

- Terrace finish: 1.5 kN/m²
- Earthquake load: As per IS-1893 (Part 1) - 2002
- Depth of foundation below ground: 1.5 m
- Walls: 230 mm thick brick masonry walls at external and 115mm walls internal.

Reference Codes:

- 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)

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.

Construction of open Drains with 250 and 300 size are proposed by using 1st class bricks masonry in CM 1:4 over a bed of 100mm thick C.C. 1:3:6, filling of edged with 1:2:4 artificial stone flooring, 12mm cement plaster (1:4.), drain 1.5x1.5m size up to existing RCC pipe Culvert. The drains have been planned in matter that they shall have an outfall on connecting drains. The playground has drains running on both side, one on the internal side along the road and the other on the external side. The boundary wall along the playground will be provided with weep-holes.

31. Summary of Investment

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:


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

Social infrastructure : Cost for the social infrastructure (like community halls, Balwadi / School, common toilet & bath etc. Market/ Shopping, Play area/ park and parking) should also be calculated in a similar manner prescribed above.

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

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: There should not generally be any cost for land unless the land needs to be purchased/ acquired for the scheme implementation, where necessary.

Operation & Maintenance Costs: Costs for O&M of assets created under PMAY is permissible. This has been fixed at 2% of the approved project cost of which the Central share would be 50% i.e 1% of the approved project cost.

GOI Contribution:

PMAY scheme guidelines stipulate that, fifty percent (50%) of the cost of provision of basic civic and social infrastructure and amenities and of housing, including rental housing and transit housing for in-situ redevelopment in slums, would be borne by the Centre. However, for the North Eastern and Special Category States the share of the Centre would be 90% including the cost of land acquisition, if required.

The Central share would be available as per milestones set out in Memorandum of Agreement (MoA). GoI would also extend overall support to the implementation of the HFA which would include (a) Technical guidance and assistance to the States/cities and funds for preparatory activities (b) Supporting community education/mobilisation through engagement of non-governmental organizations

State Contribution:

The decision would be left to the State/UT as to the sharing of the amount given by the Centre as explained above, between infrastructure costs and shelter subsidy, and the means of raising their matching share. However, it is mandated that state share should be a minimum of 20% of the cost of provision of infrastructure and civic amenities, to ensure their financial and monitoring stake in the works

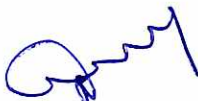
Beneficiary Contribution:

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 5% of total cost . As per PMAY guidelines no contribution from the beneficiaries is expected in infrastructure improvements.

The ability of these beneficiaries to access formal affordable credit in case of housing is difficult, hence enabling structures/frameworks would need to be evolved. The beneficiaries would need to actively participate in the process of accessing formal credit. Options such as aggregation of loans to a community of beneficiaries wherever feasible, should be examined and encouraged.

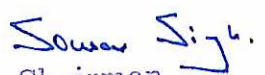
ULB Contribution:

The remaining share would have to be arranged by the ULBs out of its resources. ULBs would need to continue fiscal reforms that have already been initiated under PMAY and other schemes. Approach to financing of the ULB contribution will be a combination of initiatives that ring-fence and maximise internal accruals. and developing a framework for sustainable The phased financial projections would then be compared with the investments to assess the adequacy. In case the finances are inadequate, the investments would need to be reassessed for phasing and prioritization.



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32. Convergence of Health and Education

Health

Development Objectives for the Health Care Service Delivery Improvement Plan. Some of the development objectives, which the Bhatpara 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 municipality 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



Theme 3: 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 Municipality 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 Municipality.
- 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.

33. Environment Impact Assessment

IMPACT & REMEDIES		
1	Utilization of alternative material characteristic and availability of alternative material	Locally available bricks etc will be used.
2	Rehabilitation of water bodies and measures for maintaining surface runoff smoothly	No water body is affected by the alignment of road. The roadside 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	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	
	c) Possible measures of avoidance	
	(i) Identification of alternative routes	
	(ii) Relocation of cultural property in consultation with local	
	(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	The construction materials require for the project shall be procured from:
	a) Sourcing of materials from quarries	a) Stone metal: from the existing quarry
	b) Lead from various existing quarries	b) Bricks: from the existing brick fields, nearby the project site
	c) Adequacy of materials for the project in these quarries	

34. Operation & Maintenance

Formulation and Implementation of "Operation and Maintenance Plan for Slum Level Infrastructure work"

Background

It is recognized that the assets created in slums are required to be properly used and maintained. For this purpose, 'Operation and Maintenance Plan' for the slum is being prepared

Formulation and implementation of O&M Plan

1. The assets created in project area are required to be properly used and maintained.
2. For this purpose each ULB will formulate and implement a fully resourced 'Operation and Maintenance Plan' for project area where infrastructure works have been undertaken from BSUP funds.
3. The following steps will be taken prior to preparation of the 'Operation and Maintenance Plan' for each slum :
 - a) The ULB along with the CDS working in the Slum where infrastructure works were performed will arrange a meeting (1st) with all slum dwellers of that particular slum.


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- b) At this meeting the Local Councillor, Chairman-in-Council or Mayor-in-Council of slum development work, Municipal Engineers, Town Project Officer, Community Organiser, CDS members and RCVs of that particular slum will be present. Other members / officials as felt necessary may also be present.
- c) At this meeting the need for formation of Bustee Works Management Committee (BWMC) for looking after ,Operation and Maintenance Plan for Slum Level Infrastructure work' will be explained to the slum dwellers.
- d) The stock of work done and assets created under slum level infrastructure works of that particular slum will be listed at this meeting.
- e) At this meeting the ULB will brief the slum dwellers about the constitution, role and functions of the BWMC.
- f) A similar next meeting (2nd) will be held at which the BWMC will be elected as per constitution through informal election. If one meeting is not sufficient more such meetings may be arranged.
- g) Minute of each meeting with signature of the participants should be maintained.

Constitution & functions of the Bustee Works Management Committee (BWMC):

- a) The BWMC will consist of minimum 5 members, all of whom will be resident of that particular slum.
- b) In addition, one RCV from that slum will be member.
- c) There will be at least two female members in the BWMC.
- d) The members of the BWMC may be from BPL / APL or both.
- e) At least one member will belong to a Neighbourhood Group (NHG) from that slum.
- f) The BWMC will be elected through an informal process of election.
- g) There must be good publicity to ensure wide attendance.
- h) At least 40% of slum dwellers must be present in the meeting during election of BWMC.
- i) The BWMC will be an independent body. The ULB will be responsible for overseeing the work of BWMC.
- j) The BWMC will hold office for a period of two years, after which a new committee will be elected. If any member resigns or moves out of the slums or is incapable of functioning for any reason, another member will be elected in his / her place within one month.
- k) Each BWMC will open and operate a separate bank account. This bank account will function as the O&M fund for that slum.

- l) The BWMC will be authorized by the ULB to raise funds for O&M as is elaborated under item no. 13.
- m) The ULB will make matching contribution against the fund raised by the BWMC through user charges to encourage the process.
- n) The BWMC will report to the slum dwellers in a meeting held once in six months on revenue, expenditure and maintenance issues. This meeting will be attended by Local Councillors, ULB Officials & Engineers, Community Organizer, Town Project Officer, CDS member.
- o) There must be an agreed upon O&M Plan between the ULB, CDS and BWMC for the assets created in that particular slum under IHSDP as listed in 1st meeting.
- p) They will need interim hand holding which will be extended by the ULB by providing their technical person and accounts person for technical and accounts support. Otherwise the ULB can take help of local NGOs / CSOs for providing support to BWMC.
- q) Chairman, Secretary and Cashier will be selected within the BWMC. Bank account will be operated by any two of them jointly.
- r) The existing Beneficiary Committee will cease after the BWMC is formed.

Maintenance:

Water Supply:

Routine maintenance

- a) Daily cleaning
- b) Petty repair
- c) Periodical testing of water

Petty repair involves mainly replacement of street stand posts, repairing of hand pump and platform. It is to be ascertained by the ULB / Bustee Works Management Committee (BWMC) how much money is roughly required per month for meeting the cost of this petty repair, daily cleaning and periodical testing of water. The cost of petty repair works and daily cleaning is to be met from collection of fund from the Beneficiaries.

The Bustee Works Management Committee (BWMC) will supervise this ,Daily cleaning and petty repair work`.

Sanitation: Community latrine

Daily cleaning and petty repair work:

- It requires daily cleaning (once, twice or more) by engaging a sweeper on contract.



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- Replacement of Bib cock and other petty repairing work

It is to be ascertained by the ULB / BWMC as to how much money is required per month for carrying out the work of item (i & ii). The cost of item (i & ii) is to be met from ULB fund / Beneficiary Contribution / or a combination of both in every month. This decision may be taken. The BWMC is required to collect the contribution from Beneficiaries every month and supervise the work.

Major repair and maintenance work:

Periodical maintenance of latrine structure by way of plastering, colour washing, door, window, floor repairing, replacement of broken (W.C.) pan, cleaning of septic tank etc

Major repair and maintenance work will be implemented by the ULBs from their fund by engaging CDS / contractor or ULB staff.

Drainage:

Petty repair, operation and maintenance:

It requires cleaning at least once or twice in a week and occasional petty repair. This work should be executed by the BWMC, for which the BWMC will first decide how much money will be required in every month for getting this work done. Once the amount is ascertained, the ULBs will decide whether this expenditure may be fully met from the contribution of the Beneficiaries only or proportionately shared by ULB and Beneficiaries. The BWMC will collect the contribution from Beneficiaries. It is to be decided how the contribution be collected. The BWMC will supervise the work.

Major maintenance and repairing work like plastering, reconstruction of damaged portion and other works may be needed from time to time.

Major maintenance and repairing work will be executed by the ULBs from their fund by engaging CDS / contractor or ULB staff.

Road:

Maintenance of Concrete paved road:

Sweeping, petty repair and maintenance will be implemented by the BWMC for which they will collect contribution from Beneficiaries.



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Solid waste management:

1. Daily door to door collection and depositing to the nearby container / trailer
2. Will be done by the ULB with existing staff. The staff engaged for this work will report to the BWMC who will supervise their work. The BWMC will maintain the attendance of the staff attending the work and report on weekly basis to the ULB regarding their attendance and performance. BWMC will first assess how much money will be required every month. The BWMC will collect the contribution from Beneficiaries every month. BWMC will supervise the work.
3. Transporting from container / trailer to dumping / composting ground
4. The ULBs will execute the work from their fund.

Duties of BWMC

1. They will maintain a register showing the existing services / structures under their control :

i. Water supply

- a) What is the length of water line
- b) What is the diameter and material of water line
- c) How many stand posts are there
- d) How many small dia-deep tube wells are there and their status (functioning /
- e) How many big dia deep tube wells are there and their status (functioning /

They will maintain a register for keeping stock of materials which are often required for day to day maintenance work like bib cock, short pipe for stand posts etc.

ii. Sanitation, Drainage, Solid waste management, Community Centre

- a) They will maintain a register showing number of existing community latrines, Community Seva Kendra and community centres under their control with their status. They will also maintain a register of consumable goods like Muriatic acid, brush, broom, towel, soap etc. which will be required for maintenance purpose.

2. They will maintain an attendance Register for the persons attending duties. They should also maintain a register of income (collection) and expenditure.
3. The Bustee Works Management Committee (BWMC) will be responsible for awareness generation amongst the slum dwellers for upkeep and maintenance of the assets created.


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Function of ULB for O&M work through BWMC:

- i) Formation of Bustee Works Management Committee (BWMC) through a process of election.
- ii) One cashier to be elected among the BWMC for keeping accounts.
- iii) O&M Plan as per format to be discussed with all slum dwellers and agreed and a Tripartite Agreement signed by ULB, CDS and Bustee Works Management Committee.
- iv) ULB to pass the O&M Plan by Board of Council and earmark funds as required.
- v) ULB to allot work to one engineer and one accounts person to supervise, implement of O&M Plan and keep in regular touch with the BWMC to ascertain and solve minor problems. Local councillor may also be asked to supervise along with the engineer and liaise with the BWMC.
- vi) Necessary corrective action from time to time may be taken by ULB.

Proposed funding pattern for O&M work by BWMC

Under PMAY Projects, guidelines indicate that, O & M cost of first five years. This should be applicable to Cost of Buildings i.e. group housing, community centre etc. The beneficiaries should form a Residents Welfare association who should be responsible for maintenance of residential buildings, community facilities beyond the first five years. As far as the infrastructure viz. Roads, drains, street lighting, Water supply, sewerage is concerned the O & M becomes part of city wide infrastructure. However it is considered appropriate that beneficiaries would pay user charges for infrastructure for which the concerned authorities should work out appropriate User charge with suitable cross subsidy. In addition, the administrative arrangement for attending to complaint and regular maintenance to ensure on time maintenance also needs to workout.

Future year's operation and maintenance will be met out from a mix of user charges and ULB funding.

Arrangement for training to the members of the BWMC for petty repair, operation and maintenance work should be made by the ULB.

A cost for O&M of assets created under PMAY is permissible. This has been fixed at 2% of the approved project cost of which the Central share would be 50% i.e. 1% of the approved project cost.


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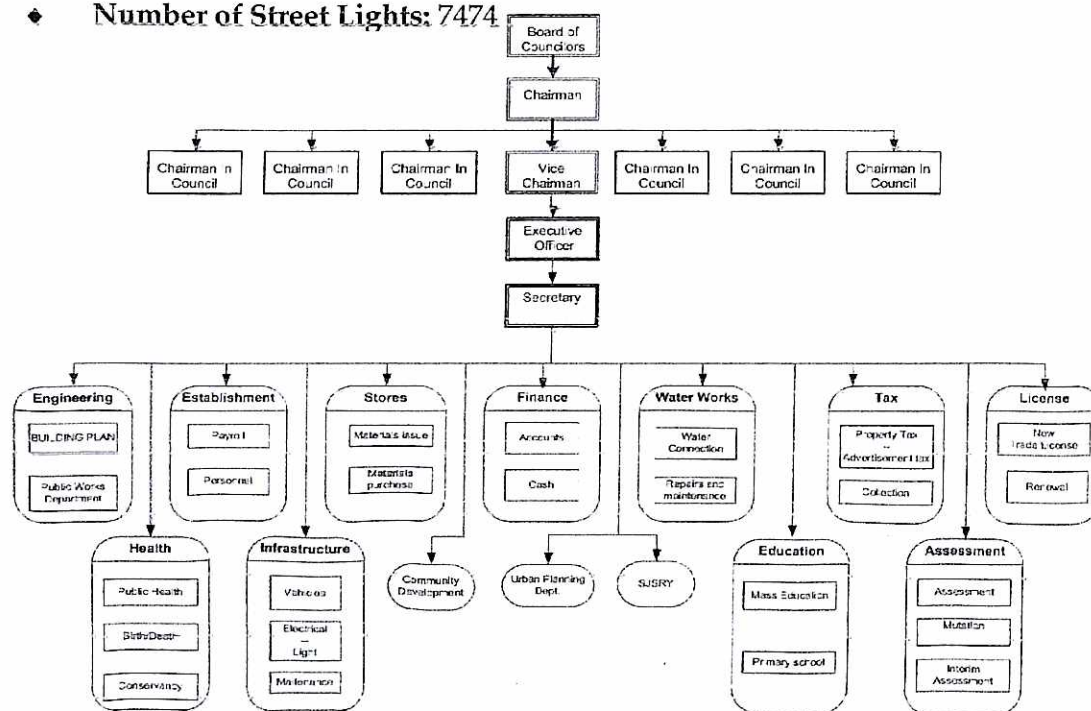

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35. Institutional Capacity

Bhatpara 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 29.14 square kilometres is comprised of 20 wards. With efficient and trained manpower, the municipality 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.

A brief profile of the municipality is provided here below:

- ◆ **Chairman:** Sri Arjun Singh
- ◆ **Area of Operation:** 32.55 square kilometers
- ◆ **Number of Wards:** 35
- ◆ **Population:** 390,467 (2011-12)
- ◆ **Roads:** 1049.57 km
- ◆ **Sewage Line:** Coverage upto 30% of total household
- ◆ **Drain Line:** 232 km
- ◆ **Water Line:** 165.5 km
- ◆ **Number of Street Lights:** 7474




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

• Solid Waste Management	• Markets
• Birth and Death Registration	• Storm Water Drainage and Flood
• Crematoria and burial ground	• Parks and Playgrounds
• Prevention of food adulteration	• Plantations
• Preventive Health Care and Health Care	• Town Planning
• Roads and its development	• Slum Improvement and Urban
• Widening & improvement to roads	• Education
• Street Lighting	• Water
• Bus Stands, Public Urinals	• Beautification
	• Auditoriums

36. Estimate & Drawing

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)					
Reference 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	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	13	%cu.m.	12047	1566.11
	SOR, PWD, P-1, I -2 a				
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.	11.12	%cu.m.	7831	870.81
	SOR, PWD, P-1, T/3 a				
3	Supplying Laying Polithin Sheets etc. SOR, PWD, P-45, T - 13	22	sqm	25	550
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	3.5	cu.m.	5823	20380.5


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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.	6.81	sqm,	297	2022.57
	SOR, PWD, P-45, T-12				
	Brick work with 1st class bricks in cement mortar (6:1)				
	a) In foundation and plinth.	10.43	cum	5719	59649.17
6	b) In super structure	15.24	cum	5943	90571.32
	SOR, PWD, P-29, T -22(a), (b)				
7	125mm thick brick work with 1st. class bricks in cement mortar (4:1). a) In ground floor	23.22	sq.m.	783	18181.26
	SOR, PWD, P-73, I -29				
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.	3.94	cu.m.	6851.66	26995.54
	(i) Pakur Variety				
	SOR, PWD, P-14, T -7(i)				
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.	0.309	MT	60705.93	18775.74
	(i) Tor steel/Mild steel.				
	SOR, PWD, P-27, T -15(i)				
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.)				
	SOR, PWD, P-66, T -12(a)				
	25 mm. to 30 mm. thick wooden shuttering as per decision & direction of Engineer-in-charge. Ground Floor	37.063	M ²	360	13342.68
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.	116.94	sq.m.	181	21166.14
	A) With 6:1 cement mortar.				
	a) Inside wall 20 mm thick plaster				
	SOR, PWD, P-151, T -2 (i)(b)				
	b) Out side Wall, 15mm th.	111.95	sq.m.	156	17464.2
	SOR, PWD, P-151, I -2 (i)(c)				

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	B)10mm th ceiling plaster (4:1)	23.33	sq.m.	140	3266.2
	SOR, PWD, P-151, I -2 (i)(c)				
12	Neat cement punning about 1.5mm thick in wall, dado, window, sills, floor, drain etc.	26.7	sq.m.	38	1014.6
	SOR, PWD, P-152, I -8				
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.	26.49	sq.m.	265	7019.85
	In ground floor.				
	3 mm. thick topping (High polishing grinding on this item is not permitted) with ordinary cement.				
	20mm thick				
	SOR, PWD, P-40, I -3 (i)				
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 complete as per direction.	34	each	22	748
	40mm x 6mm x 125 mm length.				
	(Cost of cement concrete will be paid separately)				
	SOR, PWD, P-90, I -18 (c)				
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	0.213	cu.m.	46171	9834.42
	other Local wood				
	SOR, PWD, P-85, T -1(i)				
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	8.52	sq.m.	1567	13350.84
	SOR, PWD, P-105, I -84 (iv)c				
17	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. a)75mm x 47mm x 1.70mm	32	each	34	1088
	SOR, PWD, P-91, T -20(iv)				
18	Iron Socket Bolt of approved quality fitted and fixed complete. i) 150 mm long x 10 mm dia	11	each	71	781
	SOR, PWD P-93, I-25,c				
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).	124.96	%sq.m.	1887	2358
	Two Coats				
	SOR, PWD, P-155, I -3 (b)				
20	Colour washing with ella with a coat of white wash priming including cleaning and smoothening surface thoroughly external surface One Coat	100.56	%sq.m.	1514	1522.48
	SOR, PWD, P-155, I - 4(ii)(a)				


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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)	21.69	sq.m.	41	889.29
	2) On Steel Surface SOR, PWD, P - 162, I - 7(b)	2.7	sq.m.	31	83.7
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	21.69	sq.m.	89	1930.41
	b) On Steel surface Two Coats SOR, PWD, P - 162, - 8A(aii),(bii)	2.7	sq.m.	86	232.2
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	2	each	193	386
	SOR, PWD, P-93, I - 27c				
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	1.69	sq.m.	351	593.19
	Cement & steel required for this item will not be issued by deptt.				
	SOR, PWD, P-32, I - 38 (b)				
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	Mtr.	291	873
	ii) UPVC Bend 87.5 degree 110 mm dia	2	each	162	324
26	iii) UPVC Shoe 110 mm	1	each	128	128
	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)	0.284	Qntl	8247	2342.15
	(2.70sqm @ 10.5kg per sqm = 28.35 kg)				
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	1	each	1062	1062
	SOR, PWD, (Sanitary) P - 65, I - 1 (iii)				

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.	1	Pair	70	70
	SOR, PWD, (Sanitary) P - 66, I - 9				
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.	1	each	923	923
	S Trap 100 mm				
	SOR, PWD, (Sanitary) P - 54, I - 14(B-iii)				
30	Supplying, fitting fixing CI Round Gratings	1	Each	100	100
	150mm dia.				
	SOR, PWD, (Sanitary) P - 55, I - 18(ii)				
	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-II)	1	Item	7544	7544
TOTAL AMOUNT				Rs.	350000.36
Say				Rs.	350000
Add for Electrical Works (ANNEXURE-I)				Rs.	17858
TOTAL AMOUNT				Rs.	367858
(Rupees Three lakh Sixty seven thousand Eight hundred & Fifty eight only)					


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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 P.No-1, I-2(a)	2.5	%Cu.M	12047	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.	0.05	Cu.M	5803.06	290.15
3	Brick work with 1st class bricks in cement mortar (6:1). a) In foundation & Plinth P.no-29, I-21(a)	0.01	Cu.M	5719	57.19
4	125 mm. thick brick work with 1st class bricks in cement mortar (4:1) G.Floor P.no-31, I-29	3	SqM	714	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 mix 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 P.no-12, I-6(a)	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 P.no-27, I-15(a)(i)	0.01	M.T	68508	685.08
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 P.no-173, I-21(A)(ii)	4	Mtr	291	1,164.00
	ii) UPVC Bend 87.5 degree 110 mm dia P.no-174, I-21(B)C(ii)	2	Each	162	324
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. P.no-32, I-35	2	SqM	792	1,584.00
Cost of 2 no leach pit					7,543.97
Total					7,544.00


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ESTIMATE FOR ELECTRICAL WORKS FOR ONE DWELLING UNIT UNDER PMAY					
(ANNEXURE-I)					
SL.No.	Item of works	Unit	Rate	Quantity	Amount
1	Supplying & fitting polythene pipe complete with fittings as necessary. Under ceiling /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	25	975
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	50	3800
3	Concealed Distribution wiring in 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 matching 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	10	8280
4	Deistribution concealed wiring with 2x1.5 sq mm (PH & N) single core stranded FR PVC insulated & unseathed single core stranded 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 insulated & unseathed 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	2	152
5	Supplying & drawing 1.1 KV grade single core stranded FR PVC insulated & unseathed single core stranded 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	15	1290
6	Supplying Delivery & instalation on wall of 30/32 amp DP MCB of Havel's make with enclosed box along with all its necessary l connection complete.(Anchor)	nos	808	2	1616
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 mm dia 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 partly under the ground level & partly above GL driven to an average depth of 3.65 m below the GL & restoring surface duly rammed.	each	1715	1	1715
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	5	30
				TOTAL	17858
Rupees Seventeen Thousand Eight Hundred Fifty Eight Only					17858


