

N76 Grangemockler

Road Safety / Pavement Scheme

- ▶ Process Involved
- ▶ Scheme Delivery & Identified Delivery Issues
- ▶ Lessons Learned

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Process Involved

N76 Grangemockler Scheme

► *Scheme Initiation - History & Need*

- Based on Network Pavement Survey, TII Network Management allocated funding for HD28 site within village centre in 2019 with FWD Level 1 & Level 2 reports completed in June 2019.
- N76 Grangemockler village was previously subject to Traffic calming in 2003, however traffic within village has not slowed down to desired speed levels on the village approach and within the village centre. The speeds has been measured and identified as excessive.
- Traffic counts and speed data recorded by TCC in November and December 2018 showed 85th percentile speeds of: 66-67kph in centre of the village (50kph zone), 71-74kph at gateway and 85kph at 200m outside of speed zone (100kph speed limit).
- Review of traffic collisions data indicated four collisions between the period of August 2014 to October 2018 within the site. These have been described as two “non-serious” injuries and two “material” injuries. Each collision occurred at a different location and it was not possible to determine a pattern for these collisions.
- Road Safety Inspection identified issues related to no effective narrowing of the road at the village gateways carriageway to slow traffic, substandard provision of pedestrian crossings in term of number of crossing points provided within village and unregulated parking in the vicinity of existing pedestrian crossing.



Process Involved

N76 Grangemockler Scheme

► *Scheme Initiation - Timeline*

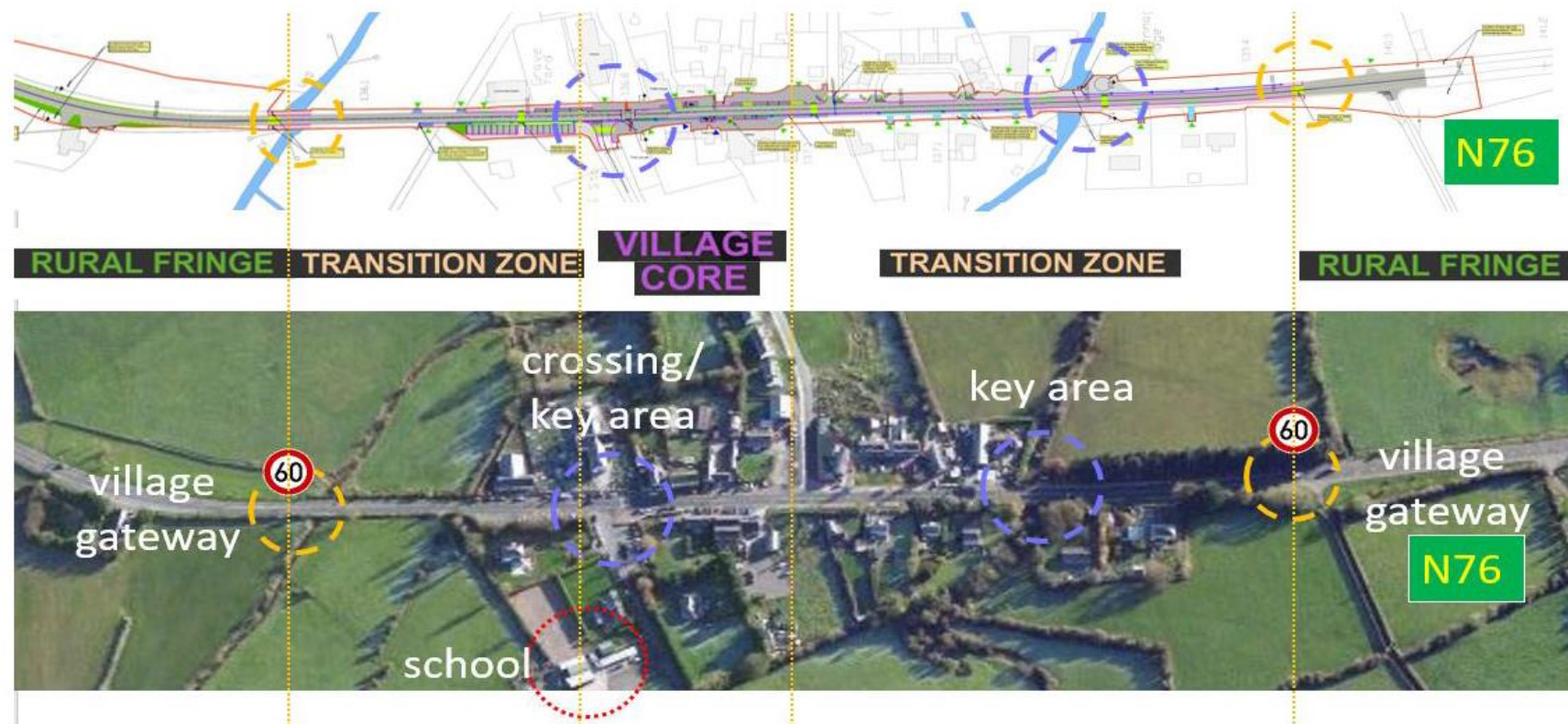
- **September 2019**, TCC appointed THRDO as Designer for a Pavement scheme (PARR Scheme).
- **November 2019**, within an effort to address identified RSI issues, further traffic and pedestrian counts & analysis were undertaken for the scheme.
- Up to **early 2020** the scheme was designed as a pavement scheme (PARR Scheme), ie pavement inlay/overlay with footpath repair and at this point TII advised TCC that the Road Safety Improvement Scheme (RSIS within N76 Grangemockler village), should be progressed in conjunction / parallel with proposed pavement scheme.
- As a result of this decision to combine **pavement & safety scheme**, there was a requirement to submit a **Feasibility and Options Report and Preliminary Design Report** for approval.
- TII identified the use of the Grangemockler scheme as a pilot scheme for the preparation of Guidelines for **RSIS in urban areas (DN-GEO-03030)** & **The Treatment of Transition Zones to Towns and Villages on National Roads (DN-GEO-03084)** that were developed at that time.
- **Landscape Architect** was appointed by TII to prepare landscaping designs which resulted in a revisit to the design to upgrade types of materials used in footpaths, extents of footpaths, introduction of new street furniture and extensive landscaping.



