

QUALITY CONTROL CHECK LIST FOR TERRESTRIAL MOBILE LASER SCANNING

SURVEY UNDERTAKEN BY:

DATE:

SURVEY PROJECT DESCRIPTION:

REPORT NO:

JOB NUMBER:

- Note:**
- i) The surveyed deliverables for a survey undertaken by laser scanning shall be checked using the relevant quality control check list for that specific survey*
 - ii) This check list shall be used to check and verify that the laser survey procedures and requirements as stipulated in TMH11 Chapter 14 have been followed*

I hereby confirm that this survey was checked against and complies with the project specifications and TMH11 survey requirements as stated in the survey instruction/contract documents.

The Items that do not form part of the survey instruction are marked as N/A.

	REQUIREMENTS	Confirmation by a registered Surveyor
1.	SUPERVISION	
1.1	Has the name of supervisory Surveyor been supplied?	

1.2	Has the PLATO registration number of supervisory Surveyor been supplied?	
1.3	General comments on Supervision	
2.	EYE SAFETY	
2.1	Was written approval from the Department of Health, in accordance with their Radiation Control Program, submitted?	
2.2	General comments on Eye Safety	
3.	SURVEY CONTROL POINTS FOR LASER SCANNING	
3.1	Is the laser scanning equipped with a compensator?	
3.2	Was Point Cloud to Point Cloud registration employed?	
3.3	Was the laser scanning control established at maximum 300m intervals?	
3.4	For road surveys, were the control points for a dual carriageway established at both sides of the dual carriageway?	
3.5	For non-road surveys, was the control established in a 300m square grid covering the entire survey area?	
3.6	Did any extrapolation take place during the scanning process (scanning outside the control configuration)?	
3.7	General comments on Survey control Points	
4.	QUALITY ASSESSMENT PLAN	
4.1	Was a quality assessment plan submitted to the Client prior to the scanning exercise	
5.	QUALITY CONTROL REPORT ON COMPLETION (This quality control is required over and above the quality control requirements stipulated in the various chapters of TMH11)	
5.1	Was the following information supplied?:	
	<ul style="list-style-type: none"> • Statistical systems report 	
	<ul style="list-style-type: none"> • PDOP values during survey 	
	<ul style="list-style-type: none"> • Comparison of elevation data from different runs/overlaps 	

	<ul style="list-style-type: none"> • Comparison of elevation data from overlapping (side laps) runs 	
	<ul style="list-style-type: none"> • Comparison of points at the area of overlaps (end lap) where more than one base were used 	
	<ul style="list-style-type: none"> • Statistical comparison of Point Cloud data and the 300mm check cross sections 	
	<ul style="list-style-type: none"> • Statistical comparison of the final DTM and the 300m check cross sections 	
	<ul style="list-style-type: none"> • Statistical comparison of adjusted Point Cloud data and redundant check points 	
	<ul style="list-style-type: none"> • GNS accuracy report as per TMH11 Chapter 14 	
	<ul style="list-style-type: none"> • IMU accuracy report as per TMH11 Chapter 14 	
	<ul style="list-style-type: none"> • Control report to TMH11 requirements 	
	<ul style="list-style-type: none"> • Statistical comparison of the final Point Cloud data and control points 	
5.2	Was the Point Cloud filtered to one layer of points which represents the mean value of the scans?	
5.3	Was the noise removed from the Point Cloud data?	
5.4	General comments on Quality Control Report	
6.	GNS CONTROL STATIONS	
6.1	Were the control stations spaced at a maximum of 15km apart?	
6.2	Do any base lines exceed 7.5km in length?	
6.3	Were control stations established at the start and end of the project?	
6.4	Do the accuracies of the control stations adhere to the accuracy requirements as for permanent survey control points?	
6.5	General comments on GNS Control Stations	
7.	CALIBRATION OF THE EQUIPMENT	
7.1	Were before and after data collection calibration results submitted?	
7.2	General comments on Calibration of Equipment	

8.	TEST RUN	
8.1	Was the test run data submitted?	
8.2	General comments on Test Run	
9.	REDUNDANCY	
9.1	How was the redundancy checked?:	
	<ul style="list-style-type: none"> • Two or more passes in the same direction 	
	<ul style="list-style-type: none"> • Overlapping passes in opposite direction 	
	<ul style="list-style-type: none"> • A combination of the above 	
9.2	Was the side lap redundancy determined by a minimum of 20% of the pass width?	
9.3	Was the time period between passes more than 1 hour?	
9.4	General comments on Redundancy	
10.	SUBMISSION OF DOCUMENTATION	
10.1	Was all the documentation submitted on completion as per the document check list in paragraph 14.3.7 of TMH11?	
11.	GENERAL COMMENTS ON THE MOBILE SCANNING EXERCISE	

I, the undersigned, being the representative of the appointed survey company on the above project, hereby certify that:

- 1. All information required in the project specifications is hereby supplied.
- 2. All field and office procedures have been carried out in terms of the relevant requirements and specifications.
- 3. All data supplied conforms to the relevant requirements and specifications for this project

Signed at.....this.....day of

Signature:.....

Plato Registration Number:.....

Name of Surveyor:.....