SC6.1.9 Plan Presentation and Documentation

SC6.1.9.1 General

SC6.1.9.1.1 Presentation Standards

(1) These presentation standards apply to engineering and "as-constructed" plans submitted for approval for development work and internal and external civil work.
(2) Engineering Drawings and Specifications, and Inspection and Testing Plans should be submitted in accordance with SC6.1.6.2.

Guideline:
Standardisation of the presentation of engineering design drawings and "as-constructed" plans submitted for approval is necessary for consistency of Council's records and desirable for expedient checking and approval.

(3) The Consulting Engineer shall sign the Statement of Compliance Form. Failure to submit this Form will delay approval of the proposed works.
(4) Scaled Engineering Drawings are required for plan checking.

Guideline:
For details of landscaping plan presentation refer to SC6.1.13 Landscape Plans and Plant Species

SC6.1.9.2 General Requirements

SC6.1.9.2.1 Title Block

Each sheet of Engineering Drawings is to have a Title Block containing the following information:

(a) Estate Name (if any).
(b) Real Property Description.
(c) Locality.
(d) Developer's Name.
(e) All Council's Development Application numbers e.g. 2010-1234.
(f) Scales including a scale bar.
(g) Plan Number and Sheet Number.
(h) Schedule and Date of Amendments.
(i) Signed design certification, by an experienced designer.
(j) Signed checking certification, by a qualified Civil Engineer.
(k) Signed approved by an RPEQ.

SC6.1.9.2.2 Size and overall dimensions

(1)	A0	1189mm x 841mm	-	Useable only with approval of the Engineer.
(2)	A1	841mm x 594mm	-	Required where A3 plans are illegible.
(3)	A3	420mm x 297mm	-	Preferred size.

SC6.1.9.2.3 Scales

(1) Scales used for all plans should preferably be those recommended by the Standards Association and AUSTROADS namely, 1:1, 1:2 and 1:5 and multiples of 10 of these scales.
(2) Although not preferred, the scales 1:25 will be accepted; and 1:125 and multiples and sub-multiples of 10 of these scales.
(3) No other scales are acceptable. Reduced plots are not acceptable.
(4) Typical Scales
The following scales are for particular uses but may be varied as appropriate to the works concerned:

(a)	Plans:	1:1000 or 1:500
(b)	Longitudinal Sections:	10 :1 Distortion i.e.
	(i) Horizontal:	1:1000, 1:500 and;
	(ii) Vertical:	1:100, 1:50
	unless clearer presentation is achieved by use of other distortions	
(c)	Intersection Details:	1:200, 1:100, or 1:250
(d)	Cross-Sections:	1:100.
(e)	Engineering Details:	1:20 or 1:10.

(f) Sewer & Stormwater Plans 1:500
(g) Water supply & Earthworks 1:1000

(5) Correct street names and lot numbers are to be shown on all relevant drawings.

SC6.1.9.2.4 Dimensioning on Plans

(1) Linear dimensions on all roadworks plans will be in metres, with the exception of some detail plans of small structures (e.g. access chambers) and some standard plans (e.g. kerb and channel), which may be in millimetres.

SC6.1.9.2.5 Standard Cross-section Intervals

Cross-sections should be provided to roads at 20.0m intervals, with further subdivision of 10.0m to 5.0m intervals where necessary due to horizontal or vertical curvature.

SC6.1.9.2.6 Chainages

Chainage on plans should be expressed to 0.01m and tied into Council's asset chainages.

SC6.1.9.2.7 Levels

(1) All levels should be reduced to Australian Height Datum.
(2) Reduced levels of:
(a) bench Marks and Reference Pegs including Permanent Survey Marks should be expressed to three decimal places i.e. 0.001m;
(b) roadworks and stormwater drainage may be expressed to two decimal places i.e. 0. 01m; and
(c) sewerage reticulation may be expressed rounded to two decimal places i.e. 0. 01m.

SC6.1.9.2.8 Grades

(1) Road grades should be shown to two decimal places.
(2) Pipe grades should be shown to two decimal places.