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Detailed Estimate for Single Dwelling unit								
	C/L of main outer wall			125 mm Partition wall			Varandah C/L	
		4.65			3.375		1.275	
		0.8			1.15		0.9	
		1.15			1.15	2.3	2.175	
		3.45			2.187			
		1.15			1.9			
		1.7			1.387	5.474		
		3.375			11.149			
		1.275						
		2.625						
		3.125						
		23.5						
	X wall	1.25						
Sl.no.								
1	Earth work in excavation							
	250 mm wall							
	1	23.5	0.75	0.7	12.34			
		0.875	0.75	0.7	0.46			
		24.375			12.8	m		
	125 mm Wall							
		2.625	0.4	0.225	0.24			
	WC	0.4	0.4	0.225	0.04			
	Bath	0.65	0.4	0.225	0.06			
	5.474	0.75		0.225				
		4.724	0.4	0.225	0.43			
	Varanda	1.425	0.4	0.225	0.13			
					0.88			
	Step	0.5	0.9	0.075	0.034			
					13.715	m		
2	Soling							
		24.375	0.75		18.281			
		11.45	0.4		4.58			
					22.861			
3	Polythene sheet							
		2.575	3.125		8.047			
		2.875	2.625		7.547			
		2	1.65		3.3			
	passage	0.625	2.375		1.484			
	Bath&WC	2.7	0.9		2.43			
	Varandah	1.025	0.6		0.615			
	step	0.9	0.5		0.45			
					23.873			
4	Jhama concrete							
			18.28	0.075	1.371			
			4.58	0.075	0.344			
			23.93	0.075	1.795			
					3.51			
5	Earth work in filling 1/5 excavation							
			13.715	5	2.743			
			23.48	0.375	8.805			
					11.548	m		


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6	B.W (6:1) in Foundation of plinth							
		23.5	0.625	14.6875				
		23.5	0.5	11.75				
		23.5	0.375	8.8125				
				35.25	0.15	5.288		
		23.5	0.25		0.525	3.084		
	X wall	0.938	0.625	0.586				
		1	0.5	0.5				
		1.063	0.375	0.399				
				1.485	0.15	0.223		
		1.125	0.25		0.525	0.148		
	125mm	3.125	0.25		0.525	0.41		
	Bath&WC	2	0.9	0.25	0.523	0.235		
	Kit	5.224	0.25		0.525	0.686		
	Vard	1.925	0.25		0.525	0.253		
	Steps	0.5	0.9		0.15	0.068		
		0.25	0.9		0.15	0.034		
						10.427	mu	
7	DPC	23.5						
		1.125						
		24.625		0.25		6.156		
		3.125						
		1.8						
		5.224						
		10.149		0.125		1.269		
						7.425		
	Less	0.9		0.25	0.225			
		0.9		0.125	0.113			
	3	0.75		0.125	0.281			
						0.619		
						6.806	sqm	
8	BW in super structure (6:1)							
		23.5						
		1.125						
		24.625	2.75	0.25	16.93			
	Parapet	23.8	0.075	0.25	0.446			
						17.376		
	Less opens							
	1	0.9	2.1	1.89				
	4	0.9	0.9	3.24				
	1	0.75	0.9	0.675				
	3	0.75	0.75	1.688				
				7.493	0.25	1.873		
	Lintel							
	1	1.525	1.525					
	4	1.2	4.8					
	1	1.05	1.05					
			7.375	0.25	0.1	0.184		
	Wo2							
	1	3.05	3.05	0.25	0.1	0.076		
					(-)	2.134		
	Net brick work						15.242	mu
9	125 th. Brick work (6:1)							
	room		3.125	2.6	8.125			
	kit		2.125	2.75	5.844			
			1.65	2.75	4.5375			
			1.45	2.65	3.8425			
	2		0.9	2.1	3.78			
						26.12875		
	Less opening							
	1	0.9	0.9					

	3	0.75	2.25					
			3.15	2.1	6.615			
	Lintel							
	1	1.3	1.3					
	1	1.025	1.025					
			2.325	0.1	0.2325			
					6.8475			
						19.28125		
	Parapet							
		23.5		0.15		3.525		
						22.806		
	passee	0.75		0.55		0.4125		
						23.219	sqm	
10	Conc M-20							
	Roof slab							
	32.15	1.1475	31.003		0.1	3.1		
	Beam		3.625	0.25	0.15	0.136		
			2.575	0.25	0.1	0.064		
	Lintel						3.301	
	D1	1	1.525	1.525				
	W1	4	1.2	4.8				
	W2	1	1.05	1.05				
	WO2	1	3.05	3.05				
				10.425	0.25	0.1	0.261	
	D1	1	1.39	1.39				
	D2	1	1.025	1.025				
	D2	2	1.4	2.8				
	O2	1	0.875	0.875				
	D2	2		6.09	0.125	0.1	0.076	
	Chaja							
	W1	4	1.2	4.8				
	W2	1	1.03	1.03				
	D1	1	1.275	1.275				
	W02	1	3.05	3.05				
				10.155	0.3	0.075	0.228	
							3.866	nu
11	Reinforcement							
		3.866	0.80%	1	7850	0.243	MT	
12	Shuttering							
	31	235	1.125					
			24.63	0.25				
	31			6.156	24.844			
	Side beam	2	3.125	0.15	0.9375			
		2	2.325	0.1	0.465			
	side slab	1	25.3	0.1	2.53			
	Lintel	1	0.9	0.25	0.225			
		1	1.525	0.1	0.153			
		1	1.275	0.35	0.446			
		1	0.3	0.05	0.015			
						29.615	sqm	
	4W1	4	0.9	0.25	0.9			
		4	1.2	0.1	0.48			
		4	1.2	0.35	1.68			
	2	4	0.3	0.05	0.12			
	1W2	1	0.75	0.25	0.188			
		1	1.05	0.1	0.105			
		1	1.05	0.35	0.368			
	2	1	0.3	0.05	0.03			
	WO2	3	0.75	0.25	0.563			
	1	1	3.05	0.1	0.305			
		1	3.05	0.35	1.068			

	2	1	0.3	0.05	0.03				
	Lintel	125 Wall							
	D1	1	0.9	0.125	0.113				
		2	1.3	0.1	0.26				
	D2	2	0.75	0.125	0.188				
	2	2	1.15	0.1	0.46				
	D2	2	0.75	0.125	0.188				
		2	1.9	0.1	0.38				
						7.423			
						37.038	sqm		
13	Plaster (6:1)								
	Out side 15 mm th.								
		25.3	2.85	1.125	0.45				
	Inside 20 mm th.					4.425	111.953	sqm	
	2	2.7	3.125	2.75	32.038				
	2	2.875	2.625	2.75	30.25				
	2	2	1.65	2.75	20.075				
	2	2.075		2.75	11.413				
	Above lintel								
	1	0.75		0.65	0.488				
	Bath								
	2	0.9		2.75	4.95				
	WC								
	1	2.95		2.75	8.113				
	1	2.25		2.75	6.188				
	4	2.2		0.9	7.92				
	T. 125 wall								
	2	0.9		0.125	0.225				
						121.658			
	Open out side less								
	3	0.75		2.1	4.725				
					(-)	4.725			
						116.933	sqm		
	Celling Plaster				24.47				
	Less				1.14				
						23.33	Sqm		
14	Neat cement punning								
	Out side	Plinth							
		25.3	0.45			11.385	Sqm	11.385	
	Inside		2.7	3.125					
		2		5.825	0.1	1.165	Sqm		
			2.875	2.625					
		2		5.5	0.1	1.1	Sqm		
	Kitchen		2	1.65					
		2		3.65	0.45	3.285	Sqm		
		1		1.65	0.45	0.743	Sqm		
		2		2.075	0.1	0.415	Sqm		
	Varanda			1.775	0.1	0.178	Sqm		
	step WC	1		3	0.45	1.35	Sqm		
	Bath			3.5	2	7	Sqm		
				0.75	0.1	0.075	Sqm		
	In side punning						15.31	15.31	
	Total							26.695	Sqm
15	Art. Stone flooring								
	Floor area					25.37	sqm		
	Step	2	0.9	0.25		0.45			
	W1	4	0.9	0.1		0.36			
	W2	1	0.75	0.1		0.075			
	W3	3	0.75	0.1		0.225			
							26.48	Sqm	


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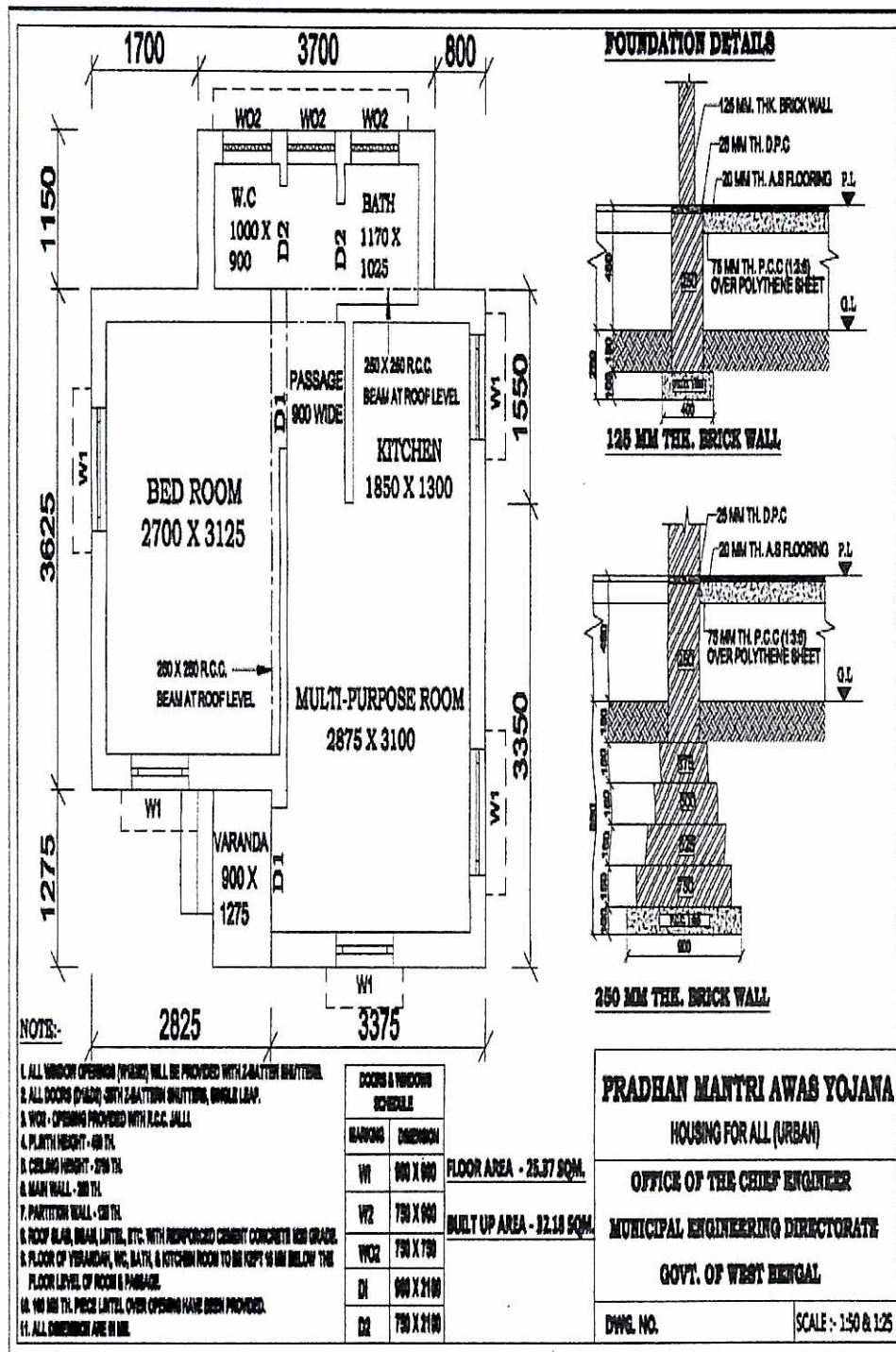
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16	Ms Clamp for door & window							
	D1+D2	4	6			24		
	W1+W2	5	2			10		
							34	nos.
17	Wood work in Door & window frame							
	D1	2	5.1	10.2				
	D2	2	4.95	9.9				
	W1	4	3.6	14.4				
	W2	1	3.3	3.3				
				37.8	0.075	0.075	0.213	ms
18	Z batten shutter							
	D1	2	0.775	2.025		3.139		
	D2	2	0.625	2.025		2.531		
	W1	4	0.775	0.775		2.403		
	W2	1	0.775	0.625		0.484		
							8.557	sqm
19	Iron Butt Hinges							
	D1+D2					12		
	W1	4	4			16		
	W2	1	4			4		
							32	nos.
20	Iron socket bolt							
	Door			6				
	Window			5				
							11	nos.
21	White wash							
	Inside+Ceiling Plaster- inside punning							
			116.933	23.33	15.31		124.953	sqm
22	Colour wash							
	Out side Plaster- out side punning							
			111.953	11.385			100.568	sqm
23	Priming on timber sutface							
	2	2	0.9	2.1		7.56		
	2	2	0.75	2.1		6.3		
	4	2	0.9	0.9		6.48		
	1	2	0.75	0.9		1.35		
							21.69	sqm
24	Painting best quality on wooden surface							
	same sl.no. 23						21.69	sqm
25	MS ornamental gril....10Kg-16 Kg							
	W1	4	0.75	0.75	2.25			
	W2	1	0.75	0.6	0.45			
					2.7			
					@12Kg/sqm		32.4	Kg
26	Priming on Steel sutface						2.7	sqm
27	Painting best quality on steel surface						2.7	sqm
	same sl.no. 24							
28	R.C.C. Shelf							
		1.75	0.5				0.875	sqm
29	Roof treatment with cow dang							


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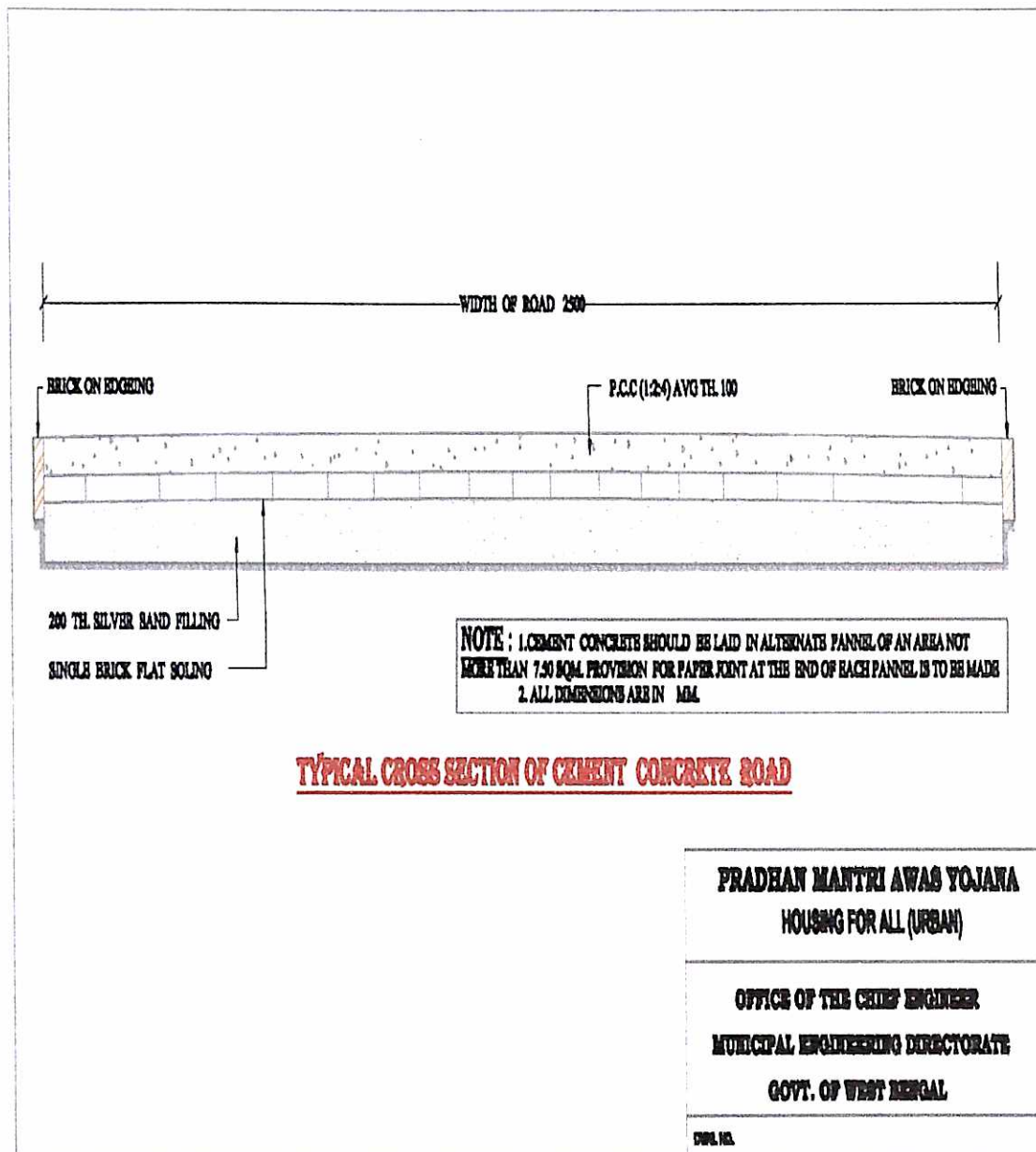
Souma S. J.
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ESTIMATE OF CEMENT CONCRETE ROAD UNDER PMAY					
All Scheduled rates are based on latest Corrigendum & addenda (UNIT LENGTH AND WIDTH 2.5m)					
Sl.No.	Description of item	Quantity	Unit	Rate	Amount
1 Pg.-1,I-1	Surface Dressing of the ground in any kind of soil including removing vegetation inequalities not exceeding 15 cm depth and disposal of the rubbish within a lead upto 75 m as directed.	2.5	m ²	10	25.00
2 pg.-1,I-2	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 spoils within a lead of 75 m. as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete.	0.312	%m ³	11927	37.21
3 pg.-11,I-1	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand.	2.5	m ²	358	895.00
4 pg.-26,I-12(f)	Hire and labour charges for shuttering with centering 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 and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor). (f) 25 mm to 30 mm shuttering without staging in foundation	0.2	m ²	335	67.00
5 pg.-11,I-5	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. a) Pakur Variety (5th corrigenda effected from 16/04/2019)	0.25	m ³	6042.72	1510.68
6 pg.-1,I-3(a)	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)	0.312	%m ³	93621	292.10
TOTAL					2826.99
				GST -12%	339.24
				Total excluding cess	3166.23
				Add 1% Cess	31.66
				Total	3197.89
				Per 1sqm	1279.16


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Abstract of Estimated Cost for Drain section of 400mmx400mm under Bhatpara Municipality.

P.O.-Bhatpara Dist.- 24 Parganas (North)

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

Length= 1.0 Mtr.

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 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 trenches, leveling dressing and ramming the bottom complete	0.575	%Cum	11927	68.58
	a) Depth of excavation not exceeding 1500mm.				
	Page-1, Item-2.				
	1 1 1 0.575 0.575				
	Total- 0.65				
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).	0.08	% Cum	93621	74.90
	Page-2, Item-4.				
	2 1 0.4 0.05 0.08				
	Total- 0.1				
3	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand. Page-11, Item-1.	1.05	Sq.M	361	379.05
	1 1 1 1.05				
	Total- 1				
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.	0.1	Cum.	5493.74	549.37
	A) Pakur Variety. Page-11, Item-5.a				
	a) Ground floor.				
	1 1 1 0.1 0.1				
	Total- 0.08				
5	Brick work with 1st class bricks in cement mortar (4:1)	0.15	Cum.	5682	852.30
	(a) In foundation and plinth Page-29, Item No.-21.a				
	1 1 0.25 0.4 0.1				
	1 1 0.25 0.2 0.05				
	Total- 0.15				
7	125mm. Thick brick work with 1st class bricks in cement mortar (4:1)	0.2	Sq.M	736	147.20
	a) in ground floor. Page-31, Item No.-29.				
	1 1 0.2 0.2				
	Total- 0.2				

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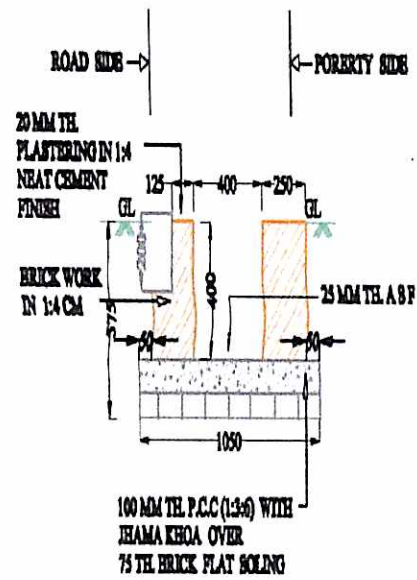
8	25 to 30 mm shuttering without staggering in foundation					0.4	Sq.M	209	83.60
	(only the area in contact with concrete to be measured.)								
	Page-42, Item No.-36f								
	2	2	1	0.1	0.4				
				Total-	0.4				
11	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding 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]					1.58	Sq.M	186	293.88
	(ii) with 1:4 cement mortar								
	Page-151, Item-2.ii.c & Page-152, Item-5.a								
	1	1	1.575		1.58				
				Total-	1.58				
12	Neat cement punning about 1.5mm thick in wall,dado>window sill,floor etc. Page-152, Item-8.					1.58	Sq.M	34	53.72
	NOTE:Cement 0.152 cu.m per100 sq.m.								
	1	1	1.575		1.58				
				Total-	1.58				
Total								2502.60	
Add GST @ 12%								300.31	
Total Excluding Cess								2802.91	
Add Cess 1%								28	
							Total	2830.94	

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CROSS SECTION OF DRAIN (400 x 400) (SCALE - 1:30)

