

Wacol Emesent MLS Range - Results Summary



DOCUMENT CONTROL

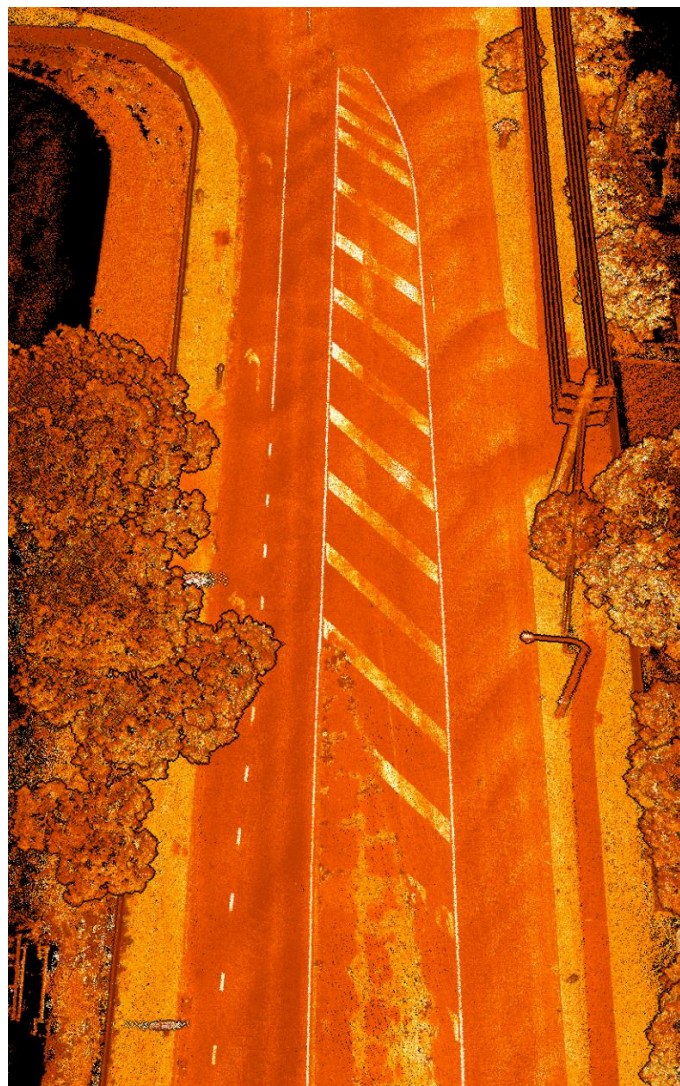
Project Number: 3206
Project Name: 3206 – Wacol Emesent MLS Range
Document Reference: 3206 Wacol Emesent MLS Range - Results Summary - Emesent.docx

1. Introduction:

Date of capture: June 2024

For the purposes of testing the accuracy of the Vehicle RTK solution, Emesent captured data along a 2km stretch of road in Wacol, Brisbane. Vehicle RTK was mounted to the back of a van to give good visibility of the road surface. 6 passes in either direction at approximately 50km/h were completed with a total capture time of 50 minutes. The baseline length was a maximum of 1km, with the Emlid RS3 rover connected to a local base station.

The data was reprojected to GDA2020 MGA Zone 56 and a geoid applied (AHD). No ground control was used in the processing of this dataset.



2. Accuracy assessment:

Control Network

To assess the accuracy, the dataset was compared against 75 quality control points which Orion Spatial Solutions established on the 2km stretch of road using a Leica TS13 Total Station and Leica LS15 Digital Level, in accordance with Queensland Government Transport and Main Roads Surveying Standards.



Example Control/QA Point (Tip of Arrow / Corner of Continuity Linemarking)



Example group of Control/QA points

For a full copy of the survey control network report, please contact Emesent.

Global Accuracy

The Vehicle RTK solution achieved the following global accuracy:

	Horizontal Accuracy (XY)	Vertical Accuracy (Z)
1 Std Dev (68%)	0.014	0.009
2 Std Dev (95%)	0.029	0.018

This means that:

- 68% of points are within 14mm horizontal and 9mm vertical distance of the control points.
- 95% of points are within 29mm horizontal and 18mm vertical distance of the control points.

