<table>
<thead>
<tr>
<th>DRAWING</th>
<th>AMEND</th>
<th>DESCRIPTION</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-10001</td>
<td>C</td>
<td>Cross-Section – Residential Access Place &amp; Access Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10002</td>
<td>D</td>
<td>Cross-Section – Residential Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10003</td>
<td>C</td>
<td>Cross-Section – Residential Single Sided Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10004</td>
<td>D</td>
<td>Cross-Section – Residential Bi-Level Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10005</td>
<td>E</td>
<td>Cross-Section – Residential Trunk Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10006</td>
<td>E</td>
<td>Cross-Section – Urban Sub Arterial Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10007</td>
<td>D</td>
<td>Cross-Section – Urban Arterial Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10009</td>
<td>D</td>
<td>Verge Profile – Urban Sub-Arterial &amp; Arterial Roads</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10010</td>
<td>D</td>
<td>Verge Profile – Residential Trunk Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10011</td>
<td>B</td>
<td>Service Allocations - Urban Access Place, Access Street &amp; Collector Street - Typical Layout Plan and Sectional View</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10012</td>
<td>B</td>
<td>Service Allocations – Residential Trunk Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10013</td>
<td>B</td>
<td>Service Allocations - Urban Arterial and Sub-Arterial Roads</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10014</td>
<td>C</td>
<td>Cross-Section - Industrial Access Road and Verge Details</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10015</td>
<td>C</td>
<td>Cross-Section - Industrial Collector Road and Verge Details</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10016</td>
<td>A</td>
<td>Service Allocations for Industrial Access Road and Industrial Collector Road</td>
<td>07/2003</td>
</tr>
<tr>
<td>8-10017</td>
<td>B</td>
<td>Cross Section - Rural Residential Access Place</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10018</td>
<td>B</td>
<td>Cross Section - Rural Residential Access Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10019</td>
<td>B</td>
<td>Cross Section - Rural Residential Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10020</td>
<td>B</td>
<td>Verge and Access Profiles - Rural Residential Access Place, Access Street &amp; Collector Street</td>
<td>12/2004</td>
</tr>
<tr>
<td>DRAWING</td>
<td>AMEND</td>
<td>DESCRIPTION</td>
<td>DATE</td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>8-10021</td>
<td>B</td>
<td>Cross Section - Rural Access Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10022</td>
<td>B</td>
<td>Cross Section - Rural Collector Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10023</td>
<td>B</td>
<td>Cross Section - Rural Sub-Arterial Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10024</td>
<td>B</td>
<td>Cross Section - Rural Arterial Road</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10025</td>
<td>B</td>
<td>Verge Profile - Rural Access and Collector Roads</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10026</td>
<td>B</td>
<td>Verge Profile - Rural Sub-Arterial and Arterial Roads</td>
<td>12/2004</td>
</tr>
<tr>
<td>8-10027</td>
<td>A</td>
<td>Service Allocations for Rural Residential Access Place/Street, Collector</td>
<td>07/2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Street - Typical Layout Plan</td>
<td></td>
</tr>
<tr>
<td>8-10028</td>
<td>A</td>
<td>Service Allocations for Rural Access, Collector, Sub-Arterial or Arterial</td>
<td>07/2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roads</td>
<td></td>
</tr>
<tr>
<td>8-10029</td>
<td>B</td>
<td>Service Allocations, Typical Service Conduit Sections, General Notes</td>
<td>12/2004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and Cover Requirements</td>
<td></td>
</tr>
<tr>
<td>8-10030</td>
<td></td>
<td>Standard Batter Profiles and Stabilisation Details. All Road Types Except</td>
<td>07/2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Urban Access Place/Street and Collector Street.</td>
<td></td>
</tr>
<tr>
<td>8-10036</td>
<td>E</td>
<td>Standard Concrete Pathways</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10037</td>
<td></td>
<td>Road Edge Guide Posts</td>
<td>09/1996</td>
</tr>
<tr>
<td>8-10038</td>
<td></td>
<td>Concrete Wheel Stops</td>
<td>07/2003</td>
</tr>
<tr>
<td>8-10039</td>
<td>B</td>
<td>Side Drains and Mitre Drains</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10040</td>
<td>B</td>
<td>Side Drain Flushing Points</td>
<td>06/1999</td>
</tr>
<tr>
<td>8-10041</td>
<td></td>
<td>Traffic Signs – Location and Post Details</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10043</td>
<td>C</td>
<td>Residential Access and Invert Crossings</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10045</td>
<td>B</td>
<td>Standard Kerb Ramp</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10047</td>
<td>B</td>
<td>Street Signs</td>
<td>10/2004</td>
</tr>
<tr>
<td>8-10048</td>
<td></td>
<td>Street Signs – Sign and Blade Details</td>
<td>07/2003</td>
</tr>
<tr>
<td>8-10049</td>
<td>B</td>
<td>Roadside Drainage - Upgrading of Existing Roads - Swale Drains</td>
<td>11/2004</td>
</tr>
<tr>
<td>8-10050</td>
<td>B</td>
<td>Roadside Drainage - Upgrading of Existing Roads - Shoulder Dykes and Batter</td>
<td>11/2004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drains</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 1
DEEMED TO COMPLY

SECTION 2
SPECIAL CIRCUMSTANCES ONLY – 12 LOTS MAXIMUM

NOTES
1. PARKING BAYS, PROVIDED AS REQUIRED, ARE TO BE SURFACED DIFFERENTLY (BY COLOUR OR MATERIAL) TO THAT OF THE THROUGH CARRIAGEWAY. PARKING BAYS MAY BE AN ALTERNATIVE BE CONSTRUCTED BEHIND KERBING (REFER SECTION 2), HOWEVER THE LENGTH OF THESE SHOULD BE EXTENDED TO MAKE ALLOWANCE FOR ENTRY TO AND EXIT FROM THE BAY – REFER FIG. 2.4.10 OF PRSC’S DESIGN STANDARDS FOR ROADWORKS.

2. WHERE PARKING BAYS ARE PROVIDED ON THE MINIMUM VERGE WITH A CONCRETE PATH, LOCALISED RESERVE WIDENING WILL BE NECESSARY. PARKING BAYS (OTHER PARALLEL OR 90°) ON THE NARROW VERGE SHOULD BE AVOIDED. THE PREFERRED LOCATION FOR PARKING BAYS IS ON THE VERGE WITHOUT MAIN SERVICES.

3. A CONCRETE PEDESTRIAN PATH OR SHARED USE PATH SHALL BE PROVIDED ON ONE SIDE ONLY WHERE CATCHMENT EXCEEDS 40 LOTS. THE PREFERRED POSITION FOR THE PATH IS ON THE WIDER VERGE AS THIS OPTIMISES LANDSCAPING OPPORTUNITIES. A CONCRETE PEDESTRIAN PATH OR SHARED USE PATH MAY BE REQUIRED FOR CATCHMENTS UNDER 40 LOTS WHERE NECESSARY TO SERVICE NEIGHBOURHOOD FACILITIES AND FOR INTERCONNECTION OF RESIDENTIAL CELLS.

