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INFRASTRUCTURE MALTA

17 December 2018

Our Ref: RD 77/18

PROJECT DESCRIPTION STATEMENT
PA/03427/18

Location:	Site at, Triq Hal Qormi, Triq San Tumas, Luqa, Malta
Proposal:	Proposed sanctioning of road works at part of Triq Hal Qormi and proposed widening of part of Triq Hal Qormi and Triq San Tumas, Luqa

1. INTRODUCTION

This Project Description Statement (PDS) describes the proposal for the widening of part of Arterial Route 8, spanning between arterial route nodes WA13 – WA27 – WA23. The application site forms part of the TEN-T road network. The project is proposed with the aim of upgrading this stretch of the road network to address traffic congestion problems which are often encountered by commuters during most weekdays. This report will therefore start with the description of the existing situation on the site and will then proceed to outline a description of the proposal which is aimed to improve the capacity and design of the road network in question.

2. EXISTING SITUATION

In general, the route network is to be composed of high-quality roads in strategic routes, which include improved road safety, road efficiency and mitigation of congestion. The application site is characterized as a highly used route connecting the areas of Qormi and Luqa, and other southern localities. This route is also one of the important routes that lead to the Malta International Airport, thus creating additional traffic load throughout this link. Traffic congestion in both directions is noted throughout the year, especially in the peak hours, since this part of the network consists of only one lane of traffic in each direction. Hence, this route is currently creating a bottleneck in the network especially in the area around the junctions.

3. TRAFFIC DATA

Traffic data has been extracted from the Master Plan from the year 2014. The data is shown in the figures 1 to 4, in the pages which follow.

The data shows that the northbound traffic going from WA23 towards WA13 is relatively high; AM peaks **1640**; PM peaks **1040**, when compared to the traffic on the rest of the southbound route; AM peak **1350**; PM peak **1050**.

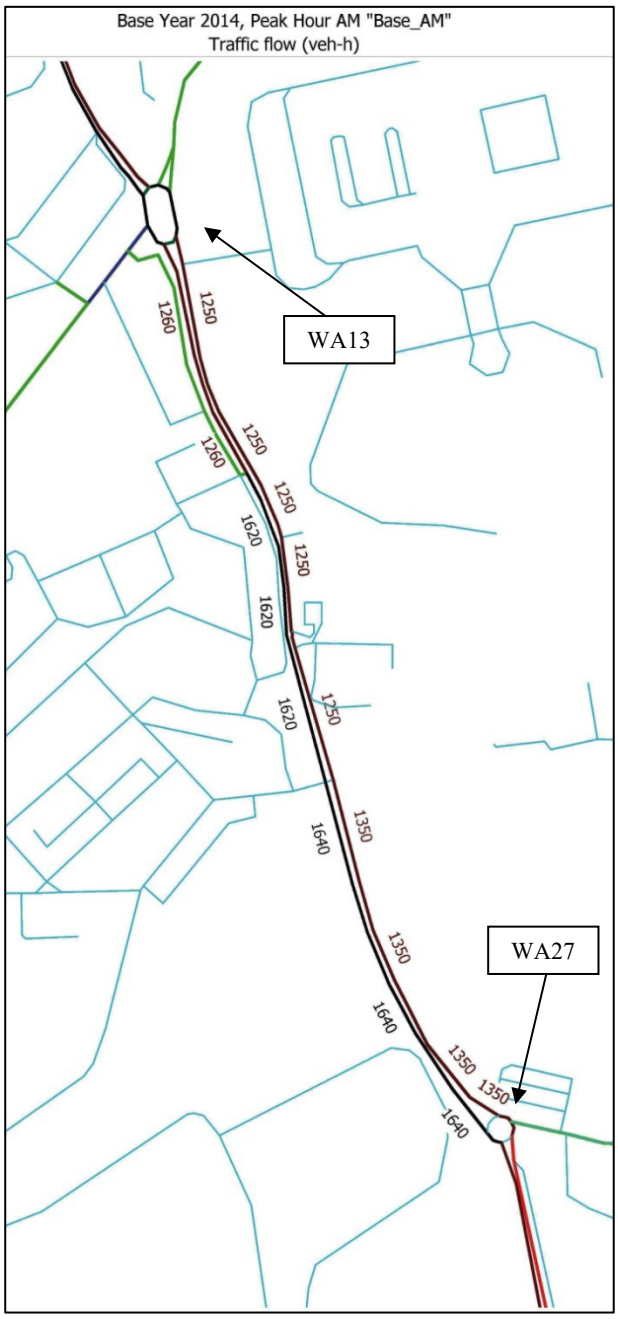
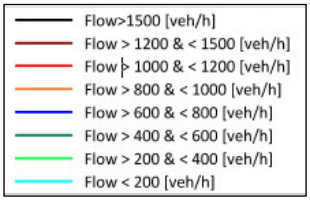


