P A L A V A

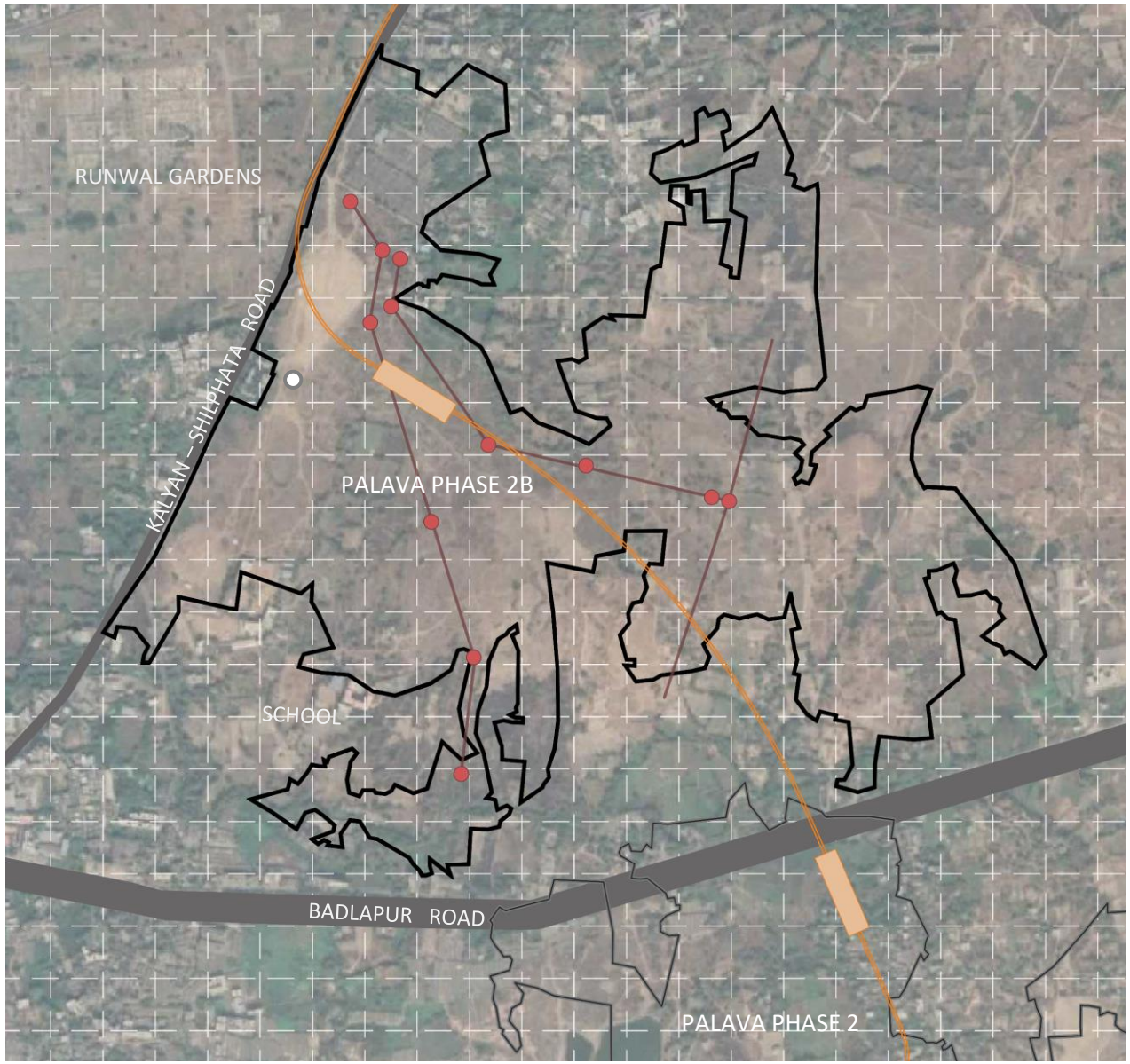
ASSESSMENT OF ROAD CONNECTING KALYAN SHIL ROAD AND PALAVA PHASE 2 THROUGH LAND UNDER PHASE 2B DEVELOPMENT

MAY 2020

CONTENTS

- SITE SETTING AND SURROUNDINGS
- ACCESS AND CONNECTIVITY
- MAPPING THE EXISTING VEGETATION AND VEGETATION TYPES
- MAPPING THE EXISTING WATER FEATURES
- OVERVIEW – EXITING LAND FEATURES
- PROPOSED DEVELOPMENT PLAN FOR THE REGION
- CONSIDERATIONS FOR THE ALIGNMENT OF THE ROAD CONNECTING SHIL ROAD & PHASE 2
- ROAD CONNECTING SHIL ROAD & PHASE 2 ASSESMENT OF ROAD ALIGNMENT
- ROW –SECTION
- TESTING ON LAND POSESSION AND LIAISONING
- CASE STUDIES FOR METRO STATION ALIGNMENT

SITE SETTING AND SURROUNDINGS



GRID 100X 100M

LEGEND

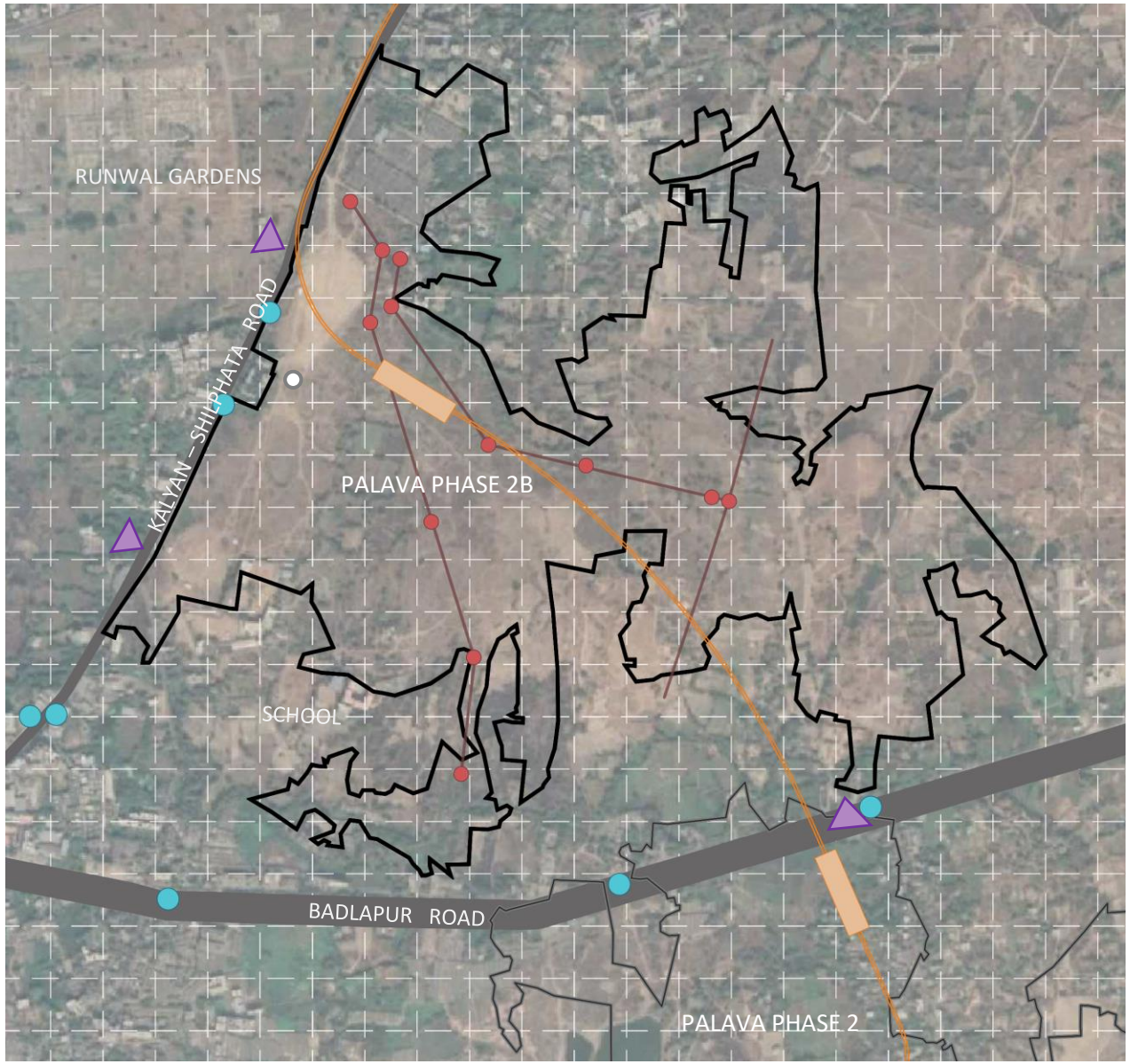
- PHASE 2B SITE EXTENT (TILR)
- PALAVA PHASE 2 SITE EXTENT
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- PROPOSED METRO LINE
- PROPOSED METRO STATION
- CURRENT SALE OFFICE

