NOTES:

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- Any inconsistencies or omissions in these drawings should be brought to the attention of the City of Onkaparinga for clarification or amendment.
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- For further information contact the City of Onkaparinga at mail@onkaparinga.sa.gov.au or phone (08) 8384 0666.
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### TYPICAL KERBING PROFILES (100 SERIES)

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<tr>
<td>SD-600</td>
<td>PLANTING – SHRUBS</td>
<td>A</td>
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<tr>
<td>SD-601</td>
<td>PLANTING – ADVANCED TREES</td>
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<tr>
<td>SD-610</td>
<td>SPADE EDGE – (SE)</td>
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<tr>
<td>SD-611</td>
<td>HARD EDGE – HARDWOOD OR WOOD PLASTIC COMPOSITE (HE)</td>
<td>A</td>
<td>FEB '18</td>
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<tr>
<td>SD-620</td>
<td>EDGE BEAM – INTERFACE BETWEEN PAVEMENT &amp; LANDSCAPING</td>
<td>A</td>
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<tr>
<td>SD-630</td>
<td>BOLLARD INSTALLATION – WOOD PLASTIC COMPOSITE</td>
<td>A</td>
<td>FEB '18</td>
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100 UPRIGHT KERB & GUTTER NOTES:
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   TO BE USED ONLY FOR MATCHING INTO OR REPLACEMENT OF EXISTING KERBING.
2. THIS KERB PROFILE SHALL NOT BE USED AT BUS STOP LOCATIONS.
3. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
4. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
5. FOR INSTALLATION REQUIREMENTS, REFER TO KERB INSTALLATION DETAIL(S).

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SPOON DRAIN NOTES:
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DRIVEWAY INVERT (INFALL TYPE) NOTES:
1. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. FOR INSTALLATION REQUIREMENTS, REFER TO DRIVEWAY INVERT INSTALLATION DETAIL(S).

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<tbody>
<tr>
<td>100 UPRIGHT KERB</td>
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</tr>
<tr>
<td>125 SEMI-MOUNTABLE KERB</td>
<td>110mm</td>
</tr>
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DRIVEWAY INVERT (OUTFALL TYPE) NOTES:
1. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. FOR INSTALLATION REQUIREMENTS, REFER TO DRIVEWAY INVERT INSTALLATION DETAIL(S).

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100 BARRIER KERB NOTES:
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2. THIS KERB PROFILE SHALL NOT BE USED AT BUS STOP LOCATIONS.
3. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
4. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
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<tr>
<td>A</td>
<td>ORIGINAL ISSUE</td>
<td>P.BICKLEY</td>
<td>JUN '10</td>
</tr>
<tr>
<td>B</td>
<td>REVISED NOTES</td>
<td>C.HASKAS</td>
<td>AUG '12</td>
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150 BARRIER KERB NOTES:
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EDGE BEAM NOTES:
1. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. FOR INSTALLATION REQUIREMENTS, REFER TO KERB INSTALLATION DETAIL(S).

1 x N12 LOCATED CENTRALLY.
LAP LENGTH 500mm MIN.

EDGE BEAM (SD-109)
(EB)
NOT TO SCALE

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KEYED-IN KERB NOTES:
1. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. FOR INSTALLATION REQUIREMENTS, REFER TO KERB INSTALLATION DETAIL(S).

KEYED-IN KERB (SD-110)
FOR MEDIANS (MED) OR ROUNDABOUTS (RAB)
NOT TO SCALE

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SIT-ON KERB NOTES:
1. THIS KERB PROFILE SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS.
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2. THIS KERB PROFILE SHALL NOT BE USED AT BUS STOP LOCATIONS.
3. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
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SEMI MOUNTABLE KERB & GUTTER (SD-112)
INFALL TYPE (SK&G)
NOT TO SCALE

SEMI MOUNTABLE KERB & GUTTER NOTES:
1. THIS KERB PROFILE SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS.
   TO BE USED ONLY FOR MATCHING INTO OR REPLACEMENT OF EXISTING KERBING.
2. THIS KERB PROFILE SHALL NOT BE USED FOR PROPERTY ACCESS.
3. THIS KERB PROFILE SHALL NOT BE USED AT BUS STOP LOCATIONS.
4. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
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SEMI MOUNTABLE KERB & TRAY NOTES:
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SEMI MOUNTABLE KERB NOTES:
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3. THIS KERB PROFILE SHALL NOT BE USED AT BUS STOP LOCATIONS.
4. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
6. FOR INSTALLATION REQUIREMENTS, REFER TO KERB INSTALLATION DETAIL(S).

SEMI MOUNTABLE KERB (SD-114)
(SK)
NOT TO SCALE

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LOW PROFILE ROUNDABOUT KERB NOTES:
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REV DESCRIPTION APPROVED DATE
D REMOVED REINFORCING MESH C.HASKAS FEB '18
C REVISED NOTES C.HASKAS AUG '12
B INCREASED LIP TO 40mm P.BICKLEY MAY '11
A ORIGINAL ISSUE P.BICKLEY JUN '10

LOW PROFILE ROUNDABOUT KERB (SD-115)
(RAB)
NOT TO SCALE
SPOON DRAIN NOTES:
1. ALL CONCRETE KERBING MUST BE CONSTRUCTED IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. FOR INSTALLATION REQUIREMENTS, REFER TO SPOON DRAIN INSTALLATION DETAIL(S).

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1200mm SPOON DRAIN NOTES:
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1200mm SPOON DRAIN (SD-117)
RESIDENTIAL & INDUSTRIAL (SD)
NOT TO SCALE

1200mm SPOON DRAIN
RESIDENTIAL & INDUSTRIAL (SD)
NOT TO SCALE
FLOW
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**GRATED INLET PIT (TYPE 2) NOTES:**

1. For pit depths \(D\) greater than 1.5m, a proposed design is to be forwarded to Technical Services for approval.

2. Step iron shall be installed in all pits where pit depth \(D\) is greater than 1.2m. (Refer SD-216).

3. Where cover is not subject to surface loading, a light duty cover and frame by 'BIANCO' or similar approved may be used.

4. Concrete strength to be 32MPa unless noted otherwise.

5. Grout to consist of 2 parts sand, 1 part cement and sufficient water to produce mix of suitable consistency.

6. Access covers & grates to be in accordance with AS 3996.

7. Grates shall be bicycle tyre penetration resistant (BTPR) in both directions.

8. Bolt down grates to be used unless noted otherwise.

9. Concrete benching (streamlining) is to be provided for all drainage pits (Refer SD-210).

10. Provide 'CONFINED SPACE' warning sign (Refer SD-211).

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**GRATED INLET PIT (TYPE 2) (SD-203)**

**FOR PIPE SIZES \(\leq \varnothing 1050\text{mm}\)**

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**REV DESCRIPTION APPROVED DATE**

A ORIGINAL ISSUE P.BICKLEY JUN '10

B REVISED DETAIL & NOTES C.HASKAS AUG '12

C REVISED NOTES C.HASKAS FEB '18

**GROUT (REFER NOTES)**

- Top of grate to match to the design service level.
- Heavy duty galvanised grate and frame by 'BIANCO' or similar approved for 600 x 600 clear opening. To be fixed in accordance with the manufacturer's specifications.
- Provide confined space warning sign (Refer SD-211).
- Mass concrete benching (streamlining), hand trowel to provide smooth finish and transition between pipes (Refer SD-210).

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**REV DESCRIPTION APPROVED TEAM LEADER DATE**

A ORIGINAL ISSUE P.BICKLEY JUN '10

B REVISED DETAIL & NOTES C.HASKAS AUG '12

C REVISED NOTES C.HASKAS FEB '18

**GRATED INLET PIT (TYPE 2) FOR PIPE SIZES \(\leq \varnothing 1050\text{mm}\)**

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**SD-203**

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**NOT TO SCALE**
**SADDLE PIT NOTES:**

1. FOR PIT DEPTHS (D) GREATER THAN 1.8m A PROPOSED DESIGN IS TO BE FORWARD TO TECHNICAL SERVICES FOR APPROVAL.

2. STEP IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m (REFER SD-216).

3. FOR PIPE SIZES < Ø1050 A STANDARD JUNCTION BOX SHALL BE PROVIDED (REFER SD-200).

4. WHERE COVER IS NOT SUBJECT TO SURFACE LOADING, A LIGHT DUTY COVER AND FRAME BY 'BIANCO' OR SIMILAR APPROVED MAY BE USED.

5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.

6. GROUT TO CONSIST OF 2 PARTS SAND, 1 PART CEMENT AND SUFFICIENT WATER TO PRODUCE MIX OF SUITABLE CONSISTENCY.

7. ACCESS COVERS & GRATES TO BE IN ACCORDANCE WITH AS 3996.

8. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).

9. PROVIDE 'CONFINED SPACE' WARNING SIGN (REFER SD-211).
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FIELD GULLY PIT NOTES:
1. FOR SWALES IN WATER SENSITIVE URBAN DESIGN (WSUD) APPLICATIONS, THE CLEAR OPENING MAY BE REDUCED TO 50mm AND THE CONCRETE APRON MAY BE REPLACED WITH ROCK PITCHING AS REQUIRED. PROPOSED ALTERATIONS ARE TO BE FORWARDED TO TECHNICAL SERVICES FOR APPROVAL.

2. FOR PITS ADJACENT TO THE ROAD, GUIDEPOSTS AND/OR WARNING SIGNS WILL BE REQUIRED. REFER TO TECHNICAL SERVICES FOR INFORMATION & APPROVAL.

3. FOR PIT DEPTHS (D) GREATER THAN 1.5m A PROPOSED DESIGN IS TO BE FORWARDED TO TECHNICAL SERVICES FOR APPROVAL.

4. STEP IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m (REFER SD-216).

5. WHERE COVER IS NOT SUBJECT TO SURFACE LOADING, A LIGHT DUTY COVER AND FRAME BY 'BIANCO' OR SIMILAR APPROVED MAY BE USED.

6. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.

7. GROUT TO CONSIST OF 2 PARTS SAND, 1 PART CEMENT AND SUFFICIENT WATER TO PRODUCE MIX OF SUITABLE CONSISTENCY.

8. BOLT DOWN GRATES TO BE USED UNLESS NOTED OTHERWISE. ACCESS COVERS & GRATES TO BE IN ACCORDANCE WITH AS 3996.

9. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).

10. PROVIDE 'CONFINED SPACE' WARNING SIGN (REFER SD-211).

FIELD GULLY PIT (SD-205)
WITH 600mm CONCRETE APRON

PLAN VIEW SECTION A-A

FIELD GULLY PIT WITH 600mm CONCRETE APRON

NOT TO SCALE

100 MIN. - 1200 MAX.

DEPTH (D) VARIES

DEPTH OF SWALE

FLOW

COVER SLAB BY 'BIANCO' OR SIMILAR APPROVED TO HAVE 32 MPa CONCRETE AND SL82 MESH

100 THICK CONCRETE APRON 600 WIDE

600x600 FIELD GULLY GRATE & FRAME

BY 'BIANCO' OR SIMILAR APPROVED

120 CLEAR OPENING

COVER SLAB IS TO BE SL82 MESH CENTRAL AND SL82 MESH 600MM MIN ALL LAPS 300MM MAX.

+50mm

+00mm

FALL

2.00m

COVER SLAB IS TO BE SL72 MESH CENTRAL AND SL72 MESH 600MM MIN ALL LAPS 300MM MAX.

+50mm

+00mm

FALL

1.00m

COVER SLAB IS TO BE SL82 MESH CENTRAL AND SL82 MESH 600MM MIN ALL LAPS 300MM MAX.

COVER SLAB IS TO BE SL72 MESH CENTRAL AND SL72 MESH 600MM MIN ALL LAPS 300MM MAX.

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COVER SLAB IS TO BE SL72 MESH CENTRAL AND SL72 MESH 600MM MIN ALL LAPS 300MM MAX.

COVER SLAB IS TO BE SL82 MESH CENTRAL AND SL82 MESH 600MM MIN ALL LAPS 300MM MAX.
DOUBLE SIDE ENTRY PIT (TYPE 1) NOTES:

1. DEFLECTORS ARE TO BE PROVIDED WHERE APPROACH GRADE IS GREATER THAN 2.0% (REFER SD-207).
2. A 1200mm TRANSITION TO THE APRON IS TO BE PROVIDED ON BOTH SIDES OF SEP IF THE PIT IS IN A SAG-POINT LOCATION.
3. FOR PIT DEPTHS (D) GREATER THAN 1.5m A STRUCTURAL DESIGN IS TO BE FORWARDED TO TECHNICAL SERVICES FOR APPROVAL.
4. STEP IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m (REFER SD-216).
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
6. GROUT TO CONSIST OF 2 PARTS SAND, 1 PART CEMENT AND SUFFICIENT WATER TO PRODUCE MIX OF SUITABLE CONSISTENCY.
7. ACCESS COVERS & GRATES TO BE IN ACCORDANCE WITH AS 3996.
8. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
9. PROVIDE ‘CONFINED SPACE’ WARNING SIGN (REFER SD-211).
10. SIDE ENTRY PITS SHALL BE LOCATED BEYOND THE TANGENT POINT OF KERB RADIUS.

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DOUBLE SIDE ENTRY PIT (TYPE 2) NOTES:
1. DEFLECTORS ARE NOT REQUIRED WHERE APPROACH GRADE IS LESS THAN 2.0% (REFER SD-206).
2. A 1200mm TRANSITION TO THE APRON IS TO BE PROVIDED ON BOTH SIDES OF SEP IF THE PIT IS IN A SAG-POINT LOCATION.
3. DEFLECTORS ARE TO BE ANGLED TOWARD THE CENTRE OF PIT FROM BOTH SIDES IF THE PIT IS IN A SAG-POINT LOCATION.
4. FOR PIT DEPTHS (D) GREATER THAN 1.5m A STRUCTURAL DESIGN IS TO BE FORWARD TO TECHNICAL SERVICES FOR APPROVAL.
5. STEP IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m (REFER SD-216).
6. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
7. GROUT TO CONSIST OF 2 PARTS SAND, 1 PART CEMENT AND SUFFICIENT WATER TO PRODUCE MIX OF SUITABLE CONSISTENCY.
8. ACCESS COVERS & GRATES ARE TO BE IN ACCORDANCE WITH AS 3996.
9. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
10. PROVIDE 'CONFINED SPACE' WARNING SIGN (REFER SD-211).
11. SIDE ENTRY PITS SHALL BE LOCATED BEYOND THE TANGENT POINT OF KERB RADIUS.

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DOUBLE SIDE ENTRY PIT (TYPE 3) NOTES:
1. COVER & FRAME TYPE SIDE ENTRY PITS SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS.
2. DEFLECTORS ARE TO BE PROVIDED WHERE APPROACH GRADE IS GREATER THAN 2.0% (REFER SD-209).
3. A 1200mm TRANSITION TO THE APRON IS TO BE PROVIDED ON BOTH SIDES OF SEP IF THE PIT IS IN A SAG-POINT LOCATION.
4. 6. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
5. GROUT TO CONSIST OF 2 PARTS SAND, 1 PART CEMENT AND SUFFICIENT WATER TO PRODUCE MIX OF SUITABLE CONSISTENCY.
6. ACCESS COVERS & GRATES TO BE IN ACCORDANCE WITH AS 3996.
7. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
8. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
9. 'CONFINED SPACE' WARNING SIGN (REFER SD-211).
10. STEPS IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m (REFER SD-216).
11. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
12. SIDE ENTRY PITS SHALL BE LOCATED BEYOND THE TANGENT POINT OF KERB RADIUS.

