



Summary of in-situ density test results

Project No.			Project Name							
D10557V			Giga One, Envision, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433252 N558803	CC223		08/07/22	Clay	Sunny	CCD	1.90	30	1.47	Zone 7
E433258 N588796	CC224		08/07/22	Clay	Sunny	CCD	1.89	15	1.64	Zone 7
E433263 N588788	CC225		08/07/22	Clay	Sunny	CCD	2.00	18	1.70	Zone 7
E433264 N558788	CC226		08/07/22	Clay	Sunny	CCD	2.07	17	1.77	Zone 7
E433274 N558799	CC227		08/07/22	Clay	Sunny	CCD	1.96	17	1.68	Zone 7
E433568 N558810	CC228		08/07/22	Clay	Sunny	CCD	2.05	22	1.68	Zone 7
E433272 N558804	CC229		08/07/22	Clay	Sunny	CCD	2.16	11	1.95	Zone 7
E433272 N558804	CC230		08/07/22	Clay	Sunny	CCD	1.96	18	1.66	Zone 7
E433277 N558791	CC231		08/07/22	Clay	Sunny	CCD	2.03	18	1.72	Zone 7
E433282 N558785	CC232		08/07/22	Clay	Sunny	CCD	2.00	17	1.70	Zone 7
E433274 N559069	CC233		08/07/22	Clay	Sunny	CCD	2.06	17	1.76	CTW - Zone 3
E433232 N558790	CC234		08/07/22	Clay	Sunny	CCD	2.03	18	1.72	Zone 2

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 17/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.		Project Name								
D10557V		Giga One, Envision, Washington								
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433332 N559098	CC235		08/07/22	Clay	Sunny	CCD	2.07	15	1.80	ZTW - Zone 3
E433332 N559096	CC236		08/07/22	Clay	Sunny	CCD	2.01	16	1.73	Road
E433331 N559094	CC237		08/07/22	Clay	Sunny	CCD	2.00	14	1.75	CTW - Zone 3
E433338 N559093	CC238		08/07/22	Clay	Sunny	CCD	2.12	16	1.83	CTW - Zone 3
E433331 N559092	CC239		08/07/22	Clay	Sunny	CCD	2.02	15	1.75	Road
E433332 N559089	CC240		08/07/22	Clay	Sunny	CCD	1.98	17	1.70	Zone 2
E433248 N558775 CC14-RT	CC241		08/07/22	Clay	Sunny	CCD	1.96	20	1.64	Zone 2
E433242 N558773 CC15-RT	CC242		08/07/22	Clay	Sunny	CCD	2.05	21	1.69	Zone 2
E433242 N558771 CC13-RT	CC243		08/07/22	Clay	Sunny	CCD	1.99	20	1.66	Zone 2
E433236 N558767 CC12-RT	CC244		08/07/22	Clay	Sunny	CCD	2.05	17	1.76	Zone 2
E433222 N558779 CC11-RT	CC245		08/07/22	Clay	Sunny	CCD	2.01	21	1.67	Zone 2

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 17/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557X			Giga One, Envision, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433327 N558774	CC246		12/07/22	Clay	Sunny	CCD	2.02	17	1.73	Zone 7
E433296 N558771	CC247		12/07/22	Clay	Sunny	CCD	1.91	20	1.59	Zone 7
E433321 N558762	CC248		12/07/22	Clay	Sunny	CCD	1.94	19	1.63	Zone 7
E433342 N558754	CC249		12/07/22	Clay	Sunny	CCD	1.97	24	1.59	Zone 7
E433272 N558769	CC250		12/07/22	Clay	Sunny	CCD	2.02	19	1.70	Zone 2
E433276 N558777	CC251		12/07/22	Clay	Sunny	CCD	2.09	19	1.76	Zone 2
E433260 N558747	CC252		09/05/00	Clay	Sunny	CCD	2.15	16	1.85	Zone 2
E433290 N558751	CC253		12/07/22	Clay	Sunny	CCD	2.07	19	1.74	Zone 7
E433310 N558747	CC254		12/07/22	Clay	Sunny	CCD	2.06	24	1.66	Zone 7
E433274 N558746	CC255		12/07/22	Clay	Sunny	CCD	2.07	18	1.76	Zone 2

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 17/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557Z				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7, L1 - 433344-558770	CC256	CC256	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.00	18	1.69	
Z7, L1 - 433335-558786	CC257	CC257	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.98	19	1.67	
Z7, L1 - 433328-558800	CC258	CC258	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.04	17	1.74	
Z7, L1 - 433328-558816	CC259	CC259	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.99	17	1.71	
Z7, L1 - 433374 - 558770	CC260	CC260	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.99	24	1.61	
Z7, L1 - 433365-558788	CC261	CC261	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.04	21	1.69	
Z7, L1 - 433359-558805	CC262	CC262	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.85	18	1.57	
Z7, L1 - 433351-558824	CC263	CC263	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.06	20	1.71	
Z7, L1 - 433345-558835	CC264	CC264	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.02	18	1.71	
Z7, L2 - 433344-558770	CC265	CC265	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	2.04	20	1.70	
Z7, L2 - 433335-558786	CC266	CC266	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.95	15	1.69	
Z7, L2 - 433326-558801	CC267	CC267	0.00	14/07/22	Brown, Sandy CLAY	Cloudy, 22C	CCD	1.89	18	1.60	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 15/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AA				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L1-433407-558758	CC269	CC269	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.09	20	1.75	
Z7-L1-433362-558856	CC270	CC270	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.06	21	1.70	
Z7-L1-433362-558856	CC271	CC271	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.10	22	1.72	
Z7-L1-433398-558842	CC272	CC272	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.01	22	1.64	
Z7-L1-433391-558819	CC273	CC273	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.04	16	1.75	
Z7-L1-433366-558842	CC274	CC274	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny 20C	CCD	2.08	21	1.72	
Z7-L1-433386-5588776	CC275	CC275	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny 20C	CCD	2.02	25	1.61	
Z7-L1-433405-558809	CC276	CC276	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny 20C	CCD	1.96	24	1.58	
Z7-L1-433398-558785	CC277	CC277	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny 20C	CCD	2.06	23	1.67	
Z7-L1-433386-558838	CC278	CC278	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny 20C	CCD	1.98	24	1.60	
Z7-L1-433355-558733	CC279	CC279	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.08	20	1.74	
Z7-L1-433411-558793	CC280	CC280	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	1.99	13	1.76	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 18/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AB				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L1-433380-558790	CC283	CC283	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.06	19	1.74	
Z7-L1-433370-558824	CC284	CC284	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.07	18	1.75	
Z7-L1-433418-558793	CC285	CC285	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	1.98	26	1.57	
Z7-L1-433395-558819	CC286	CC286	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.02	25	1.62	
Z7-L1-433400-558827	CC287	CC287	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.03	20	1.69	
Z7-L1-433407-558758	CC288	CC288	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.07	20	1.73	
Z7-L1-433378-558856	CC289	CC289	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	1.98	23	1.61	
Z7-L1-433393-588855	CC290	CC290	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.00	23	1.62	
Z7-L1-433355-588733	CC291	CC291	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.00	19	1.68	
Z7-L1-433357-558732	CC292	CC292	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.01	22	1.65	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 18/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AC			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-433342-558811	CC293		18/07/22	Clay	Clear	CCD	2.02	17	1.73	
Z7-L2-433358-558814	CC294		18/07/22	Clay	Clear	CCD	1.94	21	1.61	
Z7-L2-433365-558755	CC295		18/07/22	Clay	Clear	CCD	1.96	21	1.63	
Z7-L2-433358-558776	CC296		18/07/22	Clear	Clay	CCD	2.05	19	1.72	
Z7-L2-433367-558784	CC297		18/07/22	Clay	Clear	CCD	1.97	21	1.63	
Z7-L2-433329-558841	CC298		18/07/22	Clay	Clear	CCD	1.98	18	1.67	
Z7-L2-433372-558739	CC299		18/07/22	Clay	Clear	CCD	1.96	18	1.66	
Z7-L2-433351-558828	CC300		18/07/22	Clay	Clear	CCD	2.04	22	1.67	
Z7-L2-433349-558733	CC301		18/07/22	Clay	Clear	CCD	2.01	23	1.64	
Z7-L2-433349-558794	CC302		18/07/22	Clay	Clear	CCD	2.02	17	1.73	
Z7-L2-433370-558767	CC303		18/07/22	Clay	Clear	CCD	1.95	22	1.60	
Z7-L2-433362-558800	CC304		18/07/22	Clay	Clear	CCD	1.99	22	1.63	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 19/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results


Project No.			Project Name							
D10557AC			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-43343-558839	CC305		18/07/22	Clay	Clear	CCD	2.03	23	1.65	
Z7-L2-43333-558827	CC306		18/07/22	Clay	Clear	CCD	2.02	18	1.71	
Z7-L2-433382-558752	CC307		18/07/22	Clay	Clear	CCD	2.04	20	1.70	
Z7-L1-433368-558743	CC308		18/07/22	Clay	Clear	CCD	1.97	23	1.60	
Z7-L1-433412-558847	CC309		18/07/22	Clay	Clear	CCD	2.01	24	1.63	
Z7-L1-433405-558862	CC310		18/07/22	Clay	Clear	CCD	1.98	21	1.64	
Z7-L1-433374-558735	CC311		18/07/22	Clay	Clear	CCD	1.97	23	1.60	
Z7-L1-433442-558765	CC312		18/07/22	Clay	Clear	CCD	2.08	19	1.75	
Z7-L1-433430-558799	CC313		18/07/22	Clay	Clear	CCD	2.00	20	1.67	
Z7-L1-433437-558783	CC314		18/07/22	Clay	Clear	CCD	2.06	18	1.74	
Z7-L1-433419-558831	CC315		18/07/22	Clay	Clear	CCD	1.99	20	1.66	
Z7-L1-433425-558815	CC316		18/07/22	Clay	Clear	CCD	2.01	22	1.65	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 19/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

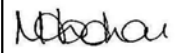
Project No.			Project Name							
D10557AD			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-433412-558801	CC317		19/07/22	Clear	Sunny	CCD	2.02	22	1.66	
Z7-L2-433392-558748	CC318		19/07/22	Clay	Sunny	CCD	2.00	20	1.67	
Z7-L2-433411-558756	CC319		19/07/22	Clay	Sunnu	CCD	2.04	20	1.71	
Z7-L2-433443-558769	CC320		19/07/22	Clay	Sunny	CCD	2.02	21	1.67	
Z7-L2-433402-558783	CC321		19/07/22	Clay	Sunny	CCD	2.04	20	1.70	
Z7-L2-433437-558786	CC322		19/07/22	Clear	Sunny	CCD	2.03	19	1.71	
Z7-L2-433399-558794	CC323		19/07/22	Clay	Sunny	CCD	2.04	21	1.69	
Z7-L2-433387-558785	CC324		19/07/22	Clay	Sunny	CCD	2.05	20	1.71	
Z7-L2-433416-558786	CC325		19/07/22	Clear	Sunny	CCD	2.04	20	1.70	
Z7-L2-433426-558807	CC326		19/07/22	Clay	Sunny	CCD	2.02	21	1.67	
Z7-L2-433392-558764	CC327		19/07/22	Clay	Clear	CCD	2.01	18	1.70	
Z7-L2-433434-558762	CC328		19/07/22	Clay	Sunny	CCD	1.97	22	1.62	

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Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 20/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.		Project Name								
D10557AD		Giga One, Washington								
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-433432-558793	CC329		19/07/22	Clay	Sunny	CCD	2.06	19	1.74	
Z7-L2-433387-558775	CC330		19/07/22	Clay	Sunny	CCD	2.06	19	1.73	
Z7-L2-433408-558770	CC331		19/07/22	Clay	Sunny	CCD	2.01	18	1.70	
Z7-L1-433420-558778	CC332		19/07/22	Clay	Sunny	CCD	2.07	21	1.71	


Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 20/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L3-433413-558754	CC333	CC333	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	21	1.69	
Z7-L3-433444-558765	CC334	CC334	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.09	19	1.76	
Z7-L3-433396-558747	CC335	CC335	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.13	16	1.84	
Z7-L3-433428-558760	CC336	CC336	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.05	23	1.67	
Z7-L3-433403-558772	CC337	CC337	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	19	1.72	
Z7-L2-433377-558803	CC338	CC338	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	1.99	25	1.60	
Z7-L3-433379-558782	CC339	CC339	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	24	1.66	
Z7-L3-433410-558793	CC340	CC340	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.06	20	1.72	
Z7-L3-433413-558754	CC341	CC341	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	20	1.72	
Z7-L3-433424-558801	CC342	CC342	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	23	1.69	
Z7-L3-433419-558779	CC343	CC343	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.09	17	1.78	
Z7-L3-433389-558765	CC344	CC344	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	17	1.77	
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method							Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632		

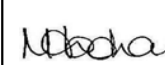
Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L3-433435-558788	CC345	CC345	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.03	16	1.75	
Z7-L2-433394-558811	CC346	CC346	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.08	19	1.75	
Z9-L1-433464-558766	CC347	CC347	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.08	20	1.73	
Z9-L1-433455-558785	CC348	CC348	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.10	19	1.77	
Z9-L1-433444-558802	CC349	CC349	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.05	21	1.69	
Z9-L1-433438-558817	CC350	CC350	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.06	20	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AJ			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L1-480601-54.923684	CC338		28/09/22	Clay	Overcast	CCD	2.11	15	1.83	
Z6-L1-480639-54.923795	CC339		28/07/22	Clay	Overcast	CCD	1.98	22	1.63	
Z6-L1-480802-54.923642	CC340		28/07/22	Clay	Overcast	CCD	2.05	22	1.69	
Z6-L1-480887-54.923745	CC341		28/07/22	Clay	Overcast	CCD	2.09	16	1.81	
Z6-L1-481039-54.923537	CC342		28/07/22	Clay	~Overcast	CCD	2.04	19	1.71	
Z6-L1-481082-54.923537	CC343		28/07/22	Clay	Overcast	CCD	2.07	20	1.73	
Z6-L1-481239-54.923526	CC344		28/07/22	Clay	Overcast	CCD	2.09	21	1.73	
Z6-L1-481317-54.923670	CC345		28/07/22	Clay	Overcast	CCD	2.08	20	1.74	
Z6-L1-481450-54.923495	CC346		28/07/22	Clay	Overcast	CCD	2.01	25	1.61	
Z6-L1-481537-54.923605	CC347		28/07/22	Clay	Overcast	CCD	2.04	23	1.67	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 29/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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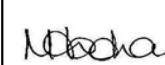
Summary of in-situ density test results

