GENERAL REQUIREMENTS

1. INTRODUCTION

This chapter is intended to guide the developer, from approval through to construction and issue of a Subdivision Certificate for subdivision development, and assumes that Council has granted consent for the project.

It is generally recommended that the Consultant/Project Manager consult with Council prior to commencement of design and construction to discuss the following requirements:

- conditions of consent,
- local conditions.
- intended design,
- construction methods and materials.

Design and construction shall be carried out in accordance with this Manual and any amendments the subject of a "revision" of any part of the Manual, and being the version current at the time of either the design or the construction. Should elements of a design, for the intended dedicated public works, at the time of construction, be considered by Council to be a variation to this Manual (the version current at the time of construction), the engineering plans under that certificate shall be reviewed and amended where necessary to ensure that the design and construction requirements meet current standards.

2. PROJECT MANAGER & PRINCIPAL CERTIFYING AUTHORITY

On all Subdivisions and Developments that require construction works, a specific person nominated to act as a Project Manager must be appointed. In addition the project must have an appointed Principal Certifying Authority (PCA) for the entire project.

In the case of subdivision or where it is intended that works be dedicated to the public,

Council must be appointed as the PCA.

In the case of works within an existing public road, consent for the works and approval of an engineering design may only be obtained under the Roads Act from either Council or the RMS.

The Project Manager must be readily available and have sufficient authority and ability to discuss and resolve any operational problems that occur during the works.

3. **DEFINITIONS**

- The <u>Engineer</u>, refers to the Council representative, who is the authorised responsible person for subdivisions and developments.
- <u>Accredited Certifier or Certifier</u>, refers to the authority or person qualified and experienced in their respective disciplines.

- The Applicant, (representing the Owner/Developer) refers to the person with authority to make decisions regarding the project, and may be the Project Manager.
- The <u>Contractor</u>, is the person engaged to carry out work.
- Approved, in the context of construction refers to any materials or treatments determined by the Engineer or Certifier to be suitable to meet relevant standards.
- <u>Footpath</u>, or <u>Shared-path</u> refers to the paved path which may be within a footway, pathway or public reserve.
- Footway, refers to the road verge between the road pavement and the road reserve boundary.
- Cycleway, a generic term used to describe a bicycle route, lane or path or that part of a separate path used for riders. It is usually within a road pavement and dedicated by markings for cyclists.
- Zoning, as applied by the Local Environment Plan (LEP) is as follows:
 - General Residential (R1): ≥450m2
 - Large-lot Residential (R5):
 - R5-V ≥2000m2
 - R5-X >5000m2
 - R5-Y ≥10000m2
 - R5-Z ≥20000m2
 - Business (B1-B6)
 - General Industrial (IN1)
 - Rural (RU): ≥40 Ha

All fees and contributions shall be paid in accordance with Council's fees and charges policy. Where a design is certified by an accredited certifier (other than Council), verification shall be made that the project has been designed in accordance with development consent and this Manual.

DESIGN & CONSTRUCTION 4.

4.1. **PLANS**

Detailed engineering plans shall be prepared by suitably qualified and experienced consultants to satisfy the requirements of development consent and this Manual.

4.2. CONSTRUCTION

No work shall commence on the site until:

- the project has "development consent",
- the engineering designs have been approved,

- the Construction Certificate issued,
- conditions of consent that require action prior to commencement of works, have been satisfied,
- the PCA has been appointed and
- payment of any necessary fees has been made.

Two working days notice in writing to the PCA is required prior to the commencement of site works. Long Service Levee shall be paid prior to the issue of the Construction Certificate. PCA fees shall be paid prior to the commencement of site works.

5. **INSURANCE / LEVY**

- Public Liability Insurance Policy: Contractors engaged on Development or Subdivisional Works are to have current Public Liability Insurance to the value of \$10 million before commencing construction. The policy is to indemnify Maitland City Council and/or the RMS where works occur in a public space.
- Workers Compensation: Contractors engaged on Development or Subdivisional works are to have a current Workers Compensation insurance Policy for all employees, as required by legislation.
- Professional Indemnity Insurance: Accredited Certifiers shall be insured in accordance with the requirements of the Environmental Planning and Assessment (Amendment) Act and the relevant Accreditation Body.
- Long Service Leave Levy: In accordance with the EP&A Act, payment of the levy where applicable, must be paid prior to issue of the Construction Certificate.

WORKS ON PUBLIC LAND 6.