Fig.1
AM Traffic Flow

Key:



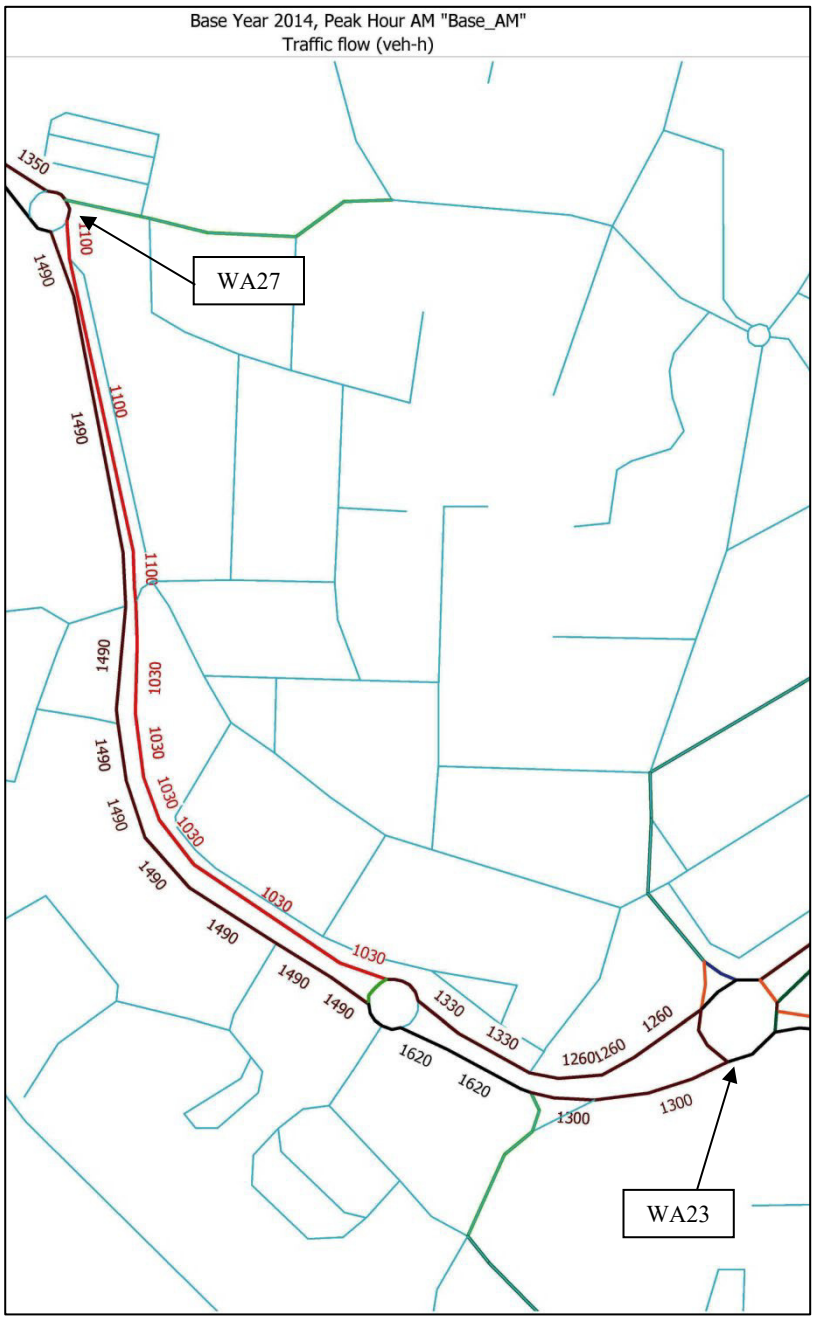
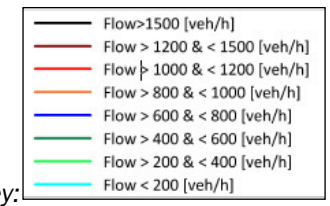


