

Frascati Road/Temple Hill Route Improvement Scheme

Temple Hill / Newtownpark Avenue Reconfiguration

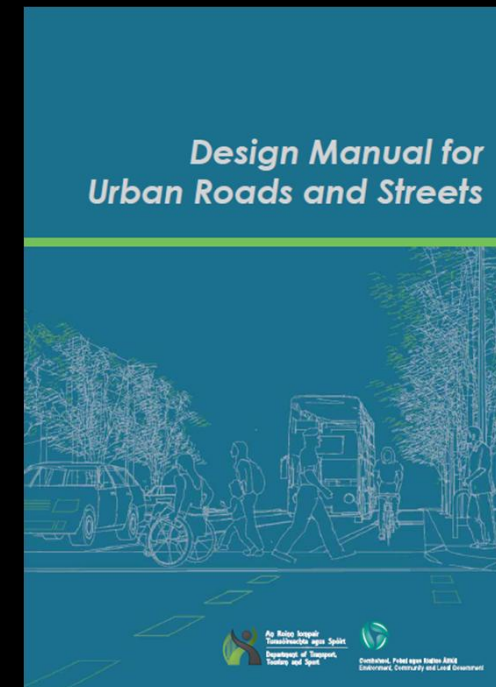
Why are we doing this Project?

- The Frascati Road is a National Route (N31) carrying 30,000 AADT and is an important link to the city centre and Dun Laoghaire;
- Unlike most urban dual carriageways it also has to accommodate significant pedestrian volumes travelling between two adjacent shopping centres;
- The route is also an important linkage to the city centre for cyclists with upwards of 400 cycling along the route during peak periods; and
- Finally, but very importantly, the N31 effectively acts as a barrier between the residential core of Blackrock

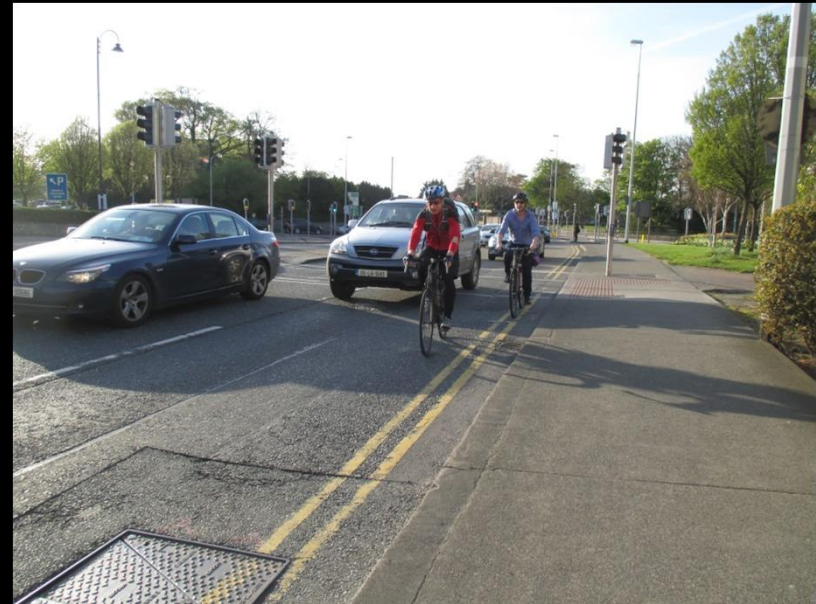


Why are we doing this Project?

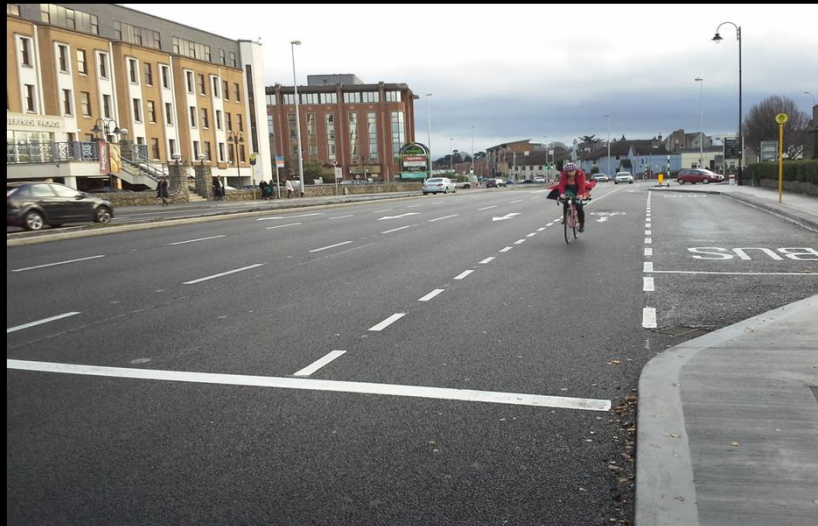
- New design guidance requires us to reduce the domination of the car in urban environment by redistributing road space to pedestrians and cyclists.
- The Frascati project is one of the first major projects being developed with these principals in mind.



