Detailed Project Report-Phase-VIII, Brahmapur Under Rajiv Awas Yojana

Implementing Agency:

Brahmapur Municipal Corporation

Consultant:

Rudrabhishek Enterprises Pvt. Ltd.



Post Cyclone(PHAILIN) Situation - Oct' 2013











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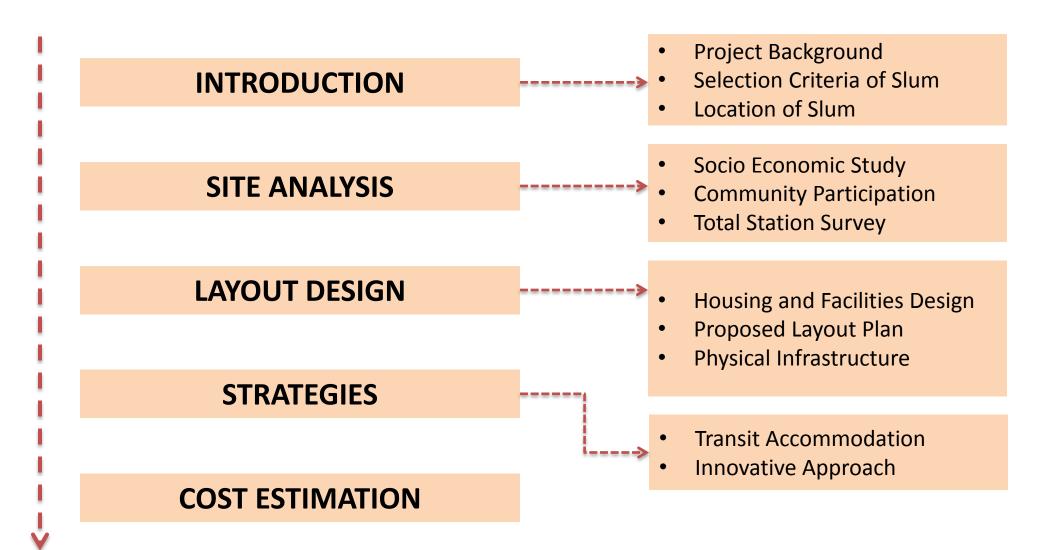






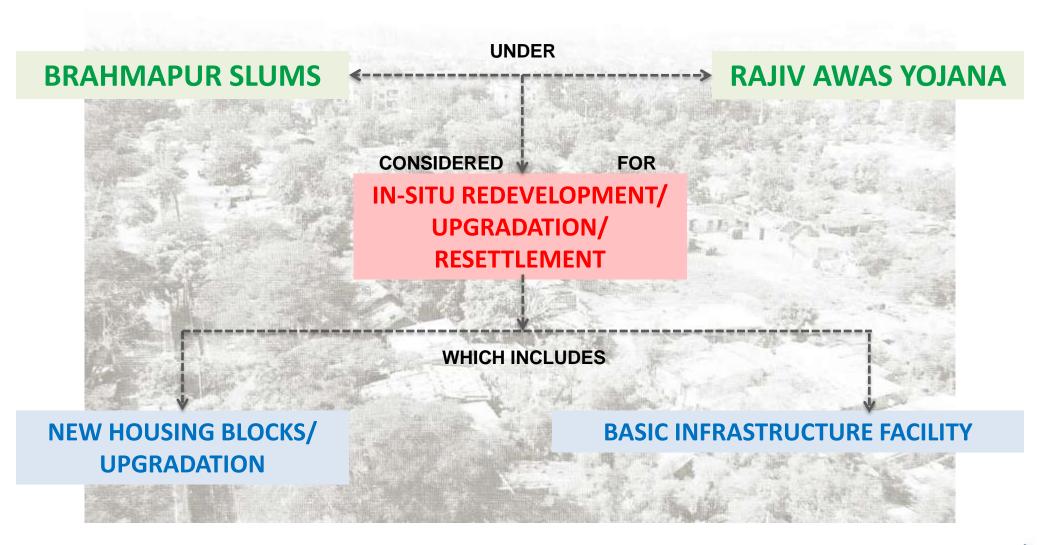


Structure of Presentation





Project Background



Introduction

- The slum dwellers are living on encroached Govt. land, Private land.
- The living condition of the slum is very unhygienic due to lack of infrastructure facilities like roads, drainage, sewerage system, solid waste management and proper water supply.
- **Location** of the slums **would encourage mainstreaming** the slum-dwellers into citywide network.
- Under RAY programme BMC has initiated programme for the slums affected by cyclone 'Phailin' to rehabilitate victims by providing them shelter and basic infrastructure services.



Introduction

DPR-Phase-8 includes 16 slums of Brahmapur namely;

1.	Bank	colony	Canal	street
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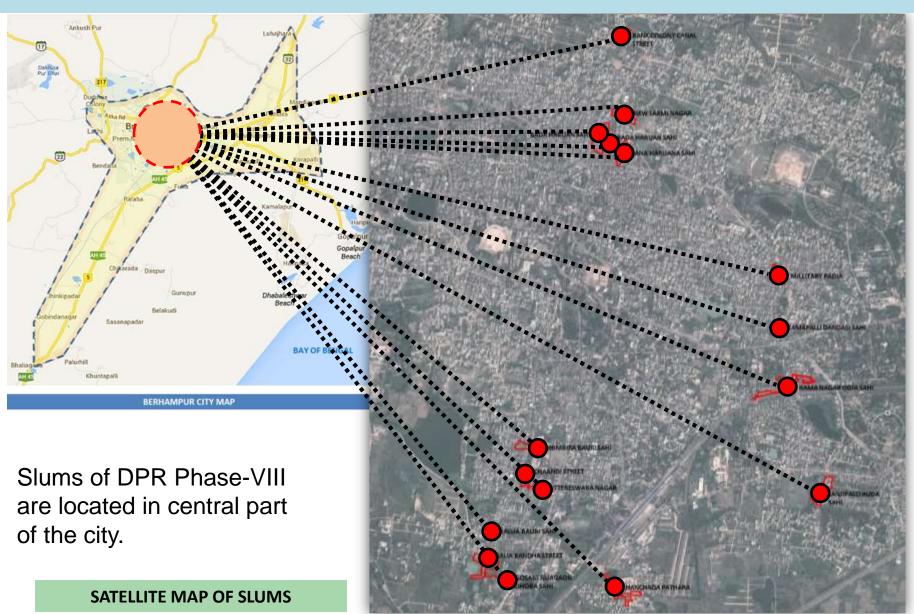
- 2. Keuta Sahi
- 3. Bada Harijan Sahi
- 4. Sana Harijan Sahi
- 5. New Laxmi Nagar
- 6. Chandi Sahi
- 7. Dhimbira Bauri Sahi
- 8. Gosani Nuagan Dhoba Sahi

- 9. Kalua Bauri Sahi
- 10. Salia Bandha Street
- 11. Uttareswara Nagar
- 12. Chanchada Pathara
- 13. Lanjipali Adua Sahi
- 14. Ramnagar Odiya Sahi
- 15. Kamapalli Dandasi Sahi, and
- 16. Military Padia



Location Map of DPR-Phase-8 Slums

majorly surrounded by Residential area.





DWELLING UNIT DETAILS

- Total 612 new dwelling units (332 GH & 280 Individual units) are proposed and upgradation of 207 nos. new toilets in 16 slum clusters.
- Cost per Dwelling Unit:

DU- Ranging from Rs. 358,067/- to Rs. 437,719/-

Infrastructure-Rs.2.624 lac.

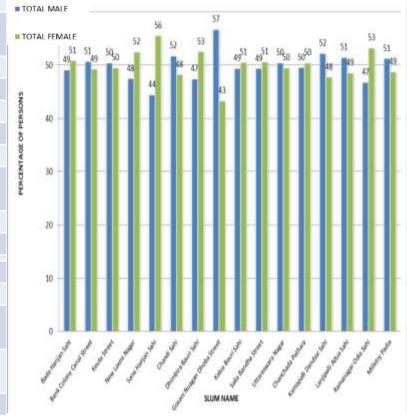
	SI No.	Scheme	Qty	Uni	Rate (Rs)	Propose	Apprais	Central	State	Ulb	benific
		Componen ts		t		d project	ed Project	share	share	share	iary Share
:		ıs				cost	Cost				Silare
	A. Housing										
	1	New									
		Housing									
<i>'</i>		New Group housing									
		Type-A (4	288	no.						0	
		units per floor -G+3)			379,365.00	1,564.2 6	1,092.5 7	864.00	97.46		131.11
		Type-B (3	12	no.						0	
		units per			414,000.00	53.62	49.68	36.00	7.72		5.96
		floor -G+3)	32	no.						0	
		Type-C (2 units per	32	110.	437,719.00	394.75	140.07	96.00	27.26	U	16.81
		floor -G+3)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	33 3	2 10107	30.00			10.01
	2	New		no.						0	
		individual									
		Dus									
		Type-1	134	no.	358,067.00	504.82	479.81	402.00	20.23	0	57.58
		Type-2	146	no.						0	
					386,185.00	590.85	563.83	438.00	58.17		67.66
		Upgradatio									
	3	n New Toilet	207	no.						0	0
		New Tollet	207	110.	57,202.00	118.41	118.41	88.81	29.60	U	U
	Total		819								
					298,457.63	3,226.7	2,444.3	1,924.8	240.45	-	279.12
						0	7	1			

Socio Economic Profile

Population Distribution

• Total population of 16 slums is 6050. Out of total population, number of male population is 2984 (49.3%) and number of female population is 3066 (50.7%).

