



Typical Arrangements

Pedestrian Ramps

Function

- To maximise pedestrian safety for all users, particularly at crossing points and intersections, and to integrate the design of crossings into the general street geometry
- Kerb ramps must be aligned with opposite kerb ramps to provide clear wayfinding when crossing a road

Materials and Dimensions

- Minimum width of 1000mm on the path of travel
- Maximum rise of 190mm
- Length no greater than 1520mm
- Maximum gradient 1:8 1:8.5

Installation

 Where possible all new kerb ramps should meet AS 1428.1 2009 clause 10.7 to include the following:
Top of pedestrian ramp located less than 3000mm from the property / building line

- Align kerb ramp with line of travel and with building line if possible. Kerb ramps on opposite sides should align with each other.

- 5mm construction tolerance of abutting surface (edges bevelled)
- The angle at the base of kerb ramps is a minimum of 166 degrees
- Provide a ramp at all points where pedestrians need to cross the road and at accessible drop off points, bus zones and taxi standards
- TGSIs are not recommended to be installed on the face of kerb ramps with a gradient of 1:8-1:8.5, as some people using mobility aids may have difficulty negotiating TGSIs on a slope
- Provide upper landings that are 1:40, preferably minimum 1500 x 1500mm



Plan showing kerb ramp crossings - guide only



Pedestrian ramp pattern A, Bondi Junction



Pedestrian ramp pattern B, Bondi Road



Pedestrian ramp pattern C, Bondi Junction

Notes:

1. Guide only. Pedestrian ramps to be designed case by case

2. Refer the Tactile Ground Surface Indicators' section for TGSI application

Footpaths & Crossings Pedestrian Ramps





Paving Junction

Function

• Paving and kerb junctions typically to occur at street corners when one type of paving pattern intersects with another.

Materials and Dimensions

• Paving patterns as per occurence

Installation

- Major streets take precedent to minor streets meaning the paving treatment on the major street should be continued past the property boundary to the kerb to reinforce a continuity and a seamless transition for paving junctions
- Paver type 2 as a double header to indicate transition of paving
- Major street paving to continue perpendicular to building line to meet the back of kerb
- Change in kerb width junctions align kerbs perpendicular and set out paving from back of kerb



Paving Junction - Corner of Spring and Newland Street

Note: 1. Refer the Tactile Ground Surface Indicators' section for TGSI application

Footpaths & Crossings Paving Junction



Kerb Extensions

Function

- Traffic calming by creating safer streets for pedestrians, cyclist and vehicles alike through raised pedestrian crossings and kerb extensions.
- Kerb extensions are the standard for traffic calming and should be applied over pedestrian refugee islands.
- Kerb extensions allow shorter crossing times for pedestrians and allow an integrated approach to the streetscape design.

Materials and Dimensions

- Dimensions will vary depending on site conditions, services, sight lines, traffic conditions and parking conditions
- Match the dominant surrounding paving and kerb type/s
- Assess suitability for enhancing kerb nibs with low level planting or trees

Installation

- Kerbs should provide a clear separation between the pedestrian space and traffic
- Design corners and intersections to suit pedestrian comfort and safety. Use of minimum radii at corners will enhance pedestrian convenience
- Avoid creating isolated islands at corners. Extend the footpath width to consolidate the potential pedestrian zone. Alter drainage to suit this condition
- Layout footpath kerbs extensions with a simple alignment of elements and edges, ideally parallel to the predominant built edge
- When required raised islands in crossings should be cut through level with the street or have kerb ramps at both sides and a level area at least 1200 mm long in the part of the island intersected by the crossings. It is recommended median cut through at the same grade as the road have warning TGSIs installed on both sides of the cut though in accordance with AS4128.4.1.



Integrated kerb extension- Hall Street, Bondi



Integrated kerb extension- Ebley Street, Bondi Junction

Footpaths & Crossings Kerb Extensions



Pedestrian Priority Crossings

Function

- Traffic calming by creating safer streets for pedestrians, cyclist and vehicles alike through raised pedestrian crossings and kerb extensions
- Pedestrian crossings are the standard for improving pedestrian safety and an integrated streetscape design

Materials and Dimensions

- For Bondi Junction and high profile areas match the dominant surrounding paving with painted white line markings
- For all other areas asphalt with white line markings may be applied
- Dimensions will vary depending on site conditions, services, sight lines, traffic conditions and parking conditions
- Crossings are to be designed case by case depending on location requirements

Installation

- Pedestrian priority crossings should provide a clear separation between the pedestrian space and traffic
- Design corners and intersections to suit pedestrian comfort and safety.
- Where drainage is required install grates to suite



Pedestrian Priority Crossing Ebley street, Bondi Junction

Footpaths & Crossings Pedestrian Priority Crossings





Scale 1:150



Scale 1:150

Notes:

1. Guide only. Pedestrian priority crossings to be designed case by case

2. Refer the Tactile Ground Surface Indicators' section for TGSI application

Service Pit Lid Infill

Function

• Reduce the intrusion of service covers in the pavement as far as possible by infill paving surfaces of larger covers to match surrounding paving, and by minimising or avoiding concrete surrounds to covers.

Product

- Recessed pit lids in cast aluminium, paving to match set into lid. Paving pattern within the lid to match that surrounding.
- Single and multi- part access covers with heavy gauge steel frames and other suitable service cover infill lids as required and specified by the various authorities. Seek further advice from relevant service authority.

Materials and Dimensions

• Service pit lid Infill to match surrounding paver type

Installation

- The provision of services has the potential for impact on the quality of streetscapes, through the location and materiality of service covers and the provision of overhead services. Consideration of service provision is essential in the design of the street.
- Liaise with service authorities to determine future service requirements over whole blocks
- Consider undergrounding of overhead wires as part of streetscape upgrades
- Use infill pit lids for all sevices including electrical and Telstra pits, to allow continuity of paving. Liaise with service authorities for their requirements.
- Use lids and frames that allow for paving to finish flush with frames.
- Pit lids and grates covers are to be flush with the surrounding surface. Openings in the surface of pathways such as grates are proposed to be no greater than 13mm to meet AS 1428.1 Clause 7
- Ensure pit lids and grates are aligned with the surrounding paving pattern. Infill paving pattern to merge and match with surrounding paving pattern.

Maintenance

• under review



Service pit infill Bondi Junction

Footpaths & Crossings Service Pit Lid Infill



86 | AUG 2020 | Rev G | Waverley Council Public Domain Technical Manual