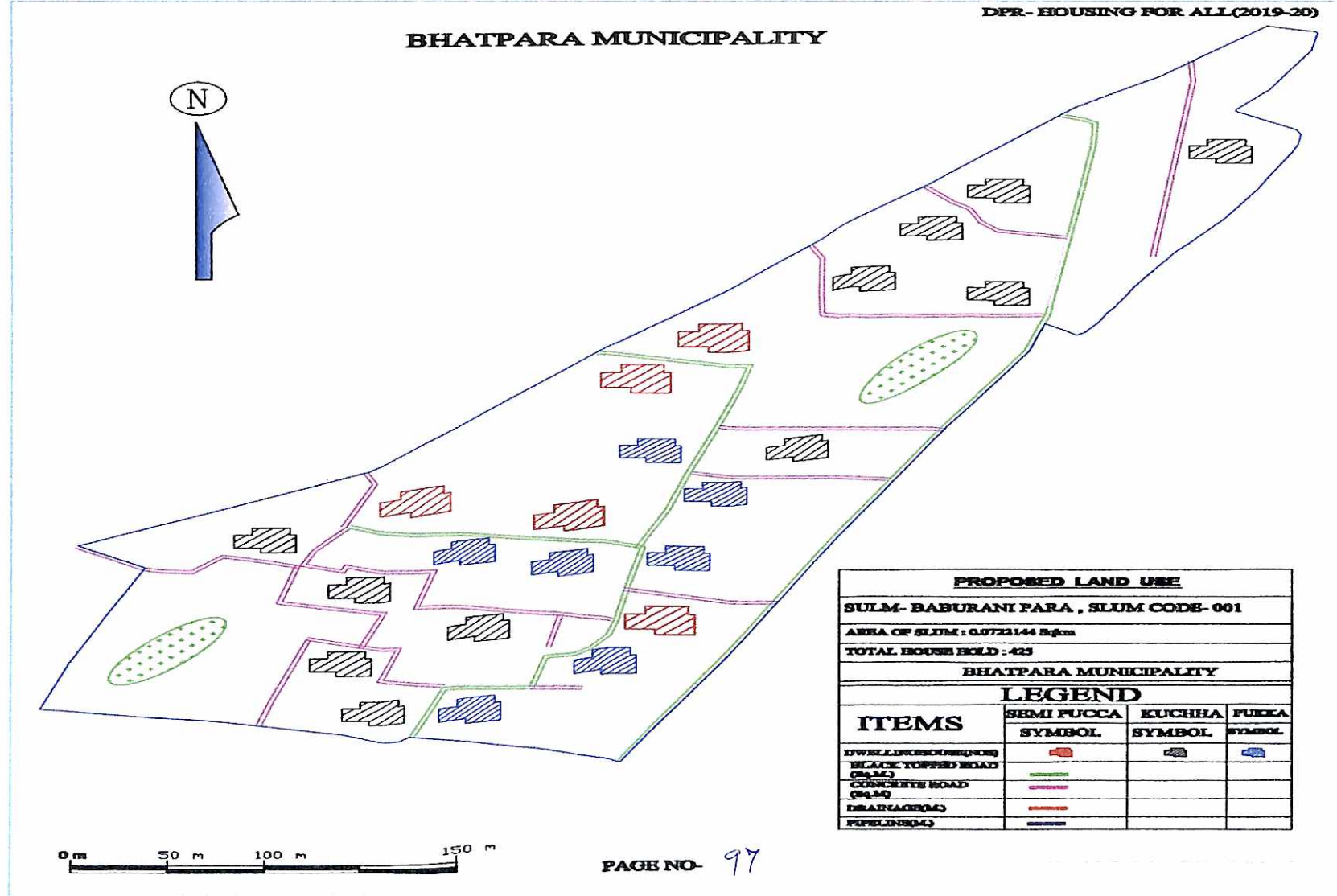


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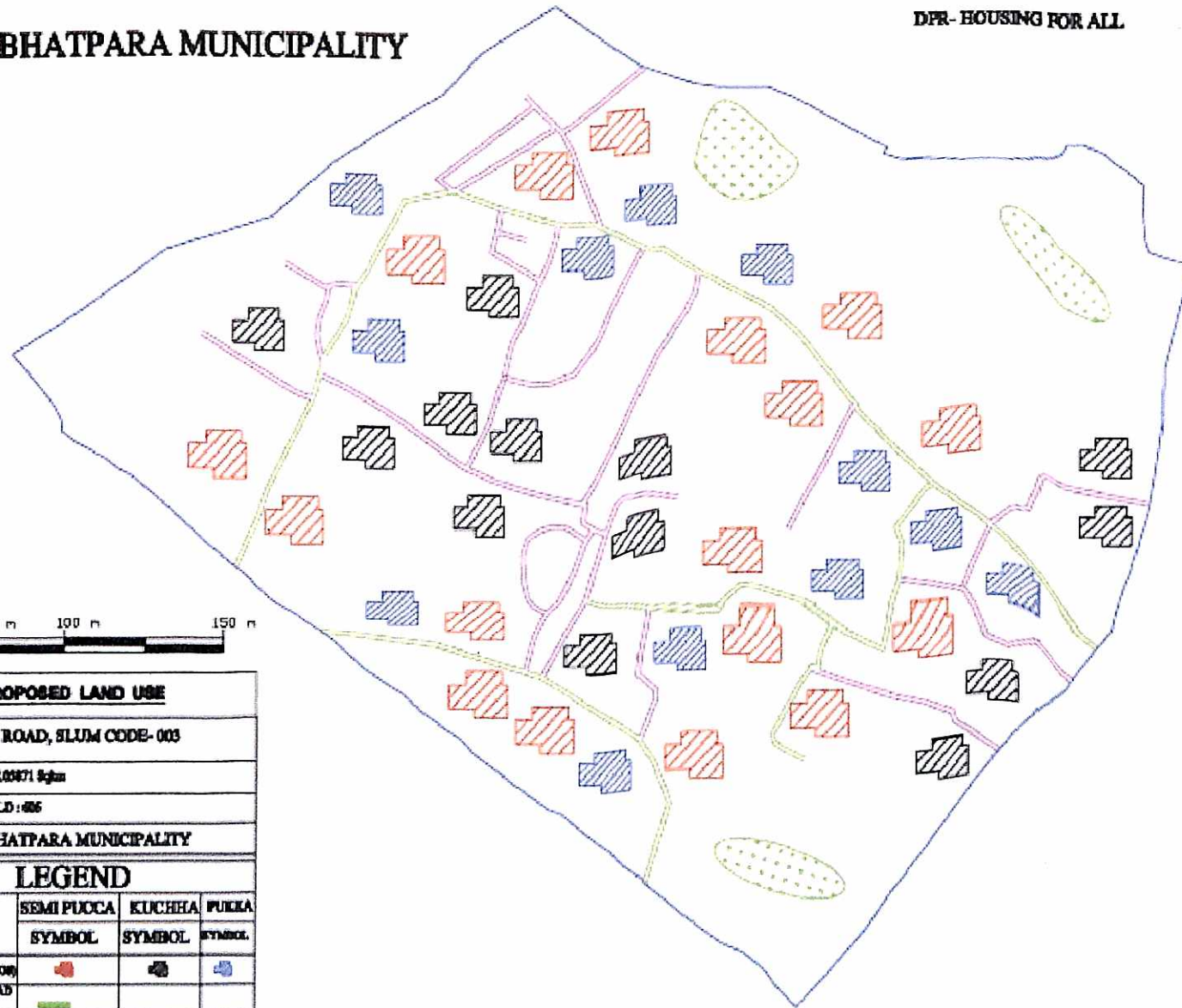
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0 m 50 m 100 m 150 m

PROPOSED LAND USE			
SULM- BAZAR ROAD, SLUM CODE- 003			
AREA OF SLUM 0.103871 Sqkm			
TOTAL HOUSE FIELD : 686			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA SYMBOL	KUCHHA SYMBOL	PURKA SYMBOL
DWELLING HOUSE (H)			
BLACK TOPPED ROAD (B.M.)			
CONCRETE ROAD (B.M.)			
DRAINAGE (M)			
PIPELINE (M)			

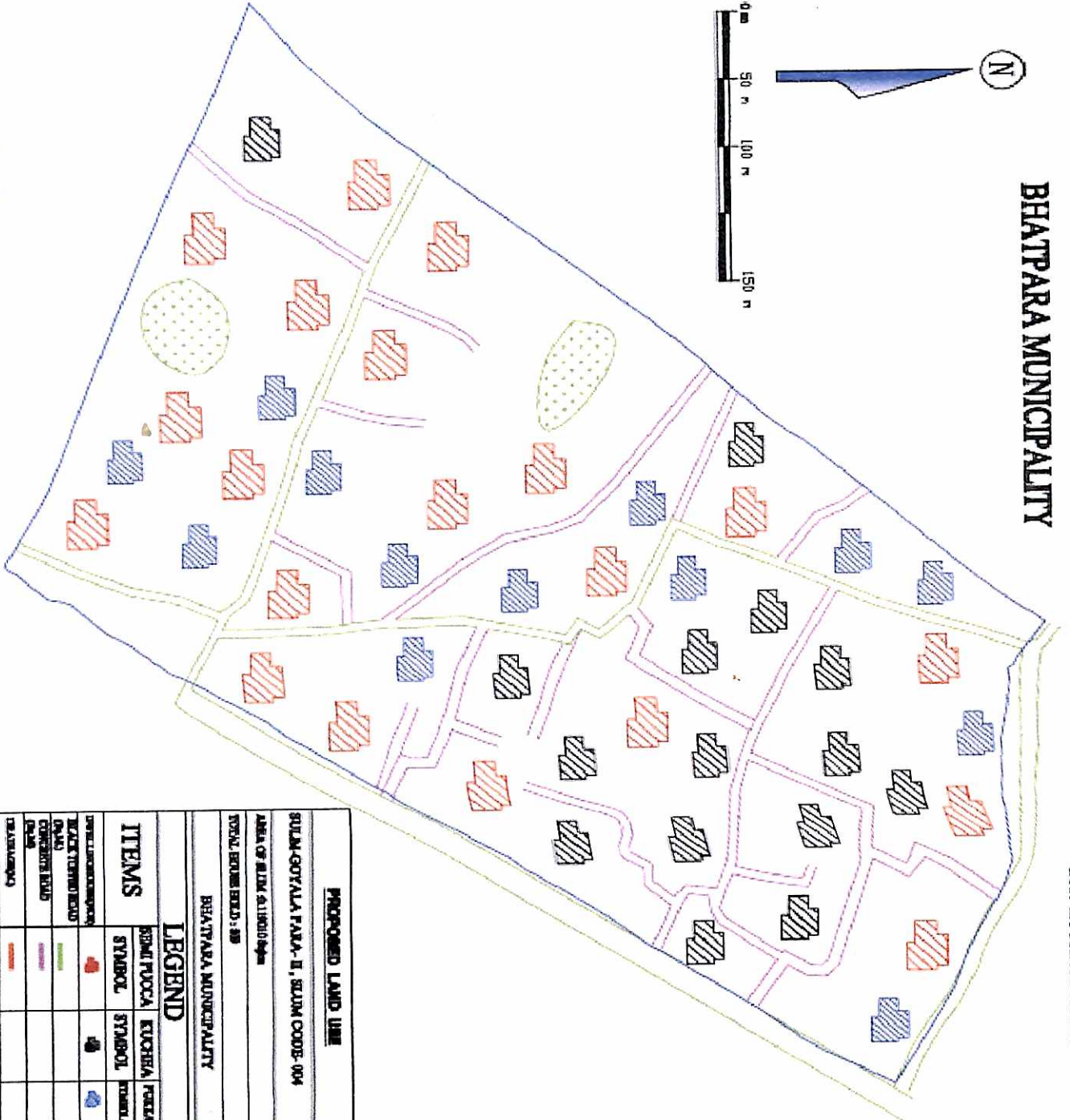


Som Sir,
Chairman
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PROPOSED LAND USE			
BULM GOVTALA PARA-II, BULM CODE-004			
AREA OF BULM 41100 Sq.m			
TOTAL BULM FIELD: 38			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SYMBOL	SYMBOL	SYMBOL
RESIDENTIAL	Red hatched	Blue hatched	Black hatched
COMMERCIAL	Green hatched	Yellow hatched	Pink hatched
INDUSTRIAL	Orange hatched	White	White
OPEN SPACE	Green	White	White
WATER BODY	Blue	White	White
ROAD	Pink	White	White
BOUNDARY	Blue	White	White


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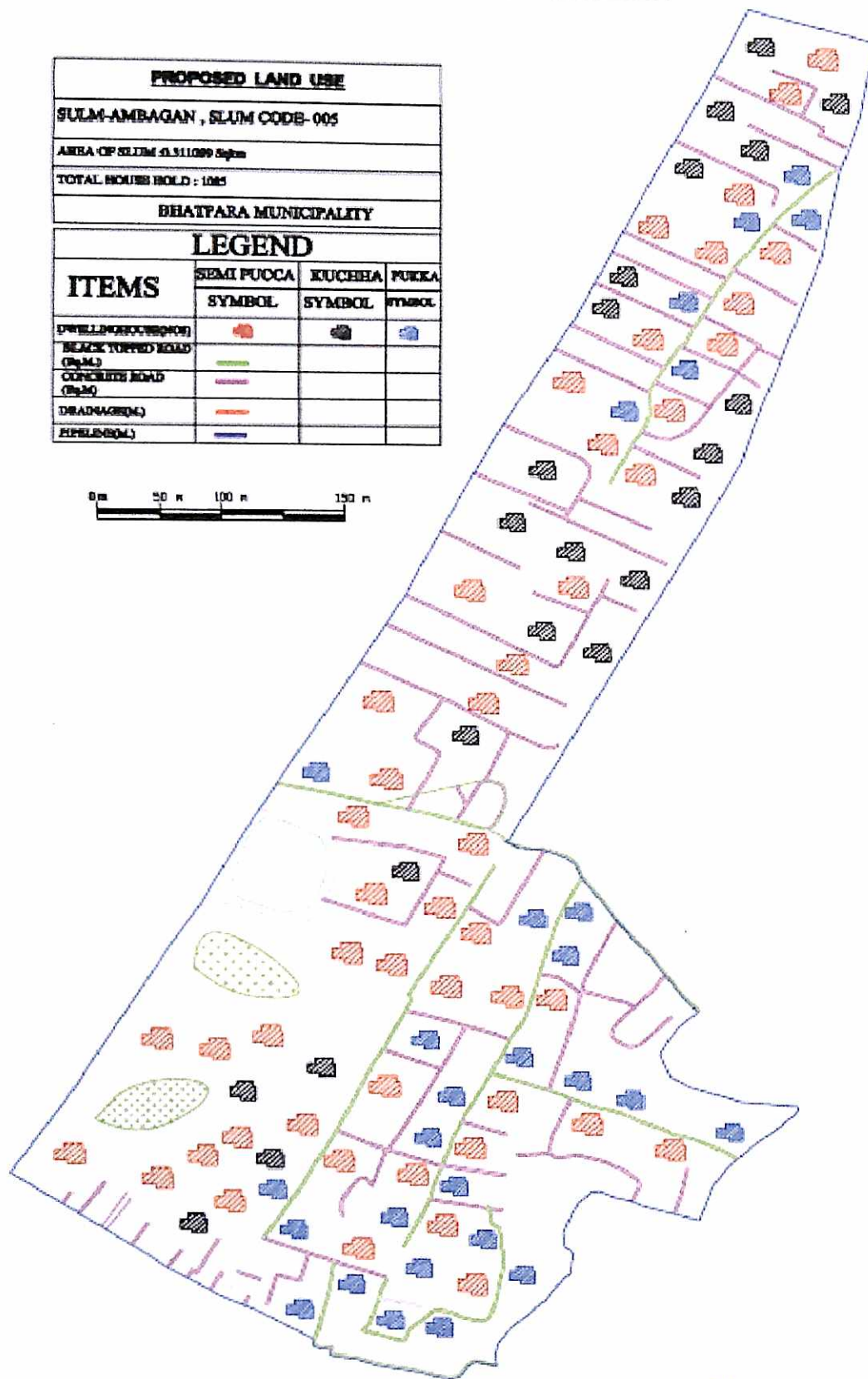

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PROPOSED LAND USE			
SULM-AMBAGAN , SLUM CODE- 005			
AREA OF SLUM : 1.311089 Sqkm			
TOTAL HOUSE HOLD : 1085			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA	KUCHEHA	PUCCA
	SYMBOL	SYMBOL	SYMBOL
DWELLING HOUSE (POB)			
BLACK TOPPED ROAD (BtM)			
CONCRETE ROAD (BtM)			
DRAINAGE (M)			
PIPELINE (M)			

0m 50 m 100 m 150 m



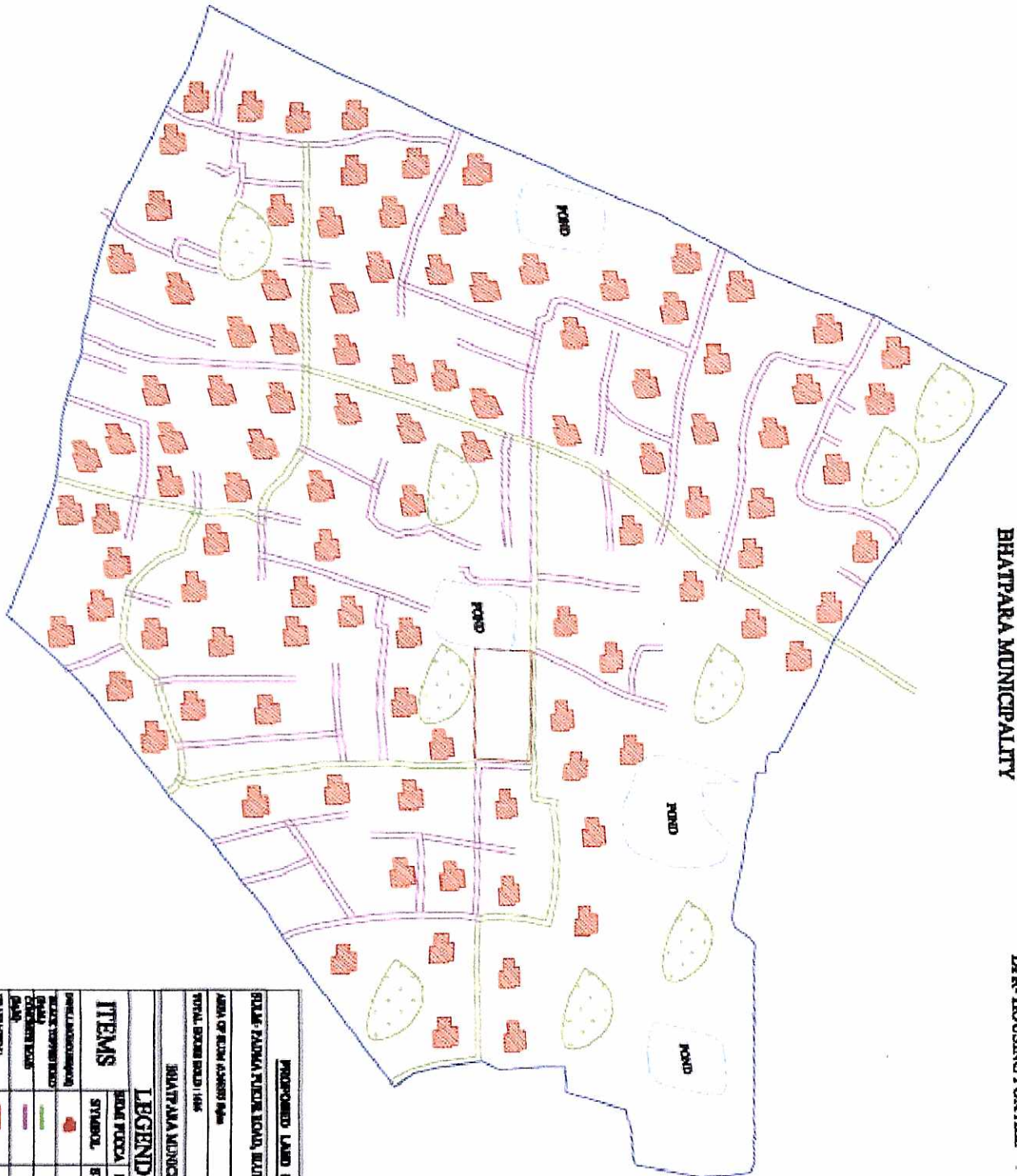
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PROPOSED LAND USE			
Bhatpara Panchayat Housing Scheme - 666			
AREA OF PLOT: 1000 Sqm			
TOTAL PLOTS: 1000			
BHATPARA MUNICIPALITY			
ITEMS	LEGEND		
	ROAD PLOT	EXCESS PLOT	STREET
ROAD PLOT			
EXCESS PLOT			
STREET			
LANDSCAPING			
WATER BODY			
UTILITY			

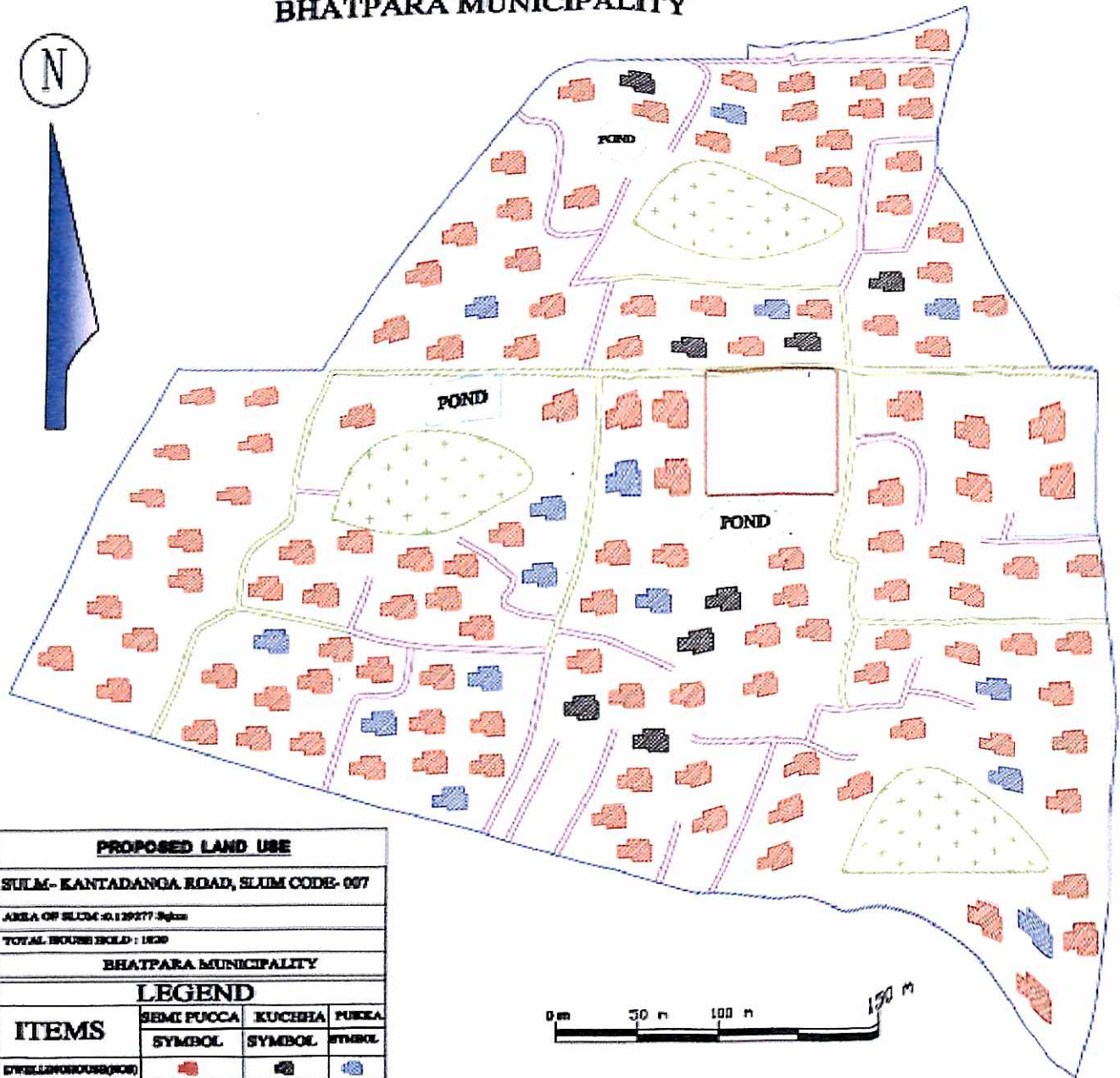

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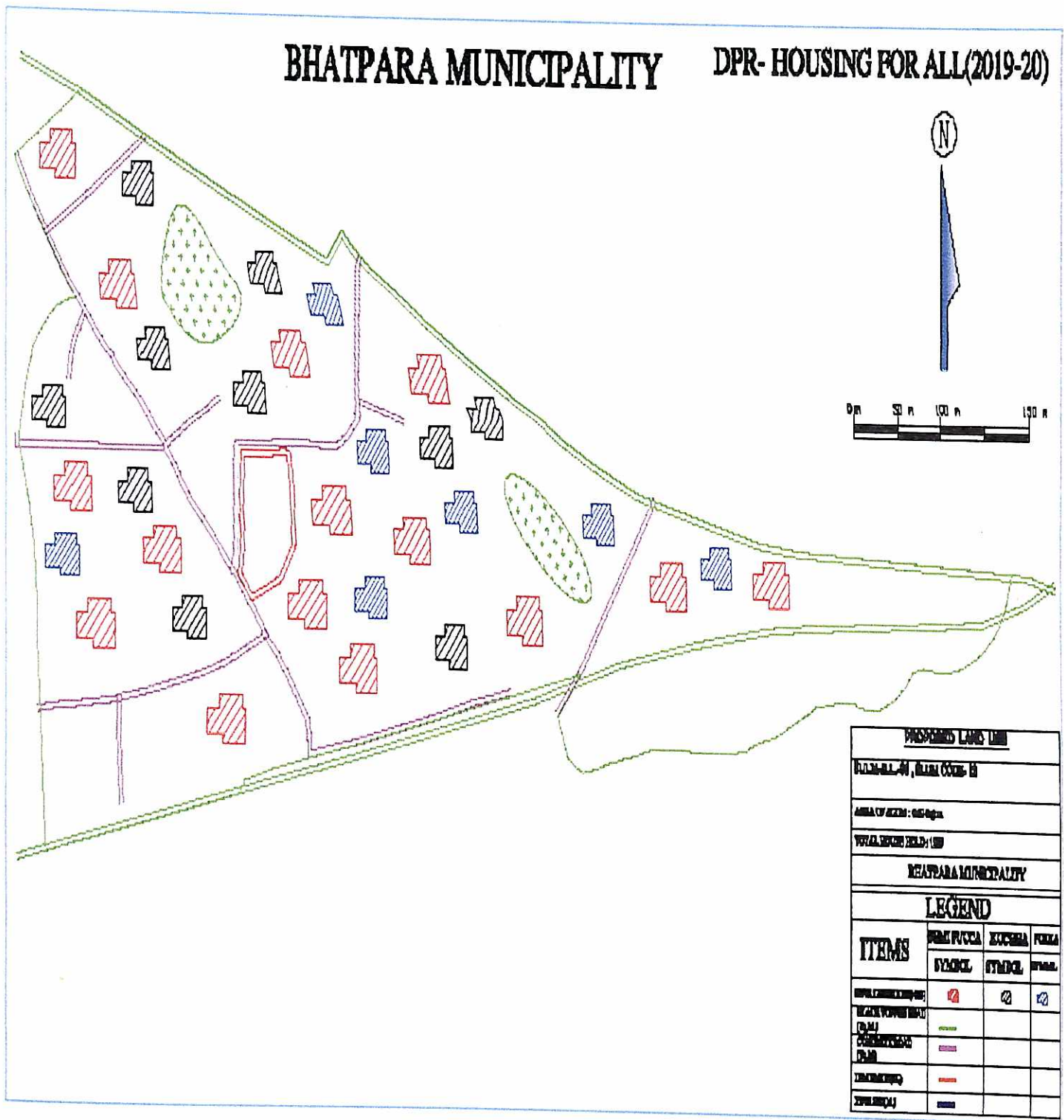