SITE AREA PALAVA PHASE 2B

= 11,42,473.65 SQ MTS
= 282.30 ACRES

0 50 100 200 500 1000

ACCESS AND CONNECTIVITY



GRID 100X 100M

LEGEND

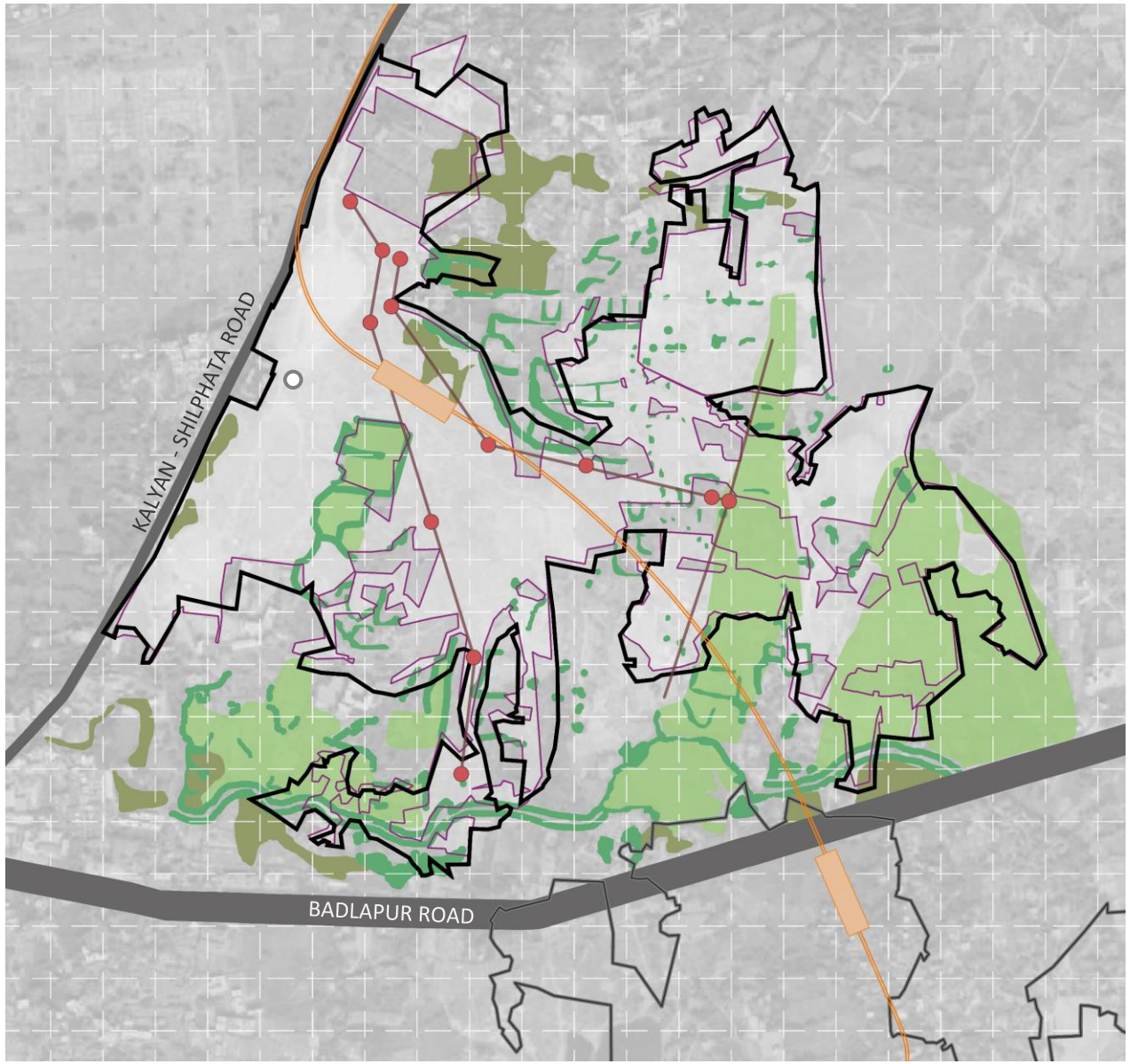
- PHASE 2B SITE EXTENT (TILR)
- PALAVA PHASE 2 SITE EXTENT
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- PROPOSED METRO LINE
- PROPOSED METRO STATION
- PROBABLE SITE ENTRY
- EXISTING BUS STOPS
- CURRENT SALE OFFICE

RAILWAY STATION PROXIMITY

NILAJE	4.1 KM
DAITIWALI	4.7 KM
DOMBIVLI	5.5 KM

0 50 100 200 500 1000

MAPPING THE EXISTING VEGETATION AND VEGETATION TYPES



GRID 100X 100M

LEGEND

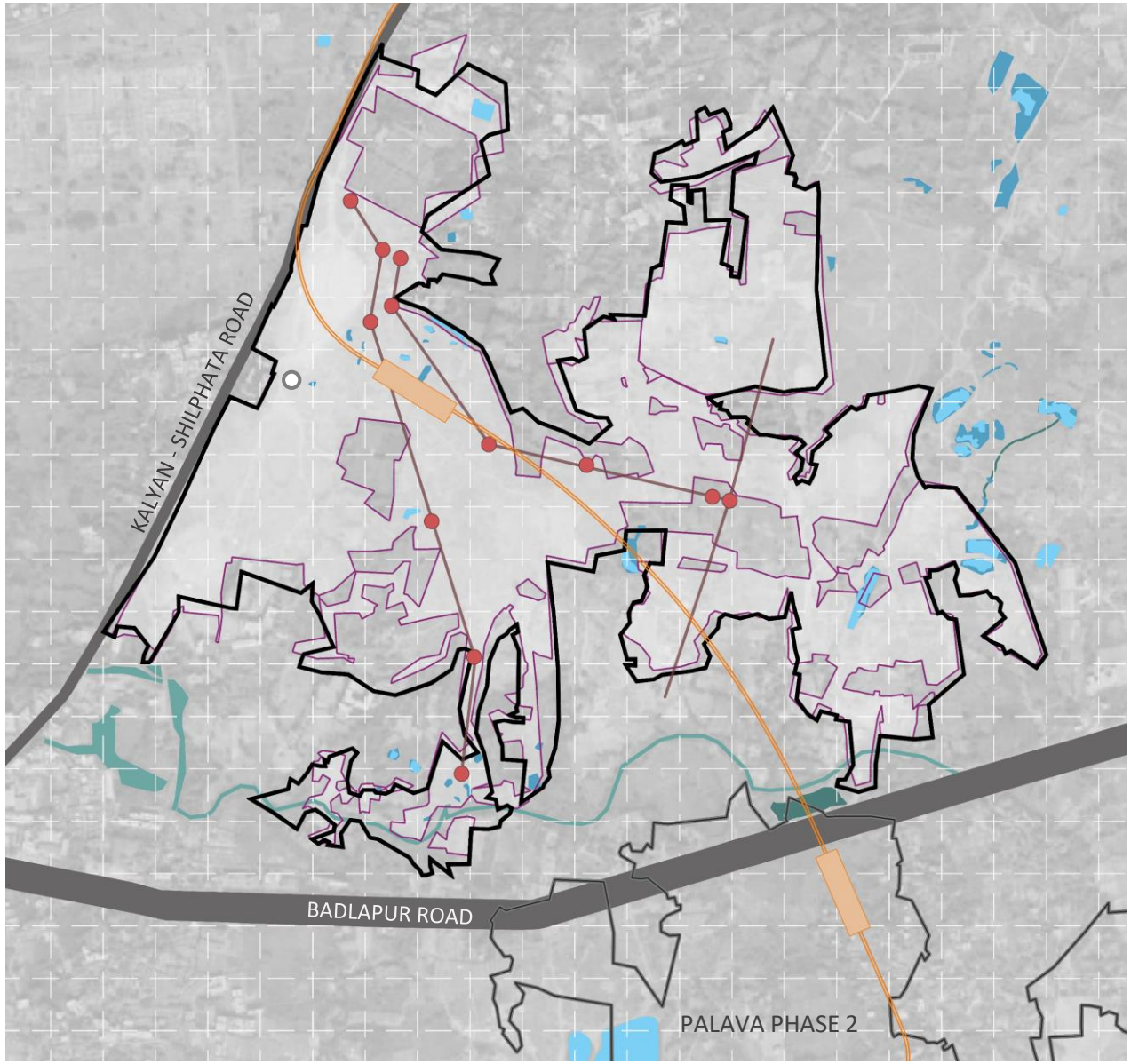
- PHASE 2B SITE EXTENT
- PALAVA PHASE 2 SITE EXTENT
- LAND ACCQUIRED
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- PROPOSED METRO LINE
- PROPOSED METRO STATION
- EXISTING TREES
- AGRICULTURE FIELDS
- THICKET
- CURRENT SALE OFFICE

INFERENCE :

Most of the vegetation (trees and thickets) are on the periphery of the site.
Agricultural activity is underway in the south and south east part of the site .
Most parts of land are clear of vegetations , which may also be a resultant of the shallow soil depths and hard rock at the surface.

0 50 100 200 500 1000

MAPPING THE EXISTING WATER FEATURES



LEGEND

- PHASE 2B SITE EXTENT (TILR)
- PALAVA PHASE 2 SITE EXTENT
- LAND ACCQUIRED
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- PROPOSED METRO LINE
- PROPOSED METRO STATION

PRE MONSOON

- SEASONAL STREAM
- POND

POST MONSOON

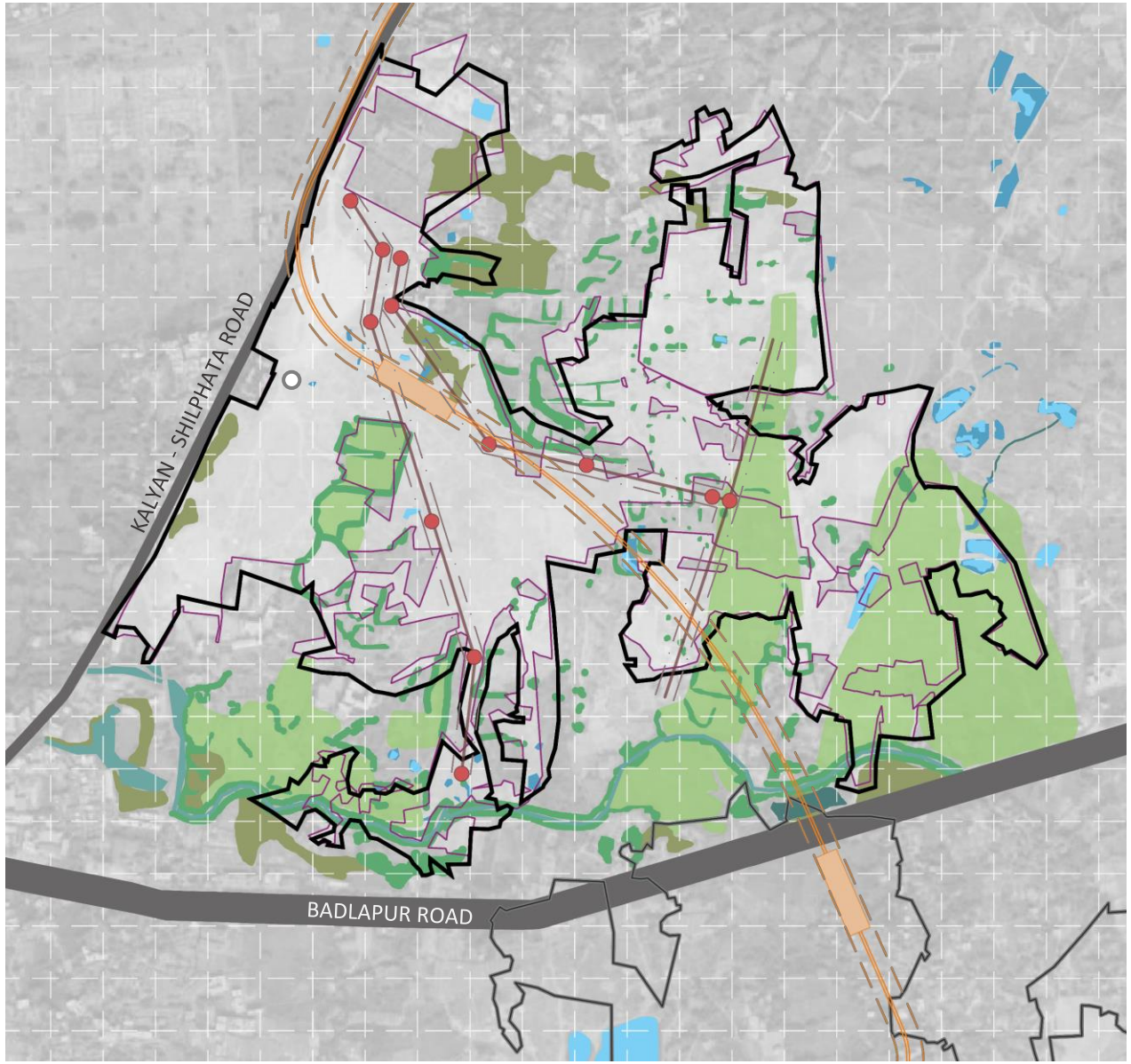
- SEASONAL STREAM
- POND

INFERENCE :

In the absence of the survey for the entire land parcel only visible surface water features are plotted .
Once a better understand of the lay of land is in place there will be areas that will require cut & fill activity, or seasonal streams / swales that will be have to be preserved and made part of the overall storm water network.

