

**PROJECT 02**

**BRAHMAPUTRA NOD  
RIVERFRONT  
DEVELOPMENT  
“DREAM PLACE” OF  
JAINUL ABEDIN**



# BRAHMAPUTRA NOD

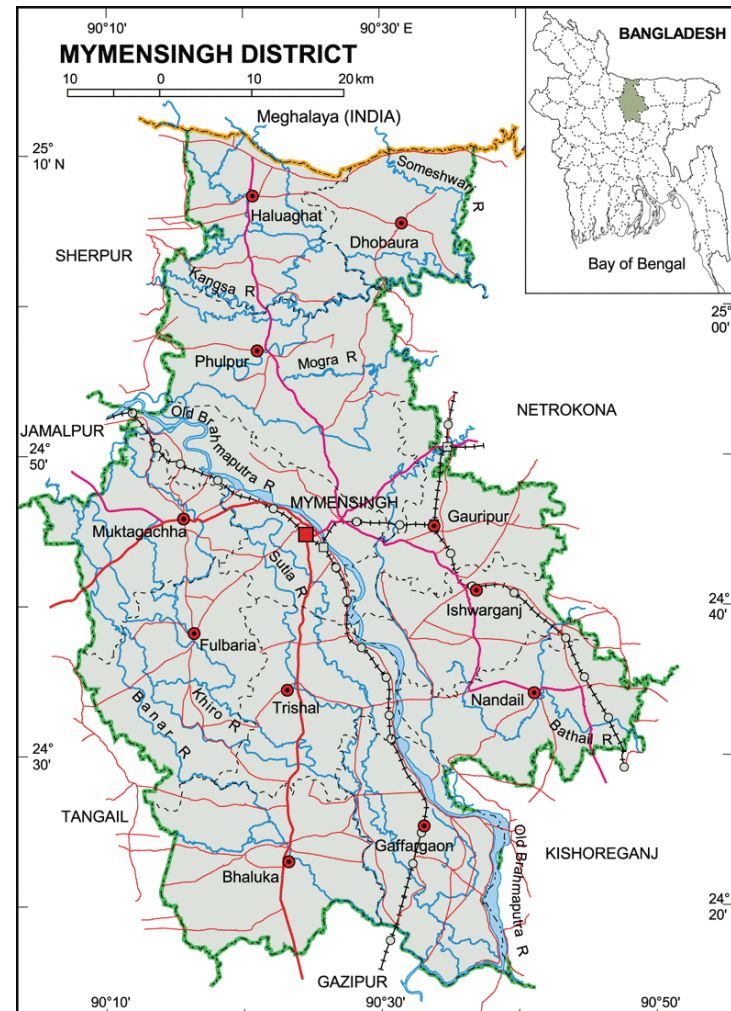
**ORIGIN:** ANGSI GLACIER, NORTH SIDE OF HIMALAYA.  
**IN BANGLADESH, BRAHMAPUTRA IS JOINED BY TEESTA RIVER.**

**DISCHARGE:** BAY OF BENGAL.

•**BRAHMAPUTRA, MAJOR SOURCE OF TRANSPORTATION, COMMUNICATION, ACTIVITY, LIFE AND LIVING.**

•**ABOUT 150YRS AGO, AS A RESULT OF EARTHQUAKE MYMENSINGH SADAR TOOK ITS PRESENT FORM.**

**Brahmaputra Nod -  
 Lifeline of Mymensingh Sadar as  
 The town grew up centering the  
 river.**



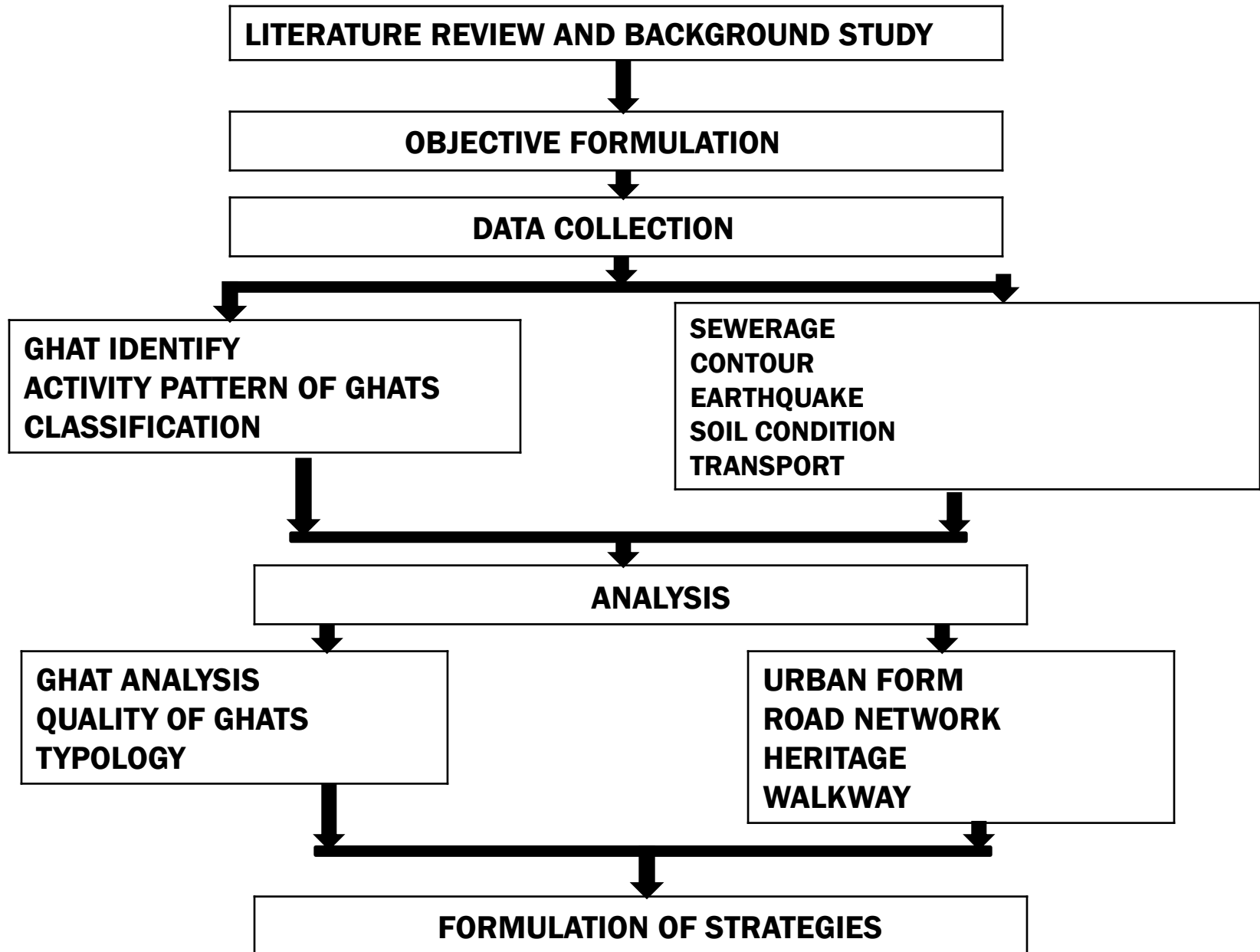
# JAINUL ABEDIN : OUR INSPIRATION

IN JAINUL ABEDIN'S CANVAS WE OBSERVE 3 PLANES.

- LAND IN THE FOREGROUND
- RIVER IN THE MIDDLE
- HORIZON RECEDING INTO DISTANCE



# METHODOLOGY



# SITE

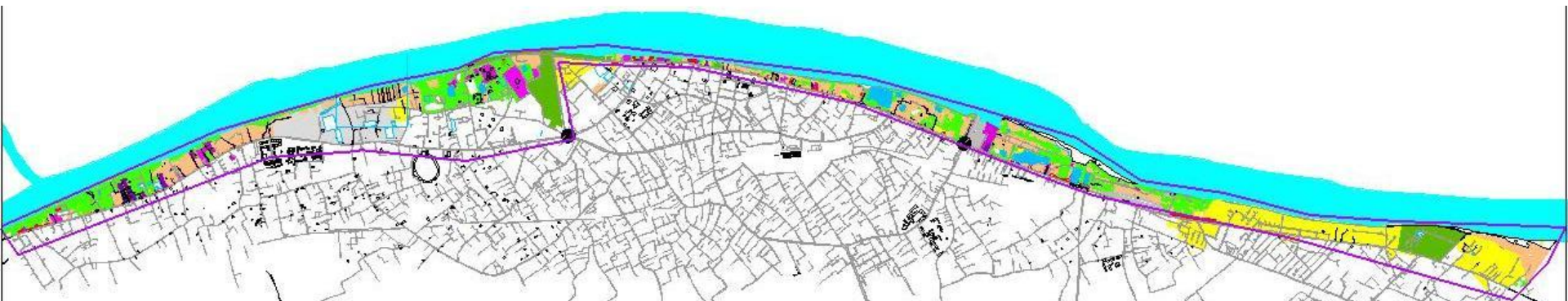
**LOCATION : Mymensingh Sadar, Mymensingh**