See below tabulated results demonstrating Orion Spatial Solutions results:



Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 1 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

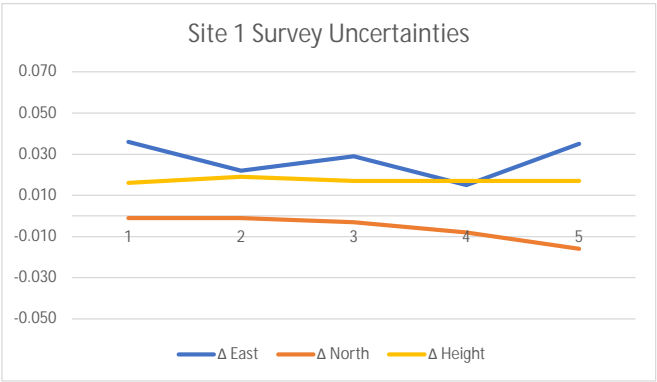
PROJECT: 3206 Wacol Emesent QA Site 1 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7236	493514.696	6947891.656	40.633		NW CORNER SOLID LINEMARKING
8025	493522.576	6947885.157	40.912		SE CORNER STOP BAR
7242	493532.689	6947882.868	41.009		NE CORNER SOLID LINEMARKING
7239	493512.149	6947882.915	40.705		SOUTHERN TIP CHEVRON
7240	493511.893	6947876.715	40.795		SOUTHERN TIP CHEVRON
7243	493533.482	6947873.583	40.903		SE CORNER GIVEWAY LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7236	493514.732	6947891.655	40.649	CHK	SE CORNER SOLID LINEMARKING
8025	493522.598	6947885.156	40.931	CHK	SE CORNER LANE LINEMARKING
7242	493532.718	6947882.865	41.026	CHK	NE CORNER LANE LINEMARKING
7239	493512.164	6947882.907	40.722	CHK	NE CORNER CHEVRON
7240	493511.928	6947876.699	40.812	CHK	NE CORNER CHEVRON
7243					SE CORNER GIVEWAY LINE
					^^Not visible in MLS pointcloud (Pt count ~3000 ppsm, not enough contrast in intensity.)

SURVEY UNCERTAINTY				
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)	
0.036	-0.001	0.036	0.016	
0.022	-0.001	0.022	0.019	
0.029	-0.003	0.029	0.017	
0.015	-0.008	0.017	0.017	
0.035	-0.016	0.038	0.017	

MEAN 0.027 -0.006 0.029 0.017





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 2 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

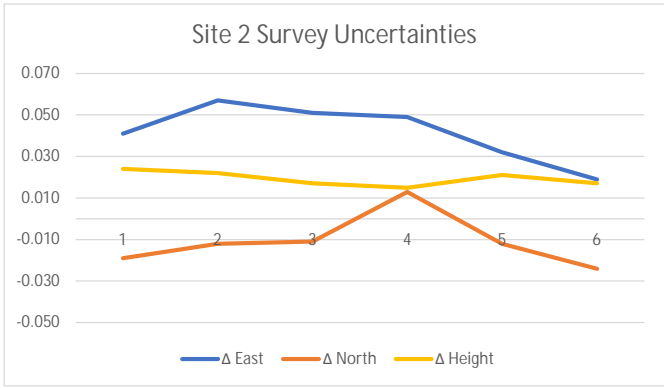
PROJECT: 3206 Wacol Emesent QA Site 2 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7200	493488.775	6947731.220	38.403	LCP	SE CORNER SOLID LINEMARKING
7201	493491.925	6947719.212	38.286	LCP	SE CORNER LANE LINEMARKING
7202	493490.969	6947713.354	38.110	LCP	NE CORNER LANE LINEMARKING
7205	493498.096	6947750.847	39.274	LCP	NE CORNER CHEVRON
7206	493500.027	6947759.262	39.551	LCP	NE CORNER CHEVRON
7207	493500.783	6947762.635	39.651	LCP	SE CORNER CHEVRON

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7200	493488.816	6947731.201	38.427	CHK	SE CORNER SOLID LINEMARKING
7201	493491.982	6947719.200	38.308	CHK	SE CORNER LANE LINEMARKING
7202	493491.020	6947713.343	38.127	CHK	NE CORNER LANE LINEMARKING
7205	493498.145	6947750.860	39.289	CHK	NE CORNER CHEVRON
7206	493500.059	6947759.250	39.572	CHK	NE CORNER CHEVRON
7207	493500.802	6947762.611	39.668	CHK	SE CORNER CHEVRON

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.041	-0.019	0.045	0.024
0.057	-0.012	0.058	0.022
0.051	-0.011	0.052	0.017
0.049	0.013	0.051	0.015
0.032	-0.012	0.034	0.021
0.019	-0.024	0.031	0.017

MEAN 0.042 -0.011 0.045 0.019





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 3 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