		10 0 10 0			- (
S.N	SLUM NAME	POPULATION			TOTAL	TOTAL	TOTAL	
0		DISTRIBUTION				MALE	FEMALE	POPULA
		Gen.	OBC	SC	ST			TION
1	Bada Harijan Sahi	21	0	665	0	337	349	686
2	Bank Colony Canal	135	0	5	0	71	69	140
	Street							
3	Keuta Street	61	5	41	0	54	53	107
4	New Laxmi Nagar	184	222	95	0	238	263	501
5	Sana Harijan Sahi	9	0	432	0	196	245	441
6	Chandi Sahi	297	10	35	0	177	165	342
7	Dhimbira Bauri Sahi	21	20	429	156	297	329	626
8	Gosani Nuagan	28	18	42	76	93	71	164
	Dhoba Street							
9	Kalua Bauri Sahi	13	0	258	0	134	137	271
10	Salia Bandha Street	521	115	0	0	314	322	636
12	Chanchada Pathara	86	2	116	26	114	116	230
13	Lanjipalli Adua Sahi	423	8	73	11	265	250	515
14	Ramanagar Odiya	57	9	218	103	181	206	387
	Sahi							
15	Kamapalli Dandasi Sahi	0	0	203	0	106	97	203
16	Military Padia	51	251	39	20	185	176	361

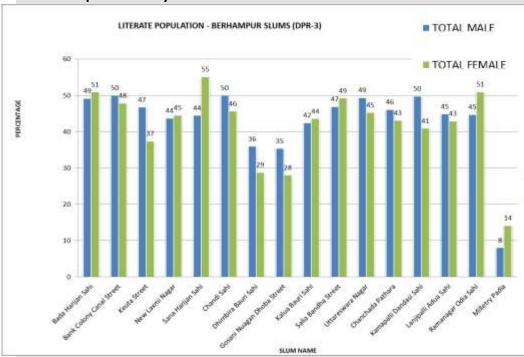


Source: Brahmapur Municipal Corporation

Socio Economic Profile

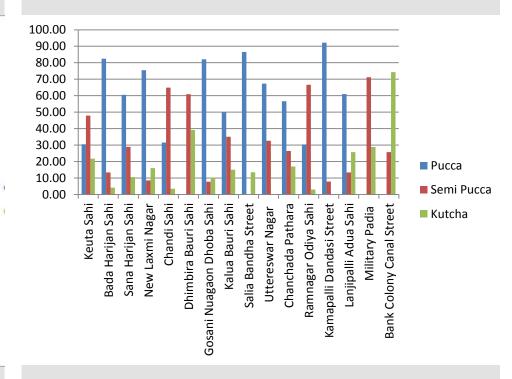
Literacy Rate

- Total **85% of the population** are **literate** of which 43% are male and 42% are female literates.
- Bada Harjan sahi (100) & Military Padia (22) have highest and lowest literacy rates respectively.



Housing Status

 Out of total units, 56% are pucca, 29% are semi-pucca and 15 % are kuccha houses.



Source: Brahmapur Municipal Corporation



Housing Scenario























Water Supply

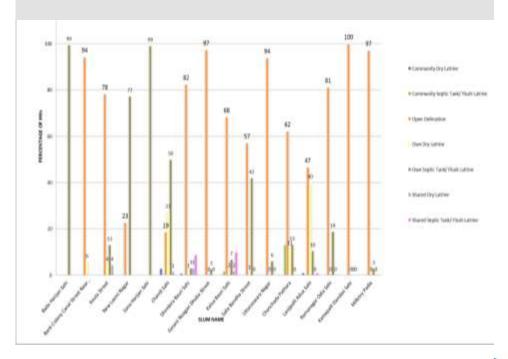
- All houses in these slums have water supply access through bore well/ public tap/ tube well/ hand pump.
- Water sources are either located within their premises or at distance of less than 0.5 km.
- Water is supplied through piped water supply only for less than one hour.



Source: Brahmapur Municipal Corporation

Sanitation

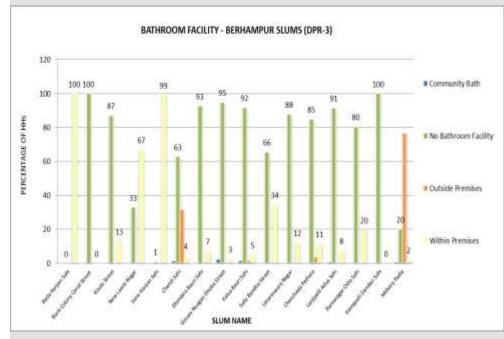
- Open defecation is a common practice in most of the slums.
- Most of the people in all these slums do not have access to proper sanitation facilities.





Bathroom Facility

- Only in 4 of 16 slums, HHs have bathroom within and outside their premises respectively.
- Rest use community bath facilities.



Source: Brahmapur Municipal Corporation

Drainage

- **Open drains found** in slums which are choked with garbage.
- Unhygienic condition is being created due to water logging at low laying areas









Source: Brahmapur Municipal Corporation



Solid Waste Management

- No solid waste management system present in the slums. Majority of the households dispose garbage themselves.
- Waste dumped on open vacant lands and open drains in the slums creating unhygienic conditions.

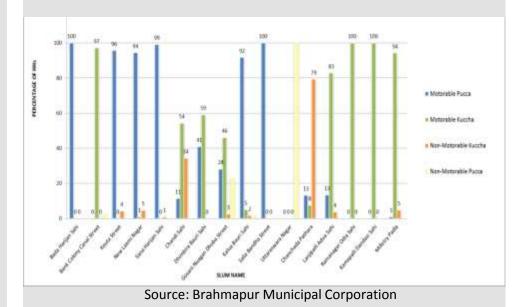






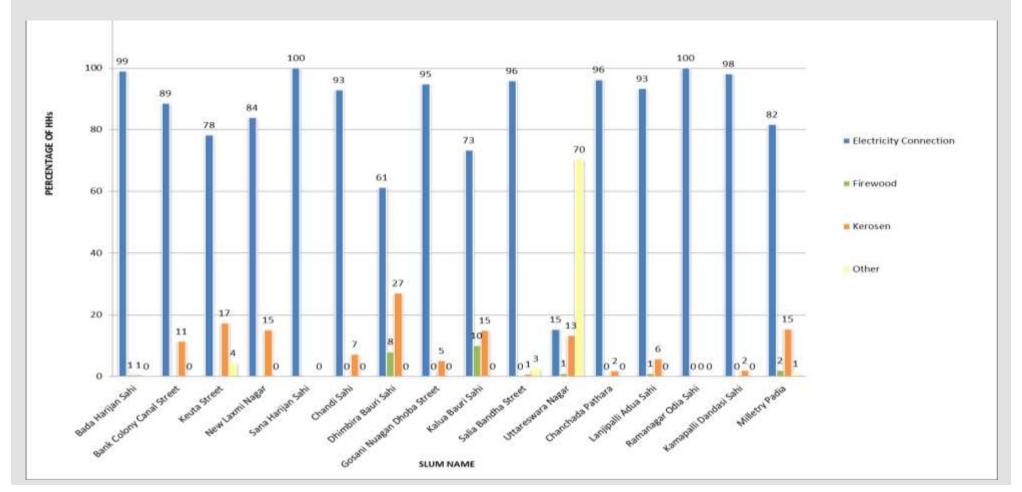
Road Frontage

Except Uttareswara Nagar & Chanchada
 Pathara slum which is accessible by non-motorable kutcha road, all other slums are accessible by motorable pucca or motorable kutcha road.