SC6.1.9.3 Design Drawings

SC6.1.9.3.1 Drawings Required

Engineering drawings should include or show each of the following:
(1) locality plan;
(2) subdivision layout/staging plan;
(3) earthworks plan and/or construction table;
(4) roadworks and drainage plan;
(5) line-marking and signage plan;
(6) longitudinal section of each road;
(7) standard cross-sections;
(8) cross-sections of each road;
(9) detail plan of each intersection and cul-de-sac;
(10) longitudinal section of each drainline;
(11) sewerage reticulation plan;
(12) longitudinal section of each sewer line;
(13) water reticulation plan;
(14) inter-allotment drainage plan;
(15) landscape plan;
(16) drainage calculations, and catchment plan;
(17) water quality control plan;
(18) electrical reticulation/conduit plan;
(19) street lighting.

SC6.1.9.3.2 Drawing requirements

(1) The minimum requirements for each drawing are to be generally as follows unless the RPEQ submitting the drawings is able to detail the design in a simplified format acceptable to the Engineer. In such instances the RPEQ is required to discuss such a proposed format with the Engineer prior to preparing plans in such a manner.
(a) Locality Plan:

(i) locate the subdivision in relation to adjacent towns, main roads, major streets, etc.;
(ii) north point;
(iii) may be included on Layout/Staging Plan for large jobs or Roadworks and Drainage Plan for smaller jobs.

(b) Layout/Staging Plan:
(i) for large subdivisions, the layout plan should show the relationship of all new roads to each other, and the existing roads adjoining the subdivision;
(ii) where development is to be carried out by Stages, the boundaries of proposed Stages should be shown on this plan, and the stages identified by numbering;
(iii) for small subdivisions, where all new roads can be shown on one detailed plan, the layout plan may be omitted.

(c) Earthworks Plan:
(i) legend;
(ii) existing site contours and finished surface contours;
(iii) limits and levels of major allotment cut and fill - distinguished by hatching;
(iv) location of cut and fill batters relative to allotment boundaries;
(v) location and levels of retaining walls (if required);
(vi) batter slopes;
(vii) Q_{100} defined flood level (if appropriate);
(viii) flood fill level (if appropriate);
(ix) north point;
(x) for smaller subdivisions, the earthwork details may be included on the Roadworks and Drainage Plan;
(xi) location(s) and level(s) of permanent survey mark(s), reference stations etc., used as datum for the works.

(d) Roadworks and Drainage Plan for each road and any joins to existing roads:
(i) legend;
(ii) road and drainage reserve boundaries;
(iii) allotment numbers and boundaries, both existing and proposed;
(iv) centreline, or other construction line;
(v) chainages, on centreline or construction line;
(vi) bearings of the centreline or construction line (or set out details);
(vii) tangent point chainages or each curve (or set out details);
(viii) radius, arc length, tangent length and secant distance of each curve (or set out details);
(ix) chainage and the intersection point of road centrelines or construction lines;
(x) kerb lines, kerb radii, and chainage of all tangent points of the kerb line;
(xi) edge of pavement, where no kerb is to be constructed;
(xii) dimensioned road reserve, footpath and pavement widths, where these differ from the standard cross-section;
(xiii) existing and finished surface contours, highlighting cut and fill areas;
(xiv) drainage catchment boundaries and identification reference;

Guideline:
Drainage catchment boundaries may be shown on a separate catchment plan.

(xv) drainage easements location and dimensions
(xvi) drainline locations, diameters;
(xvii) access chamber locations, and inlet and outlet invert levels;
(xviii) gully locations;
(xix) location of existing utilities or other existing works within the site;
(xx) location and levels of bench marks and reference pegs;
(xxi) north point;
(xxii) linemarking, and signing.

Guideline:
Linemarking and signing may be shown on separate plan(s).

(e) The Longitudinal Section of each road should include:
(i) chainages;
(ii) existing surface or peg levels;
(iii) design road centreline and kerb lip levels;

(iv) cut or fill depths;
(v) earthworks quantities;
(vi) design grades as a percentage;
(vii) chainages and levels or grade intersection points;
(viii) chainages and levels of crest and sag locations;
(ix) lengths and radii of vertical curves;
(x) sections on control lines on superelevated curves (i.e. pavement edges, kerb or lane edges), and superelevation tabulation, incorporating transitions;
(xi) sight distance diagram, for each direction of travel, where warranted;
(xii) horizontal alignment including superelevation transition details
(xiii) design speed.

(f) A Standard Cross-section should be shown for each road, including:
(i) road reserve width;
(ii) pavement widths;
(iii) seal widths;
(iv) footpath widths;
(v) crossfalls of pavement and footpaths;
(vi) pavement depth - minimum or nominal;
(vii) type of kerb and channel;
(viii) type of pavement surfacing;
(ix) sub-soil drainage;
(x) the standard cross-section may be included in the detailed cross-sections provided for each road.