N76 Grangemockler Road Safety / Pavement Scheme

The following key context areas were identified in the Village.

- Rural Fringe
- Transition zone
- Village Core



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GRANGEMOCKLER

Context

Grangemockler is located to the east of the County and is identified as a Local Service Centre in the County Development Plan.

Infrastructure

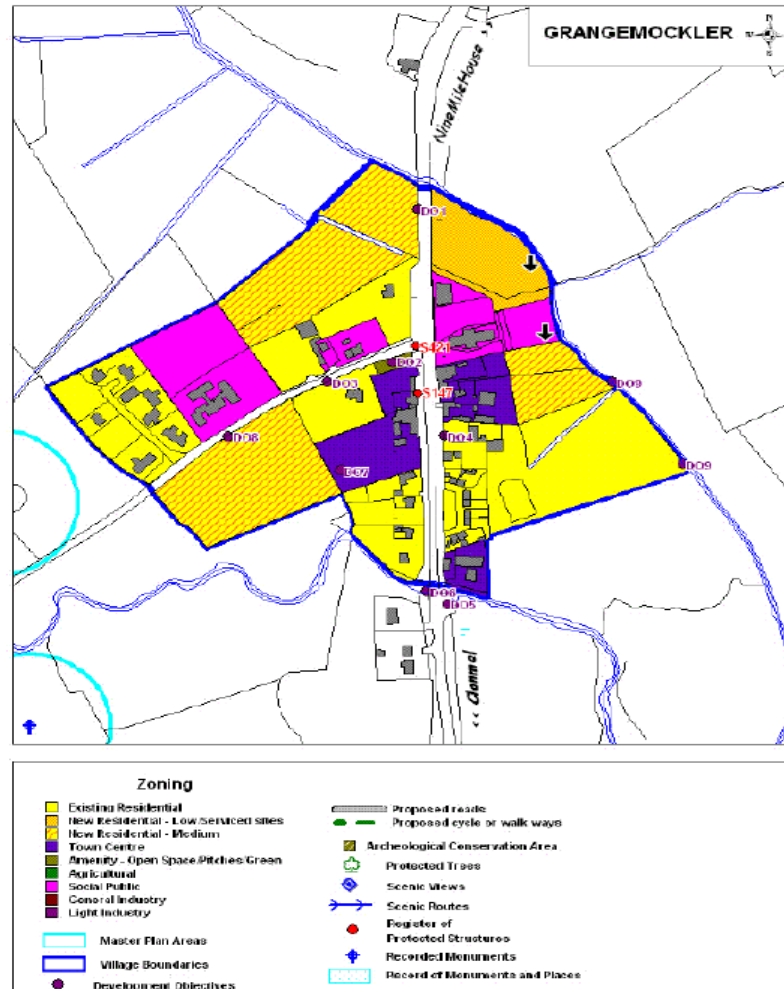
Water Supply: There are water supply difficulties; there is a need to upgrade to Clonmel Town and Rural Water Supply Scheme. Specific upgrading works may be required to accommodate new developments.