Project No.			Project Name							
D10557AF			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-433406-558836	CC351		21/07/22	Clay	Cloudy	CCD	2.05	21	1.70	
Z7-L2-433356-558837	CC352		21/07/22	Clay	Clear	CCD	2.03	23	1.65	
Z7-L2-433364-558818	CC353		21/07/22	Clay	Cloudy	CCD	2.07	19	1.74	
Z7-L3-433393-558806	CC354		21.07.22	Clay	Sunny	CCD	2.08	19	1.75	
Z7-L3-433379-558799	CC355		21/07/22	Clay	Cloudy	CCD	2.09	22	1.72	
Z7-L2-433371-558843	CC356		21/07/22	Clay	Cloudy	CCD	2.04	24	1.65	
Z7-L2-433382-558850	CC357		21/07/22	Clay	Cloudy	CCD	2.06	23	1.67	
Z7-L2-433390-558858	CC358		21/07/22	Clay	Clear	CCD	2.03	22	1.66	
Z7-L2-433378-558804	CC359		21/07/22	Clay	Clear	CCD	2.12	16	1.83	
Z7-L2-433393-558831	CC360		21/07/22	Clay	Clear	CCD	2.06	21	1.70	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 22/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AG			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z9-L1-433433-558838	CC361		22/07/22	Clay	Cloudy	CCD	2.08	20	1.74	
Z9-L1-433424-558851	CC362		22/07/22	Clay	Cloudy	CCD	2.10	21	1.74	
Z9-L1-433418-558861	CC363		22/07/22	Clay	Cloudy	CCD	2.06	17	1.76	
Z9-L2-433427-558851	CC364		22/07/22	Clay	Cloudy	CCD	2.07	21	1.71	
Z9-L2-433419-558862	CC365		22/07/22	Clay	Cloudy	CCD	1.96	17	1.67	
Z9-L3-433445-558808	CC366		22/07/22	Clay	Cloudy	CCD	1.96	14	1.71	
Z9-L3-433434-558825	CC367		22/07/22	Clay	Cloudy	CCD	1.99	18	1.68	
Z9-L3-433427-558842	CC368		22/07/22	Clay	Cloudy	CCD	1.99	21	1.65	
Z9-L3-433420-558859	CC369		22/07/22	Clay	Cloudy	CCD	2.05	19	1.73	
Z9-L2-433465-558767	CC370		22/07/22	Clay	Cloudy	CCD	2.08	20	1.73	
Z9-L2-433454-558787	CC371		22/07/22	Clay	Cloudy	CCD	2.06	21	1.70	
Z9-L2-433448-558803	CC372		22/07/22	Clay	Cloudy	CCD	2.05	23	1.67	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 25/07/2022	N O'Brien Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AH			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L1-433333-558861	CC375		25/07/22	Clay	Cloudy	CCD	2.10	21	1.73	
Z6-L1-433373-558875	CC376		25/07/22	Clay	Clody	CCD	2.20	20	1.83	
Z6-L1-433357-558870	CC377		25/07/22	Clay	Cloudy	CCD	2.09	23	1.70	
Z6-L2-433334-558859	CC378		25/07/22	Clay	Cloudy	CCD	2.13	20	1.78	
Z6-L2-433357-558862	CC379		25/07/22	Clay	Cloudy	CCD	2.08	20	1.73	
Z6-L2-433373-558870	CC380		25/07/22	Clay	Cloudy	CCD	2.11	21	1.75	
Z6-L1-433305-558849	CC381		25/07/22	Clay	Cloudy	CCD	2.05	24	1.66	
Z6-L1-433287-558854	CC382		25/07/22	Clay	Cloudy	CCD	2.09	21	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 26/07/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AA				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC131-RT	CC131-RT	CC131-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.06	19	1.73	
CC256-RT	CC256-RT	CC256-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.06	14	1.81	
CC259-RT	CC259-RT	CC259-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.10	18	1.79	
CC262-RT	CC262-RT	CC262-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	1.97	18	1.67	
CC268-RT	CC268-RT	CC268-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.01	21	1.66	
CC36-RT	CC36-RT	CC36-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.01	21	1.66	
CC88-RT	CC88-RT	CC88-RT	0.00	15/07/22	Brown, Sandy CLAY	Dry, Sunny, 20C	CCD	2.05	19	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 18/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AB				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC116-RT	CC116-RT	CC116-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.09	21	1.73	
CC117-RT	CC117-RT	CC117-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	1.99	25	1.59	
CC260-RT	CC260-RT	CC260-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.00	20	1.66	
CC266-RT	CC266-RT	CC266-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.08	16	1.79	
CC267-RT	CC267-RT	CC267-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.06	20	1.71	
CC268-RT	CC268-RT	CC268-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.06	21	1.71	
CC90-RT	CC90-RT	CC90-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	1.98	20	1.66	
CC41-RT	CC41-RT	CC41-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	1.93	22	1.59	
CC89-RT	CC89-RT	CC89-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.04	21	1.69	
CC97-RT	CC97-RT	CC97-RT	0.00	16/07/22	Brown, Sandy CLAY	Clear, 19C	CCD	2.03	21	1.67	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 18/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC294-RT	CC294-RT	CC294-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	17	1.72	
CC298-RT	CC298-RT	CC298-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	21	1.69	
CC299-RT	CC299-RT	CC299-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.00	18	1.70	
CC303-RT	CC303-RT	CC303-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	17	1.73	
CC308-RT	CC308-RT	CC308-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	18	1.71	
CC311-RT	CC311-RT	CC311-RT	0.00	20/07/22	Brown, Sandy CLAY	Clear, 22C	CCD	2.01	17	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AL			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L1-480685-54.924113	CC398		01/08/22	Clay	Overcast	CCD	1.91	8.8	1.76	
Z6-L1-480856-54.923869	CC399		01/08/22	Clay	Overcast	CCD	2.02	21	1.68	
Z6-L1-480555-54.823820	CC400		01/08/22	Clay	Overcast	CCD	2.09	21	1.73	
Z6-L1-481110-54.924597	CC401		01/08/22	Clay	Overcast	CCD	2.09	21	1.73	
Z6-L1-481139-54.924427	CC402		01/08/22	Clay	Overcast	CCD	2.06	36	1.52	
Z6-L1-481103-54.924608	CC403		01/08/22	Clay	Overcast	CCD	2.06	24	1.66	
Z6-L1-480857-54.924421	CC404		01/08/22	Clay	Overcast	CCD	2.02	29	1.56	
Z6-L1-481601-54.924074	CC405		01/08/22	Clay	Overcast	CCD	2.01	20	1.68	
Z6-L2-480934-54.924275	CC406		01.08.22	Clay	Overcast	CCD	2.05	21	1.69	
Z6-L2-480939-54.924064	CC407		01.08.22	Clay	Overcast	CCD	1.97	26	1.57	
Z6-L2-481050-54.924260	CC408		01.08.22	Clay	Overcast	CCD	2.09	20	1.75	
Z6-L2-480871-54.924320	CC409		01.08.22	Clay	Overcast	CCD	2.04	23	1.66	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 02/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AM			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L2-433228-558837	CC414		02/08/22	Clay	Overcast	CCD	2.07	19	1.75	
Z6-L2-433243-558832	CC415		02/08/22	Clay	Overcast	CCD	2.04	20	1.70	
Z6-L2-433257-558836	CC416		02/08/22	Clay	Overcast	CCD	2.02	19	1.70	
Z6-L2-433253-558852	CC417		02/08/22	Clay	Overcast	CCD	2.05	18	1.74	
Z6-L2-433279-558844	CC418		02/08/22	Clay	Overcast	CCD	1.89	16	1.63	
Z6-L2-433266-558855	CC419		02/08/22	Clay	Overcast	CCD	2.07	20	1.73	
Z6-L2-433296-555849	CC420		02/08/22	Clay	Overcast	CCD	2.03	23	1.66	
Z6-L2-433287-558867	CC421		02/08/22	Clay	Overcast	CCD	2.07	20	1.73	
Z6-L3-433360-559000	CC422		02/08/22	Clay	Overcast	CCD	1.93	25	1.55	
Z6-L3-433347-559003	CC423		02/08/22	Clay	Overcast	CCD	2.02	20	1.68	
Z6-L3-433366-558982	CC424		02/08/22	Clay	Overcast	CCD	2.02	20	1.68	
Z6-L3-433361-558982	CC425		02/08/22	Clay	Overcast	CCD	2.09	20	1.74	


Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 03/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AM			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L3-433375-558964	CC426		02/08/22	Clay	Overcast	CCD	2.06	21	1.71	
Z6-L3-433382-558950	CC427		02/08/22	Clay	Overcast	CCD	2.01	19	1.69	
Z6-L3-433388-558932	CC428		02/08/22	Clay	Overcast	CCD	2.05	20	1.70	
Z6-L3-433368-558938	CC429		02/08/22	Clay	Overcast	CCD	2.03	19	1.70	
Z6-L3-433363-558950	CC430		02/08/22	Clay	Overcast	CCD	2.04	18	1.73	
Z6-L3-433359-558968	CC431		02/08/22	Clay	Overcast	CCD	2.02	20	1.68	


Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 03/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AO			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L3-CC2 433313/ 558879	CC432		03/08/22	Clay	Cloudy	CCD	2.04	20	1.70	
Z6-L4-CC2 433344/ 558890	CC433		03/08/22	Clay	Cloudy	CCD	2.09	20	1.74	
Z6-L3-CC3 433363/ 558898	CC434		03/08/22	Clay	Cloudy	CCD	2.03	18	1.73	
Z6-L3-CC1 433388/ 558904	CC435		03/08/22	Clay	Cloudy	CCD	2.05	20	1.71	
Z6-L4-CC6 433382/ 558902	CC436		03/08/22	Clay	Cloudy	CCD	2.08	20	1.73	
Z6-L4-CC4 433393/ 558912	CC437		03/08/22	Clay	Cloudy	CCD	2.10	16	1.81	
Z6-L4-CC5 433373/ 558906	CC438		03/08/22	Clay	Cloudy	CCD	2.09	18	1.78	
Z6-L4-CC3 433383/ 558918	CC439		03/08/22	Clay	Cloudy	CCD	1.96	25	1.57	
Z6-L4-CC1 433381/ 558942	CC440		03/08/22	Clay	Cloudy	CCD	2.11	17	1.80	
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method						Approved By Date 04/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632		


Summary of in-situ density test results

Project No.				Project Name							
D10557AP				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L4-433318-558894	CC441	CC441	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.09	20	1.75	
Z6-L4-433309-558894	CC442	CC442	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.07	19	1.74	
Z6-L1-433332-558913	CC443	CC443	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.05	19	1.72	
Z6-L4-433285-558879	CC444	CC444	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.08	18	1.76	
Z6-L1-433351-558924	CC445	CC445	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.07	20	1.72	
Z6-L3-433321-558906	CC446	CC446	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.09	21	1.73	
Z6-L2-433315-558903	CC447	CC447	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.05	21	1.70	
Z6-L3-433345-558912	CC448	CC448	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.08	21	1.72	
Z6-L4-4333298-558888	CC449	CC449	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.09	20	1.75	
Z6-L2-433345-558915	CC450	CC450	0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.03	22	1.66	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 07/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AQ				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z6-L1	CC451	CC451	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.07	17	1.76	
Z6-L1	CC452	CC452	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.03	21	1.67	
Z6-L2	CC453	CC453	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.03	20	1.69	
Z6-L2	CC454	CC454	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.06	17	1.77	
Z6-L2	CC455	CC455	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.05	20	1.71	
Z6-L4	CC456	CC456	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.08	20	1.74	
Z6-L4	CC457	CC457	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.00	22	1.64	
Z6-L4	CC458	CC458	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.02	21	1.67	
Z6-L4	CC459	CC459	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.07	21	1.71	
Z6-L4	CC460	CC460	0.00	06/08/22	Brown, Slightly Sandy, Silty CLAY	Cloudy, 14C	CCD	2.13	20	1.78	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 07/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AR				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type	In-situ Bulk Density	Moisture Content	In-situ Dry Density	Remarks
							see below	Mg/m ³	%	Mg/m ³	
Z6-L5-1	CC461	CC461	0.00	08/08/22	Brown, Slightly Sandy CLAY	Sunny, 25C	CCD	2.31	19	1.94	
Z6-L5-2	CC462	CC462	0.00	08/08/22	Brown, Slightly Sandy CLAY	Sunny, 25C	CCD	2.24	16	1.93	
Z6-L5-3	CC463	CC463	0.00	08/08/22	Brown, Slightly Sandy CLAY	Sunny, 25C	CCD	2.32	17	1.98	
Z7-L4-4	CC464	CC464	0.00	08/08/22	Brown, Slightly Sandy CLAY	Sunny, 25C	CCD	2.25	18	1.90	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 09/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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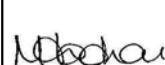
Summary of in-situ density test results

Project No.				Project Name							
D10557AS				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L4-433385-558895	CC466	CC466	0.00	09/08/22	Brown, Slightly Sandy CLAY	Cloudy, 22C	CCD	2.13	17	1.82	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 10/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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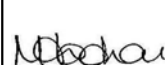
Summary of in-situ density test results

Project No.			Project Name							
D10557AT			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z8-L1-CC1	CC467		10/08/22	Clay	Sunny	CCD	2.12	20	1.77	
Z8-L1-CC2	CC468		10/08/22	Clay	Sunny	CCD	2.12	19	1.78	
Z8-L1-CC3	CC469		10/08/22	Clay	Sunny	CCD	2.12	17	1.82	
Z8-L1-CC4	CC470		10/08/22	Clay	Sunny	CCD	2.14	19	1.80	
Z8-L1-CC5	CC471		10/08/22	Clay	Sunny	CCD	2.16	17	1.84	
Z8-L1-CC6	CC472		10/08/22	Clay	Sunny	CCD	2.05	21	1.70	
Z8-L1-CC7	CC473		10/08/22	Clay	Sunny	CCD	2.07	18	1.76	
Z8-L1-CC8	CC474		10/08/22	Clay	Sunny	CCD	2.09	19	1.76	
Z8-L1-CC9	CC475		10/08/22	Clay	Sunny	CCD	2.11	20	1.76	
Z8-L1-CC10	CC476		10/08/22	Clay	Sunny	CCD	2.10	20	1.75	
Z8-L1-CC11	CC477		10/08/22	Clay	Sunny	CCD	2.13	20	1.77	
Z8-L1-CC12	CC478		10/08/22	Clay	Sunny	CCD	2.12	18	1.80	


Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 11/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AT			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z8-L1-CC13	CC479		10/08/22	Clay	Sunny	CCD	2.12	19	1.78	
Z8-L1-CC14	CC480		10/08/22	Clay	Sunny	CCD	2.07	20	1.73	
Z8-L1-CC15	CC481		10/08/22	Clay	Sunny	CCD	2.11	18	1.79	
Z8-L1-CC16	CC482		10/08/22	Clay	Sunny	CCD	2.11	19	1.77	
Z8-L2-CC17	CC483		10/08/22	Clay	Sunny	CCD	2.09	18	1.77	
Z8-L2-CC18	CC484		10/08/22	Clay	Sunny	CCD	2.06	19	1.74	
Z8-L2-CC19	CC485		10/08/22	Clay	Sunny	CCD	2.07	18	1.75	
Z8-L2-CC20	CC486		10/08/22	Clay	Sunny	CCD	2.06	16	1.78	
Z8-L2-CC21	CC487		10/08/22	Clay	Sunny	CCD	2.03	20	1.69	
Z8-L2-CC22	CC488		10/08/22	Clay	Sunny	CCD	2.06	21	1.71	

