

Three Kings Precise Level Survey Results - April 2014

Station ID	Location	Averaged Level	April 14 Level	April 14 to Averaged Level	April 14 cf May 13
AP 3136A	Mt Eden Rd	63.114	63.116	2	5
CN 3137A	Mt Eden Rd	63.328	63.329	1	2
M 212A	Mt Albert Rd	86.127	86.111	-16	2
SM 4163	Mt Albert Rd	74.142	74.143	1	1
SM 4164	Mt Albert Rd	75.851	75.844	-8	2
SM 4165	Mt Albert Rd	83.632	83.623	-9	2
SM 3882	Parau St	63.302	63.301	-1	0
RM 3898	McCullough Ave	76.078	76.065	-13	1
RM 3899	McCullough Ave	77.811	77.802	-9	1
RM 3900	McCullough Ave	76.657	76.642	-15	2
RM 3901	Smallfield Ave	78.931	78.898	-33	-1
RM 3902	Smallfield Ave	80.177	80.163	-15	1
RM 3903	Smallfield Ave	82.524	82.515	-9	1
RM 3904	Smallfield Ave	82.708	82.699	-9	1
RM 3907	Fyvie Ave	80.321	80.316	-5	2
RM 3910	Scout Ave	83.414	83.404	-10	0
RM 3925	Bremner Ave	65.423	65.424	0	-1
RM 3926	Bremner Ave	59.088	59.088	0	-2
RM 3933	Milliken Rd	71.049	71.054	4	-1
RM 3934	Milliken Rd	66.303	66.306	3	-1
RM 3935	Simmonds Ave	91.755	91.745	-10	-1
RM 3936	Simmonds Ave	90.869	90.852	-18	-1
RM 7440	Hayr Rd	84.033	84.023	-10	0
RM 7457	Mt Albert Rd	85.707	85.692	-15	3
AP 1	Plaza, Mt Albert Rd	81.269	81.249	-20	2
AP 2	Plaza, Mt Albert Rd	76.290	76.274	-15	2
AP 2A	Plaza, Mt Albert Rd	77.582	77.568	-14	2
AP 3	Plaza, Mt Albert Rd	77.367	77.354	-13	0
AP 4	Plaza, Mt Albert Rd	83.366	83.345	-20	1
AP 13	Barrister Ave	79.867	79.861	-6	2
AP 20	Grahame Breed Dr	76.792	76.785	-8	1
AP 3123A	Mt Eden Rd	75.904	75.905	1	2
AP 3124A	Landscape Rd	77.907	77.908	1	2
SM 3125	Landscape Rd	69.440	69.428	-12	3
SM 3126	Landscape Rd	63.015	63.008	-7	3
SS 3127	Landscape Rd	59.724	59.720	-4	3
SS 3132	Waitomo St	61.689	61.686	-2	3
SM 3883	Parau St	64.371	64.368	-3	0
RM 3884	Parau St	62.539	62.535	-4	0
SM 3885	Duke St	61.857	61.847	-10	1
RM 3886	Fearon Ave	55.236	55.235	-1	0
RM 3887	Fearon Ave	51.548	51.536	-12	0
OCP 3888	Parau St	62.513	62.503	-10	0
RM 3889	Duke St	69.233	69.211	-22	0
RM 3891	Duke St	77.575	77.560	-16	2
RM 3892	Duke St	78.012	77.997	-15	2
RM 3893A	Duke St	79.110	79.110	0	2
RM 3894	Fulljames Ave	72.082	72.055	-27	1
RM 3895	Hamon Ave	65.188	65.156	-33	1