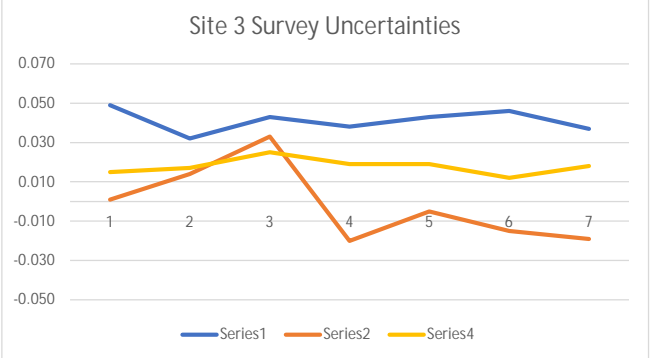
PROJECT: 3206 Wacol Emesent QA Site 3 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7183	493468.813	6947581.735	34.284	LCP	SE CORNER LANE LINEMARKING
7184	493472.699	6947605.021	34.914	LCP	SE CORNER LANE LINEMARKING
7185	493460.175	6947595.661	34.091	LCP	NW CORNER LANE LINEMARKING
7186	493467.718	6947605.854	34.708	LCP	SE CORNER GIVEWAY LINE
7187	493465.811	6947594.601	34.437	LCP	SE CORNER GIVEWAY LINE
7188	493462.12	6947572.634	33.809	LCP	SE CORNER GIVEWAY LINE
7189	493463.968	6947583.665	34.159	LCP	SE CORNER GIVEWAY LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7183	493468.862	6947581.736	34.299	CHK	SE CORNER LANE LINEMARKING
7184	493472.731	6947605.035	34.931	CHK	SE CORNER LANE LINEMARKING
7185	493460.218	6947595.694	34.116	CHK	NW CORNER LANE LINEMARKING
7186	493467.756	6947605.834	34.727	CHK	SE CORNER GIVEWAY LINE
7187	493465.854	6947594.596	34.456	CHK	SE CORNER GIVEWAY LINE
7188	493462.166	6947572.619	33.821	CHK	SE CORNER GIVEWAY LINE
7189	493464.005	6947583.646	34.177	CHK	SE CORNER GIVEWAY LINE

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.049	0.001	0.049	0.015
0.032	0.014	0.035	0.017
0.043	0.033	0.054	0.025
0.038	-0.020	0.043	0.019
0.043	-0.005	0.043	0.019
0.046	-0.015	0.048	0.012
0.037	-0.019	0.042	0.018

MEAN 0.041 -0.002 0.045 0.018





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 4 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

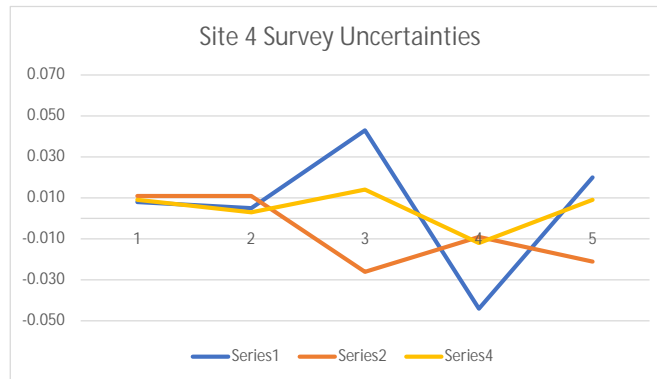
PROJECT: 3206 Wacol Emesent QA Site 4 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7163	493435.193	6947425.637	32.674	LCP	NW CORNER CONTINUITY LINE
7162	493455.166	6947422.168	33.145	LCP	NE CORNER CONTINUITY LINE
7166	493426.528	6947400.465	32.399	LCP	SW CORNER CONTINUITY LINE
7170	493455.649	6947396.436	33.403	LCP	NW CORNER CONTINUITY LINE
7171	493441.782	6947391.809	33.201	LCP	NE CORNER STOP BAR
7165	493424.285	6947410.393	32.401	LCP	NE CORNER CHEVRON
7169	493461.361	6947405.642	33.904	LCP	NW CORNER CHEVRON

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7163	493435.201	6947425.648	32.683	CHK	NW CORNER CONTINUITY LINE
7162	493455.171	6947422.179	33.148	CHK	NE CORNER CONTINUITY LINE
7166	493426.571	6947400.439	32.413	CHK	SW CORNER CONTINUITY LINE
7170	493455.605	6947396.427	33.391	CHK	NW CORNER CONTINUITY LINE
7171	493441.802	6947391.788	33.210	CHK	NE CORNER STOP BAR
7165				CHK	NE CORNER CHEVRON
7169				CHK	NW CORNER CHEVRON
					^^Not visible in MLS pointcloud
					(Low Pt count (~450 ppsm) on
					cross road stop bars.