How it did look....



Completed sections....



Programme for Completion

Phase	April	May	June	July	August
1 up to Carysfort			Complete		
2 up to Newtown Avenue					
3 up to Newtownpark Avenue					

Phase 3 Newtown Avenue to Newtownpark Avenue

Junction reconfiguration

- Temple Hill/ Newtownpark Avenue Junction needs to be substantially altered to improve its operation and safety for all users.

Current layout....



Current layout is not adequate....



Current layout is not adequate....



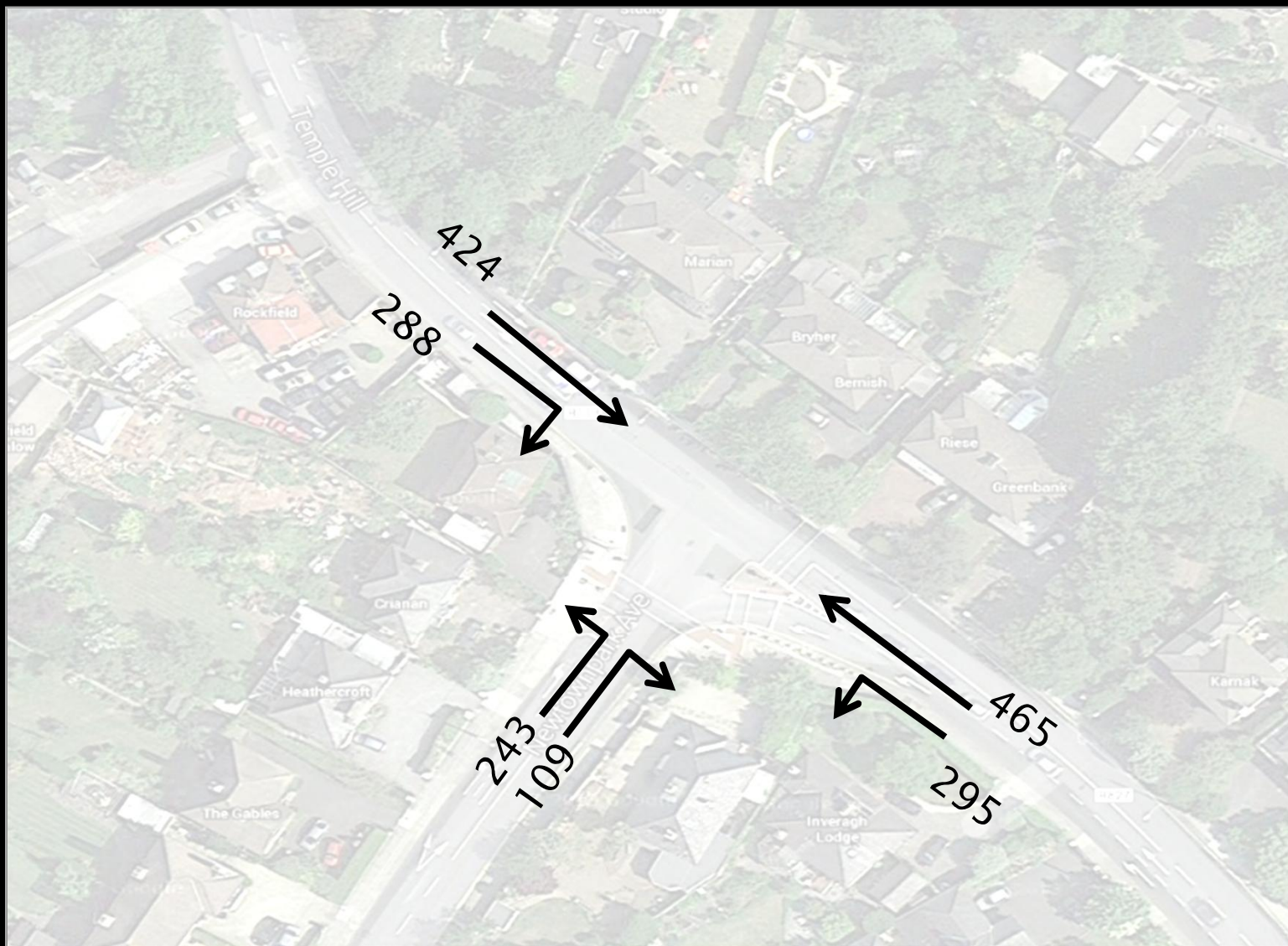
Current layout is not adequate....