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Station ID	Location	Averaged Level	April 14 Level	April 14 to Averaged Level	April 14 cf May 13
AP 3895A	Hamon Ave	65.612	65.613	0	1
RM 3896	McCullough Ave	69.820	69.799	-21	1
RM 3897	McCullough Ave	75.084	75.069	-16	1
RM 3905	Fyvie Ave	75.813	75.806	-7	1
RM 3906	Fyvie Ave	77.447	77.435	-12	1
RM 3908	Fyvie Ave	82.069	82.066	-3	2
RM 3909	Scout Ave	80.056	80.045	-12	1
RM 3911	Dally Tce	88.894	88.881	-13	3
RM 3912	Fearon Ave	51.652	51.653	1	0
RM 3913	Fearon Ave	49.238	49.244	5	-1
RM 3921	Duncumb St	50.034	50.037	4	0
RM 3923	Connelly Ave	74.293	74.278	-15	1
RM 3924	Connelly Ave	73.034	73.017	-17	0
SM 4354	Mt Eden Rd	80.155	80.130	-25	2
SM 6241	Duke St	70.012	69.983	-29	1
OCP 90B	Duke St	71.805	71.786	-18	1
AP 10	DESTROYED	82.673	Destroyed - Refer AP 10A		
AP 10A	Roskill Way	82.767	82.767	no previous level	
AP 14	Churches Ave	91.334	91.323	-11	3
AP 15	Dally Terrace	90.821	90.809	-13	2
AP 17C	Hunters Park Dr	74.602	74.594	-8	0
AP 29A	Duke St	49.542	49.538	-3	2
M 220	Mt Eden Rd	81.700	81.665	-35	0
M 221	Mt Eden Rd	83.449	83.434	-15	1
SS 1555	Selwyn Rd	99.584	99.582	-2	0
SS 1556	Selwyn Rd	102.373	102.370	-4	-1
SS 1617	St Andrews Rd	81.442	81.441	-1	1
SS 1618	St Leonards Rd	78.478	78.471	-7	0
AP 1619A	St Leonards Rd	66.609	66.606	-3	4
SS 1623	St Andrews Rd	107.522	107.513	-9	-1
SS 3306	Mt Eden Rd	60.565	60.551	-14	3
SS 3307	St Leonards Rd	59.661	59.651	-10	3
SS 3308	St Leonards Rd	63.275	63.270	-5	3
SS 3311	Rahiri Rd	95.306	95.294	-12	5
SS 3312	Rahiri Rd	95.929	95.919	-11	5
SS 3313	Landscape Rd	112.633	112.618	-16	1
SS 3315	Rewa Rd	80.938	80.914	-23	2
SS 3316	Rewa Rd	98.902	98.885	-17	3
RM 6807	St Andrews Rd	102.487	102.471	-16	-1
RM 6812	St Andrews Rd	108.907	108.894	-13	0
SM 6826	Buckley Rd	74.710	74.706	-4	-1
RM 6827	Buckley Rd	83.332	83.335	3	2
SM 6828	Buckley Rd	87.952	87.955	3	2
SS 7701B	Landscape Rd	115.509	115.508	0	1
SS 7702B	Landscape Rd	110.538	110.536	-2	1
RM 7703	Landscape Rd	100.149	100.132	-17	1
SM 7704	St Andrews Rd	97.816	97.808	-8	0
AP 7705A	St Andrews Rd	88.195	88.194	-1	0
AP 9	St Andrews Rd	92.802	92.781	-21	-1