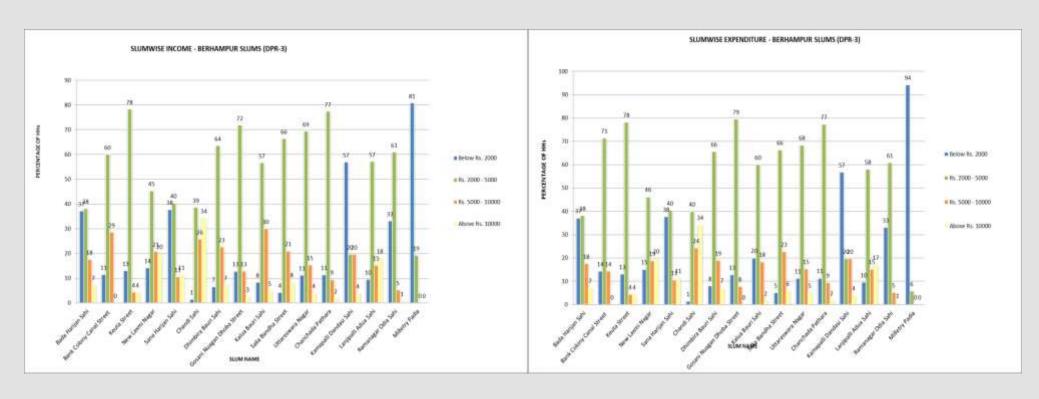
Electricity

About 91% of the households are having electricity connections, and very few households (7%)
are using kerosene for lighting their houses.



Economic Status

- Monthly income of majority of the Households is **Rs 2000-5000**.
- Only in four slums majority of Households have monthly income less than Rs 2000.



Source: Brahmapur Municipal Corporation



Community Participation

Objective of Community Participation:

To achieve a **sustainable development and implementation** of the project.

Community Participation at Project level:

- "LIPICA" is Identified as a Partner NGO engaged by RAY Cell BMC for community mobilization.
- NGO understand the community, its livelihood pattern, dynamics of local CBOs and discuss their needs and concerns.
- Local Corporator was approached and briefed about RAY's participatory process and various surveys needed for the project.
- The identified NGO, RWA members with the help of ULB shall discuss and finalize designs for housing, infrastructure planning and its maintenance at a household as well as community level.

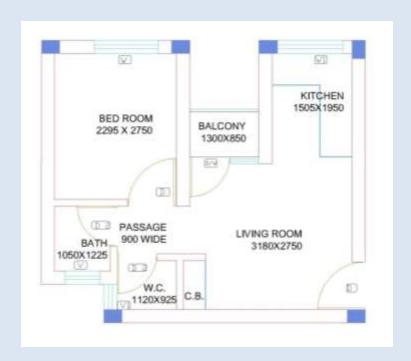




Dwelling Unit Design



- Cluster of **16 dwelling units** having 4 DUs per floor designed with proper natural light and ventilation, parking facility, common green and open areas.
- Total 23 housing blocks / clusters (G+3 structure) have been provided in different combinations to shelter for 332

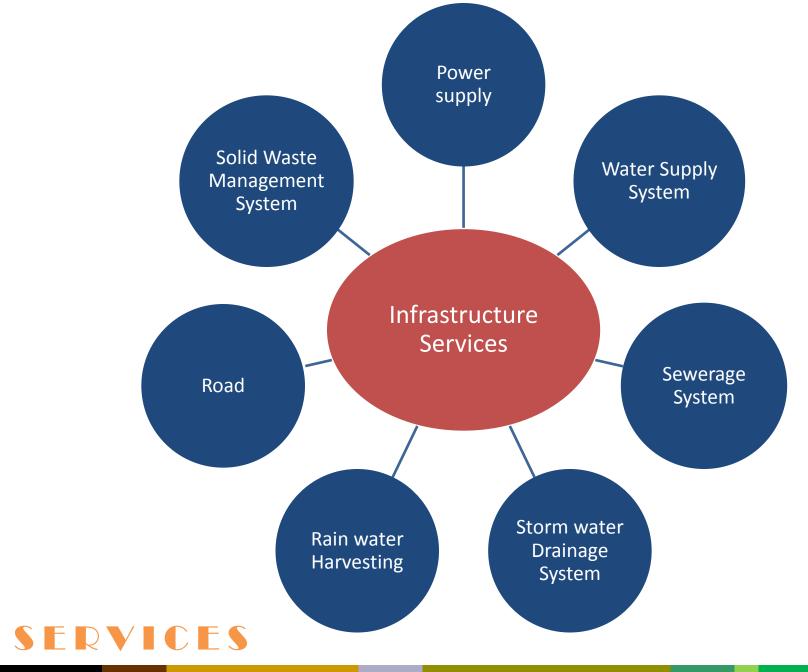


1 UNIT AREA

Carpet Area - 22.19 Sq. M Covered Area - 28.22 Sq. M

 Individual dwelling unit designed with carpet area of 22.19 Sq. M comprising of living room provided with balcony, kitchen, bed room, toilet and bath.





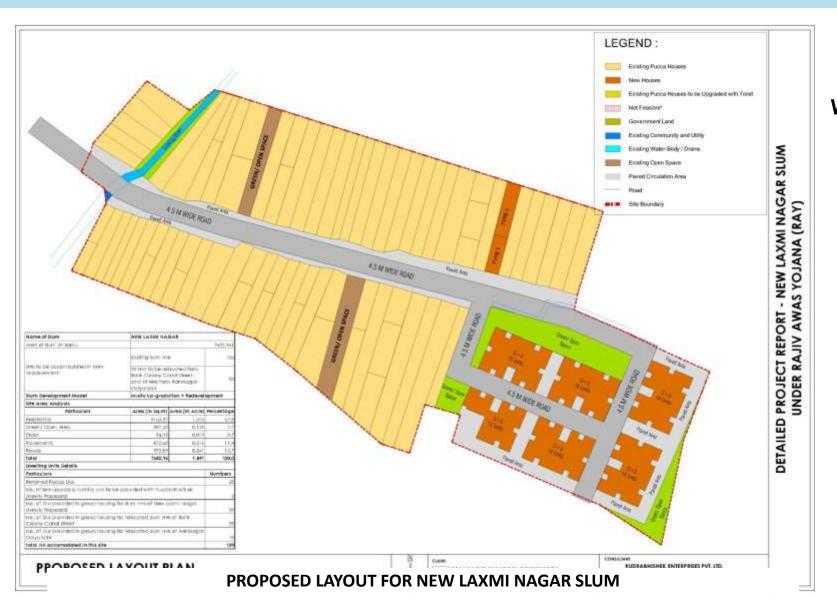


DESIGN AND INFRASTRUCTURE LAYOUTS

- HOUSING STRUCTURE
- SANITATION FACILITY
- TENURE
- PROPOSED LAYOUT
- PROPOSED GROUP HOUSING BLOCKS
- ELECTRICAL SERVICES
- SEWERAGE SYSTEM
- WATER SUPPLY SYSTEM
- DRAINAGE SYSTEM
- RAINWATER HARVESTING SYSTEM

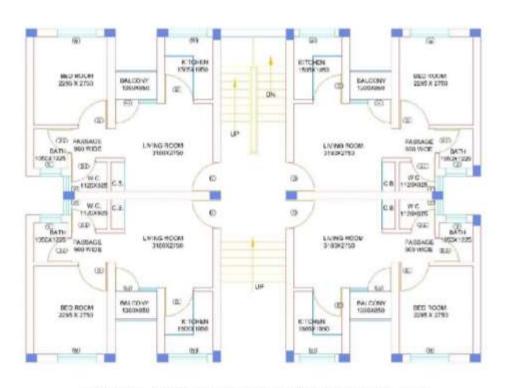


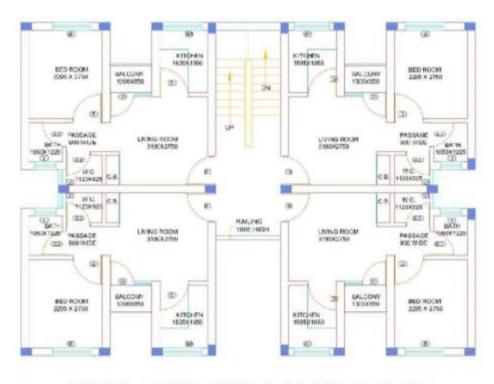
NEW LAXMI NAGAR - LAYOUT





GROUP HOUSING BLOCKS





TYPE 'A' - TYPICAL FLOOR PLAN (GROUND FL.)

BUILT UP AREA PER FLOOR - 129.50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518.00 SQ.M.

TYPE 'A' - TYPICAL FLOOR PLAN (1ST TO 3RD FL.)

BUILT UP AREA PER FLOOR - 129,50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518,00 SQ.M.

PROPOSED GROUP HOUSING BLOCKS (4 DU PER FLOOR) FOR NEW LAXMI NAGAR SLUM



GROUP HOUSING BLOCKS

ипинем

DN

UF

RALING

10001604

MERCHANISME.