PROPOSED LAND USE			
SULM- KANTADANGA ROAD, SLUM CODE- 097			
AREA OF SLUM : 0.129277 Sqkm			
TOTAL HOUSE BOLD : 1820			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA	KUCHHA	PUCCA
	SYMBOL	SYMBOL	SYMBOL
DWELLINGHOUSE(RED)			
BLACK TOPPED ROAD (24.50)			
CONCRETE ROAD (24.50)			
DRAINAGE(24.50)			
PIPELINE(24.50)			

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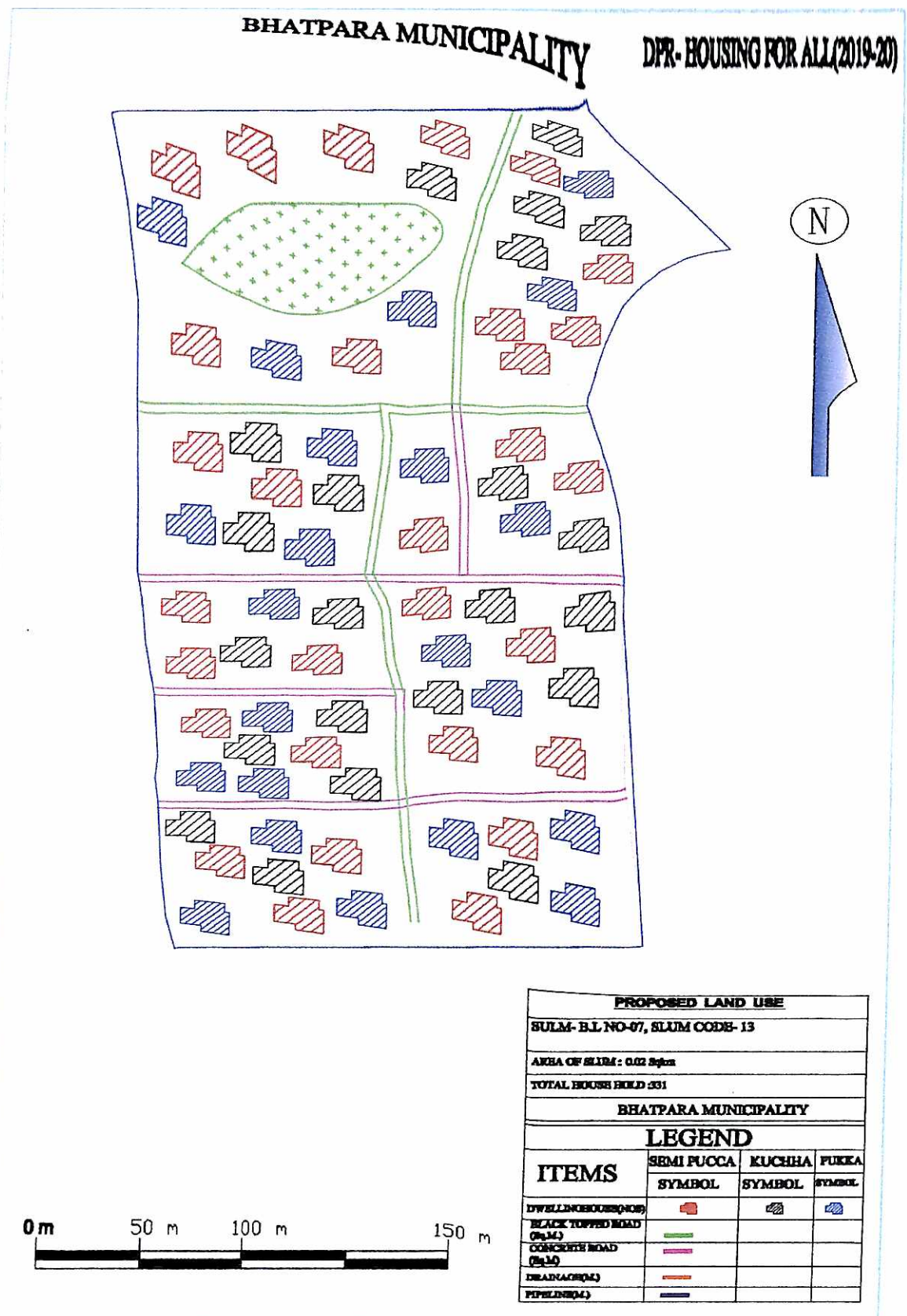
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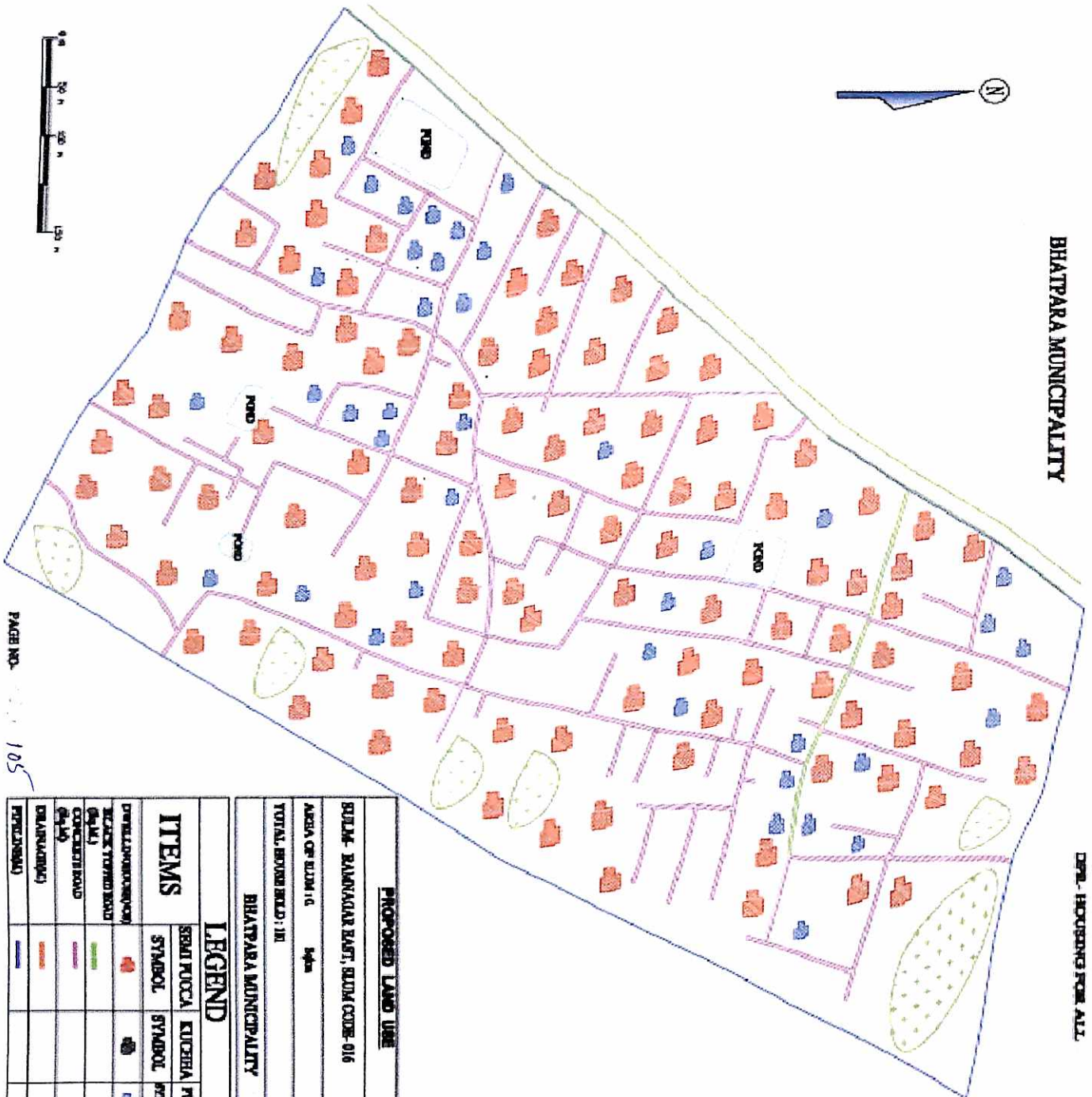

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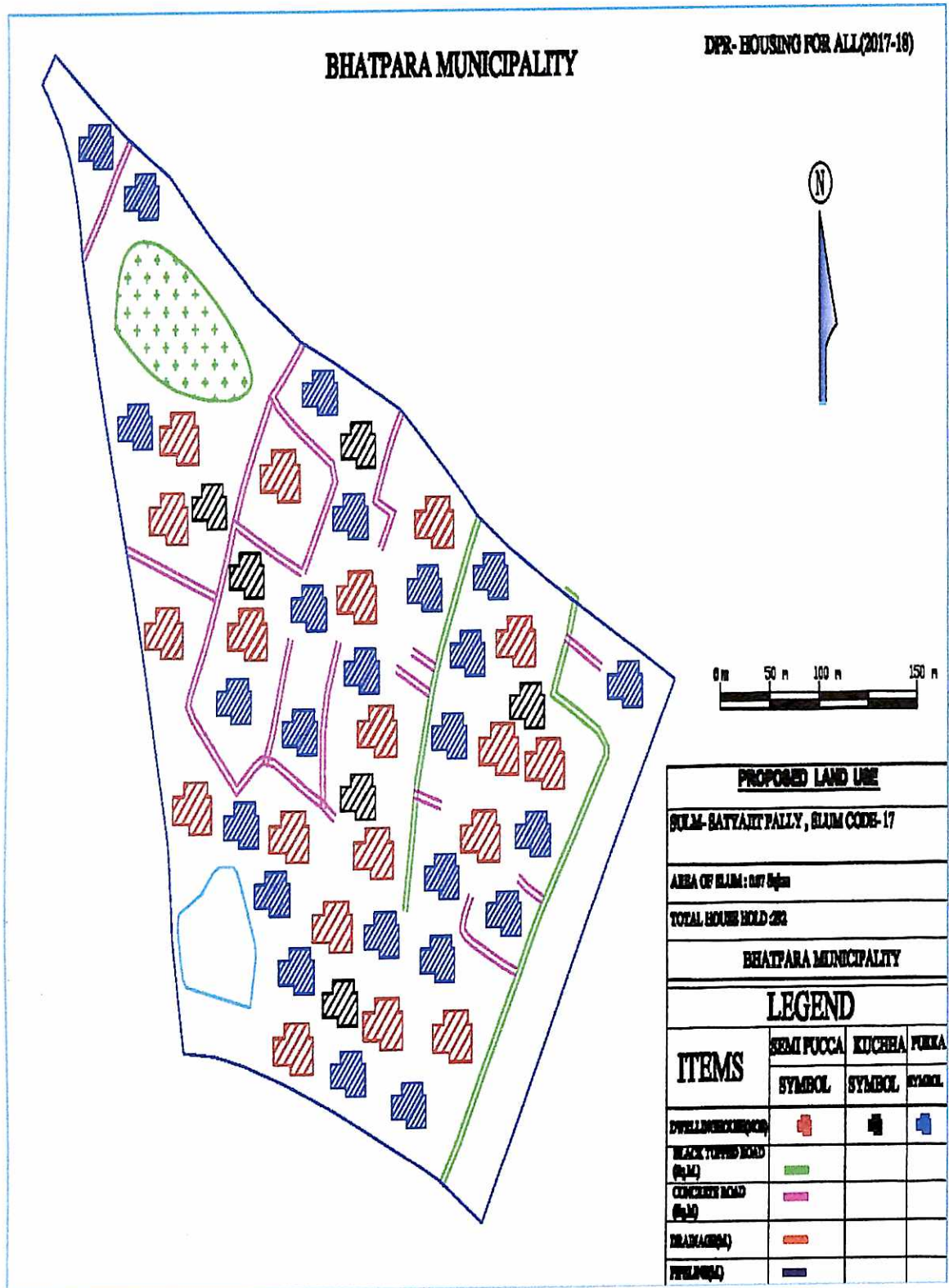
PAGE NO.

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PROPOSED LAND USE			
BUILDING - BANGALORE EAST, BLDG CODE- 916			
AREA OF BUILDING - 14m			
TOTAL BUILDING AREA : 14			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SYMBOL	SYMBOL	SYMBOL
SEMI PAVED		KUTCHA	
PAVED		PAVED	
OPEN SPACE		OPEN SPACE	
CONCRETE ROAD		CONCRETE ROAD	
PAVED		PAVED	
PAVED		PAVED	


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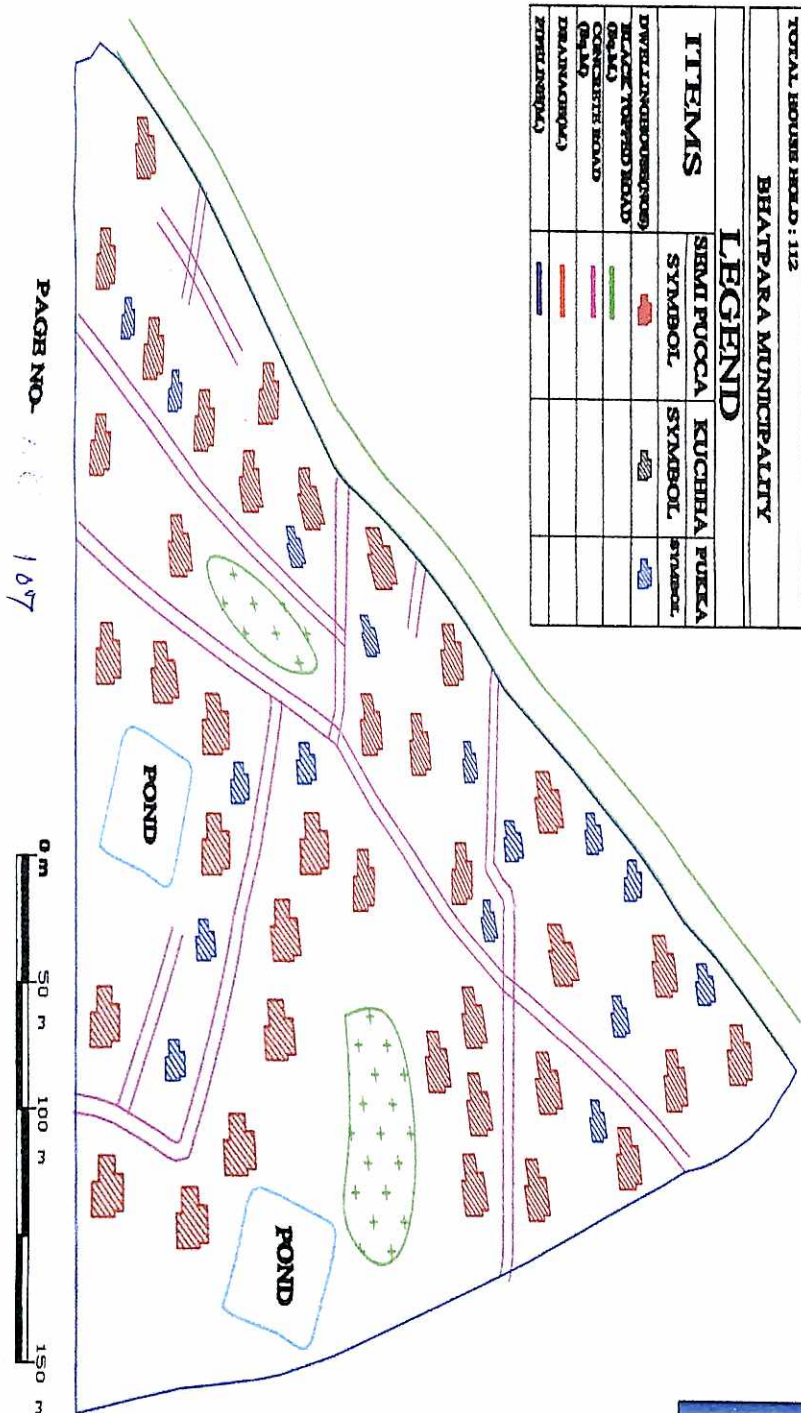



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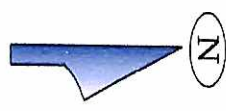

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PROPOSED LAND USE			
SULM- SUNDIYA PARA(B.C.-018), SLUM CODE- 018			
AREA OF SLUM : 0.066348 Sqkm			
TOTAL HOUSE HOLD : 112			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SIMI PUCCA	KUCHHA	PUEKA
	SYMBOL	SYMBOL	SYMBOL
DWELLING HOUSES			
WATER TOWER ROAD			
WALL			
OPEN SPACE			
DRAINAGE			
WATER TOWER			



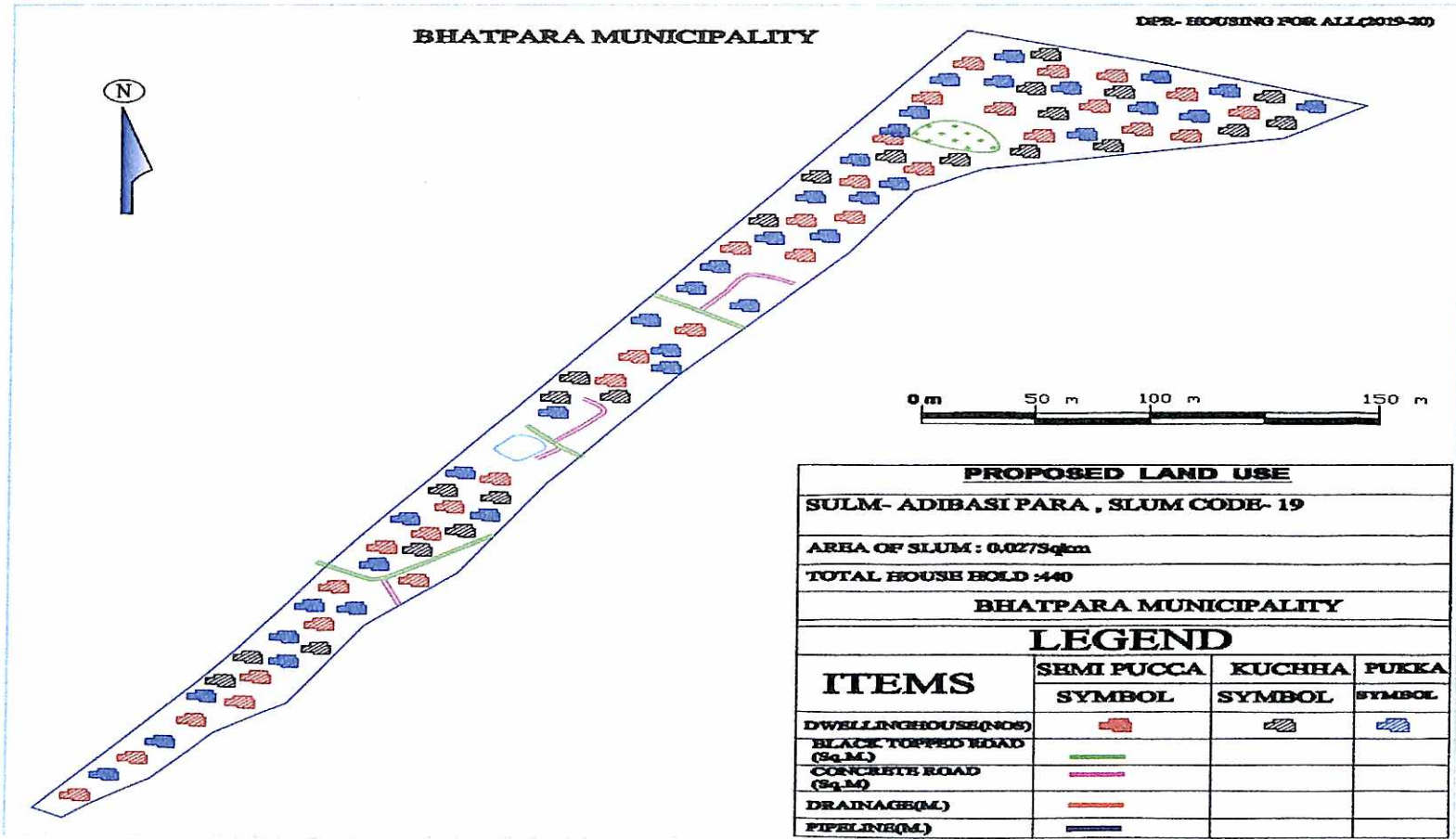
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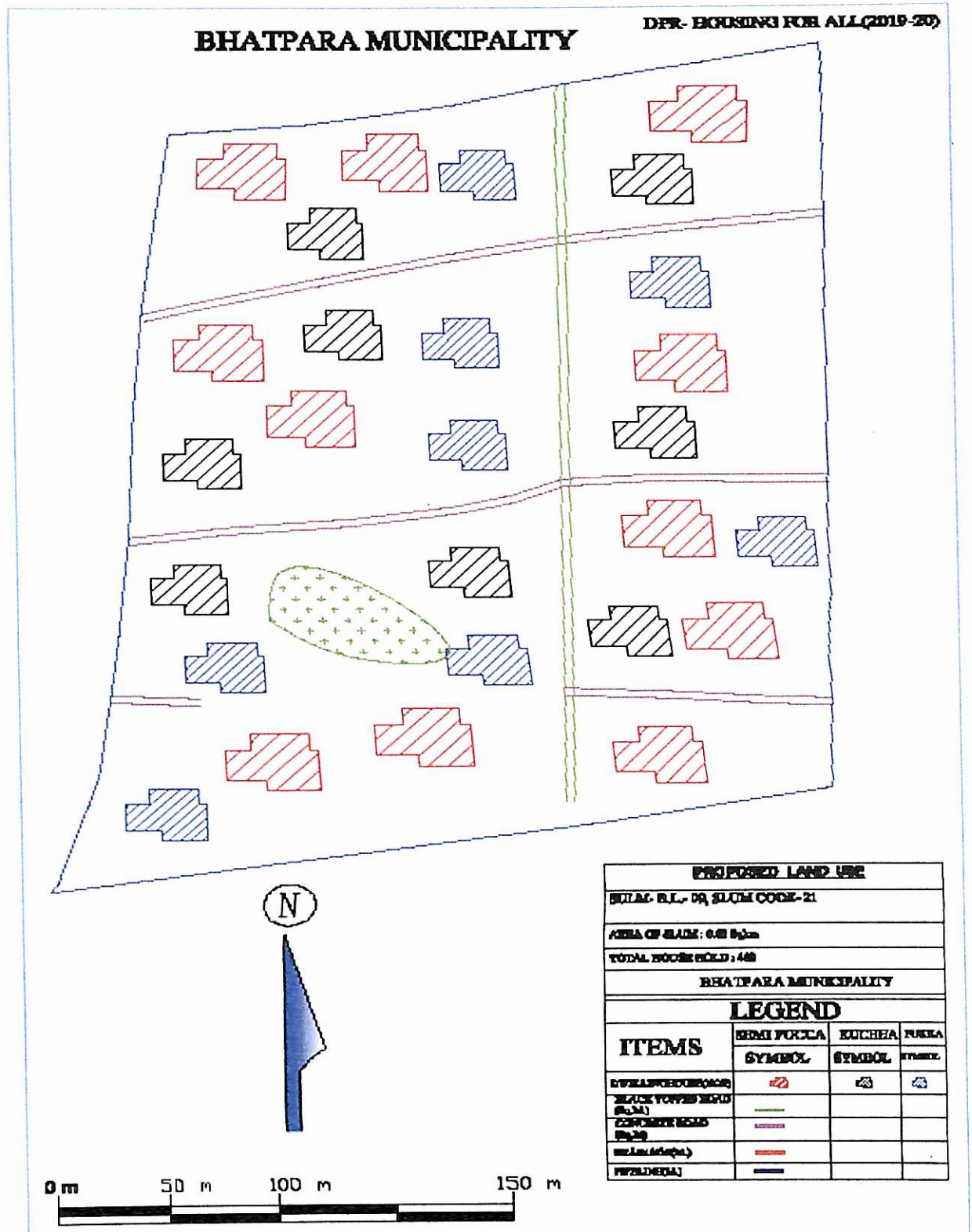
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Signed
 Chairman
 Bhatpara Municipality

