



GOVERNMENT OF KERALA

Abstract

Local Self Government Department – Development Plan for Kollam – Final sanction accorded – Orders issued.

LOCAL SELF GOVERNMENT (RD) DEPARTMENT

GO (Ms) No. 69/2010/LSGD

Dated, Thiruvananthapuram, 06/04/2010

- Read :
1. G.O. (Rt) No. 1076/09/LSGD dated Thiruvananthapuram 7/5/2009
 2. Letter No. PW 10/20009/09 dated 6/5/09 of the Secretary, Kollam Municipal Corporation.
 3. Letter No. F/10896/09 dated 31/3/2010 of the Chief Town Planner, Thiruvananthapuram

ORDER

The Development Plan currently in force in Kollam Corporation area has been sanctioned in 1986. Considering the socio-economic and other changes of Kollam town, the Development authority in 1993 requested the Chief Town Planner to revise the Development Plan to meet the present requirements. Accordingly the Chief Town Planner has prepared a draft revised development plan and Government have accorded sanction as per the G.O read as Ist paper to publish the same by the Kollam Corporation. After considering the objections and suggestions the Secretary, Kollam Municipal Corporation has forwarded along with his letter read as second paper above, the revised Development Plan for Kollam as laid down under sub-section (2) of section 12 of the Town Planning Act 1108 (IV of 1108), for Government sanction. The Chief Town Planner has also requested Government to accord sanction to the revised plan as per letter read as 3rd paper.

Government have examined the scheme in detail and are pleased to accord final sanction for the Development Plan (General Town Planning Scheme) for Kollam under sub-section (3) of Section 12 of the Town Planning Act 1108 (IV of 1108).

The Secretary Kollam Municipal Corporation shall send copies of the plan and report to various Departments and Agencies responsible for the implementation of the scheme.

By Order of the Governor,
Rajesh Kumar Singh
Secretary to Government.

To

1. The Secretary, Kollam Municipal Corporation with a copy each of the approved report and maps.
2. The Chief Town Planner – with a copy each of the approved report and maps.

Forwarded/By Order

Sd/-
Section Officer

DEVELOPMENT PLAN FOR KOLLAM 2011 A.D

Prepared by:
Department of Town and Country Planning
Government of Kerala

DEVELOPMENT PLAN FOR KOLLAM – 2011 A.D.

Prepared by

PREFACE

The urbanisation is a global phenomenon. But the haphazard growth of urban centres is not conducive for man and his environment. It is at this stage, the importance of planning and guiding the development of towns in a planned way arises. A development plan is a guide to orderly city development to promote health, safety, welfare and convenience of the people of a community. It organises and co-ordinates the complex relationship between urban land uses and many civic activities considering the resources and requirements.

Kollam town is a prominent commercial and industrial centre in the southern part of Kerala State and is well connected to the important towns in Kerala as well as to the Tamil Nadu, both by roads and railways. As early as in 1980 planners have recognized the need for a long term Development Plan for the Town considering the town's growth trends, resources potentials, locational aspects, etc., and, prepared a Development Plan for the town and environs for a period up to 2001 A.D which was sanctioned by Government vide G.O.(MS) No. 219/86/LAD dated 03.11.1986.

Vindicating the Planners judgement, the adjoining Panchayats together with the Kollam Municipal Area viz. the Development Area delineated in the Sanctioned Development Plan for Kollam have indeed developed into an influential urban centre in the District. An appraisal of the achievements of that Plan reveals that, it has to a certain extent been able to guide and control urban development. However there befell substantial changes in the physical form and structure of the town after the date of sanctioning of the Plan, which

obviously created problems both to the common man and to the executing authorities. So, with the objective of modification of the Sanctioned Plan with reference to the socio-economic and political changes the Department of Town and Country Planning under took preparation of a revised Development Plan for Kollam. The venture was to up date the deviations/land use changes from those envisaged in the sanctioned Development Plan and to review the road widening proposals taking feasibility as the major yard stick. Though some conversions have been made, as there are no changes in the land form, the proposed land use patterns for Kollam follow the basic concepts of zoning regulations. The concept of the circulation pattern of road networks also remain same as the Ring and Radial pattern at the town level with Grid Iron pattern for the central area. It is hoped that this plan will serve as a guide for proper and timely location of future investment in the physical social and economic spheres.

CHIEF TOWN PLANNER

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PART-I

INTRODUCTION

1.1 General

Kollam Town is a prominent commercial and industrial centre in the southern part of Kerala State. Situated 72km. north of Thiruvananthapuram and 150 km. south of Ernakulam, Kollam town is connected to the important towns in Kerala as well as to Tamil Nadu State both by roads and railways. Having a generally flat terrain, the town is flanked by the Lakshadweep Sea at west and south and by Astamudi Lake at north. The most influential region of the town is the central area where the major commercial centres, important commercial offices, recreational including parks and open spaces and the major traffic and transportation and other infrastructure facilities are located. A unique feature of the town's core, Chinnakkada is that a National Highway, State Highway, a few major district roads all passes through this centre and the railway junction of Thiruvananthapuram – Ernakulam & Kollam –Shencotta railway lines is situated in its heart. Manifestly, the commercial sub centres and residential settlements have developed along or within the environs of the major roadways of the town.

1.2 Planning Efforts

Despite the fact that Kollam town was one of the I Grade Municipalities of the State, during the beginning of 1980's Planners observed that due to unplanned growth, the town has been perpetually subjected to traffic congestion, acute shortage of housing, growth of slums, haphazard developments of urban facilities and congested commercial areas, with little scope of expansion, Diagnostically it was decided that only a long-term development plan prepared through a careful study of present developments and future requirements could ensure proper development of the town. Thus after a detailed study of the trends in the rate of growth of the town, the town's resources, potential, locational aspects etc. and estimating the anticipated

future growth of population and assessing future needs and functions, the District Planning Unit, Kollam, of the Department of Town and Country Planning prepared a Perspective Plan for the town and environs for a period up to 2001 A.D. Thus under sub section 12 of the Town Planning Act, 1108 (IV of 1108), Government of Kerala sanctioned the Development Plan for Kollam Town vide G.O.(MS) No. 219/86/LAD dated 03.11.1986.