Where works within public land such as a "road" or "open space" are necessary or are required through development consent under the EP&A Act, (such as road pavement, kerb & gutter, footpath, drainage, embellishments, etc) those works must be approved and completed to Council's satisfaction prior to issue of either the relevant Subdivision or Final Occupation Certificate issued under Part 4A of the Act, or as stated in the consent.

6.1. COUNCIL APPROVAL

Any works within public land may only be performed following consent issued by Council. That consent may be inherent within a Part 4A Construction Certificate issued by Council for a development project or may be gained separately upon application to Council.

APPROVED CONTRACTORS 6.2.

Works within a road reserve or other public land may only be performed by an experienced contractor who is approved by Council. The developer/builder shall apply to Council for that approval of the contracting company. (See also chapter 7).

6.3. COMMENCEMENT OF (MINOR) WORKS

The requirements under this topic relate primarily to minor developments.

Prior to commencement of work, the contractor/builder shall submit to Council:

- evidence of currency of Public Liability Insurance
- the method of works and proposed plant usage
- the proposed duration of the works
- a traffic management plan (if required)
- and shall have received from Council written consent to commence works.

The contractor's representative must be present at the critical inspections required by this Manual.

Regarding works in a road reserve relating to property driveway access and installation of services, general term of conditions for "opening" a road, (such as trenching across a road pavement and/or within the road verge) should be referenced. These documents are available from Council as part of a Road Opening application. Minor works, such as a driveway or stormwater pipe connection to the street drainage system, may be applied for, and consented to, under the Council form "Application to Construct Private Works on Footway"

For matters relating to the disruption of normal vehicle and pedestrian traffic movements and related to works (such as trenching) that may involve temporary or partial road closures, refer to Chapter 7.

6.4. ROAD CLOSURE

Permanent road closures may only be inaugurated by Council. An application to Council is necessary for consideration of such a proposal.

7. **PUBLIC UTILITY SERVICES**

Electricity, communications, water, sewer (and natural gas where applicable) shall be provided to subdivision developments in accordance with the relevant provider's requirements and in accordance with conditions of development consent.

The Developer is responsible for rectification of any damage to services resulting from construction activity.

All trenching and restoration shall be carried out to the provider's and Council's requirements. Adjustments to services, required by the development, shall be the responsibility of the Developer/Contractor.

7.1. **ELECTRICAL POWER**

For new urban residential, business and industrial subdivisions, all utility services shall be installed underground. In "large lot" residential R5 zoned areas, power shall be underground unless otherwise agreed with the energy provider. In rural RU zoned areas, overhead services are acceptable, their use being in the form of Aerial Bundled Cable (ABC) as the preferred option.



7.2. STREET LIGHTING

The major purpose of street lighting as defined by Australian Standards is required to "assist pedestrians to orientate themselves and detect potential hazards and to discourage fear of crime and crime against the person while protecting the integrity of the night time environment through control of light spill and glare".

Street lighting shall be provided for all new subdivisions for urban residential and business release as determined by Council, ulitising Australian Standard AS1158 part 3 as a design guide, with reference to Council's standard drawing SD001 for pole standard location and footing.

The street lighting design shall be in accordance with Council's requirements lighting guidelines and policy or Australian Standards to include;

- cut-off luminaries that limit adverse effects from glare.
- Adequate lighting for pedestrian activity purposes, as required by Council.
- lamps being the default supply of Ausgrid, (current supply at the adoption of this Manual being 29w Light Emitting Diode type)
- pathway lighting (not part of the roadway) where requested by Council as solar power generated type, unless nominated otherwise by Council.

Specific situations where lighting may require a higher standard, (but not limited to), are:-

- Major-road intersections.
- Minor-road intersection ("flag-lit")
- Pathways and underpasses.
- Public carparks.
- Taxi ranks.
- Bus stops.
- Stairways.

Lighting supply requirements for specific land-uses are:

- General Residential (R1) & Business (B1-B6): In accordance with development consent and Council's policy.
- **Industrial (IN1):** Street lighting shall not be provided.
- Residential (R5) large-lot: Street lighting shall not be provided.
- Rural (RU1, RU2, E4): Street lighting shall not be provided.
- Rutherford aerodrome: Lighting, in the vicinity of the aerodrome is subject to the requirements of the Civil Aviation Safety Authority's Civil Aviation Regulations "Manual of Standards Part 139".

Alternative lighting than that nominated above in zonings other than R1 & B will only be considered by Council subject to adequate warrants where special circumstances exist, such as proximity to destination points for potential night-time pedestrian traffic, and then only to Council's specifications.