MALCONY

18000080

E VIND ROOM

SHIGHERS

KITCHEN

1005-61960

an.

LAWIG ROOM

215282760

BED ROOM

2295 X 2750

DE MASSAGE

BATH.

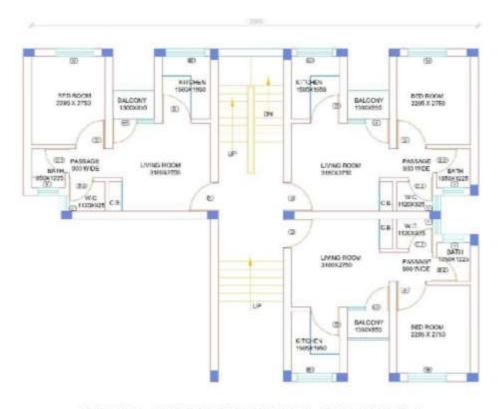
NUMBER OF THE PARTY

SOO WIDE

PERSONAL PROPERTY.

MALCOUNT

13/00/49/53





TYPE 'B' - TYPICAL FLOOR PLAN (GROUND FL.)

BUILT UP AREA PER FLOOR - 129.50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518.00 SQ.M. BUILT UP AREA PER FLOOR - 129.50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518.00 SQ.M.

PROPOSED GROUP HOUSING BLOCKS (3 DU PER FLOOR) FOR NEW LAXMI NAGAR SLUM



(B)

