

# 05

## HIGH IMPACT PROJECTS OF KUALA SELANGOR DISTRICT LOCAL PLAN 2035 – EN ROUTE TO A SUSTAINABLE AND RESILIENCE DISTRICT BY 2035

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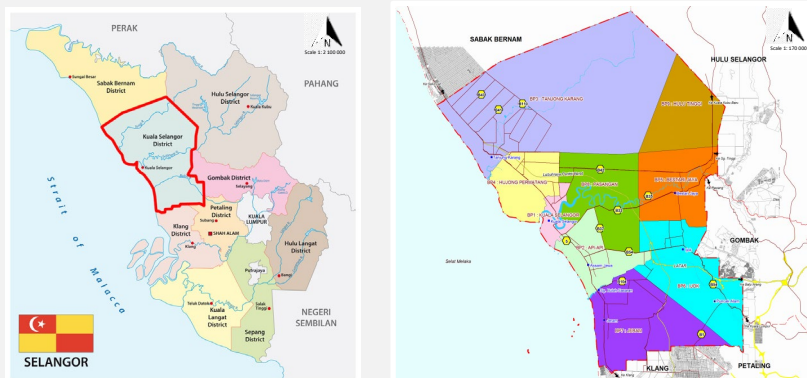
### ABSTRACT

The review of the Kuala Selangor District Local Plan 2035 complies with the district's development plan revisions or review. This planning document outlines the district's overall strategies, policies, and general proposals. Changes in policies at the district level are also examined to ensure that they are consistent with policies at the state and national levels. The District Local Plan is being prepared in compliance with PLAN Malaysia's manual. The objective of this paper is to review the District Local Plan of Kuala Selangor to formulate applicable policies, strategies, and proposals by the year 2035. The revision of the Kuala Selangor District Local Plan 2035 includes 5 development thrusts, 21 strategies, and 71 proposals, 9 of which are high-impact projects.

*Keywords: District local plan, Development plan, Development control, Planning system*  
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### INTRODUCTION

Based on Section 12 (3) of Act 172, a Local Plan (LP) is defined as a physical planning document that translates the policy and strategic planning of the structural plan into a more detailed map of the land use map for the Local Planning Authority area. The Local Planning Authority prepares it, which is then approved by the State Planning Committee and agreed upon by the State Authority. The objective of this paper is to review the District Local Plan of Kuala Selangor to formulate applicable policies, strategies, and proposals by the year 2035. The district of Kuala Selangor was chosen as the study area to produce a proposed District Local Plan, and it is governed by Majlis Daerah Kuala Selangor (MDKS). Kuala Selangor district has a total land area of 119,452 hectares (1194 km<sup>2</sup>) and is divided into 9 planning blocks: Api-Api, Bestari Jaya, Hujung Permatang, Hulu Tinggi, Ijok, Jeram, Kuala Selangor, Pasangan, and Tanjung Karang (Maps 1 & 2).



Map 1 & 2: Location Plan of Kuala Selangor District  
(Source: Draft Local Plan Kuala Selangor 2035)

### METHODS

Figure 1.1 shows the process and stages involved in the preparation of Draft Kuala Selangor District Local Plan 2035.



Figure 1.1 : Process and Stages involved in the preparation of Draft District.

## DEVELOPMENT GOAL

“Developing Kuala Selangor with a diverse economy, cohesive community, efficient infrastructure and the environmentally friendly management into sustainable district by the year 2035”

Figure 2.1: Development Goal for Draft Local Plan Kuala Selangor 2035

The goal of the District Local Plan was decided after the identification of the strengths of Kuala Selangor based on the technical analysis done during the early stages. Based on the technical analysis, economic activities in Kuala Selangor should be prioritised, especially in the agriculture sector.



Figure 2.2, 2.3 & 2.4 show the main attractions in Kuala Selangor that make this district unique and different also rich in natural resources and biodiversity.  
Source: Kuala Selangor District Council Portal (Source: Google Image)

## DEVELOPMENT OBJECTIVES

The Kuala Selangor District Draft Local Plan 2035 reflects all the eleven (11) planning sectors that have been analysed and synthesised in the Technical Report and adjusted accordingly into the five (5) objectives to create a sustainable and resilient Kuala Selangor district by 2035, which is in line with the development goals.

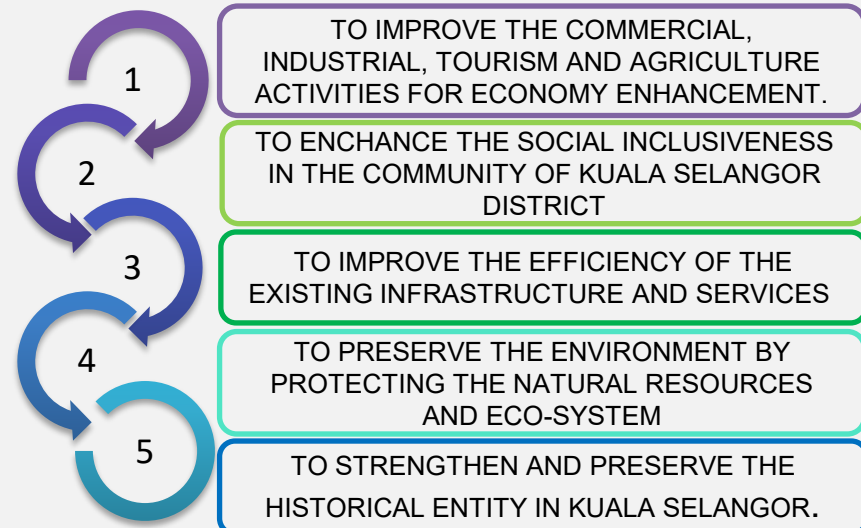


Figure 2.5: Development Objectives for Draft Local Plan Kuala Selangor 2035.



