

**SURVEY REQUIREMENTS**  
**For**  
**Subdivisions and**  
**Capital Works Projects.**  
**Part A – Design Documentation**  
**Part B – As Constructed Information**

**PART A – DESIGN DOCUMENTATION**

**INTRODUCTION**

The following information is provided as a guide as to Council's requirements for engineering surveys carried out by Consultants for design purposes. Job specific information shall be supplied by Council's Officer at the time of inspection of the site.

**GENERAL REQUIREMENTS**

**Datum / Projection**

The following table lists the required datum / projection to be applied to all survey data provided to Council by the Consultant.

Description	Datum	Units
Level Datum	Australian Height Datum (AHD)	Metres
Projection	Geocentric Datum of Australia (GDA 94 Zone 55)	Metres

**PROCEDURE**

Detailed Engineering pickup in string / point format as required including:

1. Road pavement centreline, edges and formation.
2. Kerb and channel (lip of channel and back of kerb), footpaths and driveways
3. Road table drains and other drains
4. Stormwater systems, manholes, pits, house connections, culverts, headwalls, etc
  - 4.1 Stormwater manholes, junction pits and grated pits are to be located by survey generally at centre of the chamber or at the intersection of all associated pipework, whilst finished surface level is to be taken at the centre of the lid or grate.
  - 4.2 Stormwater pits located in the kerb and channel are to be located by survey at the centre of the chamber, whilst finished surface level is to be taken at the lip of channel, perpendicular to the centre of the chamber.
  - 4.3 Finished surface levels of manholes / pits and invert levels of all pipework entering and exiting the manhole / pit are to be shown on the "As Constructed" plan.

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- 4.4 Stormwater lines shall be located from centre to centre of the upstream and downstream structures or by the end of pipes at headwalls etc.
  - 4.5 House connections are to be located at the connection to the main, the I.O. and changes in direction.
  5. Sewerage systems, manholes, pump stations, house connections, etc.
    - 5.1 Sewer manholes are to be located by survey generally at centre of the chamber or at the intersection of all associated pipework, whilst finished surface level is to be taken at the centre of the lid.
    - 5.2 Finished surface levels of manholes and invert levels of all pipework entering and exiting the manhole are to be shown on the "As Constructed" plan.
    - 5.3 Sewer lines shall be located from centre to centre of the upstream and downstream structures.
    - 5.4 House connections are to be located at the connection to the main, the I.O. and changes in direction.
  6. Water mains, sub-mains (rods), bends, valves, fire hydrants, main cocks, house connections, etc.
    - 6.1 Fittings are to be located by survey at the centre of the cover box.
    - 6.2 Water lines to be located by valves, fire hydrants and bends. Rolling of mains through deflection at joints is to be included.
    - 6.3 House connections are to be located at the connection to the main or rod, the boundary connection and changes in direction.
  7. Bridges and defined pipe and box culverts.
    - 7.1 Road pavement centreline at extremities of bridge structure or
    - 7.2 Centreline of culvert headwalls / outfalls.
  8. Property boundaries and easements based on field survey and plan compilation.
  9. All areas of placed fill exceeding 300mm depth. Depths of fill relative to natural surface to be detailed on a 5.0 metre (max) spacing.

Other Requirements

10. Horizontal survey datum to GDA 94 Zone 55.
  - 10.1 Engineering detail survey to have a GDA coordinated survey station set at the approximate centroid of the survey, and plane distances for design details.
  - 10.2 As constructed survey (digital file) to be created from adjusted survey bearings and distances (ie grid distances). Methodology and conversion factors to be supplied.
  - 10.3 Creation of appropriate reference stations of new and / or connection to existing relevant State Permanent Survey Markers.
11. Vertical survey datum to Australian Height Datum (AHD)

12. Survey information to be provided in separate layer based on the following suggested format.

Layers

CL	Centreline of road
EB	Edge of bitumen
EG	Edge of gravel
LC	Lip of channel
TK	Back top of kerb
FP	Edge of footpath
DW	Edge of driveway
DRN	Open drain / table drain
CP	Corner peg
BDY	Property boundary
SPM	State permanent mark
STN	Survey station
S	Sewer line
SM	Sewer manhole
SHC	Sewer house connection
SW	Stormwater line
SWM	Stormwater manhole / pit
SWHC	Stormwater house connection
W	Water line
WF	Water fittings
WHC	Water House connection
TEXT	General text, dimensions, material types and pipe diameters
DIM	Dimension lines