Fig.2
AM Traffic Flow

Key:



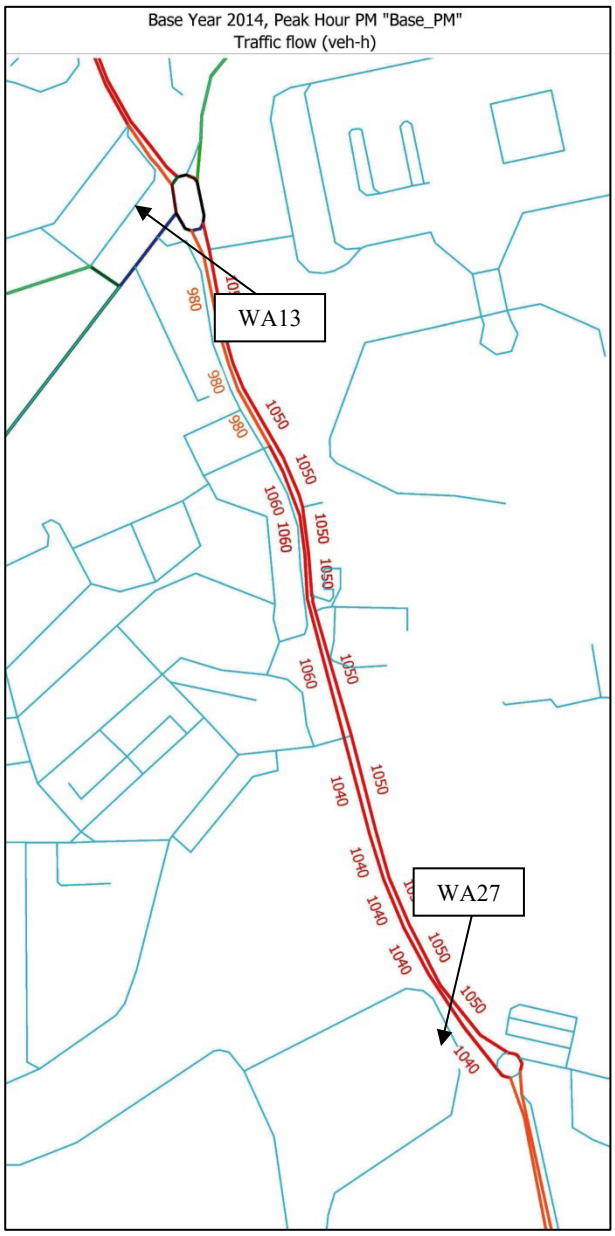
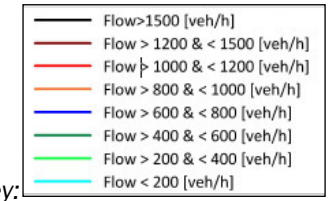


Fig 3
PM Traffic Flow

Key:



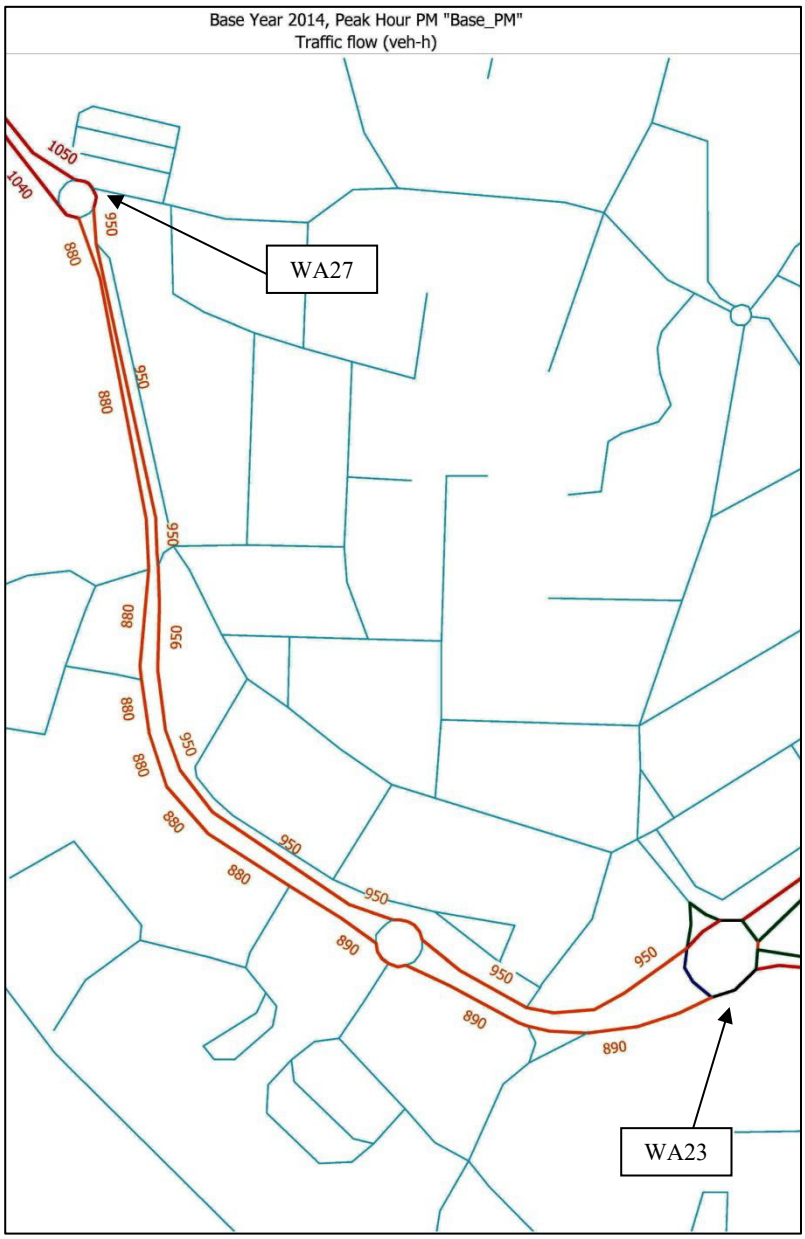
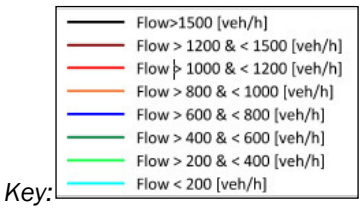


Fig 4
PM Traffic Flow



Key:

From the traffic data of 2014, the following maximum AADTs are calculated and a 1% increase per annum projection gives the data for 2017:

	2014	2017 (projections)
Total AADT:	15,088	15,545

The current road configuration is a Single Carriageway (S2) with lanes of c. 3.5m each separated by a lane line of 100mm width. When analyzing the UK DMRB Volume 5 Section 1, Part 3 TA 46/97, the total AADT for 2017 clearly shows that the capacity of the current configuration of a single carriageway (S2), which is the current road configuration, is exceeded.

The AADT figure for the current year, 2017, falls both under the D2AP (Dual All Purpose Road which caters for 39,000 AADT) and the WS2 (Wide Single Road which caters for 21,000 AADT), and the graph which follows, shows these classifications. It is noted that for the WS2 road classification, the AADT is almost at the maximum AADT that such a road type can cater for.