The Sanctioned Development Plan for Kollam envisaged a growth pattern integrating the rural areas to the urban centre of Kollam so as to vitalize the rural areas in terms of employment opportunities and social amenities. Visualizing this, the envisaged urban area of the Plan encompasses the Kollam Municipal Town adjoined by the parts of Kilikolloor, Vadakkevila, Eravipura, Neendakara and Thrikkadavoor Panchayats and Sakthikulangara Panchayat in full. The major contents of the Development Plan are a Land Use Plan which deals with the spatial distribution of economic activities, a Circulation Pattern or Road Network Plan highlighting road developments and a Civic Amenities Plan focusing on the spatial arrangements of the house holds and the various social amenities. The proposed urban area has an extent of 48.5 sq.km. serving an estimated population of 5 lakhs by 2001 A.D. The land has been distributed for different urban land uses setting aside an extent of 2969 hectare solely for residential use. All the land developments in the area reserved for specific uses are controlled by Zoning Regulations. The circulation pattern of road network has been based on the ring and radial road concept. All the major arterial and sub arterial roads have been proposed to be developed to ensure a smooth flow of traffic from the residential area to the work centres. In order to achieve a satisfactory and successful spatial distribution of various civic amenities, a hierarchy of service centres has been created in the order of Town, Zonal and Sector centres along with proposals for the major utilities and services.

Apart from planned overall control of developments through a Perspective Plan viz. the Sanctioned Development Plan, the planning efforts included the preparation of various other Action Area Plans such as Detailed Town Planning (D.T.P) Schemes, Detailed Road Alignment Projects, Slum Improvement Schemes etc. Taking up the priority schemes envisaged in the Sanctioned Development Plan, 15 D.T.P. Schemes were prepared and 4 D.T.P. Schemes were sanctioned by the Government viz., D.T.P. Scheme for Taluk Office to Civil Station, D.T.P. Scheme for Area from Kunjammappalam to District Hospital, D.T.P.

Scheme for Kadappakkada and Surroundings and DTP scheme for DSP office junction to PWD office Junction.

PART-II

NEED FOR REVISION

5.1 Implementation of the Sanctioned Development Plan

The success of a Development Plan depends entirely on its total implementation and it has to be achieved through introducing strict control over the development by preparing various detailed schemes such as D.T.P. Schemes, Road Development Proposals, Junction Improvement Schemes and Project Planning etc. The Development Plan is a comprehensive long range plan whereas the Detailed Schemes are very specific and updated in terms of persisting land uses and Road/Junction improvement feasibilities but still are within the basic concepts of the Sanctioned Development Plan. The preparation of the detailed schemes, which are proposed in the Development Plan, has to be on priority and target basis. Thus the primary action involved in the implementation of the Development Plan becomes the comprehensive control over the development activities; though it is not so specific and expressive in defining the proposals as a large extent of land is covered. Clearly the specific control of the development activities has to be sustained by carrying out the detailed development projects according to a phased programme. To content with the implementation of the plan, it is utmost necessary to heave proper co-ordination among various agencies in working out the development activities. The agencies involved also have to continually monitor the systematic implementation of the Plan and make interim reviews of the development proposals envisaged in the Plan.

5.2 Responsible Authority

The Kollam Development Authority (K.D.A) played a vital role in the enforcement of the Development Plan. The Pallithottam housing colony scheme is a project taken up by the

K.D.A. by acquiring land in the Public Zone. The commercial complex project at Anadamukkom is yet another project in the Development Plan by the K.D.A. The K.D.A also co-ordinated various Governmental and Non-Governmental agencies involved in these projects to enhance the Development Plan proposals and took up projects on Road Developments and Junction Improvements from the development Plan. The Kunjammappalam Junction improvement is an example for this. Now that the KDA is wound up, the responsibility of planned development of the area vests within respective local governments within the erstwhile K.D.A limits. However, overall co-ordination of the Development Plan is vested with the Kollam Corporation.

5.3 Constrains in the Implementation

One of the grave weaknesses in the enforcement of the Development Plan is the lack of co-ordination among the various functional departments involved in the development process of Kollam town. The Development projects of P.W.D. or the Local bodies having correlation deficiency with the Development Plan proposals may be an example cited. Also there exists the conflict between the interests of futuristic planning and the interests of contemporary society. One cannot suppress the fact that there exist certain uncertainties while proposing the development process. The uncertainty could be due to a change in Government policy or due to the uncontrolled external pressure exerted by socio-economic-legal forces. Another major constrain is that the Local Governments have no control over the sub-division of plots in the development area. It will always be practicable to introduce an effective change of land use on a large extent of land in the possession of a few landholders than on plots subdivided into smaller extents, which are in the possession of several landholders. In the Development Plan Area, for example, large extents of land are being subdivided into numerous plots of say 5 or 7 cents in different land ownership, without the control of Local Governments. Due to this a major portion of land earmarked for industrial use are being converted to residential use. Thus, since the land registration is being done without considering the land use proposals, the Zoning Regulations are becoming less feasible.

Yet another constraint is that there is no budgetary control over the functional departments and further it is true that there exists a lack of integration between the

Development Plan and the Economic Plan/five Year Plan. Regarding the land development proposals, even though the exemption from zoning has to be issued only for deserving cases out of the way granting of zoning exemption leads to drastic variation of physical structure of the land to be developed from those envisaged in the Development Plan. Apart from these, unauthorised constructions and growth of Slums also extensively contribute to the undesired developments of land. While the physical proposal is static, the variations of land use evolving through the natural developments, which cannot be restrained, also produces a major constraint to the Planner due to lack of continuous revision.

2.4 Facts Leading to Revision

The Development Plan preparation for Kollam was started way back in 1980 and it was sanctioned in 1986. Since then there befell substantial changes in the physical form and structure of the town due to constrains in the implementation of the Development Plan. Such changes obviously created problems both to the common men and to executing authorities resulting in public protests and Newspaper reviews. So with a view to maintain the Sanctioned Development Plan up to date, the K.D.A, General Council meeting held on 15.02.1993 resolved to revise the Development Plan and the District Planning Unit, Kollam under took the preparation of the Revised Development Plan.

PART-III

METHODOLOGY OF REVISION

3.1 Surveys and Analysis

It requires a through and systematic survey work to obtain a clear picture of the state of development that prevails in the development area. The major survey work involved was the survey of the existing land use. The land use classifications included Residential, Commercial, Public and Semi-public/Religious, Industries, Transportation, Parks and Open spaces, Paddy fields, Dry Agricultural lands and Water courses. Various land uses were pencil coloured in the survey litho maps (prepared by the Survey Department) using the prescribed notations. Next step was the preparation of different maps connected with the Development Plan revision. All the existing roads in the Existing Land Use map have been shown with respect to their hierarchy of importance by classifying them into Primary, Secondary and Tertiary roads.

