

# **TII Publications**



















#### About TII

Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

#### **About TII Publications**

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical).

#### **Document Attributes**

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference.

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#### **TII Publications Website**

This document is part of the TII publications system all of which is available free of charge at <a href="http://www.tiipublications.ie">http://www.tiipublications.ie</a>. For more information on the TII Publications system or to access further TII Publications documentation, please refer to the TII Publications website.

#### TII Authorisation and Contact Details

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### **TII Publications**



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### 1. Implementation

### 1.1 Implementation

This Standard covers departures from all the mandatory requirements of TII Publications (Standards) and shall be known as GE-GEN-01005 Departures from Standards. It shall be used for the design of all roads affected by National Road Projects. The January 2019 version includes changes relating to the re-launch of the on-line TII Departures system and includes clarification of the submission and approval process.

A number of TII Standards contain within them provision for relaxations where experience has shown that certain requirements may be varied within defined limits in particular situations. In these situations, a Departure is not required. However, any further variation beyond these limits requires a Departure. Where circumstances arise where the application of the technical requirements of TII Publications (Standards) are not appropriate, Designers may come forward with Departures which go beyond Relaxations to propose additional criteria (for aspects not covered by existing documents) based on a reasoned assessment. All proposals for Departures must be submitted to TII in accordance with this document for consideration on their merits. Proposed Departures must demonstrate that safety, operational effectiveness, design life and whole life cost are not compromised.

Designers must ensure that any proposal involving a Departure from technical requirements is formally approved by TII prior to incorporation into the design and works.

All Departures shall be submitted by or on behalf of the road authority in line with the requirements of the TII Project Management Guidelines (PE-PMG-02041) and Project Manager's Manual for Major National Road Projects (PE-PMG-02042). Departures will not be given for National Road Projects that are not compliant with current Department of Environment, Community and Local Government policy on access to National Roads (<u>Guidelines for Planning Authorities</u>).

The TII Departures system can only be used for National Road Projects. If TII Standards are used for the design of Regional and Local Road Projects, the Designer shall agree with the relevant road authority the extent to which the documents are appropriate in any particular situation.

#### 1.2 Non-conformance

Departures from the mandatory requirements of TII Publications (Standards) must be formally approved by TII prior to incorporation into the Design and Works. Approval cannot and will not be given retrospectively for Departures identified at a later stage. In the event that it is discovered that Works have been carried out without approval having been sought or granted for the incorporation of any feature that should have given rise to a Departure, the organisation that would have been responsible for the Departure application (had it been made at the correct time) must promptly notify the Overseeing Organisation with proposals for addressing this non-compliance.

### 2. Definitions

**National Road Projects**: All works on National Roads that involve new road construction or permanent change to the existing road layout promoted by TII, a road authority or others.

**Employer**: The organisation managing the various phases of scheme preparation and supervision of construction or as defined in the Contract.

**Employer's Representative**: The Engineer or other person appointed by the Employer as its representative in accordance with the Works Contract.

**Designer**: The Design Team undertaking the various phases of scheme preparation or supervision of construction.

**Applicant**: The Designer at the particular phase of the scheme when the Departure is required.

**Overseeing Organisation**: For National Road Projects the Overseeing Organisation is TII. Where the scheme is not on a National Road, then the appropriate overseeing organisation shall be substituted for TII.

**Departure**: A Departure from the mandatory requirements of TII Publications (Standards) submitted in accordance with this document.

**Approved Departure**: An approved Departure shall be considered as meeting TII's requirements for that element of the works provided that any mitigation measures proposed by the Designer or conditional to that approval are also incorporated into the design and works.

**Refused Departure**: Where the decision of TII is that the Departure proposed is unacceptable.

**Rejected Departure**: Where insufficient, inappropriate or contradictory information has been submitted as part of the Departure Application and it is not possible to form a conclusive decision to Approve or Refuse the application further information may be required.