SURVEY UNCERTAINTY				
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)	
0.008	0.011	0.014	0.009	
0.005	0.011	0.012	0.003	
0.043	-0.026	0.050	0.014	
-0.044	-0.009	0.045	-0.012	
0.020	-0.021	0.029	0.009	

MEAN 0.006 -0.007 0.030 0.005





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 5 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

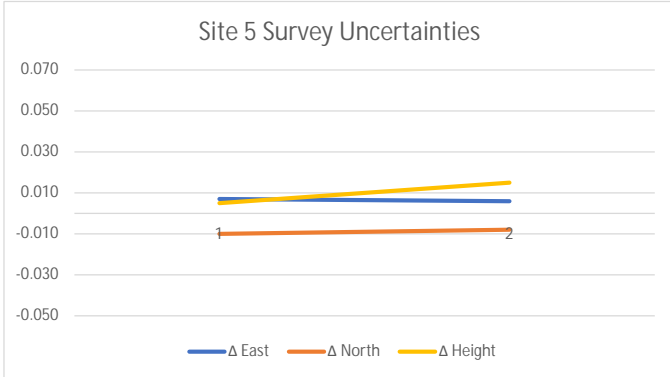
PROJECT: 3206 Wacol Emesent QA Site 5 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7134	493409.225	6947223.535	33.879	LCP	NE CORNER CHEVRON
7135	493411.377	6947240.382	34.017	LCP	SW CORNER CHEVRON
7136	493416.934	6947222.013	33.772	LCP	NIB NORTHERN TIP DIAMOND

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7134	493409.232	6947223.525	33.884	CHK	NE CORNER CHEVRON
7135	493411.383	6947240.374	34.032	CHK	SW CORNER CHEVRON
7136					NIB NORTHERN TIP DIAMOND
					^^Not visible in MLS pointcloud

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.007	-0.010	0.012	0.005
0.006	-0.008	0.010	0.015

MEAN 0.007 -0.009 0.011 0.010





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 6 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

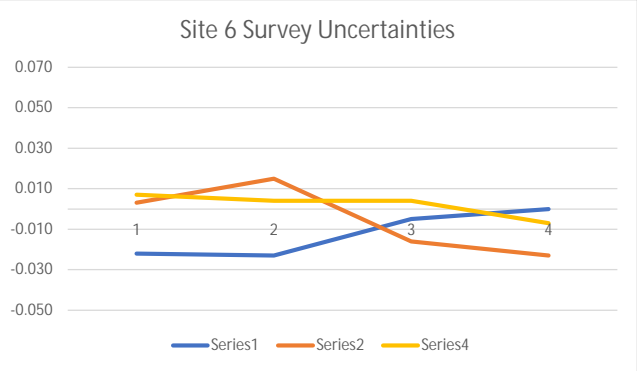
PROJECT: 3206 Wacol Emesent QA Site 6 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7121	493391.658	6947091.083	31.972	LCP	SW CORNER CONTINUITY LINE
7122	493390.347	6947083.283	31.795	LCP	SW CORNER CONTINUITY LINE
7123	493396.775	6947082.118	31.788	LCP	NE CORNER GIVEWAY LINE
7124	493398.319	6947080.102	31.831	LCP	SW CORNER SOLID LINE
7125	493395.935	6947077.241	31.818	LCP	NE CORNER GIVEWAY LINE
7126	493395.023	6947073.156	31.87	LCP	SW CORNER GIVEWAY LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7121	493391.636	6947091.086	31.979	CHK	SW CORNER CONTINUITY LINE
7122	493390.324	6947083.298	31.799	CHK	SW CORNER CONTINUITY LINE
7123	493396.770	6947082.102	31.792	CHK	NE CORNER GIVEWAY LINE
7124	493398.319	6947080.079	31.824	CHK	SW CORNER SOLID LINE
7125					NE CORNER GIVEWAY LINE
7126					SW CORNER GIVEWAY LINE
					^^Not visible in MLS pointcloud (Low Pt count (~1500 ppsm), no contrast in intensity.)