Another study conducted was locating the major Traffic, Transportation and other Infrastructure Facilities in the development area. For the preparation of a Circulation Pattern of road network, feasibility studies for selected roads were also conducted. Finally, the proposed land use map has been prepared by conducting on-site inspections at chosen areas and thoroughly analyzing the changing pattern of the various land uses within the Development Plan area. Consultations with various departments were also made so as to incorporate their needs and requirements in the Plan proposals.

PART-IV

THE REVISED DEVELOPMENT PLAN FOR KOLLAM -2001

A.D.

4.1 The Planning Concept

Vindicating the Planner's judgement, the adjoining Panchayats together with the Kollam Municipal area viz. the development area delineated in the sanctioned Development Plan, have indeed developed into an influential urban centre in the district. Taking this into consideration no further delineation of the development area was opted for the preparation of the revised Development Plan and the development area remains the same as that in the Sanctioned Development Plan. Thus the major objective of the Development Plan revision became the modification of the Sanctioned Plan with respect to the Socio-economic and political changes. The venture was to up date the deviations of land use changes from those as envisaged in the sanctioned Development Plan and to review the road widening proposals taking feasibility as the major yard stick. Though some conversions have been made, as there are no changes in the landform, the proposed land use pattern for Kollam follow the basic concepts of zoning regulations. Even while opting the conversions the present trend of land developments have also been considered. The concepts of the circulation pattern of road networks remain the same as the Ring and Radial road concept in the town level with the Grid Iron pattern concept the central area. The policies for future development also more or less conform to those in the Sanctioned Development Plan.

4.2 Proposals in the Revised Development Plan

4.2.1 Proposed Land Use

In order to achieve an acceptable land use pattern, a few changes have been made in the proposed land use, within the planning concept. Fig.1 shows the Proposed Land Use Pattern of the Present and Revised Development Plans for Kollam Town.

Table-I shows the distribution of land in the Development Plan area for different land uses both in the Present Development plan and in the Revised Development Plan along with the Land Use in 1980 and the Existing Land Use in 1997.

The table shows that while 35.34 sq.kms of land was earmarked for Residential use in the Sanctioned Development Plan, 38.51sq.kms is proposed in the Revised Development Plan. Thus an additional area of 3.17 sq.km has been released for Residential use from other uses. Since no agencies are interested in taking up housing projects, the areas previously earmarked for Public housing have been released and included in the residential use zone. So even though the Public housing proposals have been dropped, there is 7.12% increase in the land for residential purpose. The reason for this can be attributed to the type of settlement pattern that prevails in the whole State itself. The houses are normally detached providing a typical land use pattern predominantly leaning towards residential use.

One of the constant complaints on the zoning provisions of the present Development Plan has been that the proposals for Public and Semi-Public use are in areas where there is more scope for residential use. Also by experience it has been observed that the implementation of the Public and Semi-Public Use Zone proposals seems to be impractical in the present Development Plan and to a large extent the zoning of Public and Semi-Public use is found to be having not much relevance. Thus in the Revised Development Plan, there is a reduction of 0.60% in the area previously earmarked for Public and Semi-Public use. However some area have been proposed near Civil Station, H&C compound and near the proposed Link road from K.S.R.T.C Bus stand to Asramam. Further, to some extent the reduction is indemnified by permitting all the Public and Semi-Public uses in the areas earmarked for commercial uses. Moreover, if required the Government can take up decisions to permit public uses in certain restricted areas.

Table-I gives that in the Revised Development Plan there is a reduction of 0.52 sq.km. in the area reserved for Commercial use. This reduction of 1.08% has occurred mainly due to

the disreservation of the previously proposed Commercial Sub-centres, as they have not developed as envisaged. Thus the plot depths of the commercial sub-centres at Randamkutty, Ramankulangara and Pallimukku along with the local centres at Polayathodu, Kadappakkada, Cheppallimukku, Kavanad and Thrikkadavur have been reduced due to lack of commercial

activities in these areas as envisaged in the present Development Plan. To compensate that and to be more realistic, instead mixed use zone where commercial activities are also permitted is proposed by the side of all the roads proposed to be widened to 15 mts or more in the Revised Development Plan. Also being the core of the town, the central area comprising Chinnakkada and Maharani Market area have been completely demarcated for commercial purpose. The extent of land between the K.S.R.T.C Bus stand and Parvathi mill also has been reserved for commercial use along with some portion near the link road formation from K.S.R.T.C. Bus stand to Asramam through kayal reclamation. The Madannada and Puliathamukku market area proposals have been retained as such. Also all the Mixed Commercial-Cum-Residential zone proposals have been retained and in addition the area near Mulankadakom previously reserved for commercial purpose and some portion near the H.S junction have also been included in this category. Thus 0.12% additional land is reserved for Mixed (Residential-cum-commercial use) in the Revised Development Plan, thereby meeting the overall commercial demand.

Through the years, may be due to the fact that even the State as a whole is less industrialised and that the highly esteemed industrial tradition of Kollam has deteriorated considerably, it is observed that except for some extent, the vast area of land reserved for industrial use at Kilikolloor and Sakthikulangara Panchayats (presently part of Kollam Corporation) have been leaning towards residential use with no further scope for industrial developments. Considering this the extents of land (1) between Manichithodu and Puliathamukku-Kallumuthazham road, (2) near the proposed Konnelmukku-Cheppalli road, (3) near Pazhayattinkuzhy, (4) near Vishnathukavu junction and (5) near Iron Bridge (opposite of the slaughter house) have been released for residential purpose. This is clearly noticeable from the table, which shows that in the Revised Development Plan 1.59 sq.km. of land previously reserved for industrial use has been released for other uses. However, out of the 1.88 sq.km. of total land earmarked for Industrial use, nearly 60% is solely set aside for light and service industries. Thus a major portion of land in the east of N.H.47 near the Neendakara Bridge along with the area previously reserved for commercial purpose in the west side have been proposed for minor industrial use. The stretch of land along the Ashtamudi Lake from the north of Poovanpuzha (Sakthikulangara Panchayat-presently part of Kollam Corporation) up to Pulaveettil kayalvaram, the stretch by the side of T.S. Canal

between Kachikadavu and Attukal Kadavu (Eravipuram Panchayat - presently part of Kollam Corporation), the land near Pallimukku Mosque, major portion of the land previously reserved