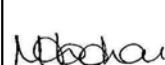
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 11/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results


Project No.				Project Name							
D10557AU				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type	In-situ Bulk Density	Moisture Content	In-situ Dry Density	Remarks
							see below	Mg/m ³	%	Mg/m ³	
Z8-L2-CC1	CC489	CC489	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.16	18	1.83	
Z8-L2-CC2	CC490	CC490	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.12	18	1.80	
Z8-L2-CC3	CC491	CC491	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.14	19	1.80	
Z8-L2-CC4	CC492	CC492	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.19	16	1.88	
Z8-L2-CC5	CC493	CC493	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.13	20	1.77	
Z8-L2-CC6	CC494	CC494	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.08	18	1.76	
Z8-L2-CC7	CC495	CC495	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.09	18	1.77	
Z8-L2-CC8	CC496	CC496	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.14	18	1.82	
Z8-L2-CC9	CC497	CC497	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.04	19	1.71	
Z8-L2-CC10	CC498	CC498	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 28C	CCD	2.02	20	1.68	
Z8-L2-CC11	CC499	CC499	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 29C	CCD	2.00	19	1.68	
Z8-L2-CC12	CC500	CC500	0.00	11/08/22	Brown, Sandy CLAY	Sunny, 29C	CCD	2.02	16	1.74	
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method							Approved By Date 12/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632		

Summary of in-situ density test results

Project No.			Project Name							
D10557AV			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z8-L2-CC1 N558683/E4 33335	CC502		12/08/22	Clay	Sunny	CCD	2.10	21	1.74	
Z8-L2-CC2 N558668/E4 33342	CC503		12/08/22	Clay	Sunny	CCD	2.00	17	1.71	
Z8-L2-CC3 N558652/E4 33346	CC504		12/08/22	Clay	Sunny	CCD	2.13	18	1.80	
Z8-L2-CC4 N558640/E4 33350	CC505		12/08/22	Clay	Sunny	CCD	2.11	17	1.80	
Z8-L2-CC5 N558628/E4 33355	CC506		12/08/22	Clay	Sunny	CCD	2.08	18	1.76	
Z8-L2-CC6 N558628/E4 33352	CC507		12/08/22	Clay	Sunny	CCD	2.13	19	1.79	
Z8-L2-CC7 N558672/E4 33358	CC508		12/08/22	Clay	Sunny	CCD	2.13	19	1.79	
Z8-L2-CC8 N558653/E4 33364	CC509		12/08/22	Clay	Sunny	CCD	2.08	18	1.76	
Z8-L2-CC9 N558643/E4 33366	CC510		12/08/22	Clay	Sunny	CCD	2.05	18	1.74	
Z8-L2-CC10 N558627/E4 33365	CC511		12/08/22	Clay	Sunny	CCD	2.00	15	1.74	
Z8-L2-CC11 N558686/E4 33365	CC512		12/08/22	Clay	Sunny	CCD	2.15	18	1.83	
Z8-L2-CC12 N558674/E4 33367	CC513		12/08/22	Clay	Sunny	CCD	1.98	18	1.68	

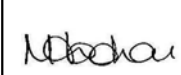
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 15/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AY			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z8-L2-CC1 N558712/E4 33391	CC522		17/08/22	Clay	Sunny	CCD	1.97	18	1.68	
Z8-L2-CC2 N558720/E4 33405	CC523		17/08/22	Clay	Sunny	CCD	2.02	18	1.71	
Z8-L2-CC3 N558723/E4 33415	CC524		17/08/22	Clay	Sunny	CCD	1.99	18	1.69	
Z8-L2-CC4 N558728/E4 33427	CC525		17/08/22	Clay	Sunny	CCD	2.08	17	1.78	
Z8-L2-CC5 N558733/E4 33440	CC526		17/08/22	Clay	Sunny	CCD	2.10	16	1.81	
Z8-L2-CC6 N558703/E4 33397	CC527		17/08/22	Clay	Sunny	CCD	2.11	16	1.81	
Z8-L2-CC7 N558708/E4 33408	CC528		17/08/22	Clay	Sunny	CCD	2.00	17	1.71	
Z8-L2-CC8 N558711/E4 33420	CC529		17/08/22	Clay	Sunny	CCD	2.00	18	1.69	
Z8-L2-CC9 N558718/E4 33432	CC530		17/08/22	Clay	Sunny	CCD	2.02	19	1.69	
Z8-L2-CC10 N558722/E4 33443	CC531		17/08/22	Clay	Sunny	CCD	2.03	18	1.72	
Specifications						Approved By	N Hodson		UKAS Accredited Laboratory No. 20632	
BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method						Date	Materials Director			
						18/08/2022				

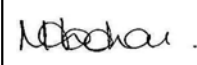
Summary of in-situ density test results

Project No.			Project Name							
D10557AZ			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z8-L2-CC1	CC531		18/08/22	Clay	Clear	CCD	1.92	20	1.60	
Z8-L2-CC2	CC532		18/08/22	Clay	Clear	CCD	2.11	20	1.77	
Z8-L2-CC3	CC533		18/08/22	Clay	Clear	CCD	2.01	23	1.64	
Z8-L2-CC4	CC534		18/08/22	Clay	Clear	CCD	1.91	17	1.63	
Z8-L3-CC5	CC535		18/08/22	Clay	Clear	CCD	2.01	20	1.68	
Z8-L3-CC6	CC536		18/08/22	Clay	Clear	CCD	2.02	13	1.79	
Z8-L3-CC7	CC537		18/08/22	Clay	Clear	CCD	2.09	35	1.55	
Z8-L3-CC8	CC538		18/08/22	Clay	Clear	CCD	2.07	20	1.73	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 19/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557BB			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC1-433341/558973	CC543		22/08/22	Clay	Clear	CCD	1.98	22	1.63	
CC2-433345/558966	CC544		22/08/22	Clay	Clear	CCD	1.99	21	1.65	
CC3-433349/558956	CC545		22/08/22	Clay	Clear	CCD	1.92	22	1.58	
CC4-433331/558957	CC546		22/08/22	Clay	Clear	CCD	1.94	21	1.61	
CC5-433339/558960	CC547		22/08/22	Clay	Clear	CCD	2.05	21	1.70	
CC6-433345/558964	CC548		22/08/22	Clay	Clear	CCD	2.01	23	1.64	
CC7-433334/558954	CC549		22/08/22	Clay	Clear	CCD	2.03	21	1.67	
CC8-433340/558958	CC550		22/08/22	Clay	Clear	CCD	2.07	22	1.69	
CC9-433347/558963	CC551		22/08/22	Clay	Clear	CCD	2.02	19	1.70	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 23/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557BD			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC1-Z4-L3-433348/558961	CC555		24/08/22	Clay	Overcast	CCD	2.06	17	1.76	
CC2-Z4-L3-433340/558974	CC556		24/08/22	Clay	Overcast	CCD	1.96	21	1.63	
CC3-Z4-L3-433330/558996	CC557		24/08/22	Clay	Overcast	CCD	2.11	20	1.77	
CC4-Z4-L3-433312/558999	CC558		24/08/22	Clay	Overcast	CCD	2.04	18	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 25/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557BH			Giga One, Envision, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433413_N 558682_Z8-L2	CC563		31/08/22	Clay	Overcast	CCD	1.97	18	1.68	
E433423_N 558673_Z8-L2	CC564		31/08/22	Clay	Overcast	CCD	2.02	19	1.70	
E433433_N 558660_Z8-L2	CC565		31/08/22	Clay	Overcast	CCD	1.94	19	1.63	
E433431_N 558692_Z8-L2	CC566		31/08/22	Clay	Overcast	CCD	2.07	17	1.78	
E433439_N 558681_Z8-L2	CC567		31/08/22	Clay	Overcast	CCD	1.96	18	1.66	
E433448_N 558665_Z8-L2	CC568		31/08/22	Clay	Overcast	CCD	2.03	19	1.71	
E433444_N 558696_Z8-L2	CC569		31/08/22	Clay	Overcast	CCD	2.03	18	1.72	
E433455_N 558685_Z8-L2	CC570		31/08/22	Clay	Overcast	CCD	2.04	20	1.71	
E433459_N 558668_Z8-L2	CC571		31/08/22	Clay	Overcast	CCD	2.03	18	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 01/09/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557AO			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC386-RT	CC386-RT		03/08/22	Clay	Cloudy	CCD	2.07	18	1.75	
CC396-RT	CC396-RT		03/08/22	Clay	Cloudy	CCD	2.09	19	1.76	
CC398-RT	CC398-RT		03/08/22	Clay	Cloudy	CCD	2.03	20	1.69	
CC402-RT	CC402-RT		03/08/22	Clay	Cloudy	CCD	2.05	21	1.70	
CC404-RT	CC404-RT		03/08/22	Clay	Cloudy	CCD	2.07	18	1.75	
CC407-RT	CC407-RT		03/08/22	Clay	Cloudy	CCD	2.04	20	1.70	
CC413-RT	CC413-RT		03/08/22	Clay	Cloudy	CCD	2.06	19	1.73	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 04/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AP				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type	In-situ Bulk Density	Moisture Content	In-situ Dry Density	Remarks
							see below	Mg/m ³	%	Mg/m ³	
CC422-RT			0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.05	19	1.73	
CC418-RT			0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.09	19	1.76	
CC365-RT			0.00	04/08/22	Brown, Slightly Sandy, Silty CLAY	Dry, Overcast, 17C	CCD	2.04	21	1.69	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 07/08/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557BE			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC522-RT	CC1		25/08/22	Clay	Sunny	CCD	2.07	19	1.75	
CC553-RT	CC10		25/08/22	Clay	Sunny	CCD	2.04	21	1.69	
CC554-RT	CC11		25/08/22	Clay	Sunny	CCD	2.06	21	1.70	
CC545-RT	CC12		25/08/22	Clay	Sunny	CCD	2.11	19	1.77	
CC546-RT	CC13		25/08/22	Clay	Sunny	CCD	2.06	20	1.72	
CC524-RT	CC2		25/08/22	Clay	Sunny	CCD	2.13	21	1.76	
CC528-RT	CC3		25/08/22	Clay	Sunny	CCD	2.13	22	1.75	
CC529-RT	CC4		25/08/22	Clay	Sunny	CCD	2.03	19	1.71	
CC531-RT	CC5		25/08/22	Clay	Sunny	CCD	2.04	23	1.66	
CC534-RT	CC6		25/08/22	Clay	Sunny	CCD	2.04	21	1.69	
CC536-RT	CC7		25/08/22	Clay	Sunny	CCD	1.99	18	1.69	
CC537-RT	CC8		25/08/22	Clay	Sunny	CCD	2.00	19	1.68	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 26/08/2022	N Hodson Materials Director 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557BI				Giga One, Envision, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433437_N55869_6_Z8-L1	CC572	CC572		01/09/22	Clay	Cloudy	CCD	2.11	14	1.86	
E433461_N55867_6_Z8-L1	CC573	CC573		09/05/00	Clay	Cloudy	CCD	2.02	15	1.75	
E433471_N55867_0_Z8-L1	CC574	CC574		01/09/22	Clay	Cloudy	CCD	2.12	16	1.82	
E433471_N55870_6_Z8-L1	CC575	CC575		01/09/22	Clay	Cloudy	CCD	2.11	21	1.75	
E433479_N55869_0_Z8-L1	CC576	CC576		01/09/22	C;lay	Cloudy	CCD	1.99	19	1.68	
E433487_N55867_8_Z8-L1	CC577	CC577		01/09/22	Clay	Cloudy	CCD	2.03	18	1.73	
E433484_N55871_2_Z8-L1	CC578	CC578		01/09/22	Clay	Cloudy	CCD	1.95	14	1.72	
E433487_N55870_0_Z8-L1	CC579	CC579		01/09/22	Clay	Cloudy	CCD	1.94	18	1.64	
E433497_N55868_8_Z8-L1	CC580	CC580		01/09/22	Clay	Cloudy	CCD	2.06	19	1.73	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 02/09/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.			Project Name							
D10557BJ			Giga One, Envision, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
E433257_N 558971_Z4-L1	CC581		02/09/22	Clay	Sunny	CCD	2.01	22	1.65	
E433294_N 558986_Z4-L1	CC582		02/09/22	Clay	Sunny	CCD	2.11	20	1.77	
E433285_N 558980_Z4-L1	CC583		02/09/22	Clay	Sunny	CCD	1.97	20	1.64	
E433271_N 558976_Z4-L1	CC584		02/09/22	Clay	Sunny	CCD	2.05	19	1.72	
E433290_N 558990_Z4-L1	CC585		02/09/22	Clay	Sunny	CCD	2.04	21	1.69	
E433279_N 558985_Z4-L1	CC586		02/09/22	Clay	Sunny	CCD	2.06	18	1.75	
E433267_N 558980_Z4-L1	CC587		02/09/22	Clay	Sunny	CCD	1.99	19	1.67	
E433255_N 558977_Z4-L1	CC588		02/09/22	Clay	Sunny	CCD	1.99	23	1.62	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 05/09/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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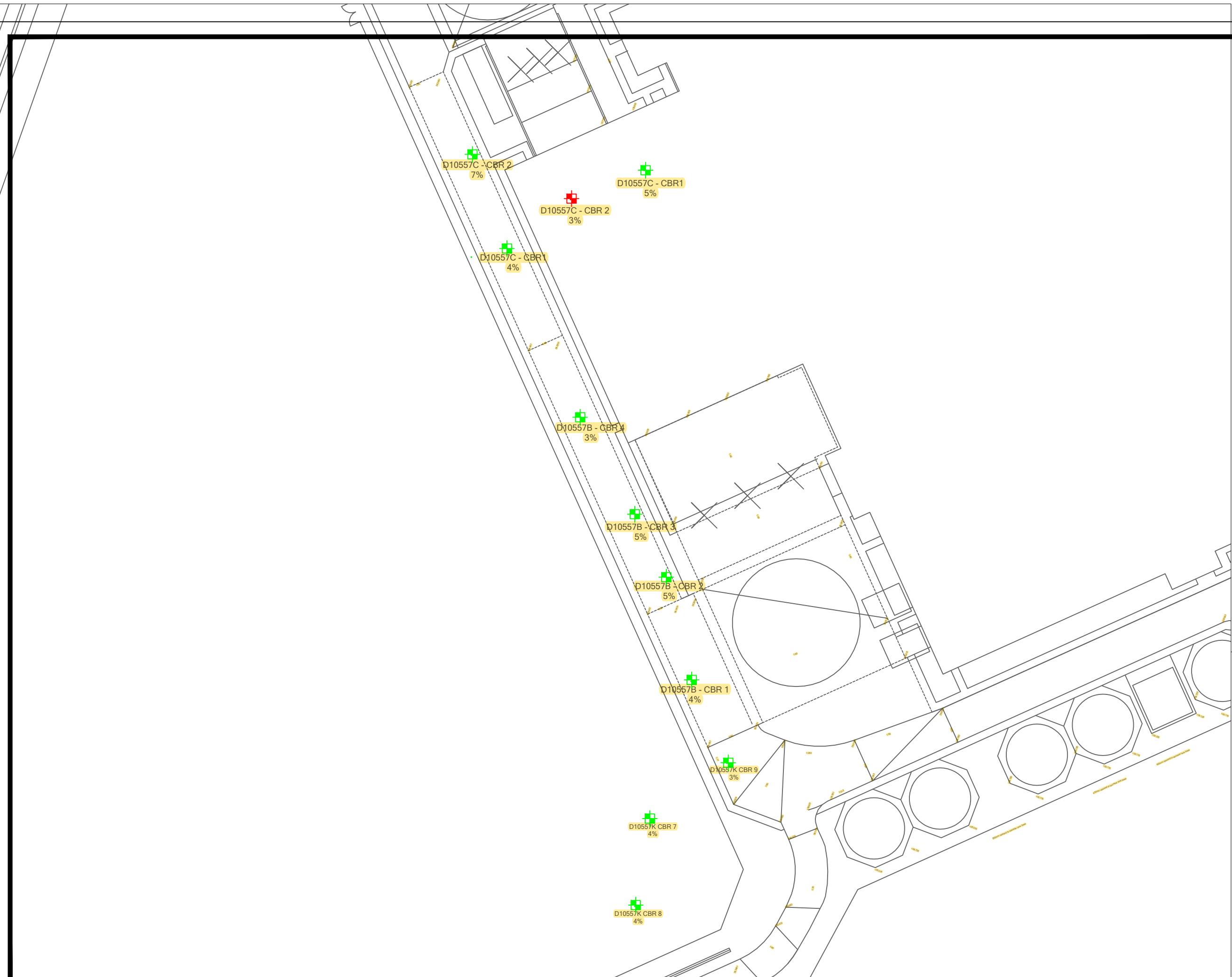
Summary of in-situ density test results

