

**Territory and Municipal Services  
Reference Document 7**



**REQUIREMENTS FOR  
OPERATIONAL ACCEPTANCE  
SUBMISSION  
for  
Hard Public Infrastructure Works  
Issue 2 Revision 3**

**APPROVED FOR ISSUE**

Approved by:

Fay Steward  
Executive Director  
Land Management and Planning  
Date: **August 2010**

## TERRITORY AND MUNICIPAL SERVICES

# REQUIREMENTS FOR SUBMISSION REQUESTING OPERATIONAL ACCEPTANCE

# AA

Document No. AA-REF- 07

### 1 PURPOSE

This document establishes the Territory and Municipal Services (TAMS) mandatory operational requirements (Requirements) to be included in any Submission requesting Operational Acceptance (Submission) of hard public infrastructure works (Works).

### 2 SCOPE

These Requirements apply to any formal Submission for all Works.

### 3 OBJECTIVES

The Requirements are issued to:

- define the information required by TAMS for any Submission to be accepted, reviewed, assessed and ultimately endorsed, and
- encourage high quality Submissions with complete supporting documentation that complies with these Requirements.

### 4 DEFINITIONS, TERMS AND ABBREVIATIONS

#### Developer

In the private sector, the organisation nominated in the Deed of Agreement as the 'Developer' including its employees, contractors, successors and agents.

In the public sector, the Land Development Agency (LDA) or any other ACT Government agency responsible for development of public infrastructure works in the ACT including its employees, contractors, successors and agents.

#### Coordinator

The Developer, the Head Consultant or the agent nominated by the Developer as being responsible for the coordination of all disciplines of design and documentation prepared and certified by the Consultant/s and for the superintendence of the construction of the Works. The Coordinator shall be responsible for the lodgement of the Submission with TAMS and shall be the sole point of contact between Asset Acceptance, through the Project Lead, and the Developer throughout the life of the development. Asset Acceptance is not required to meet or communicate directly with any other entity or individual other than the nominated Coordinator on issues relating to the Submission.

#### Head Consultant

The organisation responsible on behalf of the Developer for the overall design and/or site superintendence of the whole of the Works and certification that the design and/or construction of the Works comply with these Requirements and Standards.

## **Consultant**

The organisation responsible for the design and/or site superintendence of part or the whole of the Works and certification that the design and/or construction of that part of the Works for which it is responsible complies with the Requirements and the Standards.

## **Asset Acceptance**

Asset Acceptance is the section of TAMS responsible for coordinating the Asset and nominated capital works design and construction acceptance process on behalf of TAMS.

## **Asset Acceptance Project Lead (Lead)**

The Manager who will act as a single point of contact for the life of the project.

## **Standards**

All Australian Standards, applicable Government Agency requirements, codes and guidelines and all statutory and regulatory requirements governing the design of the Works.

## **Works**

The public infrastructure works, excluding all soft landscaping, for which TAMS will become the ultimate owner and operator on behalf of the ACT Government.

## **Operational Acceptance**

Acceptance by TAMS of the ownership of the Works at a stage of construction when the work has reached completion and is considered as fit for occupancy. Acceptance is subject to certification by the Consultant, endorsed by the Coordinator, that all outstanding work and rectification of all defects has been satisfactorily completed.

# **5 GENERAL REQUIREMENTS**

## **5.1 General**

A Certificate of Operational Acceptance can only be requested by the Coordinator when there are no safety issues to the general public and where the Submission complies with the Requirements.

The request for Operational Acceptance shall be submitted by the Coordinator under cover sheet AA-SCS-07 Operational Acceptance Submission Cover Sheet (refer Attachment A).

## **5.2 Documentation**

The Submission shall be accompanied by:

1. A Formal **Request for a Certificate of Operational Acceptance**.
2. **Certification** by the Consultant, endorsed by the Coordinator, that the Works for which operational acceptance is requested has been constructed according to the approved design requirement and that the Works complies with the Standards unless otherwise specified in the design.
3. A copy of the **Certificate of Design Acceptance**.
4. A **Site Inspection Report** stating:
  - Project Title
  - Extent of Work

- Contractor
- Inspection Date
- Inspection Purpose
- Attendees

The report shall be formatted to identify:

- The element inspected;
  - compliance, and
  - any action taken/proposed including the date of proposed completion of rectification.
5. **Works as Executed (WAE) Quality Records** in accordance with TAMS Document No. AA-REF-08 '*Works as Executed Quality Records*'.
  6. A list of all **approved and non-approved amendments**.
  7. A marked-up hard copy drawing highlighting and listing all **outstanding works**.
  8. **Stormwater test information** including ActewAGL inspection and test certificates, CCTV and SEWRAT data.
  9. A **Bill of Quantities and Costs** prepared in accordance with AA-REF-08 Requirements for Works as Executed Quality Records for all works that are to become TAMS asset.
  10. The completed **Audit Forms** listed in the Attachments verifying that all work has been inspected/audited and validating that the elements have been constructed in accordance with the approved design and are fit for purpose.