4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S DESIGN MANUAL.
SECTION 1
DEEMED TO COMPLY

VARIABLES = 3500 min REFER SECTION 1
ON P.R.S.C. STD. DWG. B-10008
20000 FOR DESIGNATED BUS COLLECTOR
7500
9500 FOR DESIGNATED BUS COLLECTOR
ON P.R.S.C. STD. DWG. B-10008
VARIABLES = 4275 min REFER SECTION 2
2.5% min. 3.0% max.
LAMINATED KERB AND CHANNEL
CONCRETE PEDESTRIAN OR SHARED USE PATHWAY.
REFER NOTE 2

SECTION 2
PARKING BAY ALTERNATIVES

INDENTED PARKING BAY

VARIABLES = 3500 min REFER SECTION 3
ON P.R.S.C. STD. DWG. B-10008
2000 PARALLEL BAYS
6500 90° BAYS
6000
2200 min.
2000 min.
2200 PARALLEL BAYS
6000 90° BAYS
VARIABLES = 4275 min REFER SECTION 4
ON P.R.S.C. STD. DWG. B-10008
2200 PARALLEL BAYS
6700 90° BAYS
2000 min.
6000
2200 PARALLEL BAYS
6700 90° BAYS

NOTE:
FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
B-10008 FOR DETAILS OF VERGE AND ACCESS PROFILES
B-10011 & B-10029 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
B-10030 FOR DETAILS OF BATTER PROFILES
AND STABILISATION TREATMENT

NOTES
1. PARKING BAYS, PROVIDED AS REQUIRED, ARE TO BE SURFACED DIFFERENTLY (BY COLOUR OR MATERIAL) TO
THAT OF THE THROUGH CARRIAGEWAY. PARKING BAYS MAY AS AN ALTERNATIVE BE CONSTRUCTED BEHIND
KERBING (REFER SECTION 2). HOWEVER THE LENGTH OF THESE SHOULD BE EXTENDED TO MAKE ALLOWANCE
FOR ENTRY TO AND EXIT FROM THE BAY — REFER FIG. 2.4.G OF P.R.S.C.'S DESIGN STANDARDS FOR ROADWORKS.
WHERE PARKING BAYS ARE PROVIDED ON THE MINIMUM VERGE WITH A CONCRETE PATH, LOCALISED RESERVE
WIDENING WILL BE NECESSARY. PARKING BAYS (EITHER PARALLEL OR AT 90°) ON THE NARROW VERGE SHOULD
BE AVOIDED. THE PREFERRED LOCATION FOR PARKING BAYS IS ON THE VERGE WITHOUT MAIN SERVICES.
2. A CONCRETE PEDESTRIAN PATH OR SHARED-USE PATH SHALL BE PROVIDED ON ONE SIDE ONLY. THE
PREFERRED POSITION FOR THE PATH IS ON THE WIDER VERGE AS THIS OPTIMISES LANDSCAPING OPPORTUNITIES.
3. WHERE THE PARKING BAY REQUIREMENT EXCEEDS 50% OF THE STREET LENGTH, THE NOMINAL KERB
LINE SHALL BE DEEMED TO BE THE FACE OF THE KERB AT THE REAR OF THE PARKING BAY. THE
STANDARD VERGE CROSS SECTION AND SERVICE ALLOCATIONS SHALL THEN BE ATTACHED TO THIS
KERB LINE.
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.
NOTES

1. SPECIES OF VEGETATION FOR USE IN THE LANDSCAPED AREA SHALL BE CHOSEN FOR SUITABILITY OF PLACEMENT IN THESE AREAS, AND SHALL BE SHOWN ON THE DEVELOPER'S LANDSCAPING PLAN FOR COUNCIL'S APPROVAL. PLANTING SPECIFIED SHALL BE IN ACCORDANCE WITH COUNCIL'S LANDSCAPING REQUIREMENTS.

2. A CONCRETE PEDESTRIAN PATH OR SHARED USE PATH MAY BE REQUIRED DEPENDING ON ALLOTMENT CATCHMENT OR WHERE NECESSARY TO SERVICE NEIGHBOURHOOD FACILITIES AND FOR INTERCONNECTION OF RESIDENTIAL CELLS.

3. RETAINING WALL TO BE DESIGNED SPECIFICALLY TO SUIT EACH SITE AND APPLICATION. THE RETAINING WALL SHOULD BE OF A TYPE WHICH WILL COMPLIMENT THE AMENITY OF THE AREA. ROCK FACED WALLS ARE ACCEPTABLE, HOWEVER EACH WALL WILL BE CONSIDERED INDIVIDUALLY AND APPROVED BY COUNCIL ON ITS MERITS.

4. DISTRIBUTION SERVICES ONLY SHALL BE CONSTRUCTED ON THE VERGE WHICH PROVIDES ACCESS TO ALLOTMENTS. STAGGERED STREET LIGHTING FURNITURE ONLY MAY BE PLACED IN THE 1.0M AREA BEYOND THE KERB ON THE OPPOSITE VERGE.

5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

6. ALL SLOPES ARE GIVEN AS 1 (VERT.) IN 'K' (HORIZ.).

SECTION 1

USE SECTION 1 WHEN :
WHERE 'K' < 500
SLOPE 'S' = 1:4 max.

NOTE:
FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWG 8–10004 FOR DETAILS OF BATTER PROFILES AND STABILISATION TREATMENT

SECTION 2

USE SECTION 2 WHEN :
WHERE 'K' > 500
SLOPE 'S' = CUT : 1:1.5 max.
OR RETAINING WALL REFER NOTE 3
FILL : 1:2 max.
REFER TO P.R.S.C. STD DWG 8–10030 FOR APPROPRIATE BATTER STABILISATION TREATMENT

SECTION 3

USE SECTION 3 WHEN :
IN FILL WHERE 'K' IS > 1500
SLOPE 'S' = 1:2 max.
OR RETAINING WALL REFER NOTE 3
REFER TO P.R.S.C. STD DWG 8–10030 FOR APPROPRIATE BATTER STABILISATION TREATMENT

SECTION 4

PINE RIVERS SHIRE COUNCIL
STANDARD ROAD CROSS SECTIONS
RESIDENTIAL STREETS
SINGLE SIDED STREET
ACCESS STREET AND ACCESS PLACE
SECTION

NOTES

1. A CONCRETE PEDESTRIAN OATH OR SHARED USE PATH SHALL BE PROVIDED ON ONE SIDE ONLY WHERE CATCHMENT EXCEEDS 40 LOTS. THE PREFERRED POSITION FOR THE PATH IS ON THE WIDER VERGE AS THIS OPTIMISES LANDSCAPING OPPORTUNITIES. A CONCRETE PEDESTRIAN PATH OR SHARED USE PATH MAY BE REQUIRED FOR CATCHMENTS UNDER 40 LOTS WHERE NECESSARY TO SERVICE NEIGHBOURHOOD FACILITIES AND FOR INTERCONNECTION OF RESIDENTIAL CELLS.

2. RETAINING WALL TO BE DESIGNED SPECIFICALLY TO SUIT EACH SITE AND APPLICATION. THE RETAINING WALL FACE SHOULD BE OF A TYPE WHICH WILL COMPLEMENT THE AMENITY OF THE AREA. ROCK FACED WALLS ARE ACCEPTABLE, HOWEVER EACH WALL WILL BE CONSIDERED INDIVIDUALLY AND APPROVED BY COUNCIL ON ITS MERITS.