Current layout is not adequate....

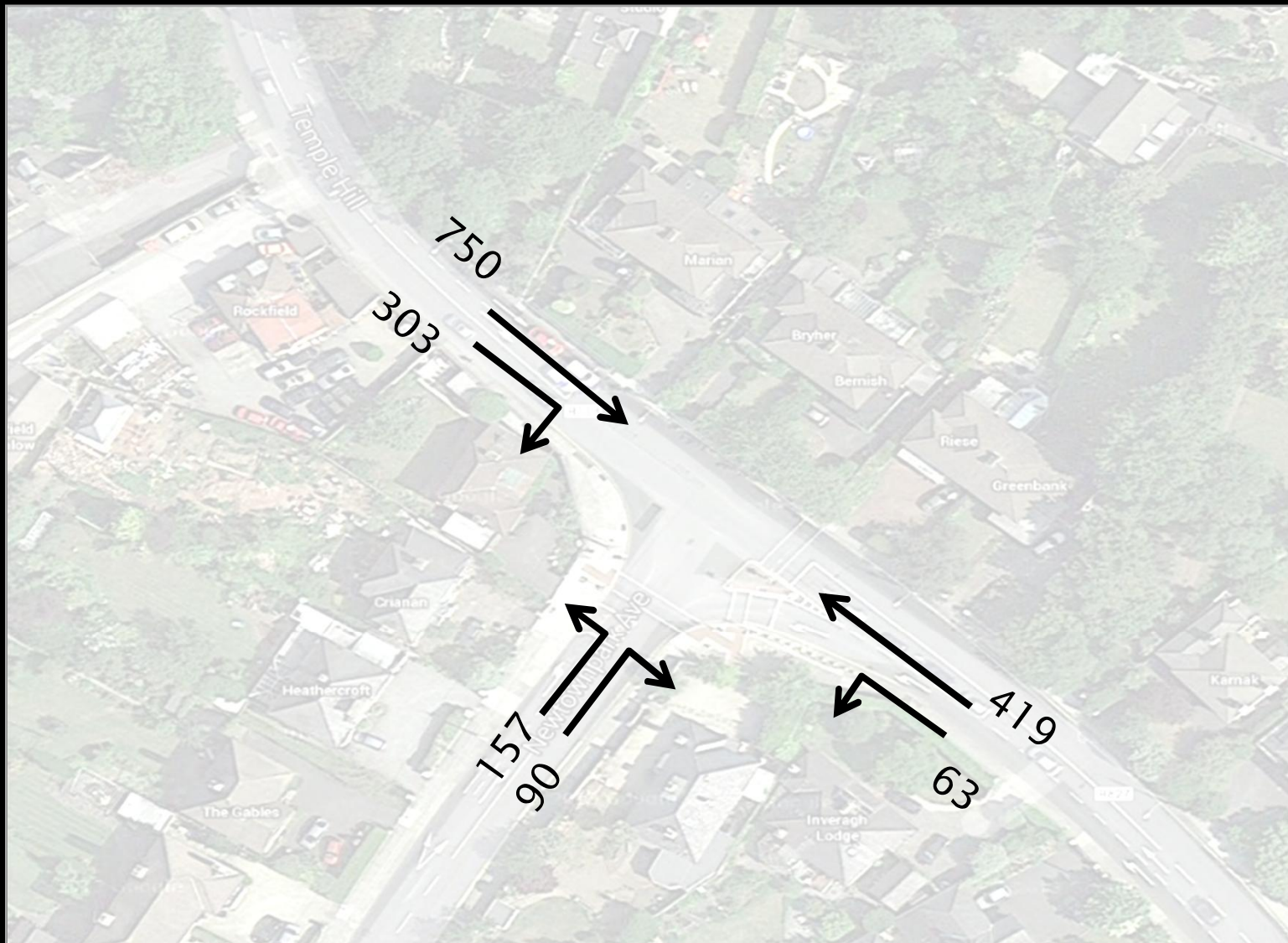


Traffic Flows.... Morning



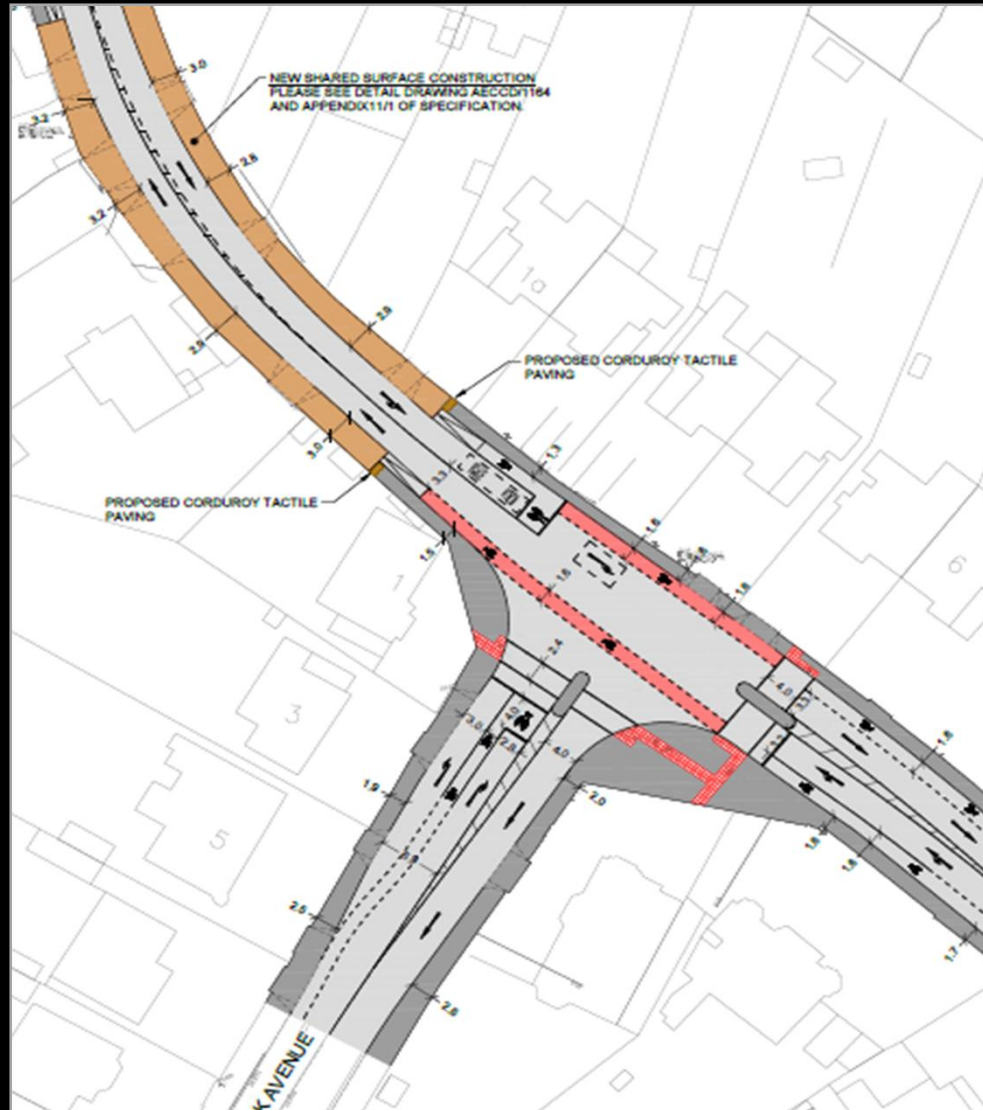
AM Peak 08.00 to 09.00, passenger car units/hr

Traffic Flows.... Evening



PM Peak 17.00 to 18.00, passenger car units/hr

Approved Layout



Key Differences :

- Removal of dedicated southbound RIGHT turning lane from the Temple Hill approach.
- Removal of left turning pocket on Stradbroke Road.

