Standard

Infrastructure – General – Design and Drafting

Doc. No.: CE-019-ST-0020

Version: 1.11

Date: 30/11/2022







Disclaimer: This document is developed solely and specifically for use on Melbourne metropolitan tram network managed by Yarra Trams. It is not suitable for any other purpose. You must not use or adapt it or rely upon it in any way unless you are authorised in writing to do so by Yarra Trams. If this document forms part of a contract with Yarra Trams, this document constitutes a "Policy and Procedure" for the purposes of that contract. This document is uncontrolled when printed or downloaded. Users should exercise their own skill and care or seek professional advice in the use of the document. This document may not be current. Current standards are available for download internally from CDMS or from https://yarratrams.com.au/standards.



Infrastructure – General – Design and Drafting



Table of Contents

1	PURPOSE	3
2	SCOPE	3
3	COMPLIANCE	3
4	REQUIREMENTS	4
4.1	Infrastructure Design	4
4.2	Infrastructure Drafting	4
5	RELATED LEGISLATION & DOCUMENTS	5
6	DOCUMENT VERSION CONTROL	5

Document Number: CE-019-ST-0020

Version: 1.11

Date Published: 30/11/2022

Document Author: Dianne Banks Document Authoriser: Andrew Last Doc ID: CDMS-313846386-5024 Page 2 of 6



Infrastructure – General – Design and Drafting



DOCUMENT VERSION CONTROL

Version History	Date	Detail
1.0	12 Mar 2020	Original Issue
1.01	30 Nov 2022	Incorporates an update to NTS standards

RELATED LEGISLATION & DOCUMENTS

Name	Document number
EMS04 Manage Design Procedure	CE-021-PR-0005
EMS06 Engineering Change Management Procedure	CE-021-PR-0020
Network Technical Standard: DoT Infrastructure Drafting Standard (V4.0)	DOC/21/99272
Network Technical Standard: DoT Infrastructure Drafting Standard (V4.0) amendment sheet	
Network Technical Standard: Standards Framework	DOC/19/110188
Network Technical Standard: Drawing Management System Standard Processes	PTV-NTS-012: 2018

Document Number: CE-019-ST-0020

Version: 1.11

Date Published: 30/11/2022

Document Author: Dianne Banks Document Authoriser: Andrew Last Doc ID: CDMS-313846386-5024 Page 3 of 6





1 PURPOSE

The purpose of this standard is to describe the general requirements for production of infrastructure design and drafting documentation for the Yarra Trams network.

2 SCOPE

This standard shall apply to all infrastructure design and drafting activity performed within the Melbourne Metropolitan Tram Network (MTN).

This standard is applicable to all infrastructure design and drafting activity for the Yarra Trams network and any third parties or Contractors who undertake design activities for Yarra Trams.

When no detailed specification exists for a design or drafting document, the requirements described in this document shall be applied.

Produced drafting documentation shall include electronic drawings and documents.

Users of this standard should also refer to and apply relevant principles and requirements from industry standards, Australian Standards, International Standards and rail industry Codes of Practice.

3 COMPLIANCE

This standard shall be fully complied with.

Deviation from this standard is only permitted when a deviation has been formally requested and approved by the relevant Engineering Design Authority at Yarra Trams.

The Yarra Trams *Management of Change* process must be followed in all circumstances where change is proposed to this standard.

'Shall' statements are mandatory in the context of compliance with requirements stipulated in this standard.

'Should' statements are considerations in the context of compliance with requirements stipulated in this standard.

'Information' statements provide additional content for clarification purposes only and are not requirements in the context of compliance with this standard.

'So far as is reasonably practicable' statements must result in the provision of a risk assessment including proposed design controls to demonstrate compliance to this standard.

Any third party or contractor undertaking design and drafting activities on the Yarra Trams network shall complete and return a compliance schedule for this standard. Assessment of compliance shall be provided for each requirement, defined by one of three permissible responses:

- Compliant
- Non-Compliant

Document Number: CE-019-ST-0020

Version: 1.11

Date Published: 30/11/2022

Document Author: Dianne Banks Document Authoriser: Andrew Last Doc ID: CDMS-313846386-5024 Page 4 of 6



Infrastructure - General - Design and Drafting



5 REQUIREMENTS

5.1 Infrastructure Design

- 5.1.1 The Yarra Trams procedure EMS04 Manage Design Procedure [CE-021-PR-0005] shall be followed by all parties undertaking design for Yarra Trams, including consultants and contractors.
- 5.1.2 The Yarra Trams procedure EMS06 Engineering Change Management Procedure [CE-021-PR-0020] shall be followed by all parties performing infrastructure design tasks for Yarra Trams, including consultants and contractors.

Information: Management of design activity should be considerate of design constructability, safety in design, RAMs, human factors, design sustainability, single design platform, security in design, design competency and all relevant statutory requirements.

Information: The general principles for all design and drafting works undertaken by or for Yarra Trams are described in the following:

- EMS04 Manage Design Procedure [CE-021-PR-0005]
- EMS06 Engineering Change Management Procedure [CE-021-PR-0020]
- Network Technical Standard: DoT Infrastructure Drafting Standard (V4.0) [DOC/21/99272]
- Network Technical Standard: DoT Infrastructure Drafting Standard (v4.0) amendment sheet
- Network Technical Standard: Standards Framework [DOC/19/110188]
- Network Technical Standard: Drawing Management System Standard Processes [PTV-NTS-012: 2018]

5.2 Infrastructure Drafting

Information: The Network Technical Standard: DoT Infrastructure Drafting Standard is in two parts referred to as LEVEL 1 and LEVEL 2.

LEVEL 1 (Section 6 to Section 9) specifies drafting requirements applicable to all drawings regardless of the discipline.

LEVEL 2 covers the specific requirements for each discipline. The tram infrastructure discipline is listed in Section 17 but may also be included within other sections.

- 5.2.1 All drafting activities and produced documentation for Yarra Trams Infrastructure shall comply with the latest Network Technical Standard: DoT Infrastructure Drafting Standard.
- 5.2.2 Any parties performing drafting services of Yarra Trams infrastructure or creating drafting documentation for the Yarra Trams infrastructure shall comply with all relevant requirements of the Network Technical Standard: DoT Infrastructure Drafting Standard.
- 5.2.3 Any parties providing drafting services of Yarra Trams infrastructure or creating drafting documentation for the Yarra Trams infrastructure shall comply with all requirements contained within the Network Technical Standard: DoT Infrastructure Drafting Standard.
- 5.2.4 All infrastructure drawings and documentation for Yarra Trams shall comply with the requirements for submitting drawings to the DoT Drawing Management System (DMS) in accordance with the Network Technical Standard: DoT Infrastructure Drafting Standard.

Document Number: CE-019-ST-0020

Version: 1.11

Date Published: 30/11/2022

Document Author: Dianne Banks
Document Authoriser: Andrew Last
Doc ID: CDMS-313846386-5024
Page 5 of 6



Infrastructure - General - Design and Drafting



5.2.5 Any parties providing drafting services of Yarra Trams infrastructure shall comply with the NTS: Drawing Management System Standard Processes [PTV-NTS-012: 2018].

Document Number: CE-019-ST-0020

Version: 1.11

Date Published: 30/11/2022

Document Author: Dianne Banks Document Authoriser: Andrew Last Doc ID: CDMS-313846386-5024 Page 6 of 6