(g) A Cross-section should be shown for each pegged chainage on each road and show:
(i) road reserve boundaries;
(ii) pavement centreline and/or other construction line;
(iii) natural surface;
(iv) design cross-section;
(v) crossfall of pavement and footpath, pavement and footpath widths and pavement depths wherever these differ from the standard cross-section.

(h) Detail Plans of intersections should include all the relevant information required for Roadworks and Drainage Plans, as listed above in SC6.1.9.3.2 (1)(d) above, together with additional details such as setting out and levels on all kerb returns, pavement contours, channelisation works, linemarking and signing.

(i) Longitudinal Sections for each Drainline should be shown, including:
(i) chainages;
(ii) existing surface levels;
(iii) design finished surface and invert levels;
(iv) access chamber chainages and offsets and inlet and outlet invert levels;
(v) distances between access chambers;
(vi) grade of each pipe;
(vii) class of each pipe length including any special backfill requirement;
(viii) hydraulic grade line, design storm frequency;
(ix) access chamber diameters and/or reference to separate detail drawing;
(x) location of other services;
(xi) Where cross road drainage occurs, separate cross sections are to be provided for each structure in lieu of longitudinal sections as per standard TMR format.

(j) The Sewerage Reticulation Plan should include:
(i) legend;
(ii) all allotments and allotment numbers;
(iii) boundary of the subdivision;
(iv) north point;
(v) location and size of existing sewers;
(vi) location and size of new sewers including line number and length of line;[1]
(vii) location of other services which cross sewer lines;
(viii) location of access chambers with their numbers;
(ix) identification of allotments which are currently sewered;
(x) existing and finished surface contours sufficient to enable verification of house connection design;
(xi) location of interallotment drainage systems;
(xii) details of permanent survey marks including AHD from which levels are to be transferred;

[1] Line numbers are available from Council.

(xiii) details of pumping stations including location, inlet/outlet, cutoff levels, electrical and water supply, size of pumping plant, control and alarm system;
(xiv) diameter, class and route of pressure main(s);
(xv) clear identification of any alterations/connections to existing sewers to be completed by Council at developer's cost;
(xvi) locations of sewer house connections.

(k) The Longitudinal Section of each Sewer Line should include:
(i) upstream and downstream invert levels;
(ii) existing and finished surface levels;
(iii) depths to invert;
(iv) grade (1:x);
(v) diameter, type and class of pipe;
(vi) chainages;
(vii) distance between access chambers;
(viii) access chamber type, cover type and drop type;
(ix) concrete bulkheads (where required);
(x) location, diameter invert level of all underground services at point of intersection with sewers;
(xi) the design location of each house connection branch indicated with an X and the type and invert level of the branch.[2]

(l) Longitudinal Sections of Pressure Mains should include:
(i) existing and finished surface levels;
(ii) invert levels at critical points;
(iii) depth to invert;
(iv) locations and types of bends/fittings;
(v) pipe diameter, type and class;
(vi) chainages;
(vii) thrust block details;
(viii) location, diameter and invert level of all underground services at point of intersection with the pressure main;
(ix) locations, signs and details of air vents;
(x) locations and dimensions of proposed easements if located on private lands.

(m) The Water Reticulation Plan should include:
(i) legend;
(ii) all allotments and allotment numbers;
(iii) boundary of subdivision;
(iv) north point;
(v) location and size of existing mains;
(vi) location of other services which cross the mains;
(vii) the location and angle of each bend;
(viii) the location of valves, hydrants, scours and caps, t's , reducers, etc.;
(ix) identify with a z the location of each service point for each allotment;
(x) road crossing conduit locations, size and class;
(xi) Location of underground electrical reticulation main.

(n) The Inter-allotment Drainage Plan should include:
(i) legend;
(ii) all allotments and allotment numbers;
(iii) boundary of subdivision;
(iv) north point;
(v) location and size of inter-allotment drainage lines;
(vi) invert and surface levels at pits;
(vii) location and size of stormwater drainage to which system is connected;
(viii) location and size of pits;
(ix) location and size of house connections;
(x) pipe material details;
(xi) details of connections to kerb and channel (if appropriate) including design finished surface level and location invert level of kerb outlet;
(xii) lengths and grades to all inter-allotment drainlines;
(xiii) label inter-allotment pits and receiving stormwater structures;
(xiv) existing and finished surface contours;
(xv) locations and dimensions of proposed easements if located on private lands;

[2] House connections to be shown as extending to boundary of property being serviced.