Waste Water: There is no municipal waste water treatment plant in Grangemockler, any proposal for a treatment plant will need to be to an agreed standard to minimize risk to the receiving environment.

Development Objectives

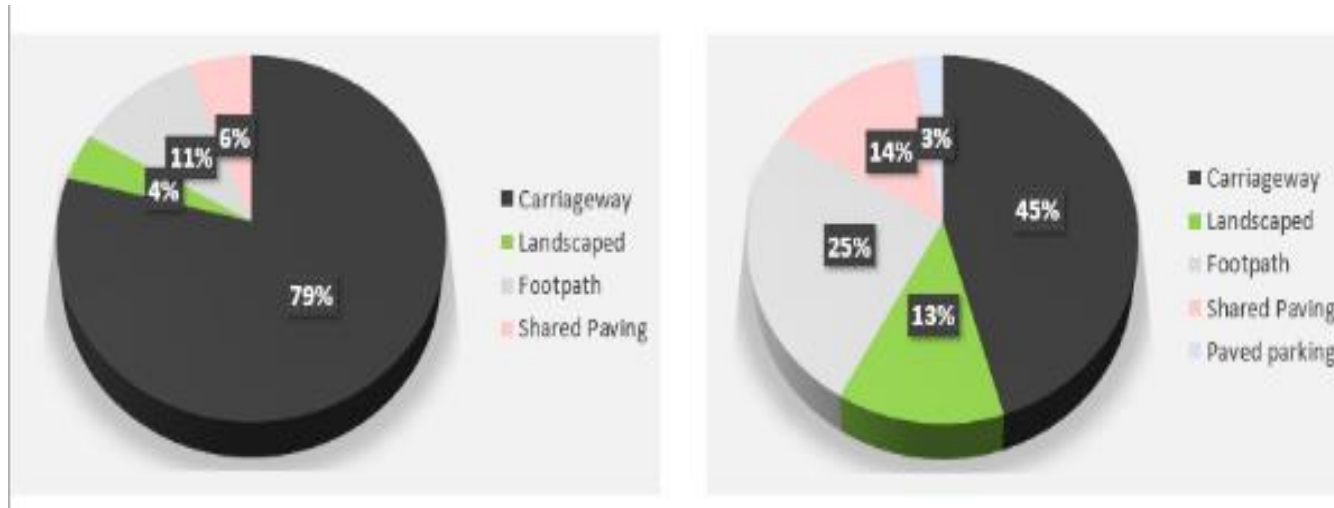
New development in Grangemockler shall respect the nature and scale of the village and shall adhere to the following specific objectives:

- DO1 Provide pedestrian path and setback of roadside boundary between the bridge and the community hall on both sides of the public road in conjunction with new development.
- DO2 Provide tree planting on the carriageway edge and enhance the visual appearance of the car park.
- DO3 Provide a new pedestrian path between the car park and the National School and a new pedestrian crossing at the school as opportunities arise.
- DO4 Provide new elements of streetscape as opportunities arise in order to improve visual enclosure and definition of the village centre.
- DO5 The Council will seek to improve the visual appearance of this area of the village and will replace the paved lay by with soft landscaping and tree planting.
- DO6 As opportunities arise the Council will seek to provide a new wall or appropriate decorative railing to the bridge.
- DO7 The Council will seek the removal of abandoned cars as opportunities arise and seek the suitable redevelopment of the lands for appropriate village centre uses.
- DO8 Provide a new set down area and car parking for the National School in conjunction with new development.
- DO9 Retain an undisturbed buffer between the SAC and future development.
- DO10 As opportunities arise the Council will seek the enhancement of the visual amenities of the village and the provision of a village centre focal point.
- DO11 As opportunities arise the Council will require the development of a linear riverside park as part of development on lands adjoining the Lingaun River.