3. AN APPROVED GUARDRAIL SHALL BE INSTALLED WHEN HEIGHT “H” (TOP OF KERB TO TOP OF KERB) EXCEEDS 1.5m.

4. LANDSCAPING WILL BE PERMITTED IN THE AREA BETWEEN THE GUARDRAIL AND TOP OF WALL WHEN THIS DIMENSION EXCEEDS 1.50m, OR, WHERE GUARDRAIL IS NOT REQUIRED, WHEN THE WIDTH OF CENTRE MEDIAN EXCEEDS 1.50m. LANDSCAPING WILL NOT BE PERMITTED IN THE 1.0m STRIP BEHIND THE BARRIER KERBS TO ALLOW FOR MANOEUVRING OF VEHICLES. MEDIAN LANDSCAPING SHALL BE IN ACCORDANCE WITH COUNCIL’S LANDSCAPING REQUIREMENTS.

5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
B–10008 FOR DETAILS OF VERGE AND ACCESS PROFILES
B–10011 & B–10029 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
B–10030 FOR DETAILS OF BATTERY PROFILES
AND STABILISATION TREATMENT
SECTION 1  
DEEMED TO COMPLY

SECTION 2 (ALTERNATIVE)

NOTES:
1. CONCRETE PEDESTRIAN PATH OR SHARED USE PATH SHALL BE PROVIDED ON BOTH VERGES.

2. SECTION 2 MAY BE USED FOR CONSTRUCTION OF A BI-LEVEL ROAD, WHERE A RETAINING WALL IS PROPOSED TO SEPARATE THE CARRIAGEWAYS, THE MEDIAN AND RETAINING WALL DETAIL SHALL BE THE SAME AS THAT SHOWN ON P.R.S.C. STANDARD DRAWING B-10004; MEDIAN AREAS TO BE LANDSCAPED IN ACCORDANCE WITH COUNCIL'S LANDSCAPING REQUIREMENTS.

3. AUXILIARY LANE ARE TO BE PROVIDED AT ANY ACCESS TO FRONTAGE DEVELOPMENTS (NEIGHBOURHOOD FACILITIES), BUS BAYS, AND ALL INTERSECTIONS, INCLUDING ANY NECESSARY CHANNELISATION. RESERVE WIDENING IS TO BE PROVIDED WHERE NECESSARY TO MAINTAIN VERGE WIDTH.

4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWG:
B-10010 FOR DETAILS OF VERGE PROFILES
B-10012 & B-10029 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
B-10030 FOR DETAILS OF BATTER PROFILES
AND STABILISATION TREATMENT

40mm ASPHALTIC CONCRETE OR OTHER APPROVED SURFACING ON 150MM MINIMUM COMPACTED DEPTH PAVEMENT

EDGE LINE, SEE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"

LAYBACK KERB AND CHANNEL

APPROPRIATE DRAINAGE AS REQUIRED

APPROPRIATE DRAINAGE AS REQUIRED
SECTION 1
DEEMED TO COMPLY

SECTION 2 (ALTERNATIVE)

NOTES

1. A CONCRETE PEDESTRIAN PATH OR SHARED-USE PATH SHALL BE PROVIDED ON BOTH VERGES OF THIS CLASSIFICATION OF ROAD.

2. AUXILIARY LANES ARE TO BE PROVIDED AT ALL ACCESSES TO ANY FRONTAGE DEVELOPMENTS (MAJOR FACILITIES), BUS BAYS, AND AT ALL INTERSECTIONS, INCLUDING ANY NECESSARY CHANNELISATION. RESERVE WIDENING IS TO BE PROVIDED WHERE NECESSARY TO MAINTAIN VERGE WIDTH.

3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
8–10009 FOR DETAILS OF VERGE PROFILES
8–10013 & 8–10029 FOR SERVICE ALLOCATIONS AND LANDSCAPING AREAS
8–10030 FOR DETAILS OF BATTER PROFILES AND STABILISATION TREATMENT
NOTES
1. A CONCRETE PEDESTRIAN PATH OR SHARED-USE PATH SHALL BE PROVIDED ON BOTH VERGES OF THIS CLASSIFICATION OF ROAD.

2. MEDIAN IS TO HAVE A MINIMUM CROSSFALL OF 2.5% AND A MAXIMUM OF 1:6. A BI-LEVEL ROAD MAY BE CONSTRUCTED, HOWEVER THE MEDIAN DESIGN WILL BE APPROVED BY COUNCIL ON AN INDIVIDUAL SITE SPECIFIC BASIS. MEDIANS ARE TO BE LANDSCAPED IN ACCORDANCE WITH COUNCIL'S LANDSCAPING REQUIREMENTS.

3. AUXILIARY LANES ARE TO BE PROVIDED AT ALL ACCESSES TO ANY FRONTAGE DEVELOPMENT (MAJOR FACILITIES), BUS BAYS, AND AT ALL INTERSECTIONS, INCLUDING ANY NECESSARY CHANNELISATION. RESERVE WIDENING IS TO BE PROVIDED WHERE NECESSARY TO MAINTAIN VERGE WIDTH.

4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.
SECTION 1 - VERGE WITHOUT PATHWAYS

SECTION 2 - VERGE WITH PATHWAYS

SECTION 3 - VERGE AT PARKING BAYS
(WITHOUT PATHWAYS)

SECTION 4 - VERGE WITH PARKING BAYS AND PATHWAYS

NOTES
1. The concrete pedestrian path or shared use path shall be constructed parallel to the kerb and channel, and transitioned smoothly around any parking bays. For details of pathway requirements refer to P.R.S.C. Std. Dwg. 8-10036.

2. The front property alignment shall be positioned so as the access grading, when applied across the full frontage of the allotment, intersects with the natural or finished surface not more than 0.5m from the front property alignment. This may lead to an increase in reserve width in side-long terrain variations may be approved by council in special circumstances.

3. The minimum reserve widths indicated on the standard road cross sections may need to be increased in certain circumstances in order to comply with this drawing.

4. Accesses are not permitted off parking bays.

5. Where parking bay requirement exceeds 50% of the street length, the nominal kerb line shall be deemed to be the face of kerb at the rear of the parking bay. The standard verge cross section and service allocations shall then be attached to this kerb line.

6. Special stabilisation measures shall be applied to all batters steeper than 1:4.

7. This drawing is to be read in conjunction with council's design manual.

8. All slopes given as 1 (vert.) in 'x' (horiz.).
SECTION 1 - ROADS WITH KERB AND CHANNEL

TYPE A
H < 1000

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD. DWGS:
8-10013 & 8-10029 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
8-10030 FOR DETAILS OF BATTER PROFILES
AND STABILISATION TREATMENT

1. NOISE ATTENUATION BARRIERS, WHERE REQUIRED, ARE TO BE POSITIONED FOR BEST EFFECT GENERALLY
AS INDICATED ON THE DRAWING. IN CUT SITUATIONS THIS SHALL BE ON THE PROPERTY BOUNDARY, AND
IN FILL SITUATIONS AS DIMENSIONED BEHIND THE PATHWAY ALLOCATION. ALTERNATIVE LOCATIONS MAY
BE APPROVED BY COUNCIL ON THEIR MERITS IN SPECIAL CIRCUMSTANCES.

2. THE WIDTH OF VERGE IS DEPENDENT ON THE ROAD CLASSIFICATION, DRAINAGE REQUIREMENTS, BATTER
SLOPES AND NOISE ATTENUATION DEVICES. THE VERGE WIDTH AND RESERVE WIDTH SHALL NOT BE LESS
THAN THOSE SHOWN ON P.R.S.C. STD. DWGS. 8-10006 AND 8-10007.