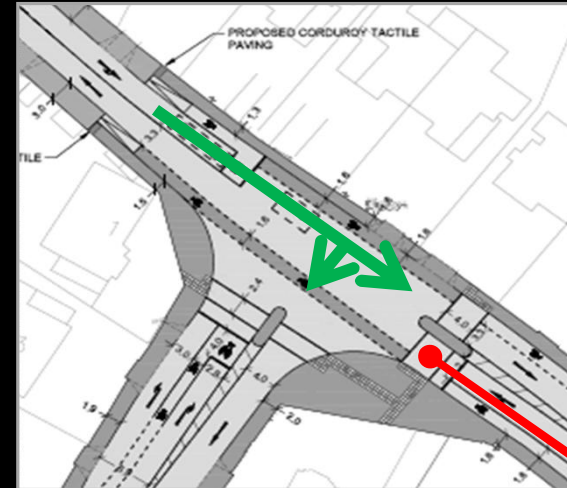
Traffic Impact :

The removal of the southbound traffic lane reduces the capacity of the junction and will result in increased congestion.

Alternatives considered:

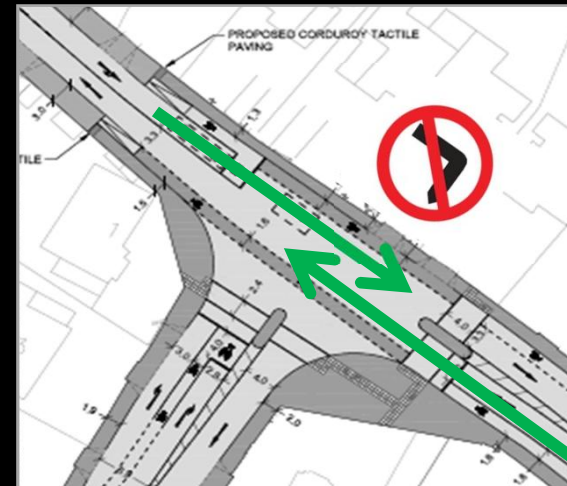
Option 1

All existing traffic movements permitted with the signal staging altered.



Option 2

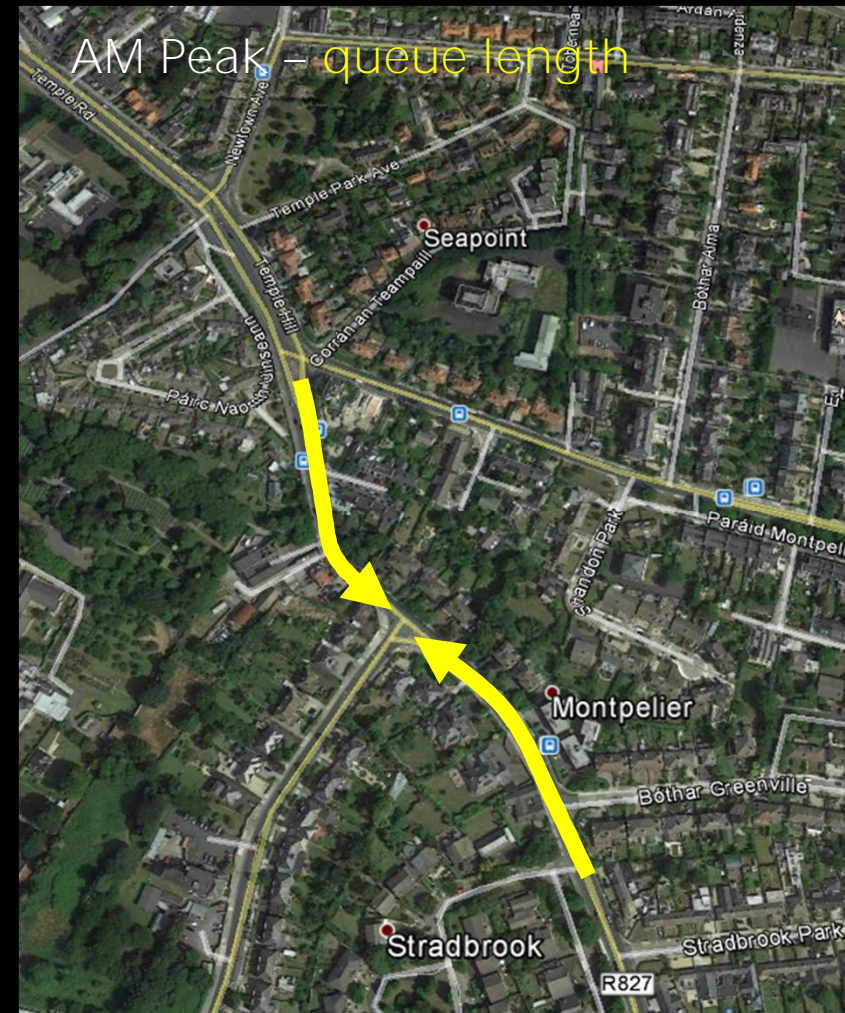
Right turn ban for traffic travelling southbound, away from Blackrock.