BED BOOM

2215 × 2750

PASSAGE GD

ST

WC

CR WO

11204925

PASSACE

NO WITH INTO

CB 11200025

BATH

105081225

BATH

105001205

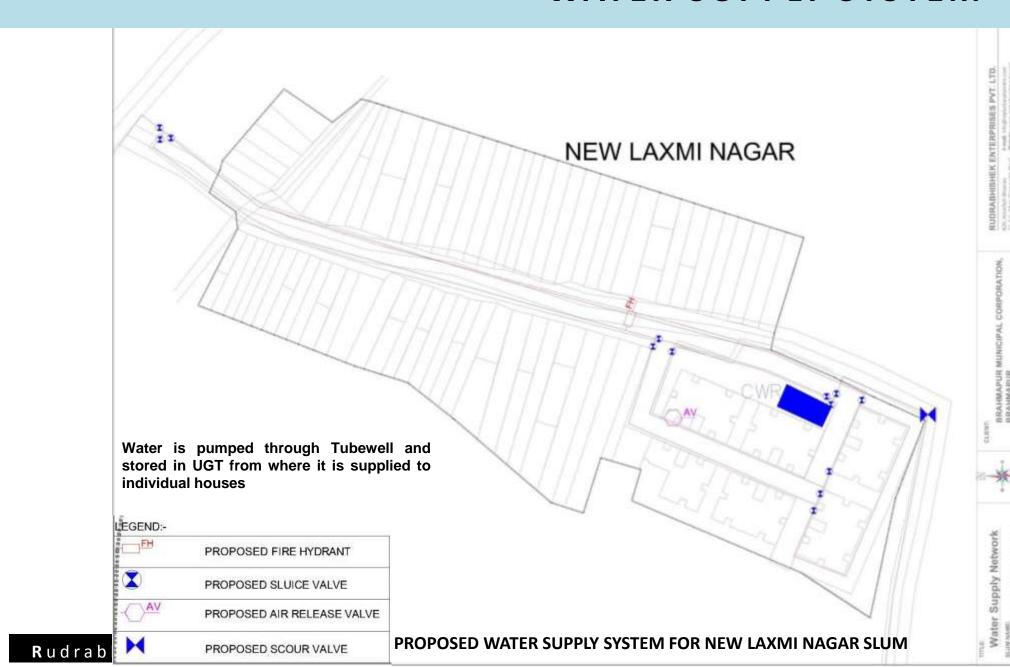
ELECTRICAL SERVICES



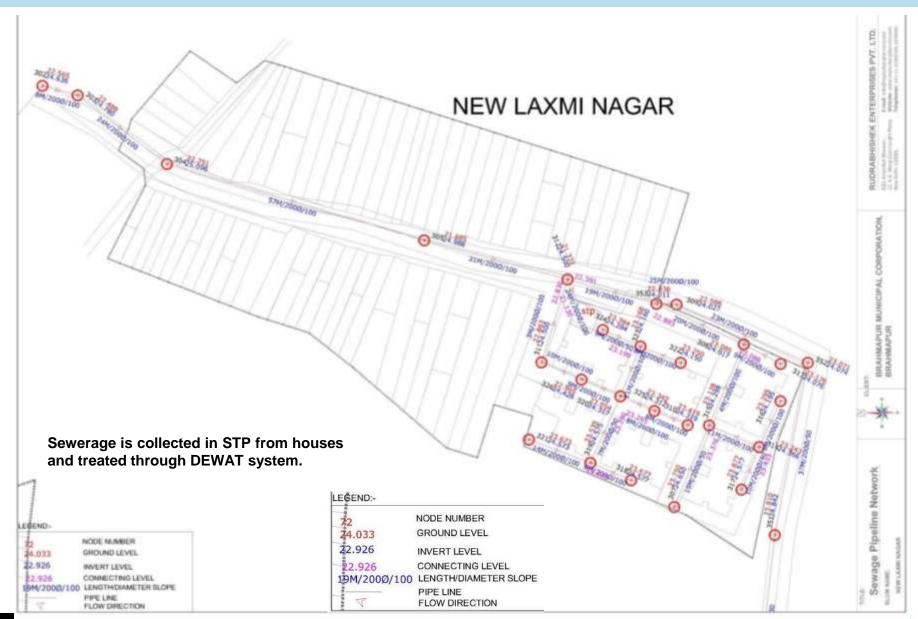
PROPOSED ELECTRICAL SERVICES FOR NEW LAXMI NAGAR SLUM



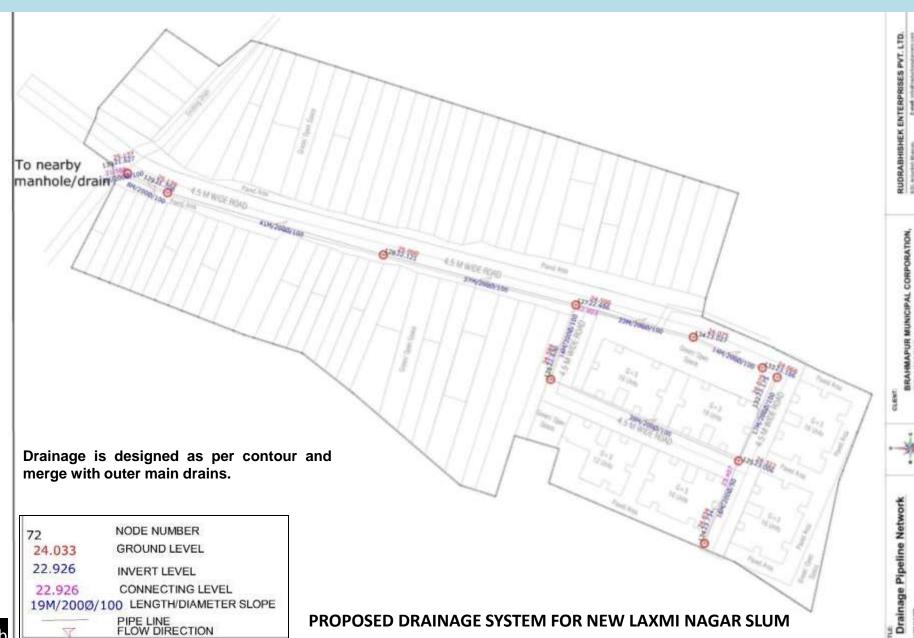
WATER SUPPLY SYSTEM



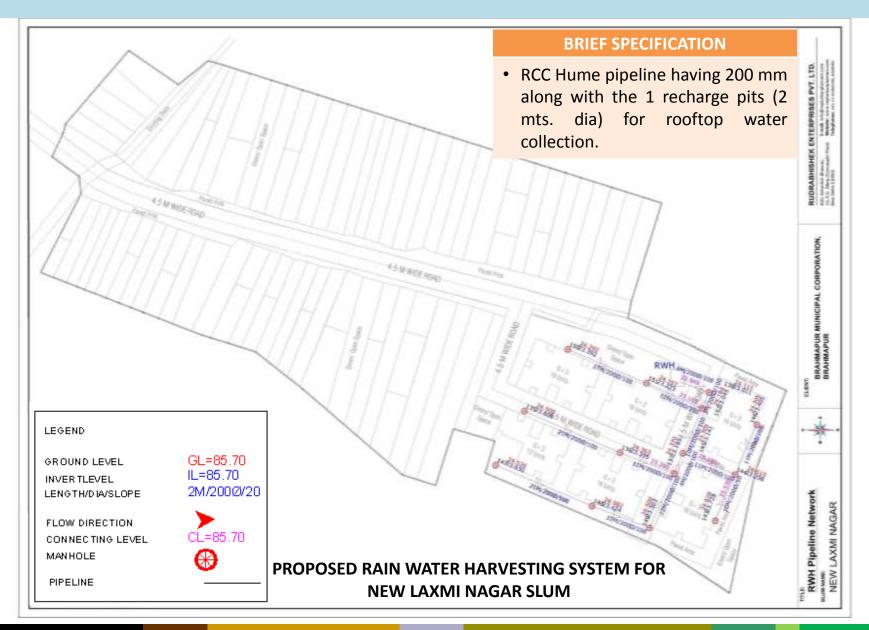
SEWERAGE SYSTEM



DRAINAGE SYSTEM

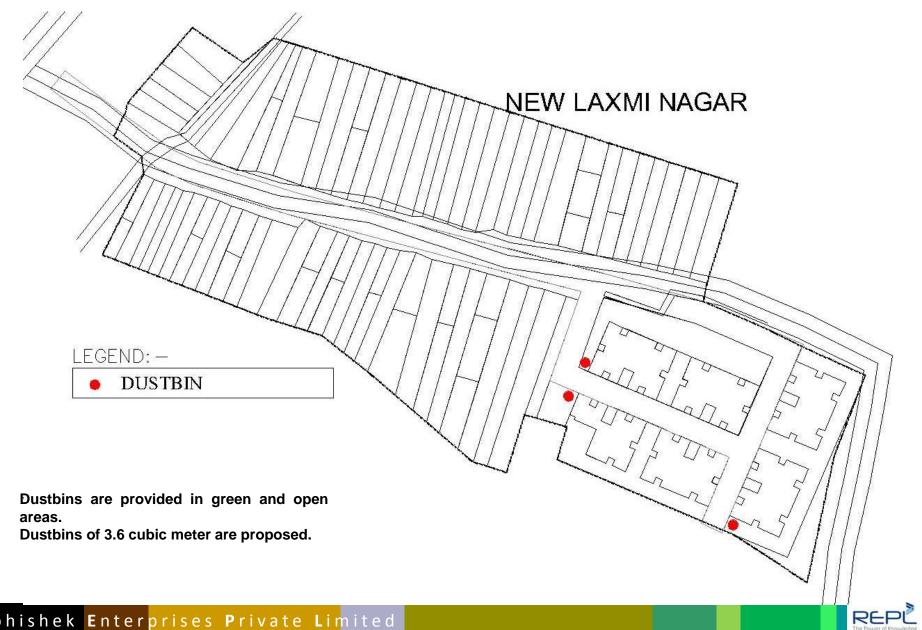


RAIN WATER HARVESTING SYSTEM

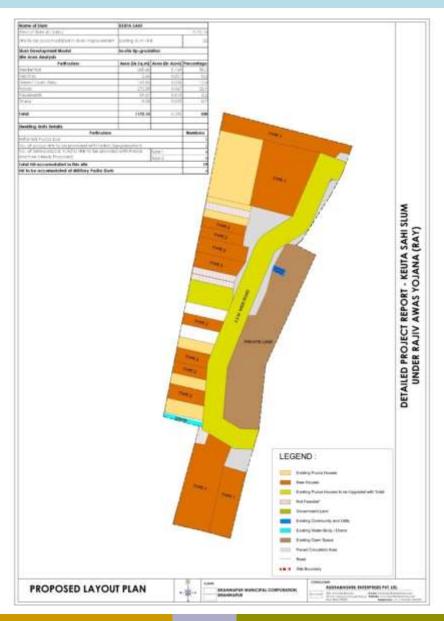




SOLID WASTE MANAGEMENT

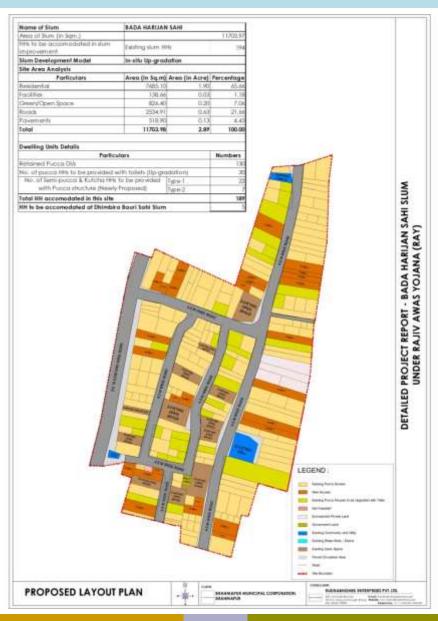


KEUTA SAHI - LAYOUT



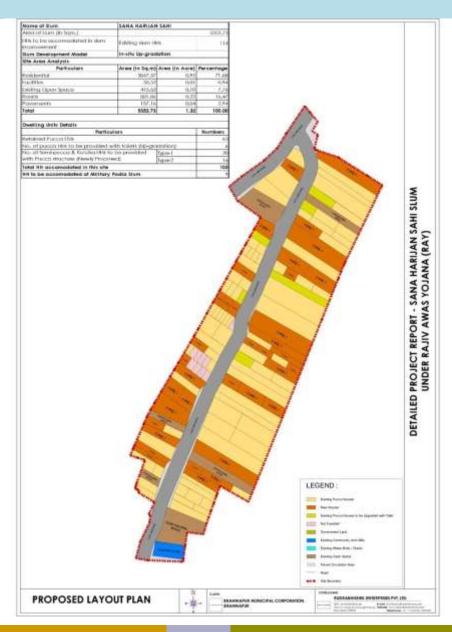


BADA HARIJAN SAHI - LAYOUT