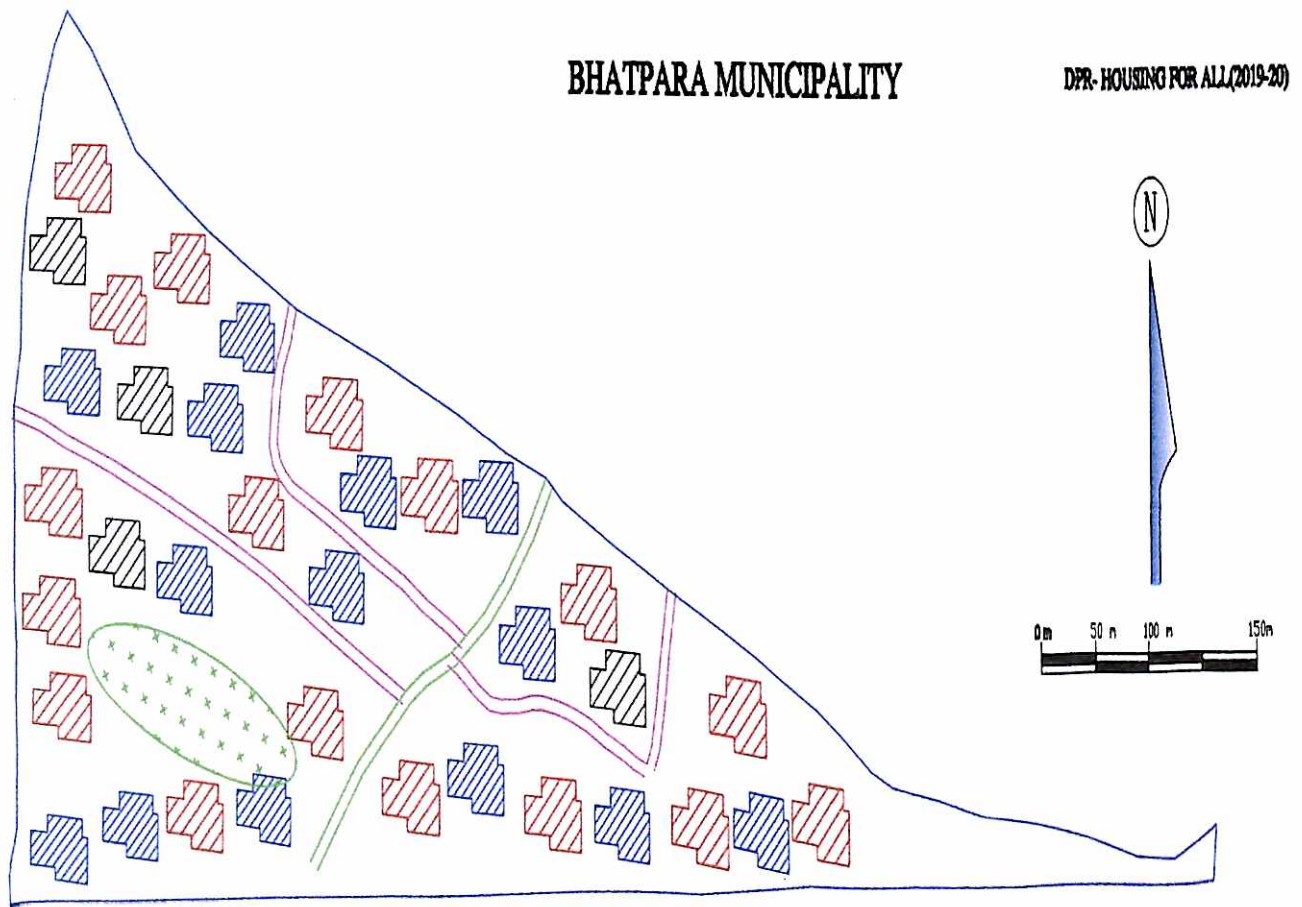
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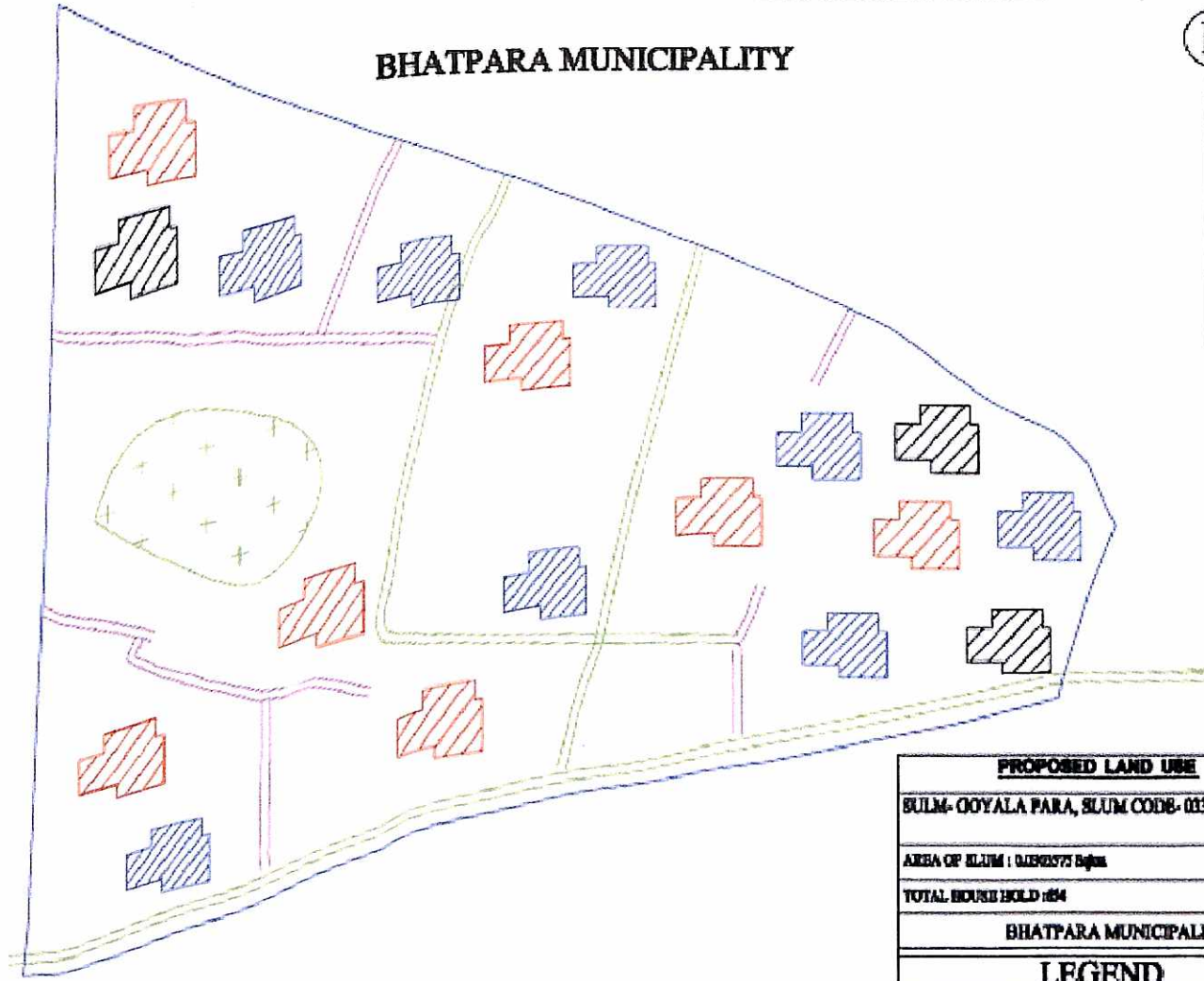
PROPOSED LAND USE			
BULM- PANCHANANTALA, SLUM CODE-29			
AREA OF SLUM : 0.07 Sqkm			
TOTAL HOUSE HOLD : 274			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCKA	KUCHHA	PURKA
	SYMBOL	SYMBOL	SYMBOL
DWELLINGHOUSE(M)			
BLACK TOPPED ROAD (B.M.)			
CONCRETE ROAD (B.M.)			
DRAINAGE(M)			
PIPELINE(M)			

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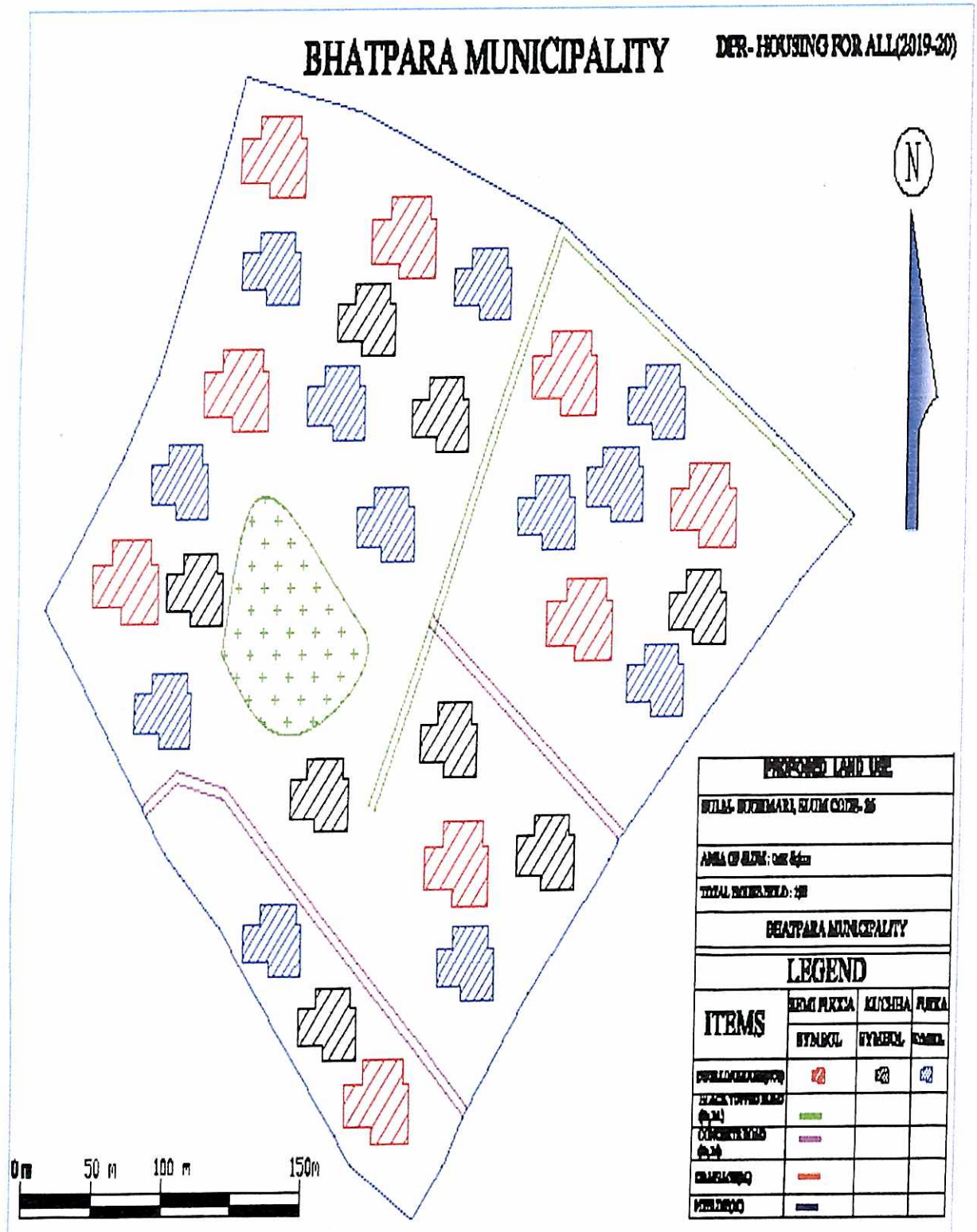
PROPOSED LAND USE			
BULM- GOYALA PARA, SLUM CODE- 033			
AREA OF SLUM : 0.128275 Sqkm			
TOTAL HOUSE HOLD : 254			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA	KUCHHA	PURKA
	SYMBOL	SYMBOL	SYMBOL
DWELLING (HOUSE)			
BLACK TOPPED ROAD (2.5 M.)			
CONCRETE ROAD (2.5 M.)			
DRAINAGE (2.5 M.)			
PIPELINE (2.5 M.)			




PAGE NO-

Suman Singh
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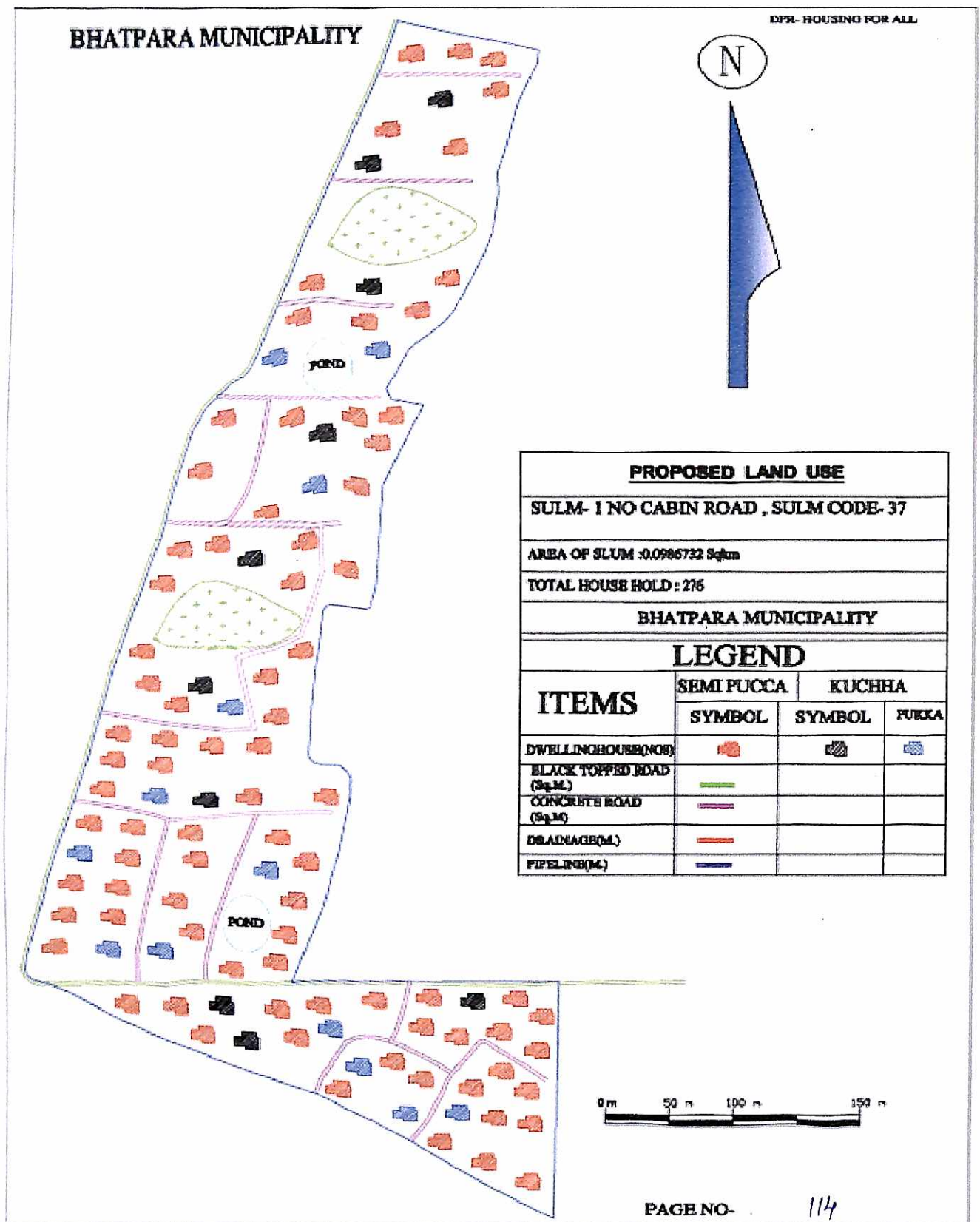
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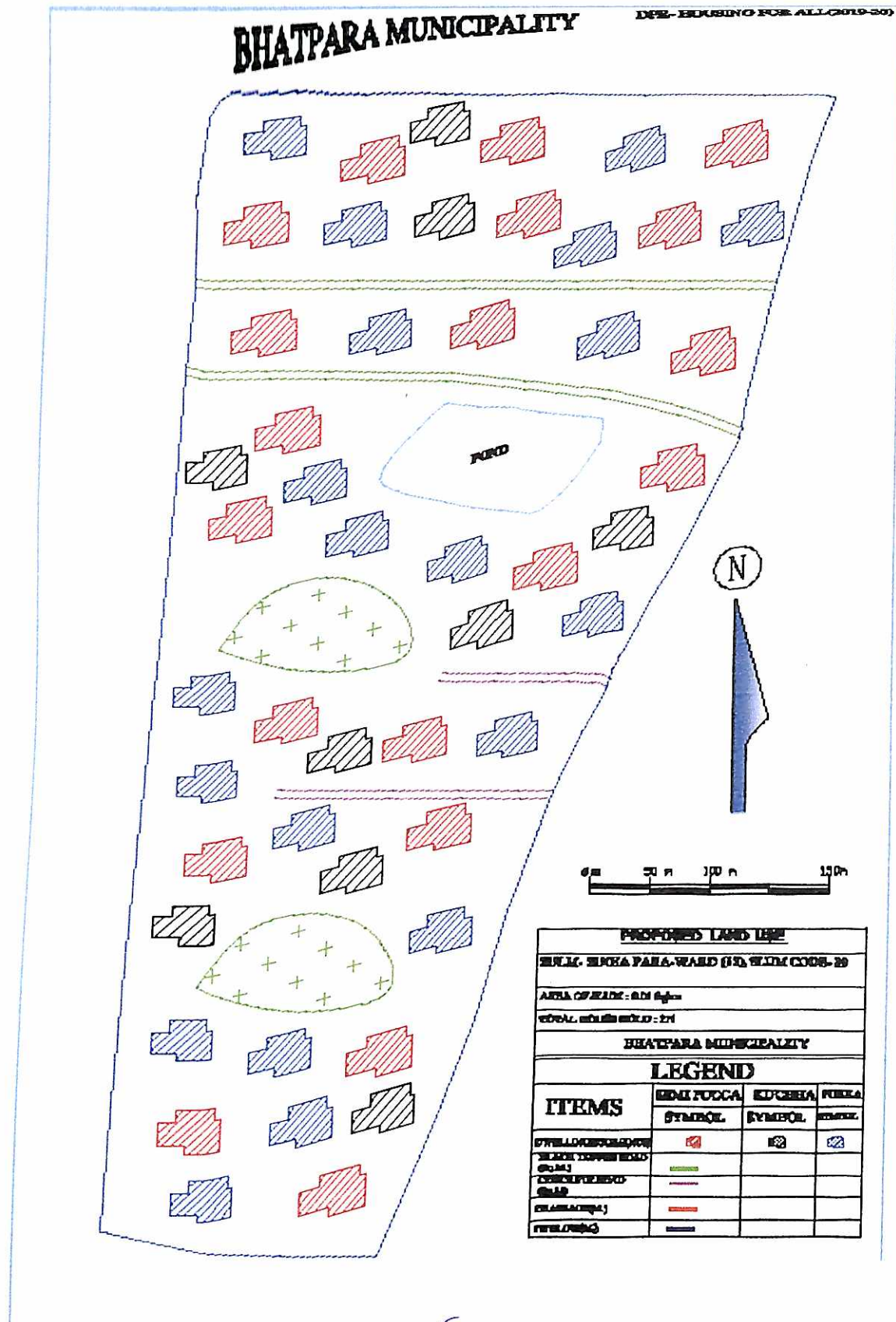
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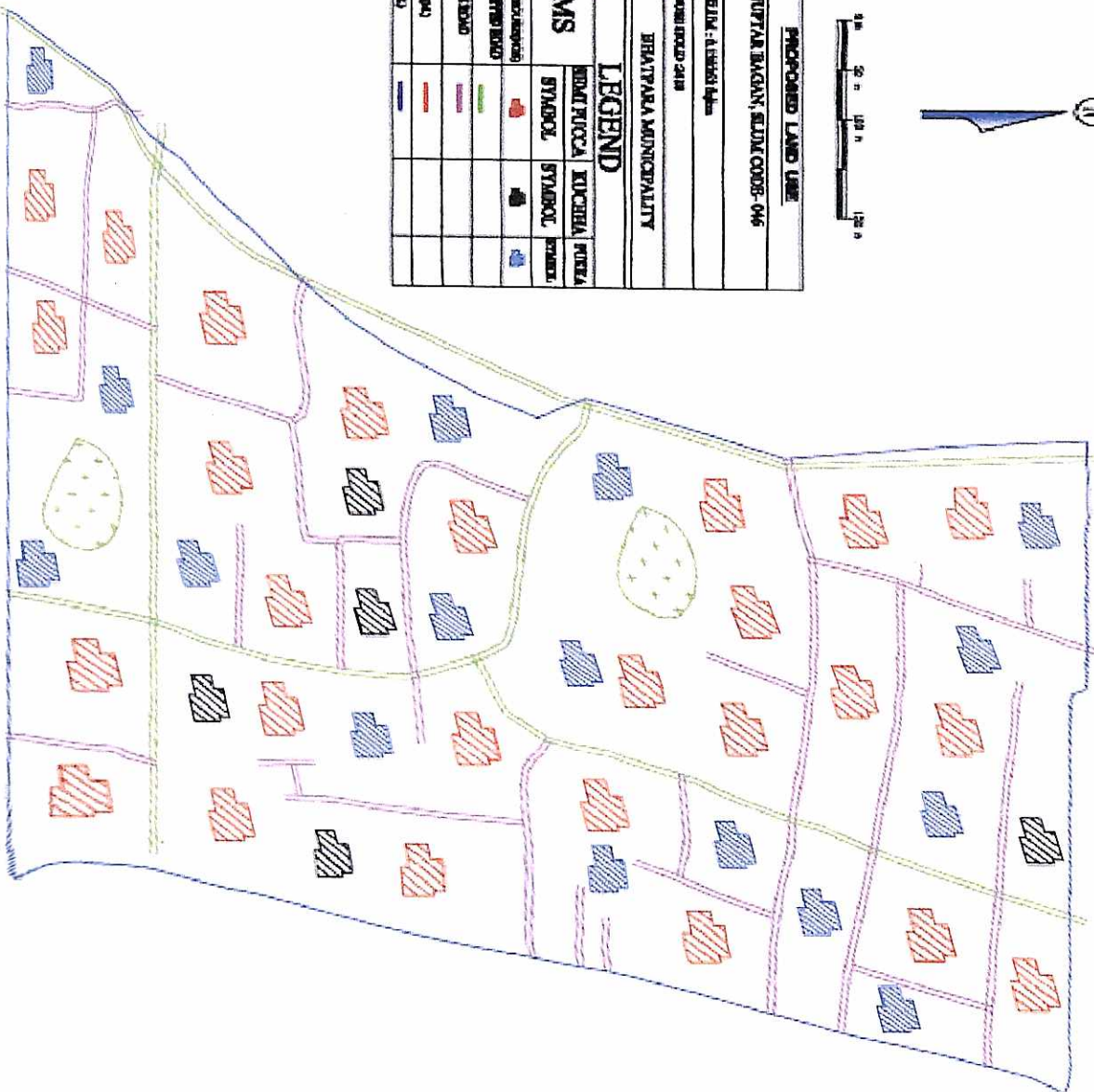
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PROPOSED LAND USE				
SCALE: GUPTAR BAGAN, SLIDE CODE: 046				
AREA OF SLIDE: 41500 Sq.m				
TOTAL HOUSEHOLD: 2418				
BHATPARA MUNICIPALITY				
LEGEND				
ITEMS	INDIFFICULT		INDIFFICULT	
	STANDARD	STANDARD	STANDARD	STANDARD
OPEN SPACE (PARKING)				
WATER BODY				
ROAD				
SETBACK				
SETBACK				
SETBACK				
SETBACK				
SETBACK				
SETBACK				