Option 1 All movements permitted:

Main Features

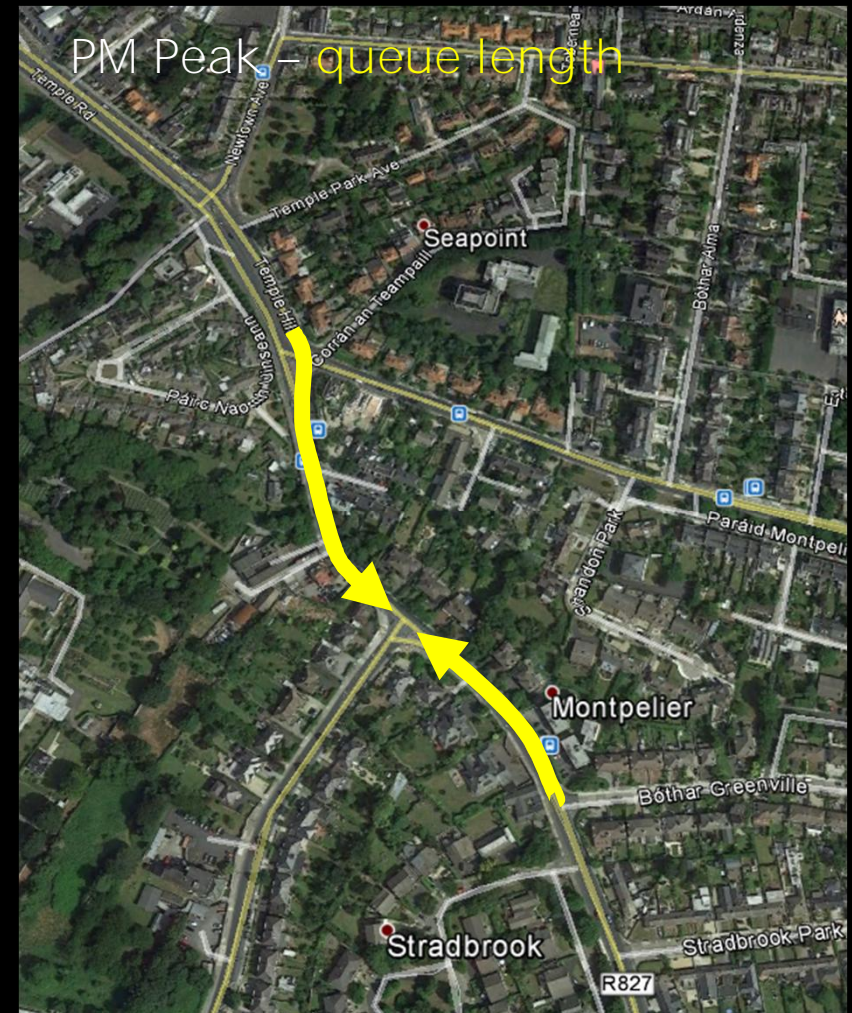
- Traffic will more or less continue to use the junction as they do at present.
- The traffic signals will be altered so that each arm of the junction will get a green signal in turn.
- Congestion will be significantly increased from that currently experienced.
- Refer to Queue length representation for AM peak