0 50 100 200 500 1000

OVERVIEW – EXITING LAND FEATURES



GRID 100X 100M

Metro line Setback = 25mts from C/L
H.T Cable Setback = 18mts from C/L

INFERENCE :

Setbacks from the metro line and the HT cables must be put to rational use as they account for large amount of continues land parcels - roads / green corridors / parks (no built zone)

Most of the site setbacks are densely vegetated . They may act as buffers.

Water bodies towards the south west may act as retention areas (subject to further studies and lay of land) and potentially be developed as recreational spaces.

LEGEND

- PHASE 2B SITE EXTENT
- PALAVA PHASE 2 SITE EXTENT
- LAND ACCQUIRED
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- HIGH TENSION SET BACK LINE
- PROPOSED METRO LINE
- PROPOSED METRO STATION
- METRO SET BACK LINE
- EXISTING TREES
- AGRICULTURE FIELDS
- THICKET

PRE MONSOON

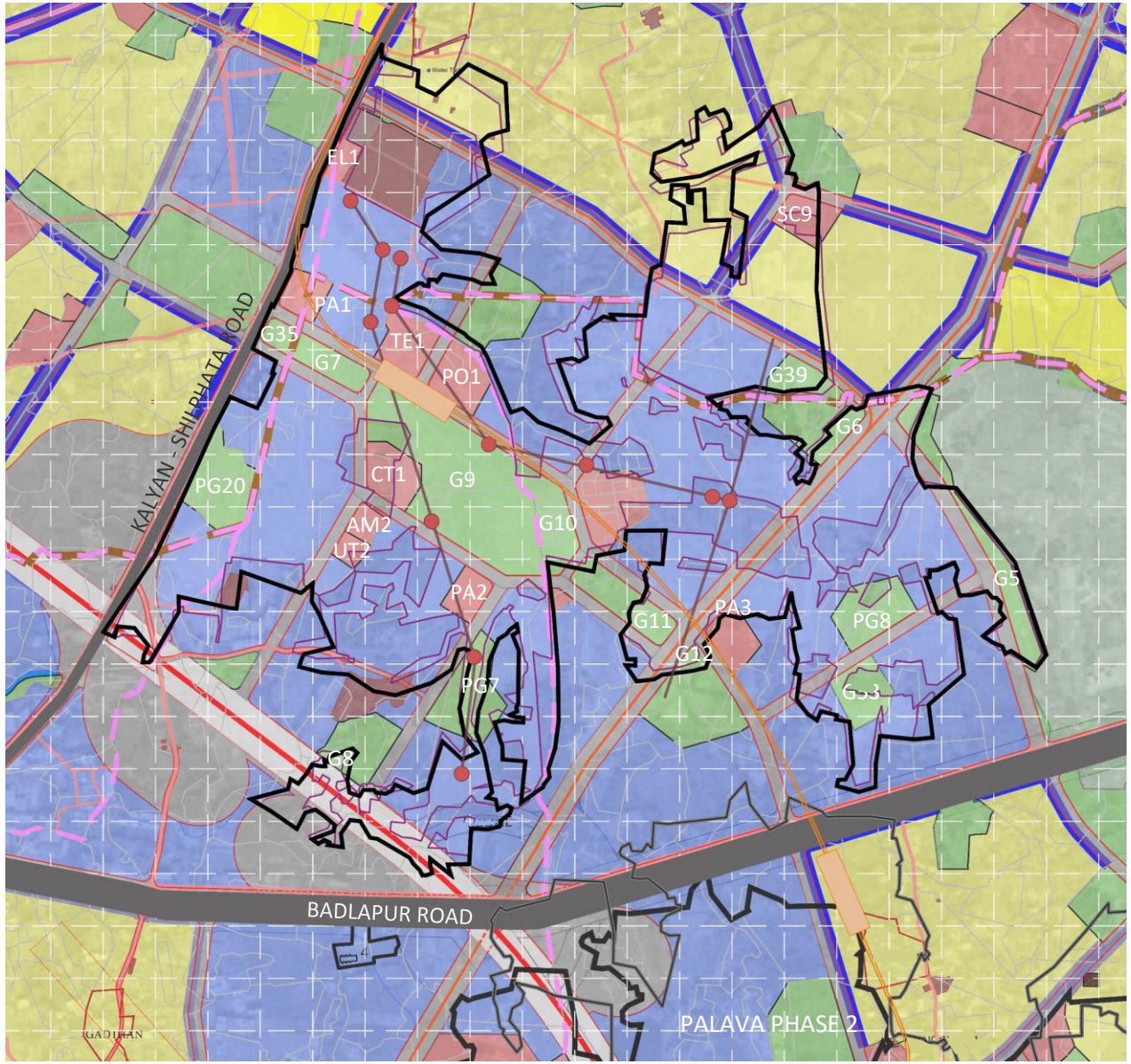
- SEASONAL STREAM
- POND

POST MONSOON

- SEASONAL STREAM
- POND

0 50 100 200 500 1000

PROPOSED DEVELOPMENT PLAN FOR THE REGION



GRID 100X 100M

DEVELOPMENT PLAN

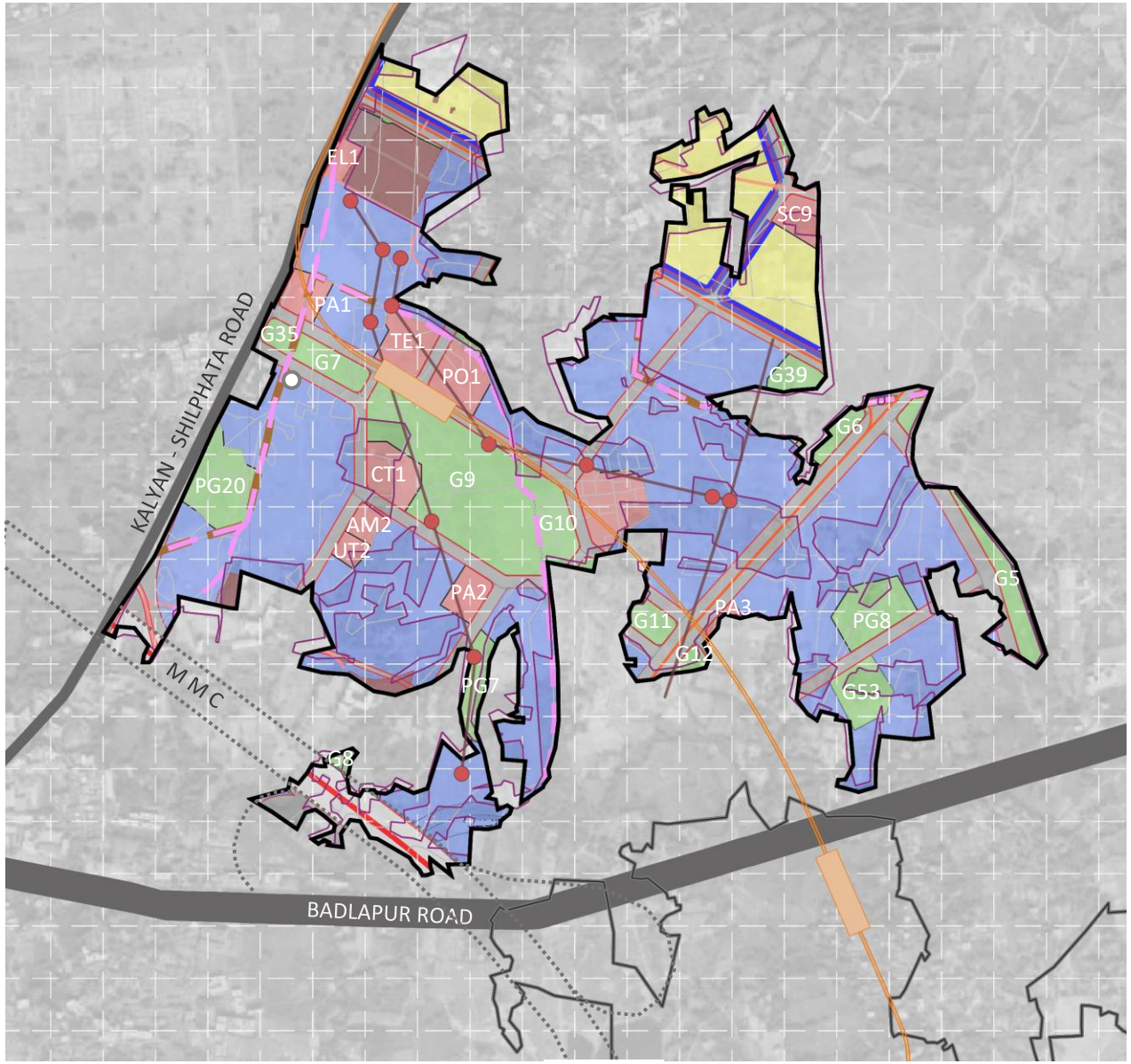
	PROPOSED MULTI MODAL CORRIDOR - 80 M
	PROPOSED 24, 30, 45 M WIDE ROADS
	EXISTING ROADS
	NOTIFIED AREA BOUNDARY
	VILLAGE BOUNDARY
	PROPOSED PUBLIC TRANSPORT
	PROPOSED SHOP LINE
	COMMERCIAL ZONE
	RESIDENTIAL ZONE
	PROPOSED PUBLIC/ SEMI PUBLIC UTILITIES
EL1	ELECTRIC SUBSTATION
PA1,PA2, PA3,PA6	PARKING LOT
PO1	POST OFFICE
TE1	TELEPHONE EXCHANGE
UT2	PUBLIC UTILITY
AM2	PUBLIC AMENITIES
CT1	SOCIO CULTURE AMENITIES
SC9	EDUCATIONAL FACILITIES SCHOOL, PRIMARY, SECONDARY
	EXISTING PUBLIC/ SEMI PUBLIC UTILITIES(SCHOOL, ELECTRIC SUBSTATION)

LEGEND

	PHASE 2B SITE EXTENT
	PALAVA PHASE 2 SITE EXTENT
	LAND ACCQUIRED
	ROAD
	HIGH TENSION LINE
	HIGH TENSION CABLE POST
	PROPOSED METRO LINE
	PROPOSED METRO STATION
	PROPOSED OPEN AND RECREATIONAL SPACES
G5,G6,G7, G8,G9, G10,G11, G12,G35, G39,G53	GARDEN
PG7,PG8, PG20	PLAY GROUND