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
DOUBLE SIDE ENTRY PIT (TYPE 4) NOTES:

1. COVER & FRAME TYPE SIDE ENTRY PITS SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS.
2. DEFLECTORS ARE NOT REQUIRED WHERE APPROACH GRADIENT IS LESS THAN 2.0% (REFER SD-208).
3. DEFLECTORS ARE TO BE ANGLED TOWARDS THE CENTRE OF PIT FROM BOTH SIDES IF THE PIT IS IN A SAG-POINT LOCATION.
4. FOR PIT DEPTHS (D) GREATER THAN 1.5m, A PROPOSED DESIGN IS TO BE FORWARD TO TECHNICAL SERVICES FOR APPROVAL.
5. STEP IRONS SHALL BE INSTALLED IN ALL PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.0m (REFER SD-216).
6. CONCRETE STRENGTH SHALL BE 32MPa UNLESS NOTED OTHERWISE.
7. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS (REFER SD-210).
8. PROVIDE ‘CONFINED SPACE‘ WARNING SIGN (REFER SD-211).
9. SIDE ENTRY PITS SHALL BE LOCATED BEYOND THE TANGENT POINT OF KERB RADIUS.

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2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
PIT BENCHING (STREAMLINING) NOTES:
1. ALL CONCRETE BENCHING (STREAMLINING) IS TO BE 25MPa.
2. CONCRETE BENCHING (STREAMLINING) IS TO BE PROVIDED FOR ALL DRAINAGE PITS.

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PIT BENCHING (STREAMLINING) (SD-210)
TO BE USED FOR ALL DRAINAGE PITS
NOT TO SCALE

1. ORIGINAL ISSUE: P.BICKLEY JUN ’10
2. REVISED TITLE & NOTES: C.HASKAS AUG ’12
3. REVISED DETAIL & NOTES: C.HASKAS FEB ’18

SCALE AT A4
NOT TO SCALE

STANDARD #
SD-210
REV C
**'CONFINED SPACE' WARNING SIGN NOTES:**

1. **THIS SIGN IS REQUIRED FOR ALL NEW GRATED INLET PITS, JUNCTION PITS, SIDE ENTRY PITS & FIELD GULLY PITS.**
2. **THE SIGN SHALL BE FIXED TO THE INSIDE WALL OF THE PIT USING GALVANISED MASONRY FIXINGS.**
3. **THE SIGN SHALL FACE THE ROAD FRONTAGE.**

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**'CONFINED SPACE' WARNING SIGN (SD-211)**

**FOR ALL NEW DRAINAGE PITS**

**NOT TO SCALE**

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1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
BANDAGE JOINT NOTES:
1. BANDAGE JOINTS SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS.
2. BANDAGE JOINTS MAY BE USED AT CHANGES IN GRADE, DIRECTION AND REMEDIATION OF CRACKED PIPES IF APPROVED BY TECHNICAL SERVICES. THIS JOINING METHOD IS ONLY TO BE USED WHERE OTHER ALTERNATIVES ARE IMPRACTICAL.
3. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
4. FOR CRACKS, HOLES OR OPENINGS WIDER THAN 5mm, ‘DENSO 600’ TAPE OR SIMILAR APPROVED SHALL BE USED. TAPE TO BE 200mm MIN. WIDTH AND LAPPED 100mm MIN. TAPE IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.
5. MORTAR MIX TO CONSIST OF 3 PARTS SAND TO 1 PART CEMENT BY VOLUME.

<table>
<thead>
<tr>
<th>PIPE DIAMETER (D)</th>
<th>THICKNESS (T)</th>
<th>WIDTH (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D &lt; 900</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>D ≥ 900</td>
<td>150</td>
<td>600</td>
</tr>
</tbody>
</table>

CROSS-SECTION

LONGITUDINAL SECTION

BANDAGE JOINT (SD-212)
FOR CONCRETE PIPES
NOT TO SCALE

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
DRAINAGE OUTLET TO KERB NOTES:
1. THE ENTIRE KERB OUTLET ASSEMBLY IS TO BE HOT DIP GALVANISED.
2. THE KERB OUTLET IS TO SIT FLUSH WITH TOP OF KERB UNLESS NOTED OTHERWISE.
3. THE KERB OUTLET SHALL BE SET BACK FROM FACE OF KERB BY A MINIMUM OF 25mm TO ENSURE THAT THERE ARE NO EDGES PROTRUDING PAST FACE OF KERB.
4. FOR INSTALLATION REQUIREMENTS, REFER TO KERB INSTALLATION DETAIL(S).

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DRAINAGE CROSSOVER (TYPE 1) NOTES:
1. THE 'TOP HAT' SECTION SHALL BE MADE FROM 3mm THICK ALUMINIUM CHEQUER PLATE.
2. THE 'TOP HAT' SECTION SHALL EXTEND THE FULL WIDTH OF THE FOOTPATH.
3. WHERE POSSIBLE, THE 'TOP HAT' SECTION SHALL BE ALIGNED PERPENDICULAR (90°) TO THE KERB.
4. THE 'TOP' HAT SECTION MAY BE OMITTED WHERE NO FOOTPATH IS PROVIDED.

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
DRAINAGE CROSSOVER (TYPE 2) NOTES:
1. 'BOX DRAIN' DIMENSIONS ARE SITE SPECIFIC, REFER TO TECHNICAL SERVICES FOR APPROVAL.
2. THE ENTIRE STEEL 'BOX DRAIN' ASSEMBLY IS TO BE HOT DIP GALVANISED.
3. THE TOP COVER OF THE STEEL 'BOX DRAIN' IS TO BE MADE OF CHEQUER PLATE.
4. STEEL 'BOX DRAIN' SHALL HAVE A MINIMUM GRADE OF 1.0% FALL TO KERB & GUTTER.
5. FOR PLACEMENT IN EXISTING KERBING, SAW CUT EITHER SIDE TO PROVIDE A 'SNUG' FIT.
6. WHERE POSSIBLE, THE STEEL 'BOX DRAIN' SHALL BE ALIGNED PERPENDICULAR (90°) TO THE KERB.

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STEP IRRON NOTES:
1. STEP IRONS SHALL BE INSTALLED IN ALL DRAINAGE PITS WHERE PIT DEPTH (D) IS GREATER THAN 1.2m.
2. STEP IRONS SHALL BE INSTALLED IN ACCORDANCE WITH AS 1657.
3. STEP IRONS SHALL BE LOCATED:
   - DIRECTLY BELOW THE OPENING IN THE COVER.
   - ON A WALL WITHOUT PIPE OPENINGS WHERE POSSIBLE.
   - ON ONE OF THE LONG SIDES OF THE PIT WHERE POSSIBLE.
4. STEP IRONS SHOULD BE FIXED SO AS TO BE COPLANAR.
5. THE STEP-UP DISTANCE SHALL BE A MINIMUM OF 300mm AND A MAXIMUM OF 500mm.
6. THE STEP-DOWN DISTANCE SHALL BE A MAXIMUM OF 600mm.
7. STEEL FOR STEP IRONS SHALL BE STRUCTURAL GRADE 250 IN ACCORDANCE WITH AS 3679.
8. STEP IRONS SHALL HAVE SHARP EDGES ROUNDED AND BE HOT-DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AS 4680.
9. PROPRIETARY STEP IRONS SHALL NOT BE USED WITHOUT PRIOR APPROVAL FROM COUNCIL’S DESIGN SECTION AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.
10. STEP IRONS SHALL BE LOAD TESTED IN ACCORDANCE WITH AS 4198.

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ALLOTMENT CONNECTION (TYPE 1) NOTES:
1. All allotment connection pipes to be minimum Ø100 PVC-U (sewer class).
2. All connections to Council’s stormwater drainage network are to be inspected by the superintendent prior to backfilling.
3. Rear of allotment drain backfilling to be in accordance with AS 3725.
4. If the finished surface level at inspection point is altered, the inspection point cover and surround should be amended to suit and the riser extended to the new finished surface level.
5. Where allotment drain is RCP or FRCP (refer to SD-223) for connection detail.

ALLOTMENT CONNECTION (TYPE 1) (SD-220)

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
ALLOTMENT BOUNDARY (REAR OF ALLOTMENT)
ALLOTMENT BOUNDARY (LOW SIDE OF ALLOTMENT)
ALLOTMENT CONNECTION (TYPE 2) (SD-221)
NOT TO SCALE

TO REAR OF ALLOTMENT DRAIN - CONCRETE ALLOTMENT COLLECTION SLAB & PVC GRATE

ALLOTMENT CONNECTION (TYPE 2) NOTES:
1. ALL ALLOTMENT CONNECTION PIPES TO BE MINIMUM Ø100 PVC-U (SEWER CLASS).
2. ALL CONNECTIONS TO COUNCIL’S STORMWATER DRAINAGE NETWORK ARE TO BE INSPECTED BY THE SUPERINTENDENT PRIOR TO BACKFILLING.
3. REAR OF ALLOTMENT DRAIN BACKFILLING TO BE IN ACCORDANCE WITH AS 3725.
4. IF THE FINISHED SURFACE LEVEL AT INSPECTION POINT IS ALTERED, THE INSPECTION POINT COVER AND SURROUND SHOULD BE AMENDED TO SUIT AND THE RISER EXTENDED TO THE NEW FINISHED SURFACE LEVEL.
5. WHERE ALLOTMENT DRAIN IS RCP OR FRCP (REFER TO SD-223) FOR CONNECTION DETAIL.

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2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
ALLOTMENT CONNECTION (TYPE 3) NOTES:
1. ALL ALLOTMENT CONNECTION PIPES TO BE MINIMUM Ø100 PVC-U (SEWER CLASS).
2. ALL CONNECTIONS TO COUNCIL’S STORMWATER DRAINAGE NETWORK ARE TO BE INSPECTED BY THE SUPERINTENDENT PRIOR TO BACKFILLING.
3. REAR OF ALLOTMENT DRAIN BACKFILLING TO BE IN ACCORDANCE WITH AS 3725.
4. IF THE FINISHED SURFACE LEVEL AT INSPECTION POINT IS ALTERED, THE INSPECTION POINT COVER AND SURROUND SHOULD BE AMENDED TO SUIT AND THE RISER EXTENDED TO THE NEW FINISHED SURFACE LEVEL.
5. WHERE ALLOTMENT DRAIN IS RCP OR FRCP (REFER TO SD-223) FOR CONNECTION DETAIL.

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ALLOTMENT CONNECTION (TYPE 3) (SD-222)
TO FRONT OF ALLOTMENT DRAIN - CONCRETE INSPECTION POINT COVER & SURROUND
NOT TO SCALE

1. TOP OF INSPECTION POINT COVER TO MATCH THE TOP OF DESIGN SURFACE
2. PRECAST CONCRETE INSPECTION POINT COVER AND SURROUND WITH LIFTING HOLE BY ‘BIANCO’ OR SIMILAR APPROVED
3. THREADED ACCESS CAP (DRY JOINT)
4. Ø100 MIN. UPVC RISER
5. Ø100 MIN. UPVC CONNECTION STUB
6. PUSH ON CAP (DRY JOINT)
7. PROPERTY DRAINAGE (BY OWNER)
8. 1.0% MIN. GRADE
9. 150mm PM2/20 BASE COMPACTED TO 96% MMDD
10. 600 MIN. - 1500 MAX. COVER (DEPTH VARIES)
11. 1000 MIN. (WIDTH VARIES)

SECTION A-A

PLAN

ALLOTMENT BOUNDARY (LOW SIDE OF ALLOTMENT)
ALLOTMENT CONNECTION TO DRAIN NOTES:
1. ALL ALLOTMENT CONNECTION PIPES TO BE MINIMUM Ø100 UPVC - SEWER CLASS.
2. ALL CONNECTIONS TO COUNCIL'S STORMWATER DRAINAGE NETWORK ARE TO BE INSPECTED BY COUNCIL'S REPRESENTATIVE PRIOR TO BACKFILLING.
3. REAR OF ALLOTMENT DRAIN BACKFILLING TO BE IN ACCORDANCE WITH AS 3725.
4. FOR ALLOTMENT CONNECTION DETAILS REFER SD-220, SD-221 & SD-222.

ALLOTMENT CONNECTION TO DRAIN (SD-223)
TO RCP OR FRCP ALLOTMENT DRAIN
FOR FRONT OR REAR OF ALLOTMENT DRAIN CONNECTIONS
NOT TO SCALE

1. All dimensions are in millimeters unless otherwise shown.
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**SWALE INSTALLATION (TYPE 1) NOTES:**

1. REFER TO DESIGN PLANS FOR LOCATION, TYPE AND EXTENT OF PROPOSED SWALES.
2. WHERE STORMWATER FLOW VELOCITY EXCEEDS 1.0m/sec OR LONGITUDINAL SWALE GRADE IS GREATER THAN 4.0% A PROPOSED DESIGN SHALL BE FORWARDED TO TECHNICAL SERVICES FOR APPROVAL.
3. CUT-OFF DRAIN(S) AND/OR DRAINAGE PIT(S) SHALL BE PROVIDED WHERE SWALE FLOW WIDTH IS GREATER THAN 1.0m FROM EDGE OF SWALE FOR ANY STORM EVENT.
4. WHEREVER POSSIBLE, SITE TOPSOIL IS TO BE USED IN PREFERENCE TO IMPORTED TOPSOIL.
5. BATTER FROM EDGE OF CONSTRUCTION TO BOUNDARY TO BE 1:5 WHERE POSSIBLE WITH CLEAN FILL COMPACTED TO 95% MMDD.
6. ‘DRYLAND GRASS MIX’ OR SIMILAR APPROVED SHALL CONSIST OF THE VARIETIES SPECIFIED IN THE TABLE. ANY VARIATIONS TO THE ‘DRYLAND GRASS MIX’ SHALL BE CONFIRMED WITH TECHNICAL SERVICES.
7. FOR SWALE TREATMENT AT DRIVEWAY CROSSOVERS REFER TO SD-231.

<table>
<thead>
<tr>
<th>SEED VARIETY</th>
<th>PERCENTAGE OF MIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victorian Rye</td>
<td>35%</td>
</tr>
<tr>
<td>Annual Rye</td>
<td>20%</td>
</tr>
<tr>
<td>Fescue</td>
<td>25%</td>
</tr>
<tr>
<td>Clover</td>
<td>5%</td>
</tr>
<tr>
<td>Medic</td>
<td>10%</td>
</tr>
<tr>
<td>Kikuyu*</td>
<td>5%</td>
</tr>
</tbody>
</table>

*KIKUYU SHALL NOT BE USED ADJACENT TO WATERCOURSES, WETLANDS OR AREAS OF SENSITIVE NATIVE VEGETATION. THE MIX SHALL BE ADJUSTED IN THESE AREAS ACCORDINGLY.