Three Kings Precise Level Survey Results - April 2014

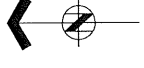
Station ID	Location	Averaged Level	April 14 Level	April 14 to Averaged Level	April 14 cf May 13
AP 11	Mt Eden Rd	80.191	80.182	-9	1
AP 16	Queens Way	83.646	83.640	-5	4
AP 18B	DESTROYED	81.641	Destroyed - Refer AP 18C		
AP 18C	Mt Eden Rd	81.667	81.667	no previous level	
M 205	Mt Albert Rd	59.305	59.304	-1	0
AP 206A	Mt Albert Rd	59.997	59.993	-4	-1
M 210	Mt Albert Rd	83.050	83.030	-20	1
SM 1979	Hillsborough Rd	61.241	61.213	-28	-2
BP 1977B	Hillsborough Rd	71.993	71.987	-6	0
SM 6809	St Andrews Rd	81.800	81.777	-23	-1
SM 6810	St Andrews Rd	76.956	76.936	-20	0
RM 6811	St Andrews Rd	76.526	76.502	-24	0
RM 6813	St Andrews Rd	80.905	80.879	-27	0
RM 6816	Rowan Rd	78.908	78.886	-22	1
SM 6817	Rowan Rd	80.995	80.977	-18	1
RM 6818	Rowan Rd	81.966	81.946	-19	1
RM 6819	Buckley Rd	65.620	65.605	-15	-2
SM 6820	Buckley Rd	71.955	71.946	-9	-1
SM 6821	Buckley Rd	71.114	71.107	-7	-1
SM 6822	Gorrie Ave	81.874	81.855	-19	-1
SM 6823	Buckley Rd	70.593	70.583	-10	0
RM 6824	Buckley Rd	71.084	71.079	-5	-1
RM 6825	Quentin Ave	81.386	81.372	-14	-1
SM 6835	Torrance St	70.784	70.785	1	0
SM 6836	Torrance St	65.955	65.957	2	-1
RM 6838	Fernleigh Ave	70.304	70.297	-6	-1
SM 6839	Fernleigh Ave	67.487	67.486	-1	-1
SM 6840	Fernleigh Ave	63.278	63.279	1	-1
SM 6841	Peet Ave	65.698	65.696	-3	0
AP 6843A	Kings Way	75.221	75.219	-3	0
RM 7647	Mt Albert Rd	67.601	67.573	-27	-1
ORM.I	Weaver Street	63.578	63.580	2	-1
AP 5	Mt Eden Rd	75.746	75.734	-12	0
AP 6	Queens Way	75.306	75.286	-20	1
AP 7A	St Andrews Rd	76.820	76.817	-4	0
AP 8B	Mt Albert Rd	75.740	75.723	-17	-1
AP 12	Warren Ave	94.357	94.339	-18	0
OAP 19	St Andrews Rd	77.508	77.482	-27	0
AP 21B	Mt Eden Rd	77.649	77.648	-1	0
AP 22	Queens Way	78.352	78.346	-6	2
AP 23	Queens Way	74.402	74.392	-10	2
AP 30	Mt Eden Rd	77.329	77.319	-11	1
AP 31	Mt Eden Rd	76.857	76.852	-5	0
AP 32	Mt Eden Rd	76.203	76.193	-10	1
AP 33	Mt Eden Rd	75.121	75.110	-11	0
AP 34	Mt Eden Rd	74.937	74.923	-14	0
SM 5387	Erson Ave	56.747	56.748	1	0
SM 5386	Symonds St	55.184	55.185	2	-1
M 638	Manukau Rd	54.690	54.689	-1	-1