Figure 2.6 & 2.7 show the main attractions in Kuala Selangor that make this district unique and different also rich in natural resources and biodiversity.  
Source: Kuala Selangor District Council Portal (Source: Google Image)



## DEVELOPMENT CONCEPT

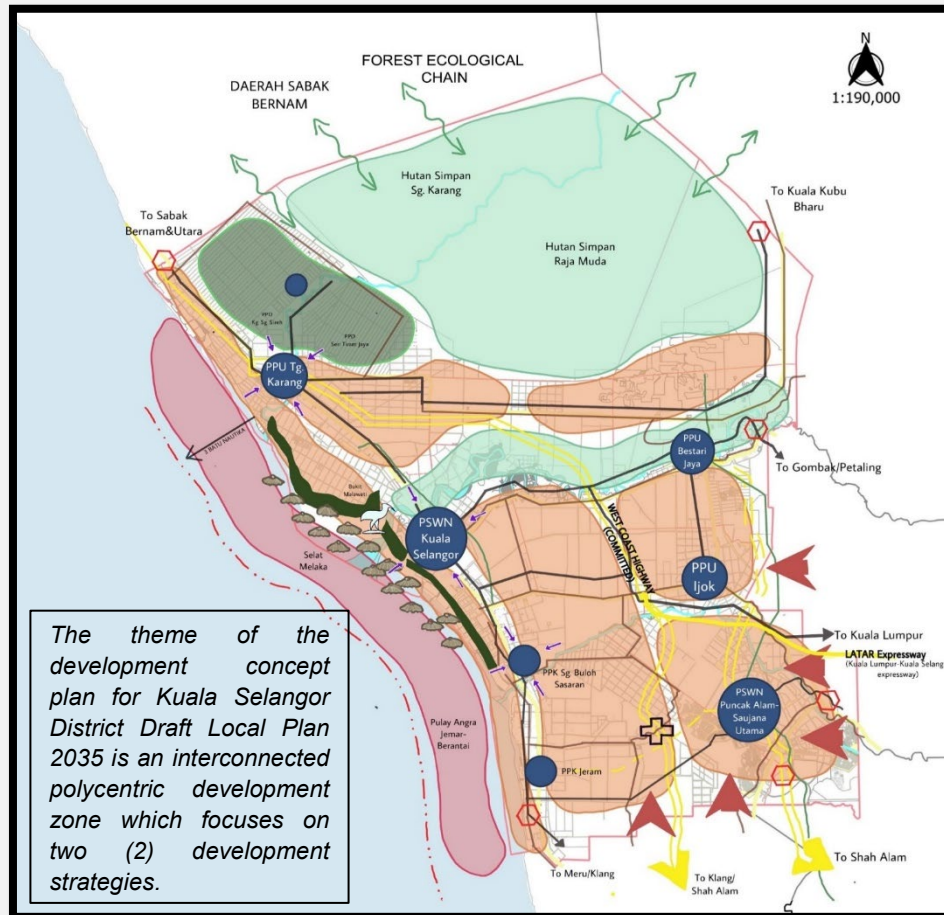
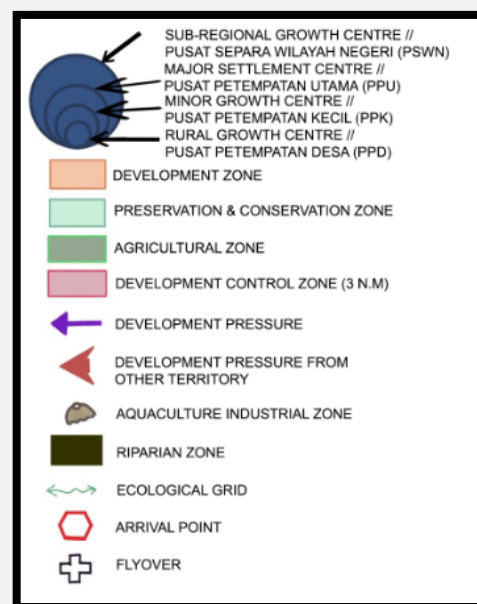


Figure 3.1: Development Concept Plan for Draft Local Plan Kuala Selangor 2035. (Source: Draft Local Plan Kuala Selangor 2035).

### “INTERCONNECTED POLYCENTRIC DEVELOPMENT ZONE”

The concept of ‘interconnected’ is translated as the catalyst centres by connecting with the existing major roads and expressways in the Kuala Selangor district. The polycentric acts as the primary growth centre identified in each town under each strategic development zone. The development zone established aims to develop Kuala Selangor with a diverse economy, cohesive community, efficient infrastructure, and environmentally friendly management into a sustainable district by 2035.



### LEGEND



Figure 3.2: Development Strategy for Draft Local Plan Kuala Selangor 2035. (Source: Draft Local Plan Kuala Selangor 2035).

Kuala Selangor District Draft Local Plan 2035 reflects all the eleven (11) planning sectors accordingly into the five (5) development thrusts to create a sustainable and resilient Kuala Selangor district by 2035, as shown from the diagram in Figure 3.3 below.