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**SWALE INSTALLATION (TYPE 2) NOTES:**

1. REFER TO DESIGN PLANS FOR DRIVEWAY LOCATIONS, TYPE AND EXTENT OF PROPOSED SWALES.
2. WHERE STORMWATER FLOW VELOCITY EXCEEDS 2.0m/sec OR LONGITUDINAL SWALE GRADE IS GREATER THAN 4.0%, A PROPOSED DESIGN IS TO BE FORWARD TO TECHNICAL SERVICES FOR APPROVAL.
3. CUT-OFF DRAIN(S) AND/OR DRAINAGE PIT(S) SHALL BE PROVIDED WHERE SWALE FLOW WIDTH IS GREATER THAN 1.0m FROM EDGE OF SWALE FOR ANY STORM EVENT.

**SWALE INSTALLATION (TYPE 2) (SD-231)**

AT DRIVEWAY CROSSOVERS - CEMENT TREATED

NOT TO SCALE
BLOCK PAVED FOOTPATH (RESIDENTIAL) NOTES:

1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S FOOTPATH NETWORK ASSET MANAGEMENT PLAN.
2. PAVERS ARE TO BE RECTANGULAR UNLESS NOTED OTHERWISE. THE SUPERINTENDENT IS TO ADVISE ON REQUIRED TYPE AND COLOUR(S).
3. PAVERS TO BE PLACED IN A 90° HERRINGBONE PATTERN WITH HEADER COURSE. STRETCHER BOND MAY BE USED ALONG TIGHT CURVES OR RADIUS' IF REQUIRED. ‘PAVELOCK’ OR SIMILAR APPROVED SWEEPING SAND TO BE USED.
4. 150 WIDE x 100 HIGH HAUNCHING TO BE USED AT DRIVEWAY CROSSOVERS AND ANY AREAS SUBJECT TO VEHICULAR LOADING.
5. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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BLOCK PAVED FOOTPATH (INDUSTRIAL) NOTES:

1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S FOOTPATH NETWORK ASSET MANAGEMENT PLAN.
2. PAVERS ARE TO BE RECTANGULAR UNLESS NOTED OTHERWISE; THE SUPERINTENDENT IS TO ADVISE ON REQUIRED TYPE AND COLOUR(S).
3. PAVERS TO BE PLACED IN A 90° HERRINGBONE PATTERN WITH HEADER COURSE. STRETCHER BOND MAY BE USED ALONG TIGHT CURVES OR RADIUS' IF REQUIRED. 'PAVELOCK' OR SIMILAR APPROVED SWEEPING SAND TO BE USED.
4. WHERE FOOTPATH IS ADJACENT TO A LANDSCAPED AREA AND IS SUBJECT TO VEHICULAR LOADING, A CONCRETE EDGE FOOTING SHALL BE PROVIDED (REFER SD-332).
5. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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**REV DESCRIPTION** | **APPROVED** | **DATE**
---|---|---
E | REVISED BASE MATERIAL & NOTES | C. HASKAS | FEB '18
D | REVISED NOTES | C. HASKAS | AUG '12
C | REVISED BATTERS & NOTES | C. HASKAS | MAY '12
B | REVISED BASE NOTE | P. BICKLEY | MAY '11
A | ORIGINAL ISSUE | P. BICKLEY | JUN '10

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**SCALE AT A4**

NOT TO SCALE
CONCRETE FOOTPATH (RESIDENTIAL) NOTES:
1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S 'FOOTPATH NETWORK ASSET MANAGEMENT PLAN'.
2. ALL CONCRETE FOOTPATHS TO BE NON-SLIP (BRUSH FINISHED).
3. 'TOOLED' CONTRACTION JOINTS TO BE PROVIDED @ 1200c/c MAX. SPACING. JOINTS ARE ALSO TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH AND ANY ADDITIONAL CONCRETE REQUESTED.
4. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED 'CANITE' OR SIMILAR APPROVED WITH N12 DOWELS x 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY'S EXPANDA JOINT' BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. CONCRETE STRENGTH TO BE 25MPa UNLESS NOTED OTHERWISE.
6. 100mm PM2/20 BASE TO BE USED AT DRIVEWAY Crossovers AND ANY AREAS SUBJECT TO VEHICULAR LOADING.
7. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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CONCRETE FOOTPATH (INDUSTRIAL) NOTES:
1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ‘FOOTPATH NETWORK ASSET MANAGEMENT PLAN’.
2. ALL CONCRETE FOOTPATHS TO BE NON-SLIP (BRUSH FINISHED).
3. ‘TOOLED’ CONTRACTION JOINTS TO BE PROVIDED @ 1200c/c MAX. SPACING. JOINTS ARE ALSO TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH AND ANY ADDITIONAL CONCRETE REQUESTED.
4. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED ‘CANITE’ OR SIMILAR APPROVED WITH N12 DOWELS x 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY’S EXPANDA JOINT* BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
6. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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FOOTPATH & RETAINING WALL NOTES:
1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S
   'FOOTPATH NETWORK ASSET MANAGEMENT PLAN'.
2. RETAINING WALL BLOCKS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
3. BACKFILL SHOULD BE NO HIGHER THAN THE TOP OF THE RETAINING WALL.
4. 'LIQUID NAILS' OR SIMILAR APPROVED CONSTRUCTION ADHESIVE IS TO BE USED TO FIX THE TOP COURSE OF
   RETAINING WALL IN PLACE. PROVIDE A CONTINUOUS BEAD APPROXIMATELY 10mm WIDE TO THE UNDERSIDE OF THE
   RETAINING WALL BLOCK BOTH FRONT & BACK.
5. FOR RETAINING WALLS WHERE \( H \geq 1000mm \) A SEPARATE DEVELOPMENT APPROVAL IS REQUIRED AND A
   PROPOSED DESIGN SHALL BE FORWARDED TO TECHNICAL SERVICES FOR APPROVAL.
6. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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ASPHALT FOOTPATH (RESIDENTIAL) NOTES:

1. For required footpath widths & locations refer to the design plans, project scope & Council's 'Footpath Network Asset Management Plan'.
2. This detail is not to be used for land developments unless approved by Council.
3. 'Sealmac - PF2' geofabric with binder must not be omitted without prior approval from Council's representative. Where geofabric is omitted, 25mm (nominal) asphalt AC7 may be used.
4. For backfilling of drainage or service trenches below footpath base level refer to SD-432 & SD-433.

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**ASPHALT FOOTPATH (SD-305)**

(RESIDENTIAL)

NOT TO SCALE

[Diagram of asphalt footpath with dimensions and notes]

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**REV** **DESCRIPTION** | **APPROVED** | **DATE**
--- | --- | ---
A | ORIGINAL ISSUE | C.HASKAS | AUG '12
B | REVISED BASE MATERIAL & NOTES | C.HASKAS | FEB '18

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ASPHALT FOOTPATH (RESIDENTIAL)

STANDARD # SD-305

REV B

SCALE AT A4

NOT TO SCALE

The City of Onkaparinga

[Logo]
ASPHALT FOOTPATH (INDUSTRIAL) NOTES:
1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S 'FOOTPATH NETWORK ASSET MANAGEMENT PLAN'.
2. THIS DETAIL IS NOT TO BE USED FOR LAND DEVELOPMENTS UNLESS APPROVED BY COUNCIL.
3. 'SEALMAC - PF2' GEOFABRIC WITH BINDER MUST NOT BE OMITTED WITHOUT PRIOR APPROVAL FROM COUNCIL’S REPRESENTATIVE.
4. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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EXPOSED AGGREGATE FOOTPATH (RESIDENTIAL) NOTES:

1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ‘FOOTPATH NETWORK ASSET MANAGEMENT PLAN’.
2. AGGREGATE SHALL BE 10mm (NOMINAL) IN SIZE.
3. THE PROPOSED COLOUR OF AGGREGATE AND CEMENT SHALL BE FORWARDED TO COUNCIL FOR APPROVAL.
4. A 'LIGHT EXPOSURE' SURFACE FINISH, TAKING APPROXIMATELY 2.0mm OFF THE TOP OF THE AGGREGATE SHALL BE USED.
5. THE EXPOSED AGGREGATE FINISH SHOULD BE OBTAINED BY STEEL TROWEL TO A SMOOTH SURFACE. AFTER FINAL SET, USE CLEAN WATER AND BRUSHES TO REMOVE THE SURFACE FILM OF MORTAR UNTIL THE AGGREGATE IS UNIFORMLY EXPOSED WITHOUT UNDERCUTTING OF THE MATRIX.
6. A PROPRIETARY CONCRETE RETARDANT SHALL BE USED IN LIEU OF SUGAR AS A CONCRETE HYDRATION RETARDANT.
7. THE FINISHED PAVEMENT SURFACE SHALL BE UNIFORM IN APPEARANCE AND FREE FROM DEPRESSIONS IN WHICH WATER CAN LIE, WITH A TEXTURE DEPTH OF 2.0-2.5mm.
8. THE CONTRACTOR SHALL TAKE ALL REASONABLE EFFORTS TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE TO PREVENT THE ENTRY OF CEMENTITIOUS MATERIALS FROM ENTERING THE UNDERGROUND DRAINAGE SYSTEM BY PLACING SAND BAGS AND/OR GEOFABRIC FILTERS AT STORMWATER ENTRY POINTS. THIS RESIDUAL MATERIAL SHALL BE REMOVED PRIOR TO RE-CEMENTATION TAKING PLACE.
9. A SAMPLE PANEL OF 1.0m x 1.0m SHALL BE PROVIDED FOR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY EXPOSED AGGREGATE FOOTPATH WORK ON SITE AND SHALL BE RETAINED ON SITE FOR THE DURATION OF THE WORKS.
10. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED 'CANITE' OR SIMILAR APPROVED WITH N12 DOWELS X 300 LONG. EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY'S EXPANDA JOINT" BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
11. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
12. 100mm PM2/20 BASE TO BE USED AT DRIVEWAY CROSSOVERS AND ANY AREAS SUBJECT TO VEHICULAR LOADING.
13. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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EXPOSED AGGREGATE FOOTPATH (INDUSTRIAL) NOTES:

1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ‘FOOTPATH NETWORK ASSET MANAGEMENT PLAN’.
2. AGGREGATE SHALL BE 10mm (NOMINAL) IN SIZE.
3. THE PROPOSED COLOUR OF AGGREGATE AND CEMENT SHALL BE FORWARDED TO COUNCIL FOR APPROVAL.
4. A ‘LIGHT EXPOSURE’ SURFACE FINISH, TAKING APPROXIMATELY 2.0mm OFF THE TOP OF THE AGGREGATE SHALL BE USED.
5. THE EXPOSED AGGREGATE FINISH SHOULD BE OBTAINED BY STEEL TROWEL TO A SMOOTH SURFACE, AFTER FINAL SET, USE CLEAN WATER AND BRUSHES TO REMOVE THE SURFACE FILM OF MORTAR UNTIL THE AGGREGATE IS UNIFORMLY EXPOSED WITHOUT UNDERCUTTING OF THE MATRIX.
6. A PROPRIETARY CONCRETE RETARDANT SHALL BE USED IN LIEU OF SUGAR AS A CONCRETE HYDRATION RETARDANT.
7. THE FINISHED PAVEMENT SURFACE SHALL BE UNIFORM IN APPEARANCE AND FREE FROM DEPRESSIONS IN WHICH WATER CAN LIE, WITH A TEXTURE DEPTH OF 2.0-2.5mm.
8. THE CONTRACTOR SHALL TAKE ALL REASONABLE EFFORTS TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE TO PREVENT THE ENTRY OF CEMENTITIOUS MATERIALS FROM ENTERING THE UNDERGROUND DRAINAGE SYSTEM BY PLACING SAND BAGS AND/OR GEOFABRIC FILTERS AT STORMWATER ENTRY POINTS. THIS RESIDUAL MATERIAL SHALL BE REMOVED PRIOR TO RE-CEMENTATION TAKING PLACE.
9. A SAMPLE PANEL OF 1.0m x 1.0m SHALL BE PROVIDED FOR APPROVAL PRIOR TO THE COMMENCEMENT OF ANY EXPOSED AGGREGATE FOOTPATH WORK ON SITE AND SHALL BE RETAINED ON SITE FOR THE DURATION OF THE WORKS.
10. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED ‘CANITE’ OR SIMILAR APPROVED WITH N12 DOWELS X 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR ‘DANLEY’S EXPANDA JOINT’ BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.
11. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
12. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

EXPOSED AGGREGATE FOOTPATH (SD-308)
(INDUSTRIAL)
NOT TO SCALE

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
PERMEABLE PAVED FOOTPATH (RESIDENTIAL) NOTES:

1. FOR REQUIRED FOOTPATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S 'FOOTPATH NETWORK ASSET MANAGEMENT PLAN'.
2. PAVERS ARE TO BE RECTANGULAR UNLESS NOTED OTHERWISE; THE SUPERINTENDENT IS TO ADVISE ON REQUIRED COLOUR(S).
3. PAVERS TO BE PLACED IN A 90° HERRINGBONE PATTERN WITH HEADER COURSE. STRETCHER BOND MAY BE USED ALONG TIGHT CURVES OR RADIUS' IF REQUIRED. 'PAVELOCK' OR SIMILAR APPROVED SWEEPING SAND TO BE USED.
4. 150 WIDE x 100 HIGH HAUNCHING TO BE USED AT DRIVEWAY CROSSTREETS AND ANY AREAS SUBJECT TO VEHICULAR LOADING.
5. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

1. All dimensions are in millimeters unless otherwise shown.
2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
CONCRETE SHARED PATH NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S.
2. ALL CONCRETE SHARED PATHS TO BE NON-SLIP (BRUSH FINISHED).
3. WHERE AN EXPOSED AGGREGATE SURFACE FINISH IS REQUIRED, REFER TO COUNCIL'S REPRESENTATIVE FOR AGGREGATE TYPE & COLOUR.
4. TOOLLED CONTRACTION JOINTS TO BE PROVIDED @ 1200c/c MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED CANITE OR A SIMILAR APPROVED PRODUCT.
5. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH AND ANY ADDITIONAL CONCRETE REQUESTED.
6. CONCRETE STRENGTH TO BE 25MPa UNLESS NOTED OTHERWISE.
7. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.
8. GUIDE TO TRAFFIC ENGINEERING PRACTICE - PARTS 13 & 14.
9. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO AUSTROADS.
10. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

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2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
BLOCK PAVED SHARED PATH NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S 'ASSET MANAGEMENT PLAN - SHARED USE PATHS'.

2. PAVERS ARE TO BE RECTANGULAR UNLESS NOTED OTHERWIE. THE SUPERINTENDENT IS TO ADVISE ON REQUIRED COLOURS.

3. PAVERS TO BE PLACED IN A 90° HERRINGBONE PATTERN WITH HEADER COURSE. STRETCHER BOND MAY BE USED ALONG TIGHT CURVES OR RADIUS'S. THE SUPERINTENDENT IS TO ADVISE ON REQUIRED COLOURS.

4. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.

5. CONCRETE HAUNCHING TO EXTEND TWO-THIRDS OF THE WAY UP THE SIDE OF BLOCK PAVERS. CONCRETE TO BE 25 MPa

6. CONCRETE HAUNCHING TO BE COMPACTED TO 96% MDD

7. WHERE SHARED PATH IS ADJACENT TO A LANDSCAPED AREA AND IS SUBJECT TO VEHICULAR LOADING, A CONCRETE EDGE FOOTING SHALL BE PROVIDED (REFER SD-332).

8. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

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SPRAY SEAL SHARED PATH (TYPE 1) NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S
ASSET MANAGEMENT PLAN - SHARED USE PATHS.

2. PROVIDE SEALMAC - PF2 GEOFABRIC WITH 0.8 - 1.0L/m² OF C170 BINDER. GEOFABRIC BY ‘GEOFABRICS AUSTRALIA’ OR
SIMILAR APPROVED. TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.

3. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.9.

4. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO THE
AUSTROADS GUIDE TO TRAFFIC ENGINEERING PRACTICE - PARTS 13 & 14.

5. FOR CBR VALUES ≤ 3 ‘TENSAR SS30’ GEOGRID SHALL ALSO BE USED, REFER (SD-313).

6. ‘SEALMAC - PF2’ GEOFABRIC WITH BINDER MUST NOT BE OMITTED FROM DESIGN WITHOUT PRIOR APPROVAL FROM THE
SUPERINTENDENT.

7. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

10/5 2-COAT SPRAY SEAL WITH 1.8 - 2.0L/m² OF C170 BINDER

WIDTH VARIES

1% MIN. 2.5% MAX. CROSSFALL

SUBGRADE TO BE COMPACTED TO 98% STD MDD

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2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
SPRAY SEAL SHARED PATH (TYPE 2) NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ASSET MANAGEMENT PLAN - SHARED USE PATHS.

2. PROVIDE SEALMAC - PF2 GEOFABRIC WITH 0.8 - 1.0L/m² OF C170 BINDER. GEOFABRIC BY ‘GEOFABRICS’ OR SIMILAR APPROVED. TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.

3. ‘TENSAR SS30’ GEOGRID TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.

4. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.9.

5. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO ‘AUSTROADS GUIDE TO TRAFFIC ENGINEERING PRACTICE’ - PARTS 13 & 14.

6. FOR CBR VALUES > 3 ‘TENSAR SS30’ GEOGRID MAY BE OMITTED, REFER SD-312.

7. ‘SEALMAC - PF2’ GEOFABRIC WITH BINDER MUST NOT BE OMITTED FROM DESIGN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.

8. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

9. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

10. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL TO ENSURE THAT THEY ARE USING THE CURRENT VERSION OF THIS DRAWING. COUNCIL ACCEPTS NO LIABILITY FOR ISSUES ARISING FROM THE USE OF SUPERSEDED DRAWINGS. PRINTED COPIES OF THIS DRAWING ARE UNCONTROLLED.

REV DESCRIPTION APPROVED DATE
A ORIGINAL ISSUE P. BICKLEY JUN '10
B REVISED BASE NOTE P. BICKLEY MAY '11
C REVISED DETAIL & NOTES C. HASKAS AUG '12
D REVISED BASE MATERIAL NOTE C. HASKAS FEB '18

SPRAY SEAL SHARED PATH (TYPE 2) (SD-313)
WITH ‘TENSAR SS30’ GEOGRID
NOT TO SCALE

SD-313 STANDARD # REV D

1. All dimensions are in millimeters unless otherwise shown.

2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
ASPHALT SHARED PATH (TYPE 1) NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL'S ASSET MANAGEMENT PLAN - SHARED USE PATHS.
2. PROVIDE 'SEALMAC - PF2' GEOFABRIC WITH 0.8 - 1.0L/m² OF C170 BINDER. GEOFABRIC BY 'GEOFABRICS AUSTRALIA' OR SIMILAR APPROVED. TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
3. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
4. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO AUSTROADS.
5. FOR CBR VALUES ≤ 3 'TENSAR SS30' GEOGRID SHALL ALSO BE USED, REFER (SD-315).
6. 'SEALMAC - PF2' GEOFABRIC WITH BINDER MUST NOT BE Omitted FROM THE DESIGN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT. WHERE GEOFABRIC IS OMITTED, 25mm (NOMINAL) ASPHALT AC7 MAY BE USED.
7. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

ASPHALT SHARED PATH (TYPE 1) WITHOUT GEOGRID

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CEMENT TREATED RUBBLE SHARED PATH (SD-316)

NOT TO SCALE

WIDTH VARIES

1% MIN. 2.5% MAX. CROSSFALL

CEMENT TREATED RUBBLE SHARED PATH NOTES:

1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ASSET MANAGEMENT PLAN - SHARED USE PATHS.
2. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.
3. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO AUSTROADS GUIDE TO TRAFFIC ENGINEERING PRACTICE - PARTS 13 & 14.
4. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

SUBGRADE TO BE COMPACTED TO 98% STD MDD

100mm R/20 BASE WITH 4% CEMENT CONTENT. TO BE COMPACTED TO 96% STD MDD.

CEMENT TREATED RUBBLE SHARED PATH

A ORIGINAL ISSUE P.BICKLEY JUN '10
B REVISED BASE NOTE P.BICKLEY MAY '11
C REVISED DETAIL & NOTES C.HASKAS AUG '12
D REVISED BASE MATERIAL C.HASKAS FEB '16
E REVISED TECHNICAL SERVICES C.HASKAS FEB '18

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LIMESTONE RUBBLE SHARED PATH NOTES:
1. FOR REQUIRED SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ‘ASSET MANAGEMENT PLAN - SHARED USE PATHS’.
2. ALL LINEMARKING & SIGNAGE FOR SHARED PATHS IS TO BE INSTALLED IN ACCORDANCE WITH AS 1742.9.
3. FOR INSTALLATION OF SHARED PATH FURNITURE & REQUIRED TREATMENT AT OBSTRUCTIONS, REFER TO ‘AUSTROADS GUIDE TO TRAFFIC ENGINEERING PRACTICE’ - PARTS 13 & 14.
4. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW SHARED PATH BASE LEVEL REFER TO SD-432 & SD-433.

LIMESTONE RUBBLE BASE (20mm NOM).
TO BE WHITE-YELLOW IN COLOUR.
TO BE COMPACTED TO 96% STD MDD.

SUBGRADE TO BE COMPACTED TO 98% STD MDD.

LIMESTONE RUBBLE SHARED PATH (SD-317)
NOT TO SCALE
**KERB RAMP (WINGS) NOTES:**

1. KERB RAMPS TO BE CONSTRUCTED IN ACCORDANCE WITH AS 1428.
2. FOR REQUIRED FOOTPATH/SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ASSET MANAGEMENT PLANS.
3. WIDTH OF KERB RAMP(W) SHALL MATCH THAT OF THE APPROACHING FOOTPATH OR SHARED PATH.
4. FOOTPATH CROSSFALL SHALL TRANSITION ALONG ITS LENGTH TO MATCH THE CROSSFALL OF THE KERB RAMP LANDING AT A RATE NO GREATER THAN 2.5% PER METRE (25mm/PER 1000mm) OR OVER A LENGTH OF 3.0m, WHICHEVER IS THE LESSER.
5. FOR KERB RAMPS ON A SHARED PATH, THE WIDTH OF THE LANDING(W) SHALL MATCH THAT OF THE APPROACHING SHARED PATH UNLESS NOTED OTHERWISE.
7. REFER TO DESIGN PLANS FOR KERB RAMP WING/PLINTH CONFIGURATION.
8. KERB RAMP WINGS SHALL NOT BE REPLACED WITH 150mm WIDE PLINTH WITHOUT PRIOR APPROVAL FROM COUNCIL’S TRAFFIC SECTION.
9. THE RAMP AND SLOPING SIDES ARE TO BE NON-SLIP (BRUSH FINISHED) AND OF A COLOUR THAT CONTRASTS WITH THE ADJOINING SURFACES.
10. TOOL ED CONSTRUCTION JOINTS ARE TO BE PROVIDED AS SHOWN AND ALSO BETWEEN THE KERB RAMP AND ANY ADJOINING CONCRETE WORKS.
11. PROVIDE TACTILE GROUND SURFACE INDICATORS (TGSI’S) AS SPECIFIED IN AS 1428.4. TGSI’S TO BE INTEGRATED IN THE RAMP TO AID IN THE ORIENTATION OF PEOPLE WITH VISION IMPAIRMENT.
12. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER (SD-325), (SD-326), (SD-327) & (SD-328) FOR INSTALLATION DETAILS.
13. KERB RAMP MUST BE ALIGNED PERPENDICULAR (90°) TO THE ROAD CENTRELINE.
14. THE KERB RAMP LOCATION SHOULD TAKE INTO CONSIDERATION THE FOLLOWING:
   - VISIBILITY FOR ALL TRAFFIC & PEDESTRIANS APPROACHING THE CROSSING AREA.
   - CONTINUE THE ALIGNMENT OF THE FOOTPATH WHERE POSSIBLE.
   - MAINTAIN ADEQUATE CLEARANCE FROM EXISTING DRAINAGE PITS, SERVICE PITS, OBSTRUCTIONS ETC.
   - ON CURVES, THE KERB RAMP SHOULD BE LOCATED AS CLOSE AS PRACTICABLE TO THE TANGENT POINT (TP) OF THE KERB.
15. FOR KERB RAMPS ON CURVES, THE MAXIMUM AND MINIMUM RAMP LENGTHS SHALL APPLY TO THE SHORTEST SIDE OF THE RAMP ONLY.
16. CONCRETE STRENGTH TO BE 25MPa UNLESS NOTED OTHERWISE.

**REQUIRED LANDING DIMENSIONS (MINIMUM)**

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**KERB RAMP (TYPE 1) (SD-320)**

*FOR KERB RAMP WITH WINGS*

NOT TO SCALE

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**KERB RAMP (TYPE 1)**

*FOR KERB RAMP WITH WINGS*

STANDARD # SD-320

REV D

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**SCHEDULE OF DRAWINGS**

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**SCALE AT A4**

NOT TO SCALE
KERB RAMP (PLINTH) NOTES:

1. KERB RAMPS TO BE CONSTRUCTED IN ACCORDANCE WITH AS 1428.
2. FOR REQUIRED FOOTPATH/SHARED PATH WIDTHS & LOCATIONS REFER TO THE DESIGN PLANS, PROJECT SCOPE & COUNCIL’S ASSET MANAGEMENT PLANS.
3. WIDTH OF KERB RAMP(W) SHALL MATCH THAT OF THE APPROACHING FOOTPATH OR SHARED PATH.
4. FOOTPATH CROSSFALL SHALL TRANSITION ALONG ITS LENGTH TO MATCH THE CROSSFALL OF THE KERB RAMP LANDING AT A RATE NO GREATER THAN 2.5% PER METRE (25mm PER 1000mm) OR OVER A LENGTH OF 3.0m, WHOEVER IS THE LESSER.
5. FOR KERB RAMPS ON A SHARED PATH, THE WIDTH OF THE LANDING(W) SHALL MATCH THAT OF THE APPROACHING SHARED PATH UNLESS NOTED OTHERWISE.
7. REFER TO DESIGN PLANS FOR KERB RAMP WINGS/PLINTH CONFIGURATION.
8. KERB RAMP WINGS SHALL NOT BE REPLACED WITH 150mm WIDE PLINTH WITHOUT PRIOR APPROVAL FROM COUNCIL’S TRAFFIC SECTION.
9. THE RAMP AND SLOPING SIDES ARE TO BE NON-SLIP (BRUSH FINISHED) AND OF A COLOUR THAT CONTRASTS WITH THE ADJOINING SURFACES.
10. ‘TOOLED’ CONSTRUCTION JOINTS ARE TO BE PROVIDED AS SHOWN AND ALSO BETWEEN THE KERB RAMP AND ANY ADJOINING CONCRETE WORKS.
11. PROVIDE TACTILE GROUND SURFACE INDICATORS (TGSI’S) AS SPECIFIED IN AS 1428.4. TGSI’S TO BE INTEGRATED IN THE RAMP TO AID IN THE ORIENTATION OF PEOPLE WITH VISION IMPAIRMENT.
12. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER (SD-325), (SD-326), (SD-327) & (SD-328) FOR INSTALLATION DETAILS.
13. KERB RAMP MUST BE ALIGNED PERPENDICULAR (90°) TO THE ROAD CENTRELINE.
14. THE KERB RAMP LOCATION SHOULD TAKE INTO CONSIDERATION THE FOLLOWING;
   - VISIBILITY FOR ALL TRAFFIC & PEDESTRIANS APPROACHING THE CROSSING AREA.
   - CONTINUE THE ALIGNMENT OF THE FOOTPATH WHERE POSSIBLE.
   - MAINTAIN ADEQUATE CLEARANCE FROM EXISTING DRAINAGE PITS, SERVICE PITS, OBSTRUCTIONS ETC.
   - ON CURVES, THE KERB RAMP SHOULD BE LOCATED AS CLOSE AS PRACTICABLE TO THE TANGENT POINT (TP) OF THE KERB.
15. FOR KERB RAMPS ON CURVES, THE MAXIMUM AND MINIMUM RAMP LENGTHS SHALL APPLY TO THE SHORTEST SIDE OF THE RAMP ONLY.
16. CONCRETE STRENGTH TO BE 25MPa UNLESS NOTED OTHERWISE.

REQUIRED LANDING DIMENSIONS (MINIMUM)

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FOOTPATH HOLDING RAIL INSTALLATION NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ASSOCIATED DPTI STANDARD DRAWINGS.
2. FOR KERB RAMP CONSTRUCTION DETAILS, REFER TO AS 1428 AND COUNCIL STANDARDS SD-320 & SD-321.
3. FOR HOLDING RAIL INSTALLATION IN PEDESTRIAN REFUGES & SHARED PATHS REFER SD-326 & SD-327.
4. PROVIDE TACTILE GROUND SURFACE INDICATORS (TGSI’S) AS SPECIFIED IN AS 1428.4. TGSI’S TO BE INTEGRATED IN THE RAMP TO AID IN THE ORIENTATION OF PEOPLE WITH VISION IMPAIRMENT.
5. HOLDING RAILS TO BE CONSTRUCTED OF (NOMINAL) Ø50mm OUTSIDE DIAMETER GALVANISED STEEL PIPE WITH 3.6mm WALL THICKNESS.
6. HOLDING RAILS SHALL BE POWDER COATED IN WHITE FOR AN ESTIMATED 10 YEAR SERVICE LIFE.
7. RED AND WHITE RETROREFLECTIVE TAPE SHALL BE USED ON BOTH OF THE VERTICAL AND THE HORIZONTAL MEMBERS OF ALL HOLDING RAILS. ALL REFLECTIVE TAPE SHALL BE CLASS 1 IN ACCORDANCE WITH AS 1743.
8. THE RED RETROREFLECTIVE TAPE SHALL BE CENTRALLY LOCATED WITH THE WHITE RETROREFLECTIVE TAPE PLACED ADJACENT TO THE LENGTHS SPECIFIED.
10. CONCRETE FOOTINGS TO BE 25MPa UNLESS NOTED OTHERWISE.

