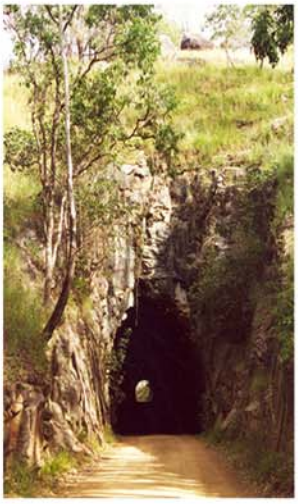


planning scheme policies

kolan shire

CONTENTS

POLICY 1: LOCAL GOVERNMENT MAY CONSULT

PLANNING SCHEME POLICY

1.1 When local government may consult on a development application

(1) Without limiting its discretion under IPA[1], the local government may seek advice or comment about an application in any circumstances the local government determines, including, in the local government's opinion, if—

(a) the development may conflict with a code;

(b) specialised technical advice is required to assess the development; or

(c) the development may affect premises being of special interest to a person.

1.2 Who may be consulted

(1) The local government may seek advice or comment about an application for development from any person, including any considered by the local government to have specialist knowledge or a special interest in an application.

(2) Without limiting subsection (1), the local government may seek advice or comment about an application for development for—

---

1 IPA, section 3.2.7 (Additional third party advice or comment)

Mineral resources

(a) within 1 km of identified mineral resources or a gravel pit—from the Department of Natural Resources and Mines; and

Native Title

(b) on land adjacent to land over which Native Title has been established or a claim has been made—from the Native Title claimant or Native Title holder; and

Good quality agricultural land

(c) on *Class A, Class B or Class C Land*—from the Department of Natural Resources and Mines; and

Bushfire prone area

(d) on land in a moderate or high risk area—from the Department of Emergency Services;

A use identified as an 'inconsistent use'

(e) for a material change of use identified as an 'inconsistent use' in the applicable zone code—owners, occupiers of adjoining or nearby premises, or the public generally.

1.3 How consultation may be undertaken

(1) The local government may seek advice or comment in any way considered appropriate for the circumstances, including any one or more of the following—

(a) public notification in a newspaper;

(b) placing a notice on the premises or a public place;

(c) personal notification or contact;

(d) placing an advertisement in the electronic media;

(e) placing information on and seeking comment from a web site;

(f) public meetings;

(g) meeting with a person or organisation having a special interest, experience or expertise; and

(h) correspondence.

POLICY 2: INFORMATION REQUIREMENTS FOR APPLICATIONS

PLANNING SCHEME POLICY

Guideline—
This policy identifies the supporting information the local government expects in a well-prepared application or may ask through an information request during the IDAS Information and Referral Stage (IPA Chapter 3, Part 3).

Division 1—Preliminary

(1) The Local Government may request the information identified in Division 2 from the applicant to assist—

(a) the assessment of a development application;

(b) the Local Government decide under the IPA that the conditions of a development permit for the operational works associated with the reconfiguring of a lot have been complied with before endorsing a plan of subdivision; or,

(c) the Local Government decide under the IPA that adequate security is given before endorsing a plan of subdivision.

Division 2—Information for assessment of development applications

The Local Government may request the following information—

2.1 General assessment

For assessment against a Zone Code—

(1) If an application requiring assessment against a zone code—

(d) an assessment of how the development may contribute to or detract from the achievement of outcomes sought for the zone;

(e) if applicable, an assessment of measures proposed to adequately manage the potential detraction from the achievement of the outcomes.

For reconfiguration of land—

(2) If an application involving the reconfiguration of land—

(a) a report detailing an appropriate Soil Erosion and Sediment Control Program prepared in accordance with Section A4 of the Soil Erosion and Sediment Control: Engineering Guidelines for Queensland Construction Sites – Institution of Engineers, Australia, Qld Division.

If in an unsewered area—

(3) for development involving material change of use or reconfiguration in an unsewered area—

(a) a report prepared by a suitably qualified person, in accordance with the Department of Natural Resources and Mines *On Site Sewerage Code*, detailing the suitability of the site for on site effluent disposal;

For development of a cattery of kennel—

(4) For development involving a cattery or kennel—

(a) a report prepared by a suitably qualified person detailing the expected noise levels associated with the *use* of the site and measures to mitigate noise levels when measured at the site boundaries; and,

(b) a report prepared by a suitably qualified person detailing how wastes from the site will be treated and disposed of.

For intensive animal husbandry—

(5) For development involving Intensive Animal Husbandry—

(a) details of—

(A) the number of animals to be kept on the site at any time; and,

(A) vehicle movements including service and delivery vehicles and proposed routes; and,

(B) proposed access routes; and,

(B) location of the 1:50 *ARI* level in respect of the site and all *use areas*; and,

(C) existing and proposed water supply including location and capacity of existing and proposed dams; and,

(D) details of all watercourses on or near the *premises*; and,

(b) a report prepared by a suitably qualified person detailing the expected noise levels associated with the *use* of the site and measures to mitigate noise levels; and,

(c) an agricultural land report prepared by a suitably qualified person in accordance with section 6 of *Planning Guidelines: The Identification of Good Quality Agricultural Land*; and,

(d) a report prepared by a suitably qualified person detailing how wastes from the site will be treated and disposed of.

For development that may create an environmental nuisance—

(6) Each submission should include a description of impact mitigation measures for how the potential impacts will be managed, minimised or mitigated.

(7) for development that may create an environmental nuisance each development submission is to describe potential emissions from the premises or activity to the surrounding environment based on the following criteria—

(a) emission characteristics or qualities;

(b) amount and rate of emissions amount;

(c) the duration and time of an emission;

(d) whether emissions will be continuous or fluctuating;

(e) the characteristics or qualities of the environment into which an emission will be made (the receiving environment);

(f) the emissions impact on the receiving environment;

(g) the views of affected persons about the emission; and

(h) the order of occupancy between the responsible person and each person affected by the proposal;

(8) for development that may generate significant levels of traffic—a report prepared by a suitably qualified person detailing—

(a) the likely traffic generation associated with the development; and,

(b) proposed measures to deal with the traffic impacts; and,

(c) the likely parking requirements of the development; and,

(d) the number of car parking spaces proposed for the *development*.

(9) for development that may result in significant environmental impact—an impact assessment and management report prepared by a suitably qualified person for development including—

(a) Aquaculture; or

(b) Extractive industry; or,

(c) General industry; or,

(d) Intensive animal husbandry; or,

(e) Low impact industry; or,

(f) Public utility; or,

(g) Rural industry; or,

(h) Service Station; or

(i) Special Industry; or

(j) Tourist accommodation; or

(k) an undefined use.

2.2 Assessment against the Natural Features and Resources Overlays

2.2.1 Mineral resources

(1) If an application for use or works located within 1km of an identified mineral resource—

(a) information identifying the nature and location of resources in the vicinity and assessment of how the proposed use and associated works may affect extraction of the resources;

(2) If an application is within or adjacent to a mining lease, mineral development licence or mining claim area—

(a) information identifying the nature and location of resources in the vicinity and assessment of how the proposed use and associated works may affect extraction of the resources;

(b) information identifying the noise and dust emissions, hours of operation, proposed haul route and proposed activities.

2.2.2 Creeks and rivers

(1) An impact assessment and management report detailing—

(a) likely impacts of the development on the integrity and function of the watercourse; and,

(b) measures available or proposed to mitigate any identified likely adverse impacts of the development on the integrity and function of the natural watercourse including the identification of distances appropriate for buffer areas; and,

(a) retention of existing on-site vegetation; and,

(2) An impact assessment and management report detailing measures taken in the design of the development to—

(a) arrange lots so that buildings and associated infrastructure are located outside areas of natural watercourses; and,

(b) arrange higher density development in clusters in areas of the site least likely to impact upon natural

watercourses and wetland areas (lot sizes may be calculated to enable an increased lot yield in return for the conservation of natural watercourses and wetland areas and buffers); and,

(c) intersect and treat runoff from developed sites; and,

(d) avoid artificial walls or rock structures along watercourses except where such materials are used for rehabilitation purposes.

2.2.3 Fred Haigh Dam Declared Catchment Area

(1) If an application is within the Fred Haigh Dam Declared Catchment Area—information sufficient to establish the likely effect on water quality including—

(a) water quality objectives for receiving waters;

(b) site-specific discharge standards;

(c) separation distances between works and uses including wastewater discharge areas on land and—

(i) catchment waters, including watercourses, lakes and springs; and

(ii) the full supply level, planned full supply level or flood margin reserve, whichever will provide the greater distance;

(d) the capacity of vegetation or other natural features to maintain water quality by filtering sediments, nutrients and other contaminants; and

(e) any changes to storm water runoff characteristics;

2.2.4 Declared groundwater areas

(1) If an application is within a declared groundwater area—

(a) information sufficient to establish the likely effect on water quality including—

(i) land uses that may have an adverse affect; and

(ii) how land conditions have been protected.

2.2.5 Biodiversity significance areas

(1) if an application is within an identified area of local, biodiversity significance—

(a) an ecological assessment prepared by a suitably qualified person which—

(i) identifies the extent of significant habitat areas;

(ii) identifies the location, alignment, width and composition of any ecological corridors;

(iii) defines the extent to which the site contributes to an ecological corridor;

(iv) identifies the connection and relationship between contiguous remnant vegetation, water and endangered ecosystems;

(v) demonstrates how the habitat areas are being retained and protected;

(vi) indicates that areas of the site identified as significant habitat or ecological corridors are not part of the proposal;

(vii) identifies the impact on the values for which the area has been assigned significance; and

(viii) highlights specific factors relevant to the remnant and the locality including—

(A) significant habitat for 'at risk' species,

(B) relative size of the ecosystem,

(C) condition, and

(D) ecosystem diversity.

2.2.6 Erosion prone areas

(1) If developing within an identified erosion prone area—

(a) a sediment and erosion control plan will be required for site works which complies with the Soil Erosion and Sediment Control - Engineering Guidelines for Queensland Construction Sites (IEAUST).

2.2.7 Natural hazard (bushfire prone area)

(1) If an application is within a moderate or high bushfire prone area—

(a) for development in a medium or high hazard area that involves the reconfiguring of a lot that results in an increase in the number of lots, or material change of use of premises—a Bushfire Management Plan prepared in accordance with Appendix 8 of State Planning Policy 1/03 Guideline, Mitigating the Adverse Impacts of Flood, Bushfire and Landslide; or

(b) a site-specific natural hazard assessment carried out in accordance with Appendix 8 of State Planning Policy 1/03 Guideline, Mitigating the Adverse Impacts of Flood, Bushfire and Landslide that concludes that the bushfire hazard is low; and

(c) a report that demonstrates the proposed development does not result in an unacceptable level of risk to people or property.

2.2.8 Landslide

(1) if an application is on a site considered to be at risk of landslide, either—

(a) sufficient information about site levels to ascertain that the subject development will not be carried out on slopes greater than 15%; or

(b) a site-specific geotechnical analysis carried out by a registered professional engineer that demonstrates that the proposed development is not subject to landslide hazard; or

(c) a report that demonstrates the proposed development does not result in an unacceptable level of risk to people or property.

2.3 Assessment against Cultural Heritage Features Overlays

(1) if an application involves assessment against the Cultural Heritage Features Overlay Code—

(a) a cultural heritage assessment report prepared by a professional cultural heritage consultant holding an authorised permit under the *Cultural Record (Landscapes Queensland and Queensland Estate) Act 1987*, or as amended or replaced by subsequent legislation; and

(b) a cultural heritage management plan approved by the Environmental Protection Agency, outlining—

(i) how the form, scale, design, finish and colour of an identified cultural heritage building (listed in Schedule 1) respects the heritage place and significant architectural features; and

(ii) how physical structures including fencing, landscaping and advertising devices do not detract from or obstruct the views of a heritage place.

2.4 Other overlay assessment

(1) if an application requiring assessment against an overlays code (other than covered elsewhere in this policy)—

(a) an assessment of how the development or effects of the development may affect the values of the relevant feature or resource; or

(b) an assessment of how the development may create or increase a risk of significant adverse effects on the natural or built environment or human health or safety; and

(c) if applicable, an assessment of measures proposed to adequately manage the potential significant adverse effects arising from the development;

2.5 Assessment involving infrastructure or operational works

2.5.1 General

(1) Division 2—Presentation of Drawings, applies to engineering plans submitted by a RPEQ for approval of

operational work and internal and external civil work with other approved developments.

(2) Engineering Drawings and Specifications, and Inspection and Testing Plans are to be submitted accompanied by the statement of compliance sheets.

(3) Engineering calculations for the design of any stormwater drainage catchments.

(4) Full scale Engineering Drawings are required for plan checking although the Engineer may approve submission of reduced scale plans for details such as road cross-sections.

2.5.2 Requirements for drawings

(1) The local government may request the following drawings—

(a) engineering and "as-constructed" plans submitted for approval for development work and internal and external civil work;

(b) Engineering drawings and specifications, and Inspection and Testing Plans;

(c) full scale Engineering Drawings—for plan checking.;

(d) reduced scale plans—for use by the local government during the construction phase provided they conform to the approved design.

2.5.3 General requirements

(1) For all development applications involving operational work—

(a) sufficient information to allow assessment of the design of the proposed development and its effects on future development in the locality, including drainage catchment area, sewerage or water reticulation area;

(b) with the submission of designs for approval—a Statement of Compliance—Design, certifying that the designs have been prepared in accordance with this policy unless specifically otherwise noted;

(c) if the proposed development would not comply with the standards in this policy—supporting evidence for the variation;

Guideline—
Failure to submit required certification may result in delays or rejection of the data provided and an information request from the local government.

(d) various works, designs, plans, drawings, calculations or other data where required—specific certification by appropriately qualified professionals;

2.5.4 If involving infrastructure works

(1) If an application involving infrastructure works, including works for reconfiguring a lot—

(a) an assessment of the capacity of existing infrastructure and the effect of the proposed use connecting to that infrastructure;

(b) an assessment of any proposed variation of the standards stated in *Planning Scheme Policy 5 Design and Construction Standards for Infrastructure Works* including—

(i) a description of the existing situation;

(ii) the reason for the variation; and

(iii) an outline of other variations that have been considered but not proposed.

(c) drainage calculations and catchment plans demonstrating that the works would not compromise the achievement of the objectives and design philosophy of QUDM;

Guideline—
The use of appropriate computer programs in the design or modelling of drainage is encouraged provided results are presented on a calculation sheet

(d) any additional calculations in support of overland flow path capacities, weir flows over kerbs, flood fill studies;

(e) where the downstream drainage system is not capable of carrying an increased discharge—an indication of what measures, including upgrading the existing downstream system, are proposed to ensure that downstream systems can adequately accommodate such increased discharge;

(f) certification from a suitably qualified consultant that the proposal would achieve the specific outcomes for stormwater drainage in the Infrastructure Works Code.

(g) *for subgrade stabilisation*—any submission for the use of alternative methods of stabilisation are to be supported by technical information from the manufacturer or a recognised geotechnical testing authority.

Division 2—Information for other approvals by local government

Guideline—
Plans of subdivision require the approval of the local government before the new lots can be registered—eg. see section 50(g) of the Land Title Act 1994. Chapter 3 Part 7 of the IPA deals with 'Plans of Subdivision'.

2.6 Request for approval of 'plan of subdivision' by the local government

The local government may request the following information—

(1) if a plan is given to the local government under the *IPA*—

(a) evidence of compliance with the conditions of the relevant development permit for reconfiguring a lot; and

(b) evidence of payment of the relevant fee; and

(c) evidence of any contributions[2] required to be paid; and

(d) evidence of payment of a maintenance bond not less than 5% of the *total installed cost* of the infrastructure works.

Guideline—
Contact the Council to ascertain the current fees for endorsing a plan of subdivision prior to lodging plan of subdivision for endorsement.

Guideline about the approval of the plan of subdivision—

The IPA (section 3.7.2) requires the local government to approve the plan of subdivision if—

- *conditions for the development permit for the reconfiguring have been complied with;*
- *conditions for the development permit for the operational works have been complied with;*
- *there are no outstanding rates, charges, or expenses over the land; and,*
- *the plan is prepared in accordance with the development permit.*

Alternatively, security may be given to ensure compliance with the above.