Upon checking the classifications, and the road cross section types, the following is to be considered:

- Even though the road is a single carriageway, it cannot be classified under the WS2 category. The WS2 category is generally under the Rural All-Purpose Road cross-sections and has lane widths of 5m each, separated by a lane line 150mm wide. The existing lane widths along Triq Hal Qormi and Triq San Tumas are not as wide.

- The road (both in the existing and the proposed scenario) cannot be classified as a dual carriageway either since the existing central strips are only located along certain road stretches which are either close to the roundabouts or at the sharp bend in the road.

- Therefore, one can conclude that the road is to be classified as a single carriageway in its current geometry and the proposal will not change this road configuration. However, the additional lane proposed will undoubtedly increase the capacity of the road section and will allow better manoeuvre and organization of traffic along the route.

Considering a further 1% increase per annum projection over the data for 2017, for an additional design life of 25 years gives the AADT data for 2042:

	2014	2042 (projections)
Total AADT:	15,088	19,936

This projected AADT for the year 2042 is also shown in the figure 5 below, which is extracted from the DMRB.

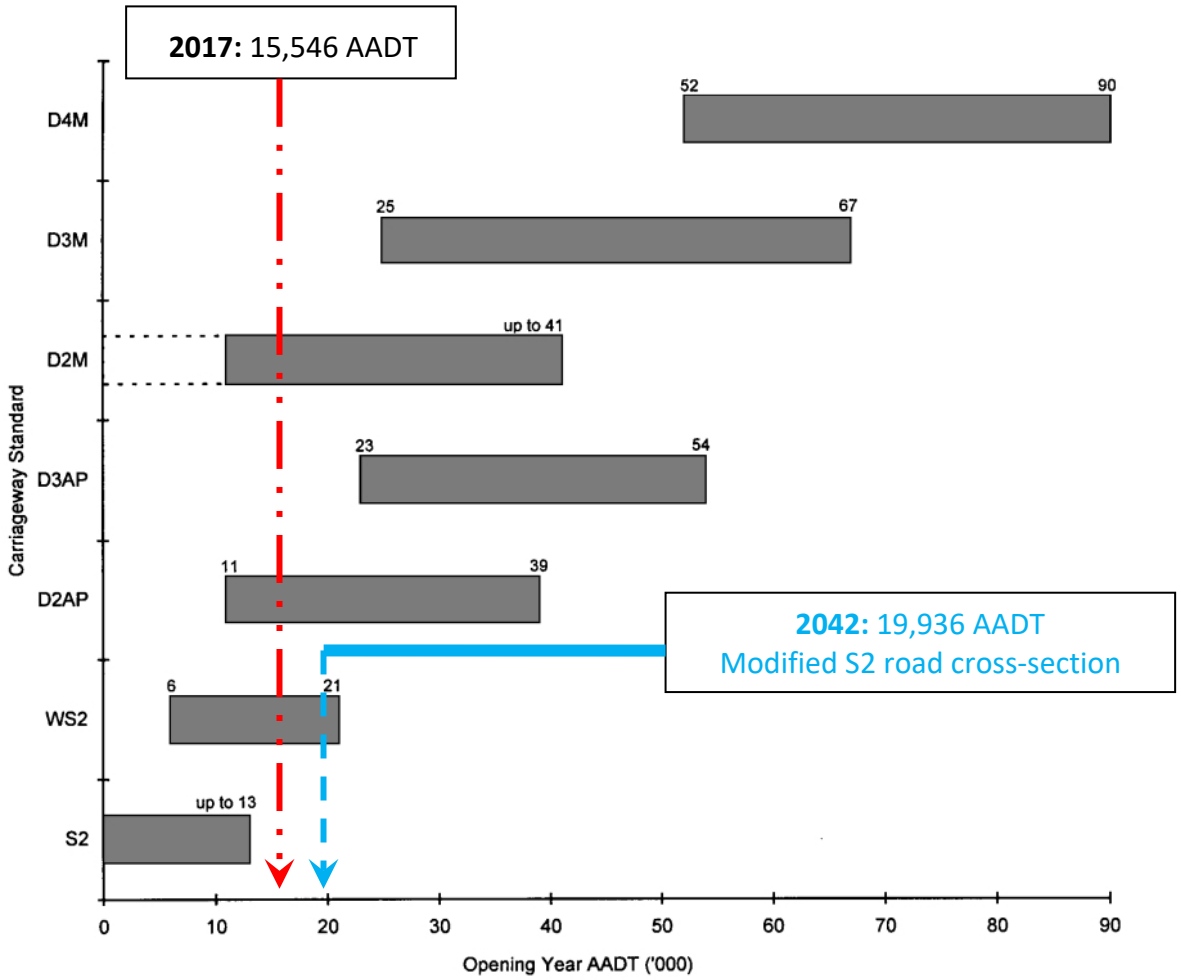


Fig. 5: Extracted from UK DMRB TA 46/97 Figure 2.1

4. PROJECT OBJECTIVES

The following are the objectives of the proposed road scheme in question:

- To improve traffic management along the stretch of Triq Hal Qormi up to Triq San Tumas, Luqa
- Eliminate the present bottlenecks along this part of Route number 8 and reduce the travel time of road users along this route in question by improving existing road capacity and junction redesign.
- Improve pedestrian safety through the implementation of pedestrian facilities such as footpaths and pedestrian crossings and link the same facilities to public transport facilities which will also be improved as part of this project.
- Encourage cycling and improve safety for cyclists by implementing a network of cycling facilities including a continuous route for road users who will opt to use this mode of transport and connect the same route to the urban/ rural areas along the scheme in question.
- Improve junction capacity and reduce traffic queues at the same junctions along the road scheme in question by redesigning the same junctions and re-organising traffic routes so that traffic conflicts are reduced as much as possible.
- Reduce emissions by eliminating traffic queues and improving traffic flow.