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**SHARED PATH HOLDING RAIL INSTALLATION NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ASSOCIATED DPTI STANDARD DRAWINGS.
2. FOR KERB RAMP CONSTRUCTION DETAILS, REFER TO AS 1428 AND COUNCIL STANDARDS SD-320 & SD-321.
3. FOR HOLDING RAIL INSTALLATION IN PEDESTRIAN REFUGES & FOOTPATHS REFER SD-325 & SD-327.
4. PROVIDE TACTILE GROUND SURFACE INDICATORS (TGSIS) AS SPECIFIED IN AS 1428.4. TGSIS TO BE INTEGRATED IN THE RAMP TO AID IN THE ORIENTATION OF PEOPLE WITH VISION IMPAIRMENT.
5. HOLDING RAILS TO BE CONSTRUCTED OF (NOMINAL) Ø50mm OUTSIDE DIAMETER GALVANISED STEEL PIPE WITH 3.6mm WALL THICKNESS.
6. HOLDING RAILS SHALL BE POWDER COATED IN WHITE FOR AN ESTIMATED 10 YEAR SERVICE LIFE.
7. RED AND WHITE RETROREFLECTIVE TAPE SHALL BE USED ON BOTH OF THE VERTICAL AND THE HORIZONTAL MEMBERS OF ALL HOLDING RAILS. ALL REFLECTIVE TAPE SHALL BE CLASS 1 IN ACCORDANCE WITH AS 1743.
8. THE RED RETROREFLECTIVE TAPE SHALL BE CENTRALLY LOCATED WITH THE WHITE RETROREFLECTIVE TAPE PLACED ADJACENT TO THE LENGTHS SPECIFIED.
10. CONCRETE FOOTINGS TO BE 25MPa UNLESS NOTED OTHERWISE.

**VERTICAL TAPE LAYOUT FOR HOLDING RAIL**

**HORIZONTAL TAPE LAYOUT FOR 600mm HOLDING RAIL**

**CARRIAGEWAY**

**PLAN VIEW**

**DETAIL A-A**

**SHARED PATH HOLDING RAIL INSTALLATION (SD-326)**

**AT KERB RAMP FOR PEDESTRIANS & CYCLISTS**

**NOT TO SCALE**

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<td>P. BICKLEY</td>
<td>C. HASKAS</td>
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PEDESTRIAN REFUGE NOTES:
1. A PROPOSED DESIGN SHOWING PEDESTRIAN WALKTHROUGH DIMENSIONS (W1), (W2), CARRIAGEWAY WIDTHS ETC. SHALL BE
   FORWARDISED TO TECHNICAL SERVICES FOR APPROVAL.
2. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ASSOCIATED DPIF STANDARD DRAWINGS.
3. FOR HOLDING RAIL INSTALLATION IN FOOTPATHS & SHARED PATHS REFER TO SD-325 & SD-326.
4. PROVIDE TACTILE GROUND SURFACE INDICATORS (TGSI'S) AS SPECIFIED IN AS 1428.4. TGSI'S TO BE INTEGRATED IN THE PEDESTRIAN
   WALKTHROUGH TO AID IN THE ORIENTATION OF PEOPLE WITH VISION IMPAIRMENT.
5. HOLDING RAILS TO BE CONSTRUCTED OF (MINIMAL) 900mm OUTSIDE DIAMETER GALVANISED STEEL PIPE WITH 3.6mm WALL THICKNESS.
6. HOLDING RAILS SHALL BE POWDER COATED IN WHITE FOR AN ESTIMATED 10 YEAR SERVICE LIFE.
7. RED AND WHITE RETROREFLECTIVE TAPE SHALL BE USED ON BOTH THE VERTICAL AND THE HORIZONTAL MEMBERS OF ALL HOLDING
   RAILS. ALL REFLECTIVE TAPE SHALL BE CENTRALLY LOCATED WITH THE WHITE RETROREFLECTIVE TAPE PLACED ADJACENT TO THE
   LENGTHS SPECIFIED.
8. PROVIDE ONE ROADSIDE WEDGE FOR EACH SLEEVE. BY RMS OR SIMILAR APPROVED LOCATED ON INSIDE EDGE. SEAL SLEEVE AT SURFACE LEVEL WITH
   WATERPROOF SEALANT.
9. THE RED RETROREFLECTIVE TAPE SHALL BE CENTRALLY LOCATED WITH THE WHITE RETROREFLECTIVE TAPE PLACED ADJACENT TO THE
   LENGTHS SPECIFIED.
10. REFER TO THE DESIGN PLANS FOR PEDESTRIAN WALKTHROUGH DIMENSIONS (W1), (W2).
11. CONCRETE FOOTINGS AND PLINTH TO BE 32MPa UNLESS NOTED OTHERWISE.

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   arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.

REV DESCRIPTION APPROVED DATE
A ORIGINAL ISSUE P.BICKLEY MAY '11
B REVISED TITLE, DETAIL & NOTES AUG '12 C.HASKAS
C REVISED TITLE, DETAIL & NOTES FEB '18 C.HASKAS

PEDESTRIAN REFUGE (SD-327) NOT TO SCALE

PEDESTRIAN REFUGE (SD-327) STANDARD # SD-327 REV C
LOCALISED FOOTPATH WIDENING NOTES:
1. THE FOOTPATH WIDENING SHALL BE LOCATED ENTIRELY IN FRONT OF THE PROPERTY THAT IT SERVICES.
2. THE FOOTPATH WIDENING ORIENTATION SHALL BE DETERMINED BY THE DRIVEWAY LOCATION.
3. FOOTPATH WIDENING IS ONLY REQUIRED WHERE THE FOOTPATH IS LOCATED ADJACENT TO THE BACK OF KERB.
4. THE FOOTPATH WIDENING IS TO BE CONSTRUCTED OF THE SAME MATERIAL AND TO THE SAME SPECIFICATIONS AS THE ADJOINING FOOTPATH.
5. ALL CONCRETE FOOTPATH WIDENINGS ARE TO BE NON-SLIP (BRUSH FINISHED).
6. 'TOOLED' CONTRACTION JOINTS TO BE PROVIDED @ 1200c/c MAX. SPACING. JOINTS ARE ALSO TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH WIDENING AND ANY ADDITIONAL CONCRETE WORKS.
7. PROVIDE 'BORAL MINI GARDEN WALL' OR SIMILAR APPROVED AS REQUIRED. RETAINING WALL BLOCKS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.

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LOCALISED FOOTPATH WIDENING (SD-330)
TO ALLOW FOR BIN PLACEMENT
NOT TO SCALE

REV DESCRIPTION APPROVED DATE
D REVISED NOTE 6 C.HASKAS FEB '18
C REVISED NOTES C.HASKAS AUG '12
B REVISED TO CLARIFY LOCATIONS P.BICKLEY MAY '11
A ORIGINAL ISSUE P.BICKLEY JUN '10

STANDARD # SD-330 REV D
SCALE AT A4 NOT TO SCALE
CONCRETE INFILL FOR SERVICE COVER NOTES:
1. CONCRETE STRENGTH TO BE 20MPa UNLESS NOTED OTHERWISE.

CONCRETE INFILL TO BE 80mm THICK MIN.
CONCRETE COLOUR TO MATCH PAVERS

SERVICE COVER
(SEWER, WATER ETC.)

75mm MIN.

BLOCK PAVERS

CONCRETE INFILL FOR SERVICE COVER (SD-331)
FOR BLOCK PAVING
NOT TO SCALE

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EDGE FOOTING INSTALLATION NOTES:
1. PAVERS ARE TO BE RECTANGULAR UNLESS NOTED OTHERWISE; COUNCIL'S REPRESENTATIVE IS TO ADVISE ON REQUIRED COLOUR(S).
2. PAVERS TO BE PLACED IN A 90° HERRINGBONE PATTERN WITH HEADER COURSE. STRETCHER BOND MAY BE USED ALONG TIGHT CURVES OR RADIUS' IF REQUIRED. 'PAVELOCK' OR SIMILAR APPROVED SWEEPING SAND TO BE USED.
3. CONCRETE STRENGTH TO BE 25MPa UNLESS NOTED OTHERWISE.

CONCRETE HAUNCHING TO EXTEND TWO-THIRDS OF THE WAY UP THE SIDE OF BLOCK PAVERS.
CONCRETE TO BE 25 MPa

EDGE FOOTING INSTALLATION (SD-332)
INTERFACE BETWEEN PAVING & LANDSCAPED AREAS - SUBJECT TO VEHICULAR LOADING
NOT TO SCALE
CONCRETE FOOTPATH REPAIR (RESIDENTIAL) NOTES:
1. FOOTPATH REPAIR WIDTH TO MATCH EXISTING FOOTPATH WIDTH.
2. ALL CONCRETE FOOTPATHS TO BE NON-SLIP (BRUSH FINISHED).
3. WHERE AN EXPOSED AGGREGATE SURFACE FINISH IS REQUIRED, REFER TO COUNCIL’S REPRESENTATIVE FOR AGGREGATE TYPE & COLOUR.
4. 'TOOLED' CONTRACTION JOINTS TO BE PROVIDED @ 1200c/c MAX. SPACING. JOINTS ARE ALSO TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH AND ANY ADDITIONAL CONCRETE REQUESTED.
5. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED 'CANITE' OR SIMILAR APPROVED WITH N12 DOWELS x 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY'S EXPANDA JOIN'T BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
6. CONCRETE TO BE 32MPa UNLESS NOTED OTHERWISE.
7. 'TRIP STOP' TO BE INSTALLED AT NO GREATER THAN 1500c/c SPACINGS WHERE LONGER LENGTHS OF FOOTPATH REPAIR ARE REQUIRED.
8. 100mm PM2/20 BASE TO BE USED AT DRIVEWAY CROSSOVERS AND ANY AREAS SUBJECT TO VEHICULAR LOADING.
9. FOR BACKFILLING OF DRAINAGE OR SERVICE TRENCHES BELOW FOOTPATH BASE LEVEL REFER TO SD-432 & SD-433.

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KERB INSTALLATION (TYPE 1) (SD-400)
IN NEW PAVEMENT - WITH FUTURE VERGE TREATMENT
NOT TO SCALE

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KERB INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB PROFILE, FOOTPATH & PAVEMENT DESIGN.

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2. It is the responsibility of the individual to ensure that they are using the current version of this drawing. Council accepts no liability for issues arising from the use of superseded drawings. Printed copies of this drawing are uncontrolled.
KERB INSTALLATION (TYPE 3) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB PROFILE & LOCATION OF FOOTPATHS (IF APPLICABLE).
3. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
4. THIS DETAIL SHALL NOT BE USED WHERE BACKFILL WIDTH (W) IS LESS THAN 350mm.
5. WHERE BACKFILL WIDTH (W) IS LESS THAN 350mm (SD-403) SHALL BE USED.
6. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS, WHICHEVER IS THE GREATER.
7. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEVER IS THE GREATER.
8. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED THE TOP 50mm SHALL MATCH EXISTING SITE MATERIALS AT BACK OF KERB (LIKE-FOR-LIKE) TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE.

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KERB INSTALLATION (TYPE 4) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB PROFILE & LOCATION OF FOOTPATHS (IF APPLICABLE).
3. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
4. CONTROLLED LOW STRENGTH MATERIAL SHALL NOT BE USED WHERE BACKFILL WIDTH (W) IS GREATER THAN 350mm.
5. WHERE BACKFILL WIDTH (W) IS GREATER THAN 350mm (SD-402) SHALL BE USED.
6. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS, WHICHEVER IS THE GREATER.
7. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEVER IS THE GREATER.
8. CONTROLLED LOW STRENGTH MATERIAL (CLSM) INFILL STRENGTH TO BE 4MPa.
9. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED THE TOP 50mm SHALL MATCH EXISTING SITE MATERIALS AT BACK OF KERB (LIKE-FOR-LIKE) TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE.

PROPOSED KERB PROFILE VARIES
(REFER DESIGN PLANS)

HOTMIX AC10 NOMINAL.
(WIDTH & DEPTH VARIES, REFER NOTES)

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KERB INSTALLATION (TYPE 5) NOTES:
1. THIS KERB INSTALLATION METHOD SHALL NOT BE USED FOR NEW INFRASTRUCTURE PROJECTS. TO BE USED ONLY FOR MATCHING INTO OR REPLACEMENT OF EXISTING KERBSING.
2. THE HOTMIX KERB SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm NOMINAL DEPTH.
3. HOTMIX KERB SHALL EXTEND A MINIMUM OF 1.0m EITHER SIDE OF THE TREE TRUNK.
4. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
5. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRAINSULAR PAVEMENT LAYERS, WHICHEVER IS THE GREATER.
6. ALL LINEMARKING, PAVEMENT MARKING AND ROAD FURNITURE SHALL BE REINSTATED TO MATCH EXISTING.
7. WHERE BACKFILL WIDTH (W) IS LESS THAN 350mm, A CONTROLLED LOW STRENGTH MATERIAL (CLSM) SHALL BE USED AND SHALL HAVE A STRENGTH OF 4MPa.

KERB INSTALLATION (TYPE 5) (SD-404)
HOTMIX KERBING FOR TREE IN CLOSE PROXIMITY - IN EXISTING PAVEMENT
NOT TO SCALE

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REV DESCRIPTION APPROVED DATE
B REVISED DETAIL C.HASKAS FEB '18
A ORIGINAL ISSUE C.HASKAS AUG '12

KERB INSTALLATION (TYPE 5) (SD-404)
HOTMIX KERBING FOR TREE IN CLOSE PROXIMITY - IN EXISTING PAVEMENT
NOT TO SCALE
SIT-ON KERB INSTALLATION (TYPE 1) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR EXACT KERB LOCATION WITH RESPECT TO THE ROAD CENTRELINE & FOR PAVEMENT DESIGN.
3. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED, BACKFILL BEHIND KERB WITH APPROVED SITE MATERIAL OR PM2/20 TO THE TOP OF KERB. TO BE COMPACTED TO 95% MMDD.

1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR EXACT KERB LOCATION WITH RESPECT TO THE ROAD CENTRELINE & FOR PAVEMENT DESIGN.
3. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED, BACKFILL BEHIND KERB WITH APPROVED SITE MATERIAL OR PM2/20 TO THE TOP OF KERB. TO BE COMPACTED TO 95% MMDD.

SIT-ON KERB INSTALLATION (TYPE 1) (SD-405)
IN NEW PAVEMENT
NOT TO SCALE

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<td>MAY '11</td>
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SIT-ON KERB INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR EXACT KERB LOCATION WITH RESPECT TO THE ROAD CENTRELINE.
3. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
4. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS.
5. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEREVER IS THE GREATER.
6. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED THE TOP 50mm SHALL MATCH EXISTING SITE MATERIALS AT BACK OF KERB (LIKE-FOR-LIKE) TO THE SATISFACTION OF COUNCIL'S REPRESENTATIVE.

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KEYED-IN KERB INSTALLATION (TYPE 1) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR EXACT KERB LOCATION WITH RESPECT TO THE ROAD CENTRELINE & FOR PAVEMENT DESIGN.
3. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED, BACKFILL BEHIND KERB WITH APPROVED SITE MATERIAL OR PM2/20 TO THE TOP OF KERB. TO BE COMPACTED TO 95% MMDD.

Backfill with PM2/20 compacted to 95% MMDD to the satisfaction of Council’s Representative.

Subgrade to be compacted to 98% STD MDD.

