

SECTION 14: TRAFFIC AND PARKING

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14.1 INTRODUCTION

This section of the Design Standards provides details of the University's minimum requirements for traffic and parking. Consultants are to produce their own project documentation incorporating this and other sections of the Design Standards as well as the requirements of the latest edition of all relevant legislation, regulations, codes and standards.

Consultants **must** use the Modification Request Form to obtain approval for any proposed departure from the Design Standards. No design work is to proceed on the basis of a proposed modification until the modification request has been approved in writing.

All project documentation is required to be submitted to the University Project Manager for review and approval prior to tendering.

14.2 PARKING SIGNAGE

All parking signs shall be clearly sign-posted in accordance with AS 1742.11 and the Road Safety Rules 2017. Signs at the main entries to car parks and University campuses shall have the following additional messages:

- The type of parking restrictions that apply;
- That vehicles must only be parked in marked bays;
- That drivers enter the campus and use the car parks at their own risk and that the University does not accept any liability for loss or damage to, or theft from, vehicles;
- That motorcycles must be parked in designated bays;
- That bicycles must be secured to the hoops provided;
- The designated speed limit for the area.

14.3 BOLLARDS

Bollards are primarily used for traffic control and property protection.

Fixed bollards are, as a minimum, to have the following features:

- Cylindrical shape of 160mm diameter and 900 mm in height;
- Stainless steel construction;
- Cylinder fixed into a removable stainless steel tube;
- Suitable for installation into any concrete surface;
- A 50mm in height reflective band around top of post;
- Removable bollards are to be lockable with manual key lock consistent with the University master key management system.

Rising bollards shall have the following minimum features:

- Cylindrical shape of 275mm in diameter and 900 mm in height;

- Stainless steel construction;
- The cylinder is to be visible in all environmental conditions. It is to incorporate a 55mm high reflecting strip all around the cylinder and LED lights that flash red when the bollard moves and stay permanently ON when the bollard is raised.
- Traffic flow must be controlled by traffic lights;
- VoIP intercom connected to University network to meet the Security Design Standards – Section 13 – 13.11.19;
- CCTV coverage to the traffic signals and the bollards;
- Access control card reader connected to the University network and security systems to meet University Design Standards Section 13: Security;
- Vehicle detectors loop systems.

The project specification shall be tailored to the specific needs of the job. The consultant is to discuss the requirements with the University Manager, Physical Security.

14.4 TRAFFIC LIGHTS

Traffic lights shall have the following features:

- Alternating red/green LED lights on two opposite sides;
- Pole mounting should be three meters in height;
- Poles to be designed to meet the installed load;
- Bolted above ground to a concrete pad (minimum size 500mm x 500mm);
- Shall be connected to the bollard operation or used for the control of competing flows of traffic.

The project specification shall be tailored to the specific needs of the job. The consultant is to discuss the requirements with the University Manager, Physical Security.

14.5 BOOM GATES

Boom gates shall have the following features:

- Controlled by the University network and security systems to meet University Design Standards Section 13: Security;
- In ground vehicle detection loops to protect vehicles as well as to allow vehicles to freely exit the carpark;
- Must have automatic powered operation;
- Brand is consistent with University preferred supplier;
- Red and white diagonal stripes;
- Constructed of fiberglass or lightweight metal;
- Connected to the University network and security systems to meet University Design Standards Section 13: Security;

The project specification shall be tailored to the specific needs of the job. The consultant is to discuss the requirements with the University Manager, Physical Security.

14.6 PARKING PAY STATIONS

Parking pay stations shall have the following features:

- A choice of credit card, electronic funds transfer at point of sale (EFTPOS) or cash handling payment methods;
- Software system available to indicate logging of transactions, errors, warnings, and electronic access to allow precise tracking of different events;
- Alarm connected to the University network and security systems to meet University Design Standards Section 1: Security to identify unauthorized access;
- Disability friendly design;
- LED large display or screen;
- A cash vault that is accessed via one door while the main serviceable components are accessed via a separate door;

The project specification shall be tailored to the specific needs of the job. The consultant is to discuss the requirements with the University Manager, Physical Security.

14.7 PARKING BAYS

Off-street parking shall conform to AS/NZS 2890.1 Parking Facilities - Off-street car parking.

On-street parking shall conform to AS/NZS 2890.5 Parking Facilities - On-street car parking.

Provision of parking spaces for people with disabilities shall conform to AS/NZS 2890.6 Parking Facilities - Off-street Parking for People with Disabilities.

Off-street commercial vehicle shall conform to AS/NZS 2890.2 Parking Facilities – Off-Street Commercial Vehicle Facilities.

Parking bays shall be clearly line marked to conform to AS/NZS 2890.1

14.8 SPEED HUMPS

Speed humps shall conform to AS/NZS2890.1. The project specification shall be tailored to the specific needs of the job. Speed humps shall have the following features:

- Speed humps shall be made suitable for traffic conditions;
- Appropriate for use on long aisles and circulating roadways in outdoor surface and car parks to check the speed of vehicles travelling at 30km/h or less;
- Speed hump marking shall be black and yellow in colour and visible to drivers;
- Speed humps shall not impede pedestrians or wheelchair traffic on any accessible travel path provided for people with disabilities;
- Preference to 'flat-top' speed hump heavy duty and highly durable, installed with dynabolts for concrete and hex anchor bolts for bitumen applications, and easily removable;

The project specification shall be tailored to the specific needs of the job. The consultant is to discuss the requirements with the University Manager, Physical Security.

14.9 REFERENCES

Road Safety Act 1986 (Vic).

AS 1742.11 Manual of Uniform Control Devices: Parking Controls.

AS 1742.11 Road Safety Road Rules 2017.

AS/NZS 2890.1 Parking Facilities - Off-street Car Parking.

AS/NZS 2890.5 Parking Facilities - On-street Parking.

AS/NZS 2890.6 Parking Facilities - Off-street Parking for People with Disabilities.

AS/NZS 2890.2 Parking Facilities - Off-street Commercial Vehicle Facilities.

14.10 AS-BUILT DOCUMENTATION

As-built documentation, operation and maintenance manuals, guarantees, warranties and other related information is to be provided to the University. Draft documentation is to be provided four weeks prior to practical completion and final form documentation is to be provided no later than four weeks after practical completion.

The University of Melbourne CAD Standards detail the formatting and submission requirements for as-built drawings, manuals and warranties. The CAD Standards can be found in the Associated Documents Section of the Design Standards web page.

14.11 DESIGN CHANGE AUTHORISATION

All requests for changes to the requirements of the Design Standards must be made on the Modification Request Form. No design work is to proceed on the basis of the proposed modification until the modification request has been approved in writing.

As part of the handover documentation to be provided to the University at project completion a schedule of all requested modifications and a signed copy of all approved modifications are to be provided.