TABLE-I

**DISTRIBUTION OF LAND FOR DIFFERENT USES IN THE SANCTIONED
DEVELOPMENT PLAN AND IN THE REVISED DEVELOPMENT PLAN FOR
KOLLAM**

Sl No.	Type of land use	Existing land use		Proposed land use 2001 A.D		Existing land use 1997		Proposed land use 2011 A.D	
		Area in sq.km.	%	Area in sq.km.	%	Area in sq.km.	%	Area in sq.km.	%
1	Residential	34.69	71.53	35.34	72.87	40.41	83.32	38.51	79.40
2	Public & Semi Public	1.74	3.59	1.70	3.51	1.50	3.09	1.41	2.91
3	Commercial	0.69	1.42	1.28	2.61	0.46	0.95	0.76	1.57
4	Industrial- Major	1.13	2.33	3.47	7.15	1.00	2.06	0.77	1.59
	Minor							1.11	2.29
5	Parks & Open spaces	0.34	0.70	0.92	1.90	0.52	1.07	1.01	2.08
6	Transportation	2.22	4.58	0.5	1.03	0.50	1.03	0.70	1.44
7	Mixed use (Residential cum commercial)			0.48	0.99				
8	Green Strip/Agricultural Reservation	4.94	10.19	2.06	4.25	0.56	1.15	0.59	1.22
9	Dry Agricultural Land- Green Strip/Agricultural Reservation					0.80	1.65	0.35	0.72
10	Water Bodies	2.75	5.67	2.75	5.67	2.75	5.67	2.75	5.67

DEVELOPMENT PLAN AREA :- 48.50 sq.km.

for industrial use at Kilikolloor area and land on eastern side of Palakkadavu thodu between Uliyakovil and Mangad region are the other areas earmarked for minor industrial purpose. The proposals for major industrial use are at the area near Neendakara bridge, the stretch of land from Pulaveettil kayalvaram up to Thopilkadavu adjacent to Ashtamudi Lake, extent of land on western side of Palakkadavu thodu between Uliyakovil and Mangad region and the stretch of land adjacent to the land ward side of coastal road between Mudakkal and Kachikadavu. Further all the existing major industries have been retained. Thus, an extent of 0.77 sq.km. of land has been set aside for major industrial use in the Revised Development Plan.

The land reservations for Parks and Open Spaces are more or less the same. Additional area earmarked is mostly taken up from the Residency Bungalow area at Asramam previously shown as Public and Semi-Public use. This is made because of the environmental sensitiveness of the area. However the open space proposal at Thrikkadavoor has been eliminated and that at the Milma Dairy area has been exempted and shown as existing industry. Also the extent of Thirumullavaram Park area along with the open space proposal at Mangad has been slightly reduced. Considering the historical importance, the Green open space at Thangassery has been retained. The land reserved for parks and open space at Thuruthel and Thevally areas have been disreserved in view of the existing developments there. Regarding the transportation facilities, the existing Boat jetty and the K.S.R.T.C. Busstand area near Taluk office, the Railway Station area and the Neendakara and Sakthikulangara Harbour areas have been retained as such. Since the Railway authorities have no intention to shift their present godown, the land reserved for the purpose near Ammannada has been emancipated for residential use. The new proposal for a Municipal Bus Terminal near Railway Station is included in the Revised Development Plan. Thus there is an additional area of 0.2 sq.km. land, including the Road Widening proposals, reserved for Transportation use.

Though all the existing paddy fields are to be retained in both the Sanctioned and Revised Development Plans, from the table it is obvious that nearly 1.5 sq.km of paddy fields have been converted to different uses, mostly into other cultivations and residential uses. Thus the existing extents of Paddy fields around Vattakayal are proposed to be retained as construction free zone. In the case of other areas zoned as Green Strip or Agricultural

Reservation in the Revised Development Plan like Suryanthody Vayal near Vattakkayal, paddy fields near Pallikavu junction, the extents of Paddy fields between Gopikkada junction and Kattethu junction, the extents to the west of Gopikkada junction, at Mangad, by the side of Manichithodu in Vadakkevila and Eravipuram panchayats (presently part of Kollam Corporation), and the large extent along the scheme boundary at Eravipuram Thekkumbhagom area, Paddy fields near Mammootillkadavu, near Thirumullavaram, near Randamkutty, near Moonnamkutty etc. very low intensity residential development may be permitted considering the nature of developments in the surrounding areas and taking due care not to affect the drainage of the locality. However it is to be noted that the Revised Development Plan proposes to retain the 2.75 sq.km. of water bodies including Lakes, Canals, Ponds etc. Another notable change is that the extent of Kayal Reclamation proposed in the present Development Plan has been considerably reduced by retaining only 0.12 sq.km. out of the 0.20 sq.km. of kayal reclamation originally proposed.

Thus, all together, in the Revised Development Plan a down to earth attempt has been made to cope with the inevitable changes occurring in the Land Use Pattern incorporating the taste and trend of the living environment.

4.2.2 Proposed Circulation Plan

The Circulation Pattern defines the hierarchy of road system and the plan shows all lines of road circulation network integrated for the movement of people and goods, within and out of the town. The plan highlights the proposed width of all the important existing roads and the proposals for new road alignments to ensure a smooth flow of traffic from the residential areas to the major work centres by meeting the future traffic demand. From the measure of safe, economic and convenient movement of traffic flow achieved through the control over the setbacks of the buildings abutting the major roads, it is obvious that the concepts of the Circulation Pattern have been proved to be quiet successful. Thus as mentioned earlier, the basic concepts of the Circulation Pattern remains the same as the Ring and Radial road system at the town level combined with the Grid iron pattern for Central area.