(xvi) details of lots over which covenants are to be placed.

(o) Drainage Calculations and Catchment Plan:
  (i) a Catchment Plan should be submitted, including:
    (a) north point;
    (b) a plan of the development showing the road and allotment boundaries;
    (c) where changes may affect adjacent properties, existing and finished surface contours (in different line types) at an interval close enough to define the terrain and allow definition of the subcatchments;
    (d) contours should extend beyond the limits of the development site to fully define the limits of external catchment;
    (e) subcatchment boundaries, labels and area;
    (f) line diagram of drainline, access chamber, gully and outlet locations;
    (g) labelling of stormwater structures; and
  (ii) stormwater calculations shall be submitted for the design storms on an A1 spreadsheet as per QUDM;
  (iii) stormwater calculations for cross road culverts shall be submitted for the design culvert as per TMR format to show culvert size and flows.
  (iv) stormwater calculations for all overland and weir flow situations are to be submitted.

(p) A Water Quality Plan should be submitted including:

Guideline:
The water quality plan may be incorporated on another suitable drawing.

  (i) the site's existing topography;
  (ii) how and when it will be altered;
  (iii) the erosion and sediment control measures that are proposed to be used;
  (iv) the catchment boundaries and the direction of flow for the different drainage area before and after development;
  (v) the stormwater management system proposed.

SC6.1.9.3.3 Miscellaneous Details

Detail drawings are required for the following:
(1) stormwater outlet structure, other than standard headwalls;
(2) access chamber details where pipe alignments are critical for clearance or flow considerations;
(3) silt traps;
(4) surcharge structures;
(5) overland drainage paths;
(6) sewage pump stations showing all relevant levels for pumps, etc.

All original applications and responses to information requests shall:
(1) be accompanied by a document transmittal amendment record,
(2) highlight any amendments to drawings by 'clouding' the amendment and be accompanied by a written description of the change.

SC6.1.9.4 "As-Constructed" Drawings and Documentation

SC6.1.9.4.1 General

(1) The "As-constructed" drawings and documentation serves two distinct functions:
  (a) Review: to provide a means to check the constructed works against the approved design to ensure the design principles and criteria have been achieved; and
  (b) Recording: to provide an accurate record of the 'as-constructed' services and their locations.

  The "as-constructed" information must be presented in a form that allows for the ready comparison between the design and "as-constructed" data by experienced staff, allows for an efficient means to include the "as-constructed" information in Council's mapping and Asset Management systems, and allows for the unambiguous interpretation and understanding by a wide range of users including the general public.
(2) Infrastructure works cannot be accepted On-Maintenance until all "as-constructed" information has been received, reviewed, and approved by the Engineer.
(3) Drawings and documents may be rejected after the infrastructure works have been accepted on maintenance should the Engineer find that they;
  (a) are unsuitable in any way with respect to this guideline; or
  (b) contain any errors

(4) Any drawings or documents rejected by Gympie Regional Council are to be duly revised, re-certified and re-submitted to the Gympie Regional Council promptly.

SC6.1.9.4.2 Statement of Compliance and Non-Compliance Report

It is recognised that in spite of the most diligent efforts some non-conforming works may occur. The Statement of Compliance – As Constructed is intended to expedite the checking and approval process by placing the responsibility of identifying and reporting any non-conforming works with the Consulting Engineer.

Non-conforming works are any works constructed out of tolerance in relation to the relevant standard specified or in any way compromises the design intent.

All non-conforming works are to be listed on the non-compliance report, along with the proposed action and timeframe to rectify (if necessary) the works. Departures from design may be accepted by the Engineer where the Consulting Engineer can demonstrate and certify that the design intent has not been compromised.

SC6.1.9.4.3 Inspection & Test Plans

Legible copies of the completed, signed and certified (by the Consulting Engineer) Inspection and Test Plans for all work activities are to be submitted as evidence of conformance to construction processes.

SC6.1.9.4.4 "As Constructed" Drawings

(1) General
- (a) "As-Constructed" drawings are to be submitted in hardcopy and electronic formats.
  - (i) All drawings are to be signed by the Consulting Engineer with the following certification.

    "This drawing is an accurate representation of the works as-constructed. All the locations and levels shown on this plan have been provided by a Surveyor as defined in the Surveyors Act 2003. I hereby accept responsibility for the as-constructed information shown on this plan.