7.3. OTHER AUTHORITIES

All works shall be carried out in accordance with the requirements of relevant Government Authorities, for issues that relate to Planning, Environment, Fire, WORKCOVER, etc. The developer is responsible for obtaining all required approvals.

PUBLIC RESERVES 8.

Public reserves relating to development include:

- areas of land to be dedicated to Council as a nature reserve (generally in its natural condition perhaps with a path or Asset Protection Zone)
- local parks (usually embellished for recreation activities for children)
- drainage reserves (predominately for stormwater drainage devices but may include surrounding recreation amenity, seating etc)
- playing fields (for organised sports)

For assistance in planning for public reserves (including associated playgrounds) developers should consult Council's adopted policies (for example see "Functional Brief: Local Playground") and seek consultation with Council personnel for each purposeful reserve type.

DRAINAGE & NATURE RESERVES 8.1.

Land to be dedicated to Council in its <u>natural</u> condition shall be left safe and tidy, free of hazards to public safety and made suitable for mowing (where appropriate, and being slashed prior to final inspection). All areas shall be managed in accordance with the requirements of Chapter 3 of this Manual. Designated reserve areas shall not be used to stockpile deleterious materials or waste. Revegetation shall be required where damage is caused to reserve areas.

Where directed by Council, signposting indicating restricted use of the reserve shall be erected.

Proposed reserves shall be examined for termite nests, by a qualified pest control person. Any identified nest shall be eliminated prior to issue of a Subdivision Certificate.

Defined paths through natural reserves shall be made safe by the removal of trees/limbs and shrubs with potential to either fall onto the path. Adverse screening adjacent to the path caused by vegetation that may impede normal surveillance, or create "entrapment" opportunities shall be removed.

Trees/limbs adjacent to and overhanging adjoining properties shall be removed.

An assessment by an arborist or a Council officer shall be made prior to the work being performed.

Land to be dedicated to Council for <u>drainage</u> purposes shall be planned to ensure safety for areas that may attract public access, provide low-maintenance vegetation, and ease of access and manoeuvrability for mowing plant. A Construction Certificate will be required for all structural elements.

In planning for drainage reserves, the area of land set aside should:

- be kept to a minimum for that purpose except as may be deemed necessary where coincidental with other non-drainage uses.
- Take into account potential expansion of drainage infrastructure for future contributing catchments.

8.2. PARKS & PLAYING RESERVES

Land that is designated through planning strategies to be local parks and playing fields shall be subject to specific development consent. All proposed improvements shall be approved by Council.

Improvements shall be inspected by Council officers and all approved equipment and facilities installed, shall be certified by either the manufacturer or a suitably qualified person, as satisfactory for public use and compliant with Australian Standards or some other appropriate standard.

Parks shall be serviced and enhanced with:

- water supply (including irrigation sprinklers with appropriate safety control devices) for establishing vegetation
- landscaping in accordance with an approved plan conducive for efficient maintenance
- lighting only where specifically required by Council (preferably solar powered)
- path paving at a minimum width of 1.8m and concrete edging around specified areas
- disability access
- maintenance vehicle access and lockable gates
- barriers such as steel bollards, and fencing to deter unauthorised vehicle entry
- signposting nominating restricted activities within the park
- an assessment for suitability of any existing trees, as per Chapter 3 Environment, Section 4

Where structures such as steps, handrails, ramps, balustrades, retaining walls, and other public use components are provided, they shall comply with the corresponding provisions with design parameters for such items, within the Building Code of Australia. For example stairs must comply with clause D2.13 of Volume 1 of the BCA in regard to their design and construction.

8.3. PLANS OF MANAGEMENT

Plans of Management for public reserves shall be prepared and submitted to Council prior to issue of a Subdivision or Occupation Certificate for each type of reserve indicating the location of infrastructure and services, and including a maintenance and replacement regime for each applicable component.

9. SUBDIVISION CERTIFICATE

Prior to issue of the Subdivision Certificate, the following items (but not limited to those items) shall be satisfied:

- Compliance with the development consent
- Submission of evidence that satisfactory arrangements have been made with the utility authorities.
- Payment of all contributions and fees.
- Submission of bonds (cash or bank guarantee) where necessary.
- Submission of a copy of any instrument required under the Conveyancing Act. Regarding the creation of interallotment drainage easements under section 88B of the Conveyancing Act, the person or authority given the power to release vary or modify such easements shall be; "the lots burdened and the lots benefited, only with the consent of Maitland City Council"
- Practical completion of construction works.
- Submission of geotechnical reports and test results, including pavement layer details
- Submission of Works-As-Executed Plans.
- Lot classification as determined by AS 2870

9.1. LOT CLASSIFICATION

Lot classification in accordance with AS 2870, is required for land within various planning zones, in accordance with the following guidelines:

- Residential (R1) the classification shall apply to the whole of the lot.
- Rural- classification is not required
- Large-lot Residential (R5) the classification shall apply to the whole of the lot or that portion of the lot considered suitable for dwelling construction
- Industrial and business zonings do not attract classification requirements by Council.