**LENGTH OF RIVERFRONT : 11.5KM**

**AREA UNDER CONSIDERATION: 2.1937SQ.KM**

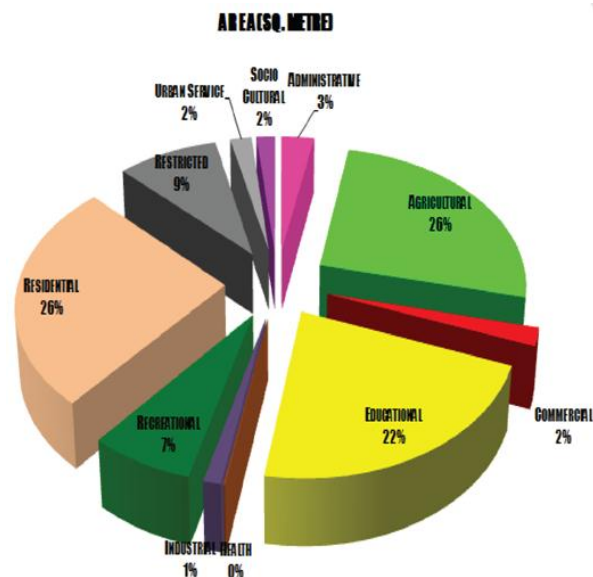
**WIDTH: 184M-336M(approx)**





## **LANDUSE**

ZONE	AREA(SQ. METRE)
Administrative	65117
Agricultural	566314
Commercial	44660
Educational	479459
Health	2389
Industrial	26233
Recreational	153065
Residential	579558
Restricted	198733
Urban Service	42261
Socio Cultural	35958
Total Area under consideration:	2193747

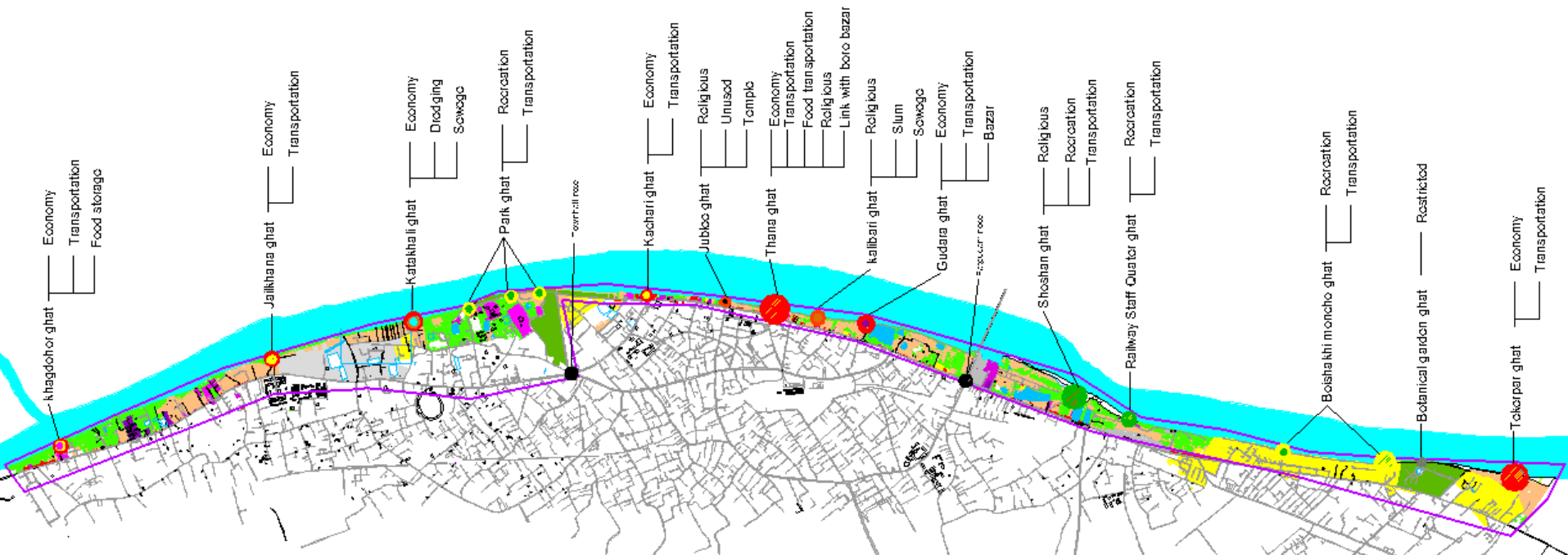


# LANDUSE

# GHAT IDENTIFY & ACTIVITY PATTERN

**“GHAT” A CONNECTING POINT BETWEEN A LANDMASS AND A WATER BODY.**  
**WE CAN CLASSIFY GHAT AS FOLLOWS BASED ON THEIR USE:**