Trends show that within the Development Plan area major commercial and public centres have been developing along the five major roads of Kollam, ie. arterial roads towards Ernakulam, Anchalumoodu, Shencotta, Kannanalloor and Thiruvananthapuram. Kollam - Thiruvananthapuram and Kollam - Ernakulam roads are the part of N.H.47 and Kollam Shencotta road connects the Tamil Nadu State. Within the Development Plan area, these roads create a smooth connection between the major commercial area at Chinnakkada and the various commercial sub centres at Neendakara, Ramankulangara, Pallimukku and Kadappakkada thereby achieving uniform distribution of development activities from the central area up to the peripheral area. Considering their importance, no changes have been made in the development proposals of all the radial roads. The radial and ring roads together distribute the entire traffic of the town evenly. So, though some changes have been made in the widening proposals of outer ring roads, the proposals for all the inner roads have been retained to 20m. This is with the exemption of the stretch of parallel road from D.S.P Office junction to Mulankadakom, which being less feasible has been proposed for 18m widening. Since the Kayal reclamation scheme has been minimised, the alignment of the Link road from K.S.R.T.C. Bus-stand to Asramam has been changed and thus it is now proposed along the Kayal boundary.

Generally the road width is fixed considering the importance and the density of traffic flow along with the built up area conditions. The higher density of structures facing the road and other prevailing land use restrictions such as the existing religious and social buildings have forced to reduce the widening proposals of some of the Sanctioned Development Plan roads. Thus the revised road widening proposals have been fixed by conducting road feasibility studies all the while not deviating from the basic concepts of road network. In the Revised Development Plan for Kollam the road network system consists of the following hierarchy of roads.

A. Outer Ring Road

- (a) **N.H. By-pass between Ayathil and Kavanad:** This is the most important stretch of road among the outer ring roads. It is proposed that the N.H.47, which cuts across the town at present should by-pass the densely built up and highly congested central area.

The by-pass begins at Mevaram junction near Thattamala in the Kollam-Thiruvananthapuram stretch of N.H.47 and the alignment passes through Vadakkevila Village where it intercepts the Kollam- Kannanalloor road at Ayathil junction. Presently this stretch of construction has been completed; a major portion of which is outside the scheme boundary. From Ayathil junction the By-pass passes through Kilikolloor village intercepting the railway lines and then the Q-S. road at Kallumthazham. Then the By-pass passes through Mangad and it crosses the Ashtamudi Lake to reach Thrikkadavoor. This stretch of the By-pass would be serving the industrial areas at Vadakkevila and Kilikolloor. Then the By-pass crosses the lake and joins the Kollam-Ernakulam stretch of N.H.47, at Altharamoodu junction near Kavanadu. The right of way proposed for the N.H. By-pass is 45m.

- (b) **Road from Ayathil to Pallimukku:** It is outer ring road connecting the Kollam-Kannanalloor road and the Kollam – Thiruvananthapuram stretch of N.H.47. The widening proposal for this road is retained as 15m.
- (c) **Road from Pallimukku junction to Eravipuram:** This is the stretch of road connecting the N.H.47 and the Coastal road. Though the road was previously proposed for 20m. widening, being less feasible it is now proposed to be widened to 18m. in the Revised Development Plan. This is an important link road serving the proposed industrial areas at Pallimukku and Eravipuram all the while connecting the Pallimukku Commercial Sub-center to the coastal road.
- (d) **Coastal road from Eravipuram to Thankassery:** This road is a part of the proposed Kollam- Varkala road and is aligned along the southern bank of T.S Canal. This road serves the Eravipuram industrial and residential areas sandwiched between the canal and Lakshadweep Sea as well the Kochuplammoodu Beach and the adjacent proposed park area. This roadway has already been developed and by considering its importance the right of way proposed is retained as 15m.
- (e) **Coastal road from Thankassery to Sakthikulangara via Thirumullavaram:** This road is the continuation of the coastal road passing through Thirumullavaram Tourist centre. A major portion of this stretch has been formed. The alignment still to be

formed is the stretch between Chittezhathu junction near Kurumalathu and Maneezhathujunction near Sarpakuzhy. This area is predominantly occupied by fishermen. The entire length of the Coastal area could be connected to the town by the Coastal road. The transportation of Sea Food and raw products will become quicker and easier once this road is completely developed. Another feature is that this road passes through three parks and open spaces viz. Thirumullavaram, Thankassery and the Kochuplammoodu beach all having enough tourist potential. In general, the outer ring road will facilitate the smooth movement between the residential areas and the industrial and commercial work centres. The road connects the major industrial areas and recreation centres and collects the traffic entering the town from outside distributing it over the entire town and its environs with the help of the intermediate roads.

B. Inner Ring Roads

These sets of roads are very important in the town's communication system and they enrich the Central area of the town. The following stretches of roads constitute the Inner ring roads.

- (a) The proposed parallel road from D.S.P. Office junction to Mulankadakom via, P.W.D Office Junction, Pandakadsala Bridge, Vaddy – Mudakkara area, Thekkecutchery and Anchukallumoodu. This stretch was previously proposed for 25m. widening, but being less feasible is now proposed to be widened to 18m.
- (b) The existing road from Mulankadakom to Civil Station is proposed for 25m. widening.
- (c) The Civil Station – Taluk office junction road: This important road is proposed for 25m. widening being the major stretch connecting the Public offices.
- (d) The proposed road from Taluk office junction to Kadappakkada viz. Asramam is proposed to be widened to 20m. This stretch includes the Link road from K.S.R.T.C. Bus stand to Asramam.

- (e) The road from Kadappakkada to Kappalandimukku is also proposed for 20m. widening.

C. Radial Roads

- (a) The existing Kollam- Thiruvananthapuram road: being the major road connecting the town and the State Capital, the widening proposal for this road is retained as 25m.- and is extended up to the Railway Station.
- (b) The existing Kollam- Kannanalloor road: Considering the importance of this road which further joins the Q.S. road at Kundara, this road is proposed to be widened to 20m.
- (c) The existing Kollam- Shencotta road: This road is an inter state road via.; Punalur Town connecting the Tamil Nadu State at commercial and tourist centres like Thrunalveli and Shencotta. This road is proposed to be widened to 25m.
- (d) The existing Kollam- Anchalumoodu road: This road intercepts the proposed N.H. By pass at Thrikkadavoor and further joins the Q.S. road at Elampalloor and this road is proposed for 20m. widening.
- (e) The existing Kollam- Ernakulam road: The widening proposal for this inter state road is also retained.

All these radial roads are interconnected with the inner ring roads. The traffic collected and carried by these roads is distributed first on the outer ring road, Second on the intermediate ring road and finally over the inner ring road. Thus the radial and ring roads together distribute the entire traffic of the town evenly.