3. A 2.0m RESERVE IS TO BE MAINTAINED FOR PATHWAYS IRRESPECTIVE OF THE WIDTH OF PATH REQUIRED.
SHOULD A PATH OF GREATER THAN 2.0m BE REQUIRED, THIS ALLOCATION AND THE ROAD RESERVE SHALL BE
INCREASED ACCORDINGLY.

4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S “DESIGN MANUAL FOR ROADS AND DRAINAGE”.

5. SPECIAL STABILISATION MEASURES SHALL BE APPLIED TO ALL BATTERS STEEPER THAN 1:4

6. ALL SLOPES ARE GIVEN AS 1:VERT IN X (HORIZ).
### VERGE CONSTRUCTION

<table>
<thead>
<tr>
<th>Description</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Pedestrian Path Only (Cut)</td>
<td>1000 min.</td>
</tr>
<tr>
<td>With Shared Use Path Only (Cut)</td>
<td>1000 min.</td>
</tr>
<tr>
<td>With Pedestrian Path and Drainage Pits (Fill)</td>
<td>2400 min.</td>
</tr>
<tr>
<td>With Shared Use Path and Drainage Pits (Fill)</td>
<td>2800 min.</td>
</tr>
</tbody>
</table>

**NOTE:** For additional details refer to P.R.S.C. STD DWGs:
8-10013 & 8-10029 for Service Allocations and Landscaping Areas
8-10030 for Details of Barrier Profiles and Stabilisation Treatment

### NOTES

1. The concrete pedestrian path or shared use path shall be constructed parallel to the kerb and channel. For details of pathway requirements refer to P.R.S.C. Standard Drawing 8-10036.

2. Noise attenuation barriers where required are to be positioned for best effect as indicated on the drawing. In cut situations this shall be on the property boundary, and in fill situations as dimensioned behind the pathway allocation. Alternative locations may be approved by Council on their merits in special circumstances.

3. The width of verge is dependent on the road classification, drainage requirements, battery slopes and noise attenuation devices. The verge width and reserve width shall not be less than those shown.

4. Special stabilisation measures shall be applied to all batteries steeper than 1:4.

5. This drawing is to be read in conjunction with Council's design manual.

6. All slopes are given as 1 (vert.) in 'X' (horiz.).

---

**PINE RIVERS SHIRE COUNCIL**

**STANDARD VERGE PROFILES**

**RESIDENTIAL STREETS**

**TRUNK COLLECTOR STREETS**
### Section 1 – Steep Terrain #
#### Roads with Kerb and Channel

- The two alternative alignment models indicated, the model to apply for any given length of road shall be dependent on the predominant terrain type. The alignment selected shall not differ at localised variations in the terrain.
- Street lights are not permitted in medians less than 3000 wide. In medians between 3000 and 6000 wide, street lights are to be of the frangible base type and the median adjacent the poles is to be paved to permit passage. In medians 6000 wide or greater, tilt down poles may be used to enable landscaping of medians.

### Section 2 – Gentle Terrain #
#### Roads with Kerb and Channel

### Section 3 – All Terrain Types
#### Roads without Kerb and Channel
NOTES

1. A CONCRETE PEDESTRIAN PATH IS REQUIRED ON ONE SIDE ONLY. A SHARED USE PATH MAY HAVE TO BE PROVIDED WHERE REQUESTED BY COUNCIL. FOR DETAILS OF PATHWAY REQUIREMENTS REFER P.R.S.C. STD. DWG. 8–10036.

2. THE MINIMUM VERGE WIDTH AND RESERVE WIDTH MAY NEED TO BE INCREASED IN CERTAIN CIRCUMSTANCES FOR PROVISION OF ACCESS OR TO MEET GRADE CRITERIA.

3. FOR DETAIL OF SERVICE ALLOCATIONS AND LANDSCAPING AREAS REFER TO P.R.S.C. STD. DWG. 8–10016 AND 8–10029.

4. LINEMARKING SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.
 SECTION

NOTES

1. A CONCRETE PEDESTRIAN PATH OR SHARED USE PATH IS REQUIRED ON BOTH VERGES OF INDUSTRIAL COLLECTOR ROADS AS SPECIFIED BY COUNCIL. FOR DETAILS OF PATHWAY REQUIREMENTS REFER P.R.S.C. STD. DWG. 8-10036.

2. THE MINIMUM VERGE WIDTH AND RESERVE WIDTH MAY NEED TO BE INCREASED IN CERTAIN CIRCUMSTANCES FOR Provision OF ACCESS OR TO MEET GRADE CRITERIA.

3. FOR DETAIL OF SERVICE ALLOCATIONS AND LANDSCAPING AREAS REFER TO P.R.S.C. STD. DWG. 8-10016 AND 8-10029.

4. LINEMARKING SHALL BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.
INDUSTRIAL ACCESS ROAD

INDUSTRIAL COLLECTOR ROAD

NOTES
1. FOR GENERAL NOTES, COVER REQUIREMENTS AND TYPICAL SERVICE CONDUIT SECTIONS, REFER TO P.R.S.C. STD. DWGS. B-10029.
2. FOR STANDARD ROAD AND VERGE DETAILS REFER TO P.R.S.C. STD. DWGS. B-10014 AND B-10015.
SECTION 1
DEEMED TO COMPLY

SECTION 2
SPECIAL CIRCUMSTANCES ONLY – 8 LOTS ABSOLUTE MAXIMUM

NOTES
1. A CONCRETE PEDESTRIAN PATH, SHARED USE PATH OR RECREATIONAL TRAIL SHALL BE PROVIDED ON ONE SIDE ONLY WHERE REQUIRED BY COUNCIL.
2. FLUSH KERB AND BARRIER KERB MAY BE USED IN SPECIAL CIRCUMSTANCES – REFER SECTION 6.2.6.1 OF COUNCIL’S DESIGN MANUAL.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
8-10020 FOR DETAILS OF VERGE PROFILES
8-10027 & 8-10029 FOR SERVICE ALLOCATIONS AND LANDSCAPING AREAS
8-10030 FOR DETAILS OF BATER PROFILES AND STABILISATION TREATMENT

PINE RIVERS SHIRE COUNCIL
STANDARD ROAD CROSS SECTIONS
NON-URBAN ROADS
RURAL RESIDENTIAL ACCESS PLACE

File: 400/26
Sheet: 1 of 1 Sheets

Scales

Dimensions in mm.

Notes revised
Original issue
Revisions
Date

CONCRETE PATH OR RECREATIONAL TRAIL. REFER NOTE 1

2 COAT BITUMEN SEAL OR OTHER APPROVED SURFACING ON 150mm MINIMUM COMPACTED DEPTH PAVEMENT

SECTION

NOTES
1. A CONCRETE PEDESTRIAN PATH, SHARED USE PATH OR RECREATIONAL TRAIL SHALL BE PROVIDED ON ONE SIDE ONLY WHERE REQUIRED BY COUNCIL.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
8–10020 FOR DETAILS OF VERGE PROFILES
8–10027 & 8–10029 FOR SERVICE ALLOCATIONS AND LANDSCAPING AREAS
8–10030 FOR DETAILS OF BATER PROFILES AND STABILISATION TREATMENT
SECTION

NOTES

1. A CONCRETE PEDESTRIAN PATH, SHARED USE PATH, OR RECREATIONAL TRAIL SHALL BE PROVIDED ON ONE SIDE ONLY WHERE REQUIRED BY COUNCIL.