Project No.				Project Name							
D10557BT				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC528-RT	CC528-RT	CC528-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.11	21	1.74	
CC542-RT	CC542-RT	CC542-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.13	19	1.78	
CC560-RT	CC560-RT	CC560-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.11	19	1.77	
CC561-RT	CC561-RT	CC561-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.13	20	1.77	
CC563-RT	CC563-RT	CC563-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.13	18	1.80	
CC565-RT	CC565-RT	CC565-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.11	18	1.79	
CC567-RT	CC567-RT	CC567-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.14	19	1.81	
CC578-RT	CC578-RT	CC578-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.02	28	1.58	
CC579-RT	CC579-RT	CC579-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.12	20	1.76	
CC583-RT	CC583-RT	CC583-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.11	24	1.70	
CC587-RT	CC587-RT	CC587-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.12	20	1.77	
CC589-RT	CC589-RT	CC589-RT	0.00	20/09/22	Brown, Slightly Sandy CLAY	Overcast, 16C	CCD	2.10	20	1.75	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 21/09/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Appendix H
PLATE LOAD TEST RESULTS





General Notes

- 3% Pass

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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
SV	INSPECTION CHAMBER	G/L	GALLEY
BT	STOP VALVE	GV	GAS VALVE
TP	BT CHAMBER	EP	ELECTRIC POLE
	TELEGRAPH POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



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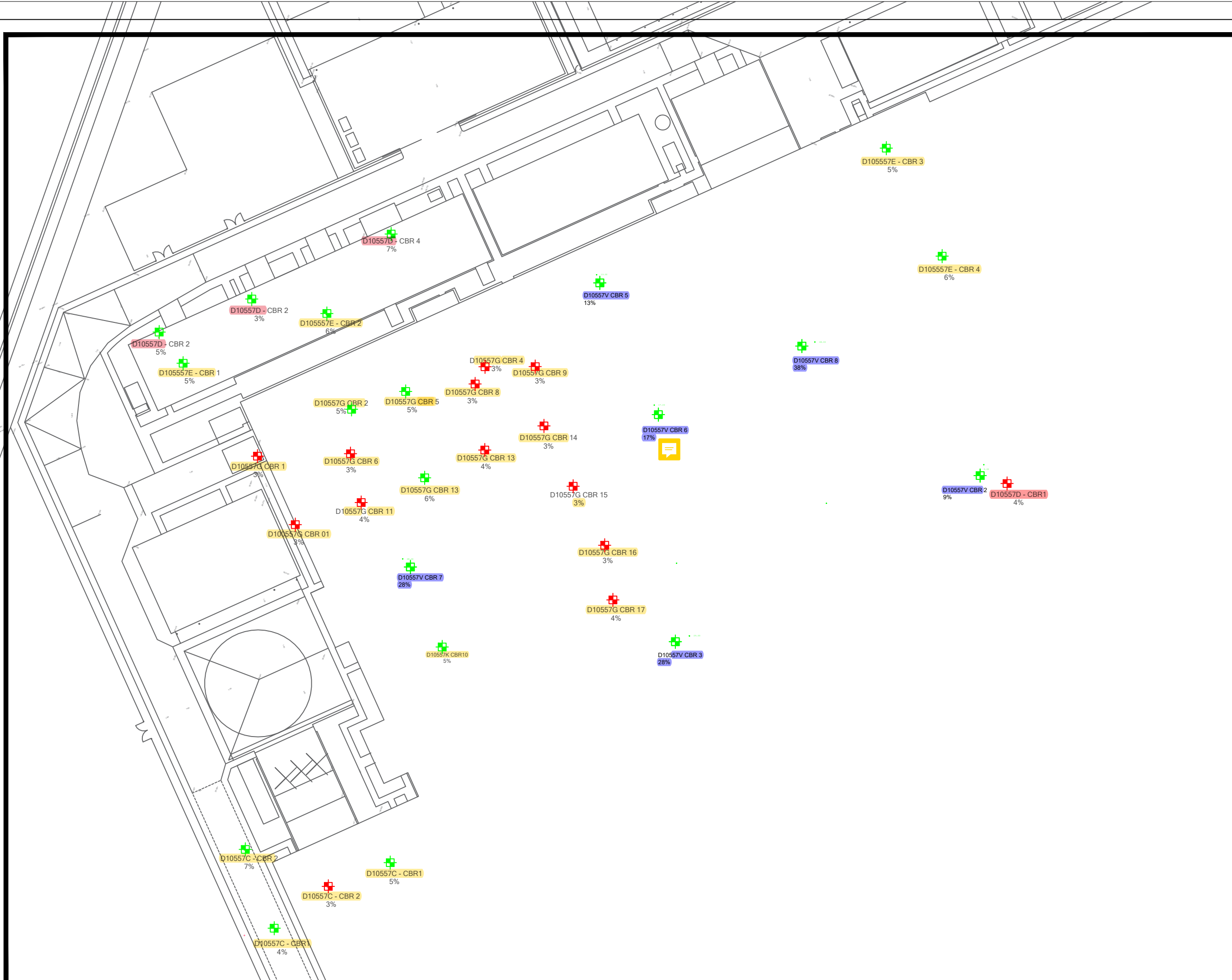
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General Notes

- Red Fail
- Green Pass

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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
SV	INSPECTION CHAMBER	G/L	GALLEY
BT	STOP VALVE	GV	GAS VALVE
BT	BT CHAMBER	EP	ELECTRIC POLE
TP	TELEGRAPHY POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



No.	Revision/Issue	By	Date

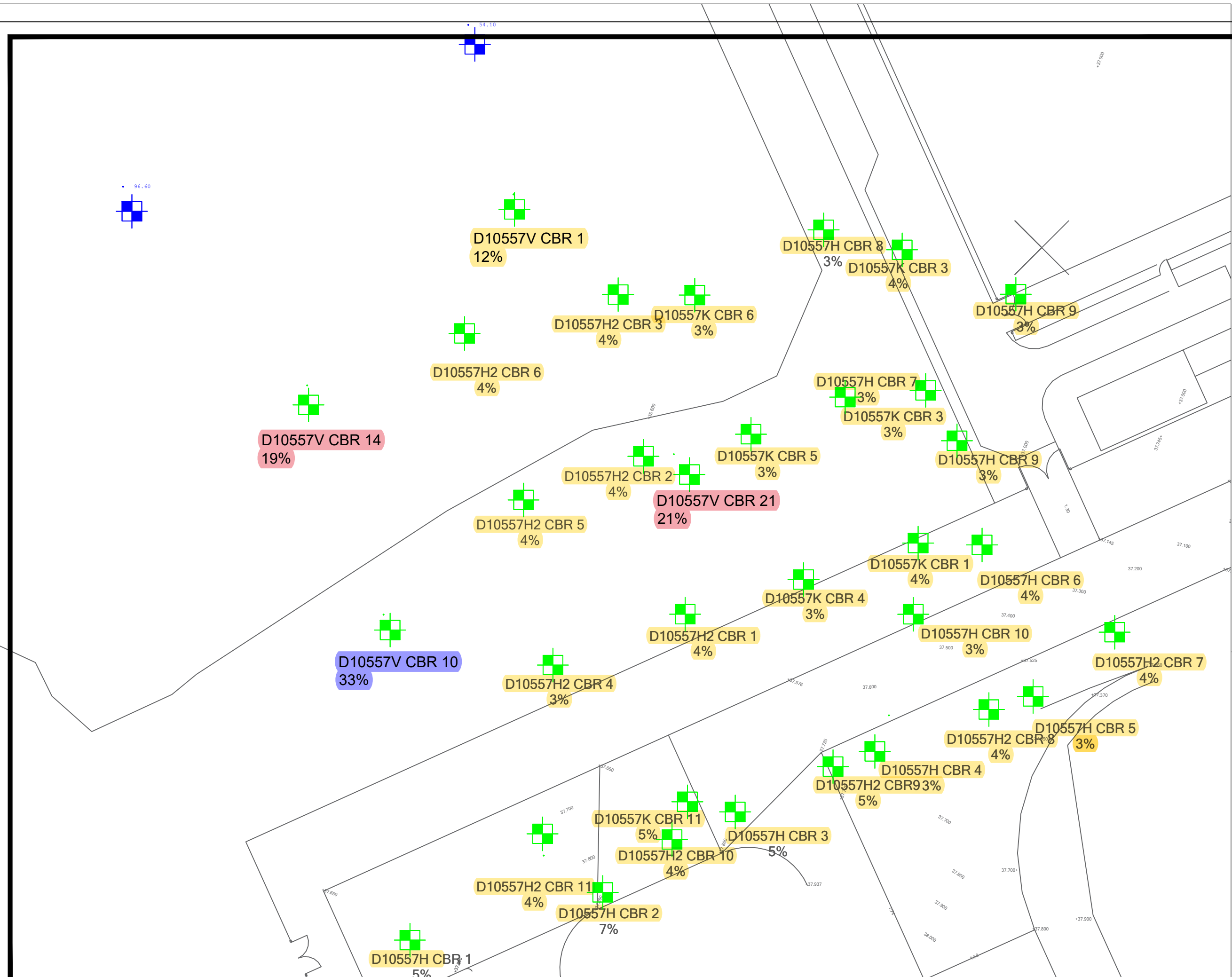


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General Notes

- Red Fail
- Green Pass
- Blue Stone

Disclaimer

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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
IC	INSPECTION CHAMBER	G/L	GALLEY
SV	STOP VALVE	GV	GAS VALVE
BT	BT CHAMBER	EP	ELECTRIC POLE
TP	TELEGRAPH POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



No.	Revision/Issue	By	Date

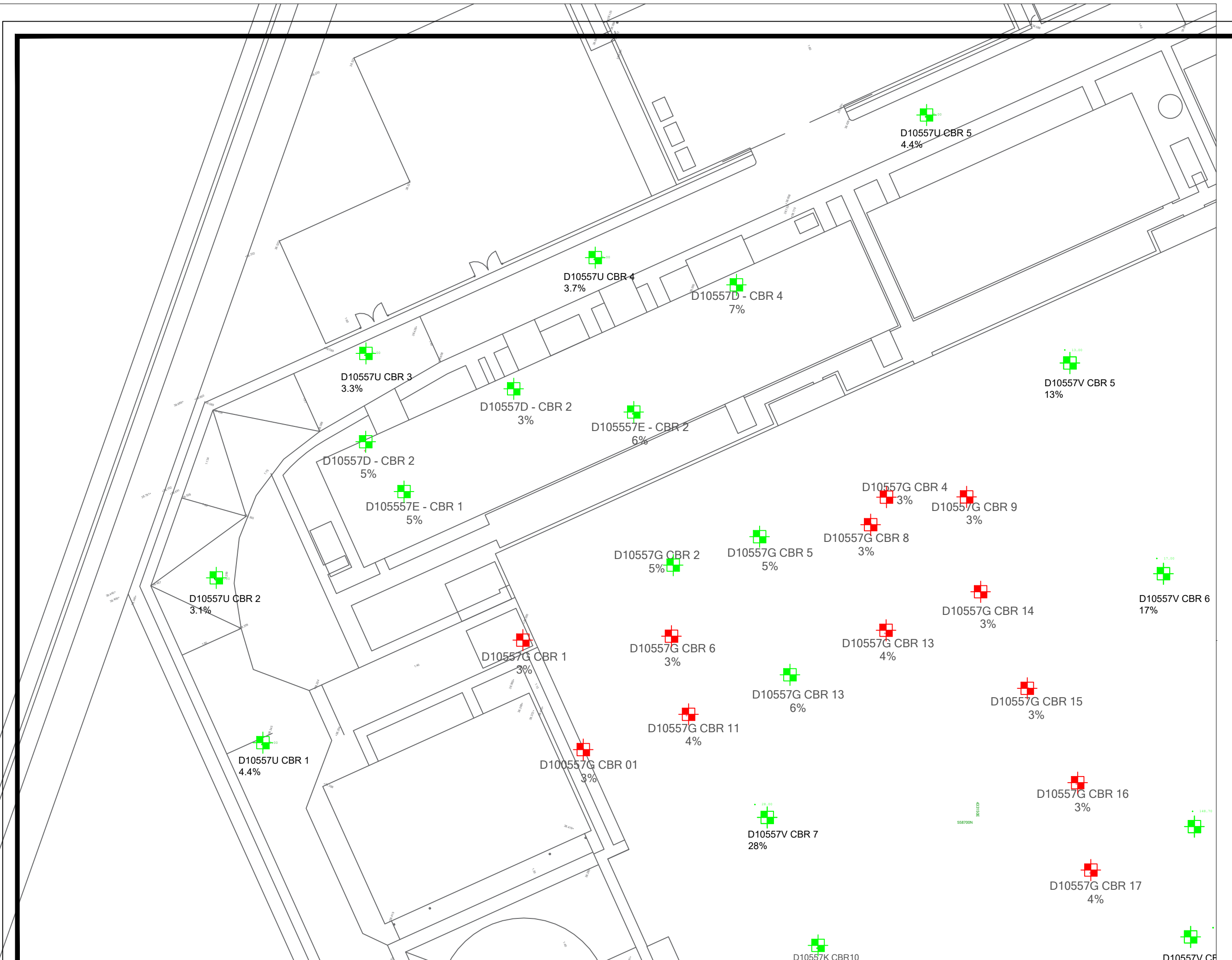
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General Notes