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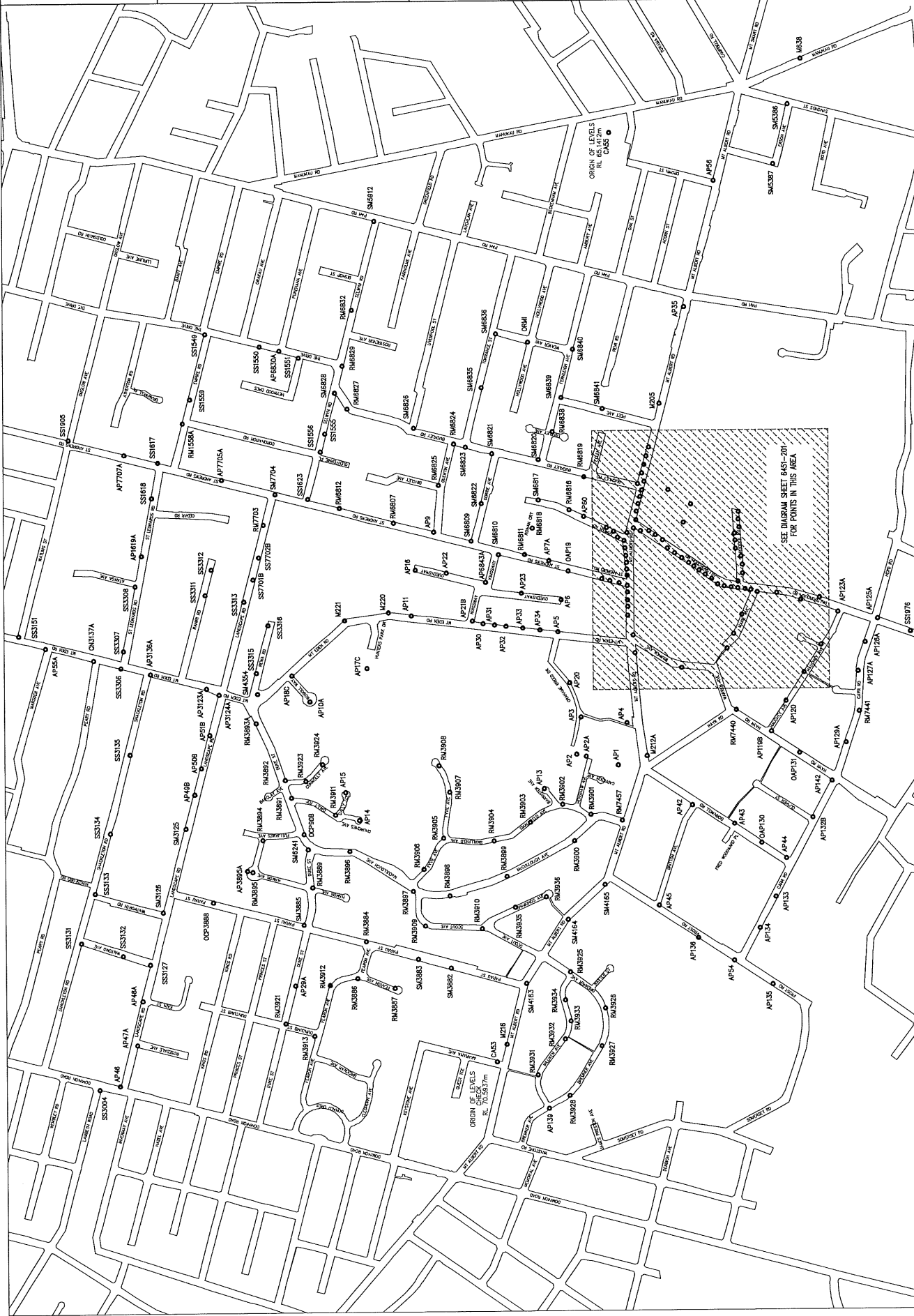
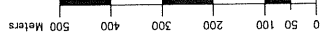
Station ID	Location	Averaged Level	April 14 Level	April 14 to Averaged Level	April 14 cf May 13
CA 55	Manukau Rd	65.141	65.141	0	0
CA 53	Akarana Ave	70.594	70.594	0	0
M 216	Mt Albert Rd	72.658	72.659	1	1
SS 1977	Hillsborough Rd	74.453	74.450	-3	0
RM 3927	Bremner Ave	62.651	62.649	-2	-1
RM 3928	Bremner Ave	56.144	56.142	-2	-2
AP 139	Bremner Ave	56.225	56.221	-4	-2
RM 3931	Milliken Ave	62.500	62.499	0	-2
RM 3932	Milliken Ave	71.719	71.718	-1	-1
SS 3004	Dominion Rd	51.812	51.809	-3	3
SS 3131	Shackleton Rd	59.419	59.416	-3	4
SS 3133	Shackleton Rd	59.554	59.549	-5	4
SS 3134	Shackleton Rd	61.479	61.471	-7	4
SS 3135	Shackleton Rd	61.684	61.680	-4	4
SS 3151	Mt Eden Rd	67.987	67.987	0	4
SS 1905	St Andrews Rd	88.810	88.807	-4	0
AP 7707A	St Andrews Rd	81.535	81.534	-1	0
RM 1558A	Empire Rd	91.682	91.681	-1	0
SS 1559	Empire Rd	96.024	96.020	-5	-1
SS 1549	The Drive	85.871	85.869	-3	0
SS 1550	The Drive	84.432	84.432	0	1