Option 1 All movements permitted:

Main Features

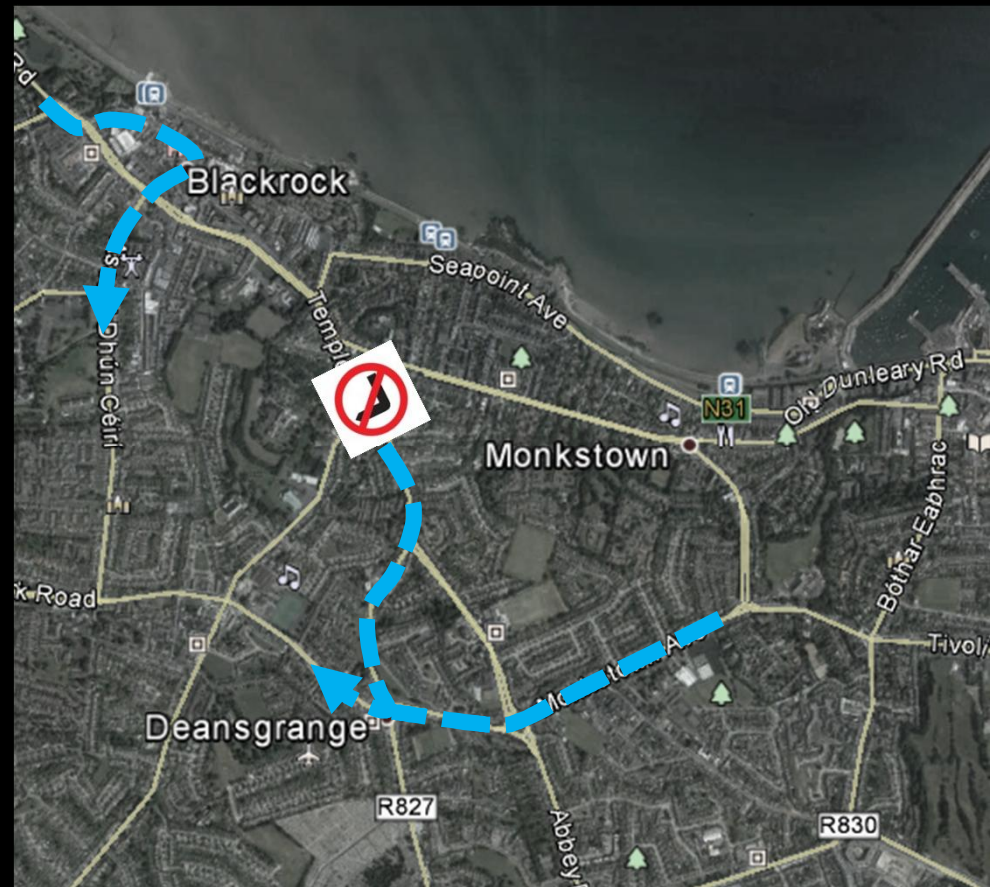
- Traffic will more or less continue to use the junction as they do at present.
- The traffic signals will be altered so that each arm of the junction will get a green signal in turn.
- Congestion will be significantly increased from that currently experienced.
- Refer to Queue length representation for PM peak



Option 2 Right turn banned:

Main Features

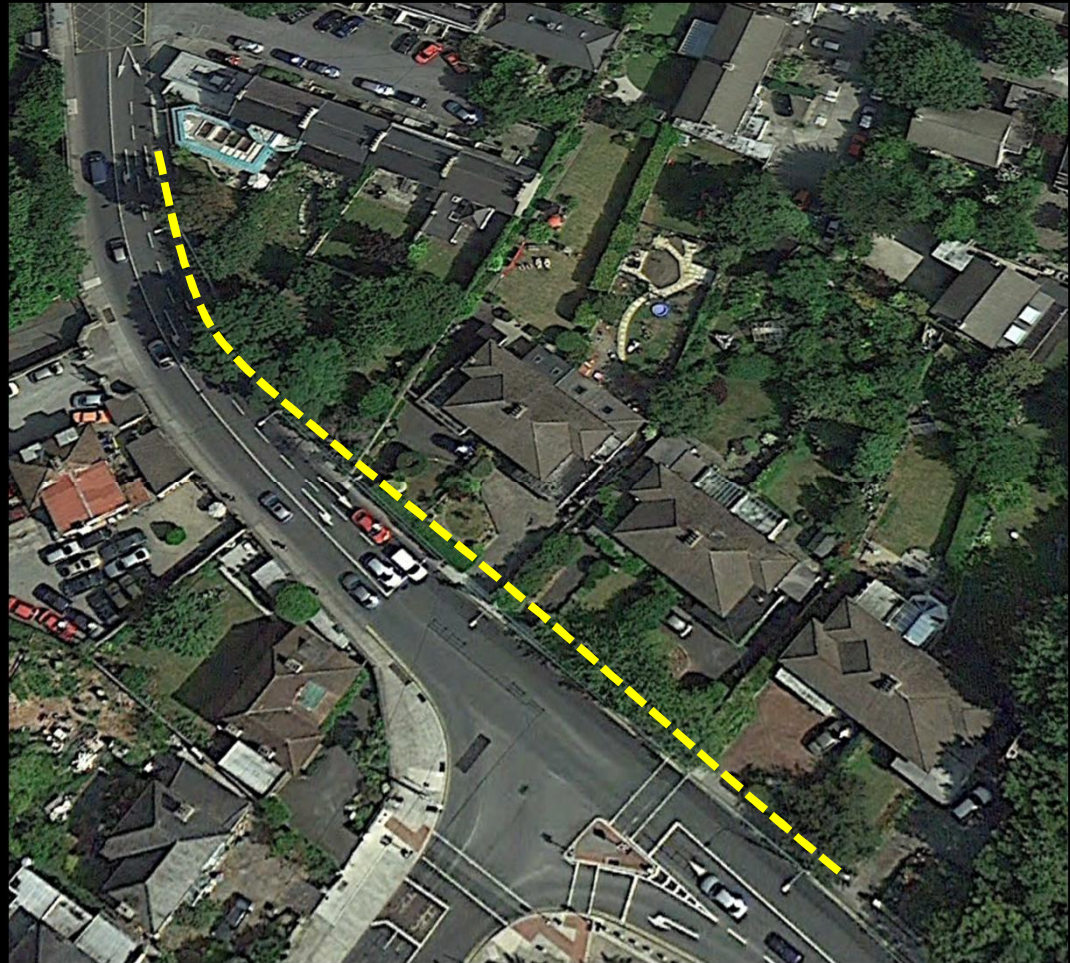
- Traffic turning right to Newtown Park avenue, coming from Blackrock, will have to find an alternative route.
- The junction will operate better than it does at present as right turning vehicles can occasionally block the narrow lanes.
- Increased traffic onto diversion routes (adjoining routes)



Alternatives Considered:

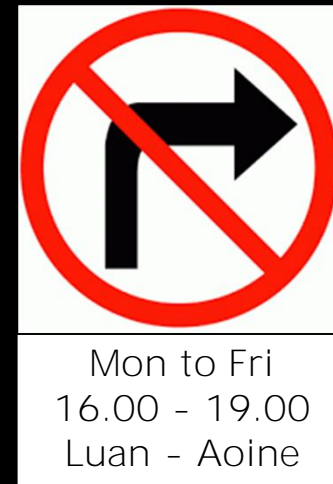
Widening the street to provide right turn lane.

- Would require significant widening on the eastern side of the street.
- Houses are at a much higher level than the road. The setting back of the road would mean access would be difficult if not impossible to achieve.
- Not a viable alternative.



Conclusion and recommendation

1. In the context of the importance of this right turn movement for the local community it is proposed to implement a compromise between both of the options:
 - A. All traffic movements will be permitted for most of the day as per Option 1.
 - B. The right turn will be banned during the afternoon peak, between 4pm and 7pm, Monday to Friday.



Conclusion and recommendation

2. The right turn will need to be banned for the duration of the works in and a round Newtownpark Avenue/ Temple Hill.
3. Advanced warning signs will be put in place to highlight the ban on a daily basis, with the additional signage provided over the length of the Frascati Road approach for a period after implementation.
4. Some improvement to junction timings and lane lengths will be made to the diversion routes as a result of the ban.