Information Transfer:

Survey Information to be supplied in the following formats:-

13. A3 size digital drawing/s at a scale of 1:200 or 1:500 as appropriate, unless approved otherwise, certified as correct by a Registered Land Surveyor.
14. Digital information is to be provided via email or by a link
- 14.1 Files to be clearly labelled including the Project Name and Stage.
- 14.2 Digital plan information is to be provided in AutoCAD DXF or AutoCAD DWG file format.

## **PART B – AS CONSTRUCTED INFORMATION**

### **INTRODUCTION**

Huon Valley Council maintains a comprehensive Geographic Information System and Asset Database, which lists and contains valuable information on all Council owned infrastructure as well as storing a large amount of topographic and miscellaneous data.

The brief is for the use of Private Developers, the representatives of Private Developers (hereafter referred to as Consultants) who are required to submit “As Constructed Plans” to Council in accordance with the Huon Valley Council Survey Requirements for Subdivisions and Capital Works Projects. In general the “As Constructed Plans” are to provide the level of detail shown in the design drawings but including actual as constructed information.

It sets out the format in which the digital files are required in order for Council to append the data to its existing Geographic Information System.

### **GENERAL REQUIREMENTS**

All enquires relating to the format of the digital information should be directed to Council’s Asset Management Department.

As Constructed information is to be submitted to and approved by Council’s Development Engineering Department for all works prior to being placed on maintenance.

A checklist for submission of “As Constructed” data is supplied to assist the consultant in compiling the required data for submission to Council. It is to be signed by the Registered Land Surveyor and lodged with the “As Constructed” plans.

## HUON VALLEY COUNCIL

### CHECKLIST FOR “AS CONSTRUCTED” PLAN REQUIREMENTS

PLEASE TICK

1. The “as constructed” plans are to be certified as correct by the Developer’s Registered Land Surveyor. All details on the plans are to be based on accurate and correctly recorded surveyed data to GDA 94 Zone 55.
2. Title boundary pegs are in place. These are to be installed and maintained in position at all times during construction.
3. A3 size “as constructed” plans are required at a scale of 1:200 or 1:500 unless approved otherwise.
4. Property boundaries, easements, rights of way, walkways and Aurora “wayleaves” are to be shown.
5. Storm Water pipelines, cut off drains and rock lined energy dissipation systems, junction pits and entry pits are to be shown including type of pit, size and material type indicated. Any existing infrastructure directly connected to should be shown and labeled “Existing”. Storm Water to be on separate sheet to sewer and water.
6. Sewer pipelines, and junction pits are to be shown including size and material type indicated. Sewer information to be on separate sheet to storm water and water.
7. Water pipelines, fire hydrants, stop valves, scour valves, air valves and main cocks are to be shown including size and material type indicated. Water information to be on separate sheet to storm water and sewer.
8. Kerb and channel, footpaths including width, driveway aprons and walkway footpaths are to be shown. Include existing infrastructure which is connected into and label accordingly as “Existing”.

9. All items in (5), (6), (7), and (8) are to be shown to scale and with distances relative to each other. Dimensions are generally not required except where the services are within private property. In these cases, the services are to be dimensioned from a boundary line, with the relevant easement also dimensioned.
10. All junction and entry pits are to have inlet and outlet pipe inverts, together with the top of pit levels shown and clearly labelled. All reduced levels are to be to "Australian Height Datum".
11. All sewer, storm water and water house connection points, including stormwater to kerb and channel, are to be shown dimensioned along a property boundary from a boundary survey peg. The depth to invert from the finished surface level is to be indicated and clearly labelled. An enlargement of the above may be required for clarity.
12. All allotments are to show areas of fill greater than 300 millimetres deep and the depth of fill at 5.0 metre grid intervals. All depths are to relate to natural surface.
13. Show existing infrastructure where it joins to the new work, e.g. show outlet storm water pipe, size, material and invert level.
14. Include relevant road details to clearly identify road name(s), surface material type, specifications and any road line markings and signage installed.

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Signed (Registered Land Surveyor)

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Date