SURVEY UNCERTAINTY				
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)	
-0.022	0.003	0.022	0.007	
-0.023	0.015	0.027	0.004	
-0.005	-0.016	0.017	0.004	
0.000	-0.023	0.023	-0.007	

MEAN -0.012 -0.005 0.022 0.002





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 7 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

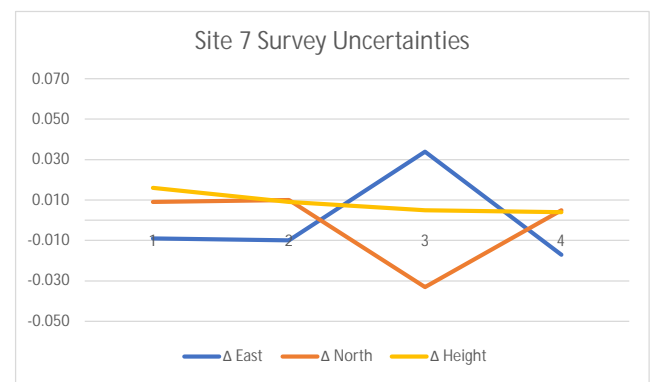
PROJECT: 3206 Wacol Emesent QA Site 7 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7114	493359.479	6946933.676	30.782	LCP	SW CORNER LANE LINEMARKING
7115	493356.729	6946917.481	30.948	LCP	NW CORNER LANE LINEMARKING
7116	493345.486	6946901.018	31.209	LCP	SE CORNER ARROW
7117	493353.953	6946901.011	31.179	LCP	SW CORNER LANE LINEMARKING

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7114	493359.470	6946933.685	30.798	CHK	SW CORNER LANE LINEMARKING
7115	493356.719	6946917.491	30.957	CHK	NW CORNER LANE LINEMARKING
7116	493345.520	6946900.985	31.214	CHK	SE CORNER ARROW
7117	493353.936	6946901.016	31.183	CHK	SW CORNER LANE LINEMARKING

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
-0.009	0.009	0.013	0.016
-0.010	0.010	0.014	0.009
0.034	-0.033	0.047	0.005
-0.017	0.005	0.018	0.004

MEAN 0.000 -0.002 0.023 0.008





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 8 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

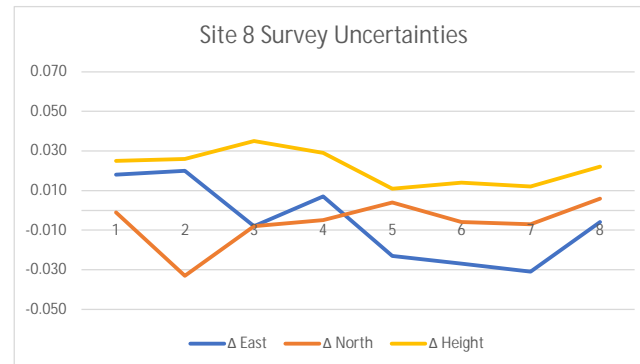
PROJECT: 3206 Wacol Emesent QA Site 8 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7093	493330.050	6946809.249	32.884	LCP	NE CORNER ARROW LINEMARKING
7094	493329.792	6946807.671	32.917	LCP	SE CORNER ARROW LINEMARKING
7095	493332.328	6946806.323	32.774	LCP	SW CORNER SOLID LINEMARKING
7096	493332.857	6946809.544	32.700	LCP	NW CORNER SOLID LINEMARKING
7100	493347.045	6946808.527	32.806	LCP	NW CORNER CONTINUITY LINE
7101	493348.346	6946831.791	32.408	LCP	NW CORNER CONTINUITY LINE
7102	493347.689	6946820.228	32.616	LCP	NW CORNER CONTINUITY LINE
7103	493342.445	6946804.694	32.953	LCP	NE CORNER LANE LINEMARKING

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7093	493330.068	6946809.248	32.909	CHK	NE CORNER ARROW LINEMARKING
7094	493329.812	6946807.638	32.943	CHK	SE CORNER ARROW LINEMARKING
7095	493332.320	6946806.315	32.809	CHK	SW CORNER SOLID LINEMARKING
7096	493332.864	6946809.539	32.729	CHK	NW CORNER SOLID LINEMARKING
7100	493347.022	6946808.531	32.817	CHK	NW CORNER CONTINUITY LINE
7101	493348.319	6946831.785	32.422	CHK	NW CORNER CONTINUITY LINE
7102	493347.658	6946820.221	32.628	CHK	NW CORNER CONTINUITY LINE
7103	493342.439	6946804.700	32.975	CHK	NE CORNER LANE LINEMARKING