0 50 100 200 500 1000

PROPOSED DEVELOPMENT PLAN – SITE SPECIFIC



GRID 100X 100M

DEVELOPMENT PLAN

	PROPOSED MULTI MODAL CORRIDOR - 80 M
	PROPOSED 24, 30, 45 M WIDE ROADS
	EXISTING ROADS
	NOTIFIED AREA BOUNDARY
	VILLAGE BOUNDARY
	PROPOSED PUBLIC TRANSPORT
	PROPOSED SHOP LINE
	COMMERCIAL ZONE
	RESIDENTIAL ZONE
	PROPOSED PUBLIC/ SEMI PUBLIC UTILITIES
EL1	ELECTRIC SUBSTATION
PA1,PA2, PA3,PA6	PARKING LOT
PO1	POST OFFICE
TE1	TELEPHONE EXCHANGE
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SC9	EDUCATIONAL FACILITIES SCHOOL, PRIMARY, SECONDARY
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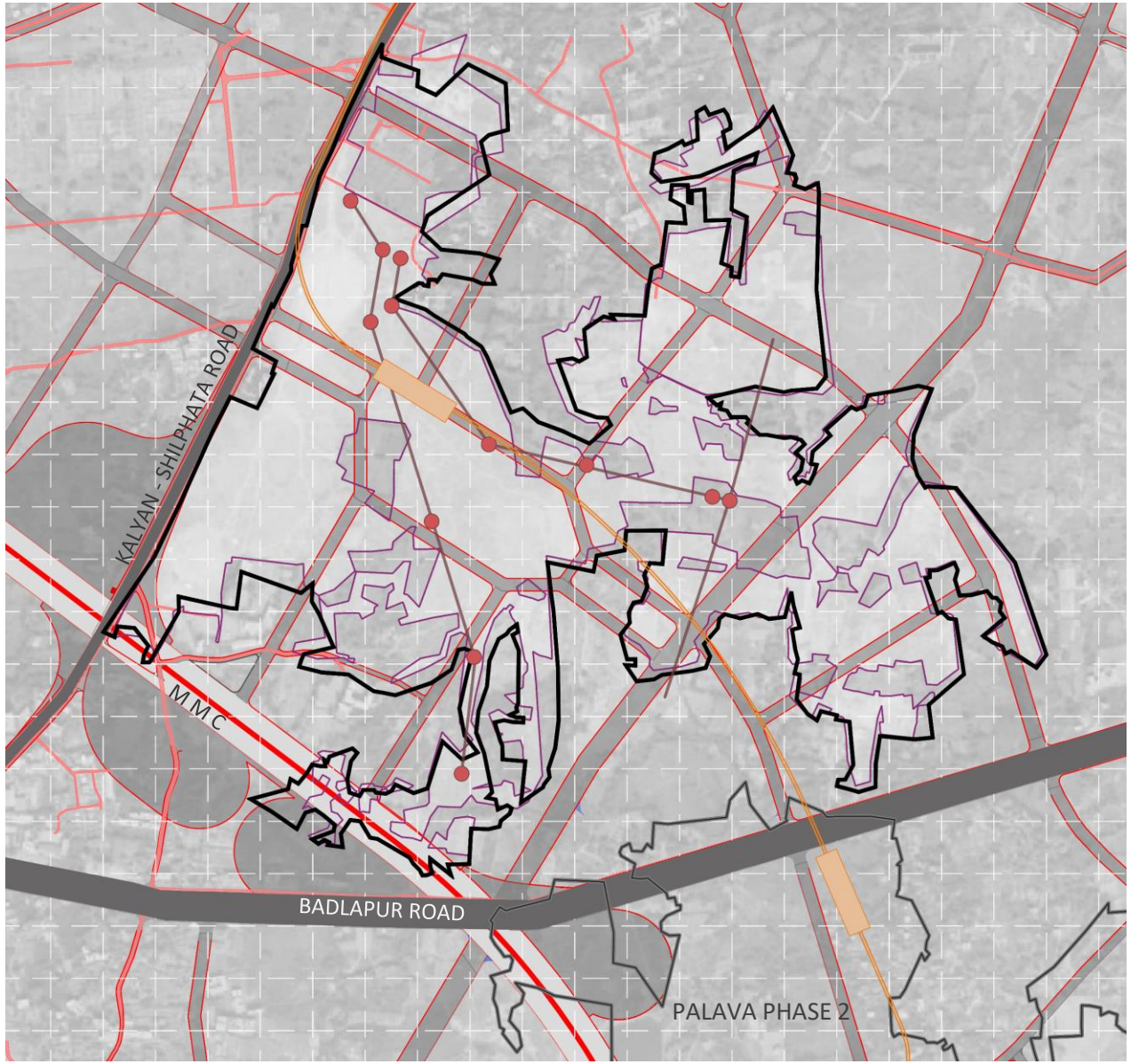
LEGEND

	PHASE 2B SITE EXTENT (TILR)
	PALAVA PHASE 2 SITE EXTENT
	LAND ACCQUIRED
	ROAD
	HIGH TENSION LINE
	HIGH TENSION CABLE POST
	PROPOSED METRO LINE
	PROPOSED METRO STATION
	PROPOSED MULTI MODAL CORRIDOR
	CURRENT SALE OFFICE
	PROPOSED OPEN AND RECREATIONAL SPACES
G5,G6,G7, G8,G9, G10,G11, G12,G35, G39,G53	GARDEN
PG7,PG8, PG20	PLAY GROUND

NOTE : Although 80% (approx.) land falls under commercial reservation , a 70-30% residential to commercial split can be adopted as per ITP rules.

0 50 100 200 500 1000

CONSIDERATIONS FOR THE ALIGNMENT OF THE ROAD



LEGEND

- PHASE 2B SITE EXTENT (TILR)
- PALAVA PHASE 2 SITE EXTENT
- LAND ACCQUIRED
- ROAD
- HIGH TENSION LINE
- HIGH TENSION CABLE POST
- PROPOSED METRO LINE
- PROPOSED METRO STATION
- PROPOSED MULTI MODAL CORRIDOR - 80 M
- PROPOSED 24, 30, 45 M WIDE ROADS
- EXISTING ROADS
- MULTI MODAL CORRIDOR
- VILLAGE ROADS

CONSIDERATIONS FOR THE ALIGNMENT OF THE ROAD

- For the current day scenario (only development of the road) – Idealistically it must be the **shortest in length** and **must pass through land that is under possession** .

- Assuming that most parts of the **entire road can be retained in the final scheme** so that the **infrastructure is built upfront and in accordance to the proposed DP** . Hence a central location through the site may be preferred imagining the master plan to grow around it

- Strategy to **cater to the overhead metro line and the station** that may fall on this road.