- 3% Pass

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ABBREVIATIONS

RWP	RAINWATER PIPE	WIP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
IC	INSPECTION CHAMBER	GIL	GALLEY
SV	STOP VALVE	GV	GAS VALVE
BT	BT CHAMBER	EP	ELECTRIC POLE
TP	TELEGRAPHY POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



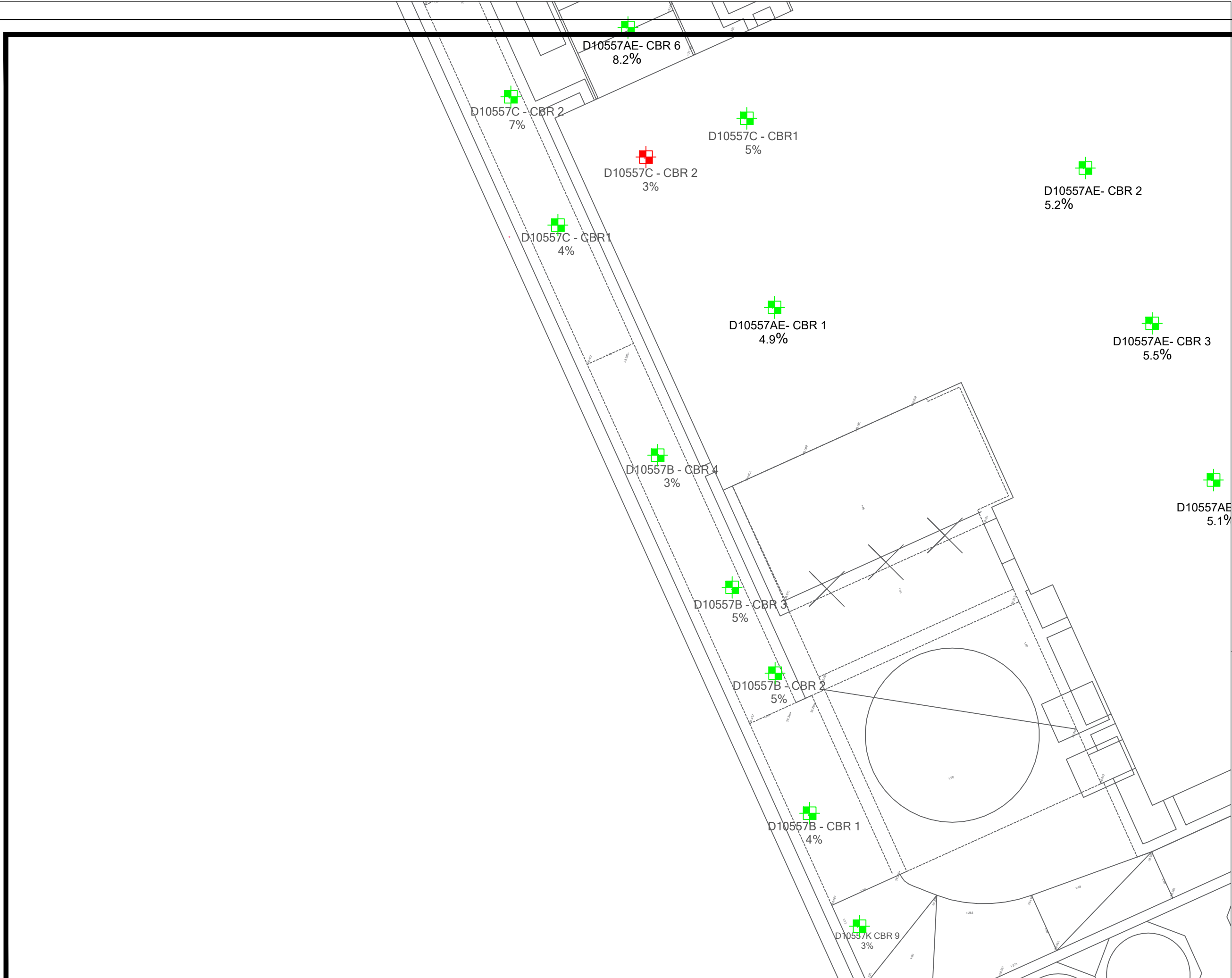
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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
SV	INSPECTION CHAMBER	G/L	GALLEY
BT	STOP VALVE	GV	GAS VALVE
TP	BT CHAMBER	EP	ELECTRIC POLE
	TELEGRAPH POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



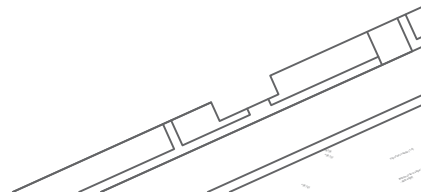
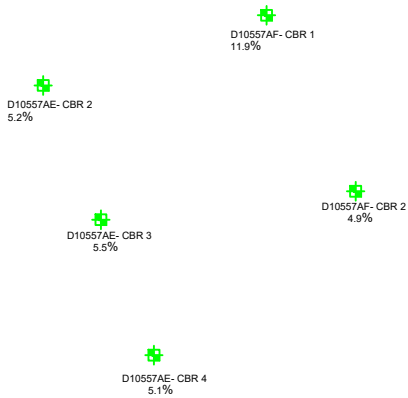
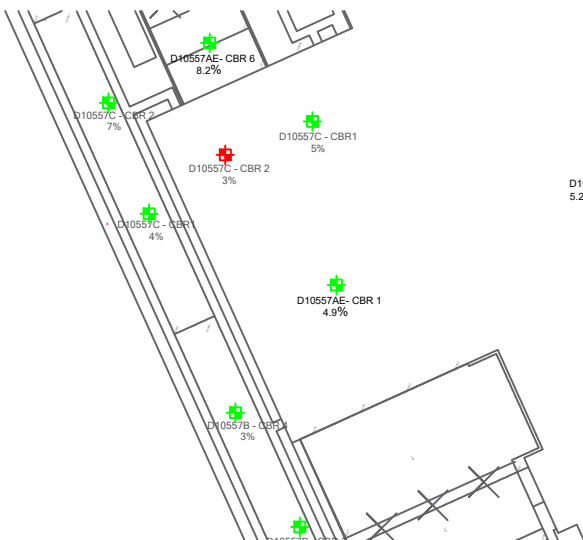
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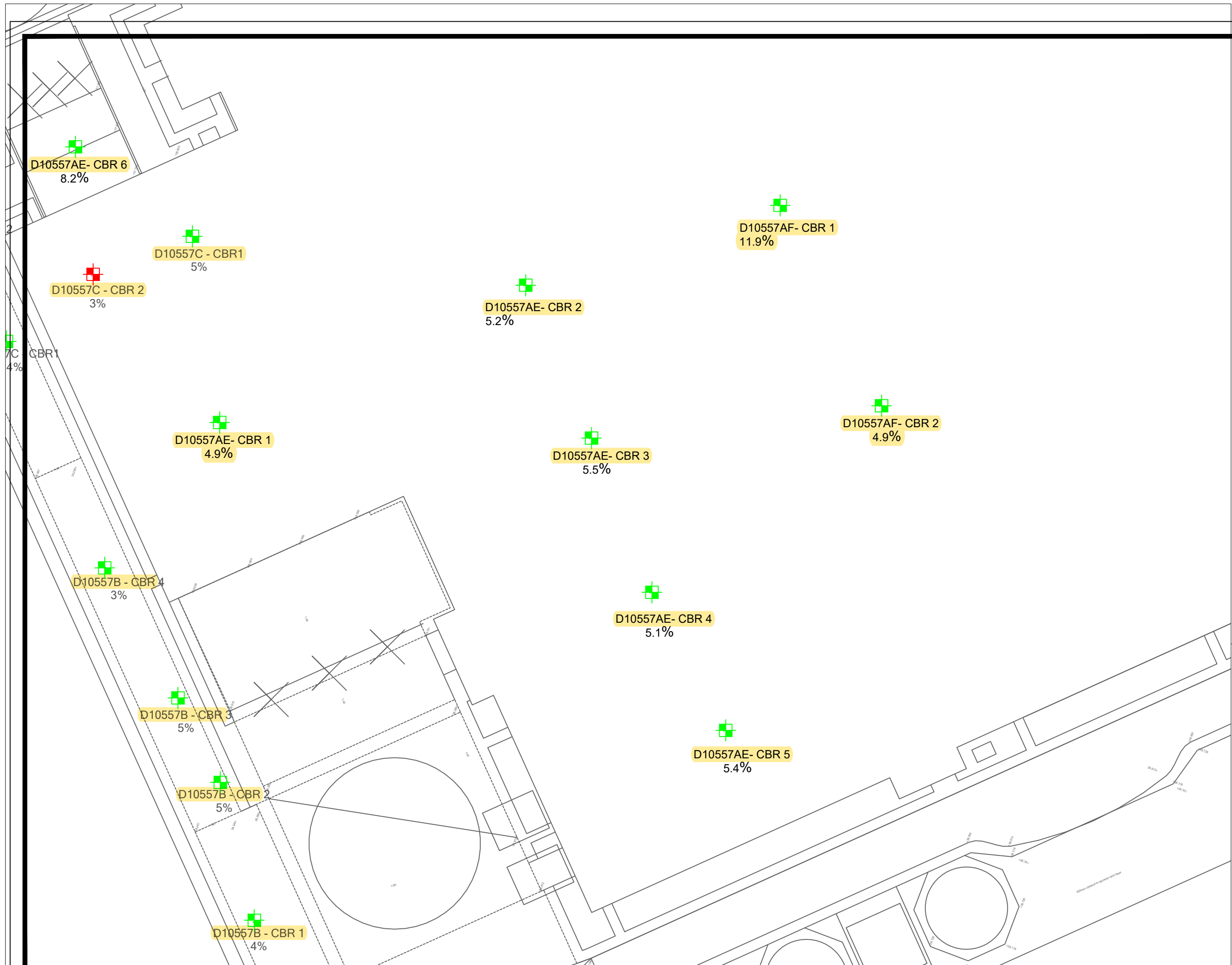


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General Notes

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ABBREVIATIONS

RWP	RAW WATER PIPE	WP	WASTE PIPE
IC	INSPECTION CHAMBER	STN	STATION CONTROL
SV	STOP VALVE	GAL	GALLEY
BT	BT CHAMBER	GV	GAS VALVE
TP	TELEGRAPH POLE	EP	ELECTRIC POLE
		LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



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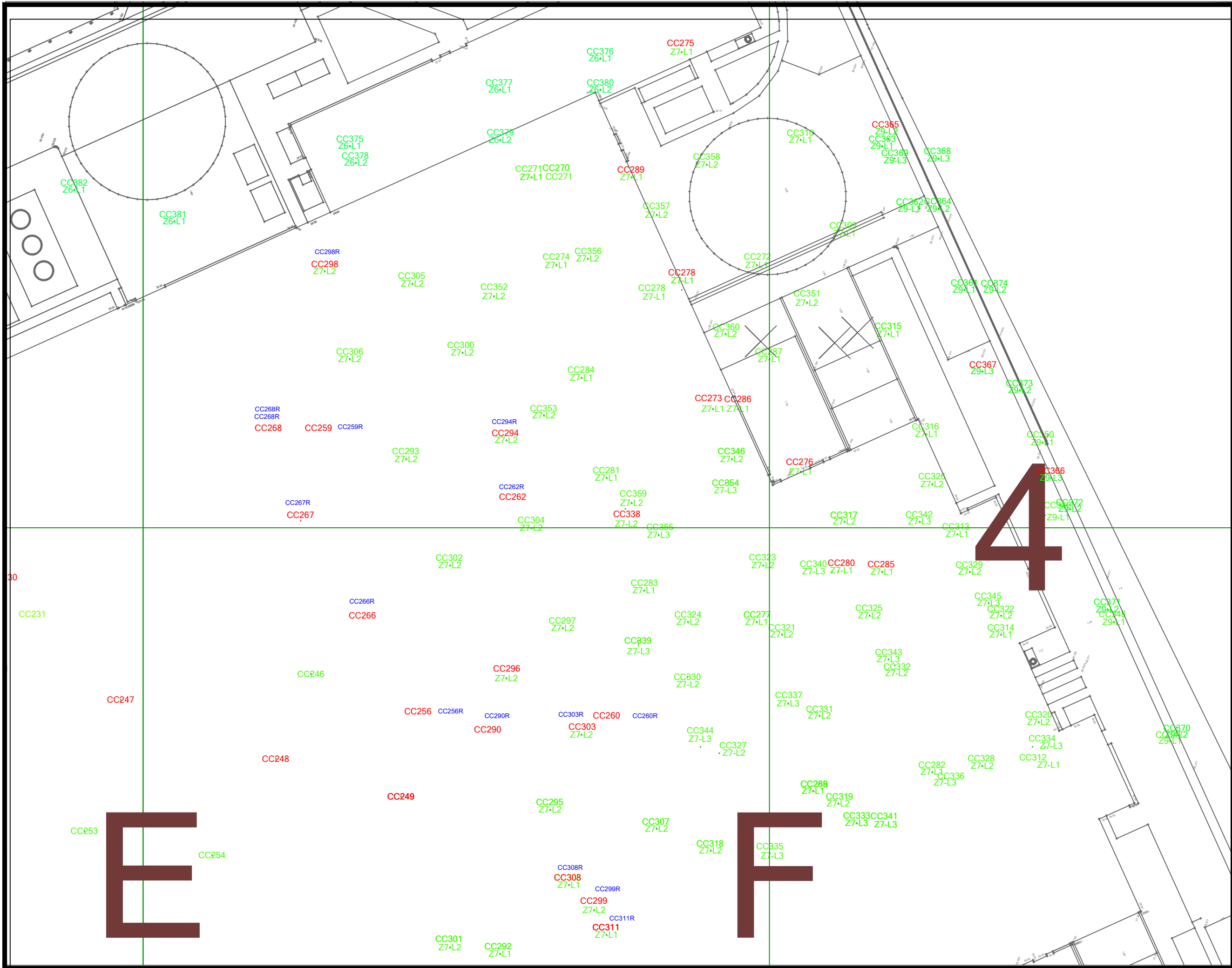
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General Notes

- Green Pass
- Red Fail
- Blue Retest

Disclaimer

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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
SV	INSPECTION CHAMBER	G/L	GALLEY
BT	STOP VALVE	GV	GAS VALVE
TP	BT CHAMBER	EP	ELECTRIC POLE
	TELEGRAPHY POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