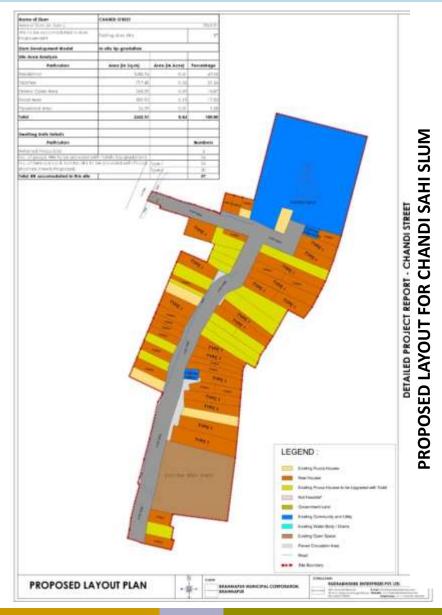


SANA HARIJAN SAHI - LAYOUT



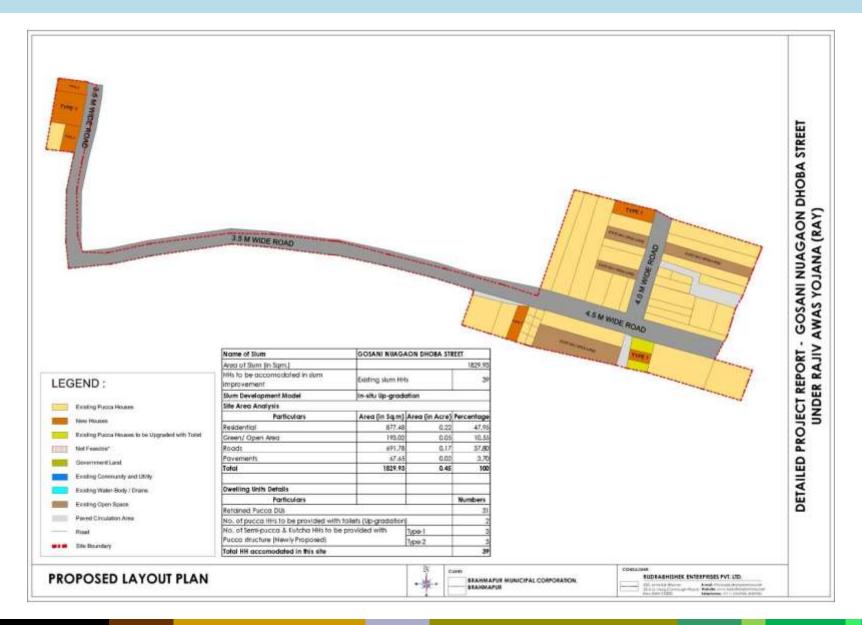


CHANDI STREET - LAYOUT



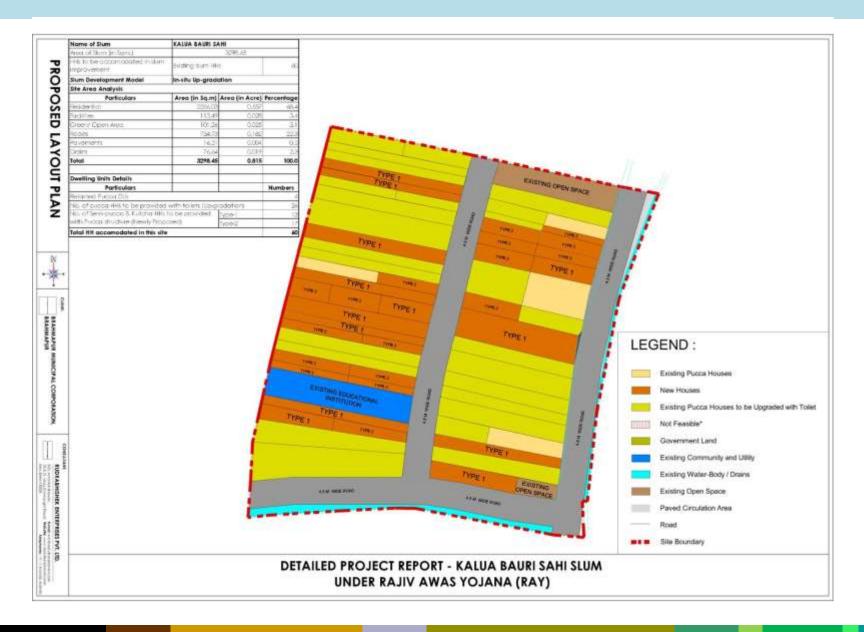


GOSANI NUAGAON DHOBA STREET- LAYOUT



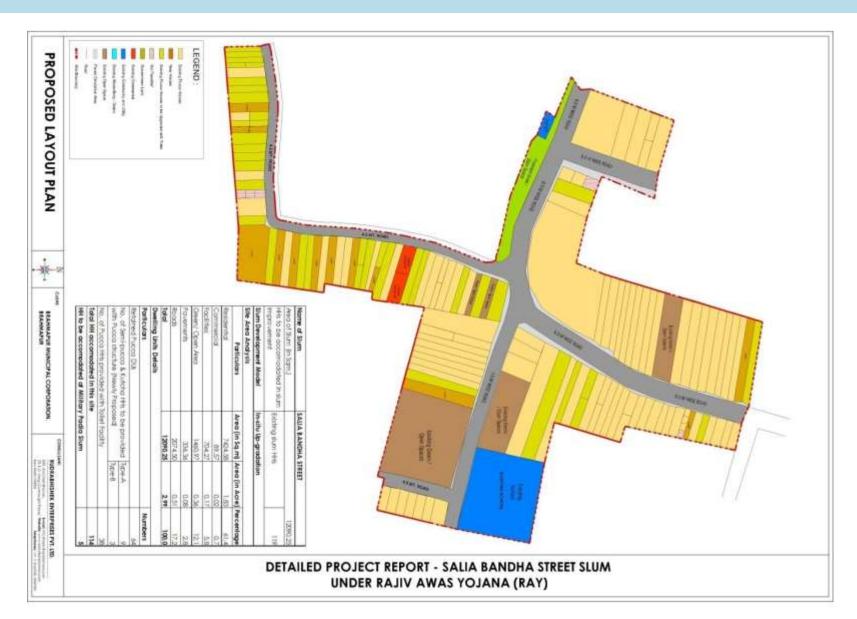


KALUA BAURI SAHI- LAYOUT



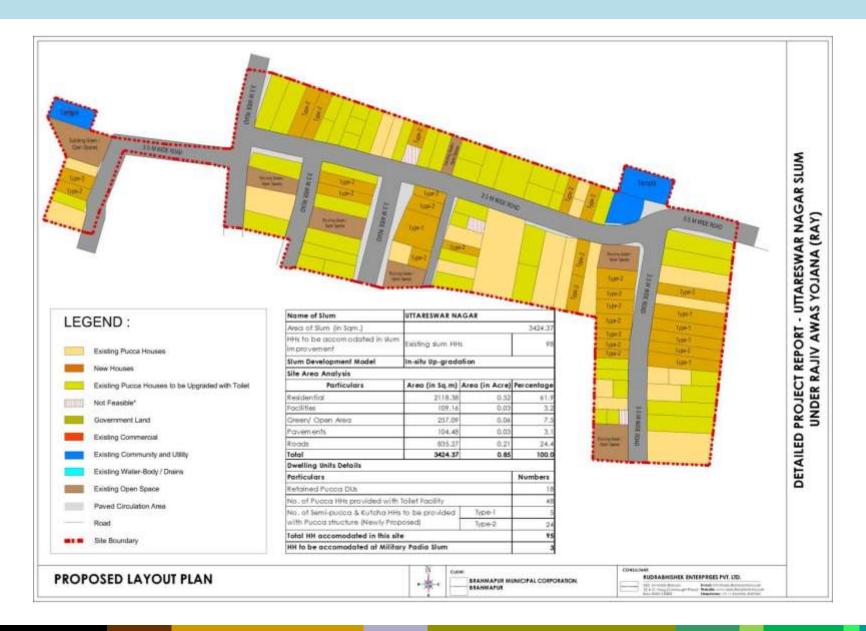


SALIA BANDHA STREET- LAYOUT



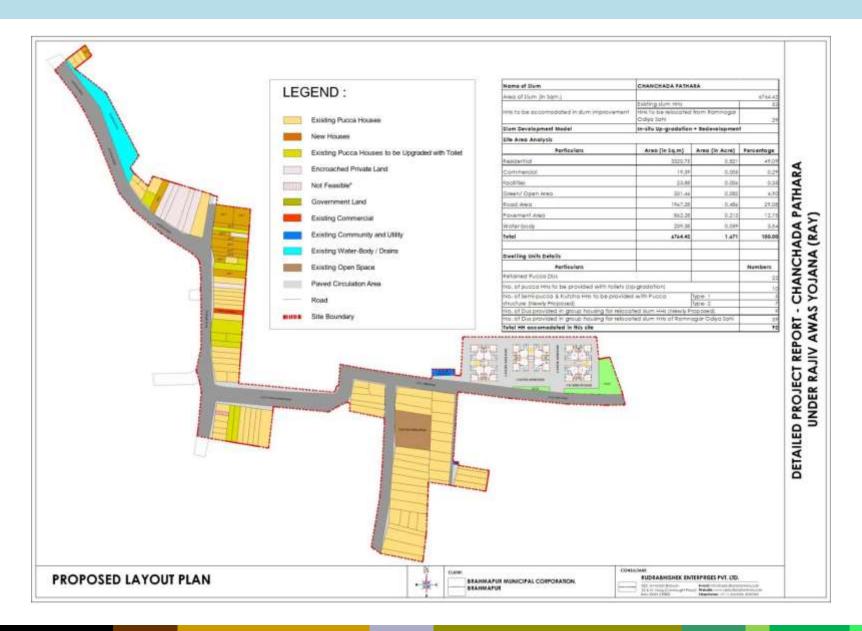


UTTARESWAR NAGAR- LAYOUT



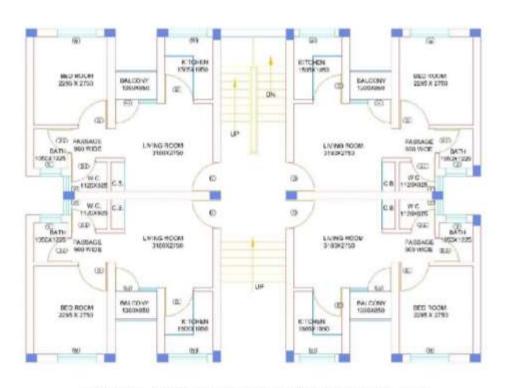


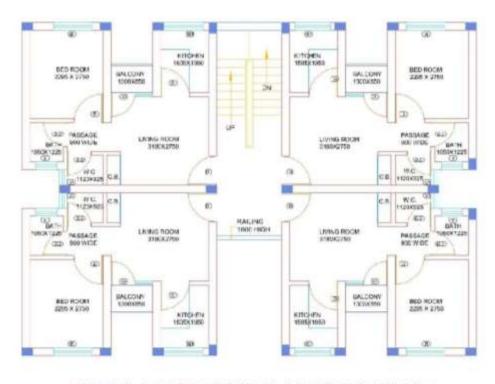
CHANCHADA PATHARA- LAYOUT





GROUP HOUSING BLOCKS





TYPE 'A' - TYPICAL FLOOR PLAN (GROUND FL.)

BUILT UP AREA PER FLOOR - 129.50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518.00 SQ.M.