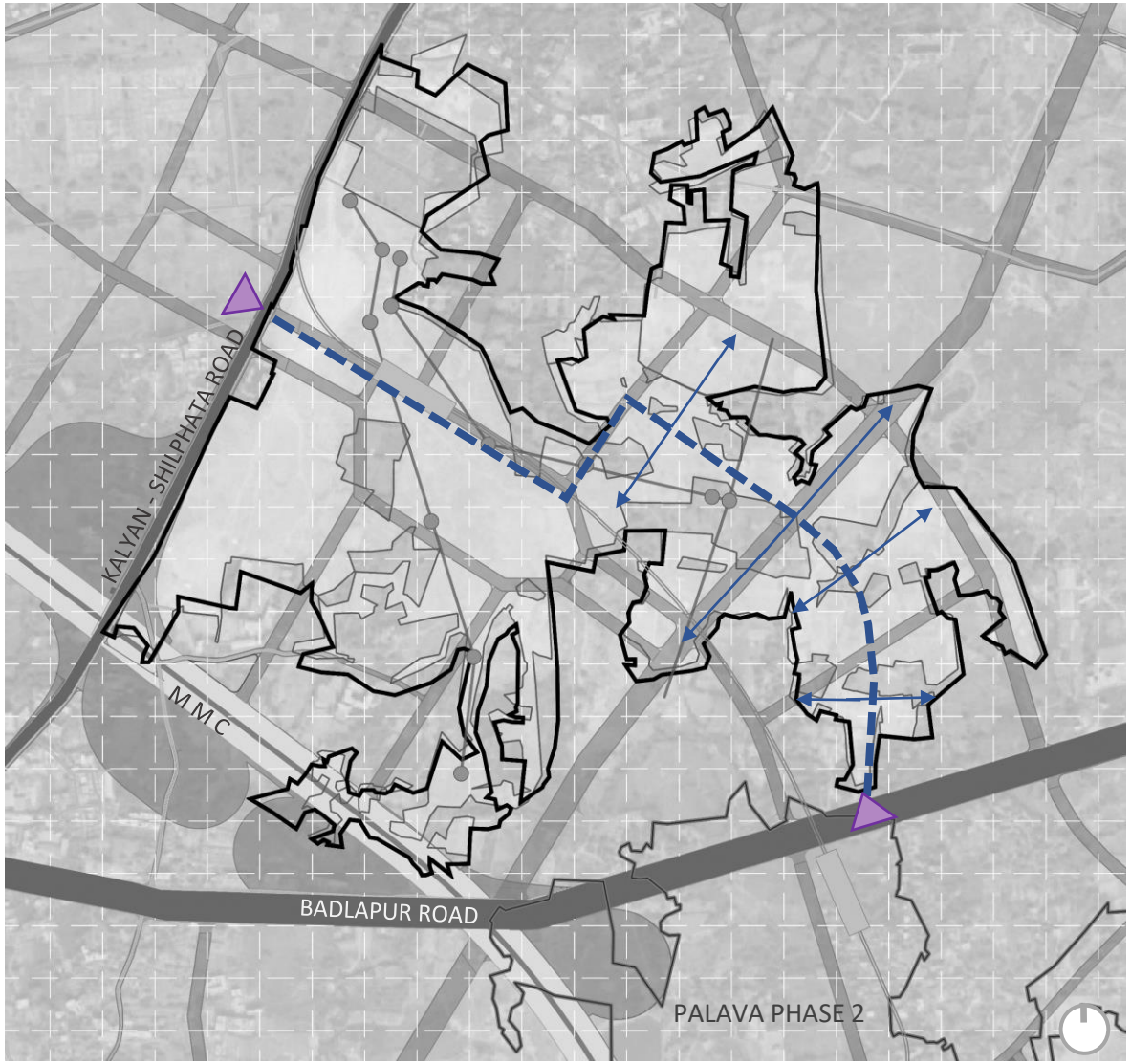
0 50 100 200 500 1000

CONSIDERATIONS FOR THE ALIGNMENT OF THE ROAD



OPTION 01

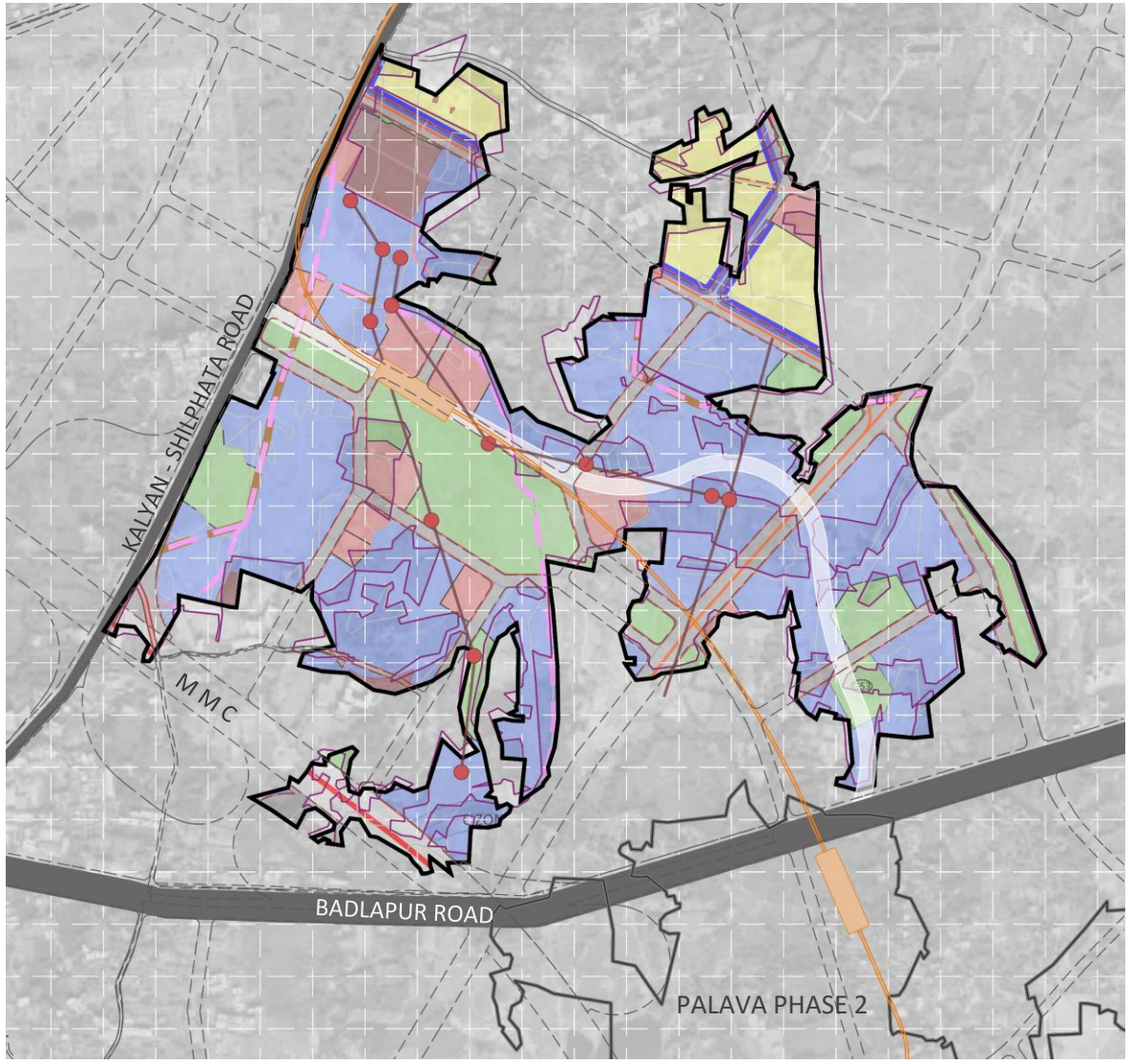
This alignment is drawn **considering the current status of land possession**.
The later half of the road may not require some **adaptation or rework once the master plan is developed for this phase.**



OPTION 02

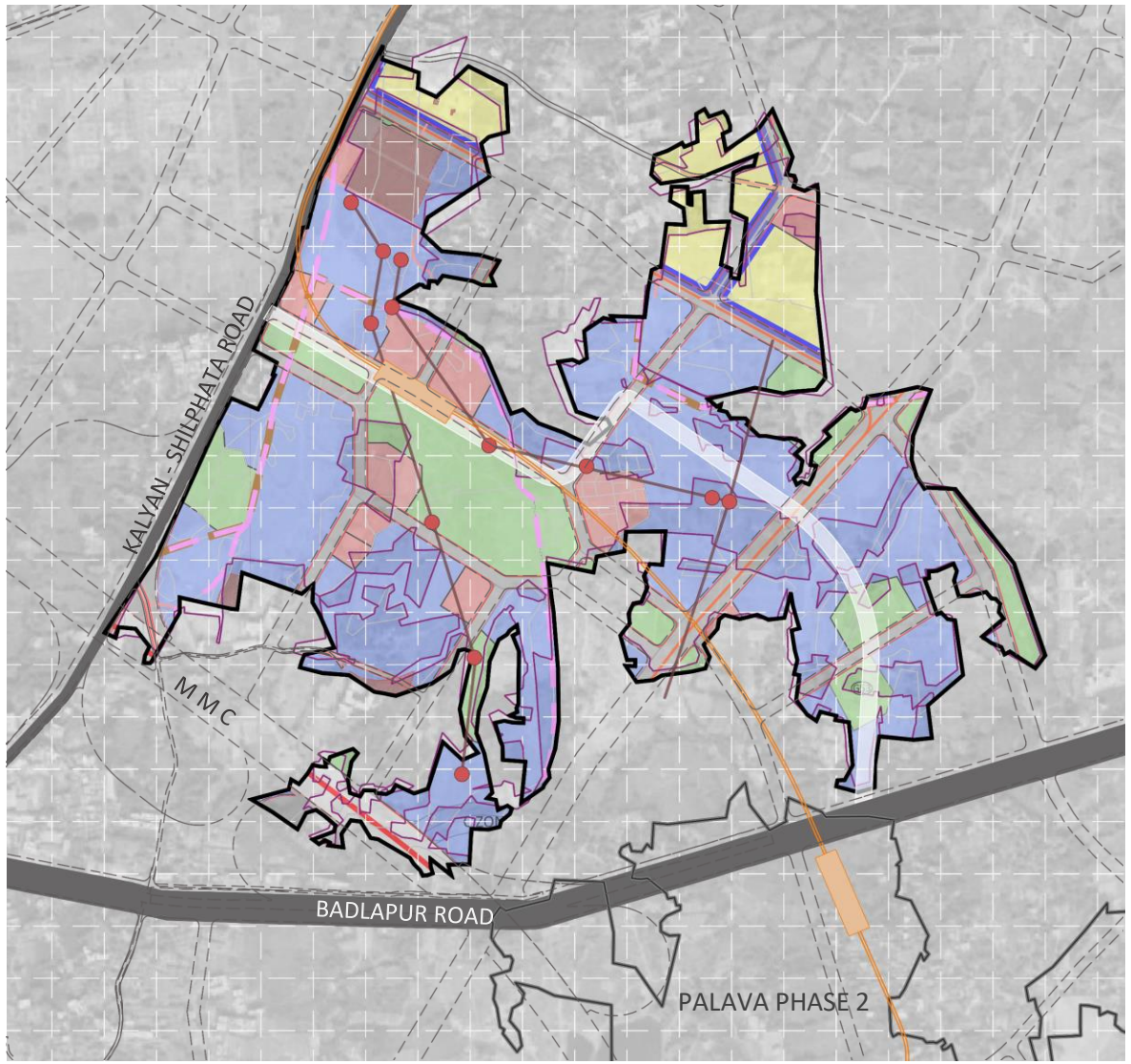
This alignment is established with a better understanding / grid of the proposed DP Roads .
It sits **centrally within the span of the land** and **connects through**. Can be developed into the **main spine** along which the development grows.