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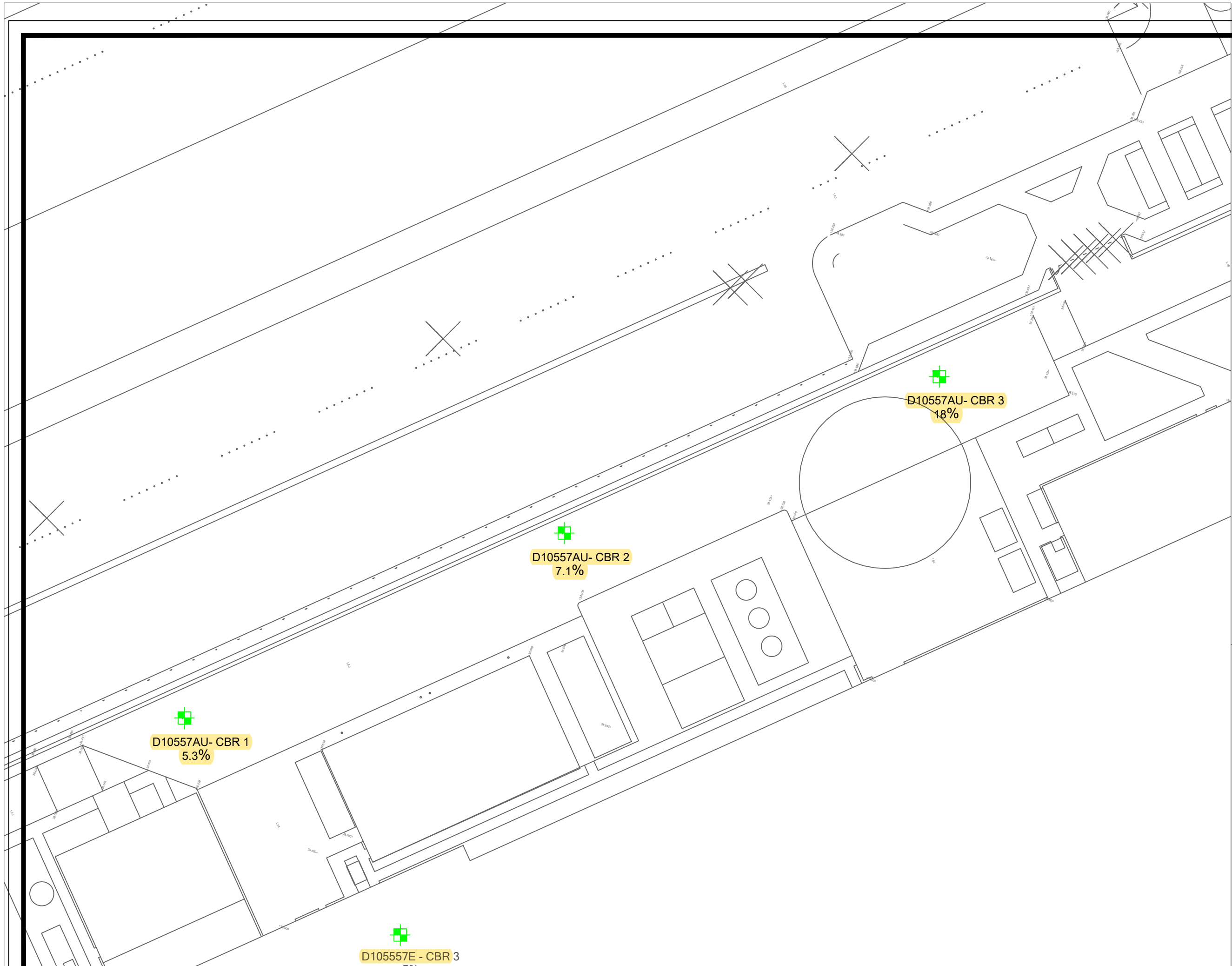
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General Notes

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ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
IC	MANHOLE	STN	STATION CONTROL
SV	INSPECTION CHAMBER	G/L	GALLEY
BT	STOP VALVE	GV	GAS VALVE
TP	BT CHAMBER	EP	ELECTRIC POLE
	TELEGRAPH POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



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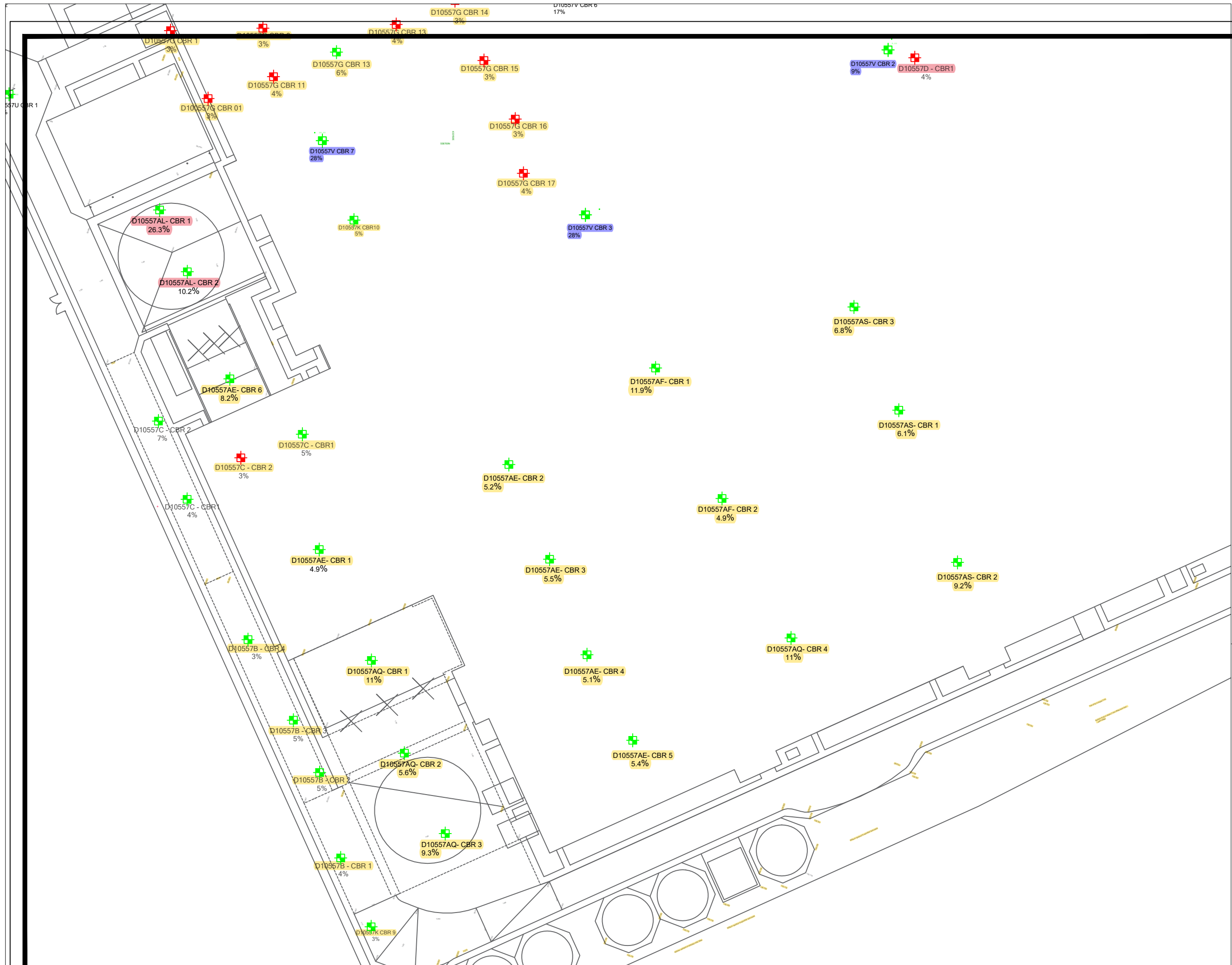
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 FAX: 0191 384 5869

Project Name and Address
**ENVISION
 INTERNATIONAL
 DRIVE
 WASHINGTON**

CBR Test Location Zone 6

Drawing No	4037	Sheet	10F1
Date	16/07/22		
Scale	SCALE		

Client	WATES	Drawn	HS	Approved	BJ
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General Notes

Disclaimer

North East Earthworks Ltd.

ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
M	MANHOLE	STN	STATION CONTROL
IC	INSPECTION CHAMBER	G/L	GALLEY
SV	STOP VALVE	GV	GAS VALVE
BT	BT CHAMBER	EP	ELECTRIC POLE
TP	TELEGRAPHY POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
	FENCE METAL
	FENCE WOOD
	FENCE POST AND RAIL
	TREE CANOPY
	HEDGE LINE
	WALL
	BUILDING



No.	Revision/Issue	By	Date

NORTH EAST EARTHWORKS LIMITED
 LITTLEBURN INDUSTRIAL ESTATE
 LANGLEY MOOR
 DURHAM
 DH7 8HJ
 TEL: 0191 384 4000
 FAX: 0191 384 5889

Project Name and Address
ENVISION INTERNATIONAL DRIVE WASHINGTON

Drawing No 4038		Sheet
Date 16/08/22	10F1	
Scale SCALE		

Client WATES	Drawn HS	Approved BJ
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4.9%

D10557AE- CBR 3

5.5%

D10557B - CBR 4

3%

D10557AQ- CBR 1

11%

D10557AE- CBR 4

5.1%

D10557B - CBR 3

5%

D10557AQ- CBR 2

5.6%

D10557B - CBR 2

5%

D10557AQ- CBR 3

9.3%

D10557B - CBR 1

4%

D10557K CBR 9

3%

General Notes

Disclaimer

North East Earthworks Ltd.

ABBREVIATIONS

RWP	RAINWATER PIPE	WP	WASTE PIPE
M	MANHOLE	STN	STATION CONTROL
IC	INSPECTION CHAMBER	G/L	GALLEY
SV	STOP VALVE	GV	GAS VALVE
BT	BT CHAMBER	EP	ELECTRIC POLE
TP	TELEGRAPH POLE	LP	LAMP POST

LEGEND

	TOP OF BATTER
	BOTTOM OF BATTER
	ROAD EDGE
	CHANNEL LINE
	TOP OF KERB
	FOOTPATH
	VERGE
	CENTRE LINE
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	FENCE WOOD
	FENCE POST AND RAIL
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No.	Revision/Issue	By	Date



LITTLEBURN INDUSTRIAL ESTATE
LANGLEY MOOR
DURHAM
DH7 8HJ

TEL: 0191 384 4000
FAX: 0191 384 5889

Project Name and Address

ENVISION
INTERNATIONAL
DRIVE
WASHINGTON

CBR Test Location Zone 1

Drawing No	4039	Sheet	10F1	
Date	16/08/22	Scale		SCALE
Client	WATES	Drawn		HS

Approved	BJ
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Project no.	Report ref.	Date	Ref. no	Easting/Northing	Kentledge	Building footprint as per plan	Building Footprint Assumed	CBR	Modulus of Subgrade Reaction	Max Pressure	Max Deformation
	D10557B	15/06/2022	CBR1	433123-E 558532-N	40t tracked excavator	NO		4	33.9	69	1.28
	D10557B	15/06/2022	CBR2	433117.720-558557.180	40t tracked excavator	NO		5	37.8	77	1.28
	D10557B	15/06/2022	CBR3	433112.004-558564.386	40t tracked excavator	NO		5	38.5	81	1.36
	D10557B	15/06/2022	CBR4	433099.080-558583.475	40t tracked excavator	NO		3	29.9	60	1.28
	D10557C	16/06/2022	CBR1	433087-N558615	13t tracked excavator	NO		4	32.7	67	1.33
	D10557C	16/06/2022	CBR2	E 433080-N558635	13t tracked excavator	NO		7	44.3	91	1.32
	D10557C-1	17/06/2022	CBR1	E 433113-N558633	14t tracked excavator	YES		5	35.5	72	1.32
	D10557C-1	17/06/2022	CBR2	E 433096-N558632	14t tracked excavator	YES		3	26.3	53	1.3
	D10557C-1	17/06/2022	CBR3	E 433103-N558640	14t tracked excavator	NO		2	24.2	49	1.3
D10557E	L22-429	20/06/2022	CBR1	E433067-N558750	14t tracked excavator	NO		4.5	46.2	70	1.29
D10557E	L22-429	20/06/2022	CBR2	E433098-N558761	14t tracked excavator	NO		6	56.9	84	1.34
D10557E	L22-429	20/06/2022	CBR3	E433230-N558799	14t tracked excavator	YES		4.5	46.4	74	1.39
D10557E	L22-429	20/06/2022	CBR4	E433243-N558773	14t tracked excavator	YES		6	55.2	85	1.32
D10557F	L22-433	21/06/2022	CBR1	E433232-N558704	14t tracked excavator	YES		4.5	46.2	71	1.32
D10557F	L22-433	21/06/2022	CBR2	E 433225-N558726	14t tracked excavator			7	58.7	88	1.34
D10557F	L22-433	21/06/2022	CBR3	E 433194-N558775	14t tracked excavator	YES		3	35.5	53	1.31
D10557F	L22-433	21/06/2022	CBR4	E 433203-N558699	14t tracked excavator	YES		5	49.2	74	1.3
D10557F	L22-433	21/06/2022	CBR5	E 433198-N558718	14t tracked excavator	YES		4	42.8	65	1.3
D10557F	L22-433	21/06/2022	CBR6	E 433179-N558768	14t tracked excavator	YES		3	38.6	60	1.3
D10557F	L22-433	21/06/2022	CBR7	E 433138-N558799	14t tracked excavator	NO		4	42.9	66	1.31
D10557F	L22-433	21/06/2022	CBR8	E 433162-N558809	14t tracked excavator	NO		4	40.9	63	1.3
D10557F	L22-433	21/06/2022	CBR9	E 433139-N558777	14t tracked excavator	YES		4	42.9	66	1.32
D10557F	L22-433	21/06/2022	CBR10	E 433111-N558763	14t tracked excavator	YES		5	51.6	78	1.3
D10557G	L22-462	22/06/2022	CBR1	E 433083-N558727	14t tracked excavator	YES		3	35.8	56	1.29
D10557G	L22-462	22/06/2022	CBR2	E 433105-N558738	14t tracked excavator	YES		5	47.9	73	1.3
D10557G	L22-462	22/06/2022	CBR3	E 433118-N558742	14t tracked excavator	YES		5	46.2	72	1.32
D10557G	L22-462	22/06/2022	CBR4	E 433136-N558748	14t tracked excavator	YES		3	36.3	57	1.3
D10557G	L22-462	22/06/2022	CBR5	E 433093-N558220	21t tracked excavator	YES		3	35.9	56	1.29
D10557G	L22-462	22/06/2022	CBR6	E 433105-N558733	21t tracked excavator	YES		3	38.7	60	1.3
D10557G	L22-462	22/06/2022	CBR7	E 433120-N558732	21t tracked excavator	YES		5	38.4	77	1.3
D10557G	L22-462	22/06/2022	CBR8	E 433134-N558744	21t tracked excavator	YES		3	36.2	57	1.31
D10557G	L22-462	22/06/2022	CBR9	E 433148-N558748	21t tracked excavator	YES		3	38.6	60	1.3
D10557G	L22-462	22/06/2022	CBR10	E 433092-N558711	21t tracked excavator	YES		3	37.9	59	1.29
D10557G	L22-462	22/06/2022	CBR11	E 433107-N558716	21t tracked excavator	YES		4	39.9	62	1.3
D10557G	L22-462	22/06/2022	CBR12	E 433122-N558722	21t tracked excavator	YES		6	53.4	81	1.32
D10557G	L22-462	22/06/2022	CBR13	E 433136-N558728	21t tracked excavator	YES		4	41	63	1.28
D10557G	L22-462	22/06/2022	CBR14	E 433150-N558734	21t tracked excavator	YES		3	38.6	60	1.28
D10557G	L22-462	22/06/2022	CBR15	E 433157-N558720	21t tracked excavator	YES		3	35.8	57	1.31
D10557G	L22-462	22/06/2022	CBR16	E 433164-N558706	21t tracked excavator	YES		3	34.1	55	1.34
D10557G	L22-462	22/06/2022	CBR17	E 433166-N558693	21t tracked excavator	YES		4	40.5	62	1.28
D10557H	L22-463	23/06/2022	CBR1	E 433304-N559004	13t tracked excavator	NO		5	51.6	77	1.3
D10557H	L22-463	23/06/2022	CBR2	E 433319-N559008	13t tracked excavator	NO		7	63.1	93	1.29
D10557H	L22-463	23/06/2022	CBR3	E 433334-N559015	13t tracked excavator	NO		5	50.1	76	1.29
D10557H	L22-463	23/06/2022	CBR4	E 433348-N559021	13t tracked excavator	NO		3	38.1	59	1.3
D10557H	L22-463	23/06/2022	CBR5	E 433362-N559025	13t tracked excavator	NO		3	36.7	57	1.31
D10557H	L22-463	23/06/2022	CBR6	E 433356-N559039	13t tracked excavator	NO		3	36.2	57	1.31
D10557H	L22-463	23/06/2022	CBR7	E 433347-N559055	13t tracked excavator	NO		4	41.2	64	1.3
D10557H	L22-463	23/06/2022	CBR8	E 433342-N559070	13t tracked excavator	NO		3	38	59	1.3
D10557H	L22-463	23/06/2022	CBR9	E 433352-N559035	13t tracked excavator	NO		3	38	59	1.31
D10557H	L22-463	23/06/2022	CBR10	E 433355-N559050	13t tracked excavator	NO		3	37.7	59	1.3
D10557H	L22-463	23/06/2022	CBR11	E 433360-N559064	13t tracked excavator	NO		3	37	58	1.31
D10557H_1	L22-469	24/06/2022	CBR1	E 433330-N559034	13t tracked excavator	NO		4	42.8	65	1.3
D10557H_1	L22-469	24/06/2022	CBR2	E 433326-N559049	13t tracked excavator	NO		4	41.6	64	1.29
D10557H_1	L22-469	24/06/2022	CBR3	E 433323-N559064	13t tracked excavator	NO		4	40.3	62	1.3
D10557H_1	L22-469	24/06/2022	CBR4	E 433317-N559029	13t tracked excavator	NO		3	38.6	60	1.29