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The proposed scheme reallocates space from motorised users to vulnerable road users groups within the village. The substantial increase in space available to pedestrian and other vulnerable road users are indicated below



Area breakdown for existing (LHS) and proposed (RHS) layouts.



Scheme Delivery & Identified Delivery Issues

N76 Grangemockler Scheme

► *Scheme Delivery - Timeline*

- PARR report was prepared and submitted for TII approval in **December 2020**.
- Feasibility and Options Report (F&O) report was approved by TII in **January 2021**.
- Preliminary Design Report (PDR) was approved by TII in **March 2021**.
- Part 8 Report & AA/EIAR screening advertised **May 2021**, during Covid restrictions.
- **18 Part 8 written submissions**, mainly related to parking proposals and perceived loss of parking (designed parking bays and provided footpaths along village).
- **Minor modifications** were made to Part 8 Report design layout which was approved by the District Council in **July 2021**.
- Design finalised in **December 2021**, scheme tendered in **March 2022** & contract signed in **June 2022**.
- Construction commenced in **July 2022** and Substantial Completion expected in **June 2023**.



Scheme Delivery & Identified Delivery Issues

N76 Grangemockler Scheme

► *Scheme Delivery - Identified Delivery Issues*

- **Slit trenching** carried out in **August 2020** indicated the need for further **CCTV and GPR investigation** for N76 Grangemockler (contracted **early 2021**).
- **Number of identified issues with existing Pavement Investigations** and FWD reports accuracy within centre of the village had to be addressed during construction.
- **Number of identified issues with existing overhead and underground services** had to be addressed during design & construction with external parties involved (ESB, Eircom).
- **Limited resources in respect of Landscape design within TII / RDO's**. Landscape Architect had to be appointed to prepare hard and soft landscaping designs. This decision resulted in a extensive landscaping design, numerous iterations in preparation of the detailed design and number of design reviews between THRDO/TCC/TII/Landscape Architect.
- **Radii at junctions** (6m used as per section 4.3.3 of DMURS) are very tight for larger vehicles & already there are evidence of over run onto footpath kerbs.
- **Maintaining level footpath across entrances** causing concern for property owners & requires introduction of more drains.
- **Use of bevelled kerbs during construction**, proved difficult with cars bottoming out on them.



N76 Grangemockler Road Safety / Pavement Scheme



N76 Grangemockler - Before



N76 Grangemockler Road Safety / Pavement Scheme



N76 Grangemockler - Proposal



N76 Grangemockler Road Safety / Pavement Scheme



N76 Grangemockler - Now



Lessons Learned

N76 Grangemockler Scheme

► *Lessons Learned - potential issues*

- Necessary to identify RSI issues at the very start of scheme to avoid delays, programme & budget overruns and agree level of intervention between Client/TII.
- Robust cost estimate must be taken through all design stages as Treatment of Transition Zones and urban regeneration with upgraded quality of materials significantly increase scheme cost.
- Significant increase in need for detailed Pavement, Traffic, Drainage, CCTV etc. investigations
- Close cooperation needed with service providers within the urban section of National roads.
- Limited resources in respect of Landscape design within TII / RDO's / Consultants.
- There is limited understanding of Landscape design needs from Engineering perspective & limited understanding of Road/Safety design needs from Landscaper perspective.
- Landscaping related to Treatment of Transition Zones will take significant amount of time to reach it's full potential (36 months for Landscape Maintenance included in contract) and there is a need for further monitoring, potential stage 4 RSA and potential interim measures.
- Initial impression is that Traffic within village has not slowed to desired speed although the temporary speed limit 60 is still in place on the village approaches and TCC planning additional speed survey over next few weeks.



Lessons Learned

N76 Grangemockler Scheme

► *Lessons Learned - positive outcomes*

- The scheme is generally well received
- The scheme met all development planning objectives
- Village amenities and focal points are better connected
- Vulnerable Road Users facilities are significantly improved
- Provided shared facilities and more inviting environment for cyclist and pedestrians
- Provision of sheltered bus stop increase attractiveness for public transport use
- Village centre visual appearance is significantly improved...
- “it looks very well”



Grangemockler



Grangemockler



Lessons Learned

N76 Grangemockler Scheme

▶ *Lessons Learned - positive outcome*

- However we still get comments about ‘destroying’ Grangemockler from few...



THANK YOU



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