Regarding a 'P' classification, where subdivision work (such as filling) is performed on the land the subject of development consent, Council's preference is that the works be performed such that no lot be classified as such. Similarly, land that in its natural state is determined to be "P" classification is considered by Council as not a desirable outcome for release, and the developer should consider performing works to improve the classification.

9.2. ROAD WIDENING

Road widening involves an adjustment to a road reserve boundary such that a part of a property under development may be acquired by, or dedicated to Council as "public road" in accordance with an adopted road widening scheme or as a requirement for planned works within Council's construction programme. Where a Subdivision Certificate is to be issued for a development, the widening shall be shown on the survey plan.

BONDS FOR INCOMPLETE WORK 10.

Bonds may be accepted to enable early release of the Subdivision Certificate. Consideration of a bond shall be given where works are substantially complete and construction items are delayed by circumstances beyond the reasonable control of the Developer or Contractor.

Consideration to the bonding will be subject to the following:

- 1. The works do not adversely affect the operation of the development.
- 2. The incomplete works do not present a safety issue that cannot be satisfactorily managed.
- 3. The completion of the works will not inhibit the commencement of building development on the new lots.

If the proposal meets the abovementioned criteria the following shall be provided/fulfilled:

- A timeframe schedule for the carrying out of the bonded works.
- Suitable security may be cash, a bank cheque or irrevocable bank guarantee to cover the cost of the outstanding works. This shall be 125% of the agreed contractual costs.
- Any bank guarantee shall not have an expiry "sunset" date, including a statement as to Council's absolute right to draw on the security to carry out the works and if required to recover any additional costs incurred in the carrying out of the works.
- Acceptance of unencumbered access for Council to enter the site and carry out works if necessary.
- The payment of a release fee in accordance with Council's Management Plan.

The following works should be in place prior to consideration of a bond for outstanding works:

- roads with a primer seal applied
- disturbed soil stabilised
- drainage systems/structures in place

Items, where justified, for consideration for bonding may typically be:

- asphalt
- footpath paving
- turf beyond that necessary for stabilisation
- signposting and linemarking not considered essential for public safety
- landscaping

11. WORKS AS EXECUTED

Works-As-Executed (WAE) plans (or the equivalent electronic files) shall be prepared by a registered surveyor and be submitted to Council for approval. Where the WAE plans show no variations at the following points of reference, it is to be assumed that no variation to the design exists. Where construction varies from permitted tolerance, Council may require rectification. Additional testing may be required to determine the extent of rectification works necessary (if any). Works-As-Executed plans shall provide sufficient details to accurately define the works and to demonstrate (tolerance) compliance, and shall include: -

- Sub-grade centreline and lip-line levels or "select" where employed. Electronic conformance reports that are generated from field survey during construction at the subgrade level are accepted as an alternative to conventional survey methods, whether surveyed at random point or specific chainages.
- Location and level of kerb and guttering, centreline of road, crown of road, either lip of gutter or top of kerb, rear of footpath (or at boundary) and overland flow paths.
- Location and level of piped and open drainage systems including pipe sizes, subsoil drains/mats and interallotment systems.
- Finished surface levels of all cut/fill regraded areas beyond the road reserve.
- Where specifically requested, traffic control devices including pavement marking.

Where construction parameters vary from, or are not specifically nominated and located on, the approved plans, further sub-grade information, as follows, shall be noted on the plans or detailed within a final geotechnical report:

- Sub-grade replacement/modification, type, thickness and extent.
- Sub-base and base-course layer thickness, type and stabilising agent.
- Location of tests carried out on the various material layers.

UNAPPROVED WORKS 12.

Where additional works or departures from the approved plans are made without approval, the Works as Executed plans must be accompanied by a report and/or calculations prepared by the Design Consultant providing sufficient justification for acceptance. Such reports shall also address the following:

- An explanation detailing that the departures comply with this Manual, or adequately satisfy the intent of the Manual or some other standard.
- Where works do not comply and are not accepted by Council, the report shall recommend remedial works necessary to rectify non-compliance.