**Minor Improvement Scheme**: As defined in DN-GEO-03030 Guidance on Minor Improvements to National Roads.

## 3. Departures

A Departure shall mean any of the following:

- a) A Departure from any of the mandatory requirements of TII Publications (Standards);
- b) The use of technical design standards and/or specifications other than those in TII Publications (Standards);
- c) The use of a set of requirements or additional criteria for any aspect of the Works for which requirements are not defined in the Contract;
- The use of a technical design standard or specification in a manner or circumstance which is not permitted or provided for in such directive or specification;
- e) A combination of any of the criteria specified above.

While the Approval of a Departure shall be considered as meeting TII's requirements for that element of the works (provided that any mitigation measures proposed by the Designer or conditional to that approval are also incorporated into the design and works), the following should be noted with respect to Approved Departures:

- a) The approval of an application in no way precludes TII from requesting that certain safety measures be carried out at a future date in relation to the approvals given.
- b) The approval of a Departure, with or without comments, does not imply that TII relieves the Designer of any responsibility for the design;
- c) Departures are approved on a location-specific basis and relate to the particular circumstances identified in each submission. A similar Departure approval may be quoted to support a new application, but each case will be considered on its own merits;
- d) TII may allow "bulk" Departures (when the same non-standard method or material is proposed for use at more than one location) in certain, clearly defined circumstances.

The following are variations that are not considered as constituting a Departure from Standard:

- a) Suggestions/Recommendations within TII Publications (Standards);
- b) Relaxations these need to be recorded in the Departures Report, but a formal application does not need to be completed.

# 4. Submitting a Departure

All Departures, are to be digitally inputted on the TII Web-based Departures Database at <a href="https://dfs.tii.systems">https://dfs.tii.systems</a>. Access is also provided through the TII portal at <a href="https://web.nra.ie/index.html">https://web.nra.ie/index.html</a>. Applicants are required to pre-register by email to <a href="mailto:infoDEPS@tii.ie">infoDEPS@tii.ie</a> prior to inputting Departures. Applicants shall be one named individual working on behalf of the Designer for the applicable stage of the road scheme.

Global co-ordinates shall be included for each separate element included in an electronically submitted Departure, where the most appropriate point along the length of each element is located by co-ordinates, or in the case of scheme-wide Departures, the start chainage for the works on the designed centre-line of the road.

Applicants should allow a **minimum** of three weeks from receipt of applications by TII to notification of decision. This will take longer for larger schemes with a large number of applications – especially during the Design & Build (D&B)/Public Private Procurement (PPP) tender process where there may be multiple sets of Departure requests. The time taken to assess Departures will depend on the number of applications, the quality of information submitted and scheme priority. Accordingly, applications should be submitted as early as possible so as to avoid delays.

If a scheme with a large number of applications is to be submitted, advance notice should be sent to the TII Publications (Standards) Section (<a href="mailto:infoDEPS@tii.ie">infoDEPS@tii.ie</a>) in order that the applications can be dealt with as swiftly as possible. In the case of D&B or PPP schemes, information contained in the Contract Documents regarding the submission of Departures should be forwarded to the TII Standards Section for information: this applies in particular to the timetable for submission of Departures during the tendering process.

### 4.1 Design Stage

During development of the design, the Designer may seek a Departure in one of the following situations:

- where it can be justified that a requirement of a Standard is inappropriate in a particular situation due to site constraints, environmental conditions;
- where the application of a Standard would have unintended adverse consequences;
- where innovative methods and/or materials are to be used that are not covered by existing Standards;
- where an alternative Standard might be adopted if more appropriate in a particular situation;
- where an aspect not covered by Standards is identified.

Departure applications must identify the need for the Departure and provide full justification for the proposed solution. Departures must demonstrate that the safety of the public, operational effectiveness and design life are not compromised by implementation of the Departure.

Preliminary Design Departures are to be submitted to TII on the TII Web-based Departures Database a minimum of two months prior to incorporation into the design, and well in advance of the finalisation of the land-take line for Statutory Planning Procedures/Tender Stage. Preliminary Design Departures submitted after the date of statutory process may infringe on lands outside of the CPO and will be considered on merit only.