**The Submission must be complete and include all the elements for the Works. TAMS will not accept incomplete Submissions or Submissions from individual consultants for separate elements of the Works. Where TAMS considers the Submission to be incomplete, the Coordinator will be advised by the Lead within one working day (i.e. by close of business the next working day following receipt of the Submission) to this effect and will be requested to collect the Submission from TAMS offices. Assessment will not commence until a complete Submission has been received.**

## 6 OPERATIONAL ACCEPTANCE

Upon completion of the review process and the Submission assessed as complying with the Requirements, a Certificate of Operational Acceptance will be issued to the Consultant.

## 7 REFERENCES

*Works as Executed Quality Records*, Document No. AA-REF-08, Territory and Municipal Services.

*Design Standards for Urban Infrastructure*, Territory and Municipal Services. Available online at [http://www.tams.act.gov.au/work/standards\\_and\\_procedures/tams\\_reference\\_documents](http://www.tams.act.gov.au/work/standards_and_procedures/tams_reference_documents)

*Standard Specification for Urban Infrastructure*, Territory and Municipal Services.

*Ref-11 Territory and Municipal Services Drafting Standard*, Territory and Municipal Services. Available online at [http://www.tams.act.gov.au/\\_data/assets/pdf\\_file/0003/34698/Ref-11\\_TAMS\\_Drafting\\_Standard.pdf](http://www.tams.act.gov.au/_data/assets/pdf_file/0003/34698/Ref-11_TAMS_Drafting_Standard.pdf)

*Development Control Code For Best Practice Waste Management In The ACT*, Urban Services September 1999. Available online at [http://www.tams.act.gov.au/\\_data/assets/pdf\\_file/0003/12495/wastemanagementplan.pdf](http://www.tams.act.gov.au/_data/assets/pdf_file/0003/12495/wastemanagementplan.pdf)

**ATTACHMENTS**

Attachment **A**: Document No. AA-SCS-07 Operational Acceptance Submission Cover Sheet.

Attachment **B** : Asset Audit Forms

Document Nos. AA-AAF-Roads-01(ext) Road Asset Audit Form  
AA-AAF-Roads-02(ext) Public Transport Audit Form  
AA-AAF-Roads-03(ext) Traffic Construction Audit Form  
AA-AAF-LS-01(ext) Hard and Soft Landscape Works Asset  
Audit Form  
AA-AAF-SW-01(ext) Stormwater Asset Audit Form  
AA-AAF-Struct-01(ext) Structures Asset



## Operational Acceptance Submission Cover Sheet

For submission lodgment requirements please refer to;

[http://www.tams.act.gov.au/city-services/Development\\_Approval\\_and\\_Applications/operational\\_acceptance](http://www.tams.act.gov.au/city-services/Development_Approval_and_Applications/operational_acceptance)

**Project Title**

**Description**

**Developer's/ Client's details**

**Name of the entity**

**Address**

**Contact person**

**Tel. number**

**E-mail**

**Applicant's details**

**Company name**

**Contact person**

**Company address**

**Tel. number**

**E-mail**

These documents are submitted for audit and comments or endorsement.

All Documents are in accordance with the design brief and have been prepared in accordance with the Requirements detailed in Reference Document AA-REF-07 Requirements for Submission Requesting Operational Acceptance (Ref-07) and Reference Document AA-REF-08 and Reference Document AA-REF-11 Requirements for Works as Executed Quality Records (Ref-08 and Ref-11).

**Note:**

The Submission must be complete and include all the elements for the Works. TAMS will not accept incomplete Submissions or Submissions from individual consultants for separate elements of the Works. Where TAMS considers the Submission to be incomplete, the Applicant will be advised within five working days to this effect and will be requested to collect the Submission from TAMS offices. Assessment will not commence until a complete Submission has been received.