[2] eg. contributions for water or sewerage headworks, parks, roadworks, car parking

The IPA requires the local government to approve the plan of subdivision within 20 business days after the applicant after the applicant complies with the above.

The IPA requires the plan of subdivision to be lodged for registration with the registering authority within 6 months after the local government's approval. The applicant is responsible for such lodgement.

2.7 Security for incomplete works

(1) For a request to secure incomplete infrastructure works under the IPA—

Guideline—: Council may, at its discretion, secure compliance with the conditions of a development permit, including any uncompleted works.

(a) fully priced schedule of outstanding works; and

(b) confirmation of the total cost of the development works, where a maintenance bond is required; and

(c) summary sheet; and

(d) certification from the Consulting Engineer that the information is correct and that the outstanding works are scheduled for completion within the period nominated in any bonding approval conditions.

2.7.1 Requests for accepting works as "on maintenance"

Statement of compliance and 'as constructed' information

(1) For a request to accept work as "on maintenance"—

(a) Statement of compliance and 'as constructed' information;

(b) 'As Constructed Drawings and Documentation' should be submitted prior to or at the 'on maintenance' inspection.

Guideline about 'on maintenance' inspections—

Though Council will carry out 'on maintenance' inspections prior to receipt of 'as constructed' information 'on maintenance' will not be granted until the drawings are submitted and approved.

(2) The *'as constructed'* information submitted is to be accompanied by the 'Statement of Compliance – Construction' duly signed by the *RPEQ* responsible for the Site Services.

Guideline—
The Council strongly recommends that as constructed information be collected and checked as the works progress. This will identify construction errors as early as possible so that rectification or request for Council's approval for the change does not delay accepting the works 'On Maintenance'.

Guideline—
Council's requirements should be satisfied prior to requesting an 'On Maintenance' site inspection. Failure to do so may result in the charging of a reinspection fee.

(3) *'As constructed'* information includes the following—

(a) *'as constructed'* drawings;

(b) Test Results;

(c) Asset Management Details;

(d) Statement of Compliance; and,

(e) Non compliance Report.

On-maintenance

(4) *For a request for the local government to accept the infrastructure works as being 'on maintenance'*—evidence from the Consultant Engineer that the local government's requirements for 'on maintenance' inspections have been satisfied.

Guideline about having works accepted 'on maintenance'—

Following a satisfactory 'On Maintenance' inspection and the Engineer's acceptance of the 'as constructed' drawings and documentation, the consultant is to submit a written request to the local government for acceptance of the works 'On Maintenance' and, if applicable, the release or reduction of any uncompleted works bond held.

Guideline about the approval of the security bond amount—

The Engineer will, upon confirming that the maintenance security bond amount has been approved and received, and all other relevant fees paid, confirm acceptance of the works 'On Maintenance' and arrange for release or reduction of any uncompleted works bond held.

(5) Unless noted otherwise on the development approval, the 'On Maintenance' period will be for a period of 12 months for all of the constructed infrastructure works.

Guideline—
Council's requirements (see guidelines in Part 4—Post Construction Phase) should be satisfied prior to requesting an 'Off Maintenance' site inspection. Failure to do so may result in the charging of a reinspection fee.

2.7.2 Requests for accepting works as "off maintenance"

(1) For a request for the local government to accept the infrastructure works as being 'off maintenance' evidence from the consulting Engineer that the local government's requirements for 'Off Maintenance' Inspections have been satisfied.

2.7.3 Requests for the release of maintenance security

Guideline—
The Council's Engineer will, upon confirmation that no outstanding accounts arising from the development are due to Council, confirm acceptance of the works 'Off Maintenance', and arrange for the release of the maintenance security bond.

(1) Following a satisfactory 'Off Maintenance' inspection, the Consultant is to submit a written request to the local government for acceptance of the works 'Off Maintenance' and include the details of any maintenance security that the consultant requests be released.

Division 3—Submitting an application

2.8 Requirements for plans, reports or studies

(1) If submitted in connection with a development application, where relevant—

(a) A planning report detailing compliance of the proposal with the planning scheme—

(b) Where a departure from the planning scheme is proposed a justification for this departure must be made. A departure from the requirements of the scheme will only be considered where there is overwhelming evidence that the development will not compromise the intended outcome for the zone or use.

(c) A minimum of 5 sets of supporting information is to be submitted for code assessable applications and a minimum of 6 sets of supporting information is to be submitted for impact assessable applications.

(d) Plans submitted to Council are to—

(i) be numbered, dated and contain a north point and any revisions to the original plan be identified in a legend;

(ii) be drawn to a metric scale of 1:10, 1:50, 1:100, 1:200, or 1:500;

(iii) be produced on a standard A0, A1, A2, A3 or A4 sheet of paper. At least one set of drawings are to be of A3 in size and to the correct scale.

(iv) show the boundaries of the site to which the application relates (metes and bounds may be required for some applications);

(v) show the name of the roads to which the site has frontage;

(vi) show the size, location of all buildings and other structures both existing and proposed to be erected on site and the distance in metres of the outermost projection of such building or structure to the boundary of the site;

(vii) show the details of the internal layout of all buildings and structures both existing and proposed to which the application relates and elevations of any new buildings or structures, indicating the position of all windows, doors, roofline and wall projections, balconies, verandahs, stairwells and outbuildings;

(viii) show the position and layout of all existing and proposed vehicular accessways, driveways and parking areas and pedestrian or cyclist paths;

(ix) show the services and other features such as street trees and the position of poles along the immediate frontage of the land;

(x) show the indicative location of all proposed landscaping and recreation areas;

(xi) show the location of on site utility services such as areas for the provision of refuse disposal or clothes drying areas, etc;

(xii) show contour information and spot levels;

(xiii) show the location of existing services within or adjacent to the site;

(xiv) show the location of all buildings on adjoining allotments;

(xv) show the landscaping in accordance with the requirements identified in the Landscaping and Landscape Plans Planning Scheme Policy.

POLICY 3: LANDSCAPING AND LANDSCAPE PLANS

PLANNING SCHEME POLICY

Division 1—General

(1) This planning scheme policy identifies the local government's requirements regarding—

(a) the circumstances in which information about landscaping may be required;

(b) the standards applying to landscape plans; and,

(c) acceptable and unacceptable species of plants for inclusion in landscaping.

Division 2—Information requirements for plans

3.1.1 Plan are required in certain circumstances

(1) Circumstances in which plans may be required—

(a) if the application involves reconfiguring a lot resulting in additional lots; or

(b) if the applicable code identifies that landscaping, buffering or screening is required in a *specific outcome* or a *probable solution*; or

(c) if the application proposes any of the following uses—

(i) "Aquaculture";

(ii) "Cattery or kennel";

(iii) "Commercial premises";

(iv) "Community services";

(v) "Community space";

(vi) "Display yard";

(vii) "Dwelling house";

(viii) "Education or health premises";

(ix) "Extractive industry";

(x) "Farm";

(xi) "Food or entertainment venue",

(xii) "General industry";

(xiii) "Home business"

(xiv) "Intensive animal husbandry";

(xv) "Low-impact industry",

(xvi) "Multi-residential";

(xvii) "Public utility";

(xviii) "Rural industry";

(xix) "Service station";

(xx) "Shop";

(xxi) "Special industry";

(xxii) "Temporary Residential";

(xxiii) "Tourist accommodation";

(xxiv) "Other".

3.2 Standards of landscape plans and specific information required

(1) The local government's standards are—

(a) for applications seeking a preliminary approval for a material change of use or reconfiguring a lot—a *Landscape Concept Plan* is to be submitted;

(b) applications seeking a development permit for reconfiguring a lot resulting in an increase in the number of lots—a *Limited Landscape Plan* is to be submitted;

Guideline—
a full landscape plan may be a condition of the development permit

(c) applications for development permit for material change of use—a *Full Landscape Plan* is to be submitted.

(2) The local government may require the information to assess the application or in approving the application, subject to the approval to a condition requiring that landscaping be carried out in accordance with satisfactory landscaping plans.

Table 1: Landscape plans—standards

Specific information required	Type of landscape plan		
	Concept	Limited	Full
Landscape areas defined	☑	☑	☑
Existing vegetation identified		☑	☑
Growth form and purpose of vegetation identified	☑	☑	☑
Surface treatments, fencing and other hardscape elements identified		☑	☑
Locations and species to be planted — plotted to scale		☑	☑
Additional details shown in section 3.3 Additional information for Full Landscape Plans			☑

3.3 Additional information for Full Landscape Plans

(1) General information—

(a) date;

(b) scale (1:100 is preferred);

(c) north point;

(d) project description and location;

(e) client's name, address and contact number;

(f) designer's name, address and contact number; and

(g) at least one set of the plans submitted should be of A3 size.

(2) General site and design information—

(a) extent of landscape areas;

(b) existing and proposed building and landscaped areas (where applicable);

(c) property boundaries, adjacent allotments, roads and street names;

(d) location of drainage, sewerage and other underground services and overhead power lines;

(e) location and name of all existing trees, clearly nominating those trees which are to be removed;

(f) soil type (e.g. sand, clay, loam) and condition (e.g. well drained, low lying);

(g) Locality Plan, showing site boundaries in relation to adjacent properties and streets;

(h) Vehicle movement areas, bin storage areas, vehicle and bin washdown areas, and service and utility areas.

(3) Landscape area calculation—

(a) the area of landscaping (measured in square metres) proposed as a means of complying with any applicable code;

(b) the area of landscaping (measured in square metres) disaggregated into component parts, including—

(i) garden beds;

(ii) turfed or grassed areas;

(iii) paved pedestrian areas;

(iv) nature conservation areas;

(v) effluent disposal areas; and,

(vi) water areas.

(c) the square metre area of landscaping actually provided broken down into turfed and planted areas.

(4) Detail design information—

(d) surface treatment e.g. paving, mulch, turf, roadway;

(e) edge treatments, particularly garden edges;

(f) plant schedule including botanical name, quantity and staking;

(g) location and species of proposed plants;

(h) planting bed preparation;

(i) subgrade treatment of planting beds in areas of compaction, particularly involving vehicle parking areas;

(j) details and soil depths of planter boxes and podiums;

(k) mounding, contouring, leveling or shaping of the surface levels, particularly around areas of changes of levels;

(l) surface and subsurface drainage and collection points;

(m) method of erosion control on slopes steeper than 1:4;

(n) position of external elements, e.g. seats, bollards, bins, lights, walls and fences;

(o) fence height, material and finish;

(p) irrigation systems;

(q) paving type if area includes public footpaths;

(r) the arrangements proposed to be made for the future maintenance of the landscaping.

Division 3—Acceptable and unacceptable plant species for landscaping

3.4 Acceptable plant species

3.4.1 Street trees[3]

(1) The following species are acceptable for street tree planting in the local government area—

Species	Common name	Notes
Barklya syringifolia	Barklya	Slow growing, very showy, evergreen small tree with heart-shaped leaves. Bears masses of brilliant, yellow flowers in early summer.
Brachychiton populneus	Kurrajong	Fast growing, dense crowned evergreen tree to about 20m in height. Provides good shade and shelter.
Brachychiton rupestris	Queensland bottle tree	Bottle-shaped trunk, drought hardy. Requires protection from frost when young.
Callistemon viminalis	Weeping bottlebrush	A large shrub or small tree 3-8m high with a graceful, weeping appearance that produces brilliant red flowers in spring and early summer.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Flindersia australis	Crows ash	Large shade tree reaching to about 18m in open plantings. Foliage is dark green in a dense rounded crown. An excellent shade and avenue tree native to Queensland.
Flindersia collina	Leopard ash	Queensland native tree with slender trunk and glossy green crown and white flowers. Trunk has leopard-like blotches. Ideal as a medium sized shade tree.

- [3] All these species would grow successfully in Kolan Shire and would be suitable as street trees. However, plant species for street tree plantings must be chosen very carefully and be site specific. Issues to be considered before any street tree planting occurs include soil type, proximity to curbing, channelling and powerlines and wind if applicable.

Species	Common name	Notes
Harpullia pendula	Tulipwood	Shade tree with large, glossy leaves and clusters of yellow flowers followed by red or yellow seed cases containing two shiny black seeds. Widely used as a street tree on a variety of soils where it rarely exceeds 10m.
Leptospermum petersonii	Lemon-scented tea-tree	Bushy shrub to 5m bearing masses of white flowers. Excellent for hedges and screens. Grows on most soil types.
Pittosporum rhombifolium	White pittosporum	Usually grows to about 6m in cultivation. Has a dense crown of glossy, dark green, toothed leaves and small white flowers which produces clusters of orange berries in winter.
Xanthostemon chrysanthus	Golden penda	Small tree that occurs in coastal north Qld. Flowers are bright yellow, very prominent and bird attracting. Excellent specimen tree where ample moisture is available.

3.4.2 Coastal trees (suitable for Kolan Shire)

(1) The following species are coastal trees which are also suitable for planting in the local government area—

Species	Common name	Notes
Araucaria cunninghamii	Hoop pine	Very tall and erect pine-shaped tree with symmetrical branches. Frost tender.
Banksia integrifolia	Coast banksia	Shapely tree with large dull green leaves with white underneath. Strongly scented yellow flowers in thick dense spikes.
Banksia serrata	Red honeysuckle	Small tree with hard, toothed leaves. Widely cultivated as a coastal ornamental. Bird attractant.
Callistemon viminalis	Weeping bottlebrush	A large shrub or small tree 3-8m high with a graceful, weeping appearance that produces brilliant red flowers in spring and early summer.
Callitris columellaris	Coast cypress pine	A tall dense, evergreen pine that can be cut back to form a dense hedge. Prefers deep sandy loams.
Casuarina equisetifolia	Coast she-oak	Small she-oak with sparse drooping needle-like foliage. Highly resistant to wind and salt

Species	Common name	Notes
		spray and grows on raw sand.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Eucalyptus ptychocarpa	Swamp bloodwood	A small spreading ornamental tree bearing masses of spectacular crimson, pink or white flowers. Has large leathery leaves.
Eucalyptus tessellaris	Moreton Bay Ash	A tall, slender, attractive eucalypt with smooth, white bark on the upper trunk and hard, chunky, tessellated bark around the base. White flowers attract parrots.
Eucalyptus tereticornis	Blue gum	Eucalypt with smooth bluey-grey trunk with irregular blotches. An important hollow-producing tree. Flowers used by native birds and bats and leaves used by koalas.
Eugenia reinwardtiana	Beach cherry	Shrub to 3m producing edible red fruits about 2cm in diameter.
Harpullia pendula	Tulipwood	Shade tree with large, glossy leaves and clusters of yellow flowers followed by red or yellow seed cases containing two shiny black seeds. Widely used as a street tree on a variety of soils where it rarely exceeds 10m.
Leptospermum petersonii	Lemon-scented tea-tree	Bushy shrub to 5m bearing masses of white flowers. Excellent for hedges and screens. Grows on most soil types.
Livistona decipiens	Weeping cabbage palm	Tall native palm with a dense head of fan-shaped leaves and slender trunk. Requires warm conditions for best growth and moist, shady conditions when young.
Melaleuca dealbata	Silver-leafed paperbark	Common tree on coastal creeks north of Maryborough. Greyish green leaves that fade to red with age. Bears white flowers attractive to birds and bees.
Melaleuca leucadendra	Broad-leaved tea-tree	Weeping tree with a fairly straight trunk covered with layers of papery white bark. Bird attracting when in flower.