- Reduce the environmental impact of the project and limiting the land uptake as much as possible by using the least amount of road space for the road widening and extend already disturbed areas rather than introduce new links resulting in new disturbed areas.
- Mitigate for the impacts of the project through the introduction of new trees and transplanting of existing trees along the route in question and adjacent to the site area.

5. DESIGN PROPOSAL

The existing road is characterized by a single carriageway of one northbound and one southbound lane, separated by road markings. At the approaches to the roundabouts, the single carriageway changes into a dual carriageway for a short stretch, again with a single lane in each direction. The central reserve in these locations varies from concrete strips to strips with agricultural soil and a number of trees/shrubs.

The proposal seeks to increase the capacity of both northbound and southbound directions between Nodes WA13, WA27 and WA23, by providing four lanes on the carriageway. The new southbound lane is planned to start off with shifting of the existing wall alignment in a way that enough road width is created to accommodate two lanes for each direction. This scenario shall take place between Node WA13 and WA27 (Triq Hal Qormi). Similarly, the same shall occur between Node WA27 and WA23 (Triq San Tumas), in the northbound direction.

The widening proposal includes for the demolition of existing boundary walls and the excavation of agricultural soil. All rubble stone that is removed from the existing walls and which is considered acceptable for re-use shall be set aside for re-use in the new boundary walls which are proposed to be constructed at the edge of the new alignment. Agricultural soil will also be re-used at the same sites.

In conclusion, the proposal seeks to provide a better managed route offering better opportunities of traffic segregation and organization. The provision of an additional lane in the northbound/ southbound directions will alleviate the congestion which is presently occurring on a daily basis on the same route. The project will reduce travel time for road users and improve mobility in this part of the comprehensive TEN-T.

6. PROVISION FOR PEDESTRIANS AND CYCLISTS

Pedestrians

Improvements to pedestrian links through uninterrupted footpaths shall be implemented where previously there was no such continuity along this stretch of road. This will ensure improved safety for pedestrians along this route. The existing pelican crossings located on site shall be extended as belisha (uncontrolled) crossings in the service road, to provide a safer pedestrian link between facilities on opposite sides of the road. Such crossings will be upgraded and posted speed limits for vehicles will not exceed 60 km/h.