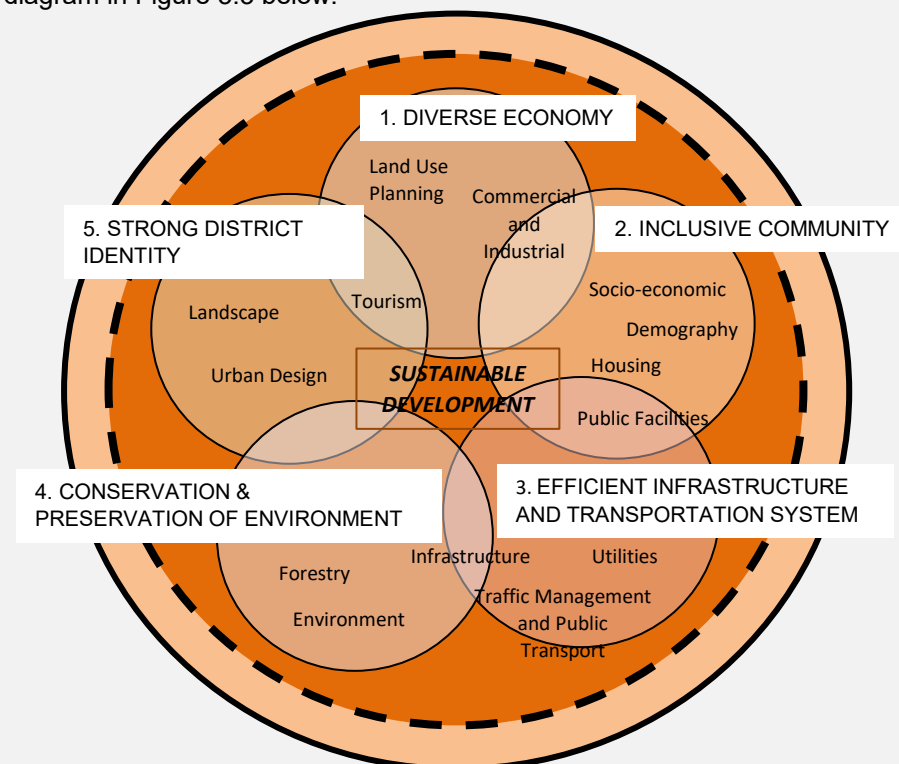
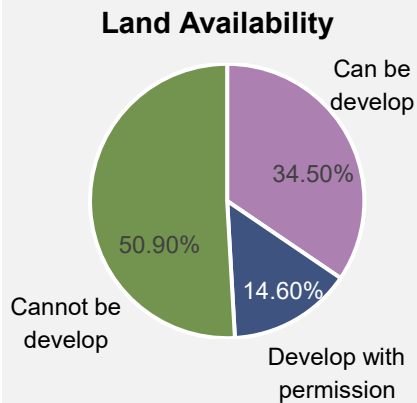
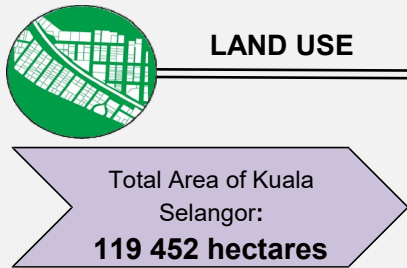


Figure 3.3: Relationship between the five (5) Development Thrusts and the Eleven (11) Planning Sectors in Sustainable Development. (Source: <http://murninetsv2.planmalaysia.gov.my/>)

## DEVELOPMENT THRUST

- |  |   |
|--|---|
|  | <b>THRUST 1</b><br>Strengthen the diverse economic activities.  |
|  | <b>THRUST 2</b><br>Enhancing the community inclusiveness in developing the Kuala Selangor district.                   |
|  | <b>THRUST 3</b><br>Improve the physical infrastructure integration, safety, and accessibility to support the economy. |
|  | <b>THRUST 4</b><br>Conserving the natural resources and practicing sustainable environmental management.              |
|  | <b>THRUST 5</b><br>Improve the identity of Kuala Selangor by strengthening the historical and cultural value.         |

## MAJOR FINDINGS: KUALA SELANGOR



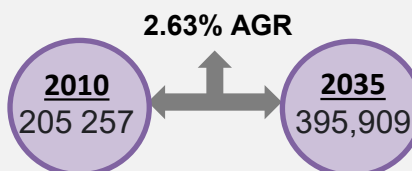
### STRATEGIC ISSUES

- The increase of unemployment and decrease of labour force;
- Shortage of housing supply than the demand and lacking in the development of affordable housing;
- Insufficient electrical supply;
- Lack emphasis on urban design and the preservation of heritage building and commercial building;
- Environmental sensitive areas; Sungai Buloh river basin and Raja Musa Forest Reserve are threatened by pollutions, land clearance and forest encroachment; and
- Profit loss of tourism sector due to COVID-19 pandemic issues.

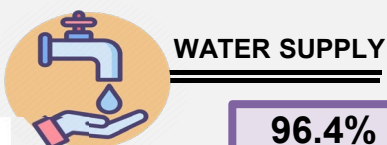
### SOCIOECONOMY & DEMOGRAPHY

INDICATORS	2019
Average Monthly Household Income	RM 7 866
Median Monthly Household Income	RM 5 855
Gini Coefficient	0.4

### Existing & Projected Number of Population



In 2019, the incidence of absolute poverty in Kuala Selangor is **3.5%**.