3.4.3 Open forests and woodlands

(1) The following species are acceptable for open forests and woodlands in the local government area—

Species	Common Name	Features
Acacia disparrima (syn aulacocarpa)	Hickory wattle	Small fast growing tree with a height range of 6-20m. Produces sweetly scented yellow flowers in autumn. Good pioneer species widely used by native wildlife.
Acacia maidenii	Maiden's wattle	Small, compact, fast growing wattle bearing yellow flowers.
Alphitonia excelsa	Soap tree or red ash	Tree with a layered, spreading canopy and leaves distinctly white on the underside. Fast growing and widely used by native fauna.
Casuarina littoralis	Forest oak	Small tree usually with a conical shape and branches characteristically curving upwards. Usually found on stony or sandy soils.
Corymbia citriodora	Lemon-scented gum	A clean, straight tree of graceful appearance with smooth pinkish grey trunk. Leaves have a strong lemon-scented smell when crushed. Food tree for greater gliders.
Corymbia intermedia	Pink bloodwood	A medium to tall tree covered with brownish-chunky bark. Flowers used by fruitbats and lorikeets.
Eucalyptus tereticornis	Blue gum	Eucalypt with smooth bluey-grey trunk with irregular blotches. An important hollow-producing tree. Flowers used by native birds and bats and leaves used by koalas.
Eucalyptus tessellaris	Moreton Bay Ash	A tall, slender, attractive eucalypt with smooth, white bark on the upper trunk and hard, chunky, tessellated bark around the base. White flowers attract parrots.
Grevillea banksii	Red flowered silky oak	An attractive small shrub with heads of red or white blooms and fern-like foliage.
Lophostemon confertus	Brush box	Large tree with a dense crown making it suitable for park and shade tree plantings. As a street tree, it often forms a shorter tree with an umbrella-like crown.
Lophostemon suaveolens	Swamp mahogany	Medium sized tree with rough flaky bark. A fast grower suitable for wet soils.

Species	Common Name	Features
Melia azedarach	White cedar	A deciduous tree with attractive compound leaves and blue flowers, and clusters of yellow berries. Berries are poisonous to some domestic animals but eaten by possums and native birds.

3.4.4 Shrubs and vine forests

(1) The following species are acceptable for shrubs and vine forests within the local government area—

Species	Common Name	Features
Alchornea ilicifolia	Holly bush	Shrub or small tree with sharply toothed, stiff leathery leaves.
Alectryon connatus	Bird's eye alectryon	Small tree with young parts and flowers densely hairy. Pale blue-green colour under the leaves.
Aphananthe philippinensis	Rough-leaved elm	Small to medium-sized tree with rough-surfaced leaves and branchlets, and prickly-toothed leaves.
Araucaria cunninghamii	Hoop pine	Very tall and erect pine-shaped tree with symmetrical branches. Frost tender.
Bridelia leichhardtii	Small-leaved brush ironbark	Shrub or small tree with small leaves and red fruit 4-5mm across.
Canthium coprosmoides	Coast canthium	Tall shrub or small tree with orange-red 2-lobed fruit 8mm across.
Cassine melanocarpa	Black olive plum	Small tree with thick and leathery leaves with shiny black fruit 1 ½ -2 ½ cm across.
Cleistanthus cunninghamii	Cleistanthus	Small tree with branchlets having raised protuberances. Fruit a 3-lobed capsule.
Clerodendrum floribundum	Lolly bush	Small tree or shrub with branchlets often purplish. Attractive black fruit are seated in a bright red petal-like calyx.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Drypetes deplanchei	Yellow tulip	Medium sized tree with young leaves sharply toothed. Fruit a red/orange coloured drupe.

Species	Common Name	Features
Ficus obliqua	Small-leaved Moreton Bay fig	Tall tree growing to 40m. Fruit a yellow to orange coloured fig. Fruit eaten by birds.
Flindersia australis	Crows ash	Large shade tree reaching to about 18m in open plantings. Foliage is dark green in a dense rounded crown. An excellent shade and avenue tree native to Queensland.
Flindersia collina	Leopard ash	Queensland native tree with slender trunk and glossy green crown and white flowers. Trunk has leopard-like blotches. Ideal as a medium sized shade tree.
Harpullia pendula	Tulipwood	Shade tree with large, glossy leaves and clusters of yellow flowers followed by red or yellow seed cases containing two shiny black seeds. Widely used as a street tree on a variety of soils where it rarely exceeds 10m.
Jagera pseudorhus	Foambark	Small tree with capsules covered with rusty brown irritating hairs, splitting into 3 segments. Seeds eaten by ground-dwelling native fauna.
Melia azedarach	White cedar	A deciduous tree with attractive compound leaves and blue flowers, and clusters of yellow berries. Berries are poisonous to some domestic animals but eaten by possums and native birds.
Mischocarpus pyriformis	Yellow pear-fruit	Medium tree with yellow/orange, pear-shaped capsules. Slow growing.
Pleiogynium timorense	Burdekin plum	Medium to large tree with a large, spreading crown that produces an edible reddish-purple plum.
Rapanea variabilis	Muttonwood	Small tree to about 5m. Produces mauve to blue small drupes about 5mm in diameter. Has attractive foliage and decorative fruit.

3.4.5 Banks of watercourses - saltwater

(1) The following species are acceptable for banks and watercourses in saltwater locations within the local government area—

Species	Common Name	Features
Acacia disparrima (syn aulacocarpa)	Hickory wattle	Small fast growing tree with a height range of 6-20m. Produces sweetly scented yellow flowers in autumn. Good pioneer species widely used by native wildlife.
Alphitonia excelsa	Soap tree or red ash	Tree with a layered, spreading canopy and leaves distinctly white on the underside. Fast growing and widely used by native fauna.
*Callitris columellaris**	Coast cypress pine	A tall dense, evergreen pine that can be cut back to form a dense hedge. Prefers deep sandy loams.
*Casuarina equisetifolia**	Coast she-oak	Small she-oak with sparse drooping needle-like foliage. Highly resistant to wind and salt spray and grows on raw sand.
Casuarina glauca	Swamp oak	Fast growing she-oak native of saline and wet sites but used for windbreaks and shelter belts in heavy soils. Seeds eaten by pigeons.
Clerodendrum floribundum	Lolly bush	Small tree or shrub with branchlets often purplish. Attractive black fruit are seated in a bright red petal-like calyx.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Eucalyptus tereticornis	Blue gum	Eucalypt with smooth bluey-grey trunk with irregular blotches. An important hollow-producing tree. Flowers used by native birds and bats and leaves used by koalas.
Eucalyptus tessellaris	Moreton Bay Ash	A tall, slender, attractive eucalypt with smooth, white bark on the upper trunk and hard, chunky, tessellated bark around the base. White

Species	Common Name	Features
		flowers attract parrots.
Ficus opposita	Sandpaper fig	Small tree with sandpapery rough leaves. Figs eaten by native birds.
Glochidion ferdinandi	Coast glochidion	Small densely growing tree to 10m. Green to red roundish, ribbed capsule.
Jagera pseudorhus	Foambark	Small tree with capsules covered with rusty brown irritating hairs, splitting into 3 segments. Seeds eaten by ground-dwelling native fauna.
Leptospermum petersonii	Lemon-scented tea-tree	Bushy shrub to 5m bearing masses of white flowers. Excellent for hedges and screens. Grows on most soil types.
Livistona decipiens	Weeping cabbage palm	Tall native palm with a dense head of fan-shaped leaves and slender trunk. Requires warm conditions for best growth and moist, shady conditions when young.
Melia azedarach	White cedar	A deciduous tree with attractive compound leaves and blue flowers, and clusters of yellow berries. Berries are poisonous to some domestic animals but eaten by possums and native birds.
Pleiogynium timorense	Burdekin plum	Medium to large tree with a large, spreading crown that produces an edible reddish-purple plum.

*Found mainly in coastal river areas rather than saltwater river areas.

3.4.6 Banks of watercourses - freshwater

(1) The following species are acceptable for banks and watercourses in freshwater locations within the local government area—

Species	Common Name	Features
Acacia disparrima (syn aulacocarpa)	Hickory wattle	Small fast growing tree with a height range of 6-20m. Produces sweetly scented yellow flowers in autumn. Good pioneer species widely used by native wildlife.

Species	Common Name	Features
Alphitonia excelsa	Soap tree or red ash	Tree with a layered, spreading canopy and leaves distinctly white on the underside. Fast growing and widely used by native fauna.
Clerodendrum floribundum	Lolly bush	Small tree or shrub with branchlets often purplish. Attractive black fruit are seated in a bright red petal-like calyx.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Eucalyptus tereticornis	Blue gum	Eucalypt with smooth bluey-grey trunk with irregular blotches. An important hollow-producing tree. Flowers used by native birds and bats and leaves used by koalas.
Ficus coronata	Creek sandpaper fig	Small fig growing along creek banks. Fruit edible, purplish and hairy.
Glochidion sumatranum	Cheese tree	Small to medium fast growing tree. Fruits are flattened and fluted similar to round cheese.
Jagera pseudorhus	Foambark	Small tree with capsules covered with rusty brown irritating hairs, splitting into 3 segments. Seeds eaten by ground-dwelling native fauna.
Leptospermum polygalifolium	Wild may	Slender, twiggy shrub with small, narrow scented leaves and white flowers.
Melaleuca quinquenervia	Paper bark	Medium sized-tree that likes wet and wallum-like areas. Birds, bats and ants feed on the nectar.
Melia azedarach	White cedar	A deciduous tree with attractive compound leaves and blue flowers, and clusters of yellow berries. Berries are poisonous to some domestic animals but eaten by possums and native birds.
Pleiogynium timorense	Burdekin plum	Medium to large tree with a large, spreading crown that produces an edible reddish-purple plum.

Species	Common Name	Features
Waterhousea floribunda	Weeping cherry	Excellent spreading tree with decorative yellow flowers and dense green foliage. Suited to moist soils. Fruit attractive to birds and bats.

3.4.7 Small trees and tall shrubs

(1) The following species are acceptable small trees and tall shrubs within the local government area—

Species	Common Name	Features
Barklya syringifolia	Barklya	Slow growing, very showy, evergreen small tree with heart-shaped leaves. Bears masses of brilliant, yellow flowers in early summer.
Buckinghamia celsissima	Ivory curl	Showy small tree bearing masses of grevillea-like white flowers. Excellent tree for avenue planting. Rarely exceeds 6m in amenity plantings.
Callistemon polandii	Red bottlebrush	A bushy small tree growing to 5m that is noted for its long lasting 9cm long, bright red, gold-tipped flowers.
Callistemon viminalis	Weeping bottlebrush	A large shrub or small tree 3-8m high with a graceful, weeping appearance that produces brilliant red flowers in spring and early summer.
Cupaniopsis anacardioides	Tuckeroo	Excellent shade tree with dark green foliage. Will stand planting in exposed situations on poor soils along the coastal strip.
Eucalyptus ptychocarpa	Swamp bloodwood	A small spreading ornamental tree bearing masses of spectacular crimson, pink or white flowers. Has large leathery leaves.
Euodia muelleri	Little euodia	Small tree to about 5m. Colourful reddish-pink flowers grow from trunk.
Harpullia pendula	Tulipwood	Shade tree with large, glossy leaves and clusters of yellow flowers followed by red or yellow seed cases containing two shiny black seeds. Widely used as a street tree on a variety of soils where it rarely exceeds 10m.

Species	Common Name	Features
Leptospermum petersonii	Lemon-scented tea-tree	Bushy shrub to 5m bearing masses of white flowers. Excellent for hedges and screens. Grows on most soil types.
Melaleuca leucadendra	Broad-leaved tea-tree	Weeping tree with a fairly straight trunk covered with layers of papery white bark. Bird attracting when in flower.
Melaleuca viridiflora	Red-flowering tea-tree	Medium sized paperbark that has pale lemon to pink and occasionally red flowers.
Pittosporum rhombifolium	White pittosporum	Usually grows to about 6m in cultivation. Has a dense crown of glossy, dark green, toothed leaves and small white flowers which produces clusters of orange berries in winter.
Xanthostemon chrysanthus	Golden penda	Small tree that occurs in coastal north Qld. Flowers are bright yellow, very prominent and bird attracting. Excellent specimen tree where ample moisture is available.

3.5 Unacceptable plant species

(1) The following plant species are unacceptable for landscaping within the local government area—

Species	Common Name
Acacia farnesiana	Mimosa Bush
Acalypha sinensis	Chinese Acalypha
Acetosa sagittata	Rambling Dock
Agave americana	Century Plant
Agave sisalana	Sisal
Agave vivipara var. vivipara	Sisal
Ageratina adenophora	Crofton Weed
Ageratina riparia	Mistflower
Ageratum houstonianum	Blue Billygoat Weed
Alternanthera philoxeroides	Aligator Weed
Anredera cordifolia	Madeira Vine, Lamb's Tail, Potato Vine
Araujia horotum	White Moth Vine
Ardisia crispa/crenata	Coral Berry, Ardisia
Ardisia humilis	Spice Berry

Species	Common Name
Arecastrum (syn. Syagrus) romanzoffianum	Cocos Palm
Aristolochia elegans	Dutchman's Pipe or Calico Flower
Arunda donax	Giant Reed
Asclepias curassavica	Red Cotton Bush
Asparagus africans	Asparagus fern
Asparagus (Myrsiphullum) asparagoides	Bridal Creeper
Asparagus densiflora	Asparagus fern
Asparagus plumosus	Ferny Asparagus
Baccharis halimifolia	Groundsel Bush
Bidens pilosa	Cobbler's Pegs
Brachiaria decumbens	Signal Grass
Brachiaria multica	Para Grass
Bryophyllum delagoense (Syn. B.diagremontianum x tubiflorum)	Mother-of-Millions Hybrid
Bryophyllum pinnatum	Live Plant
Bryophyllum tubiflorum	Mother-of-Millions
Caesilpinia decapetala	Thorny Poinciana
Callisia fragrans	Purple Succulent
Canna species (indica and generalis)	Canna Lilly
Cardiospermum grandiflorum	Balloon Vine
Cascabela thevitia syn. Thevitia peruviana)	Yellow Oleander
Cassia coluteoides	Easter Cassia
Catharanthus roseus	Pink Periwinkle
Celtis sinensis	Chinese Elm, Chinese Celtis
Cenchrus caliculatis	
Cenchrus echinatus	Mossman River Grass
Cestrum parqui	Cestrum
Chloris gayana	Rhodes Grass
Chrysanthemoides monilifera subsp. rotunda	Bitou Bush
Cinnamomum camphora	Camphor Laurel
Commelina benghalensis	Hairy Wandering Jew
Conyza bonariensis	Flax-leaf Fleabane
Conyza canadensis	Canadian Fleabane
Conyza sumantrensis	Tall Fleabane
Corymbia torelliana	Cadaga or Cadaghi
Cynodon dactylon	Bahama Grass / Green Couch

Species	Common Name
Cyperus brevifolius	Mullumbimy Couch
Cyperus involucratus	African Sedge
Cyperus rotundus	Nut Grass
Desmodium intortum	Green-leaved Desmodium
Desmodium uncinatum	Silver-leaved Desmodium
Digitaria eriantha	Pangola Grass
Duranta erecta	Duranta, Blue Sky Flower
Eichornia crassipes	Water Hyacinth
Eleusine indica	Crowsfoot Grass
Eragrostis curvula	African Lovegrass
Erythrina crista-galli	Cockspur Coral Tree
Eugenia uniflora	Brazillian Cherry
Euphorbia cyathophora	Painted Spurge
Euphorbia heterophylla	Milk Weed
Furcrea foetida	Cuban Hemp
Furcrea selloa	Hemp
Gleditisia triacanthos (+ all ornamental varieties)	Honey Locust Tree
Gloriosa superba	Glory Lilly
Gomphocarpus physocarpus	Balloon Cotton Bush
Gymnocoronis spilanthoides	Senegal Tea
Hymenachne amplexicaulis	
Hypoestes phyllostachya	Polka-dot Plant
Impatiens walleriana	Balsam
Ipomoea cairica	Mile a Minute
Ipomoea indica	Morning Glory
Juncus articulatus	Jointed Rush
Koelreuteria elegans	Golden Rain Tree
Lantana camara var. camara	Lantana
Lantana montevidensis	Creeping Lantana
Leucaena leucocephala	Leucaena
Ligustrum lucidum	Privet Broad Leaf
Ligustrum sinense	Privet Small Leaf, Chinese Privet
Lilium formosanum	Taiwam Lily
Lonicera japonica	Japanese Honeysuckle
Ludwigia ochoualis	
Lycium ferocissimum	African Boxthorn
Macfadyena unuis-cati	Cats Claw Creeper
Macroptilium atropurpureum	Siratro
Macrotyloma axillare	Perrenia Horse Gram
Melinis minutiflora	Molasses Grass