When the Designer proposes to specify Works Requirements that require the approval of a Departure, these should be applied for and obtained before incorporation into the Contract Documents.

#### 4.2 Minor Improvement Schemes

**DN-GEO-03030** includes design principles and requirements for Urban Schemes, Minor Improvement Schemes and Road Safety Improvement Schemes. An important requirement of DN-GEO-03030 is the preparation of a Preliminary Design Report, including reference to Relaxations and Departures from TII Publications (Standards). Refer to DN-GEO-03030 for confirmation of all information to be contained within such Preliminary Design Reports.

All proposed Relaxations and Departures for schemes prepared using DN-GEO-03030 shall be identified by the relevant road authority and organised as one single Departure application for each scheme (excluding Departures relating to TII specifications and pricing documents which shall be submitted separately to TII for approval as appropriate). This single Departure shall be submitted to TII through the TII Departures Database for approval as per the requirements of this standard.

The DN-GEO-03030 Preliminary Design Report (in draft form) shall form part of the Departure application and shall be submitted as an attachment to the Departure application. The draft DN-GEO-03030 Preliminary Design Report shall separately be sent to the TII Inspector for the scheme.

Both the single Departure application and the draft DN-GEO-03030 Preliminary Design Report shall be submitted to TII through the TII Web-based Departures Database a minimum of **two months prior** to incorporation into the final design, and well in advance of the finalisation of the land-take line for Statutory Planning Procedures/Tender Stage. Departures under DN-GEO-03030 submitted after the date of statutory process may infringe on lands outside of the CPO and will be considered on merit only.

The TII Standards Section will Approve, Refuse or Reject all Departures submitted to TII through the TII Departures Database. The TII Standards Section may also **refuse** the draft DN-GEO-03030 Preliminary Design Report if the draft DN-GEO-03030 Preliminary Design Report, and corresponding Departures, are not considered to comply with the requirements of DN-GEO-03030.

### 4.3 Tender Stage

During the D&B Tender Process, Tender Stage Departures are **not** to be entered onto the TII Webbased Departures Database. Instead, an email **including the Word version of the Departure applications**, drawings, calculations and any other relevant information of all the Departure applications should be emailed to both the Employer's Representative and the TII Standards Section at <a href="mailto:infoDEPS@tii.ie">infoDEPS@tii.ie</a>.

A hardcopy of the Departure applications, including drawings, calculations and any other relevant information shall also be submitted to the **Employer's Representative**. This submission shall include a cover letter and a hardcopy print of the Departure Application Forms.

The Employer's Representative prepares comments on the Tenderer's Departure applications using the Tender Comparison Table attached in Appendix C and forwards these to the TII Standards Section (infoDEPS@tii.ie) within 7 days of receipt of the reports.

During the Tender Phase, a PDF copy of the decision will be emailed to the Employer's Representative as appropriate. The Employer's Representative shall confirm the decision of TII to the Applicant, the road authority and the TII Engineering Inspector as appropriate.

#### 4.4 Construction Phase

Construction Departures are to be digitally inputted on the TII Web-based Departures Database at <a href="http://www.tiipublications.ie">http://www.tiipublications.ie</a> by the Contractor.

During the Construction Phase, a PDF copy of the application will be emailed directly by the web-based database to the Employer's Representative as appropriate.

A corresponding hardcopy of the Departure applications, including drawings, calculations and any other relevant information, are also to be submitted by the Contractor to the **Employer's Representative**.

The Employer's Representative shall prepare comments on the Applicant's Departure applications and forwards these comments to <a href="mailto:infoDEPS@tii.ie">infoDEPS@tii.ie</a> within 7 days of receipt of the reports. All comments are to relate to the Contractors Reference number as well as the TII Web-based Database reference number.

During the Construction Phase, a PDF copy of the decision will be emailed to the Employer's Representative as appropriate. The Employer's Representative shall confirm the decision of TII to the Applicant, the road authority and the TII Engineering Inspector as appropriate.