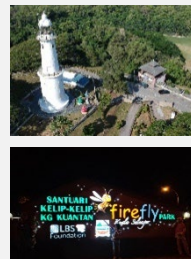


**WATER SOURCES**

**96.4%**  
From Lembangan Sg. Selangor

**3.6%**  
From Lembangan Sg. Tenggi

### TOURISM ACTIVITIES



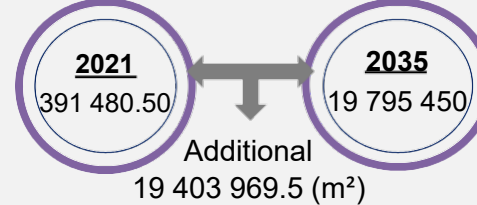
- Eco-tourism
- Agrotourism
- Cultural and heritage
- Shopping
- Gastronomy

**5**  
Types of Tourism Products

### COMMERCIAL

Total Area:  
122.570 Ha

### Projection of Floor Space (m<sup>2</sup>)



### TRANSPORT INFRASTRUCTURE

3 main access in Kuala Selangor District

CODE	ACCESSIBILITY	LENGTH (KM)
E25	Kuala Lumpur-Kuala Selangor Expressway (LATAR)	20
5	Jalan Klang-Sepang Jalan Klang-Sabak Bernam	88.50 112.87
54	Jalan Kepong-Kuala Selangor	45.60



### PUBLIC TRANSPORTATION

There are **81** bus stops in total in Kuala Selangor and only **1** bus terminal.

BUS NO	ROUTE	FARES	FREQUENCY
100	Hab Lebuah Pudu – Kuala Selangor	RM 9.00	Every 30 Minutes
105	Bestari Jaya – Kuala Selangor	RM1.50	Every 1 hour 20 minutes
740	Klang – Kuala Selangor	RM1.50	Every 30 minutes
KS0 1	MDKS/Kuala Selangor –Sekinchan	Free	Every 1 hour

### ELECTRICITY SUPPLY

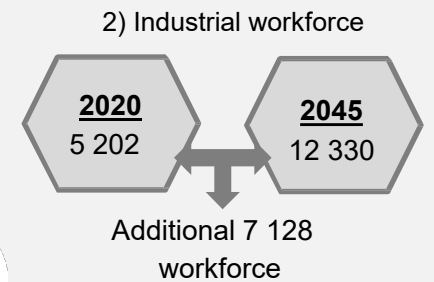
POWER PLANT	TYPE	DISTRICT	CAPACITY (MW)
Sultan Salahudin Abdul Aziz Shah Power Plant, Klang	Hydroelectricity	Kuala Selangor, Klang (North), Hulu Selangor, Sabak Bernam, Gombak.	6240 MW
<b>TOTAL</b>			<b>6240 MW</b>



### INDUSTRIAL

Total Area:  
250.160 Ha

### Projection :

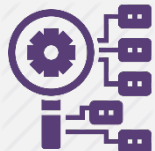




## HIGH IMPACT PROJECTS

### Project 1: Tiger Shrimp And Cockle Breeding Project

The Tiger Shrimp and Cockle Breeding Projects are located at Kg. Assam Jawa. This proposal is to zone the aquaculture area as an Aquaculture Industrial Zone (AIZ) and propose areas close to the existing aquaculture activities to be developed with an increase in the number of livestock ponds for Tiger Shrimp and Cockle. The current area is 736.6ha and is proposed to increase to 786.4ha.



Issue

There is rapid development in the neighbouring districts, causing the productivity of agricultural land to decrease, which affects the income of the agricultural sector of the study area.

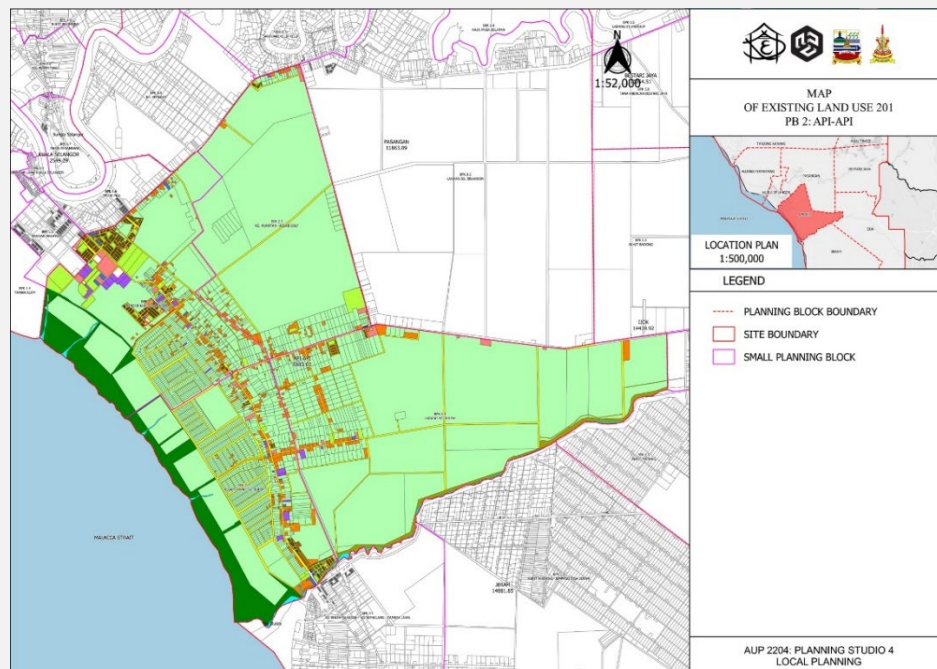


Figure 4.1: Proposed location of Tiger Shrimp Breeding project at Kampung Assam Jawa. (Source: Draft Local Plan Kuala Selangor 2035)