- **RELIGIOUS GHAT**
- **CREMATORY GHAT**
- **GHAT USED FOR CLEANING**



**ACTIVITY PATTERN**

# CLASSIFICATION OF GHATS

## ECONOMIC

**KHAGDOHOR GHAT**

**KATAKHALI GHAT**

**KACHARI GHAT**

**THANA GHAT**

**GUDARA GHAT**

**TEKER PAR GHAT**

## RELIGIOUS

**SHOSHAN GHAT**

**KALIBARI GHAT**

**JUBLEE GHAT**

## RECREATION

**PARK GHAT**

**BOISHAKHI MONCHO GHAT**

**BOTANICAL GARDEN GHAT**

## TRANSPORTATION

**JAILKHANA GHAT**

**KACHARI GHAT**

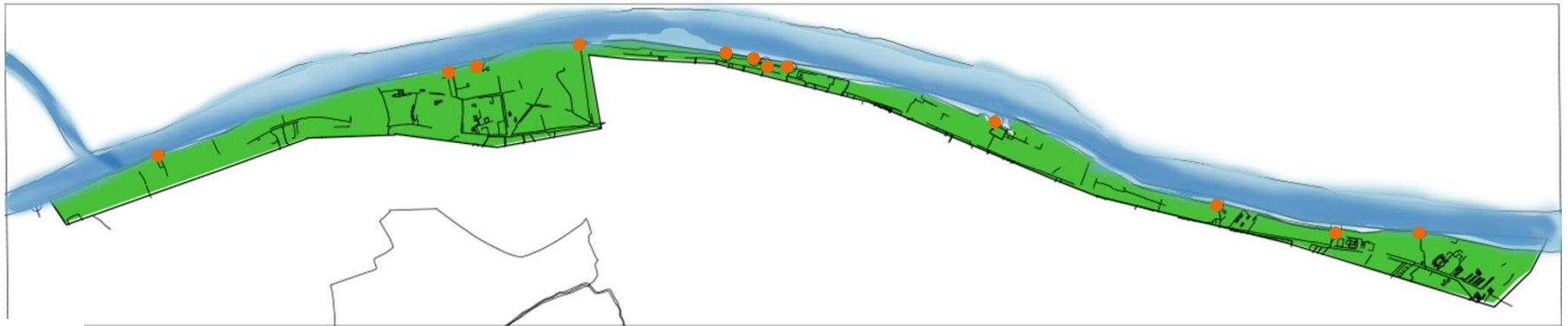
**THANA GHAT**

**GUDARA GHAT**

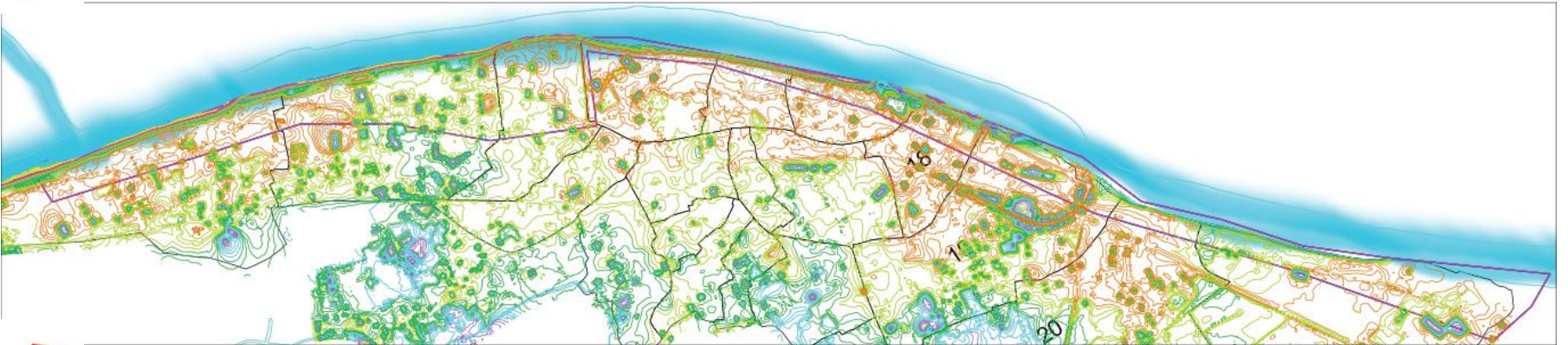
**PARK GHAT**

**RAILWAY STAFF QUARTER GHAT**

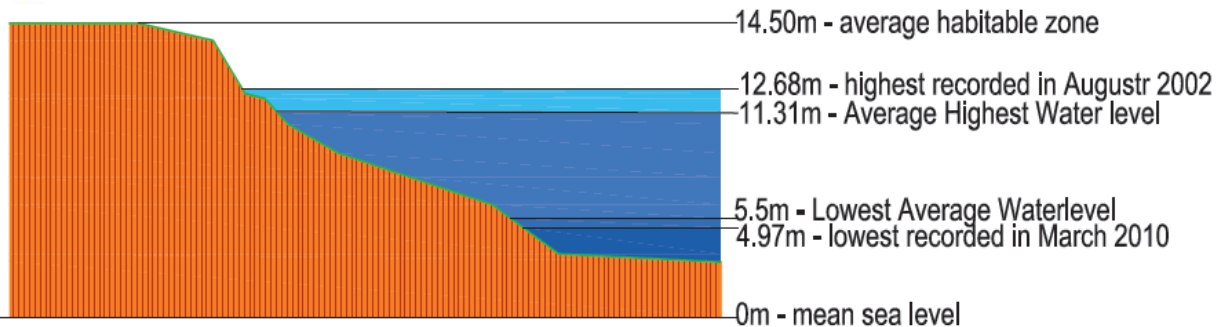




 **SEWERAGE OUTLET**



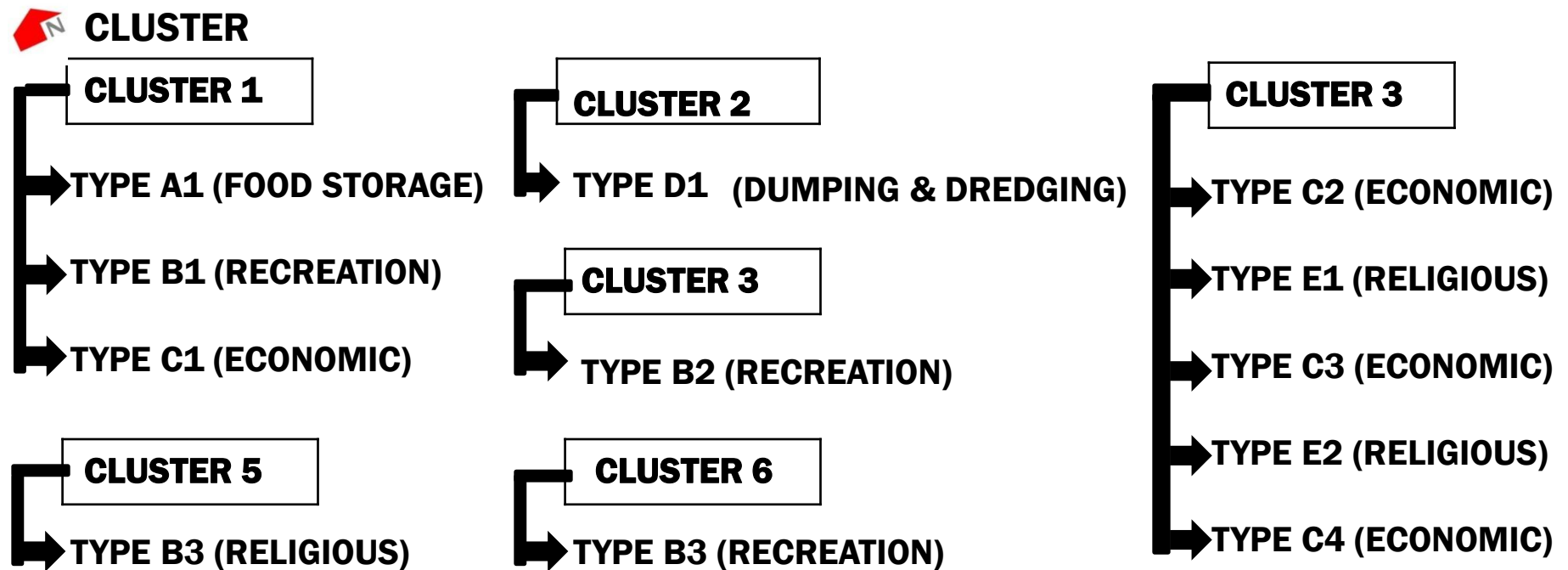
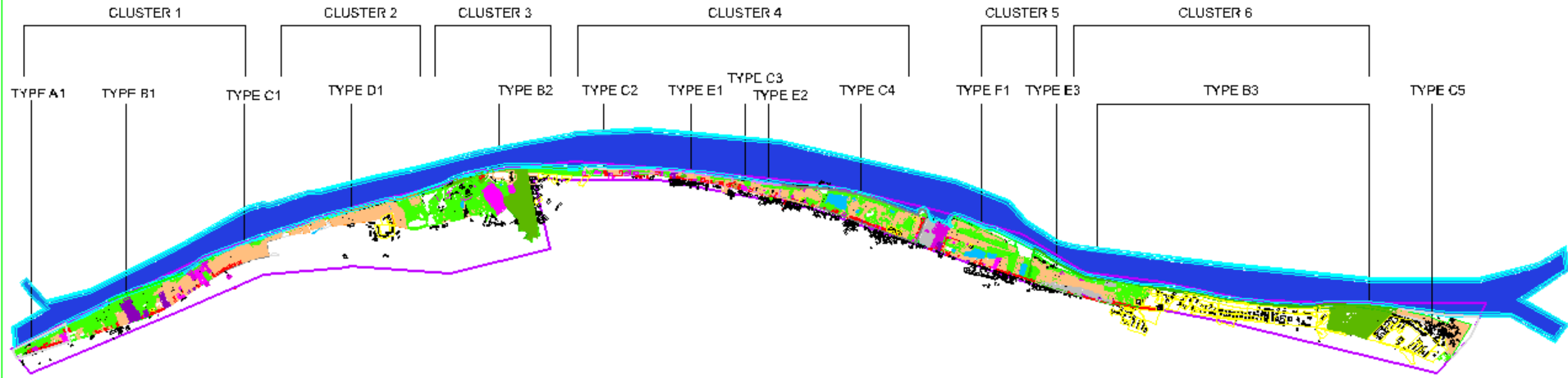
 **CONTOUR**



**IMAGE : WATERLEVEL AT DIFFERENT TIMES OF THE YEAR**  
 [BASED ON DATA RECORD FROM THE YEAR 2004 TO 2013]

KEY ISSUES	MAJOR OBJECTIVES
INCOMPITABLE LAND USES	REVITALIZATION OF RIVER
ENCROACHMENT	REHABILITATION OF SLUM DWELLERS
UNDER UTILIZATION OF OPEN SPACE	FACILITATE ECONOMIC DEVELOPMENT AND SOCIAL INTEGRATION
INACCESSIBILITY	CONNECTING RIVERFRONT WITH CITY BY WALKWAYS
SLUMS	CREATE CITY LEVEL RECREATIONAL AND GREEN SPACES
HERITAGE AND NATURAL VISTAS	SEWEGAE AND WATER TREATMENT PLANT

# TYPOLOGY & CLUSTER



# CLUSTER :1

## TYPE-A1: FOOD STORAGE

BOUNDARY: BGB CAMP TO TCB OFFICE.

LENGTH:442.9M

AREA:7537 SQ. M

WALKTIME:8.058MINUTES

INFRASTRUCTURE: BGB CAMP,TCBOFFICE,  
CENTRAL FOOD DEPOSITORY.

## TYPE-B1: RECREATION

BOUNDARY: AGRI DEV. BOARD TO WATER.DEV.BOARD

LENGTH:1069M

AREA:33194 SQ. M.

WALKTIME:21.38MINUTES

INFRASTRUCTURE: AGRI DEV.BOARD, WATER  
DEV BOARD,SILVER CASTLE, RIVE PALACE.

## TYPE-C1: ECONOMY

BOUNDARY: WATER DEV BOARD TO POLICE LINES  
SCHOOL

LENGTH:1184M

AREA:12793 SQ. M

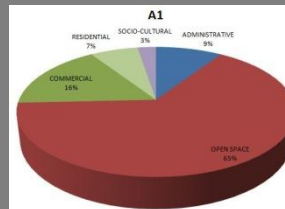
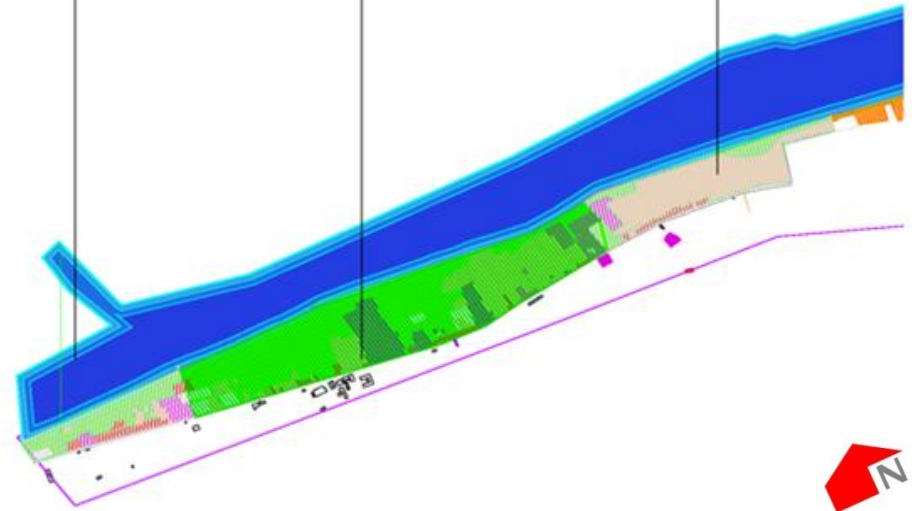
WALKTIME:13.68 MINUTES