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.018	-0.001	0.018	0.025
0.020	-0.033	0.039	0.026
-0.008	-0.008	0.011	0.035
0.007	-0.005	0.009	0.029
-0.023	0.004	0.023	0.011
-0.027	-0.006	0.028	0.014
-0.031	-0.007	0.032	0.012
-0.006	0.006	0.008	0.022

MEAN -0.006 -0.006 0.021 0.022





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 9 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

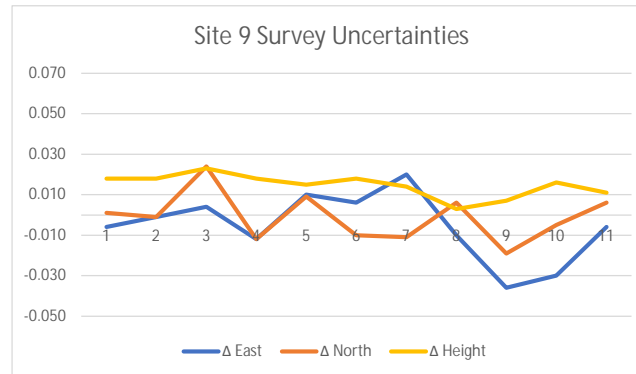
PROJECT: 3206 Wacol Emesent QA Site 9 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7065	493301.387	6946638.721	35.793	LCP	SE CORNER GIVEWAY LINE
7067	493295.3	6946652.261	35.326	LCP	SE CORNER SOLID LINE
7068	493299.701	6946663.359	35.325	LCP	SE CORNER GIVEWAY LINE
7071	493323.037	6946665.503	35.905	LCP	NW CORNER GIVEWAY LINE
7072	493314.679	6946673.825	35.643	LCP	NW CORNER SOLID LINE
7074	493320.019	6946680.296	35.55	LCP	WESTERN TIP TURNING ARROW
7075	493318.277	6946675.749	35.661	LCP	SE CORNER SOLID LINE
7076	493332.133	6946658.349	36.394	LCP	SE CORNER SOLID LINE
7077	493329.067	6946653.771	36.444	LCP	NW CORNER SOLID LINE
7078	493326.143	6946641.86	36.45	LCP	NE CORNER GIVEWAY LINE
7080	493307.222	6946627.471	36.199	LCP	NE CORNER SOLID LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7065	493301.381	6946638.722	35.811	LCP	SE CORNER GIVEWAY LINE
7067	493295.299	6946652.260	35.344	LCP	SE CORNER SOLID LINE
7068	493299.705	6946663.383	35.348	LCP	SE CORNER GIVEWAY LINE
7071	493323.025	6946665.491	35.923	LCP	NW CORNER GIVEWAY LINE
7072	493314.689	6946673.834	35.658	LCP	NW CORNER SOLID LINE
7074	493320.025	6946680.286	35.568	LCP	WESTERN TIP TURNING ARROW
7075	493318.297	6946675.738	35.675	LCP	SE CORNER SOLID LINE
7076	493332.123	6946658.355	36.397	LCP	SE CORNER SOLID LINE
7077	493329.031	6946653.752	36.451	LCP	NW CORNER SOLID LINE
7078	493326.113	6946641.855	36.466	LCP	NE CORNER GIVEWAY LINE
7080	493307.216	6946627.477	36.210	LCP	NE CORNER SOLID LINE

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
-0.006	0.001	0.006	0.018
-0.001	-0.001	0.001	0.018
0.004	0.024	0.024	0.023
-0.012	-0.012	0.017	0.018
0.010	0.009	0.013	0.015
0.006	-0.010	0.012	0.018
0.020	-0.011	0.023	0.014
-0.010	0.006	0.012	0.003
-0.036	-0.019	0.041	0.007
-0.030	-0.005	0.030	0.016
-0.006	0.006	0.008	0.011

MEAN -0.006 -0.001 0.017 0.015





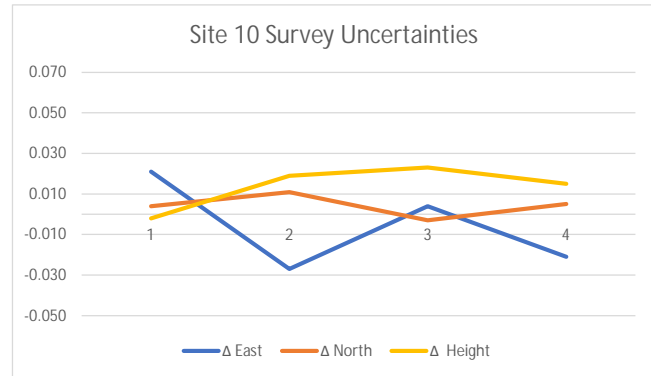
Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 10 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