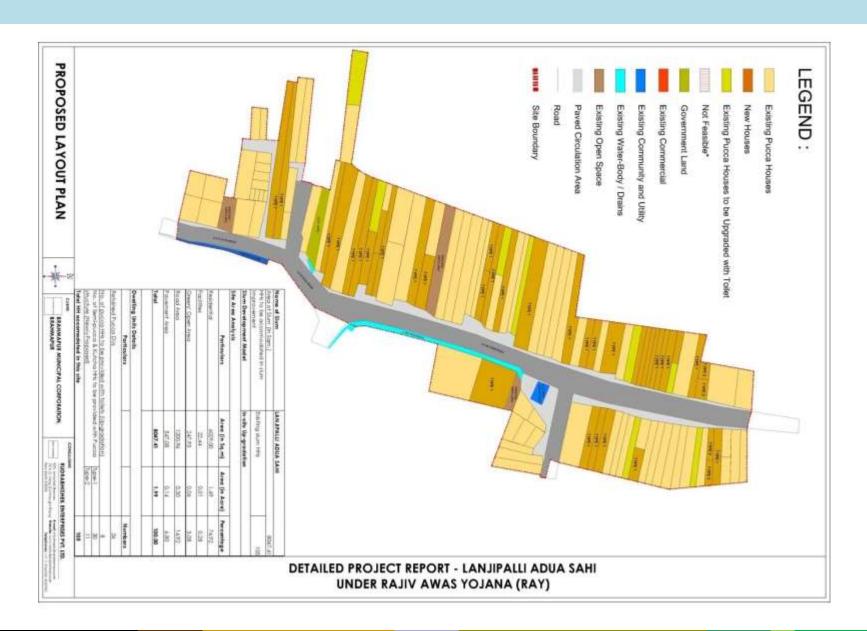
TYPE 'A' - TYPICAL FLOOR PLAN (1ST TO 3RD FL.)

BUILT UP AREA PER FLOOR - 129,50 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 518,00 SQ.M.

PROPOSED GROUP HOUSING BLOCKS (4 DU PER FLOOR) FOR CHANCHADA PATHARA SLUM

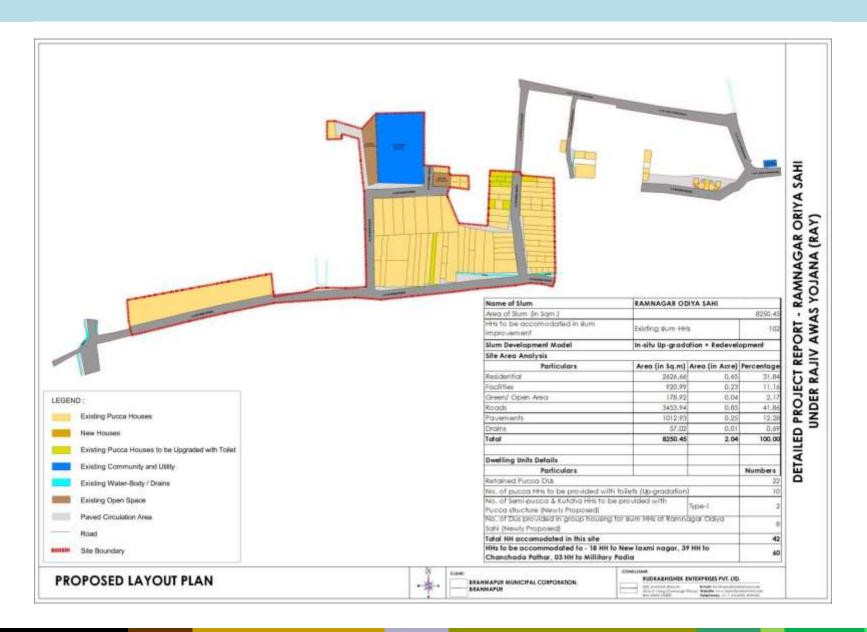


LANJIPALI ADUA SAHI- LAYOUT



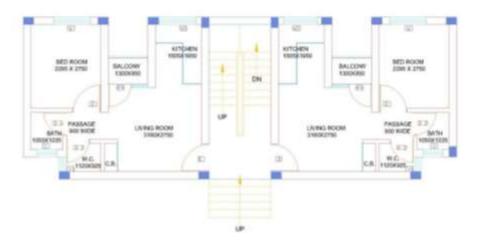


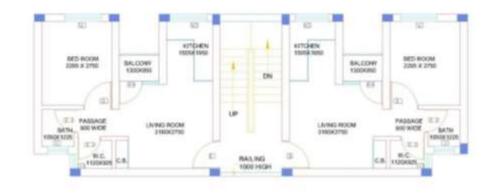
RAMNAGAR ORIYA SAHI- LAYOUT





GROUP HOUSING BLOCKS





TYPICAL FLOOR PLAN (GR. FL.) TYPE 'C'

TYPICAL FLOOR PLAN (1ST TO 3RD FL.) TYPE 'C'

BUILT UP AREA PER FLOOR - 70.69 SQ.M. TOTAL NUMBER OF FLOORS - 4 NOS. (G+3) TOTAL BUILT UP AREA PER BLOCK - 282.76 SQ.M.

PROPOSED GROUP HOUSING BLOCKS (2 DU PER FLOOR) FOR RAMNAGAR ODIYA SAHI SLUM

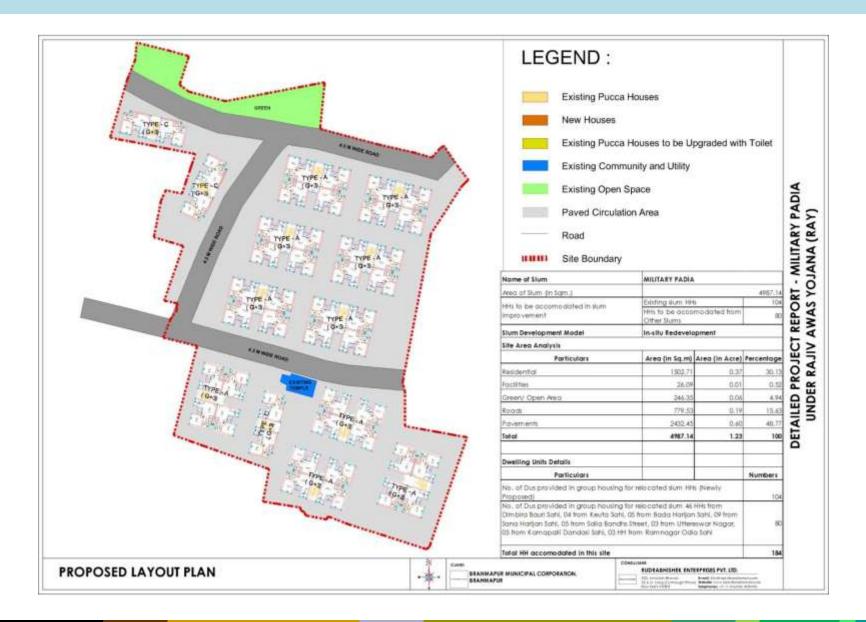


KAMAPALLI DANDASI SAHI- LAYOUT



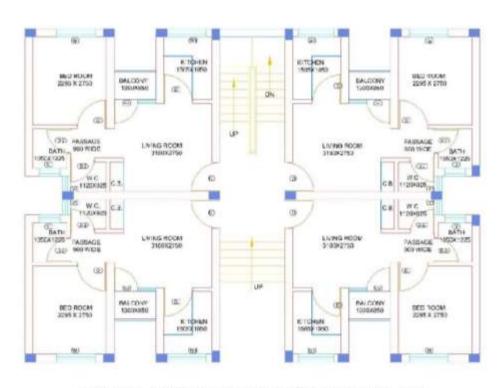


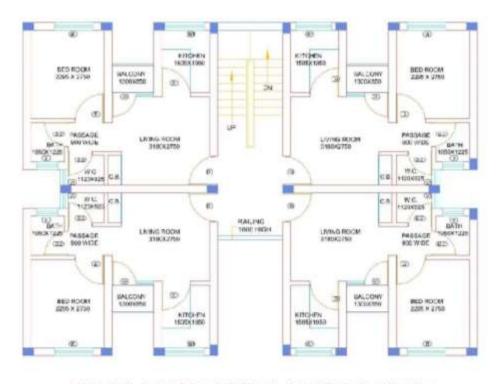
MILITARY PADIA- LAYOUT





GROUP HOUSING BLOCKS





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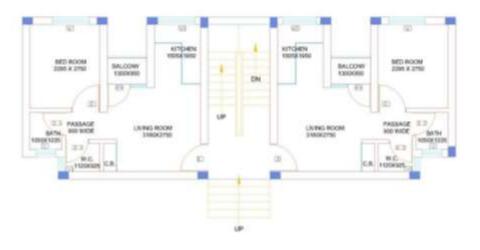
TYPE 'A' - TYPICAL FLOOR PLAN (1ST TO 3RD FL.)