INFRASTRUCTURE: WATER DEV BOARD,POLICELINE

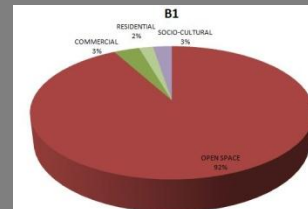
TYPE A1: FOOD  
STORAGE

TYPE B1:  
RECREATION

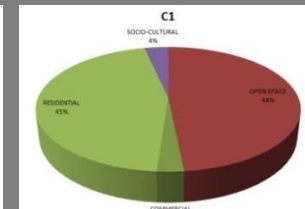
TYPE C1:  
ECONOMIC



TYPE A1:  
FOOD STORAGE



TYPE B1:  
RECREATION



TYPE C1:  
ECONOMIC

**PROBLEM:** A ZONE WITH LOTS OF  
OPPORTUNITY, BUT IS BEING UNDERUSED.

# CLUSTER 2

## TYPE-D1: DUMPING

**BOUNDARY: POLICE LINES TO POLICE LINES SCHOOL AND COLLEGE**

**LENGTH:1184M**

**AREA:15385 SQ. M**

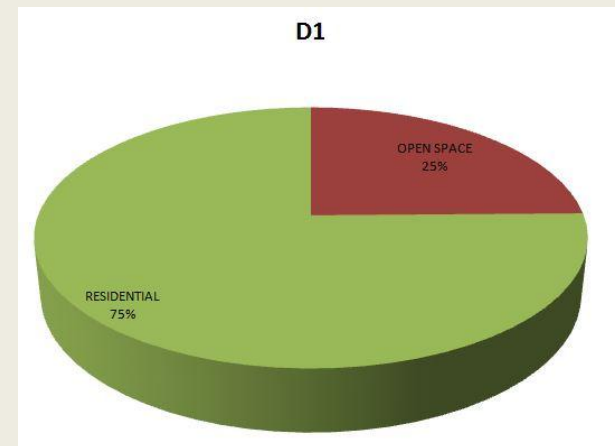
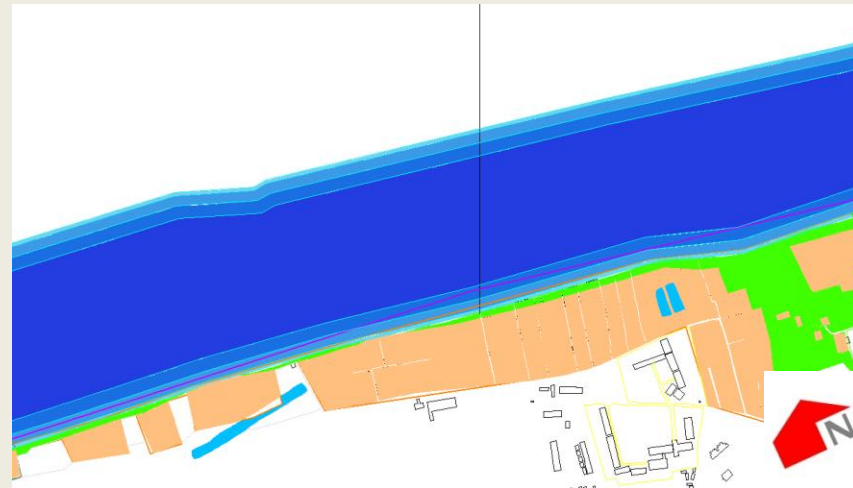
**WALKTIME:23.68MINUTES**

**INFRASTRUCTURE: AGRI DEV. BOARD,WATER DEV. BOARD,SILVER CASTLE,RIVER PALACE**

### **PROBLEMS:**

**HIGHLY POLLUTED ZONE, USED FOR DUMPING WASTES FORM POLICE LINE AND ALSO UNTREATED SEWER WASTES. BESIDES DREDGING CREATES PITS UNDER WATER WHICH IS FATAL FOR LOCAL PEOPLE. LARGE NUMBER OF SLUM**

TYPE D1: DUMPING





## TYPE-B2: RECREATION

**BOUNDARY: J.A SANGRAHASHALA TO**

**HIMUR ADDA RESTAURANT**

**LENGTH:1986M**

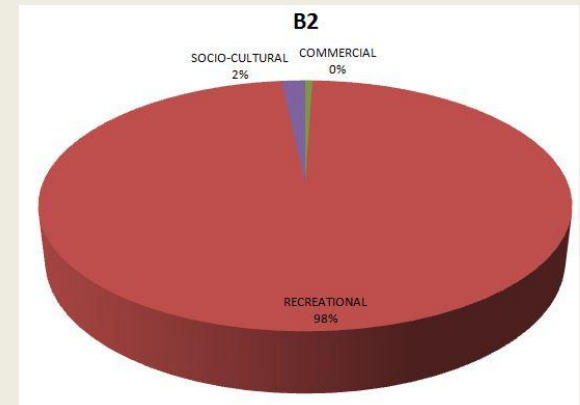
**AREA:29068 SQ. M.**

**WALKTIME:39.72MINUTES**

### PROBLEMS:

**THOUGH MAJOR RECREATIONAL ZONE,  
INSUFFICIENT WITH RESPECT TO THE  
NUMBER OF POPULATION. MIGHT BE  
CONSIDERED UNDERUSED WITH RESPECT  
TO THE OPPORTUNITY IT OFFERS.**

### TYPE B2: RECREATION



# CLUSTER 4

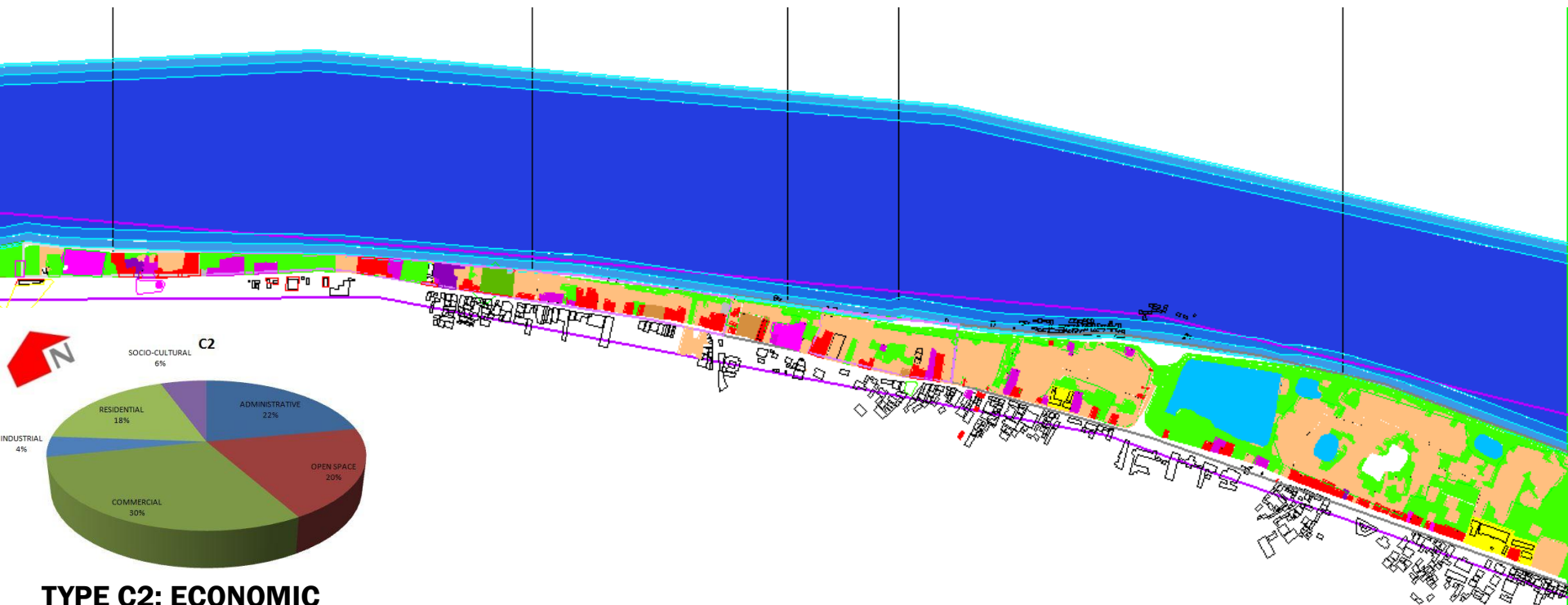
**TYPE C2:  
ECONOMIC**

**TYPE E1:  
RELIGIOUS**

**TYPE C3:  
ECONOMIC**

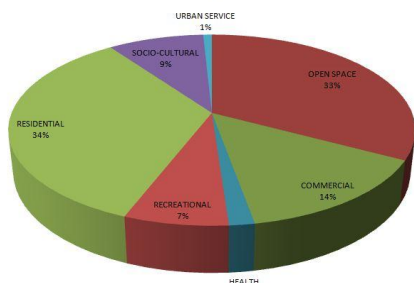
**TYPE E2:  
RELIGIOUS**

**TYPE C4:  
ECONOMIC**

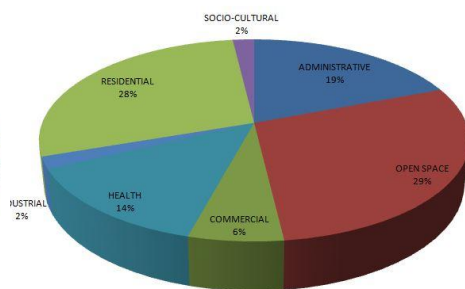


**TYPE C2: ECONOMIC**

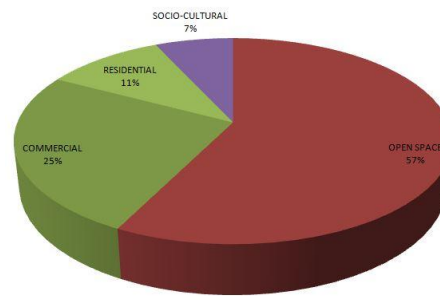
**E1**



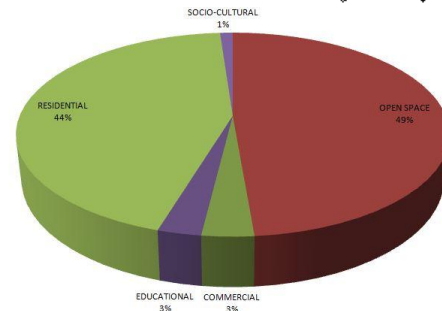
**TYPE E1: RELIGIOUS**



**TYPE C3: ECONOMIC**



**TYPE E2: RELIGIOUS**



**TYPE C4: ECONOMIC**

# CLUSTER 4

## TYPE-C2: ECONOMY

BOUNDARY: LOCAL SERVER STATION TO MYMENSINGH  
O POINT

LENGTH:268M

AREA:2046 SQ. M

WALKTIME:5.6MINUTES

INFRASTRUCTURE: KACHARI, LOCAL SERVER STATION

## TYPE-E1: RECREATION

BOUNDARY: MAZAR TO SHIV TEMPLE

LENGTH:753M

AREA:5883 SQ. M.