    Certified By: ……...(Name) ……(Signature)…….
    ……(RPEQ No)……. ….(Date)……."
  - (ii) Electronic: to be supplied on CD or DVD.
- (b) As constructed drawings become public property through their lodgement with Council, copyright on these drawings is to be removed.
- (c) All information is to be retained within the borders of the page.
- (d) North point to be shown on all layout plans.
- (e) All layout plans to be on a background showing: Lot boundaries, lot numbers, easements, kerb lines or edge of road (if no kerb), and other significant features.
- (f) Lot numbers and road names to be in accordance with the survey plan.
- (g) Existing services to be shown and differentiated from new services.
- (h) The extents of any existing services that have been removed or abandoned must be clearly shown.
- (i) Any complex arrangements or unusual fittings are to be detailed on the plans.
- (j) The linework representing the constructed works to be predominant and at least one thickness greater than background information (i.e. lot boundaries).
- (k) Text is to be of a size and font that is easily legible, typically 2.0mm minimum.
- (l) Property boundary linework shall not be broken when crossed by text. All text is to be located clear of linework, other text and any other drawing elements to ensure readability
- (m) The location of all services shall be shown with the use of dimensions or tabular description from property boundaries. There should be sufficient information to define the location of the service without ambiguity. Pipelines must be located sufficiently to show their alignment in relation to property boundaries. Location information to be in meters and shown to at least one decimal place (0.1m).
- (n) Plans are to contain no irrelevant information and be generally in accordance with the format and quality of the Sample Plans listed at SC6.1.9.4.8.

(2) Topographical details

Changes to the surface of the land as a result of the engineering works must be surveyed with sufficient measurements to ensure an accurate representation of the new topography.
Finished surface levels must, as a minimum, be collected at:
- (a) all cadastral corners,

(b) Invert of kerb or edge of bitumen, and crown of the road,
(c) Top and bottom banks including along open drains,
(d) Top and bottom of retaining walls,
(e) Along overland flow paths in roadways, pathways and parks,
(f) Detention Basin crest levels, and spillway levels,
(g) Ground levels,
(h) Levels must be taken at intervals of not more than 20 metres.
(i) The information is to be shown using contours with a suitable interval (typically 0.25 metre) and spot heights at each point collected. Refer to the sample plans for the requirements of each drawing.

On large lot developments some of these requirements may be relaxed over the areas of the development that have not been disturbed by the work.

(3) Electronic Drawings Submission

(a) Electronic submission is to use the current version of ADAC, supplying all mandatory information therein required. Council is participating in the Asset Design & As-constructed Data Routines (ADAC) initiative for the standardisation of the submission of as-constructed drawings in digital format. ADAC is Council's preferred electronic submission option.
Drawings prepared using ADAC standard will require additional items to meet all of Council's specific requirements. (SC6.1.9.4.8).

(b) However, if unable to supply ADAC standard drawings' electronic submission is required to be according to the "Gympie Regional Council Specification for As Constructed Drawings" in AutoCAD format.
No other formats will be accepted.

(c) A TIFF or PDF copy of the drawings at a resolution suitable to reprint at full size (typically 150dpi). This file will be stored in Council's record management system.

(4) Survey Requirements

(a) The level and location information required for the as constructed drawings must be collected by a Surveyor or a suitably experienced and qualified person supervised by a Surveyor.

(b) Coordinate Datum
All coordinates should be based on either:
(i) The Geocentric Datum of Australia 1994 (GDA 94) and be projected to the Map Grid of Australia 1994 (MGA 94) Zone 56. Or where this is not practical;
(ii) An arbitrary plane coordinate grid.

(c) Meridian Datum
It is desirable for the meridian to be on the azimuth of the Map Grid of Australia 1994 Zone 56. Where this is not practical, another meridian may be used, but the origin of the meridian must be noted on the face of the plan.

(d) Height Datum
All level data shall be reduced to the Australian Height Datum (AHD).