PROJECT: 3206 Wacol Emesent QA Site 10 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7060	493290.012	6946480.458	33.029	LCP	SE CORNER CONTINUITY LINE
7062	493298.959	6946514.994	34.158	LCP	EASTERN TIP TURNING ARROW
7063	493300.846	6946526.059	34.544	LCP	EASTERN TIP TURNING ARROW
7064	493298.470	6946519.139	34.342	LCP	NE CORNER TURNING ARROW

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7060	493290.033	6946480.462	33.027	CHK	SE CORNER CONTINUITY LINE
7062	493298.932	6946515.005	34.177	CHK	EASTERN TIP TURNING ARROW
7063	493300.850	6946526.056	34.567	CHK	EASTERN TIP TURNING ARROW
7064	493298.449	6946519.144	34.357	CHK	NE CORNER TURNING ARROW

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.021	0.004	0.021	-0.002
-0.027	0.011	0.029	0.019
0.004	-0.003	0.005	0.023
-0.021	0.005	0.022	0.015



MEAN -0.006 0.004 0.019 0.014



Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 11 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

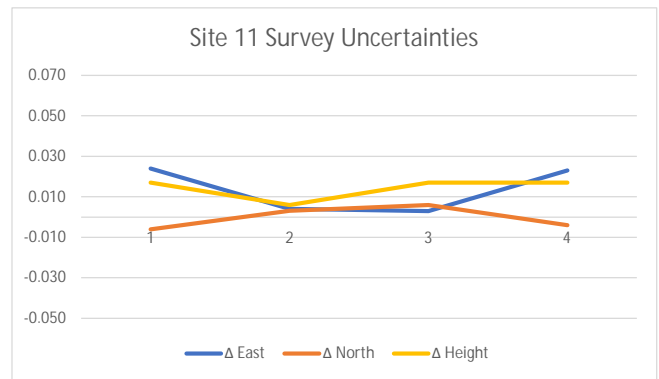
PROJECT: 3206 Wacol Emesent QA Site 11 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7244	493267.015	6946381.565	29.691	LCP	NW CORNER LANE LINEMARKING
7245	493268.309	6946354.513	29.096	LCP	SE CORNER CONTINUITY LINE
7246	493265.365	6946371.059	29.551	LCP	NE CORNER LANE LINEMARKING
7247	493266.217	6946376.074	29.595	LCP	SE CORNER LANE LINEMARKING

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7244	493267.039	6946381.559	29.708	CHK	NW CORNER LANE LINEMARKING
7245	493268.313	6946354.516	29.102	CHK	SE CORNER CONTINUITY LINE
7246	493265.368	6946371.065	29.568	CHK	NE CORNER LANE LINEMARKING
7247	493266.240	6946376.070	29.612	CHK	SE COR HLD LINE

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.024	-0.006	0.025	0.017
0.004	0.003	0.005	0.006
0.003	0.006	0.007	0.017
0.023	-0.004	0.023	0.017

MEAN 0.014 0.000 0.015 0.014





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 12 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

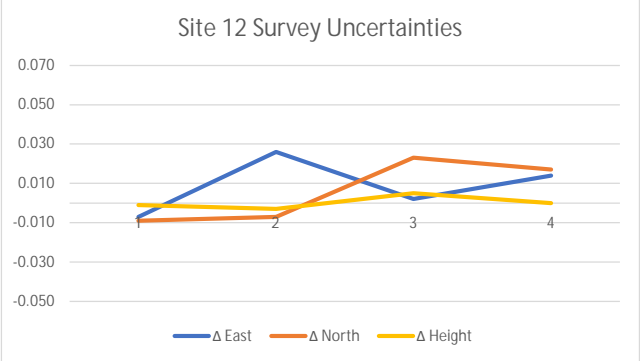
PROJECT: 3206 Wacol Emesent QA Site 12 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7037	493244.969	6946228.243	30.486	LCP	SE CORNER INT CONTINUITY LINE
7038	493236.608	6946217.246	30.722	LCP	EASTERN TIP TURNING ARROW
7040	493241.468	6946247.682	30.247	LCP	NW TIP CHEVRON
7041	493233.077	6946230.407	30.363	LCP	NW CORNER CONTINUITY LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7037	493244.962	6946228.234	30.485	CHK	SE CORNER INT CONTINUITY LINE
7038	493236.634	6946217.239	30.719	CHK	EASTERN TIP TURNING ARROW
7040	493241.470	6946247.705	30.252	CHK	NW TIP CHEVRON
7041	493233.091	6946230.424	30.363	CHK	NW CORNER CONTINUITY LINE