**Applicants signature**

**Date**

**All documents to be submitted in hard and soft copy**

	Yes	No	Office use
A formal request for Certificate of Operational Acceptance (Ref 07 clause 5.2.1)			
Relevant certification (Ref 07 clause 5.2.1 & 5.2.2)			
A copy of Design Acceptance certificate (Ref 07 clause 5.2.3)			
Completed Audit Forms (Ref 07 clause 5.2.10)			
Site inspection report (Ref 07 clause 5.2.4)			

	Yes	No	N/A	Office use
List of approved and non approved amendments (Ref 07 clause 5.2.6)				
List of all outstanding works (Ref 07 clause 5.2.7)				
Stormwater test incl. test certificates from SMEC (Ref 07 clause 5.2.8)				
Index (Ref 08 clause 6.1.1)				
Project description (Ref 08 clause 6.1.2)				
Parties to the project (Ref 08 clause 6.1.3)				
Asset Description Forms (Ref 08 clause 6.1.4)				
Works as Executed quality records (Ref 08 and Ref 11)				
Summary of construction quality records (Ref 08 clause 6.1.7)				
Operations and maintenance manuals (Ref 08 clause 6.1.8)				
Warranty documents (Ref 08 clause 6.2.8)				
Keys and locks (Ref 08 clause 6.1.9)				
List of all drawings and revision numbers in word or excel format				
Photos of assets ( clause 7.10.1 )				
Cover letter from LDA coordinator (for LDA projects only)				

#### Elements of works and submission status

	1st submission	2nd submission	3rd or following submissions
<b>Civil</b>			
<b>Landscape</b>			
<b>TCD</b>			
<b>Public lighting</b>			

As per ["Fees and charges Guideline to the Industry"](#), fees apply for the assessment of the 3rd and the following submissions.

#### Office use only

Compliance with documentation requirements of [Reference Document 07](#) and [Reference Document 08](#)

	Compliant	Not compliant
Submission		

Checked by

Date

# ATTACHMENT B: Road Asset Audit Form

Reference No: .....	Project Title: .....
Certifier: .....	Consultant: .....

CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable	CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable
<p><b>Roads Pavement</b></p> <p><b>Pavement defects</b></p> <ul style="list-style-type: none"> <li>• cracking</li> <li>• pumping</li> <li>• roughness</li> <li>• rutting</li> </ul> <p>Quality of asphalt</p> <p>Joints</p> <p>Surface drainage</p>				<p><b>Road Geometrics</b></p> <p>Built to plan</p> <p>Operational defects</p> <p>Crossfall</p> <p>Maximum slope 17%</p> <p>Intersection</p> <p>Design vehicle turning paths</p> <p>Edge details</p> <p>Super elevation</p>			
<p><b>Concrete Kerb</b></p> <p>Damage to kerb</p> <p>Expansion joints</p> <p>Built to line and level</p> <p>Correct profile</p> <p>No water ponding</p> <p>Continuity AC/Concrete</p>				<p><b>Road Design Criteria</b></p> <p>Design/posted speeds all roads</p> <p>Minimum horizontal geometry</p> <p>Maximum vertical grades</p> <p>Minimum vertical curve details</p> <p>Typical road/path cross sections</p> <p>Design vehicle</p> <p>Road clear zone dimensions</p> <p>Design criteria shown on plans</p>			
<p><b>Concrete/Asphalt paths</b></p> <p>Correct width</p> <p>Correct location</p> <p>Crossfall-general 2% to 5%</p> <p style="padding-left: 20px;">- wheelchairs/prams &lt;= 2.5%</p> <p>Slope &lt;= 10%</p> <p>Expansion joints</p> <p>Trip hazards</p> <p>Cracks in paths</p> <p>No ponding water</p> <p>No trapped low points</p> <p>Concrete finish</p> <p>Drainage correct</p> <p>Pavement transition details</p> <p>Asphalt layer thickness</p>				<p><b>Road Furniture</b></p> <p>Guideposts</p> <p>Barrier details</p>			
				<p><b>Roadside Drainage</b></p> <p>Table drains</p> <p>Suitable flow paths</p> <p>Avoids depositing silt etc.on paths</p>			
				<p><b>Kerb Crossings</b></p> <p>Correct location</p> <p>Correct dimensions</p> <p>Ramp suitable for sight impaired</p>			

**Certified as checked:**

**Signature:** ..... **Date:** .....



# ATTACHMENT B: Public Transport Audit Form

Reference No: .....	Project Title: .....
Certifier: .....	Consultant: .....

CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable	CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable
<b>Bus Routes</b>				<b>Bus Priority Measures</b>			
Road widths				Transponders			
Pavement strength				Advance detectors			
Bus stops on arterial roads				Bus lanes			
Turning lanes				Bus signals			
Swept path				Transit lanes			
Gradients				Signage and line marking			
Route efficiency							
<b>Bus Stops</b>				<b>Intersections</b>			
Peg				Turning lanes			
Pole				Turning circles			
Timetable holder				Swept path			
Sign				Lane widths			
Bench				Sight lines			
Disability access				Bus priority			
Lay-by				Transponders			
Line marking				Bus lanes			
Pedestrian hardstand				Bus signals			
Sight lines							
Safety				<b>Interchanges</b>			
Shelter				Pavement strength			
Location				Bike lockers			
				Passenger services			
				Bus operations			
				Integration with other road users			

**Certified as checked:**

**Signature:** ..... **Date:** .....

# ATTACHMENT B: Traffic Construction Audit Form

Reference No: ..... Project Title: .....