Project Component

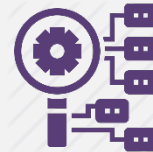
- Zoning existing shrimp ponds (approximately 700 ponds) as an Aquaculture Industrial Zone
- Excellent mobility to facilitate the transportation of inputs and outputs of enterprises



Figure 4.1.1: Cockle and tiger shrimp breeding pond – A major contributor to the development of district aquaculture activities that need to be undertaken in an environmentally friendly manner. The use of ventilation equipment to ensure that the oxygen content in the pool is always high and sufficient. (Source: Draft Local Plan Kuala Selangor 2035)

### Project 2: Remis Central Activity Area

The Remis Central Activity Area of 10.566ha is located at Pantai Remis, PB 7 Jeram. Currently, there is an existing food court in the coastal area of Pantai Remis. This proposal promotes coastal activities at Pantai Remis as the main coastal tourist attraction in Kuala Selangor. The Remis Central Activity Area will provide land-based tourism activities. The project is also complemented by a food junction, coastal recreation centres like ATV riding, horse riding, picnic areas, cultural and seasonal activity areas for weddings and seasonal celebrations. Other facilities, such as surau and toilets, are included as well.



Issues

- Lack of tourist attractions
- Poor facilities
- Faced with the problem of coastal erosion

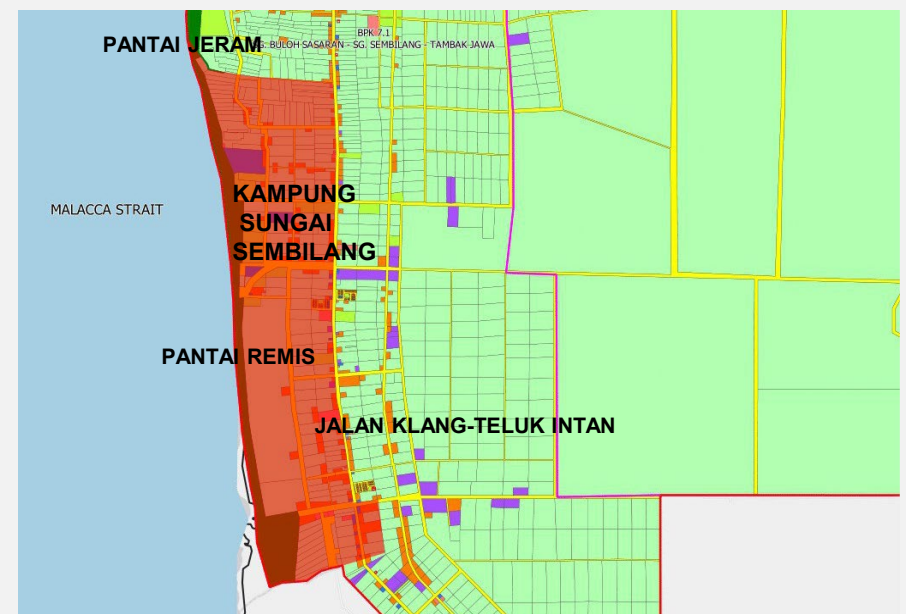


Figure 4.2: Location of Remis Central Activity Area (Source: Draft Local Plan Kuala Selangor 2035)



Project Component

- Coastal Recreation Centre
- Culture and seasonal activity area
- Facilities
- Food junction



Figure 4.2.1: Food court & souvenirs shop layout and perspective (Source: Draft Local Plan Kuala Selangor 2035)



### Project 3: Adding New Road Lanes On Federal Route 5

Project 3 provide road lanes on Federal Route 5 that spans from Jalan Kuala Selangor – Teluk Intan to Jalan Permatang. The road conditions are currently designated as a two-lane double carriageway. Adding a new lane to the road will restructure the road as a three-lane double carriageway. The addition of road lanes will increase the level of service on the road whilst also reducing the traffic congestion problem on the road. The proposed new road lanes cover a total of 4.4 km.



The level of service of the Federal Route 5 spanning from Jalan Kuala Selangor – Teluk Intan to Jalan Permatang is graded as Grade F, which is the lowest and most inconvenient, and has bad traffic congestion, especially during peak hours.

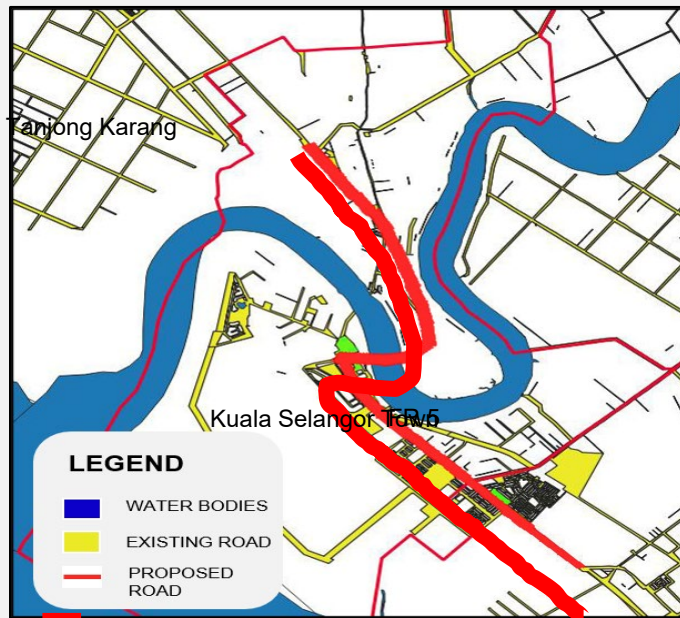


Figure 4.3: Location for proposed new lanes.  
(Source: Draft Local Plan Kuala Selangor 2035)