AP 6830A	The Drive	81.767	81.767	1	1
SS 1551	The Drive	77.481	77.478	-3	1
RM 6829	Selwyn Rd	79.864	79.857	-7	1
RM 6832	Selwyn Rd	80.190	80.191	1	1
SM 5912	Pah Rd	74.285	74.286	1	1
AP 35	Mt Albert Rd	54.190	54.193	3	-1
AP 37	Hillsborough Rd	59.335	59.320	-16	-2
AP 38	Budock Rd	69.274	69.267	-7	-1
AP 39	Hillsborough Bowling	56.297	56.290	-7	0
AP 40	Hillsborough Bowling	55.757	55.751	-6	1
IS 41	Hillsborough Bowling	56.336	56.328	-8	-1
AP 42	Dornwell Rd	76.373	76.362	-11	2
AP 43	Dornwell Rd	66.002	65.994	-8	2
AP 44	Dornwell Rd	58.493	58.483	-10	1
AP 45	Frost Rd	64.920	64.912	-8	3
AP 54	Frost Rd	57.855	57.841	-14	2
AP 46	Dominion Rd	50.443	50.439	-3	4
AP 47A	Landscape Rd	52.565	52.565	0	5
AP 48A	Landscape Rd	57.065	57.063	-2	3
AP 49B	Landscape Rd	70.340	70.337	-4	3
AP 50B	Landscape Rd	71.659	71.658	-1	3
AP 51B	Landscape Rd	74.120	74.118	-2	2
AP 55A	Mt Eden Rd	68.302	68.304	2	4
AP 56	Mt Albert Rd	58.409	58.409	0	-1
AP 60	Rowan Rd	76.276	76.263	-13	0
AP 61	Rowan Rd	71.310	71.294	-16	1
AP 62A	Mt Albert Rd	62.894	62.893	-1	-1
AP 63A	Mt Albert Rd	61.370	61.367	-4	-1