D. Other important roads

1. Chinnakada to Kochuplamoodu Beach road: This is an important road in the town's central area and so is proposed for 20m. widening and extended up to the beach.
2. S.N.College – Karbala junction road: This road already is 20m. wide.
3. Thekkecutchery to Civil Station road: This short stretch of road connecting the civil station and the parallel road from D.S.P. office to Mulanakdakom is proposed for 18m. widening
4. D.S.P. office junction to Kochuplamoodu road: This short stretch is also proposed for 18m. widening.
5. The four major roads to the west coast viz. Polayathodu – Kachikadavu, Altharamoodu- Thankassery, Mundalumoodu – Thirumullavaram and Ramankulangara- Maruthady roads are proposed to be widened to 15m.
6. The Chinnakkada – Sharma junction road is an important road via. Asramam maidan and is proposed for 15m. widening.
7. The Kallumthazham – Kuttichira road is another important road connecting the Kottamkara Panchayat to the proposed N.H. By-pass. This road is proposed for 15m. widening
8. The Mangad – Erappanchal road is another important road from the proposed N.H. By-pass and is proposed for 15m. widening.
9. The Vallikkeezhu – Mamoottilkadavu and the Ramankulangara – Erattukadavu are the two roads from N.H. 47 to the Ashtamudi Lake side. These two roads are also proposed for 15m. widening. The Mamoottilkadavu – Kangathumukku road, which is a continuation of these two roads, is also proposed for 15m. widening.
10. The Vadayattucotta road from Chinnakkada to Thekkecutchery, and the Payikada road from Chinnakkada to Maharani Market are other important roads proposed for 15m. widening.
11. The short stretches of roads from H.S junction to Kottamukku and Taluk office junction to Sudhi Theatre are another two roads proposed to be widened to 15m.

(Table II shows the list of roads proposed to be widened in the Revised Development Plan for Kollam)

It can be observed that considerable changes in the road widening proposals have been incorporated only in the sub arterial roads. Thus a few sub-arterial roads have been realigned or extended in the Revised Development Plan. Two of such roads are the Vallikkeezhu-Mamoottilkadavu and Ramankulangara – Erttukadavu roads, which have been, extended up to the Kayal in the Revised Development Plan. Then at the Eravipuram panchayat, the new road alignment proposals of Veliyilkulangara – Thirumukku and Puthennda – Kunnathuveli roads have been realigned though the existing roads of Veliyilkulangara – Alammoodu and Puthennada – Vadakkumbhagam via. Eravipuram junction. Also the new road alignment of Konnel Mukku- Cheppalli road has been split into two stretches of Konnelmukku- Kolleri junction and Gopikkada – Cheppalli junction as the two roads have already been developed from Kolleri junction and Gopikkada junction. Another road alignment changed is the new road proposal from Madannada to Thulika junction, crossing the Manichithodu. This proposal is realigned along the Existing road formed by the side of Manichithodu reaching the Ammannda - Medayilmukku Road at Kalavedi junction. Obviously, the only few changes in the road alignment proposals made in the Revised Development Plan have been considered mainly taking feasibility and present trend of road Developments into account. Also except for a few, the proposed width of all the major roads in the Revised Development Plan is the same as proposed in the Sanctioned Development Plan for Kollam.

Part-V

ZONING REGULATIONS

- 1.0 All future developments shall be in conformity with provisions of the Development Plan. All future constructions within the planning area boundary prescribed in the Development Plan shall also conform to Kerala Municipality Building Rules in force and building line prescribed in Annexure III of these regulations.
- 2.0 For the implementation and enforcement of the proposals, envisaged in the Development Plan for the town, areas have been zoned under various uses such as Residential, Commercial, Industrial, Public and Semi-public, etc. Details regarding the nature of uses “Permitted” uses “Restricted” and uses “Prohibited” in each zone are given in the accompanying sheets.
- 3.0 Uses “Permitted” in a zone cover the uses that can be normally accommodated in the relevant zone. In some cases it may be possible to permit some other uses also which are not likely to affect the quality and environment in a zone specified for the particular use; provided such cases have to be individually studied based on the performance, characteristics and special locational factors, under the “Uses Restricted” category. Such cases which come under this category are classified as “Uses Restricted”. “Uses Prohibited” enlist the various objectionable uses in each zone which shall not be permitted under normal circumstances.
- 4.0 Zoning regulations are not intended to prohibit existing uses that have been lawfully established prior to the enforcement of these regulations. They are essentially intended to help the competent authority in decisions regarding granting or refusal of planning permissions for land use conversions and construction of buildings/structures or any other matter specifically mentioned in these regulations. A non-conforming use may be allowed to continue in its existing location and essential repairs and maintenance for the structure may be permitted by the executive authority, provided that the said use create no adverse environmental influence in the zone. Addition, alteration or reconstruction, if

found necessary as part of any mitigation measures may be permitted for such uses by the executive authority with the concurrence of the Chief Town Planner.

- 5.0 Existing areas and structures of archeological importance, agricultural uses and religious uses may be permitted to continue in all zones.

- 6.0 Regulation of constructions on the sides of new roads/roads proposed for widening as per the scheme shall be governed by the distance from the center line of the road, unless otherwise specified in any Detailed Town Planning Schemes or detailed road alignments approved by the Chief Town Planner.

	Land Use	Uses permitted	Uses restricted by the Secretary of the Local Government with the concurrence of		Uses Prohibited
			Town Planner of the State Town Planning Service having jurisdiction over the area	Chief Town Planner	
(1)	(2)	(3)	(4)	(5)	(6)
6	Residential Zone	All residences, Professional offices and studios of the residents not exceeding 100 sq.m. floor area, clinics (out patient), Community halls, clubs, Parks and Play grounds incidental to the residential uses, Public utility buildings such as water supply, drainage and electric installations of a minor nature and small service industries of a non-nuisance nature (see Annexure I) engaging not more than 3 workers with power limited to 3 H.P or 6 workers without power, shops floor area up to 100 sq.m. Library/reading rooms, minor education buildings up to Primary School, all Government Offices	Hostels, boarding houses, commercial offices, educational institutions up to higher secondary level	Other educational and research institutions, Fuel filling stations, small auto garages engaging not more than 5 workers and other non-nuisance type service industries engaging not more than 10 workers with power limited to 10 H.P. or 20 workers without power transmission towers, telecommunication towers and wireless stations and areas or buildings for religious uses	Any Other Use not specified in column (3), (4) and (5).