ROAD CONNECTING KALYAN SHIL ROAD & PHASE 2



OPTION 01

LENGTH OR PROPOSED ROAD = 1.7 KM
0.66 KM IS PART OF PROPOSED DP

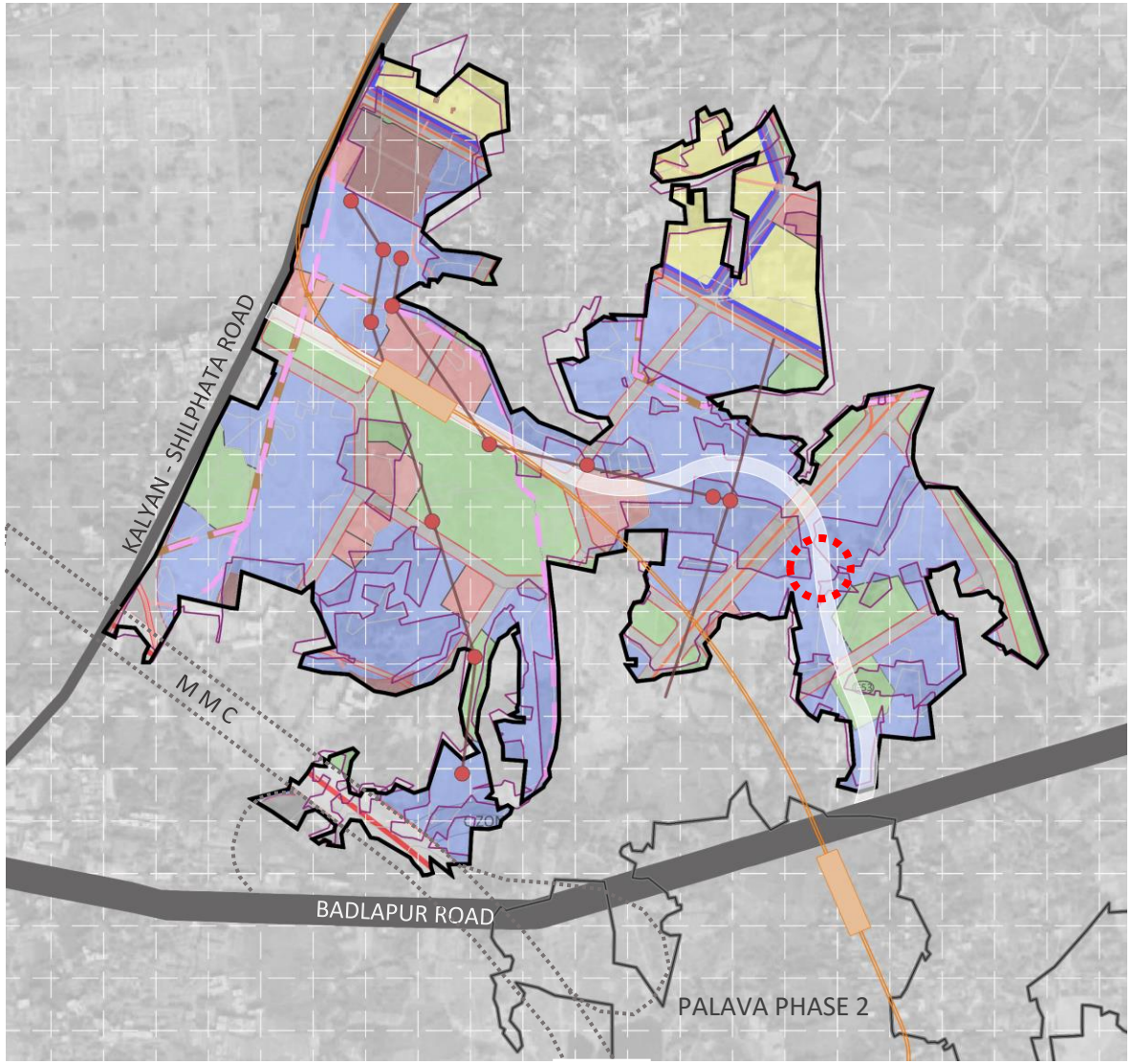


OPTION 02

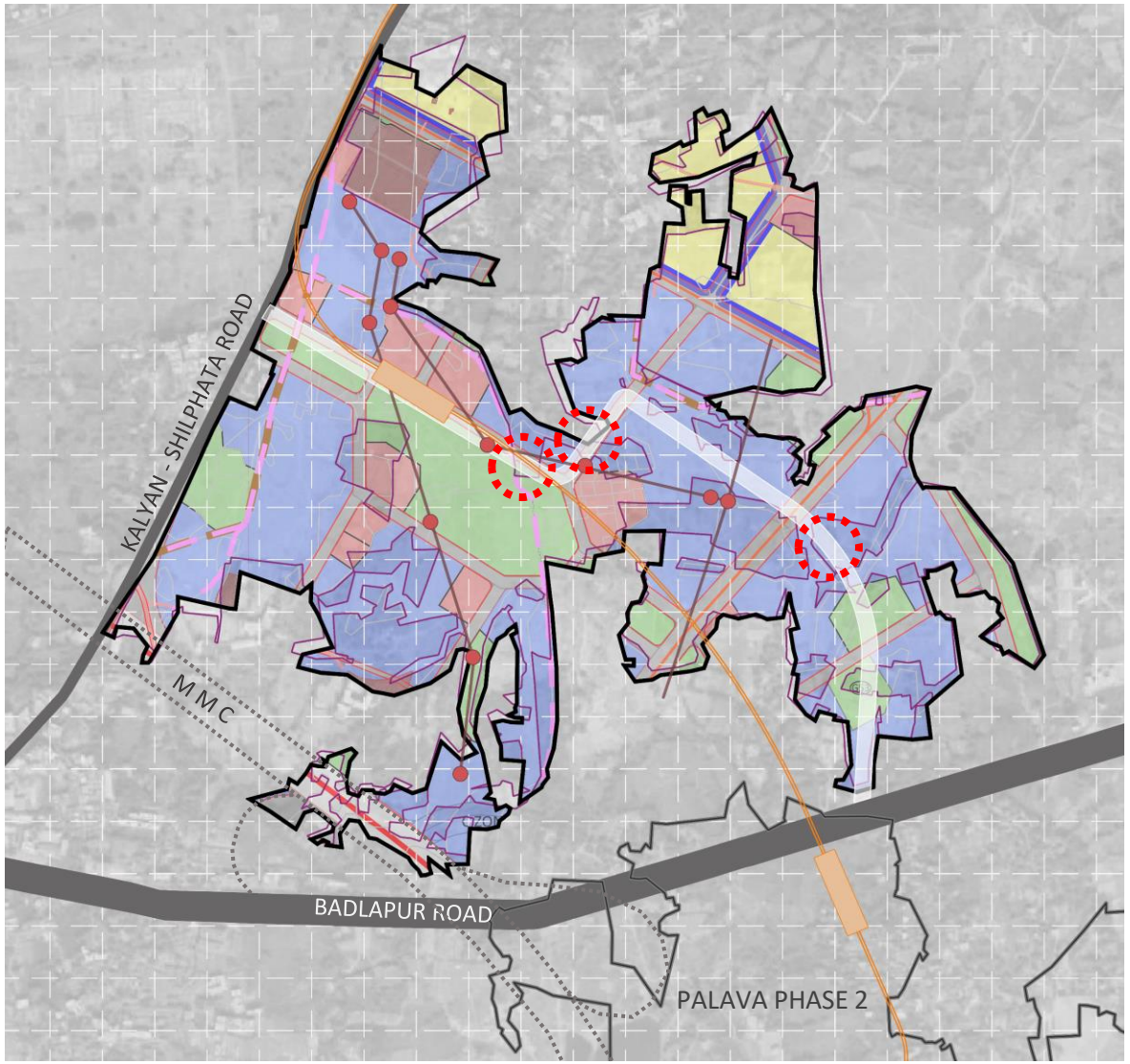
LENGTH OR PROPOSED ROAD = 1.8 KM
0.85 KM IS PART OF PROPOSED DP

0 50 100 200 500 1000

ROAD CONNECTING KALYAN SHIL ROAD & PHASE 2



OPTION 01

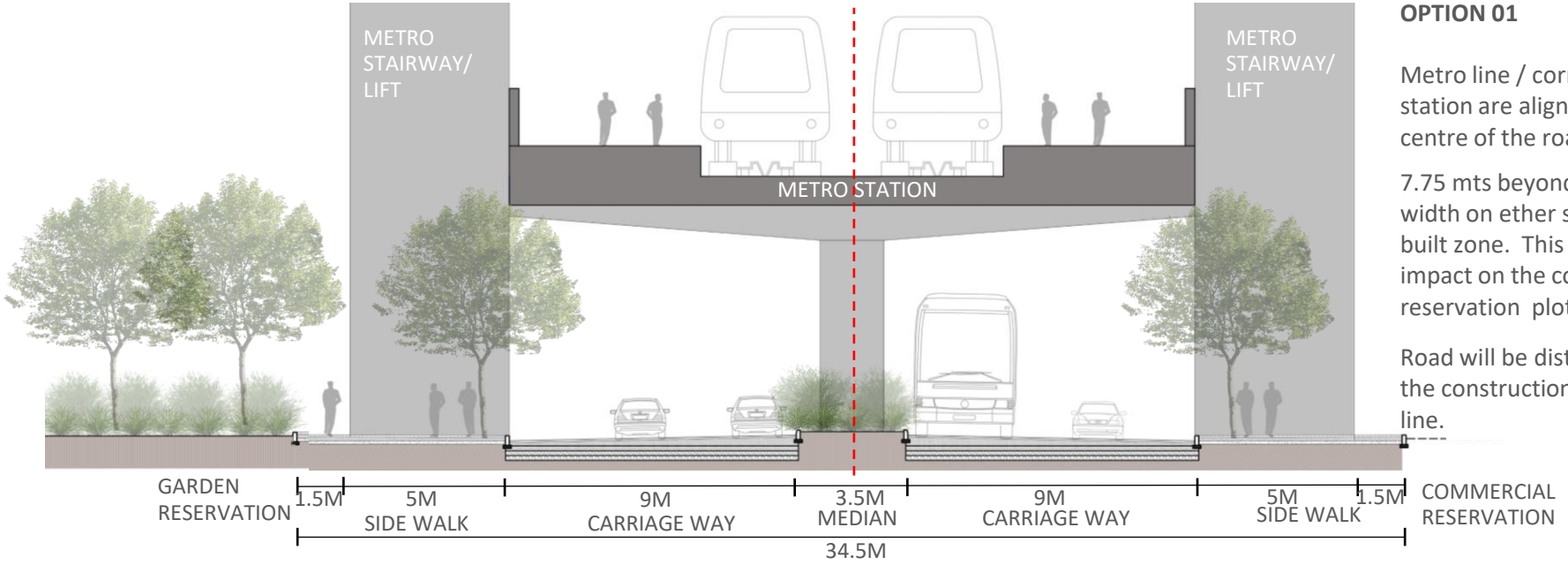


OPTION 02

CONFLICT AREAS
LAND NOT ACQUIRED

0 50 100 200 500 1000

ROW SECTION - ROAD AND METRO STATION INTERFACE



OPTION 01

Metro line / corridor & the station are aligned in the centre of the road.

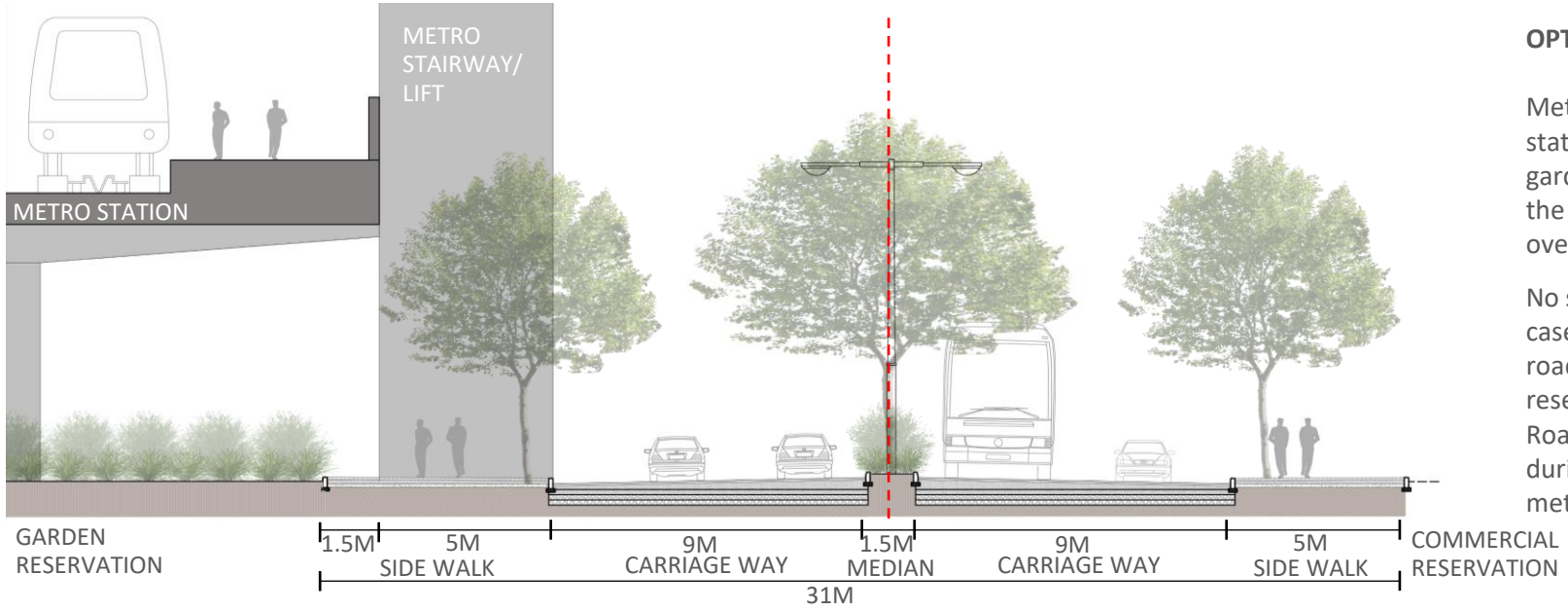
7.75 mts beyond the row width on ether side will be no built zone. This will have an impact on the commercial reservation plot.

Road will be disturbed during the construction of the metro line.

INFERENCE :

Option 2 is preferred option for the following reasons :

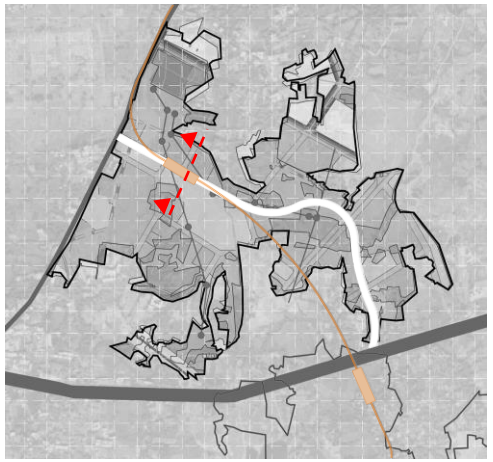
- Setback / no built zone is covered under the garden reservation and the road.
- The station can be integrated with the Garden reservation to be a large public plaza.
- The central median is optimised without compromising on the avenue road character .