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KEYED-IN KERB INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR EXACT KERB LOCATION WITH RESPECT TO THE ROAD CENTRELINE.
3. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
4. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS.
5. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEVER IS THE GREATER.
6. IN AREAS WHERE NO VERGE TREATMENT IS REQUIRED THE TOP 50mm SHALL MATCH EXISTING SITE MATERIALS AT BACK OF KERB (LIKE-FOR-LIKE) TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE.

PROVIDE 50mm APPROVED TOPSOIL COMPACTED TO 90% MMDD TO ALLOW FOR FUTURE VERGE TREATMENT

BACKFILL WITH PM2/20 COMPACTED TO 95% MMDD TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE

FALL (VARIES)

PM1/20 BASE COMPACTED TO 98% MMDD (DEPTH VARIES)

SUBGRADE TO BE COMPACTED TO 98% STD MDD

SAW-CUT LINE

PROVIDE SIT-ON KERB (SOK) (REFER SD-111)

_LANE (WIDTH VARIES)_

FACE OF KERB

EDGE LINE

HOTMIX AC10 NOMINAL. (DEPTH VARIES, REFER NOTES)

EXISTING WEARING COURSE TO BE SAW-CUT & RELAID

200 MIN.

EXISTING PAVEMENT

250 250 600

PM2/20 SUB-BASE COMPACTED TO 96% MMDD (DEPTH VARIES)

_Provide sit-on kerb (SOK) (Refer SD-111)_

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CONCRETE FILLET INSTALLATION NOTES:

1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
3. CONCRETE FILLET TO BE PLACED AT SAME TIME AS ADJACENT CONCRETE ELEMENTS.

CONCRETE FILLET TO BE 190mm THICK WITH SL72 MESH PLACED WITH 50mm COVER FROM BOTTOM USING CHAIRS OR SIMILAR. BASE THICKNESS AND COMPACTION TO MATCH THAT OF PROPOSED PAVEMENT DESIGN (REFER DESIGN PLANS).

CONCRETE FILLET AT KERB RADIUS’ (SD-410)
FOR USE WHERE SPOON DRAIN OR EDGE STRIP IS USED
NOT TO SCALE

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CONCRETE APRON INSTALLATION NOTES:
1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR LOCATION OF CONCRETE APRON(S).
3. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
4. CONCRETE APRON TO BE PLACED AT SAME TIME AS ADJACENT KERBING.

CONCRETE APRON TO BE 190mm THICK WITH SL72 MESH PLACED WITH 50mm COVER FROM BOTTOM USING CHAIRS OR SIMILAR. BASE THICKNESS AND COMPACTION TO MATCH THAT OF PROPOSED PAVEMENT DESIGN (REFER DESIGN PLANS).

CONCRETE APRON INSTALLATION (SD-411)
TO DIRECT STORMWATER FLOWS AT INTERSECTION
NOT TO SCALE

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REV DESCRIPTION APPROVED DATE
B REVISED NOTES C.HASKAS AUG '12
A ORIGINAL ISSUE P.BICKLEY JUN '10

CONCRETE APRON INSTALLATION
TO DIRECT STORMWATER FLOWS AT INTERSECTION
NOT TO SCALE

SCALE AT A4
CITY OF ONKAPRINGA
STANDARD # SD-411 REV B
DRIVEWAY INVERT & CROSSOVER INSTALLATION (RESIDENTIAL) NOTES:

1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB & PAVEMENT DESIGN (HEIGHTS SHOWN MAY VARY ACCORDING TO KERB PROFILE).
3. DRIVEWAY CROSSOVER TO BE NON-SLIP (BRUSH FINISHED).
4. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED 'CANITE' OR SIMILAR APPROVED WITH N12 DOWELS x 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY'S EXPANDA JOINT BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
6. LOCATE DRIVEWAY INVERT ON LOW SIDE OF ALLOTMENT 1.0m FROM PROJECTED SIDE BOUNDARY OR AS SPECIFIED.
7. DRIVEWAYS SHOULD PROVIDE ACCESS TO SINGLE OR DOUBLE GARAGES OR CARPORTS VIA A DRIVEWAY CROSSOVER (THE AREA BETWEEN THE PROPERTY BOUNDARY AND THE KERB) NOT EXCEEDING 4.0m WIDTH (FOR LOCAL ROADS).
8. ACCESS WAYS SERVICING MORE THAN THREE (3) DWELLINGS ON ALLOTMENTS WITH COMMON DRIVEWAYS SHOULD PROVIDE AN ACCESS ONTO COLLECTOR, DISTRIBUTOR OR ARTERIAL ROADS NOT LESS THAN 6.0m WIDTH FOR THE FIRST 6.0m OF THE ALLOTMENT.
9. ONE DRIVEWAY INVERT TO BE INSTALLED PER ALLOTMENT PER FRONTAGE.
10. DRIVEWAY INVERTS FOR CORNER ALLOTMENTS SHALL BE LOCATED NO CLOSER THAN 6.0m FROM THE INTERSECTION OF THE PROJECTED ROAD FRONTAGE BOUNDARIES UNLESS APPROVED BY COUNCIL.
11. DRIVEWAY INVERT TO BE LOCATED AT LEAST 1.0m FROM KERB RAMPS AND SIDE ENTRY PITS (EXCLUDING TAPER).

PROPOSED PAVEMENT (REFER DESIGN PLANS)

100mm PM2/20 BASE COMPACTED TO 96% MMDD
100mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

SECTION A-A

CROSSOVER WIDTH REQUIREMENTS DEPENDENT ON ROAD CLASSIFICATION

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<th>ROAD CLASSIFICATION</th>
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DRIVEWAY INVERT & CROSSOVER INSTALLATION (RESIDENTIAL) (SD-420)

1. All dimensions are in millimeters unless otherwise shown.
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REV DESCRIPTION APPROVED DATE
D REVISED DETAIL & NOTES C.HASKAS FEB '18
C REVISED DETAIL & NOTES C.HASKAS AUG '12
B REVISED INVERT DIMENSIONS P.BICKLEY MAY '11
A ORIGINAL ISSUE P.BICKLEY JUN '10

DRIVEWAY INVERT & CROSSOVER INSTALLATION (RESIDENTIAL)

SD-420

DRIVEWAY INVERT FOR 150 UPRIGHT KERB PROFILE

NOT TO SCALE

SCALE AT A4

ELEVATION B-B

100mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

PROVIDE EXPANSION JOINT (REFER NOTES)

100 mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

450 TAPER

WEARING COURSE (REFER DESIGN PLANS)

100mm PM2/20 BASE COMPACTED TO 96% MMDD

N12 DOWELS X 400 LONG, EMBEDDED 200mm AND EPOXY GROUTED INTO DRIVEWAY INVERT @ 600c/c

2.5% MAX CROSSFALL

PROVIDE EXPANSION JOINT (REFER NOTES)

450 TAPER

"TOOLED" CONTRACTION JOINT

FLOW

FLOW

TOP OF KERB

WATER TABLE

WATER TABLE

SUBGRADE TO BE COMPACTED TO 98% STD MDD

PROPOSED PAVEMENT (REFER DESIGN PLANS)

100mm PM2/20 BASE COMPACTED TO 96% MMDD

100mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

WEARING COURSE (REFER DESIGN PLANS)

100mm PM2/20 BASE COMPACTED TO 96% MMDD

+100mm INVERT OF WATER TABLE

+00mm INVERT OF WATER TABLE

+110mm

+110mm

+150mm

+150mm

+100mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

PROVIDE EXPANSION JOINT (REFER NOTES)

100 mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

2.5% MAX CROSSFALL

PROVIDE EXPANSION JOINT (REFER NOTES)

100 mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

2.5% MAX CROSSFALL

PROVIDE EXPANSION JOINT (REFER NOTES)

100 mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

2.5% MAX CROSSFALL

PROVIDE EXPANSION JOINT (REFER NOTES)

100 mm CONCRETE CROSSOVER WITH SL72 MESH LOCATED CENTRALLY USING CHAIRS OR SIMILAR

2.5% MAX CROSSFALL

PROVIDE EXPANSION JOINT (REFER NOTES)
DRIVEWAY INVERT & CROSSOVER INSTALLATION (INDUSTRIAL) NOTES:

1. INSTALLATION OF KERBSING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB & PAVEMENT DESIGN (HEIGHTS SHOWN MAY VARY ACCORDING TO KERB PROFILE).
3. DRIVEWAY CROSSOVER TO BE NON-SLIP (BRUSH FINISHED).
4. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 6.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BITUMEN IMPREGNATED 'CANITE' OR SIMILAR APPROVED WITH N12 DOWELS x 300 LONG, EMBEDDED 150mm INTO CONCRETE WITH END CAP @ 300c/c OR DANLEY'S EXPANDA JOINT BY DANLEY SYSTEMS OR SIMILAR APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
6. LOCATE DRIVEWAY INVERT ON LOW SIDE OF ALLOTMENT 1.0m FROM PROJECTED SIDE BOUNDARY OR AS SPECIFIED.
7. DRIVEWAYS SHOULD PROVIDE ACCESS TO SINGLE OR DOUBLE GARAGES OR CARPORTS VIA A DRIVEWAY CROSSOVER (THE AREA BETWEEN THE PROPERTY BOUNDARY AND THE KERB) NOT EXCEEDING 4.0m WIDTH (FOR LOCAL ROADS).
8. ACCESS WAYS SERVICING MORE THAN THREE (3) DWELLINGS ON ALLOTMENTS WITH COMMON DRIVEWAYS SHOULD PROVIDE AN ACCESS ONTO COLLECTOR, DISTRIBUTOR OR ARTERIAL ROADS NOT LESS THAN 6.0m WIDTH FOR THE FIRST 6.0m OF THE ALLOTMENT. ONE DRIVEWAY INVERT TO BE INSTALLED PER ALLOTMENT PER FRONTAGE.
9. DRIVEWAY INVERTS FOR CORNER ALLOTMENTS SHALL BE LOCATED NO CLOSER THAN 6.0m FROM THE INTERSECTION OF THE PROJECTED ROAD FRONTAGE BOUNDARIES UNLESS APPROVED BY COUNCIL.
10. DRIVEWAY INVERT TO BE LOCATED AT LEAST 1.0m FROM KERB RAMPS AND SIDE ENTRY PITS (EXCLUDING TAPER).

11. All dimensions are in millimeters unless otherwise shown.
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DRIVEWAY INVERT (RESIDENTIAL & INDUSTRIAL) NOTES:

1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED KERB, KERB INSTALLATION DETAIL & PAVEMENT DESIGN (HEIGHTS SHOWN MAY VARY ACCORDING TO KERB PROFILE).
3. DRIVEWAY CROSSOVER TO BE NON-SLIP (BRUSH FINISHED).
4. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
5. LOCATE DRIVEWAY INVERT ON LOW SIDE OF ALLOTMENT 1.0m FROM PROJECTED SIDE BOUNDARY OR AS SPECIFIED.
6. DRIVEWAYS SHOULD PROVIDE ACCESS TO SINGLE OR DOUBLE GARAGES OR CARPORTS VIA A DRIVEWAY CROSSOVER (THE AREA BETWEEN THE PROPERTY BOUNDARY AND THE KERB) NOT EXCEEDING 4.0m WIDTH (FOR LOCAL ROADS).
7. ACCESSWAYS SERVICING MORE THAN THREE (3) DWELLINGS ON ALLOTMENTS WITH COMMON DRIVEWAYS SHOULD PROVIDE AN ACCESS ONTO COLLECTOR, DISTRIBUTOR OR ARTERIAL ROADS NOT LESS THAN 6.0m WIDTH FOR THE FIRST 6.0m OF THE ALLOTMENT.
8. ONE DRIVEWAY INVERT TO BE INSTALLED PER ALLOTMENT PER FRONTAGE.
9. DRIVEWAY INVERTS FOR CORNER ALLOTMENTS SHALL BE LOCATED NO CLOSER THAN 6.0m FROM THE INTERSECTION OF THE PROJECTED ROAD FRONTAGE BOUNDARIES UNLESS APPROVED BY COUNCIL.
10. DRIVEWAY INVERT TO BE LOCATED AT LEAST 1.0m FROM KERB RAMPS AND SIDE ENTRY PITS (EXCLUDING TAPER).
11. THIS DETAIL IS NOT TO BE USED FOR LAND DEVELOPMENTS UNLESS APPROVED BY COUNCIL. FOR DRIVEWAY INVERT INSTALLATION FOR LAND DEVELOPMENTS REFER SD-420 & SD-421.

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DRIVEWAY INVERT INSTALLATION (RESIDENTIAL & INDUSTRIAL) NOTES:

1. INSTALLATION OF KERBING SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED DRIVEWAY INVERT LOCATION (IF APPLICABLE).
3. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE UNLESS APPROVED BY COUNCIL.
4. REMOVE & DISPOSE OF EXISTING KERB PROFILE CORRECTLY.
5. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS, WHOEVER IS THE GREATER.
6. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHOEVER IS THE GREATER.
7. "TOOLED" CONTRACTION JOINTS TO BE PROVIDED AT 1200mm MAX. SPACING. JOINTS ARE ALSO TO BE PROVIDED AT DRIVEWAY EDGES AND BETWEEN THE FOOTPATH AND ANY ADDITIONAL CONCRETE REQUESTED.
8. FULL DEPTH EXPANSION JOINTS TO BE PROVIDED @ 8.0m MAX. SPACING. JOINTS TO BE EITHER 20mm WIDE AND FILLED WITH BUTYREN IMPREGNATED 'CANITE' OR SIMILARLY APPROVED WITH NO DOWELS > 350mm LONG. EMBEDDED 15mm INTO CONCRETE WITH END CAPS OR DAMEL'S EXPANDA JOINT* BY DAMEL'S SYSTEMS OR SIMILARLY APPROVED, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS LOCATE DRIVEWAY INVERT ON LOW SIDE OF ALLOTMENT 1.0m FROM PROJECTED SIDE BOUNDARY OR AS SPECIFIED.
9. DRIVEWAYS SHOULD PROVIDE ACCESS TO SINGLE OR DOUBLE GARAGES OR CARPORTS VIA A DRIVEWAY CROSSOVER (THE AREA BETWEEN THE PROPERTY BOUNDARY AND THE KERB) NOT EXCEEDING 4.0m WIDTH (FOR LOCAL ROADS).
10. ACCESS WAYS SERVICING MORE THAN THREE (3) DWELLINGS ON ALLOTMENTS WITH COMMON DRIVEWAYS SHOULD PROVIDE AN ACCESS ONTO COLLECTOR, DISTRIBUTOR OR ARTERIAL ROADS NOT LESS THAN 6.0m WIDTH FOR THE FIRST 6.0m OF THE ALLOTMENT. ONE DRIVEWAY INVERT TO BE INSTALLED PER ALLOTMENT FRONTAGE.
11. ONE DRIVEWAY INVERT TO BE INSTALLED PER ALLOTMENT PER FRONTAGE.
12. DRIVEWAY INVERTS FOR CORNER ALLOTMENTS SHALL BE LOCATED NO CLOSER THAN 6.0m FROM THE INTERSECTION OF THE PROJECTED ROAD FRONTAGE BOUNDARIES UNLESS APPROVED BY COUNCIL.
13. DRIVEWAY INVERT TO BE LOCATED AT LEAST 1.0m FROM KERB RAMPS AND SIDE ENTRY PITS (EXCLUDING TAPER).
14. THIS DETAIL IS NOT TO BE USED FOR LAND DEVELOPMENTS UNLESS APPROVED BY COUNCIL. FOR DRIVEWAY INVERT INSTALLATION FOR LAND DEVELOPMENTS REFER SD-420 & SD-421.

15. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
16. WHERE BACKFILL WIDTH (W) IS LESS THAN 350mm, A CONTROLLED LOW STRENGTH MATERIAL (CLSM) SHALL BE USED AND SHALL HAVE A STRENGTH OF 4MPa.

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Revised Detail & Notes

C. HASKAS

Feb '18

Original Issue

C. HASKAS

Aug '12
PAVEMENT REINSTATEMENT FOR TRENCHES & REPAIRS (TYPE 1) NOTES:
1. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING PAVEMENT LAYERS, WHICHER IS THE GREATER.
2. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE REINSTATEMENT OF THE TRENCHES AND SHALL BE REMOVED FROM SITE.
3. THE WEARING COURSE SHALL BE 40mm MINIMUM THICKNESS OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHER IS THE GREATER.
4. THE WEARING COURSE SHALL EXTEND A MINIMUM OF 100mm EITHER SIDE OF THE EXCAVATED TRENCH. PRIOR TO APPLICATION OF THE WEARING COURSE, ENSURE THE EDGE OF THE EXISTING SEAL IS NEATLY SAW CUT.
5. THE CONTRACTOR SHALL PROVIDE ALL REGULATORY SIGNS AND WARNING DEVICES FOR THE PROTECTION OF THE PUBLIC IN ACCORDANCE WITH THE ROAD TRAFFIC ACT AND THE OCCUPATIONAL HEALTH, SAFETY & WELFARE ACT.
6. ALL LINEMARKING, PAVEMENT MARKING AND ROAD FURNITURE SHALL BE REINSTATED TO MATCH EXISTING.
7. THE FINISHED LEVEL OF ALL SERVICE COVERS SHALL BE FLUSH WITH THE FINISHED SURFACE OF THE REINSTATED PAVEMENT.

FINE AC10M WITH C320 BINDER (OR A35P IF THE TRENCH IS AT OR WITHIN 30m OF AN INTERSECTION) (DEPTH VARIES, REFER NOTES).

PAVEMENT REINSTATEMENT FOR TRENCHES & REPAIRS (TYPE 1) (SD-430)
FOR LOCAL ROADS
NOT TO SCALE
PAVEMENT REINSTATEMENT FOR TRENCHES & REPAIRS (TYPE 2) NOTES:

1. The minimum thickness of the reinstated pavement layers shall be as detailed or shall match the existing pavement layers, whichever is the greater.

2. Excavated material shall not be re-used in the reinstatement of the trenches and shall be removed from site.

3. The wearing course shall be 40mm thickness minimum or shall match that of the existing pavement, whichever is the greater.

4. The wearing course shall extend a minimum of 100mm either side of the excavated trench. Prior to application of the wearing course, ensure the edge of the existing seal is neatly saw cut.

5. The contractor shall provide all regulatory signs and warning devices for the protection of the public in accordance with the Road Traffic Act and the Occupational Health, Safety & Welfare Act.

6. All linemarking, pavement marking and road furniture shall be reinstated to match existing.

7. The finished level of all service covers shall be flush with the finished surface of the reinstated pavement.

FINE AC10M WITH C320 BINDER (OR A35P if the trench is at or within 30m of an intersection) (Depth varies, refer notes).

HOTMIX shall match flush with existing and shall be formed to match the existing road profile.

AC14M WITH C320 IN 2 LAYERS

MEDIUM PRIME @ 1.0L/m² WITH CRS70 BITUMEN EMULSION

PM2/20 SUB-BASE COMPACTED TO 96% MMDD (2 LAYERS)

SUB-GRADE/BACKFILL REINSTATEMENT (REFER SD-432 & SD-433)

TRENCH WIDTH (VARIES)
DRAINAGE TRENCH BACKFILLING NOTES:

1. THIS DETAIL IS APPLICABLE FOR EXCAVATIONS IN PAVEMENTS, VERGES, RESERVES & LANDSCAPING AREAS INCLUDING EXCAVATIONS ASSOCIATED WITH TRENCHLESS METHODS.
2. INSTALLATION OF DRAINAGE PIPES MUST BE IN ACCORDANCE WITH AS 3725-2007 AND THE CONCRETE PIPE ASSOCIATION OF AUSTRALIA - ‘MANUAL FOR CONCRETE PIPE SELECTION AND INSTALLATION HANDBOOK’.
3. FOR DRAINAGE PIPE SIZES GREATER THAN Ø1500 REFERR TO TECHNICAL SERVICES FOR DRAINAGE TRENCH BACKFILLING REQUIREMENTS.
4. FOR ‘RIBLOC’ PIPE OR SIMILAR, DRAINAGE TRENCH BACKFILLING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS.
5. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE REINSTATEMENT OF THE TRENCHES AND SHALL BE REMOVED FROM SITE.
6. FOR PAVEMENT REINSTATEMENT, REFER TO THE DESIGN PLANS OR SD-430 & SD-431.
7. FOR FOOTPATH OR SHARED PATH REINSTATEMENT, REFER TO THE DESIGN PLANS OR THE RELEVANT FOOTPATH OR SHARED PATH DETAIL(S) (SD-300 SERIES).
8. FOR VERGES, RESERVES & LANDSCAPING AREAS, THE FINISHED SURFACE SHALL BE REINSTATED TO MATCH THE ADJACENT SURFACES WITH SIMILAR MATERIALS TO EXISTING.
9. ALL ZONES SHALL HAVE MATERIAL PLACED IN LAYERS NOT EXCEEDING 200mm (UNCOMPACTED) THICKNESS. MATERIAL TO BE COMPACTED AT OPTIMUM MOISTURE CONTENT TO ACHIEVE A MINIMUM COMPACTION OF 95% MMDD.

- **BACKFILL ZONE** - LAYERS SHALL BE COMPACTED BY CONVENTIONAL MECHANICAL METHODS.
- **OVERLAY ZONE** - LAYERS SHALL BE COMPACTED BY CONVENTIONAL MECHANICAL METHODS, WITH THE LAST 150mm TO BE COMPACTED BY TAMPING OR VIBRATING.
- **SIDE ZONE** - LAYERS SHALL BE COMPACTED BY CONVENTIONAL MECHANICAL METHODS.
- **HAUNCH ZONE** - LAYERS SHALL BE COMPACTED BY CONVENTIONAL MECHANICAL METHODS.
- **BEDDING ZONE** - BEDDING SAND SHALL EXTEND OVER FULL WIDTH OF THE TRENCH. TAMPING, ROLLING OR VIBRATING COMPACTION METHODS MAY BE USED.

FINISHED SURFACE LEVEL

PAVEMENT, PATH, VERGE, RESERVE OR LANDSCAPING AREA REINSTATEMENT (REFER NOTES 6,7 & 8)

BACKFILL ZONE
- TYPE ‘D’ SAND (Sa-D)
- COMPACTED TO 95% MMDD

OVERLAY ZONE
- TYPE ‘D’ SAND (Sa-D)
- COMPACTED TO 95% MMDD

SIDE ZONE
- TYPE ‘D’ SAND (Sa-D)
- COMPACTED TO 95% MMDD

HAUNCH ZONE
- TYPE ‘D’ SAND (Sa-D)
- COMPACTED TO 95% MMDD

BEDDING ZONE
- TYPE ‘D’ SAND (Sa-D)
- COMPACTED TO 95% MMDD

DRAINAGE TRENCH BACKFILLING (SD-432)
BELOW SUB-BASE LEVEL FOR PIPE SIZES ≤ Ø1500mm
NOT TO SCALE

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STANDARD # | REV
SD-432 | D
SERVICE TRENCH BACKFILLING NOTES:
1. This detail is applicable for excavations in pavements, verges, reserves & landscaping areas including excavations associated with trenchless methods.
2. Minimum cover to the conduit(s) and/or service(s) shall be in accordance with the relevant service authority's requirements and Australian Standards.
3. Excavated material shall not be re-used in the reinstatement of the trenches and shall be removed from site.
4. This detail is not to be used for drainage trench backfilling.
5. For pavement reinstatement, refer to the design plans or SD-430 & SD-431.
6. For footpath or shared path reinstatement, refer to the design plans or the relevant footpath or shared path detail(s) (SD-300 series).
7. For verges, reserves & landscaping areas, the finished surface shall be reinstated to match the adjacent surfaces with similar materials to existing.
8. All zones shall have material placed in layers not exceeding 200mm (uncompacted) thickness. Material to be compacted at optimum moisture content to achieve a minimum compaction of 95% MMDD.
   - Backfill Zone 1 - Layers shall be compacted by conventional mechanical methods.
   - Backfill Zone 2 - Layers shall be compacted by conventional mechanical methods.
   - Bedding Zone - Bedding sand shall extend over full width of the trench. Tamping, rolling or vibrating compaction methods may be used.
9. Trenches through landscaped areas or areas not subject to vehicular loading may use clean fill for Backfill Zone 1.
10. The finished level of all service covers shall be flush with the finished surface of the reinstated pavement.

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MEDIAN ISLAND KERB INSTALLATION (TYPE 1) NOTES:

1. INSTALLATION OF MEDIAN KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND AUSTROADS ‘GUIDE TO TRAFFIC MANAGEMENT’ AND ‘GUIDE TO ROAD DESIGN’.
2. REFER TO THE DESIGN PLANS FOR MEDIAN KERB LOCATION, SIZE & SETOUT DATA.
3. MEDIAN KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE ‘PAVEMENT MARKING MANUAL’ (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. WHERE USED AS A KERB EXTENSION, 450mm MINIMUM CLEARANCE MUST BE MAINTAINED BETWEEN THE KERB EXTENSION AND THE ADJACENT KERB & GUTTER TO ALLOW FOR STORMWATER FLOWS AND MAINTENANCE PURPOSES.
6. RAISED TRAFFIC ISLANDS, MEDIANS AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.
7. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER SD-325, SD-326, SD-327 & SD-328 FOR INSTALLATION DETAILS.

INVESTIGATION BETWEEN KERBS WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) INFILL (2MPa)

MEDIAN ISLAND KERB INSTALLATION (TYPE 1) (SD-440)
CONTROLLED LOW STRENGTH MATERIAL (CLSM) INFILL
NOT TO SCALE

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REV DESCRIPTION APPROVED DATE

A ORIGINAL ISSUE P.BICKLEY MAY ’11
B REVISED NOTES C.HASKAS AUG ’12

SCALE AT A4 NOT TO SCALE
MEDIAN ISLAND KERB INSTALLATION (TYPE 2) NOTES:

1. INSTALLATION OF MEDIAN KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND AUSTROADS ‘GUIDE TO TRAFFIC MANAGEMENT’ AND ‘GUIDE TO ROAD DESIGN’.
2. REFER TO THE DESIGN PLANS FOR MEDIAN KERB LOCATION, SIZE & SETOUT DATA.
3. MEDIAN KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE ‘PAVEMENT MARKING MANUAL’ (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. WHERE USED AS A KERB EXTENSION, 450mm MINIMUM CLEARANCE MUST BE MAINTAINED BETWEEN THE KERB EXTENSION AND THE ADJACENT KERB & GUTTER TO ALLOW FOR STORMWATER FLOWS AND MAINTENANCE PURPOSES.
6. RAISED TRAFFIC ISLANDS, MEDIANS AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.
7. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER SD-325, SD-326, SD-327 & SD-328 FOR INSTALLATION DETAILS.
8. PATTERN FINISH CONCRETE INFILL COLOUR & TYPE TO BE ADVISED BY COUNCIL’S REPRESENTATIVE. INFILL CONCRETE TO BE 25MPa UNLESS NOTED OTHERWISE.

MEDIAN ISLAND KERB INSTALLATION (TYPE 2) (SD-441)
PATTERN FINISH CONCRETE INFILL
NOT TO SCALE

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SPLITTER ISLAND INSTALLATION (TYPE 1) NOTES:
1. INSTALLATION OF SPLITTER ISLAND SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND
AUSTROADS 'GUIDE TO TRAFFIC MANAGEMENT' AND 'GUIDE TO ROAD DESIGN'.
2. REFER TO THE DESIGN PLANS FOR SPLITTER ISLAND LOCATION, SIZE & SETOUT DATA.
3. SPLITTER ISLAND KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY
THE 'PAVEMENT MARKING MANUAL' (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. RAISED TRAFFIC ISLANDS, MEDIANS AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN
OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.

SPLITTER ISLAND INSTALLATION (TYPE 1) (SD-442)
BACK TO BACK SIT-ON KERB
NOT TO SCALE
MEDIAN ISLAND KERB INSTALLATION (TYPE 3) NOTES:

1. INSTALLATION OF MEDIAN KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND AUSTROADS ‘GUIDE TO TRAFFIC MANAGEMENT’ AND ‘GUIDE TO ROAD DESIGN’.
2. REFER TO THE DESIGN PLANS FOR MEDIAN KERB LOCATION, SIZE & SETOUT DATA.
3. MEDIAN KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE ‘PAVEMENT MARKING MANUAL’ (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. WHERE USED AS A KERB EXTENSION, 450mm MINIMUM CLEARANCE MUST BE MAINTAINED BETWEEN THE KERB EXTENSION AND THE ADJACENT KERB & GUTTER TO ALLOW FOR STORMWATER FLOWS AND MAINTENANCE PURPOSES.
6. RAISED TRAFFIC ISLANDS, MEDIANS AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.
7. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER SD-325, SD-326, SD-327 & SD-328 FOR INSTALLATION DETAILS.

MEDIAN ISLAND KERB INSTALLATION (TYPE 3) (SD-445)
CONTROLLED LOW STRENGTH MATERIAL (CLSM) INFILL
NOT TO SCALE

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**MEDIAN ISLAND KERB INSTALLATION (TYPE 4) NOTES:**

1. INSTALLATION OF MEDIAN KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND AUSTROADS 'GUIDE TO TRAFFIC MANAGEMENT' AND 'GUIDE TO ROAD DESIGN'.
2. REFER TO THE DESIGN PLANS FOR MEDIAN KERB LOCATION, SIZE & SETOUT DATA.
3. MEDIAN KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE 'PAVEMENT MARKING MANUAL' (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. WHERE USED AS A KERB EXTENSION, 450mm MINIMUM CLEARANCE MUST BE MAINTAINED BETWEEN THE KERB EXTENSION AND THE ADJACENT KERB & GUTTER TO ALLOW FOR STORMWATER FLOWS AND MAINTENANCE PURPOSES.
6. RAISED TRAFFIC ISLANDS, MEDIANs AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.
7. REFER TO THE DESIGN PLANS TO DETERMINE WHETHER HOLDING RAILS ARE REQUIRED. IF REQUIRED, REFER SD-325, SD-326, SD-327 & SD-328 FOR INSTALLATION DETAILS.
8. PATTERN FINISH CONCRETE INFILL COLOUR & TYPE TO BE ADVISED BY COUNCIL'S REPRESENTATIVE. INFILL CONCRETE TO BE 25MPa UNLESS NOTED OTHERWISE.