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Station ID	Location	Averaged Level	April 14 Level	April 14 to Averaged Level	April 14 cf May 13
AP 64	Hillsborough Rd	60.579	60.569	-10	-1
AP 65	Hillsborough Rd	59.546	59.533	-14	-1
OAP 66	Hillsborough Rd	59.987	59.978	-9	-2
AP 67	Hillsborough Rd	63.871	63.862	-9	-1
OCP 68	Budock Rd	66.304	66.299	-5	-1
AP 69	Budock Rd	65.977	65.971	-6	-1
AP 70	Budock Rd	71.208	71.203	-5	-2
AP 71A	Hillsborough Rd	67.816	67.815	-1	-2
AP 72	Hillsborough Rd	74.077	74.074	-3	-1
AP 73	Marie Ave	70.874	70.866	-8	-1
AP 74A	Marie Ave	78.302	78.301	-1	-1
AP 75	Marie Ave	86.876	86.875	-1	1
AP 77A	Mt Albert Rd	83.034	83.035	0	1
AP 78	Mt Albert Rd	81.022	81.012	-10	1
AP 79	Mt Albert Rd	78.663	78.654	-9	0
AP 80	Mt Albert Rd	71.414	71.400	-15	-2
AP 81A	Mt Albert Rd	58.551	58.548	-3	-1
AP 82A	Mt Albert Rd	58.575	59	-3	-1
AP 83	Mt Albert Rd	58.863	58.858	-6	0
AP 84	Mt Albert Rd	59.350	59.345	-5	-1
AP 85	Mt Albert Rd	60.619	60.611	-8	-1
AP 86	Mt Albert Rd	62.051	62	-6	-1
AP 87	Mt Albert Rd	62.733	62.726	-8	-1
AP 88A	Mt Albert Rd	64.678	64.677	-1	-2
AP 89	Mt Albert Rd	65.939	65.928	-11	-1
AP 90	Mt Albert Rd	68.687	68.677	-10	-1
AP 91	Mt Albert Rd	70.075	70.065	-10	-2
AP 92	Mt Albert Rd	72.613	72.623	10	1
AP 93	Mt Albert Rd	73.864	73.855	-9	-1
AP 94	Mt Albert Rd	77.101	77.093	-7	0
AP 95	Mt Albert Rd	79.957	79.949	-8	1
AP 96	St Andrews Rd	77.897	77.890	-7	0
AP 97	St Andrews Rd	80.321	80.313	-8	0
AP 98	Rowan Rd	68.501	68.494	-7	0
AP 99	Rowan Rd	69.478	69.470	-9	0
AP 100	Hillsborough Rd	62.966	62.955	-11	-2
AP 101	Hillsborough Rd	61.359	61.350	-9	-1
AP 102	Hillsborough Rd	60.006	59.997	-9	-1
AP 103	Hillsborough Rd	59.404	59.392	-13	0
AP 104A	Hillsborough Rd	59.554	59.547	-7	-2
AP 105	Hillsborough Rd	59.711	59.703	-8	-2
AP 106	Hillsborough Rd	60.458	60.452	-6	-1
AP 107	Hillsborough Rd	60.881	60.875	-6	-2
AP 108	Hillsborough Rd	62.060	62.055	-5	-2
AP 109	Hillsborough Rd	62.806	62.800	-6	-2
AP 110	Hillsborough Rd	64.997	64.989	-8	-1
AP 111	Hillsborough Rd	66.322	66.317	-4	-1
AP 112	Budock Rd	63.699	63.694	-5	-1
AP 113	Budock Rd	65.546	65.545	-2	0