- Additional road lanes along Federal Route 5 spanning from Jalan Kuala Selangor – Teluk Intan to Jalan Permatang
- Road furniture
- Landscape



Figure 4.3.1: The current condition of the two-lane dual carriageway at Federal Route 5  
(Source: Google Earth)



Figure 4.3.2: Example of proposed three-lane dual carriageway.(Source: Google Earth)

### Project 4: Upgrading The Intersections

Project 4 will be carried out in PB 2, Api-Api, at the intersection of Route 5 and Road 4 of Jalan Klang - Teluk Intan. The proposal is to provide a new multi-level intersection between the two roads to increase the road capacity and reduce the existing traffic congestion during peak hours in the area. Hence, the proposal to restructure the intersection as a multi-level intersection will reduce the traffic volume in the area. The multi-level intersection will provide a more straight-forward route for vehicles that need to turn at the intersection, resulting in fewer conflict points and reduced traffic congestion.



The existing intersection cannot cater the number of vehicles at the intersections, resulting in traffic congestion and delay time.

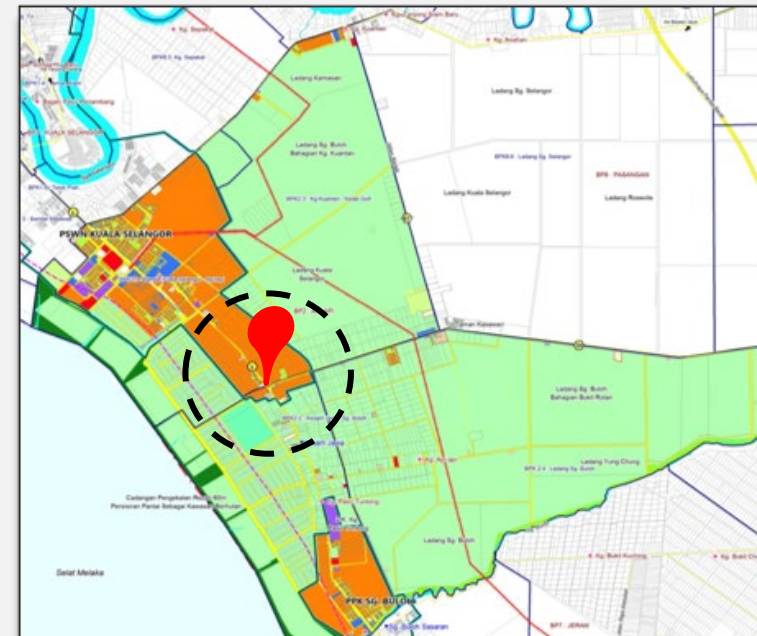


Figure 4.4: Location for proposed new intersection.  
(Source: Draft Local Plan Kuala Selangor 2035)



- Trumpet intersection
- Road furniture
- Landscape

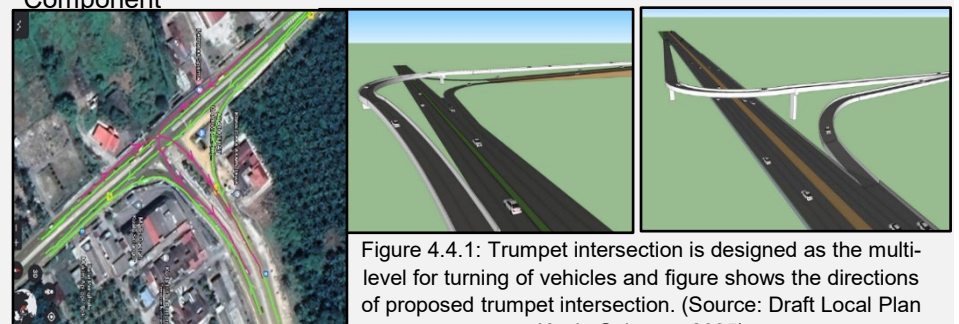


Figure 4.4.1: Trumpet intersection is designed as the multi-level for turning of vehicles and figure shows the directions of proposed trumpet intersection. (Source: Draft Local Plan Kuala Selangor 2035)



## Project 5: Adding A New Bus Route From Bestari Jaya To Simpang Tiga Ijok

Project 5 is to increase connectivity within the whole district and to encourage the use of public transport. According to the findings, the modal split of public transport usage was only 25% in 2015 (Kadar Hamsa, Abdul Azeez, 2020). This shows the lack of use of existing public transportation and its coverage throughout the whole district, which results in the high use of private transportation. It is also mentioned that the only public transportation available in Kuala Selangor is bus services, yet there are no bus stops in Bestari Jaya. There are two new routes that are proposed under this proposal, one of which is in Jeram, and another route that is connected from Bestari Jaya to Simpang Tiga Ijok.



The modal split of public transport usage is only 25% in 2015.