OPTION 02

Metro line / corridor & the station are aligned within the garden reservation with only the pedestrian stairway overlapping with pavement.

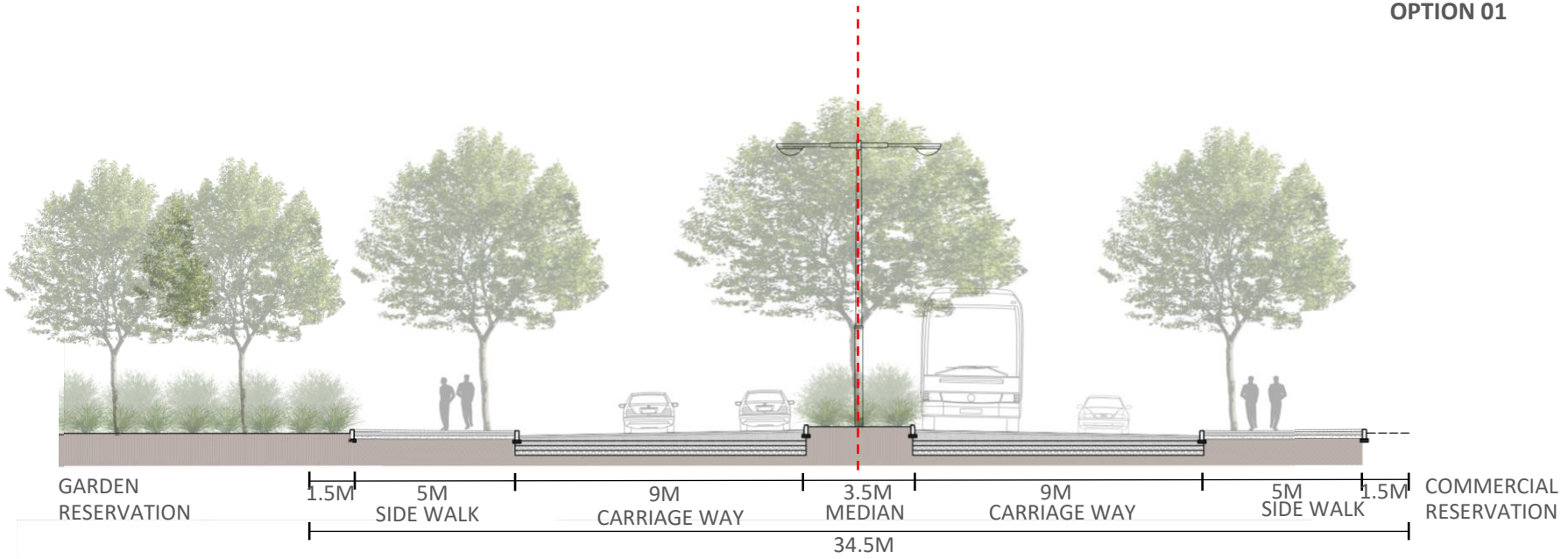
No setback will impact in this case as it overlaps with the road and the garden reservation.
Road will be un- disturbed during the construction of the metro line.



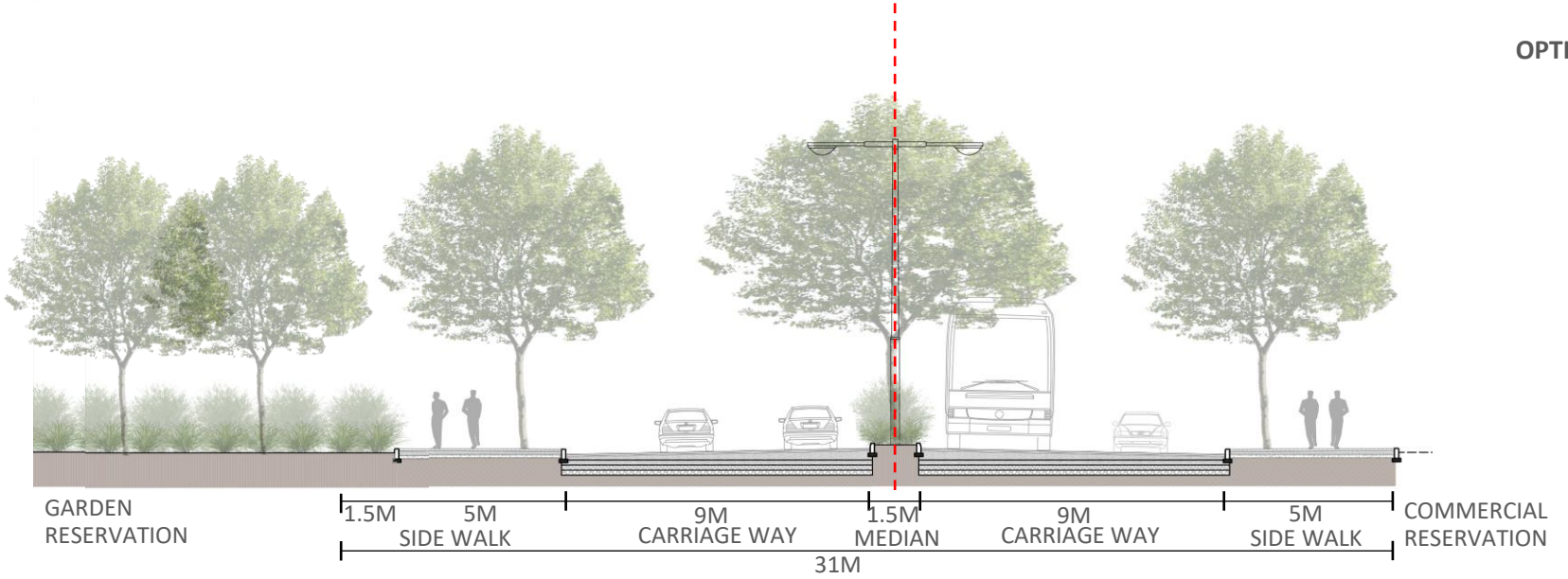
KEY PLAN

ROW SECTION – STANDARD CONDITION

OPTION 01



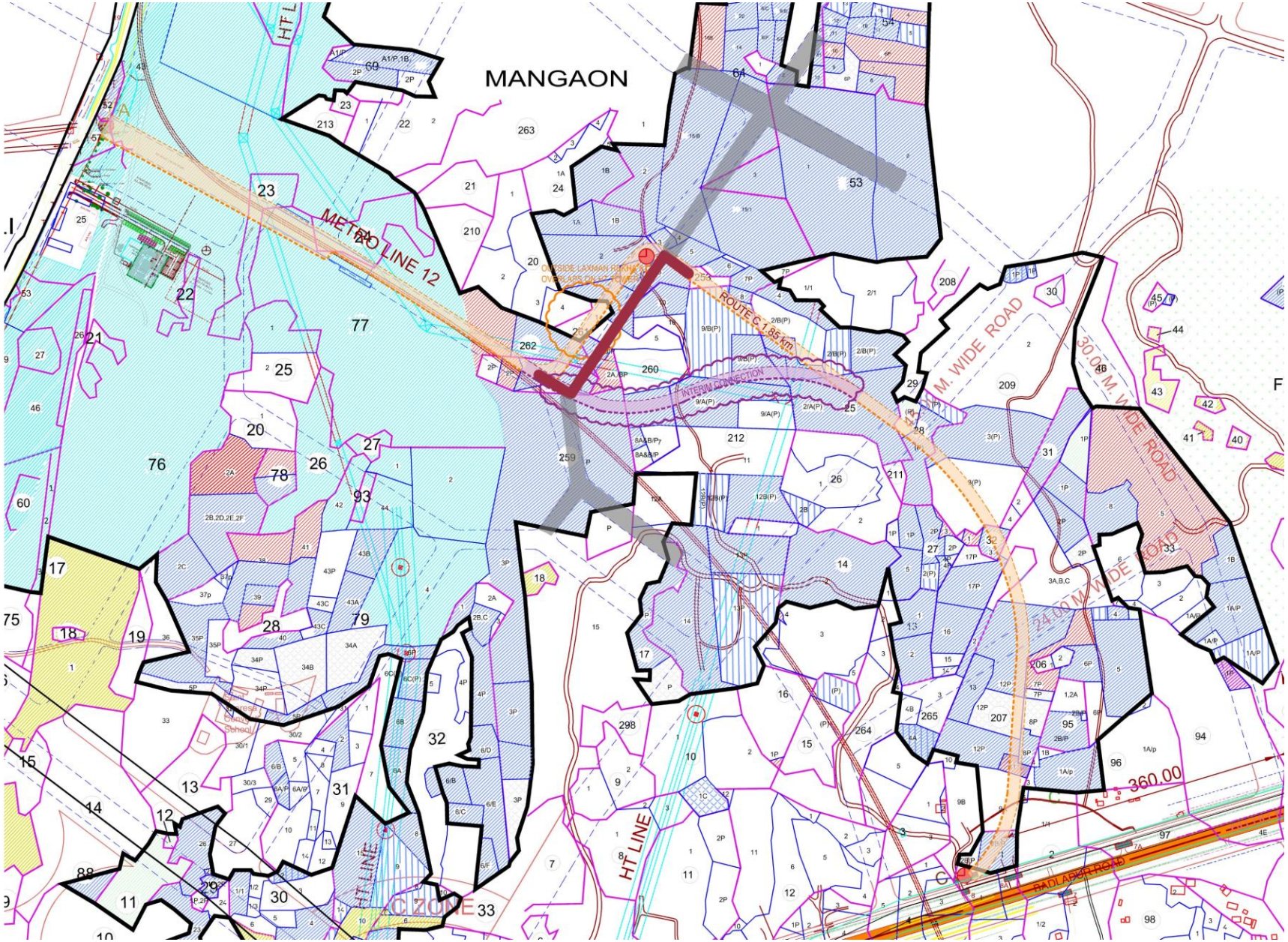
OPTION 02





KEY PLAN

TESTING ON LAND POSESSION AND LIAISONING



FEEDBACK FROM M/s. LODHA ON ROAD ALIGNMENT – 30-04-2020

This map is received from M/s. Lodha design team Making the following suggestions

A. Route - We too agree with you to built the road which can remain permanent for future development & hence prefer option 2.

Since some portion of road is going outside Laxman rekha & also overlapping on existing HT tower (marked in orange revision could), we suggest a Interim road as per attached layout.

RESPONSE FROM M/s. PBB – 30-04-2020

Marked in **Dark Red** line is the re-alignment of the DP road within the TILR boundary

Marked in Gray is the continuation of the DP road . This is drawn based on the understanding and some earlier discussions with the liaison team, that the DP Road can be realigned within the plot (possession area) as long as the entry/ exit point with reference to the site boundary are maintained / kept constant.
This arrangement is also avoiding the overlap with the HT Cable tower.

STATUS : Closed (principally)
Ground reality and feasibility to be checked

FEEDBACK FROM M/s. LODHA ON ROAD SECTION – 30-04-2020

B. Median width - To accommodate future Metro column, the width of Median to be considered as 4.0m. This would allow construction of pile foundation for Metro line column without effecting the built road. Starting from KS road the median will be 4.0 m till where the road takes a turn (portion in which metro line overlaps with DP road, approx. length 600 m), further the median would be 1.5 m as per central avenue road ROW.