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S DESIGN MANUAL.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
B-10020 FOR DETAILS OF VERGE PROFILES
B-10027 & B-10029 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
B-10030 FOR DETAILS OF BATTER PROFILES
AND STABILISATION TREATMENT

PINE RIVERS SHIRE COUNCIL

STANDARD ROAD CROSS SECTIONS
NON-URBAN ROADS
RURAL RESIDENTIAL COLLECTOR STREET
SECTION 1 – VERGE WITHOUT PATHWAYS

SECTION 2 – VERGE WITH PATHWAY/RECREATIONAL TRAIL

SECTION 3 – ACCESS PROFILE FOR VERGE WITH PATHWAY/RECREATIONAL TRAIL

SECTION 4 – RIDGE ROADS

SECTION 5 – SWALE DRAINS (SPECIAL CIRCUMSTANCES ONLY)

NOTES

1. FOR DETAILS OF PATHWAY REQUIREMENTS REFER TO P.R.S.C. STD Dwg. 8-10036, WHERE RECREATIONAL TRAILS ARE REQUIRED REFER TO SECTION 7.6.0 OF COUNCIL’S DESIGN MANUAL.

2. RECREATIONAL TRAIL AREAS ARE TO BE WELL GRADED, FREE FROM ROCKS AND OTHER OBSTRUCTIONS, AND FINISHED WITH 50mm COMPACTED GRAVEL OR GRASSED SIMILAR TO VERGES, IN ACCORDANCE WITH SECTION 7.6.0 OF COUNCIL’S DESIGN MANUAL.

3. FOR DETAILS OF CONCRETE PATHWAY REQUIREMENTS REFER TO P.R.S.C. STD. Dwg. 8-10036.

4. SPECIAL STABILISATION MEASURES SHALL BE APPLIED TO ALL BATTERS STEEPER THAN 1:4.

5. THE MINIMUM RESERVE AND VERGE WIDTHS INDICATED ON THE STANDARD ROAD CROSS SECTIONS MAY NEED TO BE INCREASED IN CERTAIN CIRCUMSTANCES IN ORDER TO COMPLY WITH THIS DRAWING.

6. ALL SWALE DRAINS ARE TO BE HYDRAULICALLY DESIGNED TO ENSURE DRAINAGE FLOWS ARE ADEQUATELY CATERED FOR WITHIN THE DRAIN AREA, REFER STD Dwg 8-10040. THE DIMENSIONS SHOWN ARE A MINIMUM ONLY, COUNCIL RESERVES THE RIGHT TO REQUEST ALTERATIONS TO DRAIN PROFILES AND TO LIMIT THE DEPTH OF THE DRAIN.

7. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL’S DESIGN MANUAL.

8. ALL SLOPES ARE GIVEN AS 1 (VERT) IN "X" (HORZ).
NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

2. AN AREA SHALL BE ALLOCATED ON ONE VERGE FOR A PEDESTRIAN OR SHARED USE PATHWAY OR RECREATIONAL TRAIL PURPOSES (IF ORDERED), AND AS A SERVICE ALLOCATION. THIS ALLOCATION IS TO BE ON THE HIGHER VERGE WHEREVER POSSIBLE.
SECTION

NOTES

1. LINEMARKING IS TO BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

2. THIS DRAWING IS TO READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

3. AN AREA SHALL BE ALLOCATED ON ONE VERGE FOR A PEDESTRIAN OR SHARED USE PATHWAY OR RECREATIONAL TRAIL PURPOSES (IF ORDERED), AND AS A SERVICE ALLOCATION. THIS ALLOCATION IS TO BE ON THE HIGHER VERGE WHEREVER POSSIBLE.
SECTION

NOTES

1. LINEMARKING IS TO BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

2. AUXILIARY LANES ARE TO BE PROVIDED AT ALL BUS BAYS AND AT ALL INTERSECTIONS, INCLUDING ANY NECESSARY CHANNELISATION.

3. THIS DRAWING IS TO READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

4. AN AREA SHALL BE ALLOCATED ON ONE VERGE FOR A PEDESTRIAN OR SHARED USE PATHWAY OR RECREATIONAL TRAIL PURPOSES (IF ORDERED), AND AS A SERVICE ALLOCATION. THIS ALLOCATION IS TO BE ON THE HIGHER VERGE WHEREVER POSSIBLE.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWGS:
8–10026 FOR DETAILS OF VERGE PROFILES
8–10028 & 8–10026 FOR SERVICE ALLOCATIONS
AND LANDSCAPING AREAS
8–10030 FOR DETAILS OF BATTER PROFILES
AND STABILISATION TREATMENT.
SECTION 1

SECTION 2 (WITH TURN LANE)

NOTES

1. LINEMARKING IS TO BE IN ACCORDANCE WITH THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

2. AUXILIARY LANES ARE TO BE PROVIDED AT ALL BUS BAYS AND AT ALL INTERSECTIONS, INCLUDING ANY NECESSARY CHANNELISATION.

3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH COUNCIL'S DESIGN MANUAL.

4. MEDIAN IS TO BE LANDSCAPED IN ACCORDANCE WITH COUNCIL'S LANDSCAPING REQUIREMENTS.

5. AN AREA SHALL BE ALLOCATED ON THE VERGE FOR A PEDESTRIAN OR SHARED USE PATHWAY OR RECREATIONAL TRAIL PURPOSES (IF ORDERED), AND AS A SERVICE ALLOCATION. THIS ALLOCATION IS TO BE ON THE HIGHER VERGE WHEREVER POSSIBLE.

NOTE: FOR ADDITIONAL DETAILS REFER TO P.R.S.C. STD DWG: 8-10026 FOR DETAILS OF VERGE PROFILES 8-10028 & 8-10029 FOR SERVICE ALLOCATIONS AND LANDSCAPING AREAS 8-10030 FOR DETAILS OF BARRIER PROFILES AND STABILISATION TREATMENT.
NOTES

1. FOR GENERAL NOTES AND COVER REQUIREMENTS, REFER TO P.R.S.C. STD. DWG. 8–10029.

2. FOR STANDARD VERGE AND ACCESS PROFILES REFER TO P.R.S.C. STD. DWG. 8–10025 AND 8–10026.

3. SERVICES TO BE INSTALLED ON PATHWAY SIDE OF ROAD. THIS ALLOCATION IS TO BE ON HIGHEST VERGE WHEREVER POSSIBLE.
NOTES

1. The alignment and depth of existing services shall be confirmed on-site in consultation with relevant service authorities prior to any excavation and shall not be inferred from the service allocation drawings.

2. The communications corridor may be utilised by various providers of underground communications and multimedia services. Developers shall negotiate with all relevant communications companies for the provision of conduits at the design phase of development. Various joint use arrangements exist amongst electricity and communications providers. Telstra plant is to occupy a space within the communications corridor immediately adjoining the underground power allocation. Telstra man-holes may locally encroach into the underground power allocation with prior agreement from Energrid. Developers should initiate joint use between service providers at the design phase.