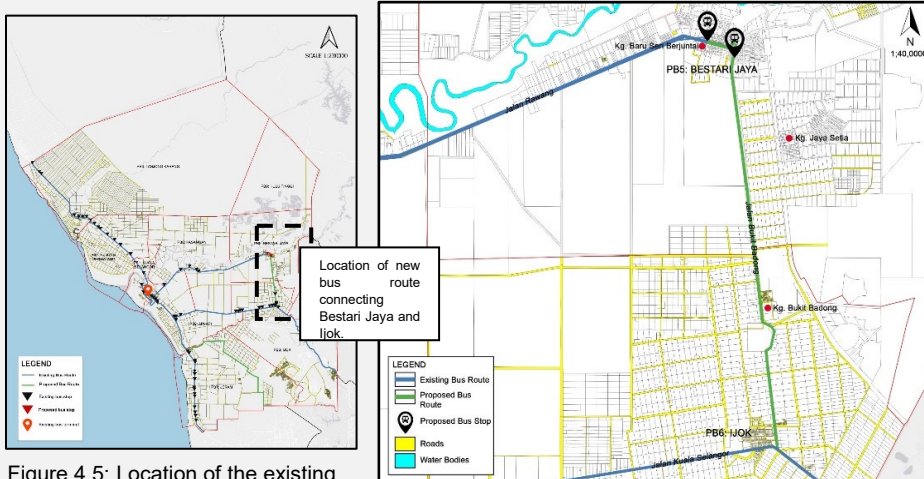


Figure 4.5: Location of the existing bus routes and bus stops along with the proposed ones in Kuala Selangor. (Source: Draft Local Plan Kuala Selangor 2035)

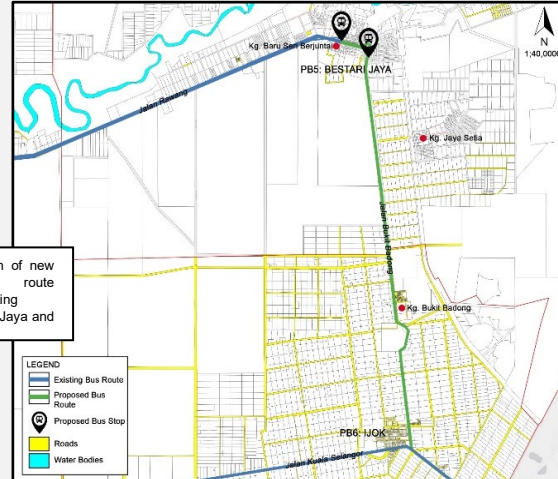


Figure 4.6 shows the location of the proposed bus route that connects Bestari Jaya and Ijok. (Source: Draft Local Plan Kuala Selangor 2035)



- Adding new bus routes and bus stops
- Upgrading the Bandar Malawati Bus Terminal



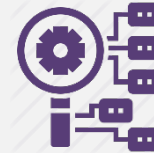
Figure 4.5.1: The current condition of existing bus stops in Kuala Selangor (Source: Draft Local Plan Kuala Selangor 2035)



Figure 4.6.1 The proposed design for new bus stops (Source: Draft Local Plan Kuala Selangor 2035)

## Project 6: Providing Flood Barriers In Ijok

Project 6 in PB 6: Ijok is aimed at providing a flood mitigation plan for areas that are close to Sungai Buloh. According to the analysis and findings, the areas that are prone to flooding are mostly around the area of Simpang Tiga Ijok (Department of Drainage and Irrigation System, 2018). The areas involved are Kampung Bukit Badong, Kampung Baru Ijok and Kampung Harmoni. The proposal that will be carried out is to install flood barriers along the riverbanks of Sungai Buloh. The flood barriers will be installed in certain areas, which involves 6.4 km of Sungai Buloh. These flood barriers will help to control soil erosion on riverbanks and to reduce stormwater runoff.



Issues

- Flood prone areas
- Soil erosion
- Heavy stormwater runoff

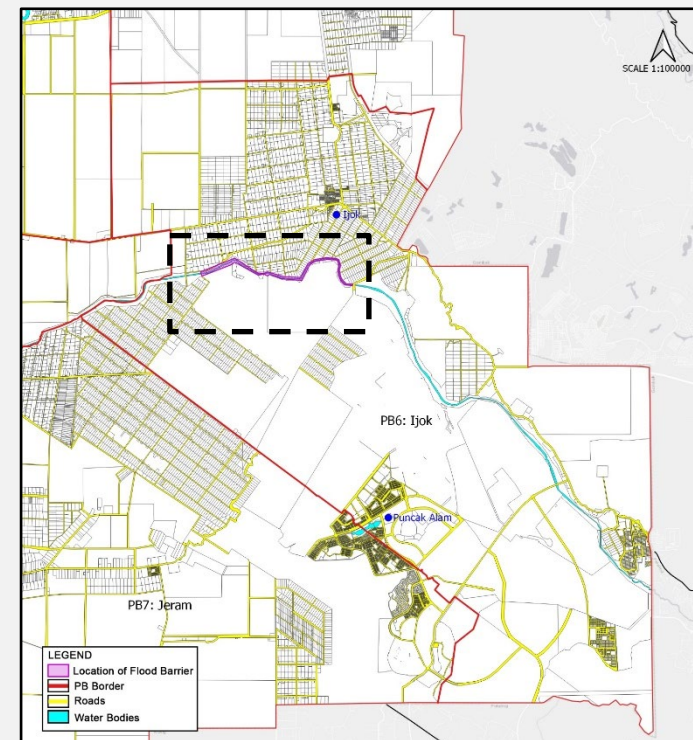


Figure 4.7: Location of flood barrier in Ijok (Source: Draft Local Plan Kuala Selangor 2035)



Project Component

The flood barriers will be installed in certain areas, which involves 6.4 km of Sungai Buloh



Figure 4.7.1: The current condition of the river stream in Ijok. (Source: Fieldwork)

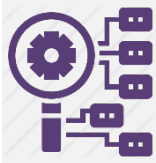


Figure 4.7.2 Example of flood barriers built on the riverbanks (Source: Fieldwork).