RESPONSE & PREFERENCE FROM M/s. PBB

The road sections with the station on the side of the road is preferred.
In this way the road remains uninterrupted and the station itself can be integrated with and be a part of the Garden reservation - large public plaza that can house functions like parking for last mile connectivity, bus shelter , public parks, designated hawker/ food plaza spaces.

STATUS : Open

CASE STUDIES : ROAD AND METRO STATION INTERFACE

METRO STATIONS NOT ALIGNED TO CENTER OF THE ROW

Metro stations can be planned as part of large public plaza's , transit hub oriented developments and mix use or commercial developments .

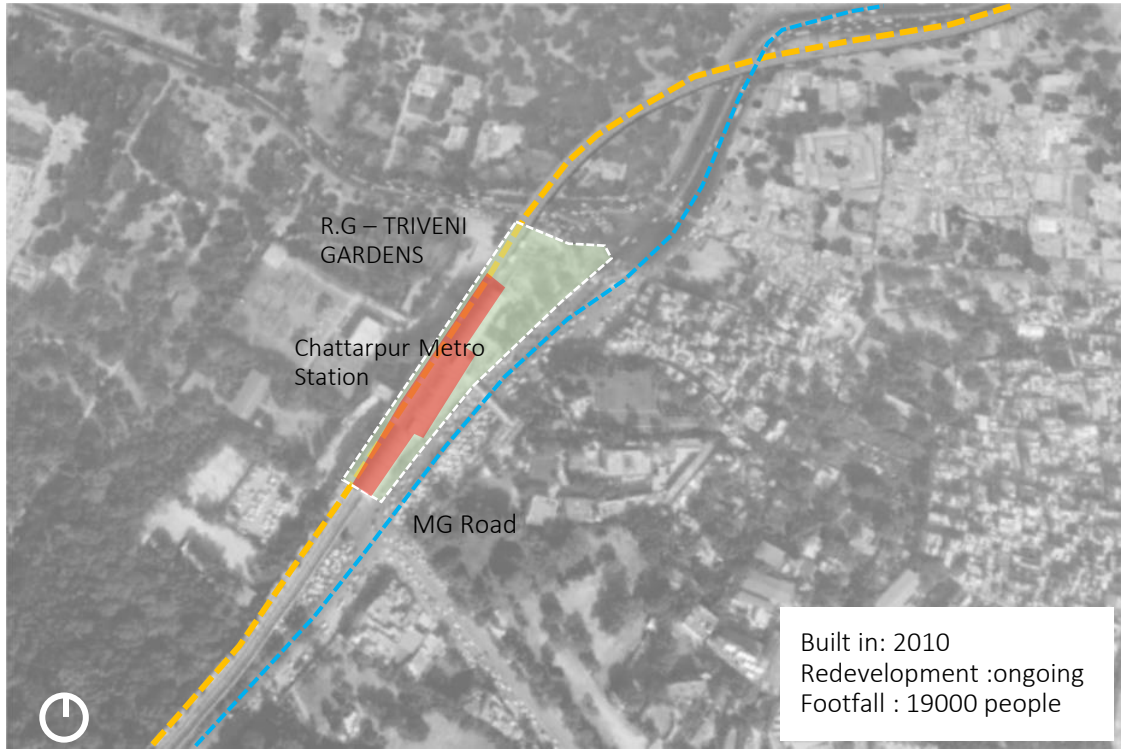
In this way they not only give impetus to the proposed development but also help plan and integrate essential functions and programs that co-exist with the metro /transit development within .

CASE I : CHATTARPUR METRO STATION, DELHI METRO

CASE II : FINENCIAL METRO STATION , DUBAI METRO

CASE III: EXPO METRO STATION, SINGAPORE MRT

CASE STUDY – CHATTARPUR METRO STATION



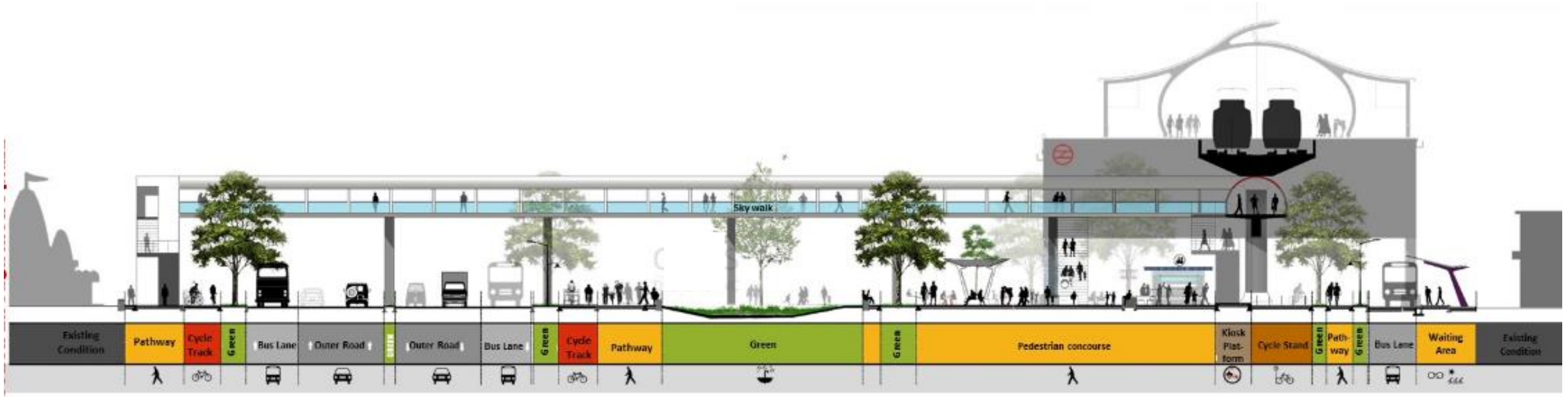
Metro line Adjacent Road



A Visualization of the proposed development



http://oasisdesigns.org/mmichattarpur.asp



Schematic Section





Plaza with greens, walkways and shaded seating. The also space houses outdoor exhibitions



Garden with Amphitheatre & seating

Proposed Program :

1. Halt and go bays for feeder buses, *Grameen Sewas* and Autos.
2. Separate parking bay for feeder buses and for cycle-rickshaw.
3. Gardens , Gathering space - Amphitheater within the plaza.
4. Drinking water and public toilet blocks .
5. Food plaza and separate zone for hawkers.
6. Cycle tracks and 2 wheeler parking for last mile connectivity
7. Public plazas and shopping areas to create vibrant destination and encourage people to use public transport systems .

http://oasisdesigns.org/mmichattarpur.asp

CASE STUDY – DUBAI METRO



Metro line Adjacent Road



Bus Parking Facilities



Continuous greens along the road to hold the metro line piers



Public gathering plazas linked to the metro station.



Public gathering plazas linked to the metro station.

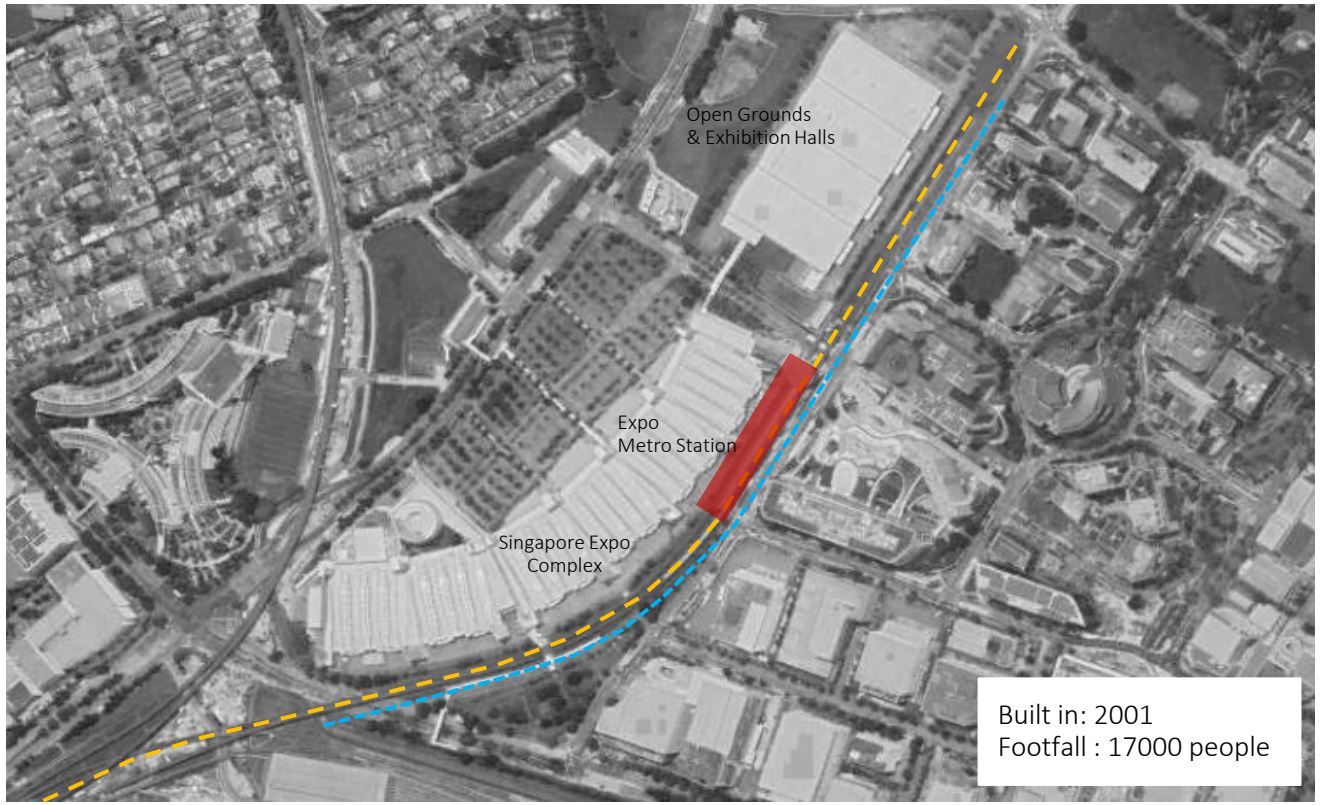
Dubai has 74km long metro line consisting of 45 stations each designed as a similar module.

Program :

1. Large continues green and gardens
2. Uninterrupted road network
3. Bus interchange and Parking facilities
4. Public Plazas and interaction spaces

https://www.aedas.com/en/what-we-do/featured-projects/dubai-metro

CASE STUDY – EXPO MRT STATION, SINGAPORE



Metro line Adjacent Road



In EXPO MRT Metro Station , at the ground level the concourse has open grilles on the street side and **a lush tropical garden** between the station and the Singapore Expo Complex on the other side, allowing the **free flow of air** through the building.



Exhibition centre and open ground



Streetscape with planting, signage and water feature



Public plazas with café an space for outdoor seating

Program :

1. Mix use development – offices and exhibition center
2. Uninterrupted road network
3. Bus interchange and Parking facilities
4. Public Plazas , cafes , gathering and interaction spaces

https://www.fosterandpartners.com/projects/expo-station/



APRIL 2020