WALKTIME:15.06MINUTES

INFRASTRUCTURE: MAZAR, MATH, ASRAM,

## TYPE-C3: ECONOMY

BOUNDARY: KOTOALI THANA TO TRAFFIC OFFICE

LENGTH:174

AREA:1712

WALKTIME:3.48

INFRASTRUCTURE: KOTOALI THANA, TRAFFIC OFFICE  
POURASAVA MARKET

## TYPE-E2: RELIGIOUS

BOUNDARY: TRAFFIC OFFICE TO BORO  
KALIBARI

LENGTH:255M

AREA: 3214 SQ. M

WALKTIME: 5.1MINUTES

INFRASTRUCTURE: BORO KALIBARI, LOKNATH  
TEMPLE, BISWANATH TEMPLE

## TYPE-C4: ECONOMY

BOUNDARY: BORO KALIBARI TO PATGUDAM NODE

LENGTH:1080M

AREA:33272 SQ. M.

WALKTIME:21.60MINUTES

INFRASTRUCTURE: HAJI HASHEM ALI COLLEGE,  
BAHAI SCHOOL AND LIBRARY, SURYAKANTA  
MALARIA RESEARCH INSTITUTE

# **PROBLEMS:**

- **COMMUNICATION WITH CHAR, BUT NOT SUFFICIENTLY DEVELOPED AS TRANSPORTATION POINT.**
- **THE RELIGIOUSLY IMPORTANT GHATS ARE LOSING THEIR IDENTITY DUE TO ILLEGAL ENCROACHMENT.**
- **SLUMS ON THE DAM ARE CAUSING THREAT THAT MIGHT POLLUTE THE RIVER.**
- **A ZONE OF CONFLICTION-SAND TRANSPORTATION AND FOOD TRANSPORTATION**
- **RELIGIOUSLY AND HISTORICALLY IMPORTANT GHATS WHICH HAS SLUMS**

## TYPE-E3: RELIGIOUS

BOUNDARY: SHOSHAN – RAILWAY BRIDGE

LENGTH:389M

AREA:7537 8066SQ. M

WALKTIME:7.78MINUTES

INFRASTRUCTURE: CREMATORY, EIDGAH, RAIL BRIDGE

## TYPE-B3: RECREATION

BOUNDARY: RAILWAY STAFF QUARTER TO BOTANICAL GARDEN

LENGTH:2474M

AREA:30947SQ. M.

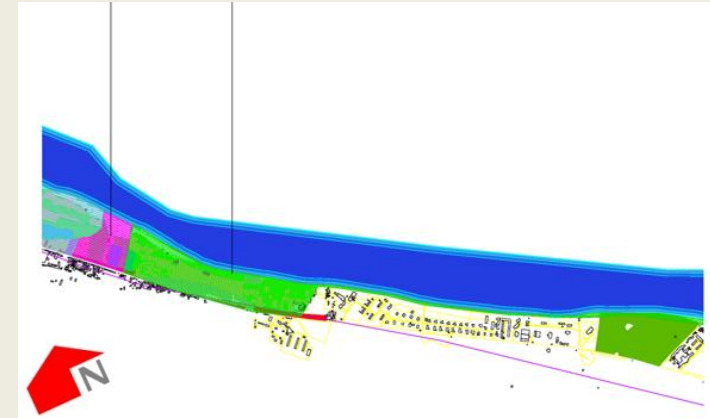
WALKTIME:49.48MINUTES

INFRASTRUCTURE: BAU, BOTANICAL GARDEN, RAILWAY STAFF QUARTER.

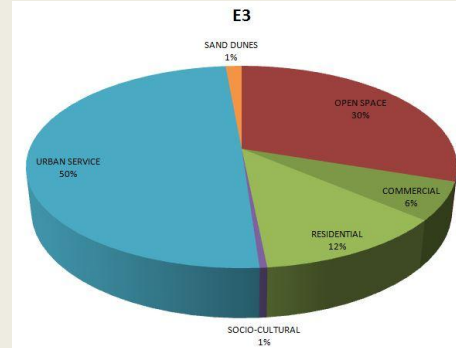
## PROBLEMS:

A ZONE WITH LOTS OF OPPORTUNITY, BUT IS BEING UNDERUSED.

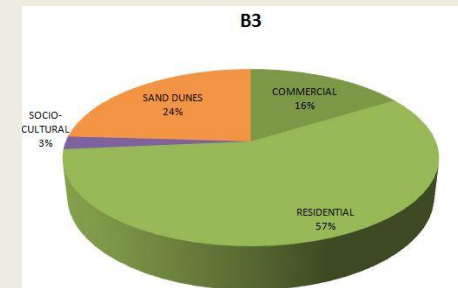
TYPE E3 : TYPE B3:  
RELIGIOUS RECREATION



TYPE E3 :  
RELIGIOUS



TYPE B3:  
RECREATION

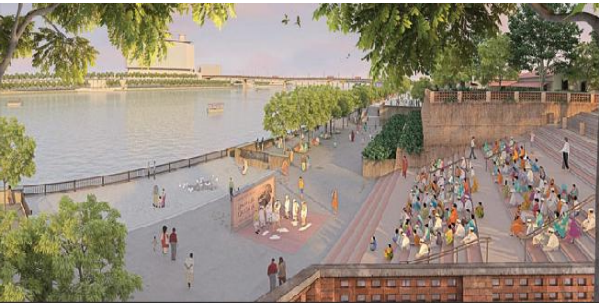
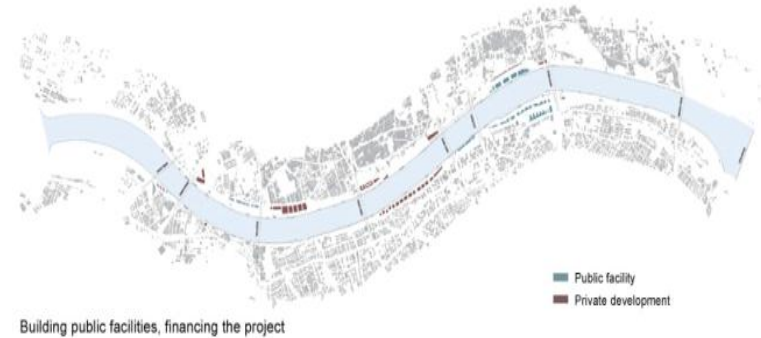
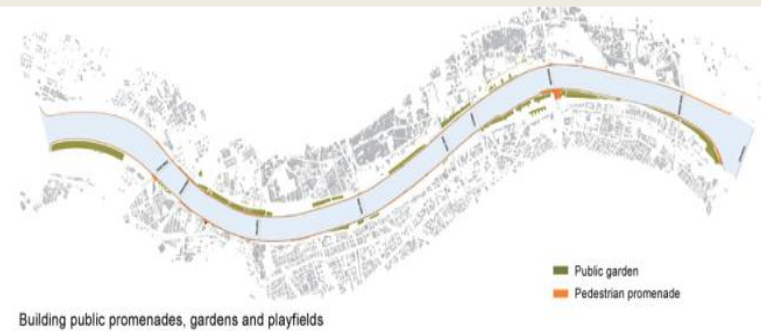




# CASE STUDY 1

## SABARMATI RIVERFRONT DEVELOPMENT PROJECT

- AHMEDABAD, 1997 - ONGOING
- APPROXIMATELY 200 HECTARES OF LAND FROM THE RIVERBED
- RETAINING WALLS HAVE BEEN BUILT
- SEWAGE INTERCEPTOR LINES WITH NEW PUMPING STATIONS HAVE BEEN CONSTRUCTED
- SLUM DWELLERS WILL BE RELOCATED WITH 'PUCCA' HOUSING
- 11.5 KM LONG PEDESTRIAN ALONG THE RIVER SIDE
- PUBLIC FACILITIES TO BE BUILT : CULTURAL CENTERS, MUSEUMS, SPORTS FACILITIES, TRADE FAIR GROUNDS AND OPEN AIR MARKETS
- A SMALL PORTION OF THE RECLAIMED LAND WILL BE SOLD FOR COMMERCIAL DEVELOPMENT