### Project 7: Upgrade The Coverage And Speed Of Telecommunication Line Services In Tanjong Karang

Based on the findings, the internet connection in Tanjong Karang is weak compared to other planning blocks (Malaysian Communications And Multimedia Commission, 2019). Project 7 is thus a proposal to help increase the speed and coverage of internet services in Tanjong Karang. This proposal will also help attract more people to come to Tanjong Karang as the place aims to be a tourist spot and provide good quality telecommunication line services in terms of speed and coverage is a must. Under this proposal, a telecommunication tower will be built at the centre of Tanjong Karang town where most people will be around and expect fast internet.



Issue

Internet connection in the northern areas of Kuala Selangor, Hulu Tinggi and Tanjong Karang are weak compared to other planning blocks.

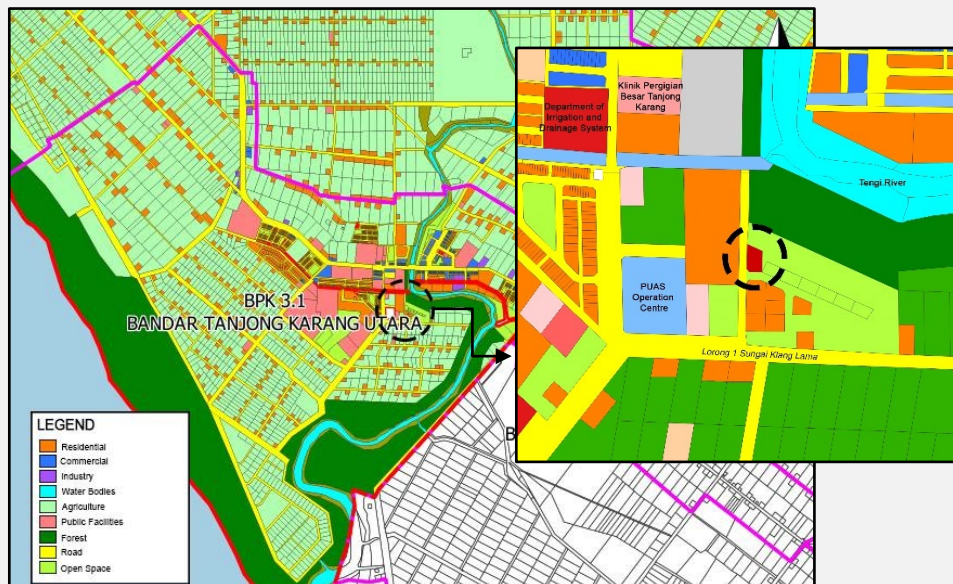


Figure 4.8: Location of the proposed telecommunication tower (Source: Draft Local Plan Kuala Selangor 2035)



Project Component

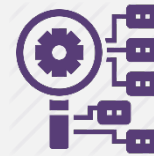
A telecommunication tower will be built at the centre of Tanjong Karang town



Figure 4.8.1: Example of telecommunication tower (Source: Google Image)

### Project 8: “Nostalgia Bukit Malawati”

Bukit Malawati is a tourist attraction for the District of Kuala Selangor (Majlis Perbandaran Kuala Selangor, 2013). Therefore, the proposal to rehabilitate the foothills and Bukit Malawati is necessary to further strengthen the district's main tourism assets. Beautify the landscape of Bukit Malawati town and strengthen the image of the town and its functions.



Issue

Lack emphasis on urban design and the preservation of heritage building at Bukit Malawati, Kuala Selangor.



Figure 4.9: Illustrations of “Nostalgia Bukit Malawati” (Source: Draft Local Plan Kuala Selangor 2035)



Project Component

- Pedestrian walkway
- Water Features
- Traditional play areas
- Street Furniture
- Parking Lot



Figure 4.9.1: Upgrading the Bukit Melawati landscape with the concept of Malay Warrior or ‘Pahlawan Melayu’.

Case Study: Teluk Batik, Lumut Perak (Source: Google Image)





## Project 9: “Kuala Selangor River Park”

The riverside area in Kuala Selangor Town can be an attractive recreational zone and for city sightseeing. The proposal to develop the promenade could indirectly create linkages between the urban zone and the water zone, given that Sg. Selangor is the heart and background of the District of Kuala Selangor. The project will be able to create a node in the city and strengthen the town's image. This project is proposed to be at the Selangor Riverbank (Kuala Selangor Square to De Palma) as shown in Figure 4.



- Lack emphasis on urban design in Kuala Selangor main town
- Poor significant tourist spot image in Kuala Selangor main town



Figure 4.10: Aerial view of Kuala Selangor River Park  
(Source: Draft Local Plan Kuala Selangor 2035)



- Pedestrian walkway
- Observation deck
- Food Court
- Public Toilets



Figure 4.10.1: Illustration of Kuala Selangor River Park  
(Source: Draft Local Plan Kuala Selangor 2035)

## CONCLUSION

The provision of a Local Plan in a particular district is important, as stated in Town and Country Planning Act 1976 (Act 172). The need for a draft local plan under Act 172, Section 12(1) to be prepared as soon as the Structure Plan is amended. Kuala Selangor Draft Local Plan 2035 was produced after the completion of inception report and technical report. Goals, objectives, thrust, and proposals are from data, findings, issues, and problems in Kuala Selangor. This article aims to create a sustainable and resilient district as a concept for the district. The development of economic, social, environmental, infrastructure, and image entities is a crucial part of making the Draft Local Plan of Kuala Selangor 2035.

## ACKNOWLEDGEMENT

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