3. Various configurations of trench width and conduit numbers/diameters exist for common trench arrangements between service providers of electricity, communications and gas.

4. Landscaping designs shall give due consideration to the provision of driveway accesses and clearances to service pits, pillars and poles for maintenance access.

5. Plants species shall be selected which minimise the potential for root damage to underground services, pathways and kerb and channel.

6. The mature height and spread of plants shall be considered when assessing visibility sight lines for safe vehicular and pedestrian functions and street lighting requirements applicable to the road classification.

7. Planting of approved shrubs may be permitted over water mains (including recycled water mains) greater than 300mm in diameter and over gas mains.

8. Refer to P.R.S.C. Std. Dwg. 8-70001 and council’s design manual for landscaping requirements.

9. Brass indicator discs shall be placed in kerb over all cross road conduits.

10. Service allocation drawings shall be read in conjunction with council’s design manual.
**CUT BATTER DETAILS**

_EXCEPT URBAN ACCESS PLACE, ACCESS AND COLLECTOR STREETS REFER VERGE PROFILES P.R.S.C. STD DWG 8-10008_

**NOTES**

1. THE BATTER STABILISATION TREATMENT TABLE IS TO BE USED AS A GUIDE ONLY. FINAL TREATMENT IS DEPENDENT ON ACTUAL SITE AND GEOTECHNICAL CONDITIONS.

2. WHERE SCOUR IS PRESENT ON EXISTING BATTERS, AN ALTERNATIVE EROSION PREVENTION METHOD IS TO BE DETERMINED ON SITE BY THE SUPERVISING ENGINEER IN CONSULTATION WITH COUNCIL’S ENGINEER.

3. SUBJECT TO A GEOTECHNICAL ASSESSMENT, BATTER STAGE HEIGHT ‘H’ SHALL NOT EXCEED 3.0m PER STAGE IN NORMAL CONDITIONS.

WHERE A HEIGHT IN EXCESS OF 3.0m IS PROPOSED, A GEOTECHNICAL ASSESSMENT IS TO BE COMPLETED BY AN ENGINEERING GEOLOGIST ENCOMPASSING ALL CRITERIA REQUIRED IN ACCORDANCE WITH STRUCTURE CLASSIFICATION CLASS 1 TO A.S. 4678. A MAXIMUM BATTER STAGE HEIGHT AND FACE SLOPE IS TO BE PROVIDED. COUNCIL RESERVES THE RIGHT TO LIMIT THE MAXIMUM BATTER STAGE HEIGHT TO 5.0 METRES.

**FACE TREATMENT OF CUT AND FILL BATTERS**

_AT 1 IN 4 OR STEEPER_

**BATTER STABILISATION TREATMENT**

<table>
<thead>
<tr>
<th>BATTER SLOPE</th>
<th>UNDERLYING SOIL CONDITIONS</th>
<th>BATTER TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 1:4</td>
<td>SILT – SAND</td>
<td>HYDROMULCHING OR TURFING.</td>
</tr>
<tr>
<td></td>
<td>CLAY – LOAM</td>
<td>SEEDING OR TURFING.</td>
</tr>
<tr>
<td></td>
<td>SHALE – ROCK</td>
<td>SCARIFY, TOPSOL AND TURF.</td>
</tr>
<tr>
<td>1:4 – 1:3</td>
<td>SILT – SAND</td>
<td>HYDROMULCHING OR TURFING,</td>
</tr>
<tr>
<td></td>
<td>CLAY – LOAM</td>
<td>SEEDING OR TURFING, STAKED AT 500mm CRS.</td>
</tr>
<tr>
<td></td>
<td>SHALE – ROCK</td>
<td>SCARIFY, TOPSOL AND TURF.</td>
</tr>
<tr>
<td>STEEPER THAN 1:3</td>
<td>SILT – SAND</td>
<td>HYDROMULCH (REFER NOTE 1)</td>
</tr>
<tr>
<td></td>
<td>CLAY – LOAM</td>
<td>HYDROMULCH (REFER NOTE 1)</td>
</tr>
<tr>
<td></td>
<td>SHALE – ROCK</td>
<td>LEAVE BARE (REFER NOTE 1)</td>
</tr>
</tbody>
</table>
CONCRETE PATHWAYS — PART PLAN

PATHWAY WIDTHS

- Pedestrian Path — Collector Streets and below: 1200
- Pedestrian Path — Trunk Collector Streets and above: 1500
- Shared Use Pathways (Minimum): 2000
- Shared Use Pathways (Desirable): 2500
- Commuter Cycleways: 3000

Or as required by Council's Bikeways Plan

PATHWAY WIDENING

(Minimum widening 800mm)

- R12 Dowel bar epoxy bonded to exist. concrete
- New path

Dowel bars to be placed along the pathway midway between joints at 2000 crs, or as directed by Council's Engineer.

PATHWAY CONSTRUCTION DETAIL

FOR AREAS AFFECTED BY FLOODING

(Refer Note 5)

NOTES

1. Concrete to be Grade N25 in accordance with P.R.S.C. Standard Specification for Plain and Reinforced Concrete.
2. Reinforcing mesh may be deleted on written instructions from Council's Engineer.
3. Finish to slab to be wood float or broom.
4. The Engineer may direct that this dimension be varied.
5. 'Areas Affected by Flooding' will be defined by Council's Engineer.
7. All dimensions are in millimetres.
8. For pathways with down grade exceeding 5%, which connects with Roads of Collector Standard or greater, refer P.R.S.C. Standard Dwg. 8-60034
9. Tactile indicator Types A, B & C as per AS 1428.4 — 1992. To be installed:
   (i) At signalised and other major crossings
   (ii) In footpaths located in areas of heavy pedestrian traffic (eg. shopping precincts)
   (iii) As directed by Council's Engineer.

PINE RIVERS SHIRE COUNCIL

STANDARD CONCRETE PATHWAYS

File

400/26

Sheet 1 of 1 Sheets

Drawing No.

8 10036

A3
**SPACING OF GUIDE POSTS**

1. **ON STRAIGHTS** — the spacing shall be 150m max. with the posts in pairs, and at bridges/culverts.
   - On very long straights in flat terrain, the spacing may be increased to 300 metres, in pairs.

2. **ON HORIZONTAL CURVES INCLUDING TRANSITIONS TO CIRCULAR CURVES** — the spacing shall be in accordance with the following table:

<table>
<thead>
<tr>
<th>RADIUS OF CIRC. CURVE</th>
<th>POST SPACING ON CURVE INSIDE</th>
<th>POST SPACING ON CURVE OUTSIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 124m</td>
<td>20 m</td>
<td>10 m</td>
</tr>
<tr>
<td>125 to 349m</td>
<td>40 m</td>
<td>20 m</td>
</tr>
<tr>
<td>350 to 799m</td>
<td>60 m</td>
<td>40 m</td>
</tr>
<tr>
<td>800 to 1999m</td>
<td>90 m</td>
<td>60 m</td>
</tr>
<tr>
<td>over 2000m</td>
<td>refer to straights</td>
<td></td>
</tr>
</tbody>
</table>

   Posts placed on the inside of the curve are to be opposite a post on the outside, where practicable.