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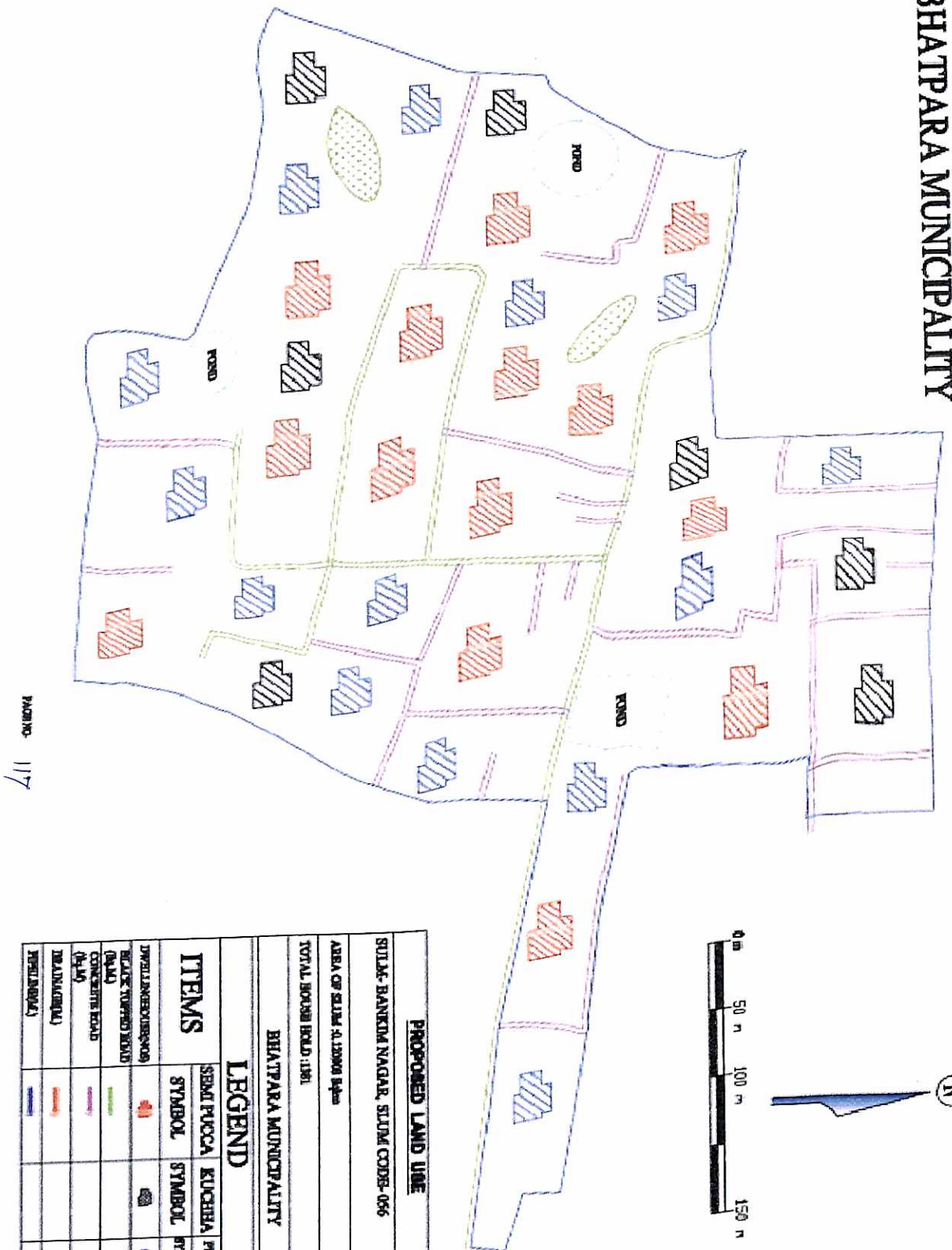
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Soumitra S. J.
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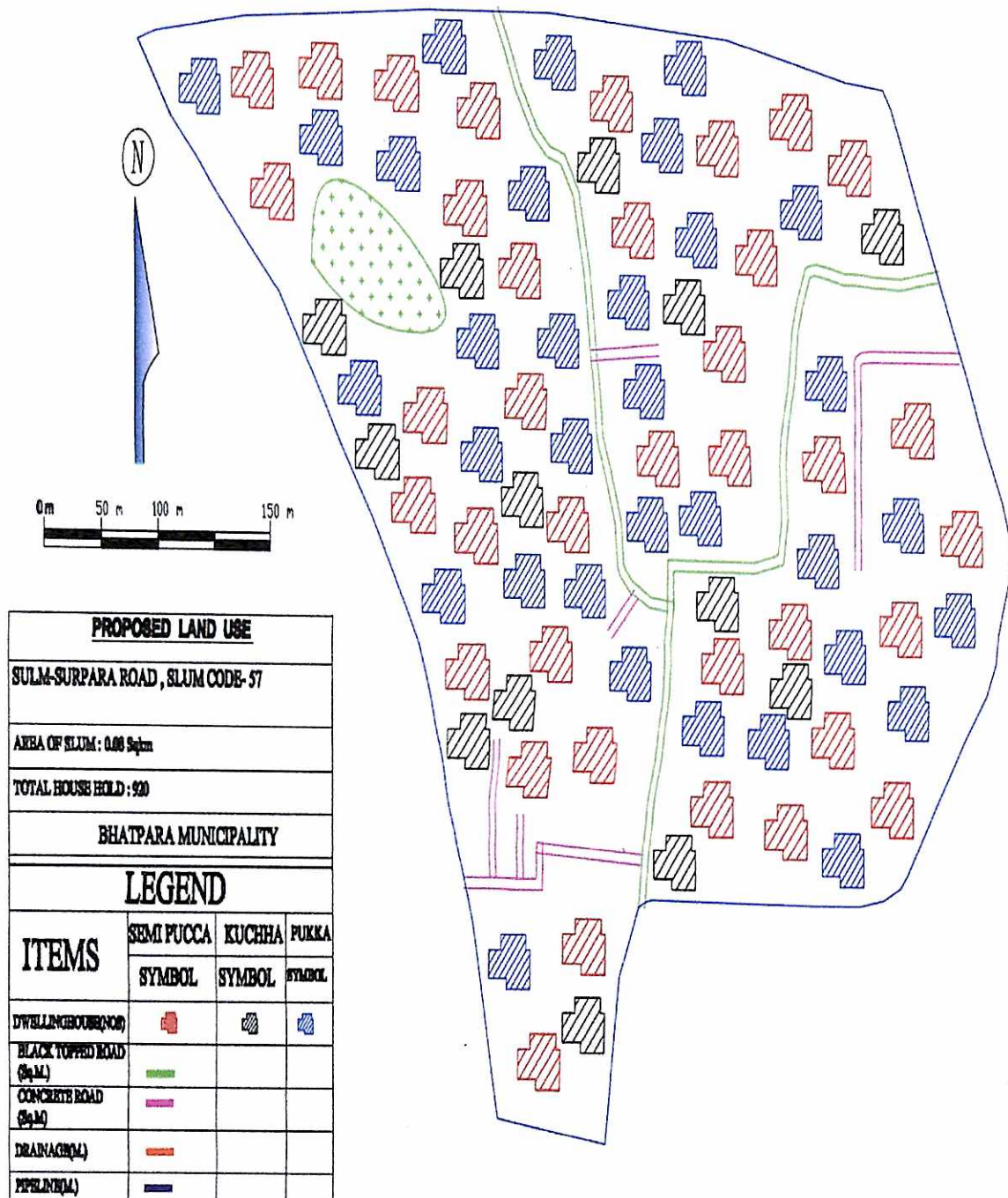
PROPOSED LAND USE			
SULJE-BANKIM NAGAR, SLDM CODE-056			
AREA OF SLDM 4.13000 Hpa			
TOTAL HOUSE HOLD 1381			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA SYMBOL	KUCHA SYMBOL	PUCCA SYMBOL
DWELLING (HOUSE)	[Red hatched box]	[Blue hatched box]	[Green hatched box]
BLACK TYPED ROAD (P.W.)	[Black line]	[Black line]	[Black line]
CONCRETE ROAD (P.W.)	[Black line]	[Black line]	[Black line]
DRAIN (P.W.)	[Blue line]	[Blue line]	[Blue line]
WATER (P.W.)	[Blue line]	[Blue line]	[Blue line]


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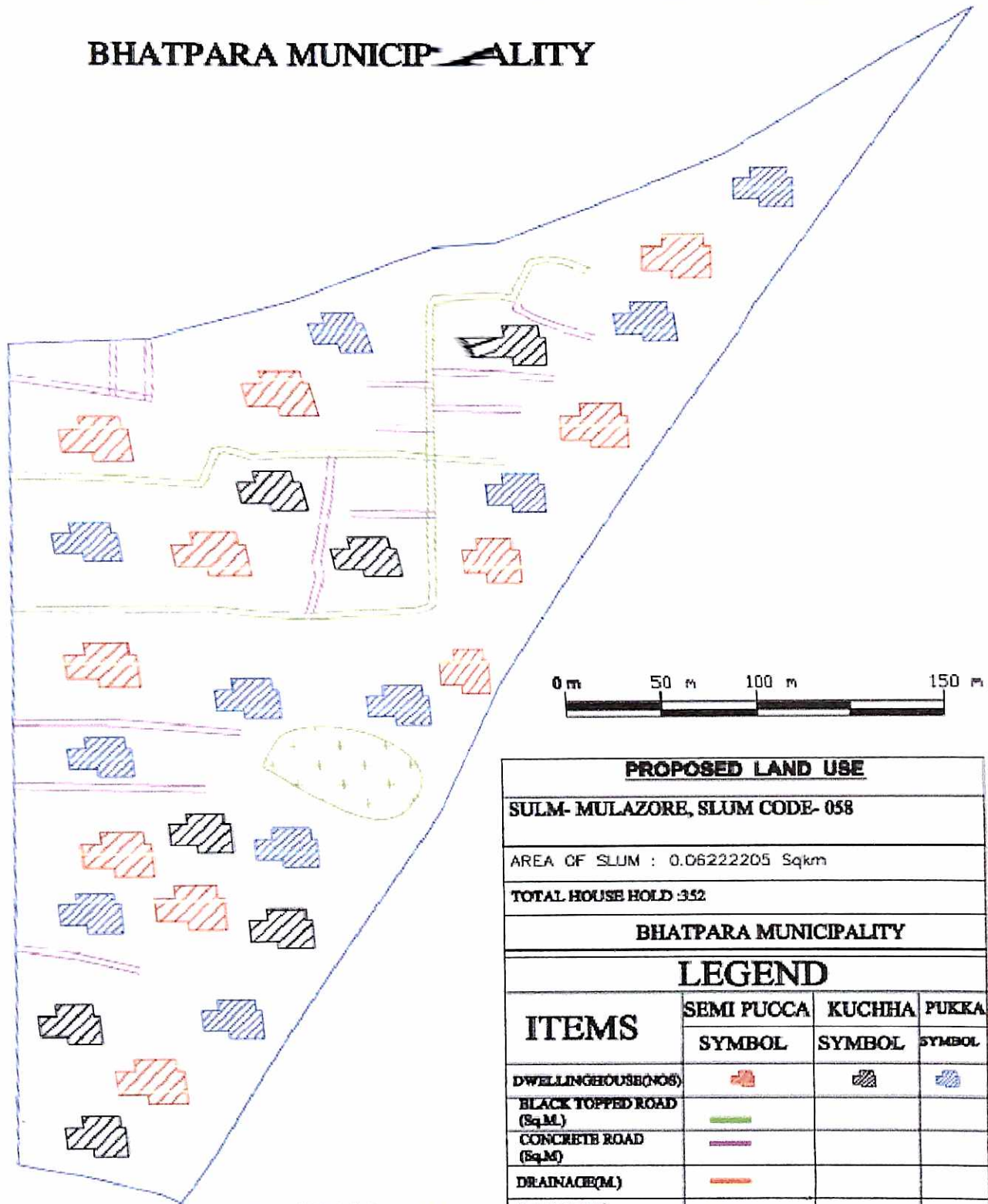

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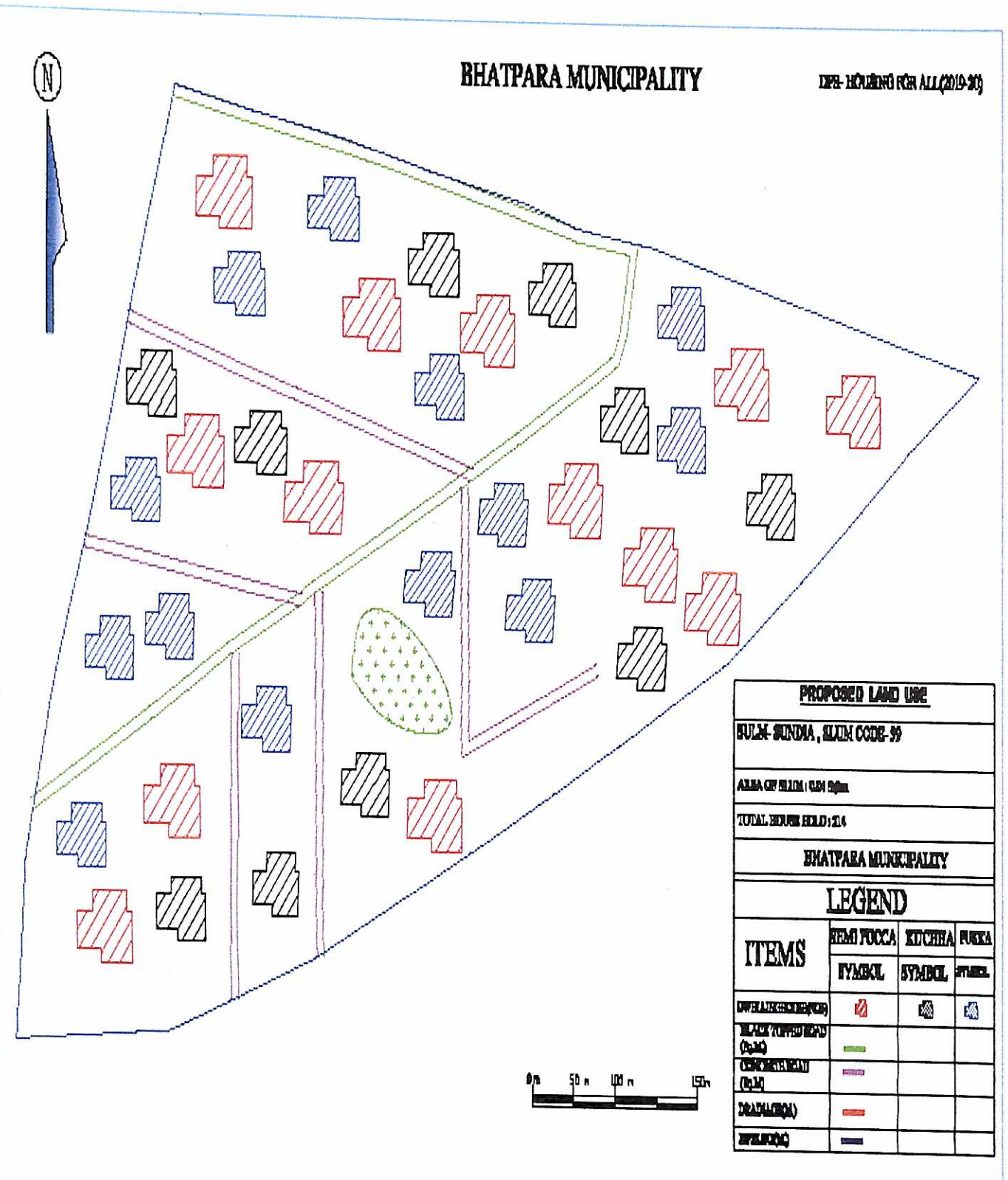
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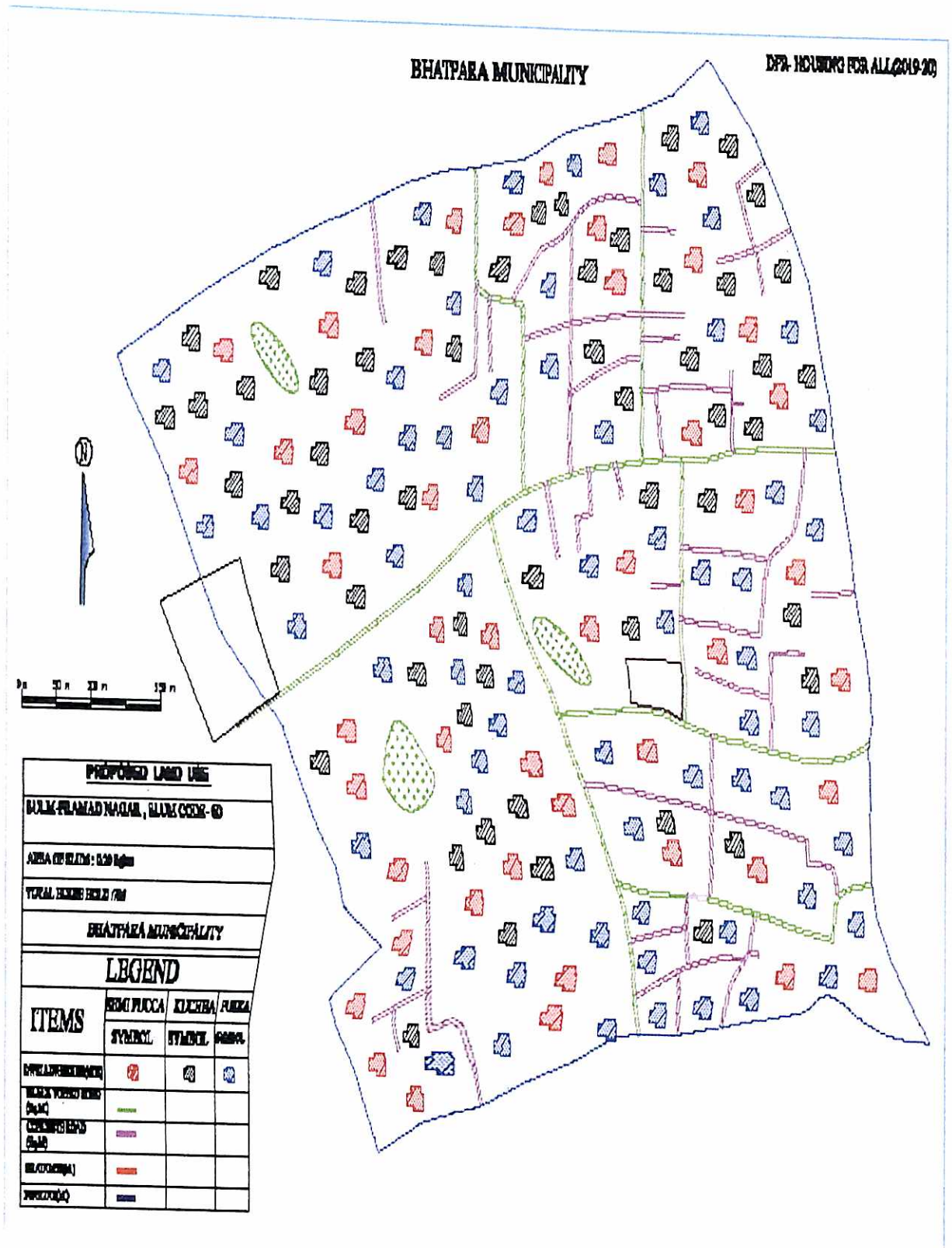
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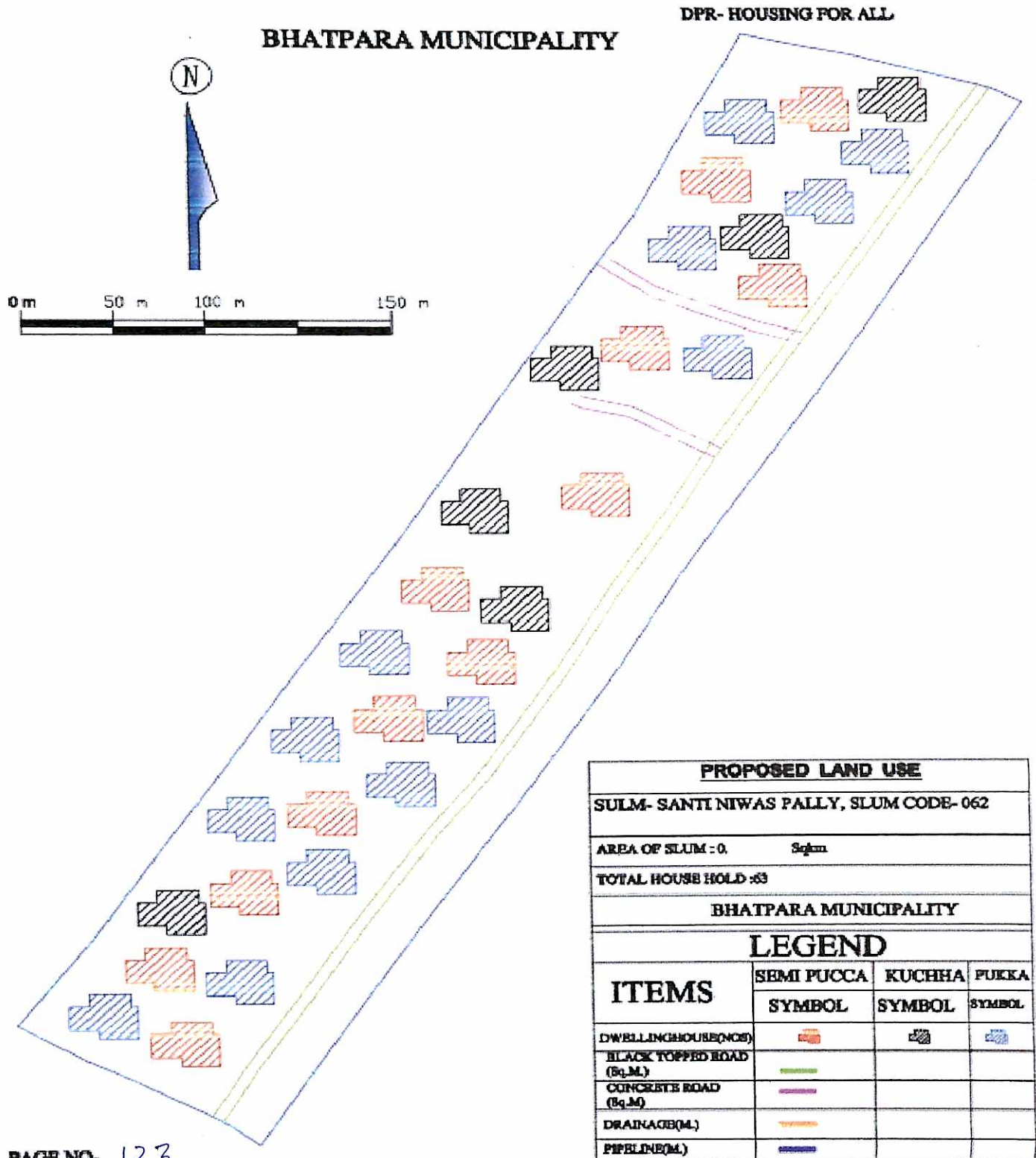