**MEDIAN ISLAND KERB INSTALLATION (TYPE 4) (SD-446)**

**PATTERN FINISH CONCRETE INFILL**

**NOT TO SCALE**
SPLITTER ISLAND INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF SPLITTER ISLAND SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AND AUSTROADS 'GUIDE TO TRAFFIC MANAGEMENT' AND 'GUIDE TO ROAD DESIGN'.
2. REFER TO THE DESIGN PLANS FOR SPLITTER ISLAND LOCATION, SIZE & SETOUT DATA.
3. SPLITTER ISLAND KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE 'PAVEMENT MARKING MANUAL' (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. RAISED TRAFFIC ISLANDS, MEDIANS AND KERB EXTENSIONS SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.

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ROUNDABOUT INSTALLATION (TYPE 1) NOTES:
1. INSTALLATION OF ROUNDABOUT KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876
   AUSTROADS 'GUIDE TO TRAFFIC MANAGEMENT' AND 'GUIDE TO ROAD DESIGN'.
2. REFER TO THE DESIGN PLANS FOR ROUNDABOUT KERB LOCATION, SIZE & SETOUT DATA.
3. ROUNDABOUT KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE
   'PAVEMENT MARKING MANUAL' (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. ROUNDABOUT KERBING SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM
   THE KERB BY 100mm.
6. PATTERN FINISH CONCRETE INFILL COLOUR & TYPE TO BE ADVISED BY COUNCIL’S
   REPRESENTATIVE, INFILL CONCRETE TO BE 32MPa UNLESS NOTED OTHERWISE.

ROUNDABOUT INSTALLATION (TYPE 1) (SD-450)
MOUNTABLE ISLAND & LANDSCAPED CENTER ISLAND
NOT TO SCALE

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ROUNDABOUT INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF ROUNDABOUT KERBING SHALL BE IN ACCORDANCE WITH AS 1742, AS 2876 AUSTROADS 'GUIDE TO TRAFFIC MANAGEMENT' AND 'GUIDE TO ROAD DESIGN'.
2. REFER TO THE DESIGN PLANS FOR ROUNDABOUT KERB LOCATION, SIZE & SETOUT DATA.
3. ROUNDABOUT KERB FACES SHALL BE PAINTED REFLECTORISED WHITE AS REQUIRED BY THE 'PAVEMENT MARKING MANUAL' (DPTI).
4. ALL NIGHT ROAD LIGHTING SHALL BE IN ACCORDANCE WITH AS 1158.
5. ROUNDABOUT KERBING SHALL BE DELINEATED WITH AN OUTLINE MARKING SEPARATED FROM THE KERB BY 100mm.
6. PATTERN FINISH CONCRETE INFILL COLOUR & TYPE TO BE ADVISED BY COUNCIL'S REPRESENTATIVE. INFILL CONCRETE TO BE 32MPa UNLESS NOTED OTHERWISE.

CIRCULATING CARRIAGEWAY

FALL (VARIATES)
MATCH TO PAVEMENT CROSSFALL

PROVIDE KEYED-IN KERB (REFER SD-110)

WEARING COURSE
(DEPTH VARIES)

N12 DOWELS
300 LONG @ 350c/c

SUBGRADE TO BE COMPACTED TO 98% STD MDD

ROUNDABOUT INSTALLATION (TYPE 2) (SD-451)
PATTERN FINISH CONCRETE INFILL
NOT TO SCALE

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REV DESCRIPTION APPROVED DATE
C REVISED SUB-BASE NOTE C.HASKAS FEB '18
B REVISED DETAIL & NOTES C.HASKAS AUG '12
A ORIGINAL ISSUE P.BICKLEY MAY '11

CITY OF ONkaparinga
STANDARD # SD-451 REV C

SCALE AT A4
NOT TO SCALE
SPOON DRAIN INSTALLATION (TYPE 1) NOTES:
1. INSTALLATION OF SPOON DRAIN SHALL BE IN ACCORDANCE WITH AS 2876.
2. REFER TO THE DESIGN PLANS FOR PROPOSED PAVEMENT DESIGN.

5mm PROUD (TYP).

PROPOSED SPOON DRAIN PROFILE
(REFER SD-104)

WEARING COURSE
(REFER DESIGN PLANS)

WEARING COURSE
(REFER DESIGN PLANS)

100 MIN.

SUBGRADE TO BE COMPACTED TO 98% STD MDD

PROPOSED PAVEMENT (DEPTH VARIES)
(REFER DESIGN PLANS)

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SPOON DRAIN INSTALLATION (TYPE 2) NOTES:
1. INSTALLATION OF SPOON DRAIN SHALL BE IN ACCORDANCE WITH AS 2876.
2. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
3. THIS DETAIL SHALL NOT BE USED WHERE BACKFILL WIDTH \( W \) IS LESS THAN 350mm.
4. WHERE BACKFILL WIDTH \( W \) IS LESS THAN 350mm (SD-462) SHALL BE USED.
5. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS, WHICHEREVER IS THE GREATER.
6. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEREVER IS THE GREATER.

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SPOON DRAIN INSTALLATION (TYPE 3) NOTES:
1. INSTALLATION OF SPOON DRAIN SHALL BE IN ACCORDANCE WITH AS 2876.
2. EXCAVATED MATERIAL SHALL NOT BE RE-USED IN THE BACKFILL REINSTATEMENT AND SHALL BE REMOVED FROM SITE.
3. CONTROLLED LOW STRENGTH MATERIAL SHALL NOT BE USED WHERE BACKFILL WIDTH (W) IS GREATER THAN 350mm.
4. WHERE BACKFILL WIDTH (W) IS GREATER THAN 350mm (SD-461) SHALL BE USED.
5. THE MINIMUM THICKNESS OF THE REINSTATED PAVEMENT LAYERS SHALL BE AS DETAILED OR SHALL MATCH THE EXISTING GRANULAR PAVEMENT LAYERS, WHICHEVER IS THE GREATER.
6. THE WEARING COURSE SHALL BE HOTMIX AC10 NOMINAL. THE DEPTH IS TO BE 40mm MINIMUM OR SHALL MATCH THAT OF THE EXISTING PAVEMENT, WHICHEVER IS THE GREATER.
7. CONTROLLED LOW STRENGTH MATERIAL (CLSM) INFILL STRENGTH TO BE 4MPa.

SPOON DRAIN INSTALLATION (TYPE 3) (SD-462)
IN EXISTING PAVEMENT WITH ‘CLSM’ INFILL
NOT TO SCALE

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PLANTING NOTES:
1. PLANTING HOLE DIMENSIONS;
   WIDTH - 1.5 TIMES ROOTBALL DIAMETER OR AS SPECIFIED.
   DEPTH - THE HEIGHT/DEPTH OF THE ROOTBALL OR AS SPECIFIED.
2. REGULARLY CHECK SOIL MOISTURE OF ROOTBALL DURING MAINTENANCE PERIOD.

50mm GRAVEL MULCH AS SPECIFIED OR
75mm ORGANIC MULCH. REFER PLANS
AND SPECIFICATIONS FOR DETAILS

PLANTING (SD-600)
SHRUBS
NOT TO SCALE

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PLANTING NOTES:

1. PLANTING HOLE DIMENSIONS;
   - WIDTH - 3 TIMES ROOTBALL DIAMETER OR AS SPECIFIED.
   - DEPTH - THE HEIGHT/DEPTH OF THE ROOTBALL OR AS SPECIFIED.
2. IN ROAD VERGES OR AREAS OF COMPACTION A HOLE 2m WIDE x 3m LENGTH SHOULD BE EXCAVATED AND BACKFILLED WITH A MIX OF SUITABLE SITE SOIL, ORGANIC COMPOST AND APPROVED TOPSOIL.
3. KEEP TOPSOIL AWAY FROM THE BASE OF THE TRUNK AND TOP OF ROOTBALL.
4. REGULARLY CHECK SOIL MOISTURE OF ROOTBALL DURING MAINTENANCE PERIOD.
5. ENSURE THAT THE GREENWELL WATER SAVER IS INSTALLED TO A MINIMUM DEPTH OF 100mm BELOW FINISHED SOIL LEVEL (FSL) WITH A MAXIMUM OF 100mm ABOVE FSL.
6. IF GREENWELL WATER SAVER IS NOT INSTALLED, PROVIDE A WATERING BOWL AROUND THE IMMEDIATE CROWN OF THE PLANT TO HOLD AT LEAST 5 LITRES OF WATER.

A. ALL TREES TO BE HEALTHY WELL GROWN SPECIMENS WITH ACCEPTABLE ROOT-SHOOT RATIOS. ALLOW COUNCIL'S REPRESENTATIVE 24 HOURS NOTICE TO INSPECT TREES BEFORE PLANTING. (TREES TO BE WATERED PRIOR TO PLANTING)

B. STAKE ALL TREES WITH (2) 50x50x1500mm, CHISEL POINTED HARDWOOD STAKES DRIVEN 600mm MIN. INTO GROUND OUTSIDE OF THE ROOTBALL

C. TREES TO BE TIED IMMEDIATELY AFTER PLANTING WITH HESSIAN TIES. TIES TO BE NO MORE THAN HALFWAY UP THE MAIN LEADER AND WRAPPED AROUND STAKE AND TREE IN A 'FIGURE 8' BEFORE SECURING WITH GALVANIZED NAILS

D. EXCAVATE PLANTING HOLE TO DEPTH AND WIDTH AS SPECIFIED, ROUGHEN SIDES AND LIGHTLY PACK BACKFILL SOIL AROUND ROOTBALL SIDES, TAMP LIGHTLY. APPLY APPROVED FERTILISER AS DIRECTED AND SPREAD INTO BACKFILL ACCORDING TO MANUFACTURER'S SPECIFICATIONS

E. ENSURE TREES ARE PLACED SO THE CROWN OF THE ROOTBALL IS LEVEL WITH THE FINISHED SOIL LEVEL. CAREFULLY TRIM OFF ANY GIRDLING ROOTS FROM THE ROOTBALL

F. SET ROOTBALL ON UNDISTURBED SOIL TO PREVENT SETTLING

G. GREENWELL WATER SAVER (LARGE SIZE - 50L) TO BE INSTALLED AROUND EACH TREE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. COLOUR TO BE CONFIRMED WITH COUNCIL'S REPRESENTATIVE

H. INFILL GREENWELL WATER SAVER WITH 20mm QUARTZITE AGGREGATE (NO FINES) OR COARSE ORGANIC MULCH. ENSURE 50mm COVER ON TOP OF ROOTBALL. AGGREGATE TO BE OFF-WHITE OR OCHRE IN COLOUR.

J. EXTENT AND TYPE OF MULCH TO BE CONFIRMED WITH COUNCIL'S REPRESENTATIVE

STAKING SETOUT PLAN

PLANING (SD-601)
ADVANCED TREES
NOT TO SCALE

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SPADE EDGE (SD-610)

1. REFER TO THE DESIGN PLANS FOR PROPOSED LOCATION & EXTENT OF SPADE EDGING.
2. REFER TO LANDSCAPE PLANS FOR DETAILS OF ADJACENT SURFACES.
3. REFER TO LANDSCAPE PLANS FOR MULCH REQUIREMENTS.

GRASSED OR COMPACTED SURFACE AREA

ORGANIC MULCH TO 100mm DEPTH WITH 400mm TAPER TO EDGE

100mm DEEP SPADE CUT

TOPSOIL CULTIVATED BY MECHANICAL MEANS TO 100mm DEPTH IF GRASSED

(REFER LANDSCAPE PLANS)

TOPSOIL CULTIVATED BY MECHANICAL MEANS TO 300mm DEPTH.

(REFER LANDSCAPE PLANS & SPECIFICATION FOR DETAILS)

SPADE EDGE (SD-610)

(Se)

NOT TO SCALE

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SPADE EDGE (Se)

SD-610

A
HARD EDGE (SD-611)
HARDWOOD OR WOOD PLASTIC COMPOSITE (HE)

NOT TO SCALE

100mmx25mm HARDWOOD OR WOOD PLASTIC COMPOSITE EDGE SCREWED TO STAKES WITH GALVANISED SCREWS TO SECURELY FASTEN EDGING TO STAKE.

ORGANIC MULCH TO 100mm DEPTH WITH 400mm TAPER TO EDGE

300mm LONG STEEL DROPPER STAKES PLACED ON ALTERNATE SIDES AS REQUIRED TO HOLD EDGE IN PLACE @ 1200mm CENTRES (MAX). DRIVEN TO FINISH 30mm BELOW EDGING

TOPSOIL CULTIVATED BY MECHANICAL MEANS TO 100mm DEPTH IF GRASSED.

TOPSOIL CULTIVATED BY MECHANICAL MEANS TO 300mm DEPTH.

(REFER LANDSCAPE PLANS & SPECIFICATION FOR DETAILS)

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EDGE BEAM NOTES:
1. INSTALLATION OF EDGE BEAM SHALL BE IN ACCORDANCE WITH AS 2876 & SD-109.
2. REFER TO THE DESIGN PLANS FOR PROPOSED LOCATION & EXTENT OF EDGE BEAM.
3. IN AREAS WHERE NO MULCH OR TURF IS REQUIRED, BACKFILL BEHIND KERB WITH APPROVED SITE MATERIAL OR PM2/20 TO THE TOP OF KERB. TO BE COMPACTED TO 95% MDD.
4. CONCRETE STRENGTH TO BE 32MPa UNLESS NOTED OTHERWISE.
5. REFER TO LANDSCAPE PLANS FOR DETAILS OF ADJACENT SURFACES.

LANDSCAPED AREA
- PROVIDE EDGE BEAM (EB) REFER SD-109 FOR DETAILS
- MULCH OR TURF (REFER LANDSCAPE PLANS)
- BACKFILL WITH PM2/20 COMPACTED TO 95% MMD TO THE SATISFACTION OF COUNCIL’S REPRESENTATIVE

PAVED AREA
- WEARING COURSE (REFER DESIGN PLANS)
- PROPOSED PAVEMENT (REFER DESIGN PLANS)
- SUBGRADE TO BE COMPACTED TO 98% STD MDD

EDGE BEAM (SD-620)
INTERFACE BETWEEN PAVEMENT & LANDSCAPING
NOT TO SCALE

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A ORIGINAL ISSUE
C.HASKAS
FEB '18

SCALE AT A4
NOT TO SCALE

SD-620
A
BOLLARD INSTALLATION NOTES:
1. REFER TO DESIGN DRAWINGS FOR BOLLARD LOCATION, SPACING, SIZE AND HEIGHT.
2. BOLLARDS TO BE IN ACCORDANCE WITH AS 3845 AND SUPPLIERS SPECIFICATIONS.
3. BOLLARDS TO BE INSTALLED IN ACCORDANCE WITH SUPPLIERS SPECIFICATIONS.
4. REQUIREMENT TO ATTACH REFLECTOR TO BE CONFIRMED WITH COUNCIL’S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. CONCRETE FOOTINGS TO BE 25MPa UNLESS NOTED OTHERWISE.

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