7	Mercantile or Commercial Zone	Retail and wholesale shops, godowns and ware houses, professional offices, studios, commercial offices, clinics (OP), diagnostic centres, police post/station, fire post/station, post and telegraph office, community halls, library and reading rooms, auditorium/wedding halls, theatres, cinemas, hostels, hostels, lodging houses, restaurants, parking plazas/taxi/jeep/auto rickshaw/cart stand, bus stands, parks and open spaces, transmission towers and wireless stations, non- nuisance type of service and light industries employing not more than 10 workers and using power up to 15 H.P.	Residences exceeding 300 sq. m. of floor area, social welfare institutions, printing presses, service garages, stacking yards, truck terminals and all uses permitted in public and semi public use zone	Fuel filling stations and areas and buildings for religious uses	Junk yards, storage of materials causing dust, objectionable odours and fumes etc. and any other use not specified in columns (3), (4) and (5).
8	Industrial Zone – Major Industries	All types of Industries other than obnoxious and nuisance type industries (See appendix-II), Retail business and wholesale business incidental to industries. Storage godowns, warehouses, public and semi-public offices incidental to the industrial use, residences incidental to industrial use, transmission towers, telecommunication towers and	Existing residential houses, Guest House, Truck terminal, Taxi, Autorickshaw stand, Junkyards, Stacking yards, Professional Offices, Studios,	Fuel filling stations, Obnoxious and nuisance type industries, Minor storage of explosives and fire works.	Usage of items coming under column (ii) shall be permitted by the Ex.Authority with the concurrence of the Chief Town

		wireless stations, public utility areas and buildings, Fire Station, Park and Open Spaces, Hotels, Canteen	Reading room, Lodging houses.		Planner.
9	Industrial Zone – Minor Industries	All types of industries other than obnoxious and nuisance type industries (See Annexure II), retail business and wholesale business incidental to the industries, storage and godowns, public and semi-public offices incidental to the industrial use and warehousing, residences incidental to industrial use, transmission towers, telecommunication towers and wireless stations, public utility areas and buildings	Residence not exceeding 300 sq.m. of floor area, transport terminals landing places, junk yards, stacking yards, shops/professional offices/banking and financial institutions/restaurants and canteen-floor area up to 200 sq.m.	Residences exceeding 300 sq.m. of floor area, Fuel filling stations, obnoxious and nuisance type industries, minor storage of explosive and fire works, cremation ground/crematorium/burial ground/common vault	Any other use not specified in column (3), (4), (5)
10	Mixed Use Zone	Permitted, restricted and prohibited uses are as for Residential and Commercial Zones			
11	Public and Semi-public zone	Local, State and Central Government Offices, social and cultural establishments,		Cremation grounds, burial grounds and related constructions, sewage	Any other use not specified in column (3) and

		auditorium/wedding halls, community facilities including hospital, clinics educational institutions etc. public utilities and related building and religious buildings, transmission towers, telecommunication towers and wireless stations, residential uses incidental to uses permitted such as residential quarters/guest house/ hostel.		treatment plants garbage dumps and slaughter houses	(5)
12	Parks and open spaces zone	Parks, open spaces and maidans, play grounds, botanical gardens, stadium, swimming pools, open air theatres, existing cemeteries and existing religious uses.	Pavilions and Grand stands, bath houses, gymnasium, aquarium, reading rooms, radio kiosks and social and cultural establishments.		Any other use not specified in column (3) and (4)
13	Green strip or Agricultural reservation	Paddy fields, all land put to agricultural uses, pastures, grazing grounds, fodder cultivation, brick kilns, dhobi khanas and removal of clay /gravel up to a depth of 1m.	Dairy and poultry farms, single family residential buildings of floor area upto 300 sq.m. in areas which are substantially built up with lawful residential	Milk processing plants, storage and processing of farm products, service and repair of farm machinery, burial grounds/cremation grounds	Notwithstanding anything contained in column (3), (4), and (5) green

		below the level of land surrounding the agricultural area and existing religious uses.	buildings on the date of this notification and public utility and service areas.	and religious uses.	strip/agricultural reservation zone-contiguous to the Vattakkal shall be retained a construction free zone.
14	Transport and communication Zone	All buildings and uses connected with transport and communication such as bus terminals, railway stations, air ports, water landings, ports and harbour, transmitting and wireless stations etc., fuel filling stations, essential repairs and service stations related to the above and transportation routes, public utilities and related buildings.			Any other use not specified in column (3) and (4)

Note:

Uses permitted in residential, commercial and public and semi-public zones may also be permitted by the executive authority, if such uses are not allowable otherwise in the zoning regulations:

- i. in land to a depth of 50 metres in residential zone and 100 metres in Commercial, Public and Semi-Public and Industrial zones on either sides of roads having an existing or proposed width of 15 metres or more.
- ii. in land to a depth of 100 metres in residential zone and 200 metres in Commercial, Public and Semi-Public and Industrial zones on either sides of roads having an existing or proposed width of 18 metres or more
- iii. in land to a depth of 200 metres in residential zone on other sides of roads having proposed width of 25 metres or more

In the case of contiguous plots under single ownership, that extends beyond the depth so specified in i and ii above, such uses may be permitted for the entire plot depth, provided that the plots have a minimum frontage of 25 metre on such roads.

Provided also that hospitals may be permitted in residential zones only in plots having a minimum extent of 0.20 Hectare after road widening, if any, and limiting the maximum permissible coverage and FAR in such plots to 30% and 1.0 respectively.