The existing bus stops will be improved with the provision of lay-bys and the introduction of the necessary infrastructure to cater for people with special needs.

Cyclists

Cyclists have the possibility to cycle all along this stretch of road given that the proposed cycle lane spans between all three junctions. The proposed cycle lane shall be bi-directional throughout and will be segregated from the main traffic flow by means of a concrete strip. This configuration shall proceed northbound from roundabout at *"Dinitrol"* up to WSC head offices. At this point, the dedicated cycle lane shall merge into the service road where it is proposed to form part of a shared space, up to the junction at St. Vincent de Paule where, at the end, cyclists shall re-join the carriageway.

7. POLICY CONSIDERATIONS

The road in question is classified as an arterial road and as stated above is an important link in the South Region and the Central Areas of Malta. The following are planning policies in connection with the surrounding areas of the Scheme in question:

- No sites of cultural heritage were identified close to the site in question.
- At either end of the road scheme there are sites which were included in the 2006 Scheme Rationalisation areas. The widened road will not encroach on these areas.
- The road in question passes through the groundwater protection zones buffer zones. The project will not have an impact on these buffer zones.
- Areas indicated as commercial/ industrial and airport's runway/ operational area shall not be compromised through proposed widening of road.
- Reservoir at area known as *Schinas* and reservoir in WSC grounds shall not be affected by the proposed widening.
- No encroachment shall take place in the vicinity of the areas designated as aviation areas and the area designated as *Airmalta Development Brief Area.*
- Other areas such as the residential parcels and the public urban open spaces shall not be compromised by the proposed works.

The agricultural areas showing in the Local Plans are identified under policy SMAG01 (Awaiting classification of agricultural value). In between these sites identified as agricultural areas, presently there are a number of areas which are being utilized for various commercial uses ranging from an approved fuel station with incorporated commercial establishments, mass storage outdoor yards and construction companies.

8. IMPACTS OF THE PROJECT

Positive Impacts

The following are the identified potential positive impacts of the road scheme in question:

- Improved traffic flow through this part of Route 8 by alleviating the present congestion.

- Enhancement of road safety along the stretch in question for all road users through the enhancement of pedestrian and cycling facilities, better traffic calming measures, redesigned junctions and a new improved street lighting system.

- Constant speeds of 50 to 60 kph which are being promoted through this important connection between the areas of Qormi and Luqa, and other southern localities, as opposed to the present frequent traffic queues along the route in question. With the planned improvement in road capacity, redesigned junctions and better traffic management, the traffic will flow better at more constant speeds which will lead to lower emissions since vehicle engines are more efficient as opposed to the present slow moving and stationary vehicles especially in the peak hours. The latter situation is currently the source of higher emissions since vehicles are continuously stuck in traffic queues and as a result travelling on low gears along this road.

- Improvement of facilities for pedestrians by implementing footpaths and connections to public transport infrastructure. This will in turn improve connections by walking across communities in Qormi and Luqa.

- Improvement of cycling facilities along the route in question to promote the use of alternative modes of transport other than vehicle transport.

- Improvement of public transport facilities along the route in question. This will encourage the use of public transport in general and encourage the reduction of vehicles on the road. The improved traffic flow along the same route will also benefit the travel time of buses along this stretch.

- A new LED street lighting system which will be more efficient in terms of consumption than the present one.

- A new stormwater system which will be implemented to collect rainwater surface run off and discharge it at identified controlled locations.