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
-0.007	-0.009	0.011	-0.001
0.026	-0.007	0.027	-0.003
0.002	0.023	0.023	0.005
0.014	0.017	0.022	0.000

MEAN 0.009 0.006 0.021 0.000





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 13 QA
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

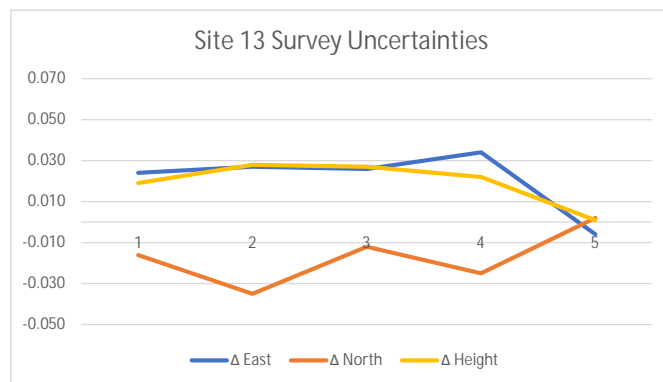
PROJECT: 3206 Wacol Emesent QA Site 13 QA

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7013	493220.590	6946122.538	30.926	LCP	EASTERN TIP TURNING ARROW
7016	493224.941	6946148.122	30.837	LCP	EASTERN TIP TURNING ARROW
7017	493230.194	6946150.647	30.719	LCP	SW CORNER GIVEWAY LINE
7019	493222.749	6946135.335	30.856	LCP	EASTERN TIP TURNING ARROW
7020	493213.764	6946096.388	30.808	LCP	SW CORNER CONTINUITY LINE

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7013	493220.614	6946122.522	30.945	CHK	EASTERN TIP TURNING ARROW
7016	493224.968	6946148.087	30.865	CHK	EASTERN TIP TURNING ARROW
7017	493230.22	6946150.635	30.746	CHK	SW CORNER GIVEWAY LINE
7019	493222.783	6946135.31	30.878	CHK	EASTERN TIP TURNING ARROW
7020	493213.758	6946096.39	30.809	CHK	SW CORNER CONTINUITY LINE

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.024	-0.016	0.029	0.019
0.027	-0.035	0.044	0.028
0.026	-0.012	0.029	0.027
0.034	-0.025	0.042	0.022
-0.006	0.002	0.006	0.001

MEAN 0.021 -0.017 0.030 0.019





Project Name: 3206 - Wacol Emesent MLS - Comparison 2
 Address: Site 14 Cntrl
 Client: EMESENT
 OSS Project Ref: 3206 - Wacol Emesent MLS

PROJECT: 3206 Wacol Emesent QA Site 14 Cntrl

TS POINTS					
ID	E	N	Z	CODE	COMMENT
7001	493197.787	6945960.971	30.388	LCP	SW CNR GIVEWAY LINE
7002	493186.990	6945965.582	30.271	LCP	NORTHERN TIP CHEVRON
7003	493192.097	6945993.722	30.288	LCP	NE CORNER GIVEWAY LINE
7005	493195.078	6945981.957	30.439	LCP	WESTERN TIP TURNING ARROW
7007	493200.807	6945978.716	30.418	LCP	NW CORNER GIVEWAY LINE
7010	493193.088	6945960.883	30.428	LCP	EASTERN TIP TURNING ARROW

MLS POINTS					
ID	E	N	Z	CODE	COMMENT
7001	493197.799	6945960.972	30.385	CHK	SW CNR GIVEWAY LINE
7002	493187.020	6945965.583	30.287	CHK	NORTHERN TIP CHEVRON
7003	493192.137	6945993.719	30.314	CHK	NE CORNER GIVEWAY LINE
7005	493195.094	6945981.961	30.454	CHK	WESTERN TIP TURNING ARROW
7007	493200.826	6945978.713	30.433	CHK	NW CORNER GIVEWAY LINE
7010	493193.117	6945960.857	30.435	CHK	EASTERN TIP TURNING ARROW

SURVEY UNCERTAINTY			
ΔE	ΔN	Hor Vect (SUH)	ΔZ (SUZ)
0.012	0.001	0.012	-0.003
0.030	0.001	0.030	0.016
0.040	-0.003	0.040	0.026
0.016	0.004	0.016	0.015
0.019	-0.003	0.019	0.015
0.029	-0.026	0.039	0.007

MEAN 0.024 -0.004 0.026 0.013