Species	Common Name
Melinis repens	Red Natal Grass
Mimosa pudica	Common Sensitive Plant
Murraya paniculata cv. Exotica	Murraya, mock orange
Myriophyllum aqauticum	Parrot's Feather
Nasella neessiana	Chilean Needle Grass
Neonotonia wightii	Glycine
Nephrolepsis cordifolia	Fish bone fern
Nymphaea caerulea subsp. zanzibarensis	Blue Lotus
Ochna serrulata	Ochna, Mickey Mouse Bush
Oenthera drummondii subsp. drummondii	Beach evening Primrose
Olea africana	African Olive
Olea europea	Olive
Optuntia spp.	Drooping Pear Tree, prickly pears
Oxalis corniculata	Creeping Oxalis, Yellow Wood Sorrell
Panicum maxiumum	Green Panic / Guinea Grass
Parkinsonia aculeata	Jeruselum Thorn
Paspalum conjugatum	Paspalum
Paspalum dilatatum	Paspalum
Paspalum mandiocanum	
Paspalum notatum	Bahia Grass
Passiflora edulis	Passion Fruit
Passiflora foetida	Stinking Passion Vine
Passiflora suberosa	Corky Passion Vine
Passiflora subpeltata	White Passion Fruit
Parthenium hysterophorus	Parthenium Weed
Paulownia spp	Paulownia
Pennisetum alopecuroies	Swamp Foxtail
Pennisetum clandestinum	Kikuyu Grass
Pennisetum purpureum	Elephant Grass
Pennisetum setaceum	African Fountain Grass
Phyla canescens	Condamine Couch / Lippia
Phyllostachys aurea	Fishpole Bamboo
Phytolacca octandra	Inkweed
Pinus caribaea	Caribbean Slash Pine
Pinus elliottii	Slash Pine
Pistia stratiotes	Water Lettuce
Prosopis pallida	Algaroba
Prunus munsoniana	Wild Goose Plum

Species	Common Name
Psidium guajava	Guajava, Guava
Pueraria lobata	Kudzu
Pyrostegia venusta	Flame Vine
Rhaphiolepis indica	Indian Hawthorn
Ricinus communis	Castor Oil Plant
Rivina humilis	Spice Berry
Rorippa nasturtium-aquaticum (syn. Nasturtium officinale)	Watercress
Rubus bellobatus	Kittatinny Blackberry
Rubus discolor (R.fruticosa complex)	a Blackberry
Rubus ellipticus	Yellow Berry
Rubus fruticosus	Blackberry
Ruellia malacosperma	Ruellia
Ruppia maratima	Sea Tassel
Salvia coccinea	Red Salvia
Salvinia molesta	Salvinia
Sansevieria trifasciata	Mother in Laws Tongue
Scheffera actinophylla	Umbrella Tree
Schinus molle	Pepper Tree
Schinus terebinthifolia	Broad Leafed Pepperina Tree, Pepper Tree
Senecio madagascariensis	Fire Weed
Senecio tamoides	Canary Creeper
Senna pendulina	Easter cassia, Winter senna
Senna septentrionalis (syn. floribunda)	Arsenic Bush
Setaria sphacelata	South African Pigeon Grass
Sida rhombifolia	Paddy's Lucerna
Solanum erianthum	Tobacco Bush
Solanum hispidum	Giant Devil's Fig
Solanum mauritianum	Wild tobacco tree
Solanum seaforthianum	Brazilian nightshade
Solanum torvum	Devil's Fig
Solidago canadensis var. scabra	Canadian Goldenrod
Spathodea campanulata	African Tulip Tree
Sphagneticola (syn. Wedelia) trilobata	Singapore Daisy
Sporobolus africanus	Paramatta Grass
Sporobolus fertilis	Giant Paramatta Grass
Sporobolus jacquemontii	American rat's tail Grass

Species	Common Name
Sporobolus pyramidalis and S. natalensis	Giant Rat's Tail Grass
Stylosanthes scabra	Shrubby Stylo
Tagetes minuta	Stinking Roger
Stenolobium stans	Yellow Bells, Yellow Bell Flower
Themada quadrivalvis	Grader Grass, Thatch Grass
Thunbergia alata	Black-eyed Susan
Thunbergia grandiflora	Blue Thunbergia
Tithonia diversifolia	Mexican Sunflower
Tradescantia albiflora	Wandering jew
Tradescantia zebrina	Zebrina
Triumfetta rhomboidea	Chinese Burr
Verbesina enceloides	Crownbeard
Xanthium spinosum	Bathurst Burr

POLICY 4: RECONFIGURING A LOT INVOLVING GOOD QUALITY AGRICULTURAL LAND

PLANNING SCHEME POLICY

4.1 Preliminary

(1) This policy applies to all development applications involving reconfiguring a lot containing Good Quality Agricultural Land (GQAL)—referred to in this policy as '**reconfiguring applications**'.

(2) The purpose of this policy is to—

(a) to identify the matters that the local government is to consider in assessing whether or not reconfiguring applications comply with the Reconfiguring a Lot Code; and

(b) identify the information to be provided as part of a reconfiguring application or which may be required by the local government in an information request.

(3) For the purpose of the policy, the following terms are defined as—

(c) **primary production** includes agriculture, horticulture, animal husbandry (whether or not intensive), flowers, ornamental plants or succulents grown on a commercial basis (but not including a wholesale or retail nursery).

(d) **sustaining** or **sustainable** means the primary production, including ancillary rural activities, are capable of financially supporting a family unit whereby income is derived from on-farm primary production activities (to be established by a Business Plan) and capable of long-term production with no net loss of environmental values (to be established by a Land Capability and Environmental Assessment Report).

4.2 Considerations for determining reconfiguring applications

(1) In deciding a development application involving reconfiguring of a lot in the Rural Zone, the local government is required to consider whether or not the proposal would compromise the capability of the land to be used sustainably for crop or animal production[4].

Specific outcome from planning scheme

The reconfiguring does not compromise the capability of the land to be sustainably used for crop or animal production, excluding intensive animal husbandry, with a reasonable level of inputs and without causing degradation of land or other natural resources.

(2) The local government may approve reconfiguration of Class A and Class B Good Quality Agricultural Land below the minimum lot sizes identified in the Reconfiguring a Lot Code in the planning scheme.

(3) In determining a development application involving reconfiguring a lot resulting in a lot less than 100ha for Class A land or below 200ha for Class B land the local government will consider the following matters for the purpose of assessing whether a proposal complies with the relevant specific outcomes of the code—

(a) whether the lot is currently being used or is likely to be used for primary production or another rural activity; and,

(b) the matters set out in a Business Plan prepared and submitted in accordance with section 4.3(1); and,

(c) the matters set out in a Land Capability and Environmental Assessment Report prepared and submitted in accordance with section 4.3(2); and

---

[4] see specific outcome for the Rural Zone in the Reconfiguring a Lot Code

(d) whether the reconfiguration is an improvement on the current configuration by way of one or more of the following—

(i) there is no increase in the number of lots as a result of the reconfiguring;

(ii) the proposed lots are adequately configured to allow for sustainable primary production; and

(e) whether a proposed lot is to accommodate an approved or existing public utility undertaking, rural industry or new road provided that other lots are able to be sustainably used for primary production; and

(f) whether there is an adequate and suitable area for a dwelling house, including its curtilage, that does not diminish the availability of land suitable for sustainable primary production;

(g) the capacity of proposed lots to generate income from primary production compared to the configuration of the lots at the time of the application;

(h) whether the proposed lots are able to be used for a range of alternative primary production activities;

(i) whether there is a suitable area for a dwelling house and its curtilage that—

(i) complies with the *Dwelling House Code*;

(ii) contains adequate space for on-site wastewater treatment and disposal;

(iii) provides adequate separation from Agricultural activities in accordance with the *Planning Guidelines – Separating Agricultural and Residential Land Uses; and*

(iv) will not experience adverse impacts from other nearby activities including for example rural activities and extractive industries.

(4) It is unlikely that a proposed reconfiguring that increases the number of lots and creates a lot that is less than 40ha would comply with the applicable Reconfiguring a Lot Code.

4.3 Information requirements

The Local Government may request the following information[5]—

(1) a *Business Plan* to be prepared by a suitably qualified financial consultant detailing—

(a) the capacity of the lot to generate income to sustain a family unit in a manner consistent with sustainable use of the lot in accordance with the Land Capability and Environmental Assessment Report;

(b) viable alternative primary production to demonstrate flexibility of the lot as a sustainable unit to respond to fluctuating farm economics.

(2) a *Land Capability and Environmental Assessment Report* prepared by a suitably qualified land consultant providing—

(a) an assessment of the agricultural land class(es) of the subject land with regard to *SPP 1/92 – Development and the Conservation of Agricultural Land;*

(b) an assessment of land capability and constraints with regard to—

(i) climatic limitation other than rainfall;

(i) moisture availability for crop growth;

(ii) effective soil depth;

(iii) soil physical factors affecting crop growth (eg. surface crusting, hard pans, cementation, etc);

(iv) soil nutrient fertility;

(v) soil salinity or sodicity;

(vi) topography;

---

[5] Such information should be submitted with the application at the time of lodgement.

(vii) matters affecting workability of the soil (eg. rockiness, stiff clay, etc);

(viii) susceptibility to erosion; and

(ix) susceptibility to flooding

(c) an assessment of whether the land is capable of sustained production of the primary production proposed, including the need for rotation and spelling.

(d) the requirement for water supply or irrigation to sustain the primary production, and the availability of an adequate water supply and whether or not the water supply is subject to tradeable rights.

(e) the potential for off-site impacts to existing land uses or features, including areas or sites of high conservation or environmental value.

(f) an assessment of the suitability of the lot for the production of other crops or other primary production activities suitable for the area.

(3) evidence that there is a suitable area for a dwelling house and its curtilage that—

(a) complies with the *Dwelling House Code*.;

(b) contains adequate space for on-site wastewater treatment and disposal;

(c) provides adequate separation from Agricultural activities in accordance with the *Planning Guidelines – Separating Agricultural and Residential Land Uses; and*

(d) will not experience adverse impacts from other nearby activities including for example rural activities and extractive industries.

POLICY 5: DESIGN AND CONSTRUCTION STANDARDS FOR INFRASTRUCTURE WORKS

PLANNING SCHEME POLICY

Division 1—Standards

The standards for drainage, road (excepting for State-controlled roads), sewerage, and water supply in the local government area are—

Infrastructure works item:	Standard:	Exceptions:
Drainage	AUS-SPECS #1	
Roads	AUS-SPECS #1	State-controlled roads
Sewerage	Sewerage Code of Australia (WSA02-1999)	Any State exceptions
	Sewerage Pumping Code of Australia (WSA04-2001)	Any State exceptions
	if the matter is not dealt with in WSA02-1999 or WSA04-2001—the IPWEA drawings	
Water supply	Water Reticulation Code of Australia (WSA03-1999)	Any State exceptions
	if the matter is not dealt with in WSA03-1999—the IPWEA drawings	

Division 2—Standard drawings

The local government's standard drawings are—

(1) KSC001—Cul-de-sac;

(2) KSC002—Type cross sections (sealed rural road);

(3) KSC003—Type cross sections (unsealed rural roads);

(4) KSC004—Erection of signs;

(5) KSC005—Property access;

(6) KSC006—Invert crossing (handicapped, pram and residential type vehicular);

(7) KSC007—Causeways;

(8) KSC008—Methods of applying curve widening and superelevation;

(9) KSC009—Typical intersection layout (low volume rural roads);

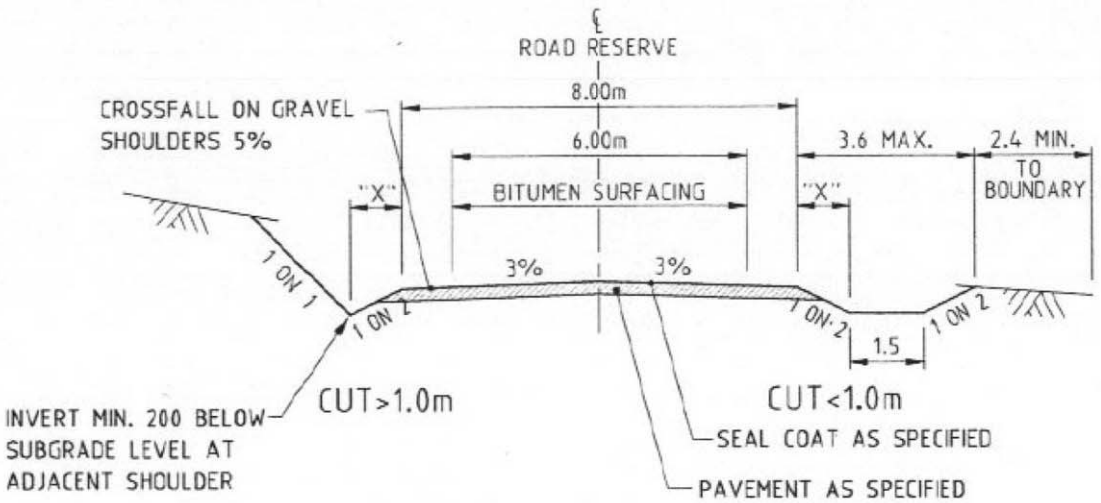
(10) KSC010—Road edge guide posts; and

(11) KSC011—Standard 4 metre Grid and Gate.

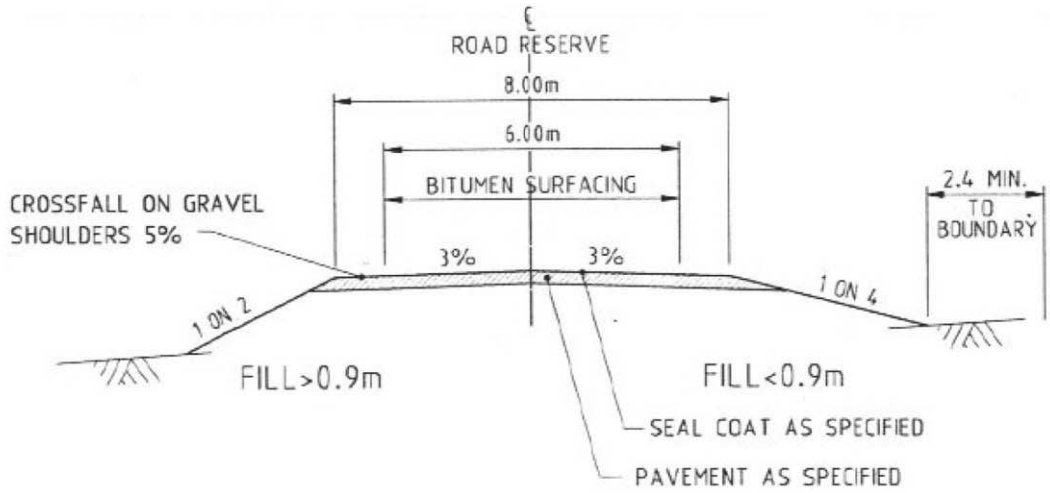
DIMENSION "X"

PAVT. DEPTH (mm)	MIN. DIM."X" (m)
100	0.6
150	0.7
200	0.8
250	0.9
300	1.0

THESE MINIMUM DIMENSIONS OF "X" PROVIDE FOR A TABLE DRAIN DEPTH OF 0.2m BELOW SUBGRADE LEVEL.