3. **ON CREST VERTICAL CURVES** — posts are to be placed in pairs for the full length of V.C. in accordance with the following table:

<table>
<thead>
<tr>
<th>V.C. RADIUS metres</th>
<th>POST SPACING 25m</th>
<th>50m</th>
<th>75m</th>
<th>100m</th>
<th>150m</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500–1000</td>
<td>50m</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1001–2000</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001–4500</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;4500</td>
<td>4500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL ROAD EDGE GUIDE POSTS**

4. **IN AREAS SUBJECT TO FREQUENT FOGS** — the spacing shall be reduced to 60m max. in pairs.

5. **AT BRIDGES AND CULVERTS** —
   - (a) Where the structure is up to 5m in length (measured along the road centreline), 2 posts are to be placed — one at each left hand approach end of the structure.
   - (b) Where the structure is over 5m in length (measured along the road centreline), 4 posts are to be placed — one at each corner of the structure.

6. **AT FLOODWAYS ON STRAIGHTS** — guide posts on floodways shall be tubular steel, installed as shown. Guide post spacing shall be 25m with the posts in pairs.

7. **GUARDRAIL** — where guidepost locations fall adjacent to guardrail installation, the delineators are to be attached to the first guardrail post approached, and then to guardrail posts at the required spacing using guardrail delineator brackets.

8. **OTHER** — in special circumstances where positions of guide posts are detailed on working plans, such positions are to be adopted in lieu of those derived from this drawing.

**POST INSTALLATION DETAILS**

1. **Formation generally** —
   - The inside face of the post is to be set in line with the shoulder edge. The shoulder widths are indicated on the applicable Standard Road Cross Sections.
   - For long lengths of low embankment, the inside face of posts is generally to be 600 beyond the shoulder edge, but no more than 150 beyond the end of an adjacent culvert. Post lengths are to be increased when placed beyond the shoulder edge to allow for batter slope. (E.g. for a batter slope of 1 in 4, the post will need to be increased by 150mm).

2. **Concrete margins** —
   - 65 NB galvanised steel sleeve (3.2 min. thickness)
   - M10 x 90 galvanised hex. bolt, nut and washer. Drill 12 dia. holes in post and sleeve for bolt.

---

**PINE RIVERS SHIRE COUNCIL**

**ROAD EDGE GUIDE POSTS**

**POST AND INSTALLATION DETAILS**

**Scales**

NOT TO SCALE

**Original Issue**

9/96

**Revisions**

**Based on MRO Drawing 1357**

**Date**

**Director Works & Services**

**M. Mayor**

**C.E.O.**

**Drawing No.**

810037

**Pine Rivers Shire Council**

**Sheet 1 of 1 Sheets**
NOTES:

1. DESIGN, LOCATION AND PLACEMENT OF CONCRETE WHEEL STOPS SHALL BE IN ACCORDANCE WITH AS 2890.1.

2. EACH LIFTING ANCHOR TO BE "SWIFTLIFT" OR EQUIVALENT 1.3 Tonne, GALVANISED, AND FITTED TO MANUFACTURER’S SPECIFICATIONS.

3. CONCRETE TO BE GRADE N30 TO AS 3600.

4. FIX TO AC OR GRAVED SURFACES WITH 300 LONG x 16 DIAMETER GALVANISED DRIVE PINS BOTH ENDS.
BEHIND KERB

Concrete filled to top of 60° Bend

300x300x300 concrete block around junction

BEHIND KERB ELEVATION

Hydrant Box and Plain Cover

45° Bend

Direction of Flow

Side drains

450x300x300 concrete block around junction

PLAN

SECTION

BRASS MARKER DETAIL

CONNECTION NOTES:
1. 100 dia. uPVC Class SH sewer pipe may be cut to length to suit field application.
2. Connection of 100 dia. sewer pipe to Std Class 1000 connector may be made by use of ducting tape if connection work finishes inside the concrete section of the catchpit wall. Alternatively, this joint must be glued using plastic jointer glue.
3. Class 1000 connector shall be inserted into the 100 dia. uPVC sewer pipe adaptor a minimum distance of 50mm.

NOTES
1. Flushing Points are not to be constructed into side drains which do not contain a drainage pipe or drainage panel.
2. Flushing points are to be installed at the upstream end of any drainage pipe or panel, high points in Streets and Roads, the high point of Cul-de-sacs, and at 60 metre maximum spacings.
3. When using prefabricated drainage panels, appropriate adaptors are to be fitted between the flushing point pipework and the drainage panel.
4. For construction details of Side Drains, refer to Standard Drawing 8–10039.

FROM CATCHPIT

TYPICAL LOCATIONS OF SIDE DRAIN FLUSHING POINTS

PINE RIVERS SHIRE COUNCIL
SIDE DRAIN FLUSHING POINTS

A3
POST DETAIL

NOTES:

1. ALL SIGNS ARE TO BE REFLECTORISED UNLESS SPECIFIED OTHERWISE.
2. SIZE & SIGN TYPE HAS BEEN SHOWN ON THE DRAWINGS. TWO (2) PIPE STANDARDS ARE TO BE PROVIDED AT LARGE SIGNS.
3. ALL SIGNS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO ERECTION.
4. ALL SIGNS ARE TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFIED OTHERWISE.
2. PIPE DIAMETER TO BE DETERMINED TO SUIT TABLE DRAIN FLOWS.
3. PIPE CLASS TO BE MINIMUM CLASS 2 TO SUIT COVER REQUIREMENTS.
4. DIMENSIONS MAY BE VARIED IF APPROVED BY COUNCIL.

<table>
<thead>
<tr>
<th>NOMINAL INTERNAL DIAMETER (D)</th>
<th>URBAN</th>
<th>RURAL/RURAL RESID.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>475</td>
<td>600</td>
</tr>
<tr>
<td>B</td>
<td>450</td>
<td>565</td>
</tr>
</tbody>
</table>

PROPERTY BOUNDARY

SECTION 1

SECTION 2

PINE RIVERS SHIRE COUNCIL

STANDARD ACCESS PIPE CROSSING

Drawing No. 400/26

Sheet 1 of 1 Sheets
Layback Kerb and Channel

Upright Kerb and Channel

Barrier Type

Mountable Type

Edge (Flush) Kerb

Extended Spoon Drain

Notes:

1. Concrete to be Class N25.
2. Upright kerb and channel is to be used only on industrial Roads and at Bus Stops.
3. At the intersection of an industrial Road with a road of other classification, upright kerb and channel shall continue to the Tangent Point of the kerb return in the other road.
4. # - Dimensions marked thus are the maximum values for full embedment. Lesser values may be approved by Council Engineer to suit pavement course thicknesses proposed or occurring in the job.
5. Semi-mountable kerbs may be cast directly on to bitumen by machine.
6. Reinforcing may be omitted on written instructions from Council Engineer.
7. If Spoon Drain Cast in situ, reinforcing to be included.

Pine Rivers Shire Council

Standard Kerb and Channel, Kerbs, and Spoon Drains

Director Assets & Infrastructure

Scales

Moyr

C.E.O.

NOT TO SCALE

1/100

Pavement Courses

75 mm min

150

K175

Kerb and Channel Foundations

Pavements Up To & Incl. 175mm

Pavements in Excess of 175mm

11/05

Original Issue

9/96

Revisions

Adp. Date

File

Min. Page

400/26

Drawing No.