(e) Control
As staged subdivisions encroach into areas with limited survey control, there is potential for positional accuracy of the Councils Digital Cadastre Database (DCDB) to be degraded. In order to maintain the accuracy and integrity of the DCDB it is imperative that sufficient survey control is established over new subdivisions as they are developed.
Permanent Survey Marks (PSMs) should be placed within the subdivision as per the 'Cadastral Survey Requirements 2005, Clause 3.26.1 Connection to Permanent Survey Marks' such that are well spaced and provide a good coverage over the extent of the survey. These marks are to have MGA94 Zone 56 coordinates and AHD levels to at least 4th Order horizontal and vertical standard as defined in ICSM Standards and Practices for Control Surveys (SP1). They are also to have a cadastral connection on the plan of survey. This will enable the survey to be accurately positioned into the spatial representation of the existing cadastre (i.e. DCDB). The coordinate and level information, where they do not already exist, are to be forwarded to DERM on the appropriate form for inclusion in the Survey Control Database with a copy forwarded to Council with the 'as-constructed' information.

(f) Accuracy
The location and level information shown on the 'as-constructed' plans are to conform to the following accuracy limits.
(i) Level: ± 0.01 metre (Earthworks ± 0.05 metre)
(ii) Horizontal: ± 0.05 metre

(5) Drawing Scales

(a)	Roadworks	1:500
(b)	Sewer Reticulation	1:500
(c)	Water Reticulation	1:1000

(d) Stormwater Drainage & Earthworks 1:500

(6) Each sheet of 'As-constructed' Drawings is to have a Title Block containing the following information:
   (a) Project description / Estate Name.
   (b) Real Property Description
   (c) Consulting Engineer's name.
   (d) Surveyor's name.
   (e) Developer's Name.
   (f) All Council's Development Application numbers including approvals prior to the operational works approval e.g. 2010-1234.
   (g) Scales including a scale bar.
   (h) Plan Number and Sheet Number.
   (i) Schedule and Date of Amendments.
   (j) Approved by – Name, RPEQ Number, and Signature.

(7) Hard Copy Plans
   (a) Three copies of all plans at the designated scale are required (A3 size preferred)
   (b) They are to be a black ink drawings, colour is to be avoided.

SC6.1.9.4.5 Stormwater Drainage Engineering Calculations

Where the drainage systems have been constructed out of tolerance and may be extended by future development either upstream or downstream; or in exceptional circumstances such as incorrect pipe sizes and major out of tolerance construction, the design calculation sheets shall be amended to reflect the 'As Constructed' performance of the systems and submitted to Council as part of the As-constructed submission.

SC6.1.9.4.6 Test Results

The following tests are to be submitted with the "as-constructed" documentation prior to site inspection:

(1) Quality testing on specified materials; for example:
   (a) Select fill (e.g. CBR, plasticity index, etc., as specified).
   (b) Subgrade (CBR).
   (c) Sub-base course material (CBR).
   (d) Base course material (CBR).
   (e) Asphalt.
   (f) Pipe bedding / haunch / side zone materials (grading).
   (g) Subsoil drain filter material (grading).
   (h) Concrete strength (test cylinders).

(2) Compaction testing of placed materials where specified; for example:
   (a) Allotment fill.
   (b) Fill under roads.
   (c) Sub-Base course.
   (d) Base course.
   (e) Asphalt.
   (f) Trench backfill.
   (g) Pipe bedding / haunch zone.

(3) Pipeline testing where specified; for example:
   (a) Sewer line pressure tests.
   (b) Sewer access chamber leak tests.
   (c) Water main pressure tests.
   (d) Water main water quality tests.
   (e) CCTV Inspection tests.
   (f) Water meter number and installation date.

(4) All test results are to be submitted, including tests that fail to meet the specified standard. In the case of failed tests, the consultant shall include details of the retesting / rectification work carried out.

(5) Where the construction includes sprayed bitumen seal work, copies of the spray sheets are to be included with the 'As-constructed' documentation.

SC6.1.9.4.7 Operations and Maintenance Manuals

For each asset or structure (i.e. pump stations, reservoirs, gross pollutant traps) which requires specific maintenance procedures, Operations and Maintenance Manuals are to be provided. The manuals shall include spare parts lists, electrical diagrams, maintenance schedules, and all other relevant information which may assist with the running of the asset over its entire life.

SC6.1.9.4.8 Sample Plans

D-01 – Method of Recording “As Constructed” Stormwater Data
R-21 – Method of Recording “As Constructed” Road Data
S-01 – Method of Recording “As Constructed” Sewerage Data
W-01 – Method of Recording “As Constructed” Water Reticulation Data

D-02 – Method of Recording “As Constructed” Stormwater Data - ADAC
R-22 – Method of Recording “As Constructed” Road Data - ADAC
S-02 – Method of Recording “As Constructed” Sewerage Data - ADAC
W-02 – Method of Recording “As Constructed” Water Reticulation Data - ADAC