FORMATION IN CUT

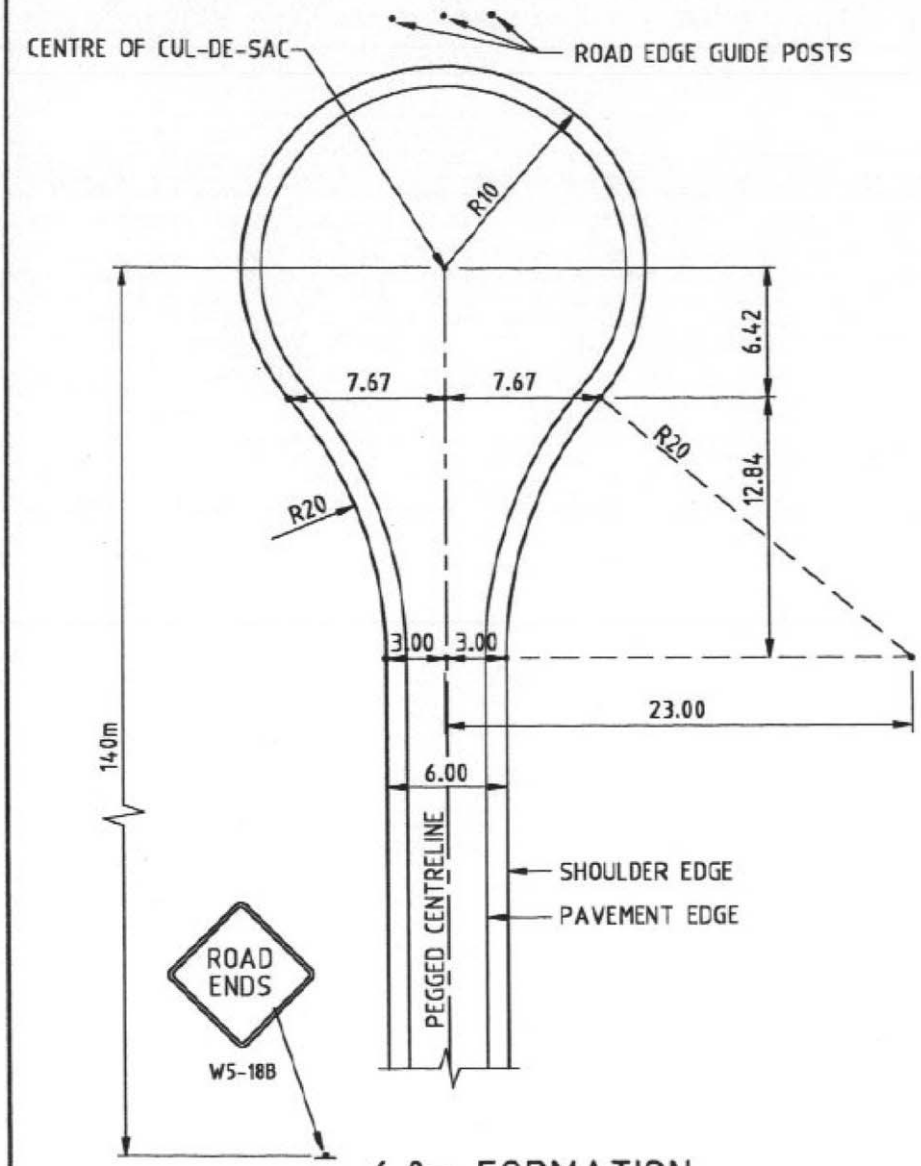


FORMATION IN FILL

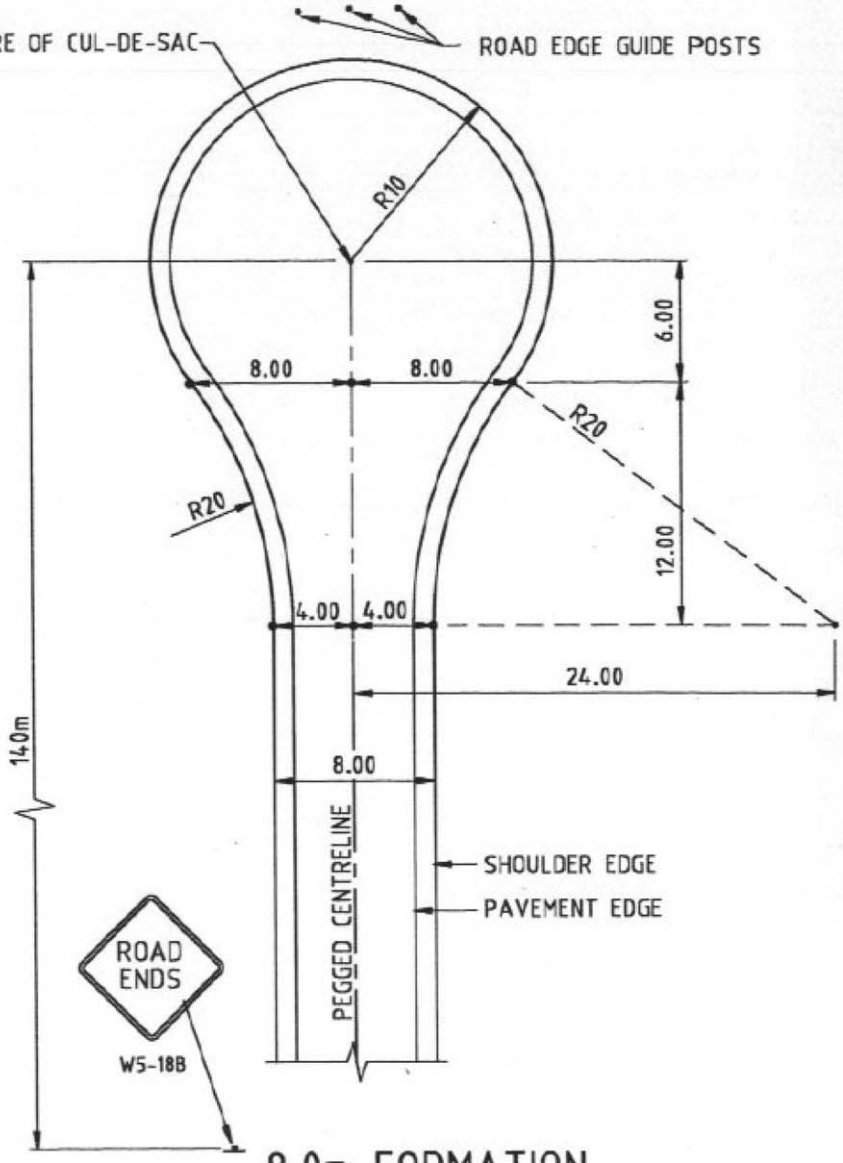
DIMENSIONS IN METRES

Scales 0 1 2 3 1:100			Drawn	RMcK 36/96	KOLAN SHIRE COUNCIL
			Checked	B.E.L. 07/96	
	0	FOR CONSTRUCTION B.E.L.	Designed		Shire Engineer Date 28/10/96
	Revisions		Checked		STANDARD DETAIL: TYPE CROSS SECTIONS SEALED RURAL ROAD

Drawing No. KSC002 0



6.0m FORMATION



8.0m FORMATION

DIMENSIONS IN METRES

Scales

0 2.5 5.0m

1:250

		Drawn	RMcK 06/96
		Checked	B.E.L. 06/96
		Designed	
0	FOR CONSTRUCTION	B.E.L.	

KOLAN SHIRE COUNCIL

Shire Engineer Date

STANDARD DETAIL

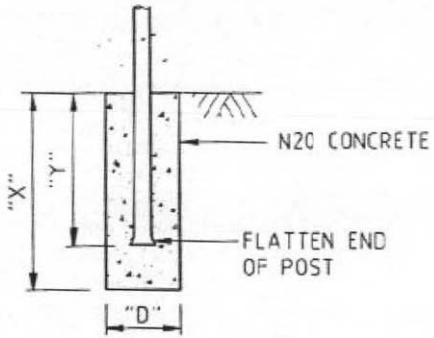
CUL-DE-SAC

Drawing No.

KSC001

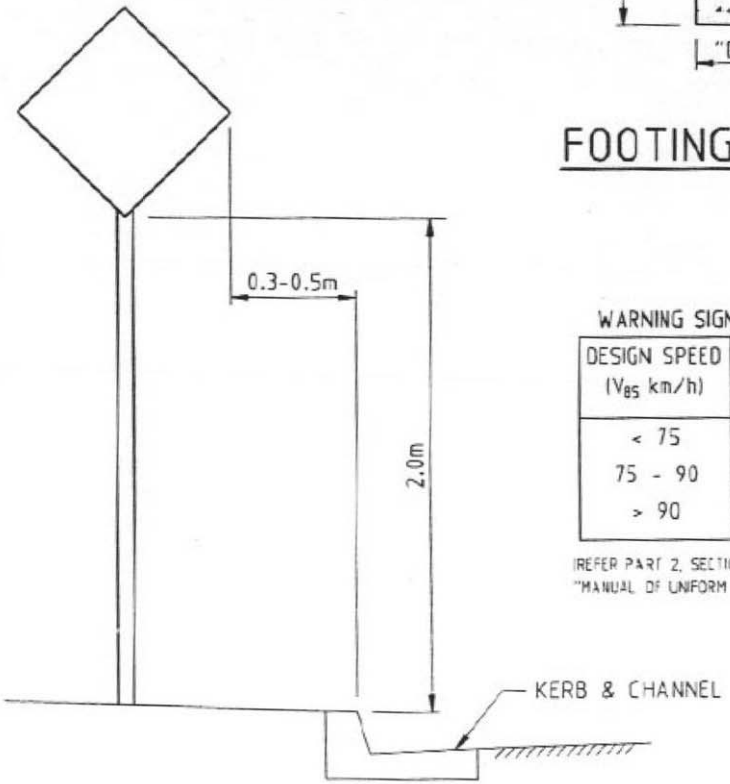
DIMENSIONS "X","Y" & "D"

SIGN SIZE	DIMENSION (mm)		
	"X"	"Y"	"D"
A SERIES	600	400	200
B SERIES	800	600	200
C SERIES	1000	800	300



FOOTING DETAIL

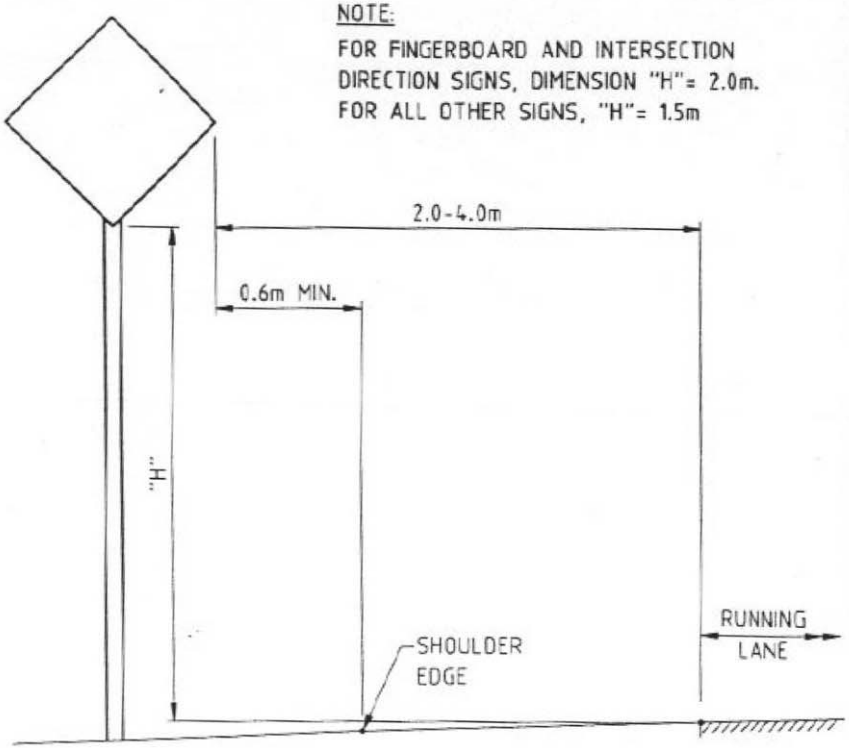
NOTE:
FOR FINGERBOARD AND INTERSECTION DIRECTION SIGNS, DIMENSION "H"= 2.0m.
FOR ALL OTHER SIGNS, "H"= 1.5m



WARNING SIGN INSTALLATION GUIDE

DESIGN SPEED (V_{85} km/h)	DISTANCE FROM HAZARD/OBSTRUCTION (m)
< 75	80 - 120
75 - 90	120 - 180
> 90	180 - 250

(REFER PART 2, SECTION 3 DEPARTMENT OF MAIN ROADS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES")



URBAN AREAS

RURAL AREAS

DIMENSIONS IN METRES

Scales
0 0.2 0.4 0.6m
1:20

3	FOR CONSTRUCTION	B.E.L.	
	Revisions		

Drawn	RMcK 06/96
Checked	B.E.L. 07/96
Designed	
Checked	

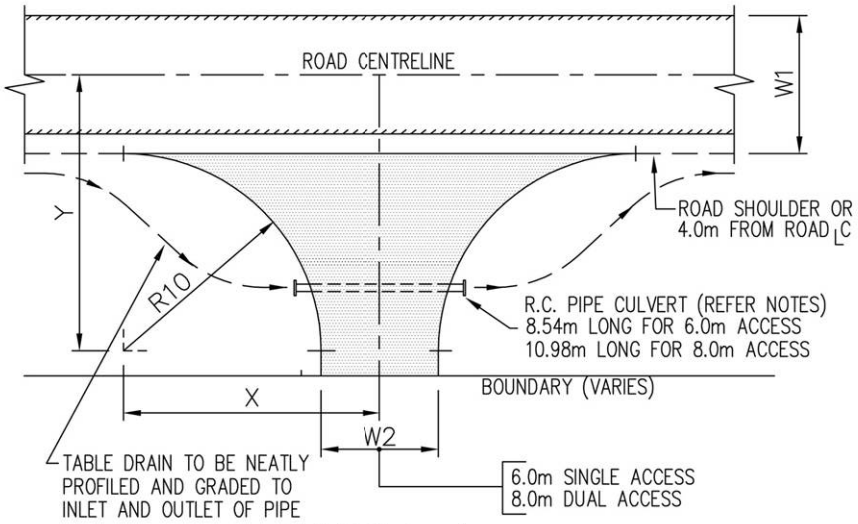
KOLAN SHIRE COUNCIL

Shire Engineer ____ Date 28/5/96

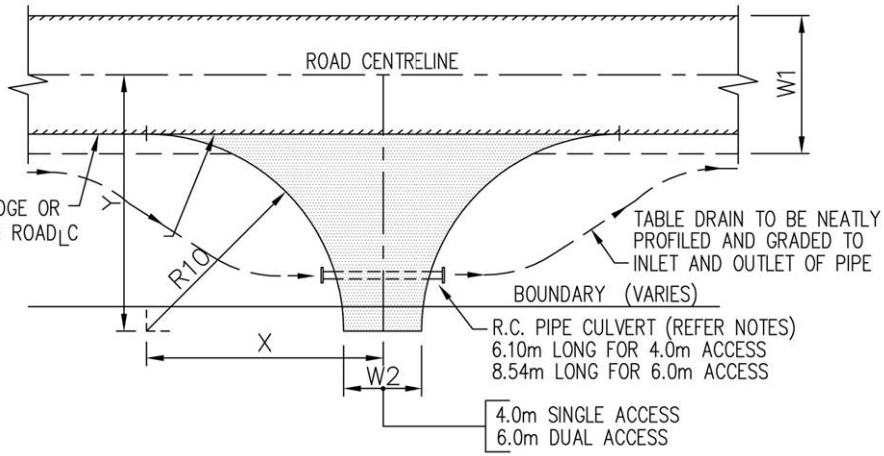
STANDARD DETAIL

ERECTION OF SIGNS

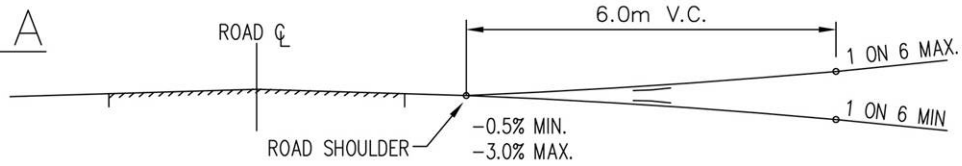
Drawing No.
KSC004
0



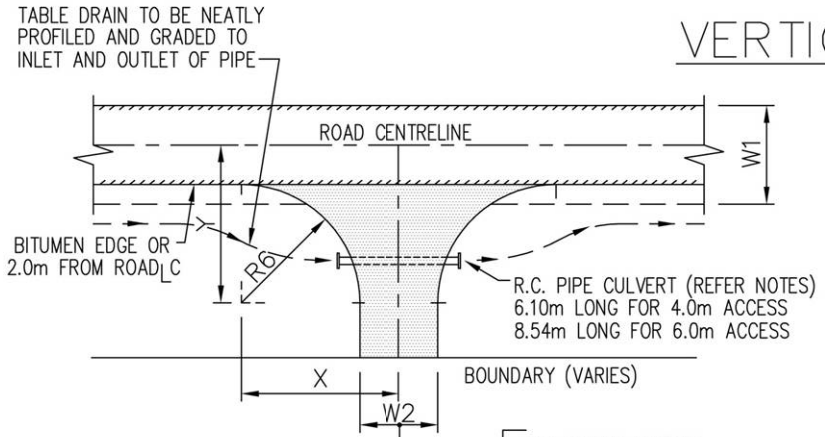
TYPE A



TYPE B



VERTICAL GRADING



TYPE C

	DIMENSION W2		
	4.0	6.0	8.0
DIMENSION X	12.0	13.0	14.0

	DIMENSION W1			
	4.0	5.6	6.0	7.0
DIMENSION Y	12.0	12.8	13.0	13.5

DIMENSIONS X AND Y

NOTES

1. ALL DIMENSIONS ARE IN METRES
2. LOCATION AND SIZE OF R.C. PIPE CULVERTS SHALL BE AS DETERMINED BY COUNCIL'S ENGINEER.
3. FOR DETAILS OF PIPE ENDWALLS AND BEDDING REFER DEPARTMENT OF MAIN ROADS STANDARD DRAWINGS 1305, 1306 AND 1359.
4. THE TYPE OF ACCESS REQUIRED AT ANY LOCATION SHALL BE DETERMINED BY COUNCIL'S ENGINEER.