Negative Impacts

The following are the identified potential negative impacts of this road scheme:

- Due to the necessary road widening that has to be carried out to increase traffic capacity, pedestrian facilities, cycling and public transport facilities the trees identified in the table below, will be effected:

Type of Tree	Uprooted	Transplanted	Undisturbed	Proposed
Acacia Karroo	1		6	
Olea Europea		47	4	45
Prunus Dulcis		13	3	
Citrus		2	2	
Prunus		4	2	
Prunus Persica		5		
Pyrus			2	
Citrus Sinesis			3	
Citrus Limon		1		
Yucca Gloriosa			1	
Eriobotrya Japonica			2	
Ficus Carica				
Cerantonia Siliqua	2		2	
Eucalyptus Globulus	2		47	
Cupressus Sempervirens	39		36	
Cercis Siliquastrum	1			
Pinus Halapensis	22		6	
Casuarina Equisetifolia	2			
Washingtonia Palm		2		
Arecaceae		1		
Chamaerops Humilis		1		
Total	**69**	**76**	**117**	**45**

- The total area of land expropriation required is 9,080 sq.m of which around 6,600sq.m is agricultural land.
- Potential traffic noise impact - A number of sensitive receptors have been identified as follows:
  - Residential area separated by a service road from Triq Hal Qormi. At this location the road will not be widened onto the side of these residential units.
  - Residential blocks separated by a service road from Triq San Tumas. At this location no road widening from the existing road footprint is being envisaged onto this particular side.
  - Residential area in Triq il-Mitjar, separated by a service road from Triq San Tumas. At this location no road widening from the existing road footprint is being envisaged onto this particular side.

9. WASTE

The proposed interventions will produce the following estimated waste materials:

- Total estimated scarified asphalt material = 7,250m³. This material will be re-used by the Contractor on the site in question and in other road construction sites.
- Total estimated type 1 granular material = 10,300m³. This material will be deposited in approved dumping sites.
- Existing metal crash barriers will be reused in other locations and the ones which will not be deemed fit to act as vehicle restraint systems will be disposed of in approved metal recycling sites.
- All the street lighting poles existing on site will be either re-used in other road street lighting schemes.

Apart from the waste materials identified above, the project will have an effect on agricultural soil. A total estimated amount of 7,200m³. will be excavated and it is planned that this material is re-used in the same agricultural fields from where such material will be taken up.

10. WORKS CARRIED OUT TO DATE

Since part of this application is a request for sanctioning, the following is an outline of the works carried out to date:

Phase 1 - Works at Express Trailers roundabout and formation of bypass lanes (opposite St Vincent De Paule premises).

- Removal of part of existing boundary wall
- Excavation and removal of soil for widening and formation of new boundary wall
- Removal / and/ or re-location of trees in existing roundabout perimeter
- Removal and reconstruction of central strips
- Removal/ relocation of street lighting poles (Enemalta)

Phase 2 -Widening of carriageway from Chainage 0+050 up to Chainage 0+200.

- Removal of part of existing boundary walls
- Excavation and removal of soil for widening and new boundary wall

11. CONCLUSION AND RECOMMENDATIONS

Concluding Comments

The road scheme in question will be a considerable improvement on the existing situation which is characterized by frequent congestion along the whole route in question. This is due to the inadequacy of the present road capacity to cater for the traffic loads in the area. Furthermore, the introduction of new pedestrian and cycling facilities along the same route will continue encouraging road users to opt for alternative modes of transport to the vehicle. The redesigned junctions will complement the increased road capacity and will introduce a number of improvements for

the major traffic flows. These improvements in traffic flows will also allow for the better flow of public transport routes along the same route.

Collectively, these measures will connect both localities in the area by walking and cycling as well as improve the connection by public transport to the nearby public facilities. This proposal will hence promote alternative modes of transportation, enhance safety for all road users, and improve traffic flow.

Recommendations

- In order to ascertain the least amount of agricultural land take up, the adopted footpath, cycle lane and road widths should be the minimum possible in the relevant standards and guidelines.

- It is recommended that the extracted soil is reused in the same agricultural land sites.

- A number of private reservoirs maybe encountered in the affected areas of the agricultural land on both sides. If such cases arise, it is recommended that these reservoirs are rebuilt in the same agricultural areas so that water harvesting is not effected with the proposal.

- Due to the upgrading of this road a number of trees will be transplanted and/ or uprooted. It is recommended that trees which can be transplanted shall be transplanted in the nearby areas where this is possible. It is also recommended that new trees being introduced shall be of the indigenous species.