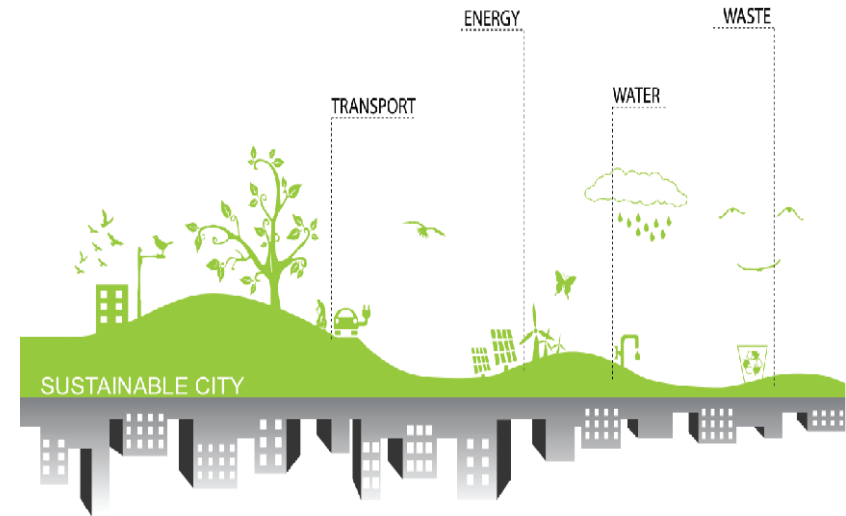




# CASE STUDY 2

## TRANS GANGA RIVERFRONT DEVELOPMENT

- SPREAD ACROSS 1156 ACRES,
- SUSTAINABLE CITY DESIGN WITH TWO LEVELS
  - FIRSTLY AT THE DESIGN LEVEL ELEMENTS REQUIRED TO MAKE A CITY SUSTAINABLE HAVE BEEN GRAFTED IN THE MASTER PLAN
  - SECONDARY AT THE IMPLEMENTATION STAGE GREEN ROOF, EARTH COOLING, SOLAR PANELS, GROUND WATER RECHARGE, WASTE MANAGEMENT HAVE BEEN PROPOSED
- LAND USE: COMMERCIAL, INDUSTRIAL, MIXED USE, RESIDENTIAL AND PUBLIC AMENITIES.





# CASE STUDY 3

## BRAHMAPUTRA RIVERFRONT DEVELOPMENT

### GUWAHATI, ASSAM (ONGOING)

LENGTH: 20 KM

- PLAN OF THE FIRST PHASE IS OVER A 7KM LENGTH
- CONTINUITY AND ACCESS ALONG THE RIVER
- LINKAGES FROM THE CITY TO THE RIVERFRONT
- RESTRUCTURING LAND USE,
- DEVELOPMENT OF CULTURAL PRECINCT
- REVITALISATION OF THE RIVER ECOLOGY, RIVERSIDE PROMENADE, GHATS, PLAZAS AND PARKS, ART GALLERY, CONSERVATORY, CONFERENCE FACILITIES AND YOUTH CENTRE, LOCAL PRODUCE MARKETS, LIGHTING, STREET FURNITURE & PUBLIC ART, HERITAGE MANAGEMENT & CONSERVATION



S4  
ZONE  
CONCEPT  
PLAN

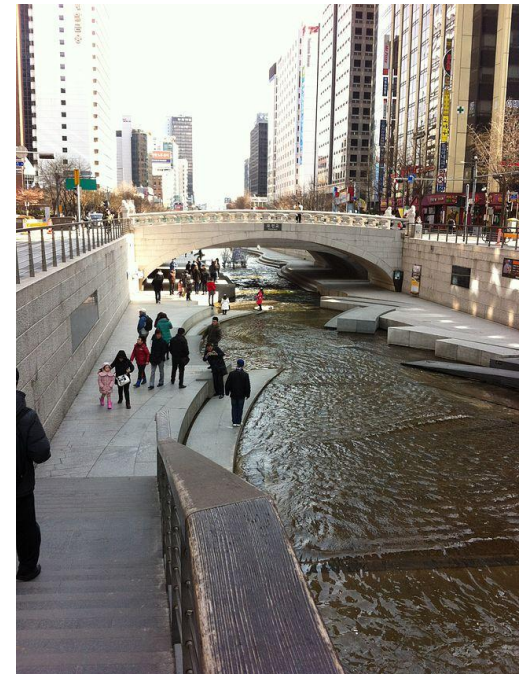




# CASE STUDY 4

## THE CHEONGGYEcheon RIVER RESTORATION PROJECT, SEOUL, SOUTH KOREA

- OPENED TO THE PUBLIC IN SEPTEMBER 2005
- CREATING THE ENVIRONMENT WITH CLEAN WATER AND NATURAL HABITATS WAS THE MOST SIGNIFICANT ACHIEVEMENT OF THE PROJECT.
- BUSINESS AND INDUSTRIAL AREA CENTERED ON THE STREAM.
- THE PROJECT RESULTED IN A SPEEDING-UP IN TRAFFIC AROUND THE CITY WHEN THE MOTORWAY WAS REMOVED.
- THE PROJECT ATTEMPTED TO PROMOTE THE URBAN ECONOMY THROUGH AMPLIFYING URBAN INFRASTRUCTURE FOR A COMPETITIVE CITY WITHIN THE EXISTING BUSINESS AND INDUSTRIAL AREA CENTERED ON THE STREAM.



# LEARNING FROM CASE STUDY

## RIVERFRONT QUALITIES

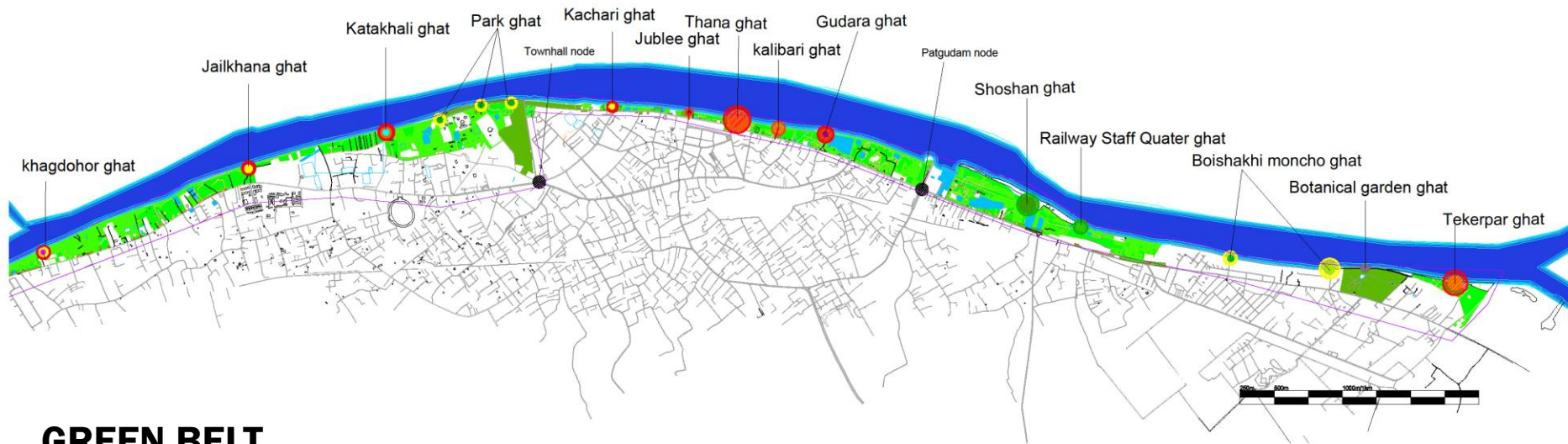
- ACCESS LINKAGE
- EDGE USES
- ATTRACTION AND DESTINATIONS
- IDENTITY AND IMAGE
- AMENITIES
- WATER USES
- FLEXIBILITY IN DESIGN
- SEASONAL STRATEGY
- LANDUSE MANAGEMENT
- DIVERSE FUNDING SOURCES

## TO CREATE GREAT WATERFRONTS

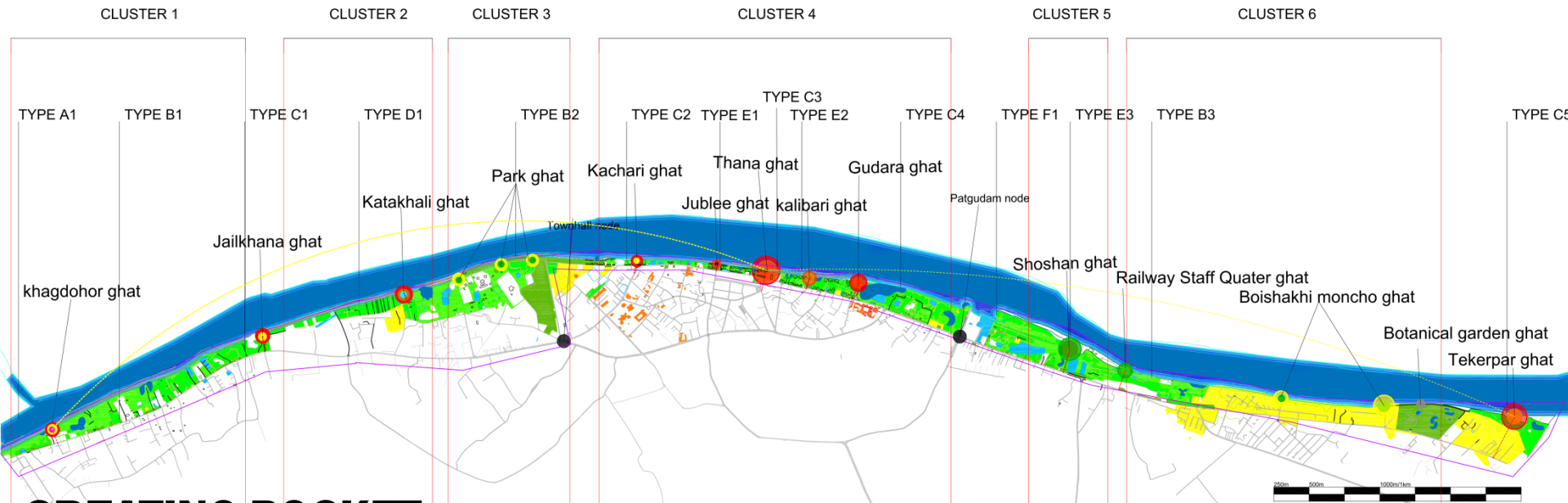
- MAKE PUBLIC GOALS AS PRIMARY OBJECTIVES
- CREATE MULTIPLE DESTINATIONS
- CONNECT THE DESTINATIONS
- ENCOURAGE 24HR ACTIVITY
- OPTIMIZE PUBLIC ACCESS
- SUPPORT MULTIPLE MODES OF TRANSPORTATION
- INTEGRATE SEASONAL ACTIVITIES INTO EACH DESTINATION
- MAKE ICONIC BUILDINGS SERVE, AS MULTIPLE FUNCTIONS
- USE PARKS TO CONNECT DESTINATIONS