150mm COMPACTED DEPTH BASE COURSE GRAVEL

Scales					
NOT TO SCALE				Drawn	RMcK 06/96
				Checked	B.E.L. 07/96
	0	FOR CONSTRUCTION	B.E.L.	Designed	
		Revisions		Checked	

KOLAN SHIRE COUNCIL

Shire Engineer Date

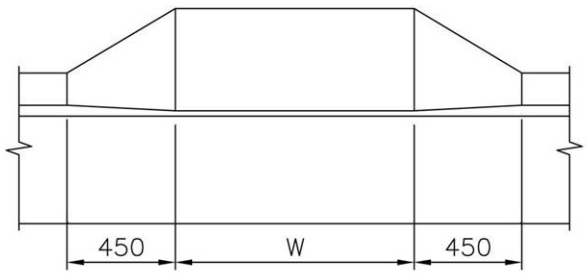
STANDARD DETAIL

PROPERTY ACCESS

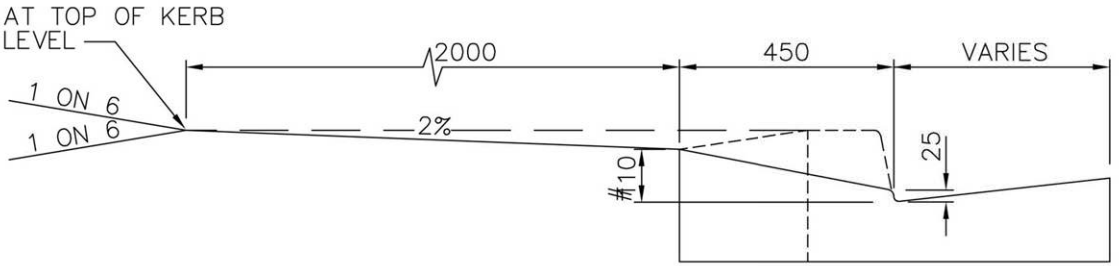
Drawing No.

KSC005

0

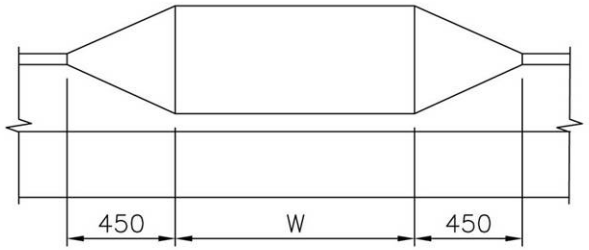


PLAN

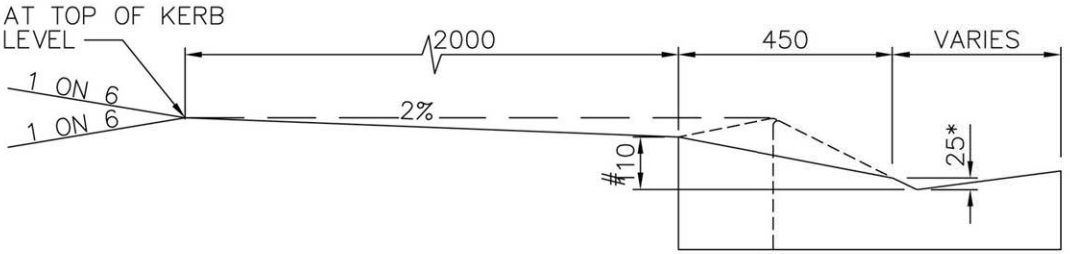


SECTION

BARRIER TYPE KERB AND CHANNEL



PLAN



SECTION

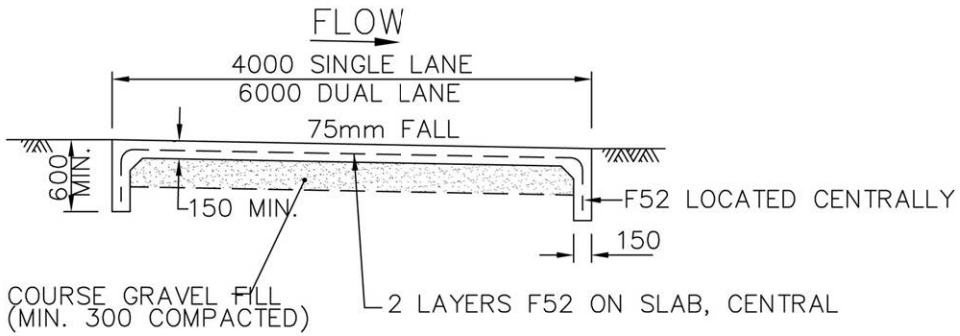
MOUNTABLE TYPE KERB AND CHANNEL

NOTES

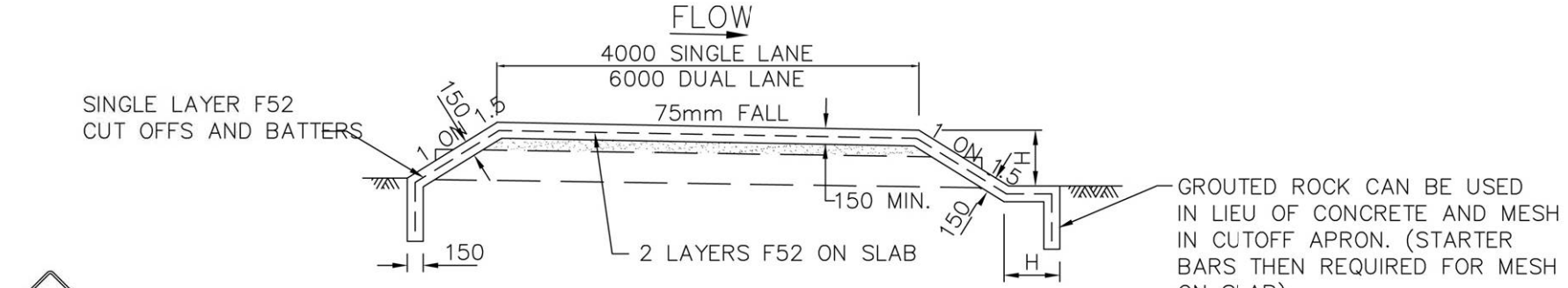
1. WHERE WIDTH "W" HAS NOT BEEN SPECIFIED, THE FOLLOWING SHALL BE ADOPTED:
   (A) HANDICAPPED PERSON STANDARD WIDTH W = 1000mm
   (B) PRAM RAMP STANDARD WIDTH W = 1000mm
   (C) RESIDENTIAL INVERT MINIMUM WIDTH W = 3000mm
2. MAXIMUM WIDTH "W" FOR RESIDENTIAL INVERTS SHALL BE 6.0m UNLESS OTHERWISE APPROVED BY THE ENGINEER.
3. * 25mm LIP AT INVERT MAY BE DELETED IF APPROVED BY THE ENGINEER.
4. WHERE APPROVED BY THE ENGINEER, RESIDENTIAL TYPE INVERT CROSSINGS MAY BE DELETED FOR MOUNTABLE TYPE KERB AND CHANNEL.
5. # WHERE PROBLEMS MAY OCCUR WITH CHANNEL OVERFLOW, INVERT KERB HEIGHT TO BE IN LINE WITH ADJACENT KERB.

DIMENSIONS IN MILLIMETRES

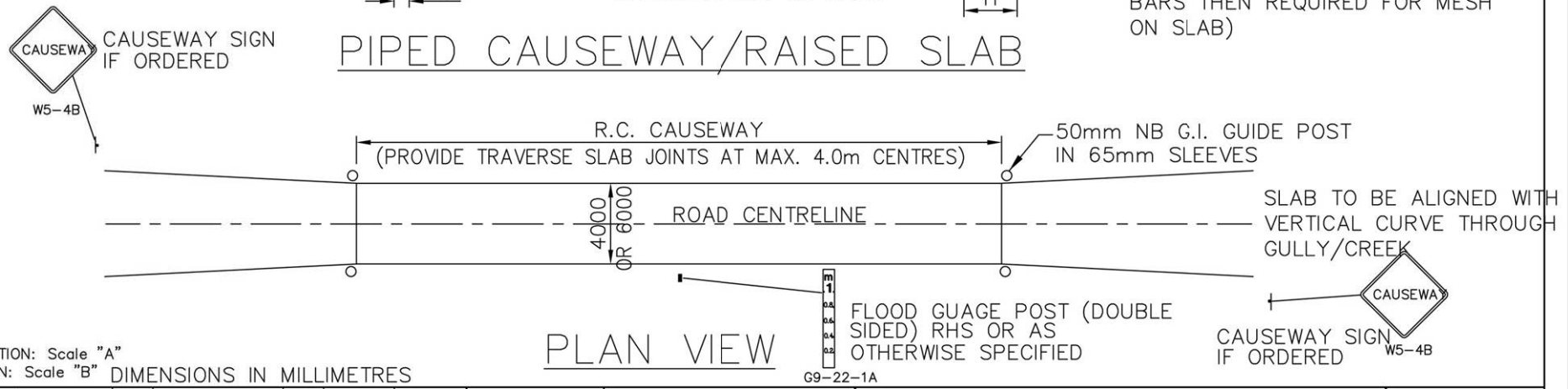
Scale A (Plan) 0 200 400 600mm 1:20			Drawn	RMcK 06/96	KOLAN SHIRE COUNCIL
Scale B (Section) 0 100 200 300mm 1:10	0	FOR CONSTRUCTION B.E.L.	Checked	B.E.L. 07/96	Shire Engineer Date
		Revisions	Designed		STANDARD DETAIL: INVERT CROSSING HANDICAPPED, PRAM AND RESIDENTIAL TYPE VEHICULAR
			Checked		Drawing No. KSC006 0



SLAB FLUSH WITH BED



PIPED CAUSEWAY/RAISED SLAB



PLAN VIEW

SECTION: Scale "A"
PLAN: Scale "B" DIMENSIONS IN MILLIMETRES

Scale A 0 400 800 1200mm 1:40 / Scale B 0 2000 4000 6000mm 1:200		Drawn	RMcK 06/96
		Checked	B.E.L. 07/96
	FOR CONSTRUCTION B.E.L.	Designed	
	Revisions	Checked	

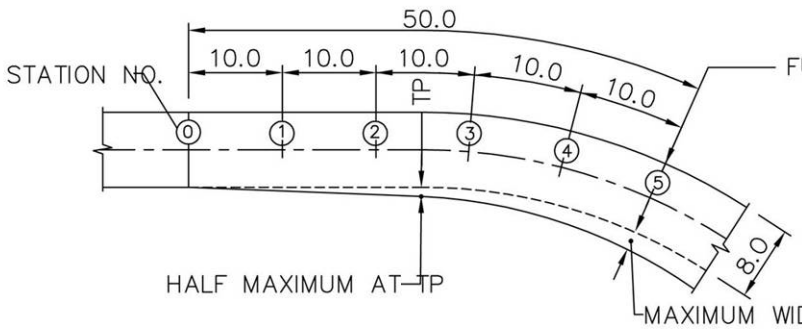
KOLAN SHIRE COUNCIL

Shire Engineer Date

STANDARD DETAIL

CAUSEWAYS

Drawing No. KSC007 0



CURVE WIDENING TABLE

MAXIMUM WIDENING (m)	TOTAL EXTRA WIDTH (m)					
	⓪	①	②	③	④	⑤
2.0	0	0.4	0.8	1.2	1.6	2.0
1.5	0	0.3	0.6	0.9	1.2	1.5
1.0	0	0.2	0.4	0.6	0.8	1.0
0.5	0	0.1	0.2	0.2	0.4	0.5

CURVE WIDENING WARRANTS

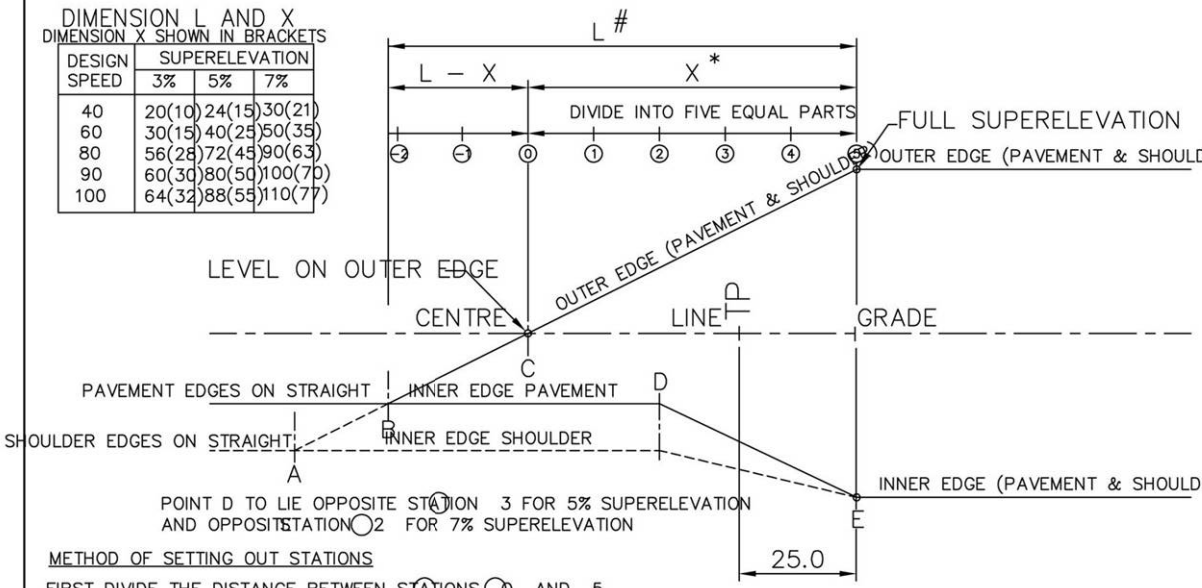
CURVE RADIUS (m)	TOTAL AMOUNT OF WIDENING IN METRES WHERE NORMAL WIDTH OF TWO TRAFFIC LANES IS:		
	4.0m	6.0m	7.0m
30 – 100	2	1.5	1.0
100 – 250	1.5	1.0	0.5
250 – 750	1.0	1.0	–
750 – 1500	1.0	0.5	–
OVER 1500	0.5	–	–

METHOD OF APPLYING CURVE WIDENING

DIMENSION L AND X

DIMENSION X SHOWN IN BRACKETS

DESIGN SPEED	SUPERELEVATION 3%	5%	7%
40	20(10)	24(15)	30(21)
60	30(15)	40(25)	50(35)
80	56(28)	72(45)	90(63)
90	60(30)	80(50)	100(70)
100	64(32)	88(55)	110(77)



POINT D TO LIE OPPOSITE STATION ③ FOR 5% SUPERELEVATION AND OPPOSITE STATION ② FOR 7% SUPERELEVATION

METHOD OF SETTING OUT STATIONS

FIRST DIVIDE THE DISTANCE BETWEEN STATIONS ⓪ AND 5 INTO FIVE EQUAL PARTS.