Departures will be processed as quickly as possible during the Construction Stage/Detailed Design; however, as in all cases, a minimum of three weeks should be allowed for processing of applications.

# 5. Departure Decision Process

The decision of TII in relation to each Departure Application shall be one of the following:

- Approve the Departure;
- Refuse the Departure; or
- Reject the Departure.

Departures once submitted cannot be withdrawn. Under no circumstances will a Departure be retrospectively approved.

All Departures are submitted to the relevant section of TII for comments and shall be processed as appropriate. All queries relating to current Departures are to be emailed to <a href="mailto:infoDEPS@tii.ie">infoDEPS@tii.ie</a>.

All comments/recommendations are recorded in the database and approval and refusal numbers are assigned as appropriate and are digitally sent to the Applicant via the TII web-based database.

Approvals, once issued electronically, are deemed to have been signed by the TII Director of Professional Services.

## 6. Details Required

The following details shall as a minimum be included in all Departure reports:

- A short description of the scheme, including details of the type of contract, the stage the scheme is at and other background information. The outcome of any Safety Audits and Statutory Processes should also be detailed if applicable. For schemes prepared using DN-GEO-03030, the Preliminary Design Report shall form part of the Departure application.
- Road authority agreement: If a third party is submitting a proposed Departure, details of the road authority's agreement to the proposed Departure, and to it being submitted on the road authority's behalf, should be submitted.
- A Departure Application Form (as printed from the Departures Website for each individual application). The application should contain sufficient detail to enable a recommendation to be made on the application. It is particularly important that the 'Justification' section is fully completed, and a detailed reason given why the Departure is being sought. If alternative designs have been considered in order to avoid the Departure, these should be outlined. Proposed compensatory measures should also be outlined where applicable.
- A detailed drawing for each Departure showing plan and long section (in all cases), so geometric details can be ascertained. This drawing should also show (with dotted lines or different colours) how the area of the scheme would look if the correct standards were applied. The drawing should clearly show the scale used. This enables the reviewer to see the difference between standard and sub-standard design and to understand more clearly the justification for the Departure.
- **Drawing(s) of the entire scheme** (at min scale of 1:10000), so the reviewer can see how the Departure fits in with the overall scheme.
- Contact details for the Employer's Representative and/or who to contact for further information.
- If an application does not contain sufficient information for assessment, then the Departure will be rejected; a subsequent time-frame for assessment cannot be guaranteed. A 'Departure Application Checklist' has been provided in **Appendix B** which should be completed and returned with the Departures Report.
- The authority's book.

### 7. References

GE-INT-01029: Introduction to the TII Publications System

DN-GEO-03030: Guidance on Minor Improvements to National Roads

PE-PMG-02041: Project Management Guidelines

PE-PMG-02042: Project Manager's Manual for Major National Road Projects

Appendix A:

Departure Application Form

# Application for a Departure from the TII Design Manual for Roads and Bridges during the Tender Stage Only

# Application for a Departure from TII Publications (Standards)

Includes all documents classified as Standards on <a href="https://www.tiipublications.ie">www.tiipublications.ie</a> including the Requirements for Measuring and Pricing (RMP)

	and moning (min )								
General Information for Application No:									
Route Number:	Scheme:	Contract Type:							
Design Speed:	Traffic Flow and Composition (if appli	cable):							
km/h	Approx (Design Year)								
Carriageway Type / Road Cross Sect	ion:								
Applicant Information:									
Applicant Name:	Contact Person and Contact Details:								
	Name:								
Applicants Departure Reference No:	Email:								
Departure Information:									
Departure Location and Chainage (as	s relevant):								
Departure Category:									

Departure Type:
Standard Required by relevant TII Publications (Standards):
Standard Provided/ Amendment to the RMP:
Departure Justification/ Reason for Amending the RMP:

Other Departures or Relaxations at same location/ Amendments to the RMP for the same scheme:
Additional Information:
Additional information.
TII Publications (Standards) Document:
THE ablications (Standards) Document.
TII Publications (Standards) Paragraph/Table/Figure:

Comments:	
Supporting Documentation:	
Status:	

Appendix B:

**Departure Application Checklist** 

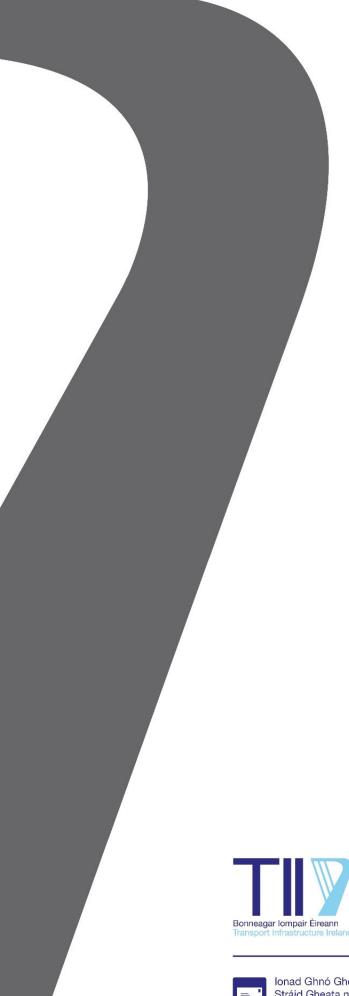
General:	Yes/No					
Has the Cover Sheet for the Departure Report been completed?						
Is it clear who the Employer is and who the official response should issue to?						
Has sufficient background information been given to ascertain the stage the scheme is at?						
Have any time constraints regarding receiving a decision on the application been outlined?						
Has the Road Authority been consulted?						
Application:	Yes/No					
Has an individual application form been completed for each Departure?						
Have the application form(s) been submitted via the TII Web-based Database?						
Has a plan and longitudinal section been provided for each geometry Departure?						
Does the drawing show how the area of the scheme would look should the correct standard be applied?						
Does the justification give sufficient information for a person not familiar with the scheme to be able to make a recommendation?						
Have any alternatives considered been outlined and shown on the drawings submitted?						
Have possible mitigation measures been outlined?						
D&B/PPP Schemes:	Yes/No					
Has the tendering timetable been submitted to TII Publications (Standards) Section?						
Has the full set been submitted to the TII Publications (Standards) Section?						
Have the structures Departures (Volume 2) been submitted directly to TII Structures Section?						
Has the Employer's Representative commented on all applications?						

Appendix C:

**Tender Comparison Table** 

Departure Location & Chainage	Departure Category and Classification	Departure Type	Details	Status	TII Reference	Application Comments	Bidder 1 (B1)	Bidder 2 (B2)	Bidder 3 (B3)	Bidder 4 (B4)	Bidder 5 (B5)	Specimen Design
e.g.												
Mainline and associated side roads	Drainage	Thermoplastic Structured Wall Pipes (HAPAS 02/H068)	HAPAS Cert 02/H068			This application is recommended for APPROVAL for pipes and fittings other than those included in Table 5/2 provided that they hold a current Irish (or British) Agrément Board Roads and Bridges Certificate (or equivalent) stating that they are a suitable alternative for the usage specified in Table 5/2.	Applicants Reference	SpecDes_D01				

Departure Location & Chainage	Departure Category and Classification	Departure Type	Details	Status	TII Reference	Application Comments	Bidder 1 (B1)	Bidder 2 (B2)	Bidder 3 (B3)	Bidder 4 (B4)	Bidder 5 (B5)	Specimen Design
						They shall comply with all other requirements of Series 500 and with the standards and particular requirements therein and be of 100mm internal diameter unless otherwise described.						
Whole Scheme	Pavement	Reduction of PSV in HRA	PSV=40			This application is recommended for REFUSAL as a reduction in PSV has implications for skid resistance and cannot be considered.			Applicants Reference			







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