# PROPOSAL (RIVER FRONT)



# PROPOSAL (MASTER PLAN)



## CREATING POCKET

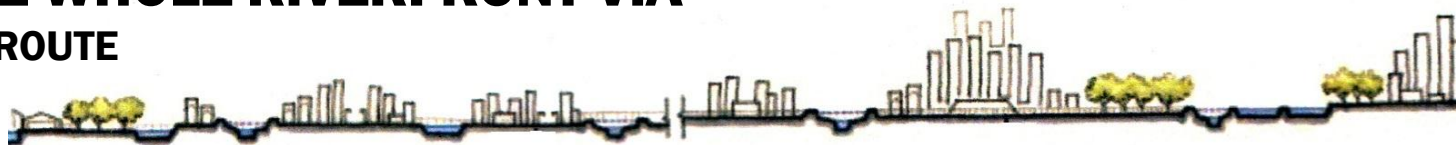
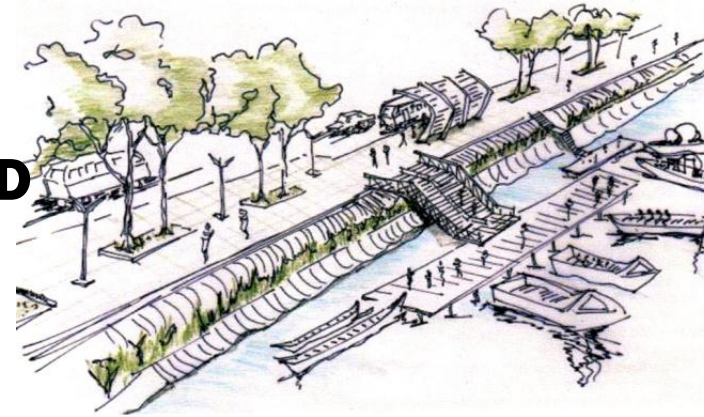
- FOR PROPER DRAINAGE OF FLOOD WATER
- FOR CONNECTING RIVER WATER CLOSE TO ROAD