USE THE DISTANCE BETWEEN STATIONS ⓪ AND 1 TO MARK OUT STATIONS ⊖1 AND −2 ETC. FOR RISES AND FALLS TO PAVEMENT AND SHOULDER EDGES AT EACH STATION SEE THE TABLES ON THIS DRAWING.

SUPERELEVATION TABLE

SUPERELEVATION %	STATION ⊖5	⊖4	⊖3	⊖2	⊖1	⓪	①	②	③	④	⑤
3.0	−3.0%	−2.4%	−1.8%	−1.2%	−0.6%	LEVEL	+0.6%	+1.2%	+1.8%	+2.4%	+3.0%
5.0	–	–	−3.0%	−2.0%	−1.0%	LEVEL	+1.0%	+2.0%	+3.0%	+4.0%	+5.0%
7.0	–	–	–	−2.8%	−1.4%	LEVEL	+1.4%	+2.8%	+4.2%	+5.6%	+7.0%

THIS DIAGRAM SHOWS THAT THE HIGHER OR OUTER EDGE OF THE SHOULDER COMMENCES TO RISE BACK ON THE STRAIGHT AT THE POINT A AND THE HIGHER OR OUTER EDGE OF THE PAVEMENT AT THE POINT B, AT WHICH POINT THE RISING SHOULDER CROSSFALL EQUALS THE PAVEMENT CROSSFALL. BOTH PAVEMENT AND SHOULDER ON THIS SIDE ARE LEVEL AT POINT C. POINT C IS THE CONTROL POINT FOR THE CHANGING CROSSFALLS. BETWEEN B AND E THE SHOULDER AND PAVEMENT CROSSFALLS ARE EQUAL AT ALL POINTS. THE OUTER SHOULDER ON THE CURVE HAS THE SAME CROSSFALL AS THE ADJACENT PAVEMENT.

ON THE INNER HALF OF THE PAVEMENT THE NORMAL CROSSFALL IS NOT ALTERED UNTIL THE POINT D IS REACHED WHERE THE OUTER HALF OF THE PAVEMENT IS AT THE SAME CROSSFALL; IT THEN CHANGES UNIFORMLY TO THE FULL SUPERELEVATION AT THE POINT E AT THE SAME RATE AS THE OUTER HALF.

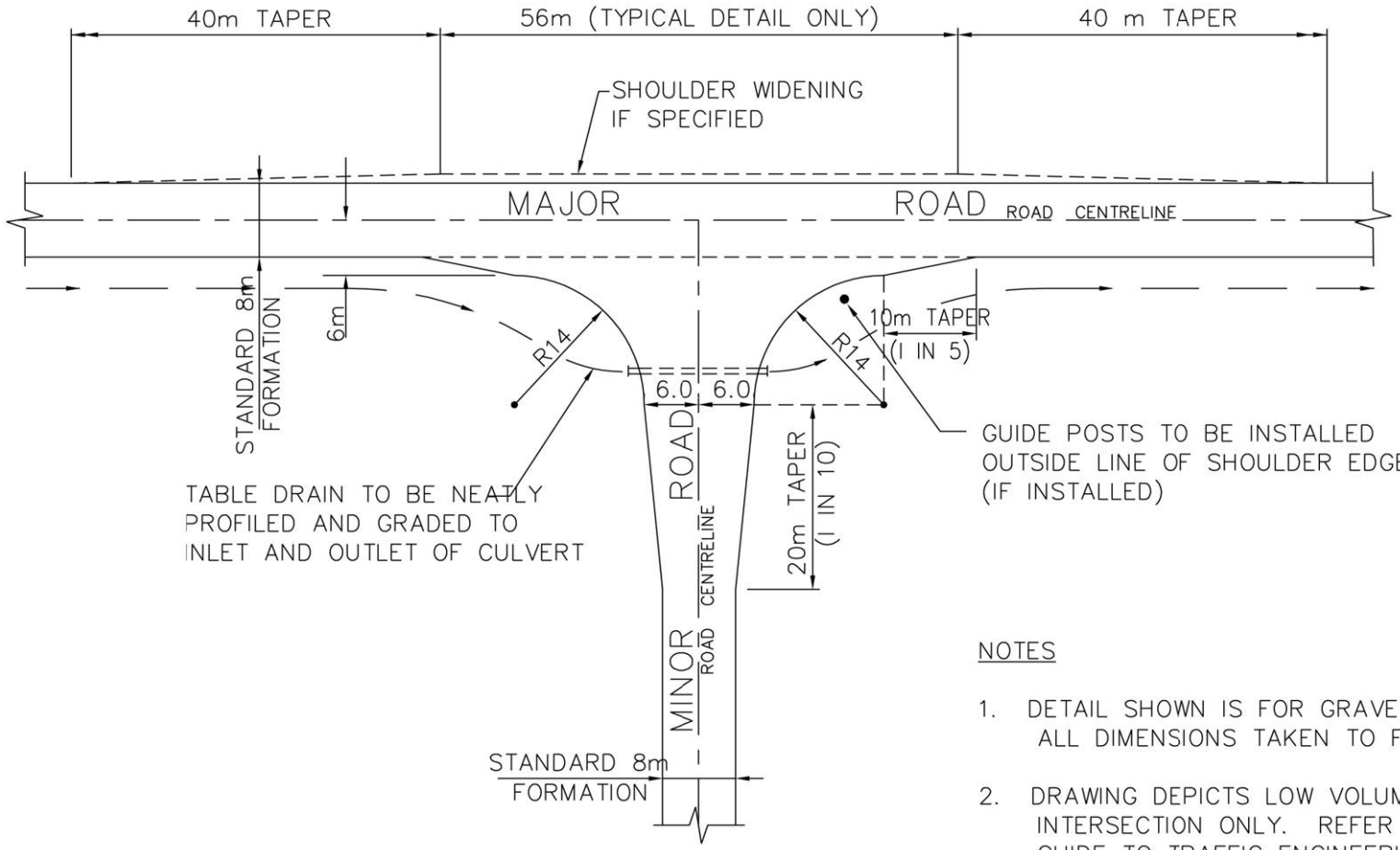
ON THE INNER SHOULDER THE STEEPER SHOULDER SLOPE ON THE STRAIGHT IS RETAINED TO THE POINT D. THE SHOULDER THEN CHANGES UNIFORMLY TO THE FULL SUPERELEVATION AT POINT E.

IF THE PAVEMENT SUPERELEVATION DOES NOT EXCEED THE SHOULDER CROSSFALL ON THE STRAIGHT, THE INNER SHOULDER CONTINUES UNCHANGED THROUGHOUT THE CURVE. IF THE PAVEMENT SUPERELEVATION EXCEEDS THE SHOULDER CROSSFALL ON THE STRAIGHT THE INNER SHOULDER ON THE CURVE IS CONSTRUCTED AT THE SAME SLOPE AS THE ADJACENT PAVEMENT.

METHOD OF APPLYING SUPERELEVATION

DIMENSIONS IN METRES

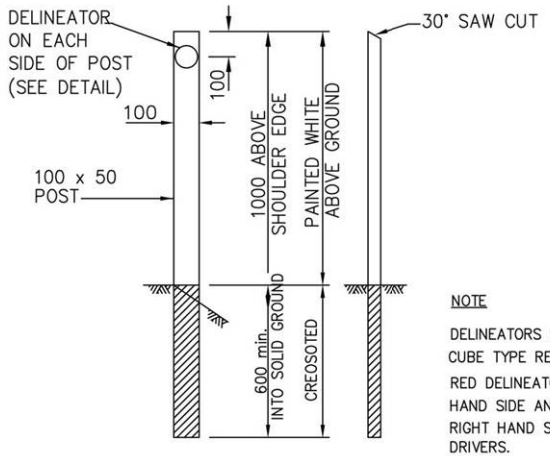
Scales: NOT TO SCALE	Drawn: RMcK 06/96	KOLAN SHIRE COUNCIL	STANDARD DETAIL	Drawing No.
0 FOR CONSTRUCTION	Checked: B.E.L. 07/96		METHODS OF APPLYING CURVE WIDENING AND SUPERELEVATION	KSC008
Revisions	Designed:	Shire Engineer Date		0
	Checked:			



NOTES

1. DETAIL SHOWN IS FOR GRAVEL FORMATION, ALL DIMENSIONS TAKEN TO FORMATION EDGE.
2. DRAWING DEPICTS LOW VOLUME RURAL INTERSECTION ONLY. REFER "AUSROADS GUIDE TO TRAFFIC ENGINEERING PRACTICE – INTERSECTIONS AT GRADE" FOR HIGHER VOLUME LAYOUTS.

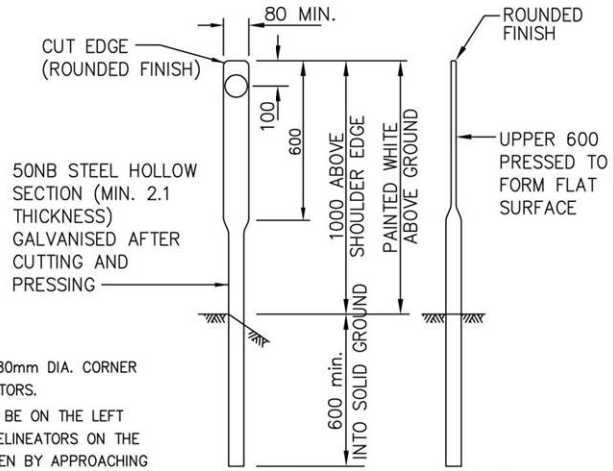
Scales: 0 5 10 15 — 1:500		Drawn: RMcK 05/96	KOLAN SHIRE COUNCIL
	0 FOR CONSTRUCTION	Designed:	STANDARD DETAIL
	Revisions	Checked:	TYPICAL INTERSECTION LAYOUT LOW VOLUME RURAL ROADS
		Shire Engineer Date	Drawing No. KSC009 0



NOTE

DELINEATORS SHALL BE 80mm DIA. CORNER CUBE TYPE RETROREFLECTORS.

RED DELINEATORS SHALL BE ON THE LEFT HAND SIDE AND WHITE DELINEATORS ON THE RIGHT HAND SIDE, AS SEEN BY APPROACHING DRIVERS.



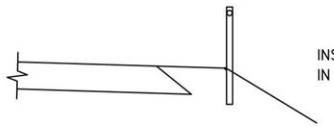
* REFER INSTALLATION DETAIL3 FOR POST ON CONCRETE MARGIN

TIMBER

TUBULAR STEEL

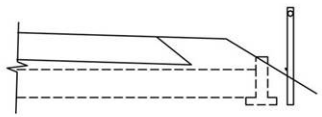
TYPICAL ROAD EDGE GUIDE POSTS

1. FORMATION GENERALLY: –



INSIDE FACE OF POST TO BE SET IN LINE WITH THE SHOULDER EDGE.

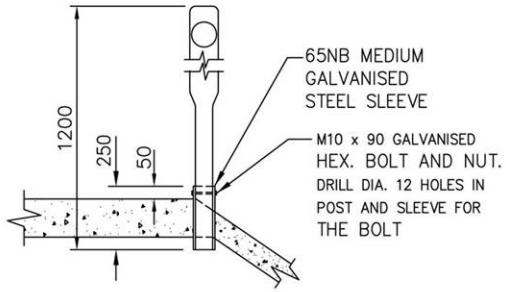
2. LONG LENGTHS OF LOW EMBANKMENT: –



INSIDE FACE OF POST TO BE GENERALLY BEYOND THE SHOULDER EDGE BUT NOT MORE THAN 150 BEYOND TNE END OF AN ADJACENT CULVERT.

POST LENGTHS ARE TO BE INCREASED WHEN PLACED BEYOND THE SHOULDER EDGE TO ALLOW FOR SLOPE. WHEN SLOPE IS 4:1, POST LENGTHS ARE TO BE INCREASED BY 150.

3. CONCRETE MARGINS



NOTE

WHERE ROAD EDGE GUIDE POST LOCATIONS FALL ADJACENT TO GUARDRAIL INSTALLATION, THE DELINEATORS ARE TO BE ARTTACHED TO THE NEAREST GUARDRAIL DELINEATOR BRACKETS.

SPACING OF GUIDE POSTS

1. ON STRAIGHTS AND CURVES WITH RADIUS GREATER THAN 2000 – THE SPACING SHALL BE 150mm, WITH THE POSTS IN PAIRS. (SEE NOTE 6).
2. ON VERY LONG STRAIGHTS IN FLAT TERRAIN – THE SPACING MAY BE INCREASED, AS SPECIFIED, TO 300m, WITH THE POSTS IN PAIRS.
3. ON CIRCULAR CURVES INCLUDING CIRCULAR PORTIONS OF TRANSITIONED CURVES – THE SPACING SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE: –

CURVE RADIUS	SPACING (m)	
	OUTSIDE OF CURVE	INSIDE OF CURVE#
< 100	6	12
100 – 199	10	20
200 – 299	15	30
300 – 399	20	40
400 – 599	30	60
600 – 799	40	60
800 – 1199	60	60
1200 – 2000	90 (SEE NOTE 6)	60 (SEE NOTE 6)
> 2000 INCL. STRAIGHTS	150 (SEE NOTE 6)	150 (SEE NOTE 6)

POSTS ON INSIDE OF CURVE TO BE LOCATED OPPOSITE A POST ON THE OUTSIDE OF THE CURVE WHERE PRACTICABLE.

4. ON CURVE TRANSITIONS – THE SPACING FOR THE TRANSITION PORTION SHALL BE THE SAME AS THE SPACING REQUIRED FOR THE CIRCULAR PORTION OF THE CURVE (AS DETERMINED FROM THE TABLE ABOVE). THE FIRST POSTS SHALL BE LOCATED AT A POINT ALONG THE TRANSITION PORTION, WHICH IS ONE QUARTER OF THE TRANSITION LENGTH, MEASURED FROM THE TANGENT POINT AT THE STRAIGHT. (WHERE ALIGNMENT PLANS ARE NOT SUPPLIED IN THE SCHEME DOCUMENTS, THE FIRST POSTS SHALL BE LOCATED AT THE POINT WHERE CURVE JUST NOTICEABLY STARTS TO DEVIATE FROM THE ALIGNMENT OF THE STRAIGHT).
5. AT CRESTS – (i) LOCATED ON STRAIGHTS, A MINIMUM OF TWO PAIRS OF DELINEATORS (BEYOND 40m) ARE TO BE VISIBLE AT ALL TIMES FROM A DRIVER'S EYE HEIGHT OF 1.15m.

   (ii) LOCATED ON OR JUST BEFORE A HORIZONTAL CURVE, THIS REQUIREMENT ONLY APPLIES TO THE OUTSIDE OF THE CURVE. THE REQUIREMENTS OF NOTE 3 SHALL ALSO APPLY.
6. IN AREAS SUBJECT TO FREQUENT FOGS – THE SPACING SHALL BE REDUCED TO 60m, WITH THE POSTS IN PAIRS.
7. AT BRIDGES AND CULVERTS – (i) WHERE THE STRUCTURE IS EQUAL TO OR GREATER THAN 5m IN LENGTH (MEASURED ALONG ROAD CENTRELINE), 4 POSTS – ONE AT EACH CORNER OF THE STRUCTURE.

   (ii) WHERE THE STRUCTURE IS LESS THAN 5m IN LENGTH (MEASURED ALONG ROAD CENTRELINE), 2 POSTS – ONE AT EACH LEFT HAND APPROACH END OF THE STRUCTURE.
8. AT FLOODWAYS ON STRAIGHTS – (i) WHERE THE FLOODWAY IS EQUAL TO OR LESS THAN 120m IN LENGTH , THE SPACING SHALL BE 25m, WITH THE POSTS IN PAIRS.