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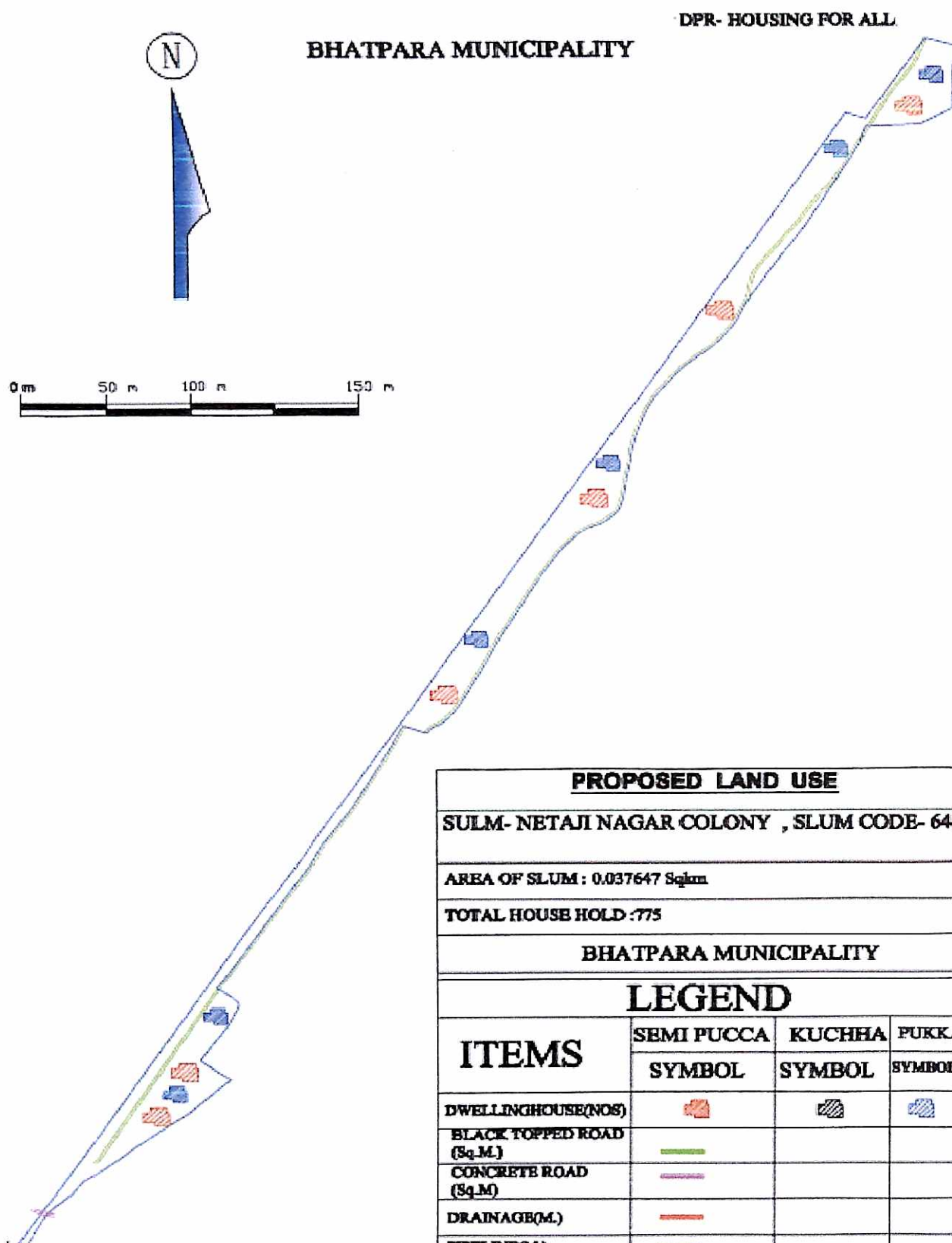
[Signature]
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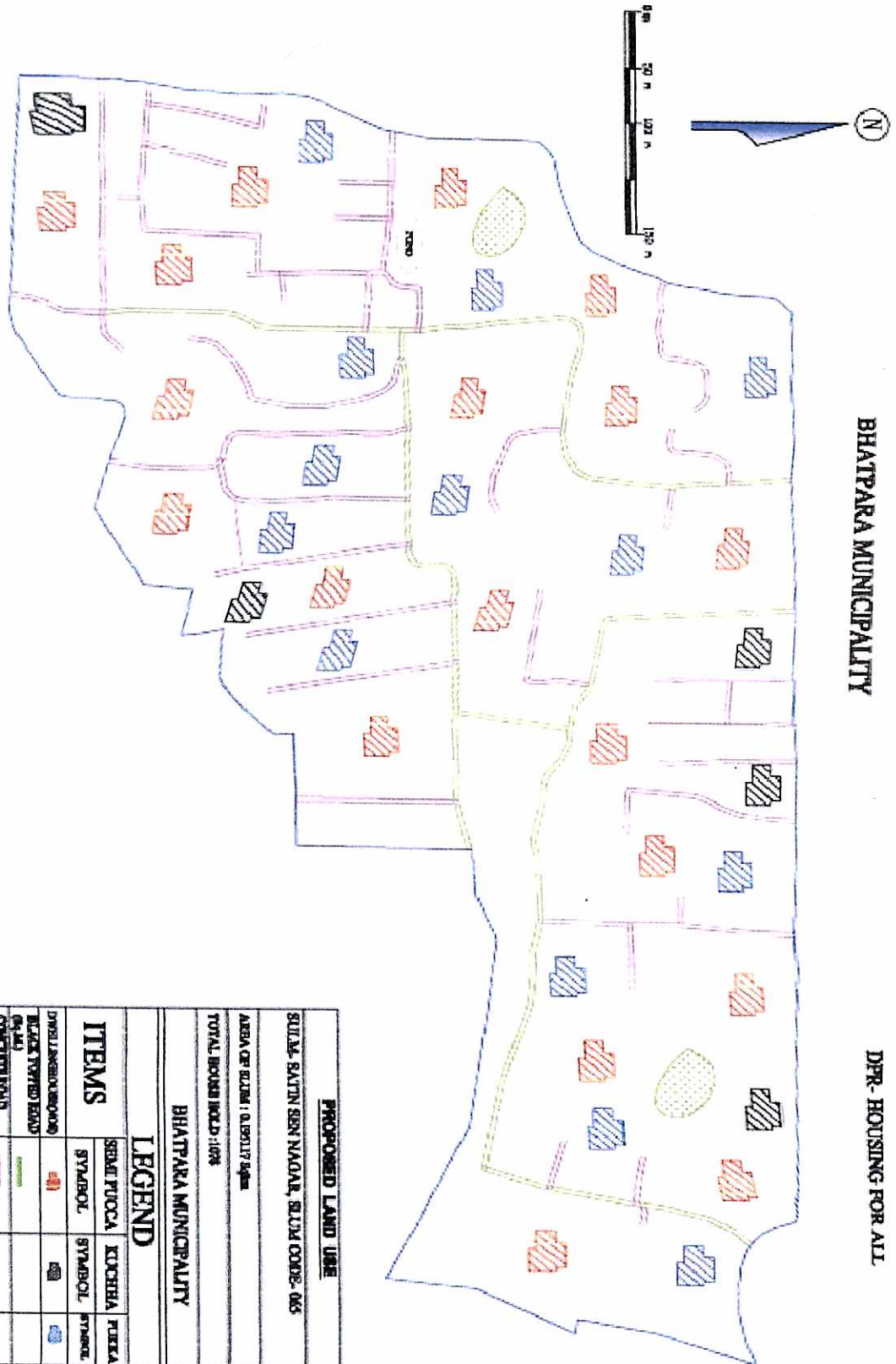
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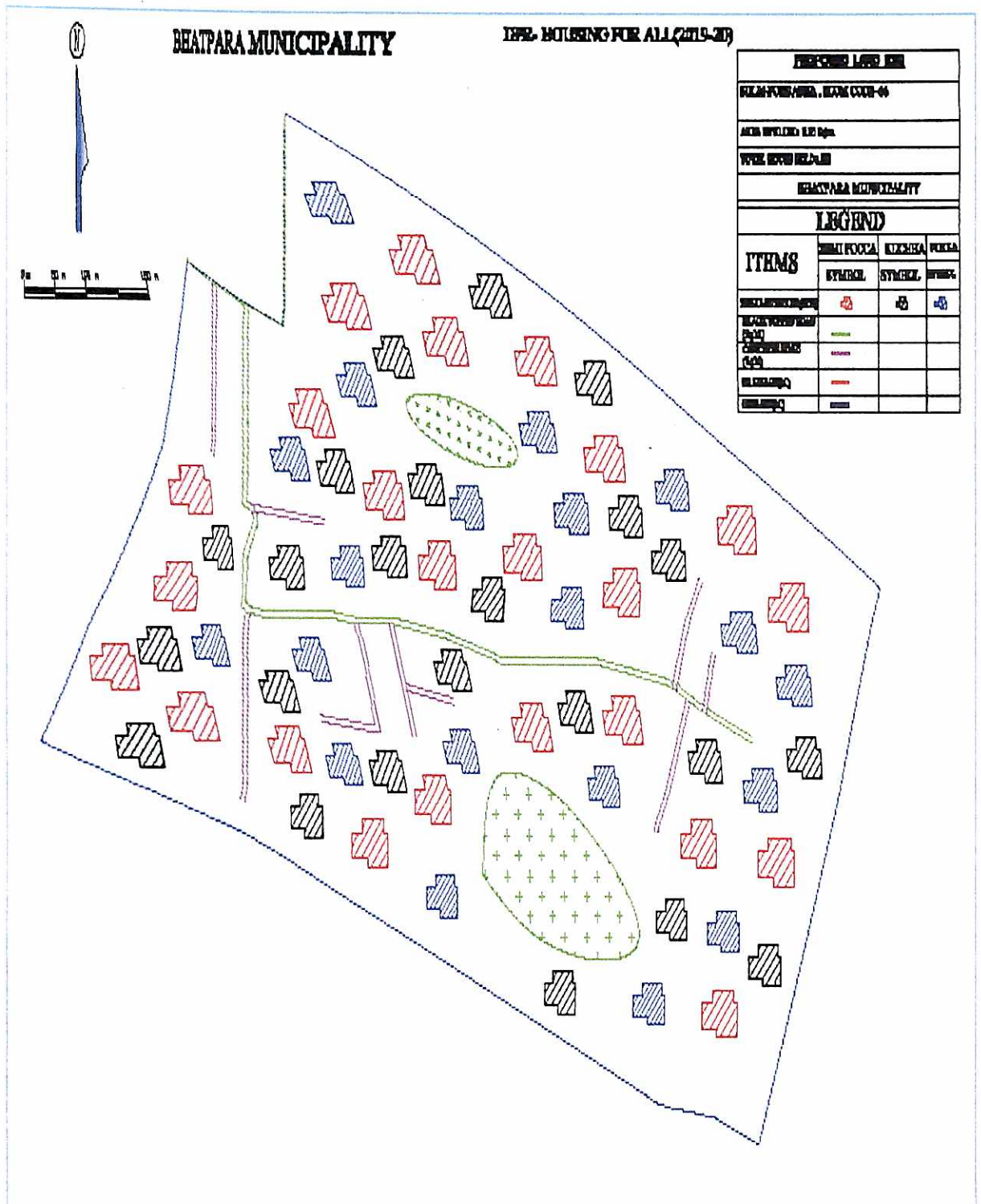
PAGE NO.

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PROPOSED LAND USE			
BULM. BHATPARA SEN NAGAR, BULM CODE- 065			
AREA OF BULM : 0.18717 Sqkm			
TOTAL BULM CODE : 065			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCHA SYMBOL	KUCHHA SYMBOL	PURKA SYMBOL
DWELLING ROOM	[Hatched]	[Hatched]	[Hatched]
BLACK TIGHT ROAD	[Hatched]	[Hatched]	[Hatched]
CONCRETE ROAD	[Hatched]	[Hatched]	[Hatched]
DRAINAGE	[Hatched]	[Hatched]	[Hatched]
WATER SUPPLY	[Hatched]	[Hatched]	[Hatched]


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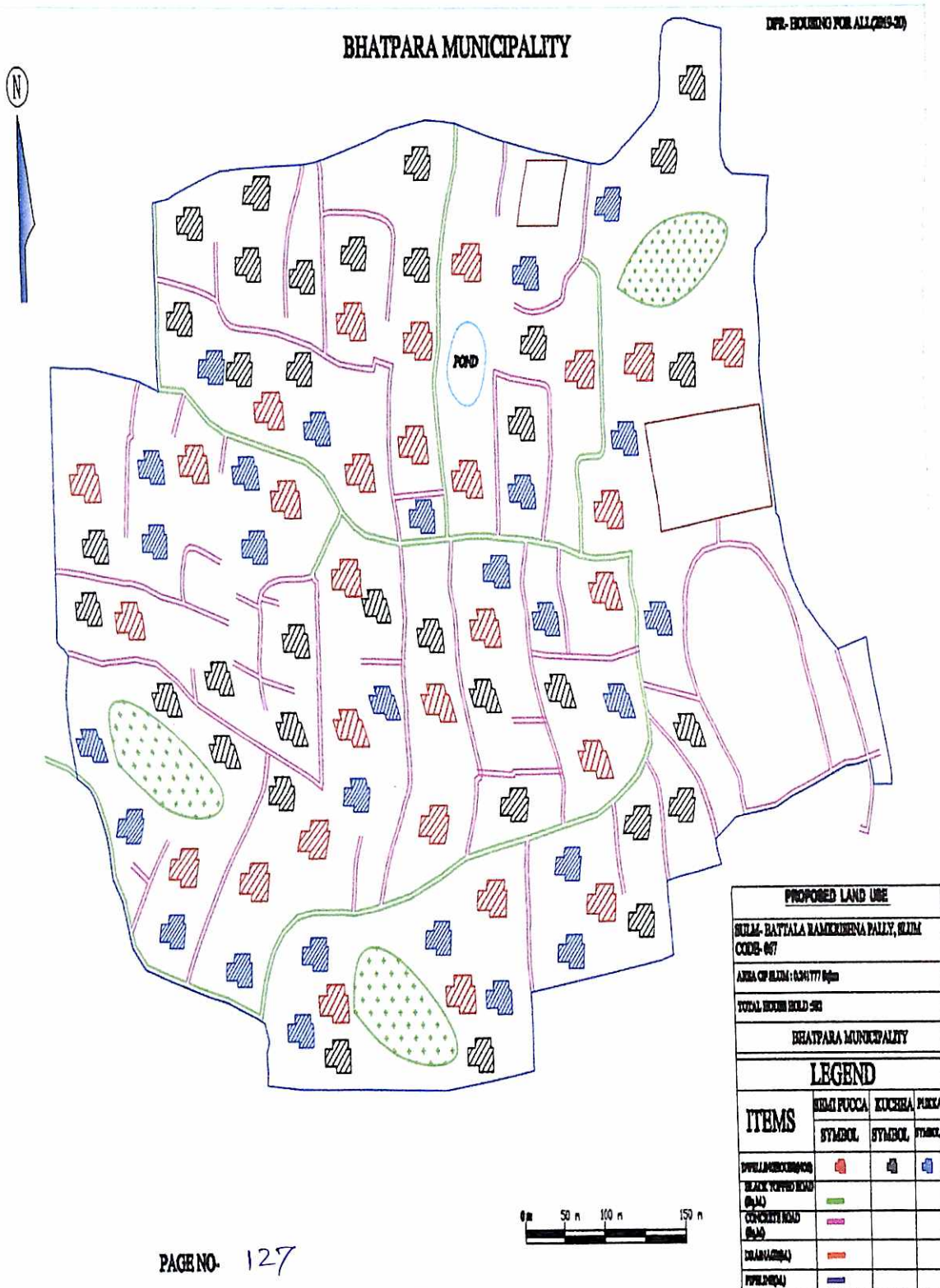

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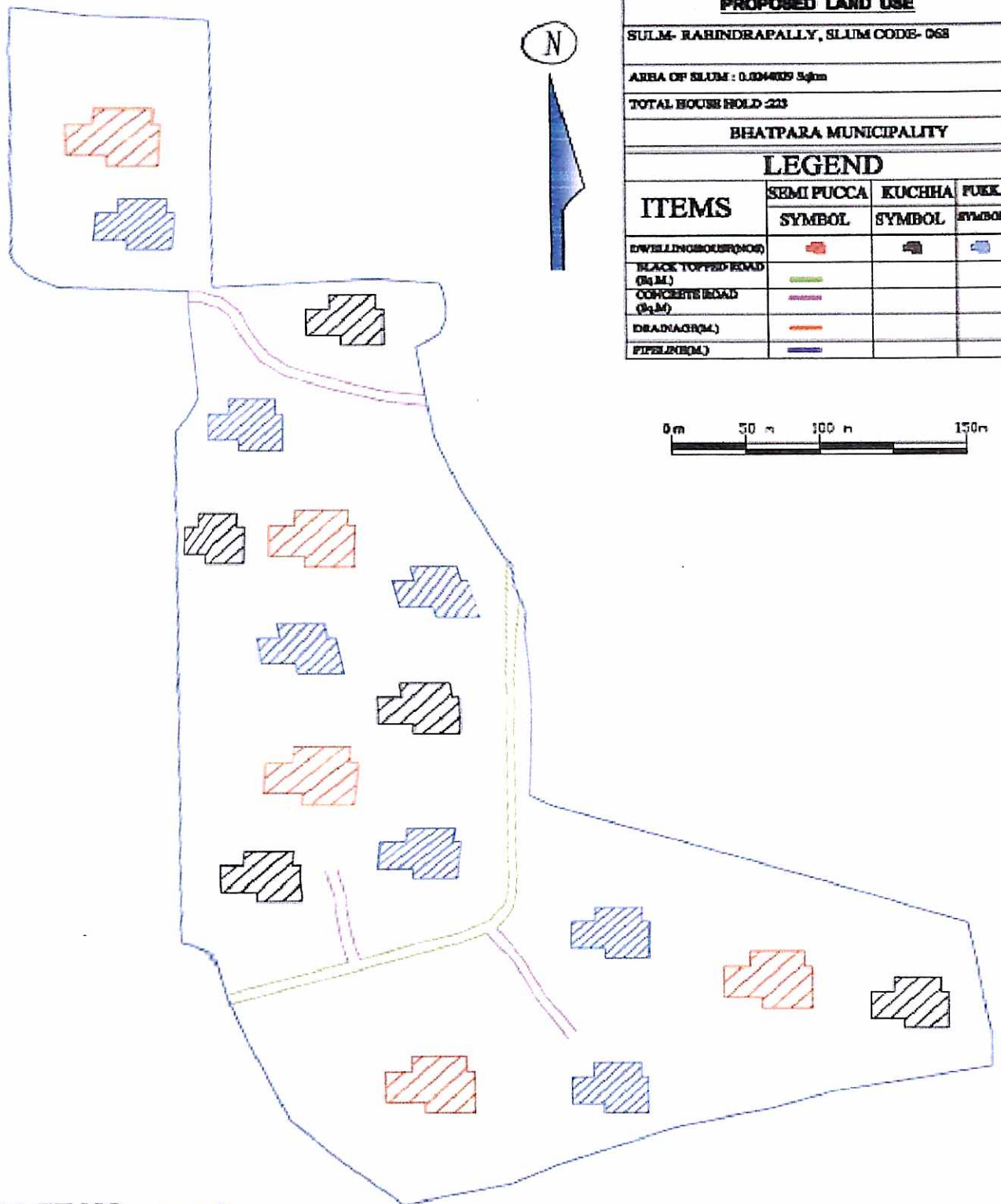
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DPR- HOUSING FOR ALL