Certifier: ..... Consultant: .....

CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable	CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable
<b>Check Elements</b>				<b>In Accordance with Approved Drawings</b>			
Devices on Roads				<b>Signs</b>			
Speed humps				• street			
Thresholds				• guide			
Traffic Islands				• regulatory			
Road width				• warning			
Cross section				Sign material and class			
Driveway locations				<b>Road marking</b>			
Access visibility				• lines			
Vertical curves				• arrows			
Lighting at pedestrian crossing				• messages			
Road reinstatement				• durability level			
Cycle rest rails				• RPMS/CPMS			
<b>Appropriateness of TCD's for Arrangements</b>				• reflectivity			
Roundabouts				• skid resistance			
Intersections							
Speed zones							
School zones							
Traffic calming							
Pedestrian provision							
Taxi provision							
Disabled							
Buses							
Cycles							
Loading zones							

Notes: i) Check arrangements against approved drawings.  
 ii) Check arrangements are safe in operation.

**Certified as checked:** Signature: ..... Date: .....

# ATTACHMENT B: Hard and Soft Landscape Works Asset Audit Form

Reference No: ..... Project Title: .....

Certifier: ..... Consultant: .....

CHECK ELEMENTS	Audit			CHECK ELEMENTS	Audit		
	Unsatisfactory	Satisfactory			Unsatisfactory	Satisfactory	
<b>Trees</b>				<b>Paving</b>			
Condition				Construction details			
Species				Material details			
Spacing				Gradients			
Planting Details				Parking			
Root barriers				<b>Retaining Walls</b>			
Winter shade considered				Construction details			
Clearances				Material details			
• utilities				Safety rails			
• fencing				<b>Earthworks</b>			
• kerbs				Side slopes max. 1:4			
• footpaths				Cover material			
• buildings				Clearance from structures			
<b>Planted Areas</b>				<b>Water Features</b>			
Condition				Sewer connection			
Details				Landscape integration			
Species				Appropriate species			
Spacing				Planting clearances			
Surface treatment				Water pump			
Edges				Water supply			
Avoid driver sight lines				Backflow prevention			
Distance from structures				Water containment			
<b>Lawns/Grass</b>				<b>Irrigation</b>			
Condition				Commissioned			
Gradients				Performance			
Species				Meter pit detail			
<b>Playgrounds</b>				Backflow prevention			
Softfall materials				Pipe sizes			
Softfall containment				Sprinkler type			
Structures to Australian Standards				Sprinkler orientation			
Paint/coating				Controller			
Spacing of structures				<b>Drainage</b>			
Clearances				Contours			
				Overland flows			

**Certified as checked:**

**Signature:** ..... **Date:** .....



# ATTACHMENT B: Structures Asset Audit Form

Reference No: ..... Project Title: .....

Certifier: ..... Consultant: .....

CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable	CHECK ELEMENTS	Complies - Yes	Complies - No	Not applicable
<b>Design Factors</b>				<b>Retaining Walls</b>			
Flood levels				Geometry			
Lanes				Material			
Design loads				Drainage			
Spans				Backfill			
Pedestrians				Footing stability			
Cycles				Geotechnical report			
Lighting				Soil bearing pressure			
Min. vertical clearance over roads				Rails for heights "x"m			
<b>Bridges and large culverts</b>				<b>Safety Barriers</b>			
Bridge number				Hazards			
Drainage				Type			
Cross fall				Length			
Long fall				Galvanising			
<b>Barriers</b>				Posts			
Type				Terminal treatments			
Height				<b>Materials</b>			
Length				<b>Concrete</b>			
Transitions/terminals (safety)				Workmanship			
Bolting arrangements				Cracks			
Structural system				Rust			
Joints				Surface finish			
Welding				Formwork removed			
Bearings				<b>Steel</b>			
<b>Superstructure</b>				Correct welds			
Slab				Weld treatments			
Beams				Member sizes			
Approach slabs				Rust			
<b>Substructure</b>				Fixtures			
Footings				Ponding at joints			
Piers				<b>Paint</b>			
Abutments				Layers			
Erosion protection				Thickness			
Stone pitching				Type			
				<b>Bearings</b>			
				Type			
				Orientation			

Certified as checked:

Signature: ..... Date: .....