810044

Sheet 1 of 1 Sheets

NOT TO SCALE
NOTES

1. Position of Kerb Ramps:
   a. The number and exact positions shall be determined with regard to the location of
      existing and proposed traffic signal posts, drainage structures, and direction
      of pedestrian movements.
   b. Kerb ramps should be carefully planned to ensure
      that users are not put at risk from traffic of any kind, bearing in
      mind that a disabled persons reaction time may be greater than
      that of persons having full mobility.
   c. Kerb ramps should be installed in a manner which will
      direct the user (particularly the visually impaired) across the
      adjacent roadway by the most direct route.

2. Concrete to be grade N25.

3. The maximum gradient of a ramp exceeding 1520 mm in length
   shall be 1:14.

4. The ramp and sloping sides should be slip resistant and of a colour
   or treatment that contrasts with the adjoining surfaces, as directed by Council's Engineer.

5. Use of Tactile Indicators:
   a. Required at signalised, and other major crossings, or where
      directed by Council's Engineer.
   b. Tactile indicator types A, B and C are to be as per
   c. A colour contrast of the ramp area to the surrounding area
      is also part of the Tactile Indicator installation.
   d. Lines of Tactiles to be glued into saw cuts.

6. Construction joints (as directed) are required for
   existing curb and channel and footpath only.

7. Reconstruction of kerb ramps:
   a. Grades as shown on this drawing are to be achieved whenever practically possible.
   b. Channel may also require reconstruction at ramp area.
   c. Ensure edge of bitumen pavement is flush with edge of channel.

KERB RAMP WIDTHS

Collector Streets and below 1200
Trunk Collector Streets and above 1500
Shared Use Pathways (Minimum) 2000
Shared Use Pathways (Desirable) 2500
Commuter Cycleways 3000
Or as required by Council's Bikeways Plan

PINE RIVERS SHIRE COUNCIL

STANDARD KERB RAMP

400/28

Drawing No.

Sheet 1 of 1 Sheets
**NOTES:**

1. **SIGN LOCATIONS:**
   - STREET SIGNS ARE TO BE PROVIDED AT ALL INTERSECTIONS CLEARLY INDICATING ALL STREETS AND ROADS AS DESCRIBED IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" FOR STREET NAME SIGNS.

2. **STANDARD STREET SIGNS:**
   - STANDARD STREET SIGNS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE TYPE 1 STANDARD SIGN DETAIL ON P.R.S.C. STD. DWG. B-10048.

3. **ALTERNATIVE STREET SIGNS:**
   - (a) ALTERNATIVE STREET SIGNS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE TYPE 2, 3 AND 4 SIGN DETAILS ON P.R.S.C. STD. DWG. B-10048.
   - (b) ALTERNATIVE STREET SIGNS ARE TO BE SELECTED IN ACCORDANCE WITH PINE RIVERS SHIRE COUNCIL POLICY.

4. **SIGN BLADES:**
   - (i) NUMBERING TO BE ODD OR EVEN, DEPENDANT UPON THE SIDE OF THE ROAD THE SIGN IS INSTALLED.
   - (ii) LETTERING AND COLOUR OPTIONS:
     - (a) BLACK SERIES "D" OR "C" LETTERING TO AS1744 ON WHITE BACKGROUND.
     - (b) WHITE "COOPER MD BT" LETTERING TO AS1743 ON STANDARD GREEN BACKGROUND.
     - (c) ALL SIGN BLADES ARE TO BE MANUFACTURED FROM "ANTI-VANDAL" EXTRUDED ALUMINIUM AS PER SIGN BLADE DETAIL ON P.R.S.C. STD. DWG. B-10048.

5. **ALL SIGNS ARE TO BE APPROVED BY THE COUNCIL'S ENGINEER PRIOR TO CONSTRUCTION.**
1. Where batters rise above road level, catch banks are to be installed at the very top of the batter, (Refer P.R.S.C. Std. DWG 8=10030).

2. Where scour is present on batter, an alternative erosion prevention method is to be employed as directed on site by Council's engineer.

3. In areas to be turfed, the existing surface is to be scarified prior to the placement of turf.

4. Turf to be placed on 50mm depth of topsoil, fertilized and watered in.

5. Temporary silt fences are to be erected at swale drain outlets prior to commencement of work.

6. Where longitudinal grades of swale drains are in excess of 2%, dumped rock protection is to be installed at drain outlets.

7. Where loose rock is to be employed for the lining of swale drains, rock should be 75mm to 100mm size, relatively free of sediments and preferably washed prior to placement. A rounded river rock is preferred to crushed rock.

8. 1200mm concrete invert to be used where grade is in excess of 10% or where required for hydraulic capacity.

9. Final pavement depth to be determined from soil tests.

10. Pipe crossings or concrete inverts are to be provided at driveways.

---

**TABLE 1**

(SWALE DRAIN TREATMENT SELECTION)

<table>
<thead>
<tr>
<th>SWALE DRAIN GRADE</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4% - 2%</td>
<td>CONCRETE LINED</td>
</tr>
<tr>
<td>2% - 5%</td>
<td>GRASS LINED</td>
</tr>
<tr>
<td>5% - 10%</td>
<td>ROCK LINED</td>
</tr>
<tr>
<td>10% OR GREATER</td>
<td>CONCRETE LINED</td>
</tr>
</tbody>
</table>

Refer to P.R.S.C. Std DWG 8=10030 for appropriate batter stabilization treatment.

---

**TABLE 2**

(TYPICAL DIMENSIONS)

<table>
<thead>
<tr>
<th>ROAD CLASSIFICATION</th>
<th>DIMENSIONS (MIN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>ACCESS</td>
<td>3000</td>
</tr>
<tr>
<td>&gt; COLLECTOR</td>
<td>3500</td>
</tr>
</tbody>
</table>

Refer to P.R.S.C. Std DWG 8=10030 for appropriate batter stabilization treatment.

---

**CONCRETE LINED SWALE DRAIN**

- PROPOSED SEAL WIDENING
- 100mm EDGE LINE
- NEW PAVEMENT FOR SHOULDER SEALING. (REFER NOTE 9)

---

**ROCK LINED SWALE DRAIN**

- PROPOSED SEAL WIDENING
- 100mm EDGE LINE
- NEW PAVEMENT FOR SHOULDER SEALING. (REFER NOTE 9)

---

**PINE RIVERS SHIRE COUNCIL**

**ROADSIDE DRAINAGE**

**UPGRADING OF EXISTING ROADS SWALE DRAINS**
NOTES
1. BATTER DRAINS ARE TO BE POSITIONED ADJACENT TO CULVERTS AND WHERE SURFACE FLOWS ON SHOULDER ENCROACH ON TO THE DRIVING LANE.

2. SHOULDER DYE MAY BE OMITTED ON SUPERELEVATED CURVES WHERE ROADWAY CROSSFALL SLOPES AWAY FROM SHOULDER OR WHERE FILL BATTER IS LESS THAN 1.0m IN HEIGHT.

3. CATCH DRAINS ARE TO BE TREATED AS FOR SWALE DRAINS—REFER DWG. 8–10049.

4. FOR DIMENSIONS A, B & C REFER TO TABLE 2 ON DWG. 8–10049.

5. THIS DIMENSION TO BE REDUCED TO 1000 WHEN THERE IS NO FLOW FROM THIS DIRECTION.

6. FINAL POSITION OF BATTER DRAINS AND EXTENT OF SHOULDER DYE TO BE DETERMINED BY COUNCIL'S ENGINEER.