Project no.	Report ref.	Date	Ref. no	Easting/Northing	Kentledge	Building footprint as per plan	Building Footprint Assumed	CBR	Modulus of Subgrade Reaction	Max Pressure	Max Deformation
D10557H_1	L22-469	24/06/2022	CBR5	E 433315-N559045	13t tracked excavator	NO		4	44.6	69	1.31
D10557H_1	L22-469	24/06/2022	CBR6	E 433311-N559059	13t tracked excavator	NO		4	42.8	65	1.3
D10557H_1	L22-469	24/06/2022	CBR7	E 433371-N559032	13t tracked excavator	NO		4	45.8	69	1.29
D10557H_1	L22-469	24/06/2022	CBR8	E 433359-N559025	13t tracked excavator	NO		4	41.8	64	1.3
D10557H_1	L22-469	24/06/2022	CBR9	E 433345-N559020	13t tracked excavator	NO		5	46.8	72	1.31
D10557H_1	L22-469	24/06/2022	CBR10	E 433331-N559015	13t tracked excavator	NO		4	40.9	63	1.3
D10557H_1	L22-469	24/06/2022	CBR11	E 433317-N559010	13t tracked excavator	NO		4	46.1	70	1.31
D10557K	L22-474	27/06/2022	CBR1	E 433352-N559040	14t tracked excavator	NO		4	43.3	66	1.29
D10557K	L22-474	27/06/2022	CBR2	E 433348-N559054	14t tracked excavator	NO		3	34.4	60	1.3
D10557K	L22-474	27/06/2022	CBR3	E 433343-N559068	14t tracked excavator	NO		4	41.1	63	1.29
D10557K	L22-474	27/06/2022	CBR4	E 433341-N559037	14t tracked excavator	NO		3	37.2	58	1.3
D10557K	L22-474	27/06/2022	CBR5	E 433336-N559051	14t tracked excavator	NO		3	37.4	58	1.29
D10557K	L22-474	27/06/2022	CBR6	E 433330-N559064	14t tracked excavator	NO		3	37.3	58	1.3
D10557K	L22-474	27/06/2022	CBR7	E 433115-N558505	14t tracked excavator	NO		4	46	70	1.3
D10557K	L22-474	27/06/2022	CBR8	E 433112-N558488	14t tracked excavator	NO		4	45.4	69	1.3
D10557K	L22-474	27/06/2022	CBR9	E 433130-N558516	14t tracked excavator	NO		3	39.2	60	1.29
D10557K	L22-474	27/06/2022	CBR10	E 433116-N559013	14t tracked excavator	YES		5	47.8	72	1.3
D10557K	L22-474	27/06/2022	CBR11	E 433330-N559016	14t tracked excavator	NO		5	50	76	1.3
D10557L	L22-478	28/06/2022	CBR1	E 433340-N559021	14t Tracked Excavator	NO		4.6	35.1	70	1.28
D10557L	L22-478	28/06/2022	CBR2	E 433355-N559022	14t Tracked Excavator			6	53.9	82	1.32
D10557L	L22-478	28/06/2022	CBR3	E 433369-N559024	14t Tracked Excavator	NO		5	47	72	1.31
D10557L	L22-478	28/06/2022	CBR4	E 433342-N559072	14t Tracked Excavator			7	61	92	1.32
D10557L	L22-478	28/06/2022	CBR5	E 433347-N559054	14t Tracked Excavator			8	68.7	101	1.3
D10557L	L22-478	28/06/2022	CBR6	E 433354-N559040	14t Tracked Excavator			7	59.3	88	1.3
D10557L	L22-478	28/06/2022	CBR7	E 433337-N559032	14t Tracked Excavator			8	64.2	94	1.3
D10557L	L22-478	28/06/2022	CBR8	E 433334-N559048	14t Tracked Excavator			6	57.7	86	1.3
D10557L	L22-478	28/06/2022	CBR9	E 433326-N559065	14t Tracked Excavator			7	58.7	87	1.31
D10557L	L22-478	28/06/2022	CBR10	E 433321-N559024	14t Tracked Excavator	NO		6	46.3	84	1.29
D10557L	L22-478	28/06/2022	CBR11	E 433311-N559039	14t Tracked Excavator	NO		5	47.4	72	1.3
D10557L	L22-478	28/06/2022	CBR12	E 433305-N559060	14t Tracked Excavator			8	64.5	95	1.3
D10557L	L22-478	28/06/2022	CBR13	E 433330-N559106	14t Tracked Excavator	NO		3	33.4	52	1.31
D10557L	L22-478	28/06/2022	CBR14	E 433339-N559092	14t Tracked Excavator	NO		3	31.7	50	1.31
D10557M	L22-484	29/06/2022	CBR1	Zone 3	14t Tracked Excavator		NO	2	24.5	40	1.29
D10557M	L22-484	29/06/2022	CBR2	Zone 3	14t Tracked Excavator		NO	2	27.2	44	1.3
D10557M	L22-484	29/06/2022	CBR3	Zone 3	14t Tracked Excavator		NO	2	27.1	44	1.33
D10557M	L22-484	29/06/2022	CBR4	Zone 3	14t Tracked Excavator		NO	2	27.9	45	1.3
D10557M	L22-484	29/06/2022	CBR5	E433336-N559079	14t Tracked Excavator	NO		3	33.1	52	1.3
D10557M	L22-484	29/06/2022	CBR6	E433335-N559055	14t Tracked Excavator	NO		5	50.1	76	1.3
D10557M	L22-484	29/06/2022	CBR7	E433329-N559070	14t Tracked Excavator			8	64.6	95	1.3
D10557M	L22-484	29/06/2022	CBR8	E433344-N559042	14t Tracked Excavator			8	64.5	96	1.31
D10557M	L22-484	29/06/2022	CBR9	E433350-N559048	14t Tracked Excavator	NO		5	51.8	78	1.3
D10557M	L22-484	29/06/2022	CBR10	E433348-N559058	14t Tracked Excavator	NO		5	52.1	79	1.3
D10557M	L22-484	29/06/2022	CBR11	E433342-N559075	14t Tracked Excavator	NO		5	50.1	77	1.31
D10557N	L22-487	30/06/2022	CBR1	N433296 E559083	13t tracked excavator	NO		2	23.2	38	1.32
D10557N	L22-487	30/06/2022	CBR2	N433305 E559088	13t tracked excavator			7	59.8	89	1.28
D10557AE	L22-564	20/07/2022	CBR1	433122/558596 - Zone 5	21t Tracked Excavator	YES		4.9	48.5	74	1.3
D10557AE	L22-564	20/07/2022	CBR2	Zone 5 433163/ 558523	21t Tracked Excavator	YES		5.2	50.6	79	1.35
D10557AE	L22-564	20/07/2022	CBR3	Zone 5 433168/ 558598	21t Tracked Excavator	YES		5.5	52.2	79	1.3
D10557AE	L22-564	20/07/2022	CBR4	Zone 5 433181/ 558590	21t Tracked Excavator	YES		5.1	50.1	77	1.33
D10557AE	L22-564	20/07/2022	CBR5	Zone 5 433194/ 558566	21t Tracked Excavator	YES		5.4	51.9	80	1.33
D10557AE	L22-564	20/07/2022	CBR6	Zone 6 433097/ 558535 DockLeveler	21t Tracked Excavator	YES		8.2	67.7	99	1.3
D10557AF	L22-574	21/07/2022	CBR1	Zone 5	23t Tracked Excavator	YES		11.9	85.7	123	1.29
D10557AF	L22-574	21/07/2022	CBR2	Zone 5	23t Tracked Excavator	YES		4.9	48.9	74	1.28
D10557AG	L22-586	22/07/2022	CBR1	Zone 3	13t tracked excavator		NO	30.3	156	213	1.29
D10557AG	L22-586	22/07/2022	CBR3	Zone 3	13t tracked excavator		NO	44.7	200.2	267	1.29