Annexure I

Type of non-obnoxious and non-nuisance type of service or light industries permissible in Residential zones, vide regulation 7

1. Flour Mills
2. Embroidery and Lace manufacturing
3. Gold and silver smithy
4. Watch, pen and Spectacle repairing
5. Laundry, dry cleaning and dying
6. Photo and picture framing
7. Manufacture and repair of musical instruments
8. Automobile servicing (excluding repair)
9. Radio servicing and repairing
10. Cotton and silk printing
11. Bakeries
12. Confectioneries
13. Cold storage
14. Aerated waters and fruit beverages
15. Manufacture of tobacco products
16. Garment making/tailoring
17. Electroplating
18. Bamboo and cane products

19. Sports goods
20. Card-board box and paper products
21. Domestic electrical appliances
22. Toy making
23. Furniture without machinery
24. Wooden electrical accessories
25. Copper, brass and metal utensils
26. Small foundries
27. Padlock
28. Sanitary fittings and other similar industries

ANNEXURE II

List of Obnoxious or nuisance industries

subject to objectionable odours, fumes, effluents or processes to be located in the Hazardous Zone

(Grouped under Indian Standard Industrial Classification)

Vide Regulations 9 & 10

1. Manufacture of food stuff.
2. Slaughtering Preservation of meat, fish and cleaning fish.
3. Manufacture of Beverages.

4. Production of distilled spirits, wines, liquor etc. from alcoholic malt fruits and malts in distillery and brewery.
5. Production of country liquor and indigenous liquor such as toddy, liquor from mahua, palm juice.
6. Manufacture of wood and wooden products.
7. Sawing and planning of wood.
8. Wood seasoning and creosoting.
9. Manufacture of veneer and plywood.
10. Paper pulp and straw board.
11. Manufacture of leather and leather products.
12. Curing, tanning and finishing of hides and skins and preparation of finished leather.
13. Manufacture of Rubber, Petroleum and Coal products.
14. Manufacture of tyres and tubes.
15. Manufacture of Industrial and Synthetic rubber.
16. Reclamation of rubber.
17. Production of petroleum, kerosene and other petroleum products in Refineries.
18. Production of chemicals and chemical products.
19. Manufacture of chemicals and chemical products
20. Manufacture of basic industrial chemicals such as acids, alkalies and their salts not elsewhere specified (specially sulphurous, sulphuric nitric, hydrochloric etc. acids) ammonia, chlorine and bleaching powder manufactures.
21. Manufacture of dyes, paints, colours and varnishes, printing ink etc.
22. Manufacture of fertilizers (specially from organic materials)
23. Manufacture of disinfectants and insecticides.
24. Manufacture of Ammunition, explosives and fire works.

25. Manufacture of matches.
26. Manufacture of non-metallic mineral products other than petroleum and coal.
27. Manufacture of cement and cement products.
28. Manufacture of lime.
29. Manufacture of Plaster of Paris.
30. Manufacture of Basic metals and their products
31. Manufacture of iron and steel including smelting, refining, rolling and conversion into basic forms.
32. Manufacture including smelting, refining etc. of non-ferrous metals and alloys in basic forms.
33. Manufacture of armaments.
34. Manufacture of machinery (other than transport) and electrical equipment.
35. Manufacture of all kinds of battery.
36. Miscellaneous item not covered above.
37. Incineration, reduction or dumping of offal, dead animals, garbage or refuse.
38. Manufacture of gelatin and glue.
39. Fat, tallow, grease or lard refining or manufacture.
40. Bone meal, bones grist and bone powder, and
41. Other similar types of nuisance industries.

ANNEXURE III

Building lines for construction of building abutting major roads

Building line

1. N.H. Bye-pass	:	4.5 m.
2. 25m. wide road	:	4.5 m.
3. 20m. wide road	:	3.0 m.
4. 18m. wide road	:	3.0 m.
5. 15m. wide road	:	3.0 m.
6. 12m. wide road	:	3.0

Table II

<p>25m.</p> <ol style="list-style-type: none">1. Kollam (Chinnakkada) – Ernakulam2. Kollam (Railway Station) – Thiruvananthapuram3. Kollam – Shencotta <p>20m.</p> <ol style="list-style-type: none">1. Kollam (Chinnakkada) – Kannanalloor2. High School junction – Thrikkadavoor3. Chinnakkada – Beach (Beach road)4. Taluk Office – Kadappakkada via. Asramam5. Kadappaklada – Kappalandimukku6. S.N.College – Karbala <p>18m.</p> <ol style="list-style-type: none">1. D.S.P. Office – Mulankadakom via. Thekkecutchery2. Pallimukku – Earvipuram3. Thekkecutchery – Civil Station4. D.S.P. Office – Kochuplamoodu	<p>12m.</p> <ol style="list-style-type: none">1. S.N. College – Mundakkal2. Congress Bhavan – Mundakkal3. Kochuplamoodu – Thumbara4. Thumbara – Amruthakulam5. Pulimoodu – Puthennada via. Chayakkada junction6. Amruthakulam – Veliyilkulangara7. Madannada – Attukalkadavu8. Bharanikavu – Pazhayattinkuzhy via. Chakarikada9. Veliyildulangara – Alumoodu10. Puthennada – Eravipuram Vadakkumbhagom11. Sivaji junction – Mangad via. Uliyakovil12. Nair’s Hospital – Uliyakovil13. Randamkutty – Uliyakovil14. Randamkutty – Kadappal15. Ammannada – Polayathodu16. Kallumthazham – Puliyathumukku17. Puliyathumukku – Pallimukku
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<p>15m.</p> <ol style="list-style-type: none"> 1. Eravipuram – Sakthikulangara (Coastal road) 2. Ayathil – Pallimukku via. Mulluvila 3. Polayahodu – Kachikadavu 4. Altharamoodu – Thankasseri 5. Mundalummodu – Thirumullavaram 6. Ramankulangara – Maruthady 7. Chinnakkada – Sharma junction via. Asramam 8. Kallumthazham – Kuttichira 9. Mangad – Erappanchal 10. Vallikkeezhu – Mammoottilkadavu 11. Ramankulangara – Erattukadavu 12. Mamoottilkadavu – Kangathumukku 13. Chinnakkada – Thekkecutchery (Vadayattucotta road) 14. Chinnakkad – Maharani Market (Payikkada road) 15. High Schoold junction – Kotamukku 16. Taluk Office – Sudhi theatre (Dist. Hospital road) 	<ol style="list-style-type: none"> 18. Ammannada – Medayilmukku via. N.S. junction 19. Madannada – Kalavedi junction 20. Palathara – Thattamala H.S.junction 21. Mulluvila – Pazhayattinkuzhy 22. Karicode – Mangalathu junction via. Kuttichira 23. Anchukallummoodu – Kaval junction 24. Ottakkalmoodu – Sarpakuzhy 25. Vishnathukavu – Cheemaramukku 26. Ramankulangara – Konnelmukku 27. Elangathu junction – Ozhukkuthodu 28. Konnelmukku – Kolleri junction 29. Gopikkada – cheppallimukku 30. Vallikkeezhu – Vasupilla junction 31. Maniyathu junction – Suriyanthodi 32. Karangiya junction - Mariyalayam
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