Note:
 Origin of Levels
 CHS5 5049330
 RL 631.14
 in 100m
 M205 5054417
 (GS at 5/02)
 CHS519 = Level
 Control Pt.
 Existing



PROJECT No:	1301005451.01	SCALE:	1:5000
DRAWING No:	006451-200	NTS	

TITLE:
**SURVEY MONITORING
 CONTROL POINTS**

PROJECT:
**WINSTONE AGGREGATES
 THREE KINGS QUARRY
 AUCKLAND**

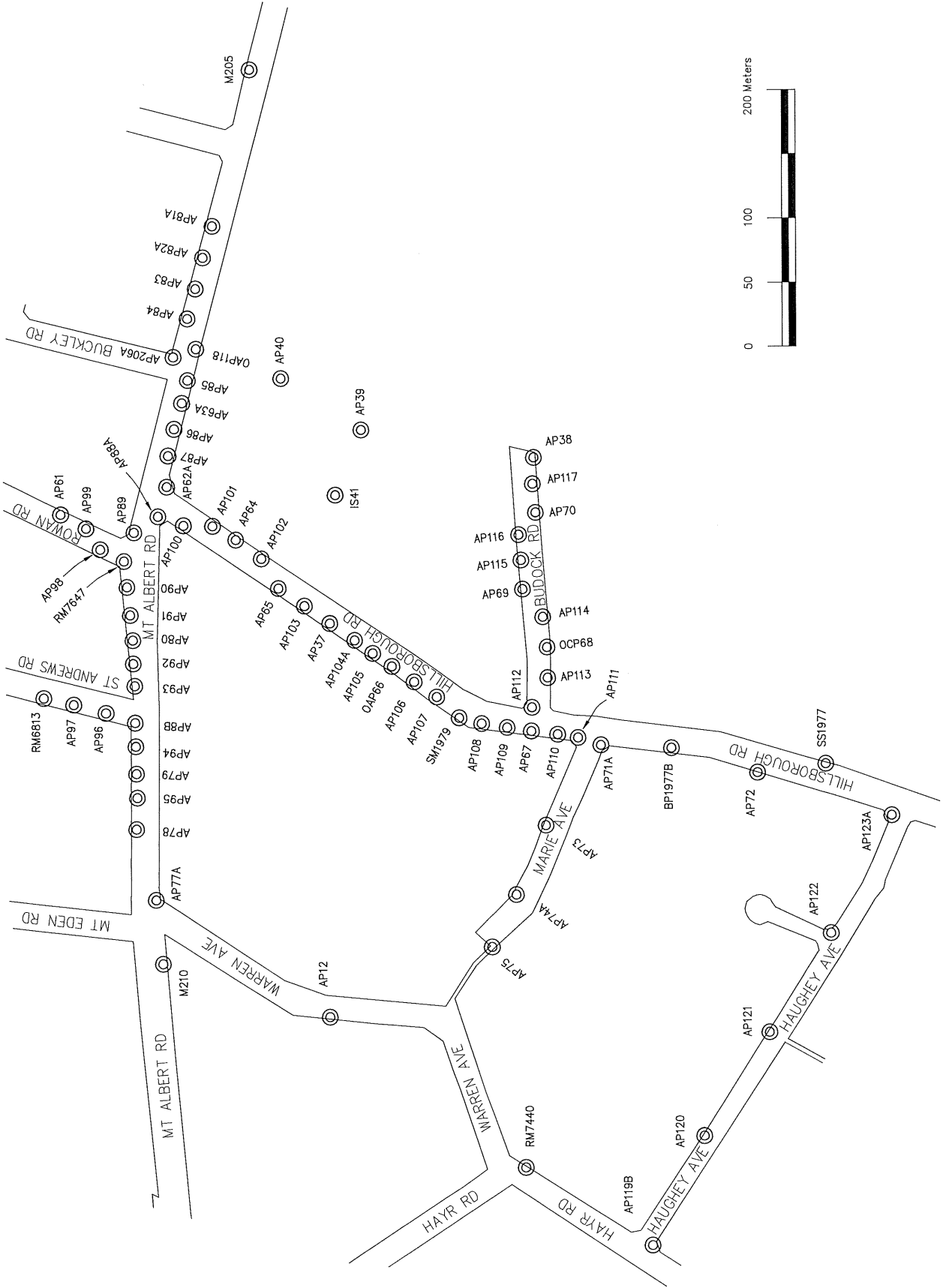
DRAWN BY: JEFFREY
 LEVEL 4, 6005 S. 4 LEONARD STT DRIVE
 AUCKLAND 1013
 TEL: 09 486 3300
 WWW.HARTLOGGERS.COM



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 NEW ZEALAND
 QUALITY ASSURED

NO.	DATE	BY	DATE	BY	DATE	BY
1	03/04/14	JEFFREY	03/04/14	JEFFREY		
2	03/04/14	JEFFREY	03/04/14	JEFFREY		
3	03/04/14	JEFFREY	03/04/14	JEFFREY		
4	03/04/14	JEFFREY	03/04/14	JEFFREY		
5	03/04/14	JEFFREY	03/04/14	JEFFREY		
6	03/04/14	JEFFREY	03/04/14	JEFFREY		
7	03/04/14	JEFFREY	03/04/14	JEFFREY		
8	03/04/14	JEFFREY	03/04/14	JEFFREY		
9	03/04/14	JEFFREY	03/04/14	JEFFREY		
10	03/04/14	JEFFREY	03/04/14	JEFFREY		

REFER TO APPROVED MASTER DRAWINGS FOR ORIGINAL SIGNATURES. FILE: MANUKAU N:\11301005451\LEVELS\CAD\SURVEY\0051-200 CONTROLPTS PLAN.DWG



ISSUE NO:	006451-201
PRODUCT No:	1:5000
DATE OF ISSUE:	13/02/2022
DATE OF REV:	13/02/2022
BY:	A
REV:	A

TITLE:
**SURVEY MONITORING
 CONTROL POINTS
 (DIAGRAM TO PLAN 6451-200)**

PROJECT:
**WINSTONE AGGREGATES
 THREE KINGS QUARRY
 AUCKLAND**

APPROVED FOR THE PROJECT OFFICE
 LEVEL 4, QUAY 5, 4 LEONARD CDT DRIVE
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NO.	DATE	BY	DATE	APPROVED	DATE	BY	DATE
1	13/02/2022	MHD	13/02/2022	MHD	13/02/2022	MHD	13/02/2022
REF REVISIONS							