   (ii) WHERE THE FLOODWAY IS GREATER THAN 120m IN LENGTH, THE SPACING SHALL BE 50m, IN PAIRS.

   GUIDE POSTS INSTALLED ON FLOODWAYS SHALL BE TUBULAR STEEL.
9. OTHER – WHERE GUIDE POST POSITIONS ARE DETAILED ELSEWHERE IN THE SCHEME DOCUMENTS, SUCH POSITIONS SHALL BE ADOPTED WHERE THEY CONFLICT WITH POSITIONS DERIVED FROM THIS DRAWING.

INSTALLATION DETAILS NTS

DIMENSIONS IN MILLIMETRES

Scales 0 2 4 6 1:200		Drawn	RMcK 05/96
		Checked	
		Designed	
0	FOR CONSTRUCTION		
Revisions		Checked	

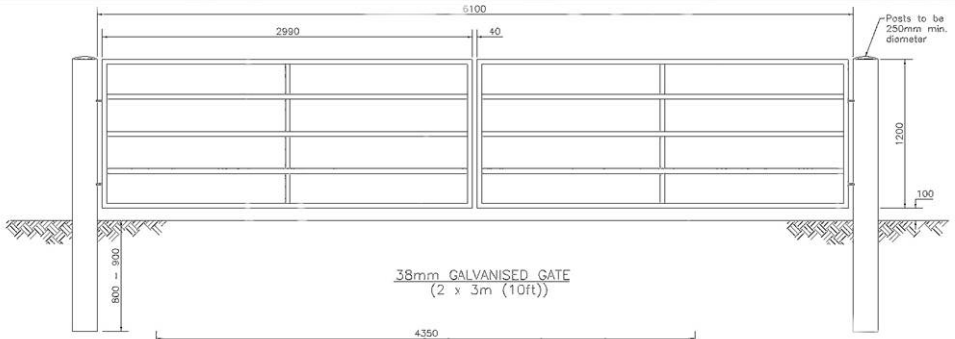
KOLAN SHIRE COUNCIL

Shire Engineer Date

STANDARD DETAIL

ROAD EDGE GUIDE POSTS

Drawing No. KSC010 0



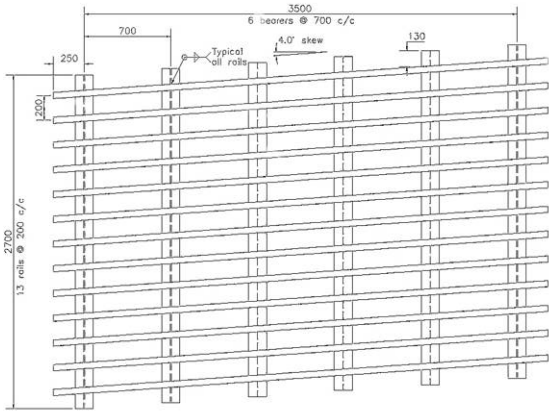
38mm GALVANISED GATE
(2 x 3m (10ft))

NOTE:
Single Gate (across road) – Use 3658mm (12 ft) span

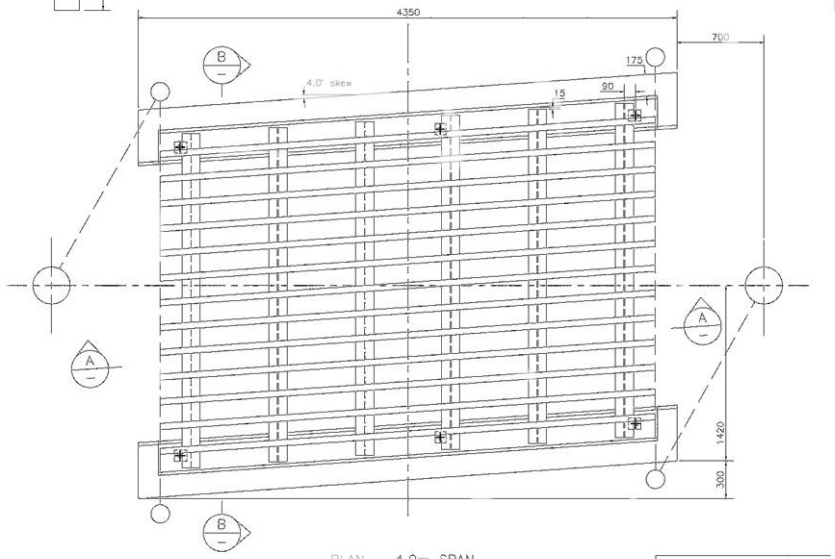
Hardwood Timber posts to be used throughout

All grids must have a 3.7m (min) gate adjacent to cattle grid to allow for tracked machinery

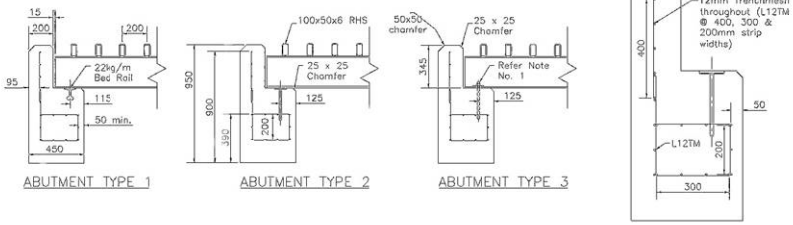
Two 4.0m grids to be installed for wider roads



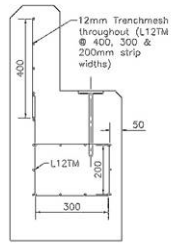
GRID FRAME



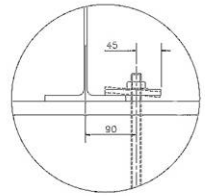
PLAN – 4.0m SPAN



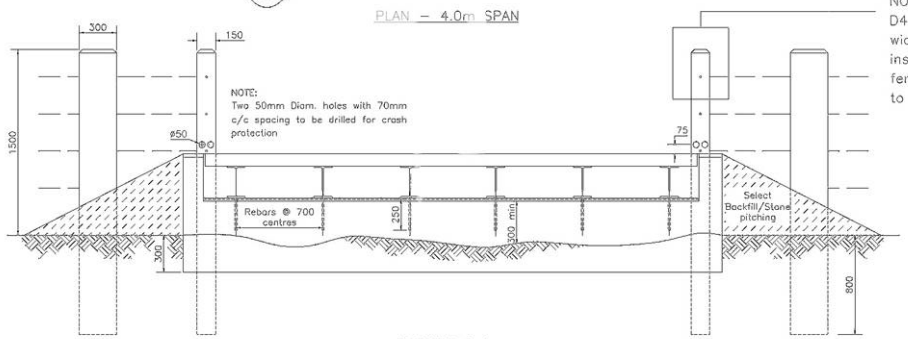
ABUTMENT TYPE 1 | ABUTMENT TYPE 2 | ABUTMENT TYPE 3



REINFORCING DETAIL
(1:20)

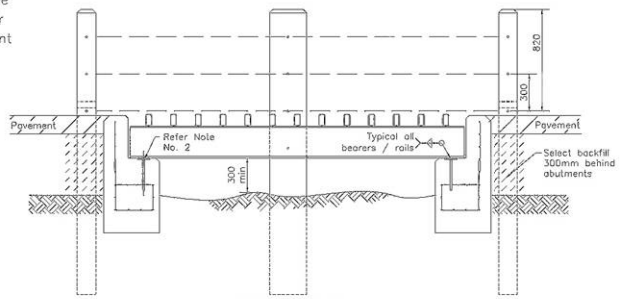


TIE DOWN DETAIL
TYPE 3
(Not to Scale)



SECTION A–A

NOTE:
D4–3A left and right width markers to be installed on all four fence posts adjacent to grid



SECTION B–B

NOTES:
1. Diameter 18mm threaded bar, set into concrete at depth of 250mm. Tie downs of 100 x 10 Flat profile, 90mm lengths with 20mm clearance holes to be fastened with flat and spring washers.
2. Diameter 18mm Rebars at 250mm lengths to be welded at 700 centres on 100 x 10 flat profile and concreted as shown on Section A–A.
3. Grid rails to be 100x50x6 RHS, grade 350 or 22Kg/m Rail. Bearers to be 250 UB 37.3, grade 250 to AS 3678 & AS 3679.1.
4. Concrete class shall be 32MPa/20 in abutments, cover to reinforcing steel to be 50mm min.

Scales				Drawn	DHH
1:40 (A3)				Checked	GG
	A	Redesigned standard	10/02	Designed	DHH
	Revisions			Checked	AC

KOLAN SHIRE COUNCIL

Shire Engineer Date
AC

STANDARD DRAWING

STANDARD 4.0m GRID & GATE

Drawing No.
KSC 011

Job No.
Standard Drawing

A

POLICY 6: ROAD CONTRIBUTIONS

PLANNING SCHEME POLICY

6.1 Statement of Intent

6.1.1 Scope

(1) This policy applies throughout the area of the Shire of Kolan.

(2) This policy applies to—

(a) All applications under the *Integrated Planning Act 1997* and Council's Planning Scheme;

(b) Applications for approval for second (or subsequent) dwellings and caretaker residences;

(c) All applications requiring *Material Change of Use* (and not likely to be subject to a future reconfiguring a lot application);

(d) The principal road leading to and/or fronting the subject land; and

(e) Intersections external to the site upon which the proposed development will have an impact due to increased traffic.

6.2 Objectives

(1) It is the purpose of this policy to facilitate the achievement of the following objectives—

(a) To set the appropriate standard required for the external road; and

(b) To provide a program for the upgrading and augmenting of roads to satisfy the additional demand directly generated by the proposed development.

6.3 Definitions

(1) "*External Road*" - for the purpose of this Policy, external road shall mean the main/major road leading to and/or fronting the site of the proposed development.

(2) "*Charitable Organisation*" - an organisation which exists for the purpose of education, assistance to the poor or disadvantaged, assistance to the sick, other public purposes of a broadly similar nature and sporting bodies where in the opinion of Council there is an overall benefit to the community. It does not include Government Departments which exist for the above purposes.

6.4 Rationale

(1) The local government believes it necessary to require an appropriate road standard or require road contributions, as the development will generate additional traffic and such traffic will create additional demands for the maintenance and upgrading of roads within the Shire generally, and in the vicinity of the subject land, particularly.

(2) The local government recognises that higher standards of roads require less resources for works toward maintenance and upgrading and provides a safe and efficient travel route.

6.5 Required Standard for External Roads

6.5.1 Bitumen Seal

(1) Where the sum total of the existing traffic and the traffic generated by the proposed development is greater than 75 vehicles per day (based on a nominal figure of 6 vehicles per day for each new allotment or dwelling) the external road to the site is to be constructed to a bitumen seal standard. Where accurate AADT figures are not available then the applicant will be required to demonstrate estimated traffic numbers.

6.5.2 Gravel

(1) Where the sum total of traffic as above is less than 75 vehicles/day then the road is to be to a gravel standard in the Rural Zone. In all other zones external roads are to be to a bitumen seal standard.

6.5.3 Widths

(1) Widths of formation, gravel and bitumen are to be to the standard indicated in the local government's Road Design Standards or the Planning Scheme except that, where the local government feels it appropriate, the *Austroads Rural Road Design Guide*. On low trafficked roads (30 vehicles per day or less), the local government may accept a lesser formation width of 6 metres.

6.5.4 Kerb and Channel

(1) In urban areas, kerb and channel will be required along the frontage of the subject site, and will only be required on the section of external road leading to the site if required to overcome particular problems e.g. scouring.

6.5.5 Intersections

(1) Intersections to which the development contributes traffic are to be to the standard required in the NAASRA Publication - "*Intersections at Grade*" or any similar standard as adopted in future by the local government.

6.6 Failure to Meet Required Standards

(1) Should the external road leading to any proposed development fail to meet the required standard, the local government may elect to refuse the development application.

(2) Alternatively, the local government may approve the application subject to the upgrading of the external road by the applicant or alternatively, the local government may accept a contribution based on Section 6.7 of this Policy.

6.7 Allocating Responsibility

(1) Where the size of the development is such that the development on its own would require the set standard, then the full cost of upgrading the external road is to be at the applicant's expense.

(2) Where the development on its own does not warrant the standard required by the sum total of the existing traffic plus the traffic from the proposed development, then the applicant may choose to construct the external road to the required standard, or alternatively, the applicant may make a contribution to the local government, equal to the development's pro-rata share of the cost of the upgrading works.

(3) Where the roads leading to and fronting the development are constructed to the required standard, the local government may require a contribution towards the reduction in design life of the road. Such contribution will not be less than $2,500/additional lot.

(4) Where such road frontages are not constructed to the required standard, the local government may either require the road(s) along the allotments frontage(s) to be constructed to the required standard, or require a contribution towards such construction. Such contributions will not be less than $2,500/additional lot.

(5) The local government will require a contribution of $900 per additional vehicle generated by the development (based on a nominal figure of 6 vehicles per day for each new allotment or dwelling) towards the cost of maintenance of roads within the general vicinity.

(6) Where a proposed development fronts a State Controlled Road and no local government roads are used for direct access to the site, the local government will require a contribution equal to that in Clause (5) above.

6.8 Kerb and Channel Contribution

(1) For a minor residential subdivision and where kerb and channel does not exist adjacent to the proposed reconfiguration, the local government may require, in lieu of construction of kerb and channel, a cash contribution from the applicant for the estimated cost of bulk construction for the construction of kerb and channel in the Shire.

(2) Contribution rate is $30.00 per linear metre but may be varied by resolution of the local government from time to time.

6.9 Contributions

(1) Contributions referred to in this policy are intended to be expended on the road or roads leading to and fronting the subject land.

(2) The local government may pool contributions from the immediate locality within the Shire to provide for larger scale upgrading works within the Shire.

(3) Contributions will be payable prior to—

(a) sealing of the plan of survey, in the case of a reconfiguring a lot application; or

(b) issue of the building permit, in the case of applications for second (subsequent) dwellings and caretaker's residences and other material change of use applications.

6.10 Concessions

(1) Where the local government requires either external works or a contribution as set out in either Clause 6.6(2) or 6.8(1) of this policy, the value of the requirement may be reduced in the following instances:

6.10.1 Charitable Organisations

(1) In instances where the applicant is a charitable organisation and the organisation can demonstrate to the local government satisfaction, that the requirement to bear the cost of the contribution will prevent the project proceeding, the local government may, upon receipt of the full amount of the contribution, make a donation of all, or part of, the contribution, back to the applicant, from general revenue.

6.10.2 Long Term Community Benefit

(1) Where a project or development is likely to provide significant long-term benefit to the Kolan Shire community, the local government may reduce or waive the contributions payable, such decision being based on a quantitative assessment of the financial benefits to the Shire, and such assessment being carried out by persons competent in the field of financial analysis.

(2) In instances where a contribution, or part thereof, is waived, the local government will transfer an equivalent amount from its general revenues into the appropriate reserve fund.

6.10.3 Upgrading Works not Listed in 5 Year Programme

(1) In instances where a contribution is required towards upgrading works on a sub-standard road and the upgrading works is not listed on the current 5 year program of works, the local government may accept a reduced contribution, such contribution being calculated as follows—

(a) Anticipated time span until upgrading will occur, is determined.

(b) The contribution rate as calculated in Clause 6.7 is discounted to a present worth using the current real rate of return on investments (i.e. the actual amount interest rates less the current inflation rates.)

POLICY 7: SUPPLY OF WATER

PLANNING SCHEME POLICY

7.1 Statement of Intent

(1) To provide new residential dwellers on rural acreage with an acceptable water storage for domestic purposes.

7.2 Policy

(1) Every habitable building is to be provided with a minimum of 22,500 litres rainwater tank storage to the except where—

(a) Such habitable building is within the benefited areas of the Gin Gin, Monduran and Wallaville Water supplies or capable of being supplied with water from one of those supplies.

(b) Such habitable building is provided with or capable of being provided with a domestic bore located on the allotment on which such habitable building is situated and that the supply is adequate and the quality of the water is suitable for domestic use.

(2) Every habitable building provided with, or capable of being provided with, a bore water supply in Clause (1)(b) is to be provided with a minimum of 1,000 litres rainwater tank storage.