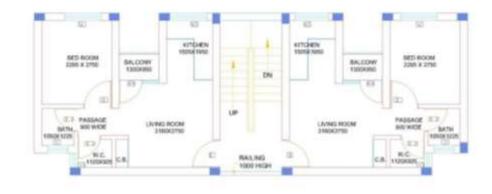
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PROPOSED GROUP HOUSING BLOCKS (4 DU PER FLOOR) FOR MILITARY PADIA SLUM



GROUP HOUSING BLOCKS





TYPICAL FLOOR PLAN (GR. FL.) TYPE 'C'

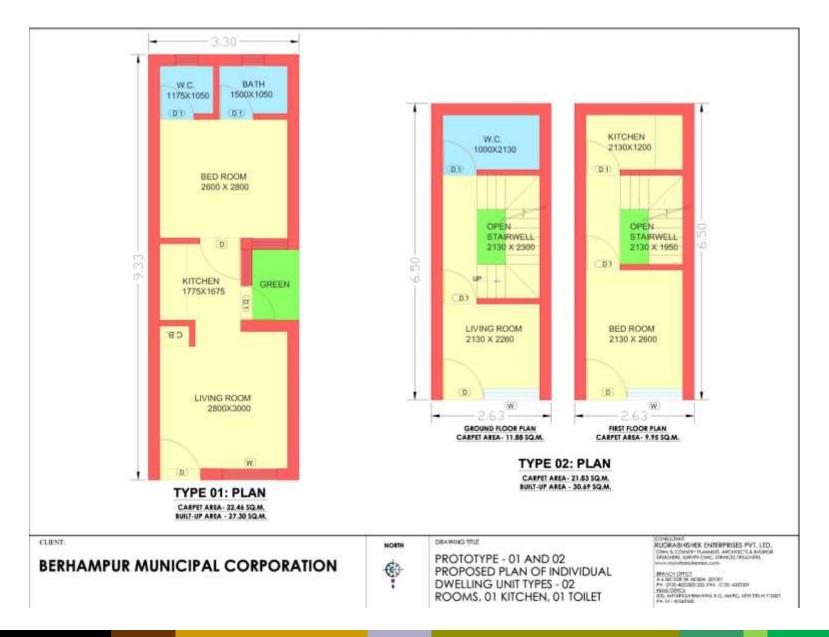
TYPICAL FLOOR PLAN (1ST TO 3RD FL.) TYPE 'C'

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PROPOSED GROUP HOUSING BLOCKS (2 DU PER FLOOR) FOR MILITARY PADIA SLUM



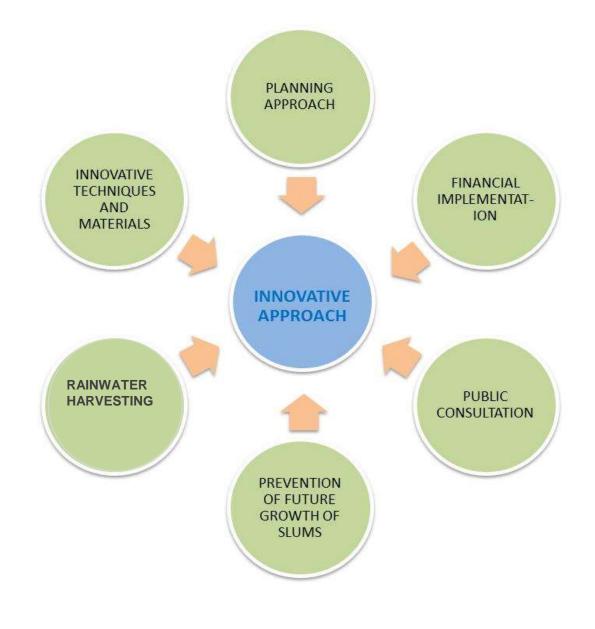
PROPOSED INDIVIDUAL DWELLING UNIT TYPES





INNOVATIVE APPROACH





APPROACH



Innovative Approach

PLANNING INNOVATIONS

- Layout is prepared keeping in view natural topography
- **Effective utilization** of existing land resource
- Adequate Green Area provided in the site

FINANCIAL IMPLEMENTATION

- Public Private Partnership
- World Bank
- Community Participation

PUBLIC CONSULTATION

- Helps in **increase in success rate** of the project
- Access to appropriateness of the proposed scheme

PREVENTION OF FUTURE GROWTH OF THE SLUM

- Reserve land for public private housing project
- Increase in supply of developed land / houses / flats in the city
- Affordable housing and rental accommodation



Innovative Approach

INNOVATIVE TECHNIQUES

- Roof-top rain water harvesting system for all the clusters
- Alternative power generation techniques like solar panels to be used for street lighting, multipurpose community center etc.
- Maximum use of locally available and ecofriendly materials
- Top soil of the site will be conserved and shall be used for gardening purpose.







Maintenance of Assets

MODELS IDENTIFIED FOR OPERATION & MAINTENANCE

BUILDING BLOCK LEVEL

- 16 members in 1 block level association
- Door to Door collection of Solid Waste
- Common assets of Building Blocks (staircase, corridors, terrace water tank etc.)

NEIGHBOURHOOD LEVEL

- Community based organization under umbrella of BMC shall take care of the common social infrastructure of the neighbourhood
- ULB will take care of the physical infrastructure facilities such as water supply distribution, cleaning of septic tank etc.

CITY LEVEL

- ULB will be responsible for O&M of main trunk lines of water supply, sewerage etc.
- ULB will also be responsible for transportation of solid waste from dhalao to disposal site.



PROJECT COST ESTIMATES



Abstracts of Cost

SR. NO.	PARTICULARS	COST		
1	Civic Infrastructure	In Lakhs		
1.1	Water Supply System	214.13		
1.2	Sewerage System	203.61		
1.3	Storm Water Drainage System	57.99		
1.4	Rain Water Harvesting System	28.30		
1.5	Solid Waste Management	19.48		
1.6	Roads	293.15		
1.7	Electricity	309.96		
	Sub Total	1126.62		
2	Housing	2444.37		
	(Including Electrical and Sanitary fittings)			
3	Social Infrastructure	479.58		
	(Including Boundary Wall, Park, Entry Gate, Site clearance and			
	Rent for HHs during Transit)			
4	Other Charges + O&M	759.48		
	Total Estimated Cost of Engineering and Construction	4810.05		



Funding Pattern

Summary of costi	ing (component	wise)		(Rs in lacs)								
SI.No	Scheme Component	Qty	Unit	Rate (Rs)	Proposed Project Cost	Appraised Project cost	Central Share	State share	ULB share	Beneficiary share		
A. Housing												
				Sub Total (A)	3,226.70	2,444.37	1,924.81	240.45	-	279.12		
B. Infrastructure	3. Infrastructure (Social)											
				Sub Total (B)	868.07	479.58	95.24	345.02	39.32			
C. Infrastructure	(Physical) د											
				Sub Total (C)	1216.82	1126.62	393.07	646.23*	87.32			
			Sub Total (B+	-C)- Infrastructure	2084.89	1606.20	488.31	991.25	126.64			
			S	Sub Total (A+B+C)	5,311.59	4,050.57	2,413.12	1,231.70	126.64	279.12		
D. O & M - 4% of	f subtotal (A+B-	+C)										
E. Other charges	·											
1 Project M	ng Consultant @	2% of Sub Total ((A+B+C)		106.23	81.01	. 0	81.01	0			
2 Labour Ce	ess @ 1% of (A+B-	;+C)			53.12	40.51	. 0	40.51	0	1		
3 Continger	3 Contingencies @1% of Sub Total (A+B+C)					40.51	. 0	40.51	0	1		
4 DPR Prepa	aration @0.75%	of Sub Total (A+B-	,+C)		39.84	30.38	0	30.38	0	1		
5 Cost Escal	ration @ 10% of ?	Sub Total (A+B+C))		531.16	405.06	0	405.06	0	1		
Sub Total:- (E)				783.46	597.46	-	597.46	-				
Total (Other Charges +O&M)-(D+E)				995.92	759.48	121.52	618.52	19.44				
				Grand Total	6,307.52	4,810.05	2,534.64	1,850.22	146.08	279.17		
Note: 1. Cost of le	aying external se	ewerage pipeline (Cost 25.0 lacs) sh	hall be incurred by S	State Governmen	it and is not inclu	ded in the project	cost.				

2. The estimated cost of solar power system including Vat & sale tax is Rs. 29.58 lacs, out of which Rs. 8.87 lacs will be provided by Central Govt. as subsidy.

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THANK YOU....