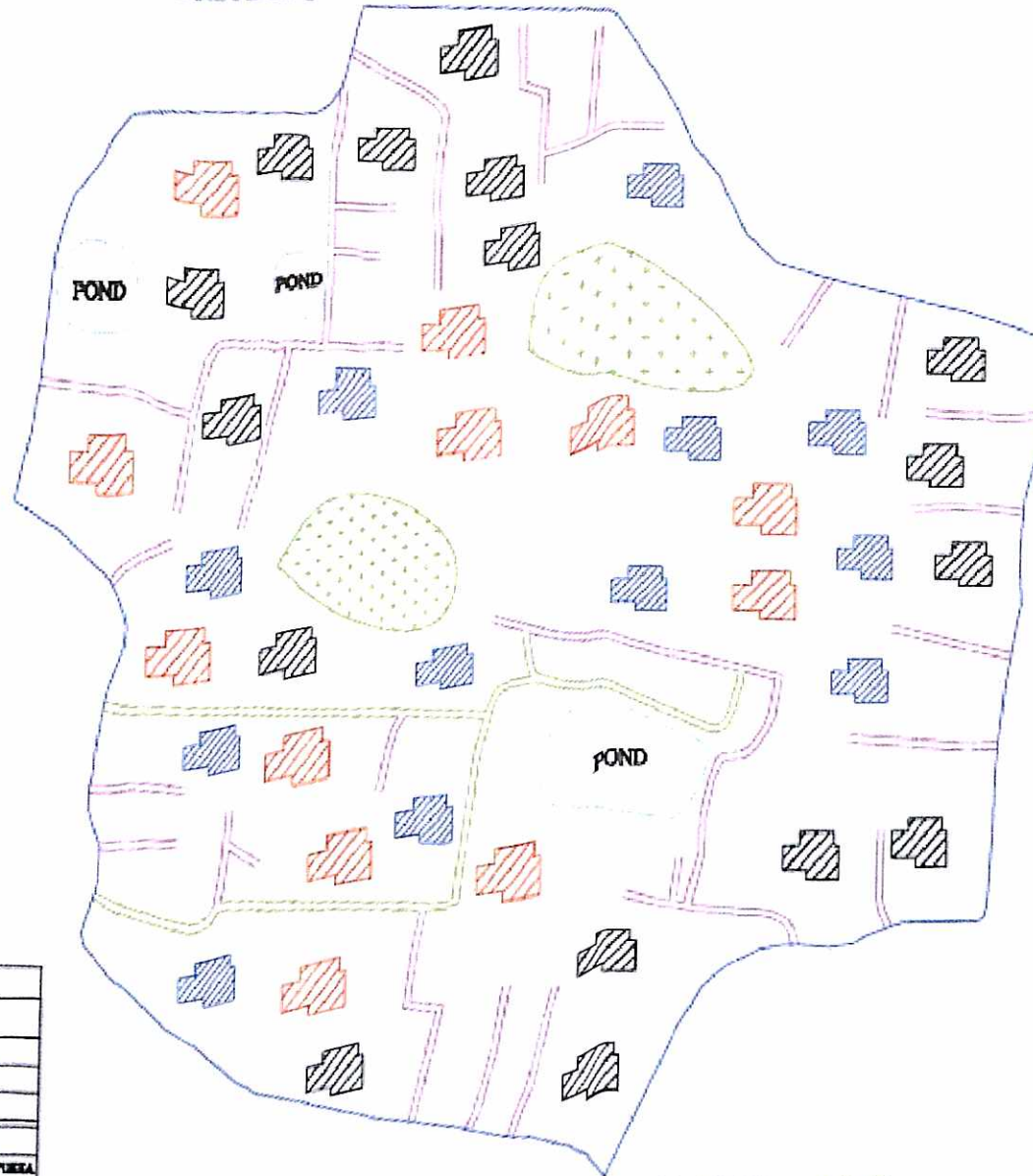
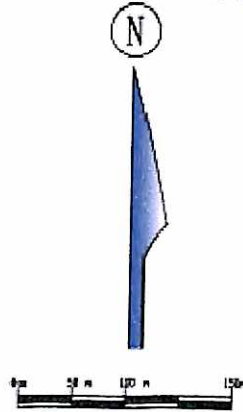


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BHATPARA MUNICIPALITY

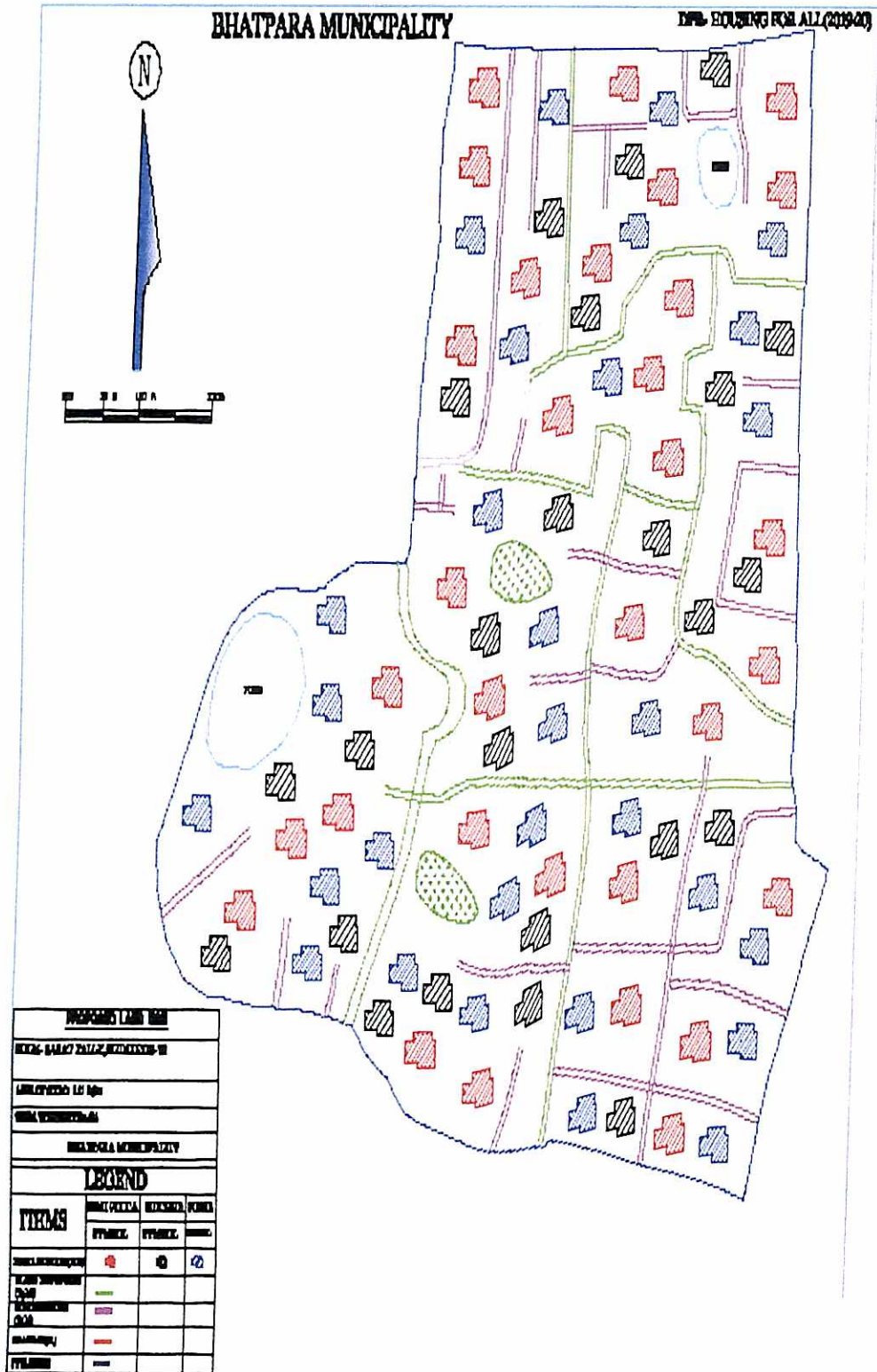


PROPOSED LAND USE			
BULM- KAO BAGAN, BULM CODE-09			
AREA OF BULM : 0.13049 Sqkm			
TOTAL HOUSEHOLD SIZE			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	HOUSE PLOTTA	KUCHHA	PURBA
	SYMBOL	SYMBOL	SYMBOL
HOUSEHOLD (H/H)			
HOUSEHOLD (H/H)			
HOUSEHOLD (H/H)			
HOUSEHOLD (H/H)			
HOUSEHOLD (H/H)			
HOUSEHOLD (H/H)			

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Soumitra
Chairman
Bhatpara Municipality

[Signature]
Engineer
Bhatpara Municipality



[Signature]
 Engineer
 Bhatpara Municipality

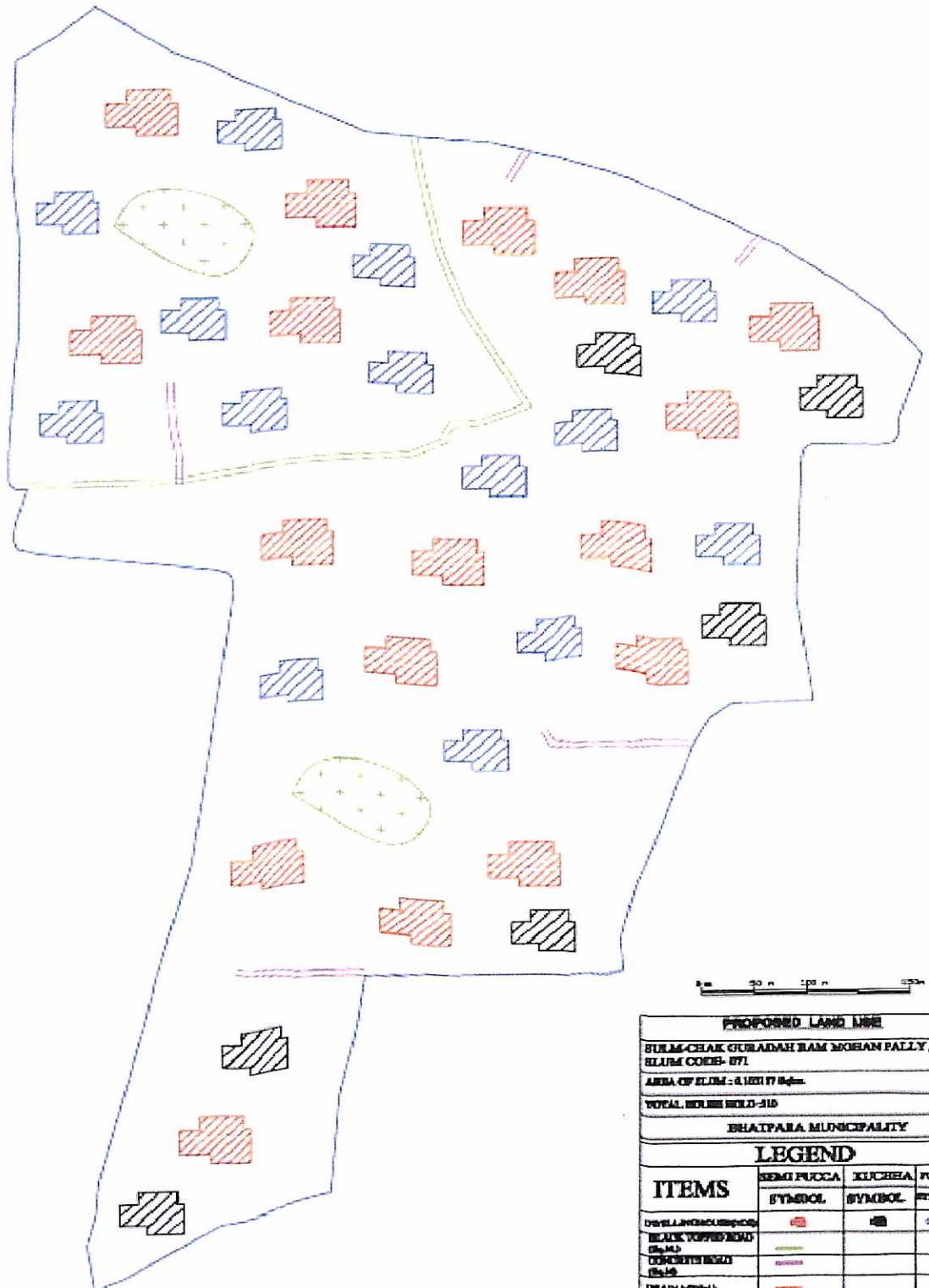
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[Signature]
 Chairman
 Bhatpara Municipality

BHATPARA MUNICIPALITY

DPR- HOUSING FOR ALL

N



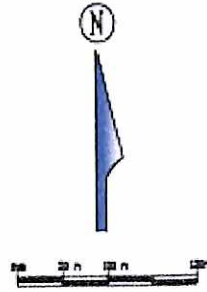
PROPOSED LAND USE			
BULM-CHAK GULADAH RAM MOHAN PALLY,			
BLUM CODE- 071			
AREA OF BLUM : 0.1217 Hect.			
TOTAL BLUM WARD-115			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCKA	KUCHHA	PURKA
	SYMBOL	SYMBOL	SYMBOL
OVERALL LANDSCAPING			
BLACK TOPPED ROAD			
GRASS			
CONCRETE ROAD			
DRAINAGE			
PERMANENT			

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Engineer
Bhatpara Municipality

Chairman
Bhatpara Municipality

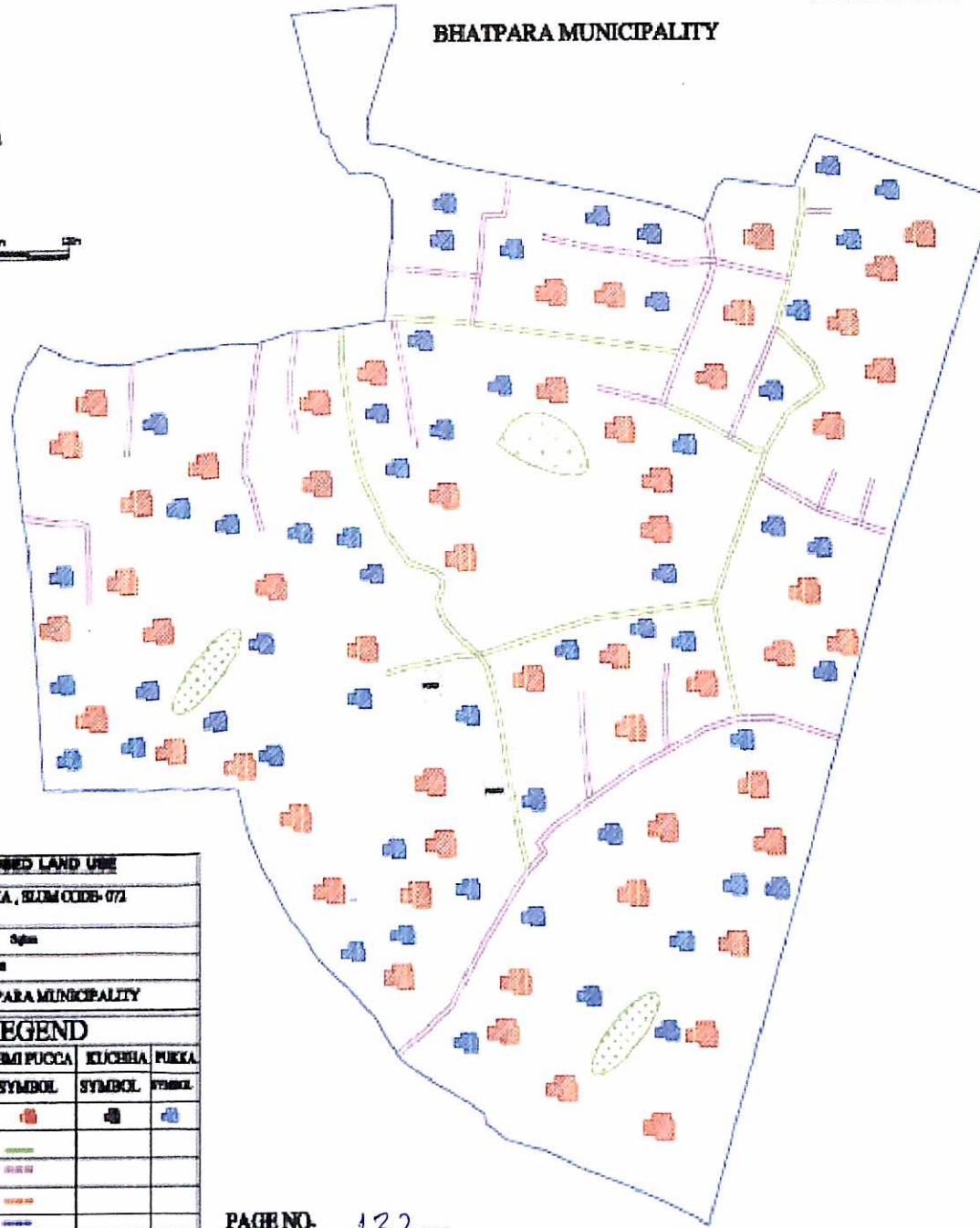


BHATPARA MUNICIPALITY

PROPOSED LAND USE			
BULM-HOUSE KHANA, SLUM CODE-072			
AREA OF SLUM : 6 Hectare			
TOTAL HOUSE HOLD : 118			
BHATPARA MUNICIPALITY			
LEGEND			
ITEMS	SEMI PUCCA SYMBOL	KUCHHA SYMBOL	PURKA SYMBOL
WELL/SHOWER/TOILET			
BLACK TOPPED ROAD (B ₁ 34)			
CONCRETE ROAD (B ₂ 30)			
BRICK/ACR/CL			
PIPE/PORE/CL			

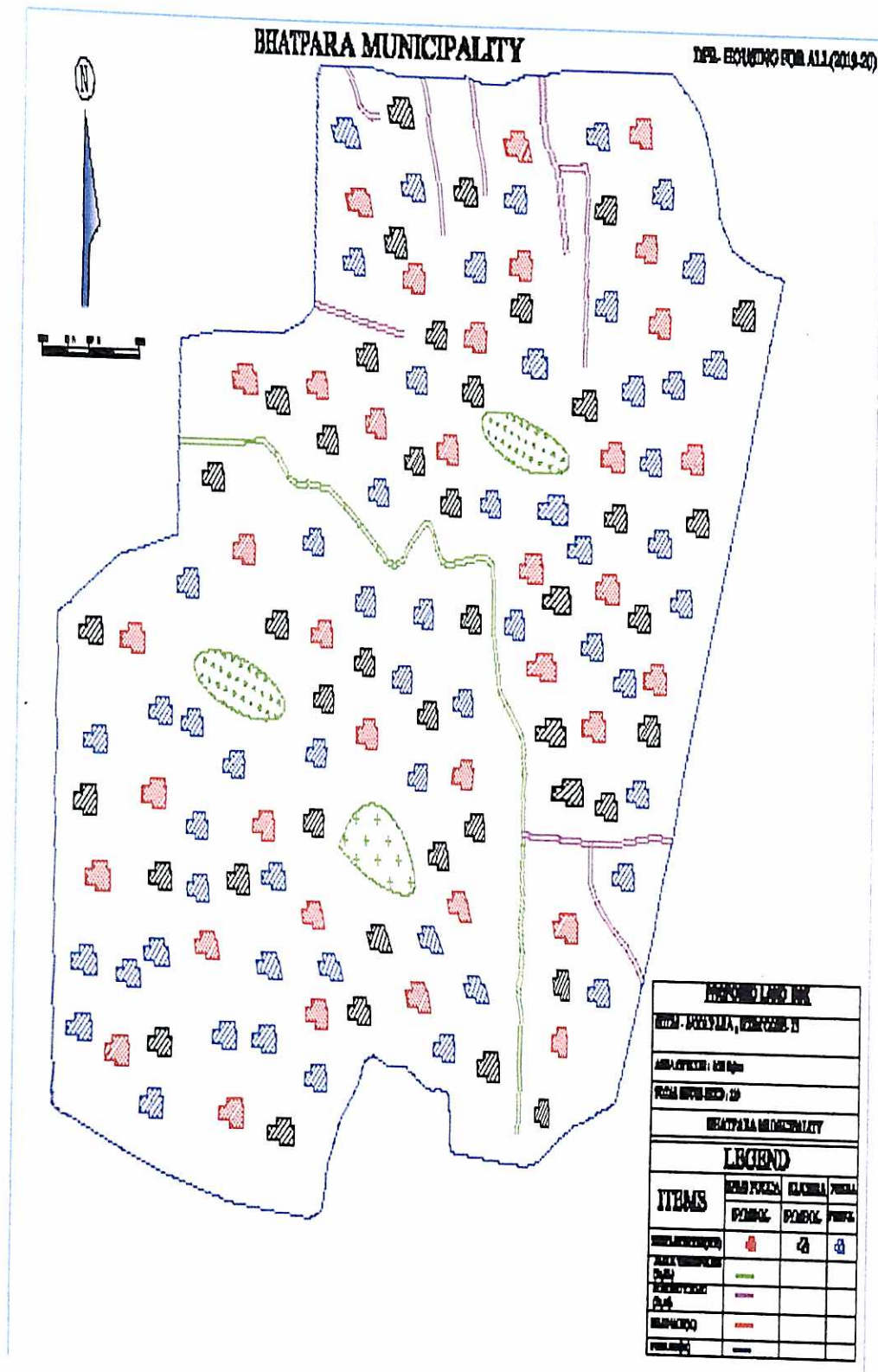
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Soumitra Singh
Chairman
Bhatpara Municipality

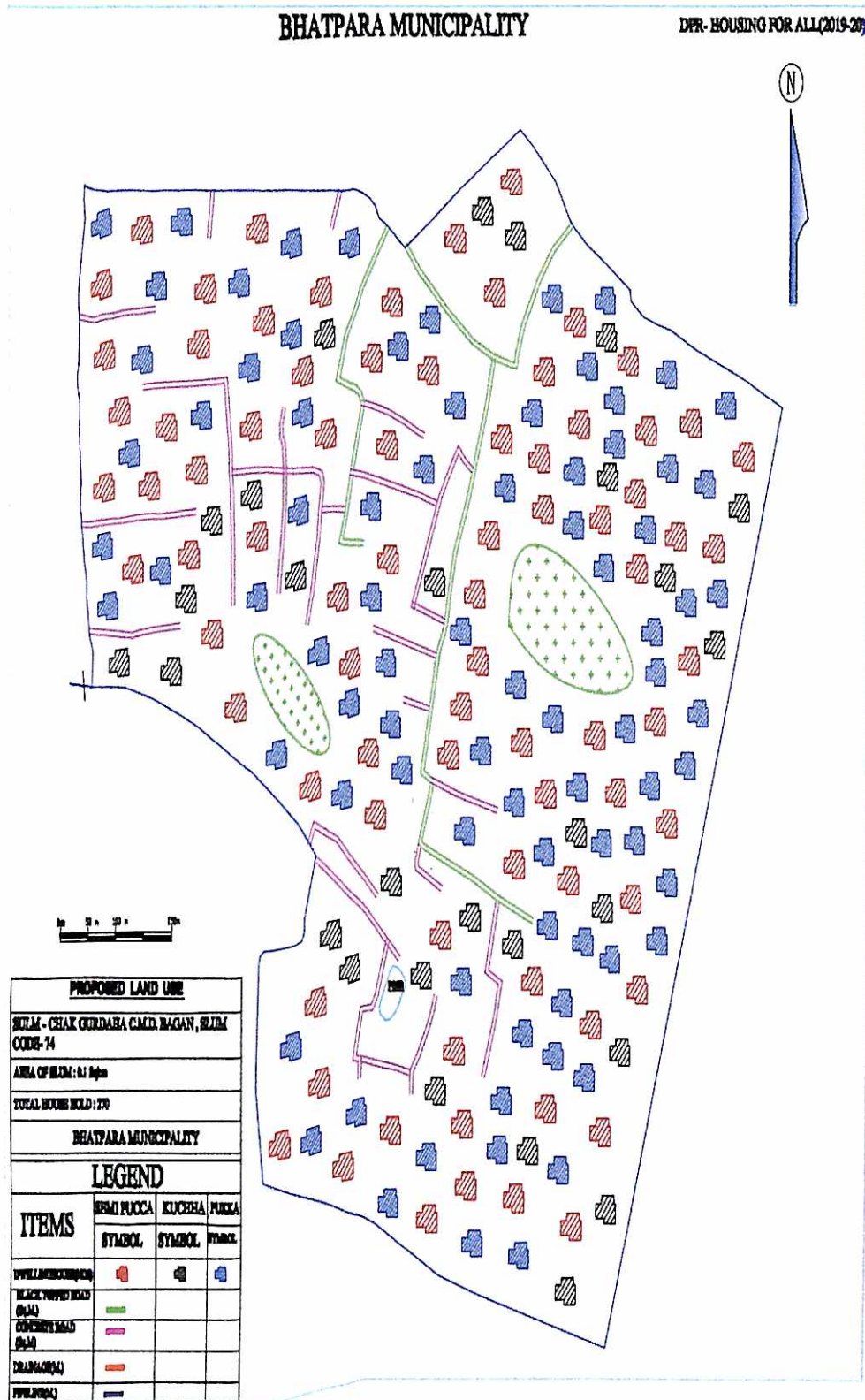
Engineer
Bhatpara Municipality




Engineer
 Bhatpara Municipality

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Chairman
 Bhatpara Municipality




 Engineer
 Bhatpara Municipality

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 Chairman
 Bhatpara Municipality