## CONNECTING THE GHATS DIRECTLY WITH ROAD

- CREATING VISTA
- MAKING DIRECT LINK WITH THE HERITAGE
- CONNECTING MAJOR INFRASTRUCTURE WITH THE RIVER
- SKYLINE

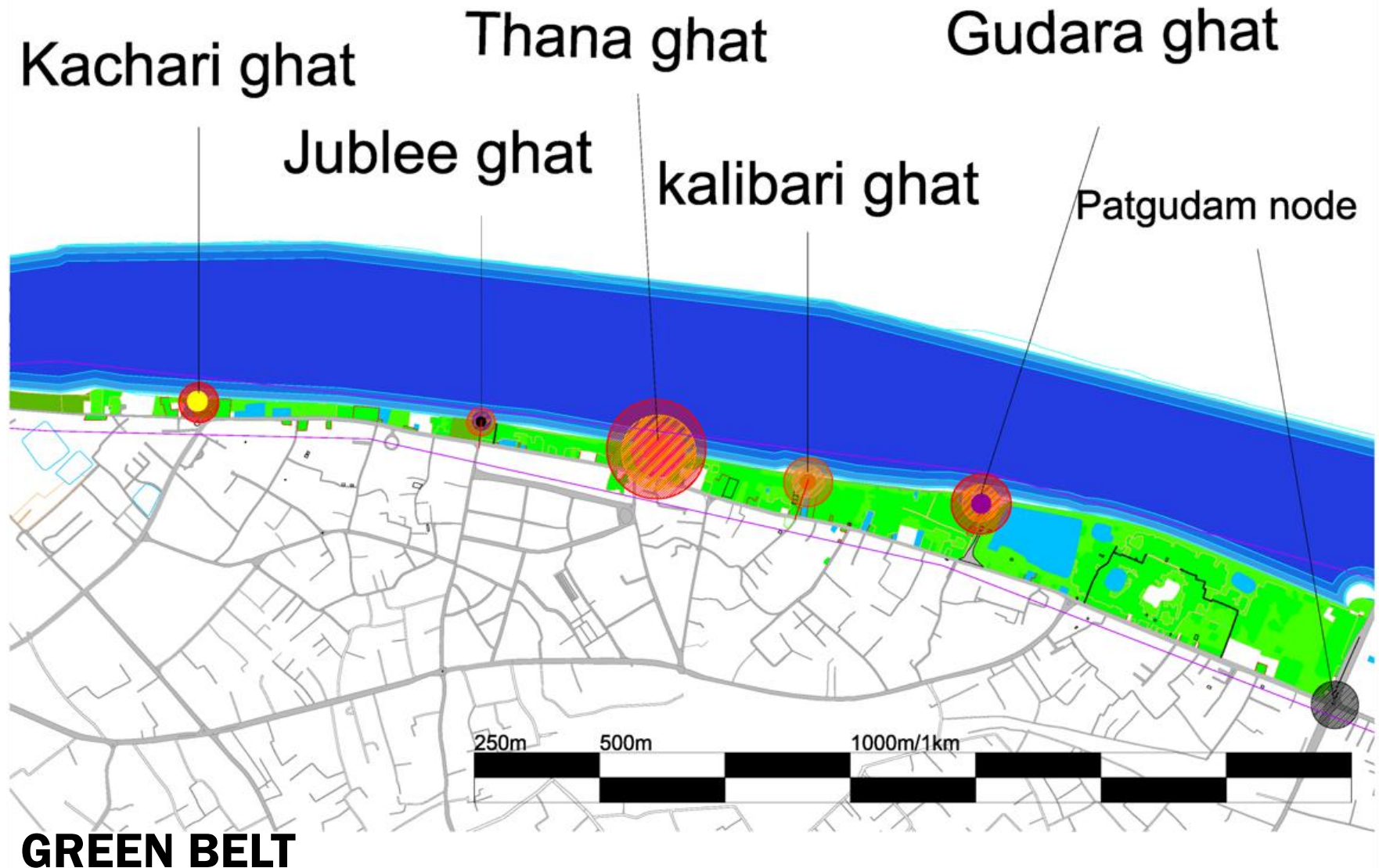
## CONNECTING THE WHOLE RIVERFRONT VIA

- A PEDESTRIAN WALKROUTE
- BI-CYCLE ROUTE
- WATER TAXI ROUTE



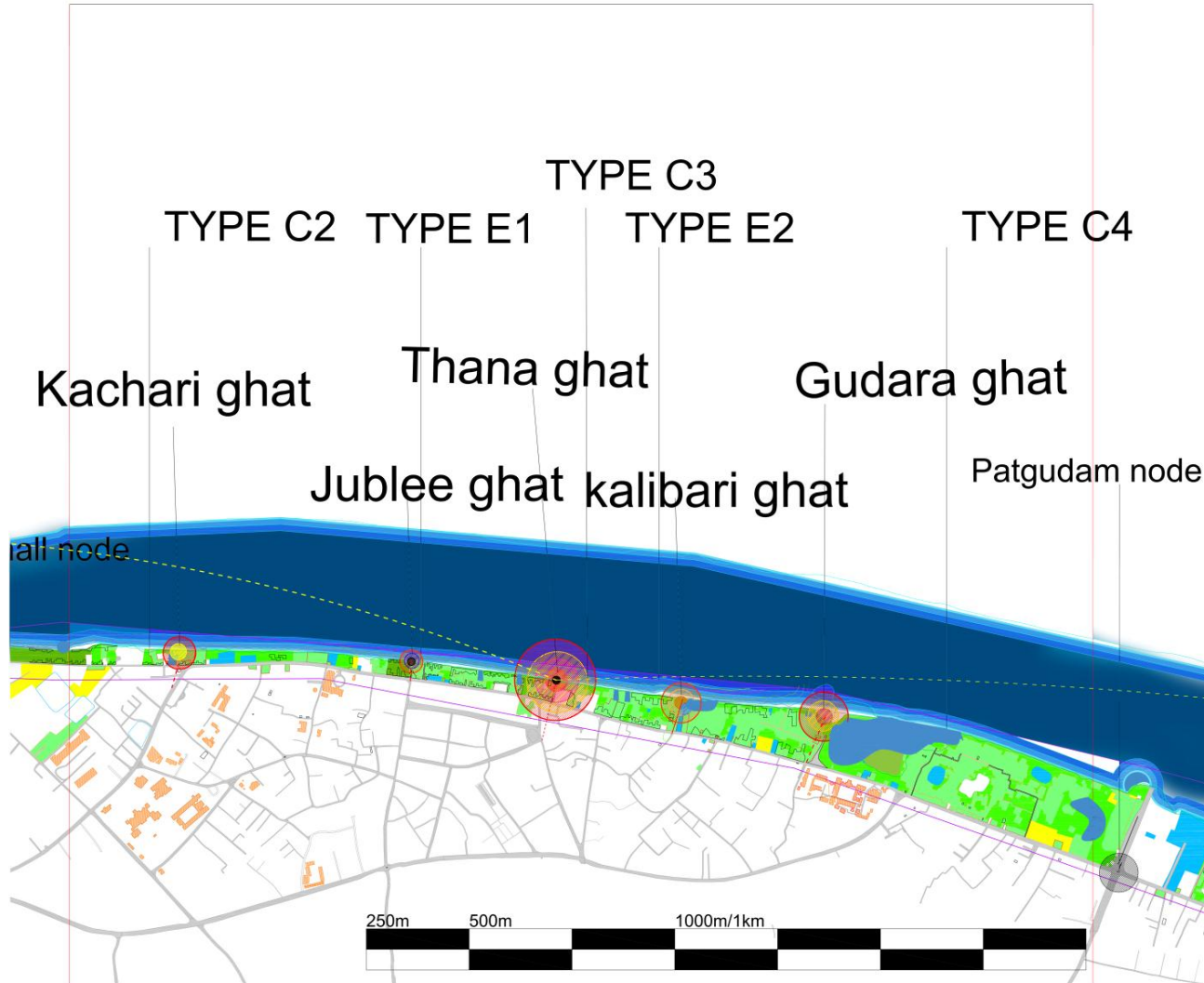
# PROPOSAL (CLUSTER 4)

## KACHARI GHAT TO PATGUDAM MOR



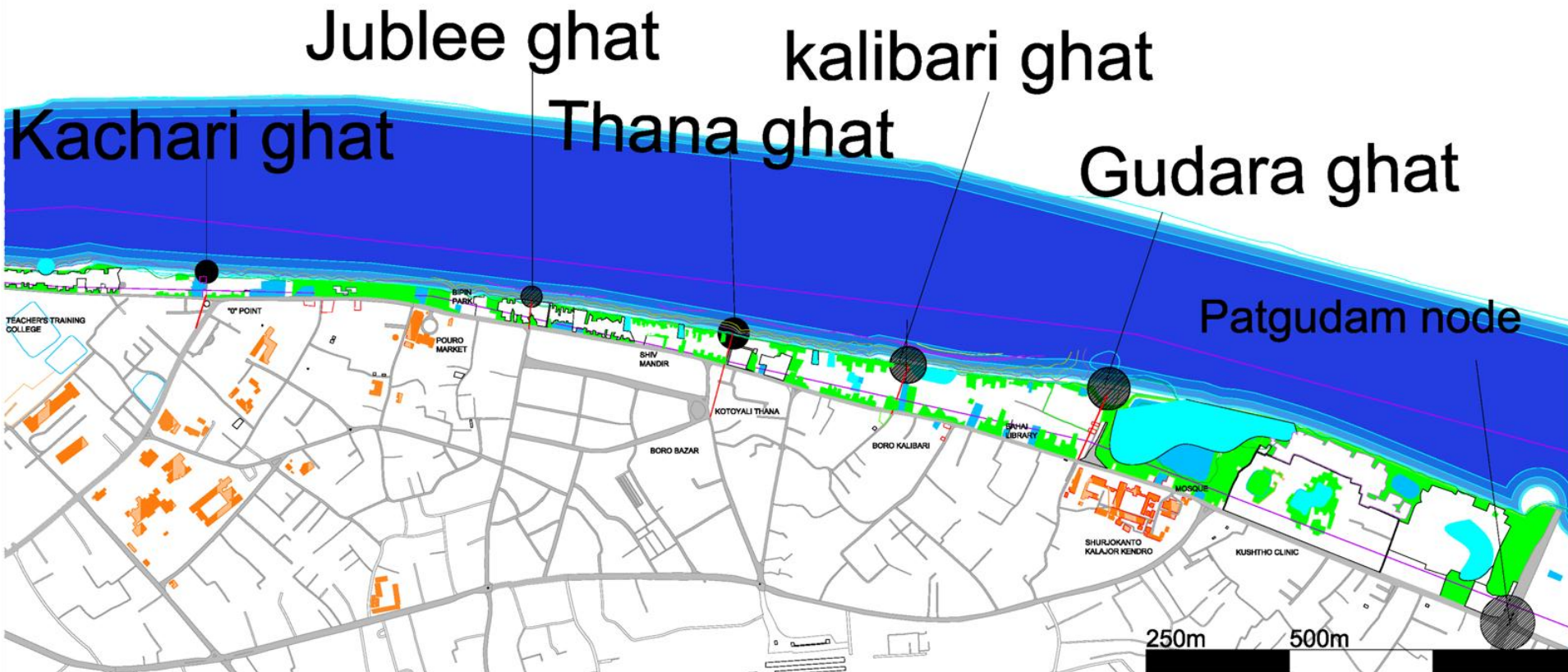
# PROPOSAL (CLUSTER 4)

## CLUSTER 4





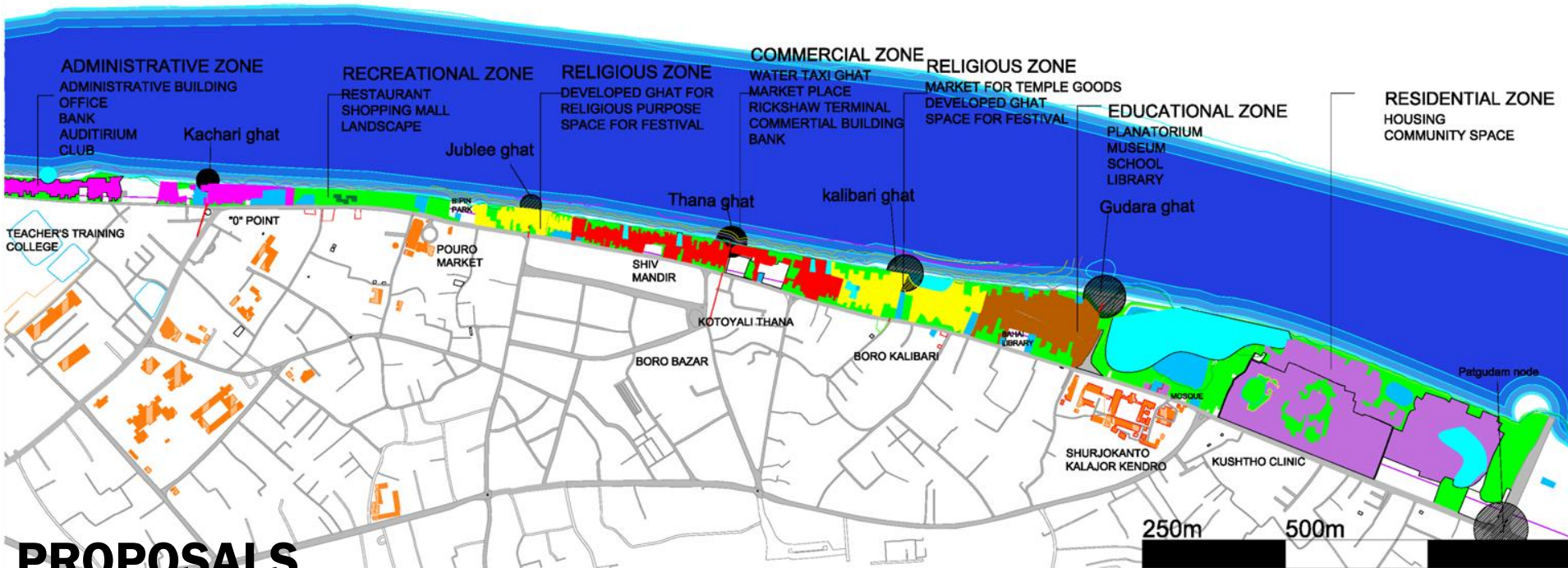
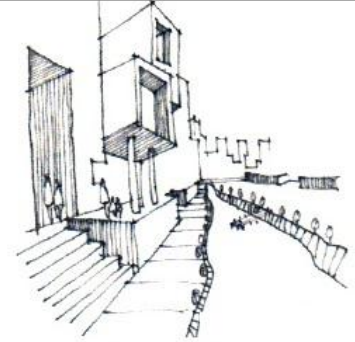
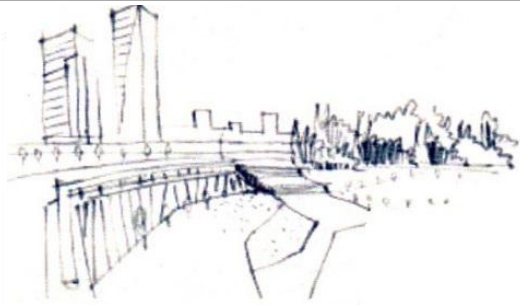
# PROPOSAL (CLUSTER 4)



**URBAN SOLID –VOID RELATION**



# PROPOSAL (CLUSTER 4)



**PROPOSALS**