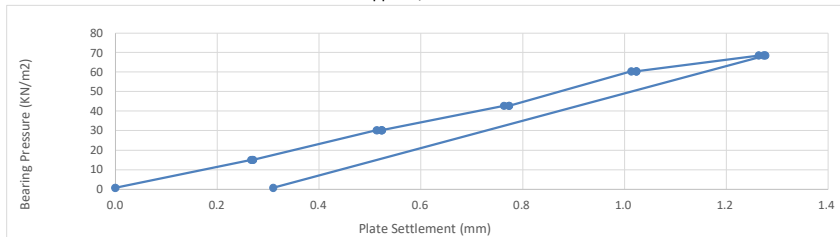
Project no.	Report ref.	Date	Ref. no	Easting/Northing	Kentledge	Building footprint as per plan	Building Footprint Assumed	CBR	Modulus of Subgrade Reaction	Max Pressure	Max Deformation
D10557AI	L22-621	27/07/2022	CBR1	Zone 6	13t tracked excavator		NO	26.3	142.8	195	1.29
D10557AI	L22-621	27/07/2022	CBR2	Zone 6	13t tracked excavator		NO	10.2	77.7	113	1.29
D10557AI	L22-621	27/07/2022	CBR3	Zone 2	13t tracked excavator		YES	25.2	138.7	199	1.34
D10557AI	L22-621	27/07/2022	CBR4	Zone 2	13t tracked excavator		YES	21.5	125.5	172	1.27
D10557AI	L22-621	27/07/2022	CBR5	Zone 2	13t tracked excavator		YES	35.7	173.5	231	1.27
D10557AI	L22-621	27/07/2022	CBR6	Zone 2	13t tracked excavator		YES	28.2	149.1	206	1.29
D10557AJ	L22-624	28/07/2022	CBR1	54.924658-1.481839	18t tracked excavator			25	136.4	199	1.26
D10557AJ	L22-624	28/07/2022	CBR2	54.924759-1.481236	18t tracked excavator			16	103.9	146	1.26
D10557AJ	L22-624	28/07/2022	CBR3	54.924869-1.480797	18t tracked excavator			11	79.6	118	1.3
D10557AJ	L22-624	28/07/2022	CBR4	54.921411-1.482966	18t tracked excavator			69	264.8	341	1.27
D10557AJ	L22-624	28/07/2022	CBR5	54.922414-1.483388	18t tracked excavator			16	101.9	149	1.3
D10557AJ	L22-624	28/07/2022	CBR6	54.922952-1.483789	18t tracked excavator			23	129.8	186	1.31
D10557Q	L22-502-1	28/07/2022	CBR1		13t tracked excavator			5	51.7	77	1.25
D10557Q	L22-502-1	28/07/2022	CBR2		13t tracked excavator			11	82	117	1.25
D10557Q	L22-502-1	28/07/2022	CBR3		13t tracked excavator			30	156.1	209	1.25
D10557R	L22-503-1	17/07/2022	CBR 1	N433305 E559103	21t tracked excavator			11	79.7	116	1.32
D10557R	L22-503-1	17/07/2022	CBR 2	N433291 E559095	21t tracked excavator			11	80.5	116	1.31
D10557R	L22-503-1	17/07/2022	CBR 3	N433274 E559089	21t tracked excavator			7	63.5	94	1.3
D10557R	L22-503-1	17/07/2022	CBR 4	N43315 E559086	21t tracked excavator			6	56.1	84	1.3
D10557R	L22-503-1	17/07/2022	CBR 5	N433301 E559075	21t tracked excavator			7	60	89	1.29
D10557R	L22-503-1	17/07/2022	CBR 6	N433286 E559068	21t tracked excavator			7	59.8	89	1.3
D10557R	L22-503-1	17/07/2022	CBR 7	N433274 E559063	21t tracked excavator	NO		4	41.6	64	1.29
D10557R	L22-503-1	17/07/2022	CBR 8	N433285 E559046	21t tracked excavator	NO		5	49.8	76	1.3
D10557R	L22-503-1	17/07/2022	CBR 9	N433293 E559027	21t tracked excavator	NO		5	48.1	72	1.29
D10557S	L22-509-1	05/07/2022	CBR1	N433373 E559102	14t tracked excavator	NO		5	50.2	76	1.3
D10557S	L22-509-1	05/07/2022	CBR2	N433377 E559087	14t tracked excavator	NO		4	40.5	63	1.3
D10557S	L22-509-1	05/07/2022	CBR3	N433383 E559073	14t tracked excavator			9	73.2	107	1.31
D10557S	L22-509-1	05/07/2022	CBR4	N433347 E559096	14t tracked excavator	NO		4	45.2	69	1.31
D10557S	L22-509-1	05/07/2022	CBR5	N433359 E559080	14t tracked excavator	NO		3	37.7	59	1.29
D10557S	L22-509-1	05/07/2022	CBR6	N433367 E559060	14t tracked excavator			6	53.7	81	1.3
D10557V	L22-522	08/07/2022	CBR1	549222 / 483465	21t Tracked Excavator	NO		12	85.9	122	1.25
D10557V	L22-522	08/07/2022	CBR2	433184 / 558685	21t Tracked Excavator	YES		8.9	71.5	104	1.27
D10557V	L22-522	08/07/2022	CBR3	433184 / 558685	21t Tracked Excavator	YES		25	149.9	188	1.28
D10557V	L22-522	08/07/2022	CBR4	Zone 3 54924756 / 482201	21t Tracked Excavator		NO	19	117.1	163	1.28
D10557V	L22-522	08/07/2022	CBR5	Zone 3 549255 / 481731	21t Tracked Excavator	YES		13	90.7	131	1.3
D10557V	L22-522	08/07/2022	CBR6	Zone 3 433274 / 559069	21t Tracked Excavator	YES		17	109.4	155	1.3
D10557V	L22-522	08/07/2022	CBR7	54925006/ 481165	21t Tracked Excavator	YES		33	164.8	224	1.28
D10557V	L22-522	08/07/2022	CBR8	433117 / 558703	21t Tracked Excavator	YES		28	148.5	204	1.27
D10557V	L22-522	08/07/2022	CBR9	54921926 / 484830	21t Tracked Excavator			38	182	245	1.28
D10557V	L22-522	08/07/2022	CBR10	549222 / 483242	21t Tracked Excavator	NO		21	123.9	173	1.29
D10557AM	L22-636	02/08/2022	CBR1	433141/558809	14t tracked excavator			12	84.6	122	1.27
D10557AM	L22-636	02/08/2022	CBR2	433114/558803	14t tracked excavator			19	114.9	169	1.33
D10557AO	L22-643	03/08/2022	CBR1	ZONE 1 Service Yard	13t tracked excavator		NO	20	117.9	170	1.33
D10557AO	L22-643	03/08/2022	CBR2	ZONE 1 Service Yard	13t tracked excavator		NO	13	89.2	132	1.34
D10557AO	L22-643	03/08/2022	CBR3	ZONE 1 Service Yard	13t tracked excavator		NO	11	84	120	1.26
D10557AQ	L22-656	05/08/2022	CBR1	433181/588634	22t Tracked Excavator	YES		11	83	120	1.31
D10557AQ	L22-656	05/08/2022	CBR2	433255/558649	22t Tracked Excavator	NO		5.6	52.8	82	1.33
D10557AQ	L22-656	05/08/2022	CBR3	433235/558618	22t Tracked Excavator	NO		9.3	73.2	108	1.33
D10557AQ	L22-656	05/08/2022	CBR4	433199/558606	22t Tracked Excavator	YES		11	82.6	120	1.32
D10557AS	L22-667	09/08/2022	CBR1	Zone 5	22t Tracked Excavator	YES		6.8	59.9	89	1.28
D10557AS	L22-667	09/08/2022	CBR2	Zone 5	22t Tracked Excavator	YES		9.2	72.9	106	1.28
D10557AS	L22-667	09/08/2022	CBR3	Zone 5	22t Tracked Excavator	YES		6.8	60.1	89	1.27
D10557AU	L22-671	11/08/2022	CBR1	Zone 6	13t tracked excavator	NO		5.3	51.4	83	1.39
D10557AU	L22-671	11/08/2022	CBR2	Zone 6	13t tracked excavator	NO		7.1	61.4	96	1.36
D10557AU	L22-671	11/08/2022	CBR3	Zone 6	13t tracked excavator	NO		18	113.3	157	1.26

Project no.	Report ref.	Date	Ref. no	Easting/Northing	Kentledge	Building footprint as per plan	Building Footprint Assumed	CBR	Modulus of Subgrade Reaction	Max Pressure	Max Deformation
D10557AW	L22-704	15/08/2022	CBR1		13t tracked excavator			3.8	41.2	371	8.04
D10557AW	L22-704	15/08/2022	CBR2		13t tracked excavator			8.4	68.9	371	6.19
D10557AW	L22-704	15/08/2022	CBR3		13t tracked excavator			8.5	69.4	371	6.84
D10557AW	L22-704	15/08/2022	CBR4		13t tracked excavator			12.1	86.7	371	5.83
D10557AW	L22-704	15/08/2022	CBR5		13t tracked excavator			5.8	54	371	8.88
D10557AW	L22-704	15/08/2022	CBR6		13t tracked excavator			4.5	46.1	371	11.01
D10557AY	L22-708	17/08/2022	CBR1	Road Zone 10	22t Tracked Excavator		NO	17	108.1	153	1.31
D10557AY	L22-708	17/08/2022	CBR2	Road Zone 10	22t Tracked Excavator		NO	5.1	49.7	80	1.5
D10557AY	L22-708	17/08/2022	CBR3	Road Zone 10	22t Tracked Excavator		NO	24.9	137.9	187	1.27
D10557AZ	L22-722	18/08/2022	CBR1	Zone 7	13t tracked excavator		YES	7.3	62.8	94	1.3
D10557AZ	L22-722	18/08/2022	CBR2	Zone 7	13t tracked excavator		YES	5.8	54.4	82	1.3
D10557AZ	L22-722	18/08/2022	CBR3	Zone 7	13t tracked excavator		YES	12	86.4	124	1.3
D10557AZ	L22-722	18/08/2022	CBR4	Zone 7	13t tracked excavator		YES	15	100.2	145	1.31
D10557AZ	L22-722	18/08/2022	CBR5	Zone 7	13t tracked excavator		YES	19	114.8	162	1.3
D10557AZ	L22-722	18/08/2022	CBR6	Zone 7	13t tracked excavator		YES	11	83.7	120	1.29
D10557AZ	L22-722	18/08/2022	CBR7	Zone 7	13t tracked excavator		YES	8	68	101	1.33
D10557BA	L22-728	19/08/2022	CBR1	Zone 10 433106/558828	40t tracked excavator		NO	11	82.6	121	1.31
D10557BA	L22-728	19/08/2022	CBR2	Zone 10 433135/558850	40t tracked excavator		NO	12	84.5	127	1.4
D10557BA	L22-728	19/08/2022	CBR3	Attenuation Tank	13t tracked excavator		NO	8.8	70.9	106	1.31
D10557BE	L22-740	25/08/2022	CBR1	Zone 4	13t tracked excavator		NO	9.4	73.6	106	1.26
D10557BE	L22-740	25/08/2022	CBR2	Zone 5	13t tracked excavator		YES	22	127.3	180	1.32
	D10557BF	26/08/2022	CBR1		13t tracked excavator			5.1	50.1	78	1.37
	D10557BF	26/08/2022	CBR2		13t tracked excavator			8.1	67	104	1.44
	D10557BF	26/08/2022	CBR3		13t tracked excavator			7.7	64.8	100	1.35
D10557BG	L22-746	30/08/2022	CBR1		13t tracked excavator			8.2	67.4	103	1.38
D10557BI	L22-755	01/09/2022	CBR1	Zone 8	13t tracked excavator		YES	7.4	63.1	98	1.34
D10557BI	L22-755	01/09/2022	CBR2	Zone 8	13t tracked excavator		YES	12	88.1	127	1.3
D10557BI	L22-755	01/09/2022	CBR3	Zone 8	13t tracked excavator		YES	30.3	156.2	209	1.28
D10557BI	L22-755	01/09/2022	CBR4	Zone 8	13t tracked excavator		YES	27	145.8	205	1.31
D10557BI	L22-755	01/09/2022	CBR5	Zone 8	13t tracked excavator		YES	22	126.4	177	1.31
D10557BJ	L22-773	02/09/2022	CBR1	Zone 8	13t tracked excavator		YES	23.3	132.1	183	1.3
D10557BJ	L22-773	02/09/2022	CBR2	Zone 8	13t tracked excavator		YES	24.2	135.2	190	1.33
D10557BJ	L22-773	02/09/2022	CBR3	Zone 8	13t tracked excavator		YES	17	107.2	150	1.29
D10557BJ	L22-773	02/09/2022	CBR4	Zone 8	13t tracked excavator		YES	19	114	162	1.32
D10557BJ	L22-773	02/09/2022	CBR5	Zone 8	13t tracked excavator		YES	15	101.3	143	1.29
D10557BK	L22-773	05/09/2022	CBR4	Main Building	18t tracked excavator		YES	3.4	38.8	371	6.91
	D10557BS	16/09/2022	CBR1	Road	13t tracked excavator		NO	8.4	68.5	99	1.28
	D10557BS	16/09/2022	CBR2	Road	13t tracked excavator		NO	22	128.5	175	1.27
	D10557BS	16/09/2022	CBR3	Road	13t tracked excavator		NO	26	140.7	197	1.32
	D10557BU	21/09/2023	PLT1	PLT1	17t tracked excavator			11	81.4	371	4.19
	D10557BU	21/09/2023	PLT2	PLT2	17t tracked excavator			16	104.3	371	3.59
	D10557BU	21/09/2023	PLT3	PLT3	17t tracked excavator			25	137.7	371	3.11
	D10557BU	21/09/2023	PLT3	PLT3	17t tracked excavator			13	91.8	371	3.85
	D10557BU	21/09/2023	PLT4	PLT4	17t tracked excavator			13	89	371	3.83
	D10557BU	21/09/2023	PLT5	PLT5	17t tracked excavator			18	111.3	371	3.28

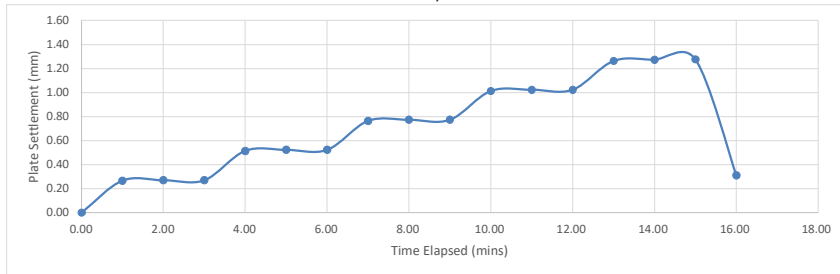
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D105578
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	15/06/2022
		Weather Conditions	Cloudy
		Air Temperature °C	16°C
		Sample Description	Clay
		Reaction Load	40t Tracked Excavator
Depth of Test from Groundlevel	37.98	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 1 433123-E 558532-N-
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	69	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	68	Modulus of Subgrade Reaction (Mn/M²/M)	33.9
Calculated CBR (%) at 1.25mm	4		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superceded document HD 25/94

Comments:

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The published results are appertaining only to the locations tested

Test Carried Out By:

D. Tennant
Materials Technician

Approved By:


Laboratory Manager

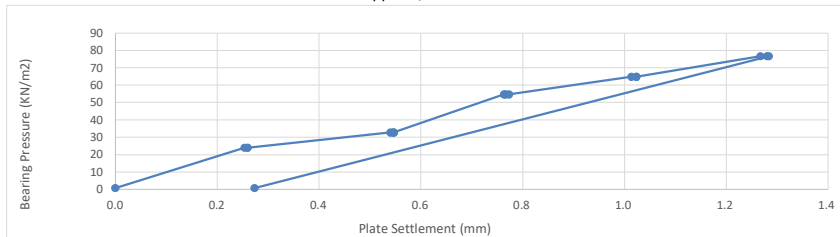
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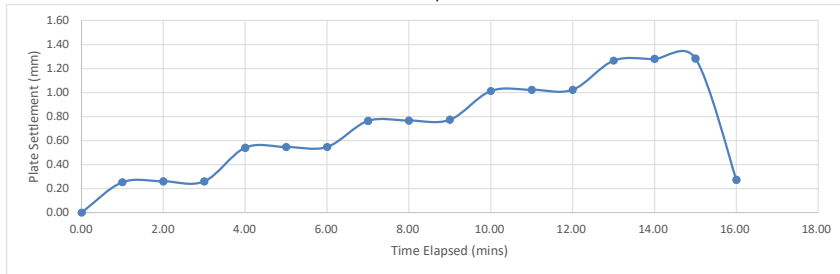
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557B
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	15/06/2022
		Weather Conditions	Cloudy
		Air Temperature °C	16°C
		Sample Description	Clay
		Reaction Load	40t Tracked Excavator
Depth of Test from Groundlevel	37.952	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 2 433117.720-558557.180
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	77	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	76	Modulus of Subgrade Reaction (Mn/M²/M)	37.8
Calculated CBR (%) at 1.25mm	5		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

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D. Tennant
Materials Technician

Approved By:


Laboratory Manager

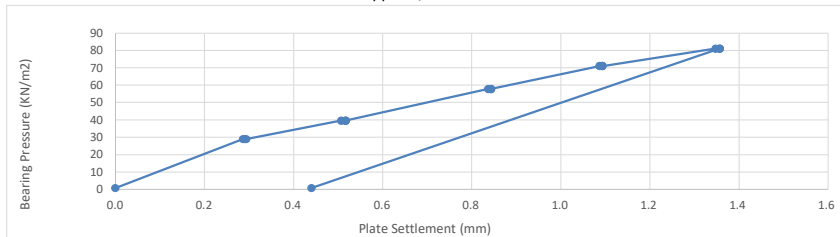
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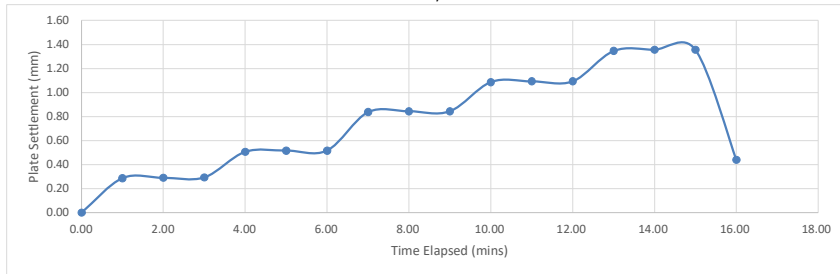
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D105578
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	15/06/2022
		Weather Conditions	Cloudy
		Air Temperature °C	16°C
		Sample Description	Clay
		Reaction Load	40t Tracked Excavator
Depth of Test from Groundlevel	37.924	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 3 433112.004-558564.386
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	81	Maximum Deformation (mm)	1.36
Pressure at 1.25mm penetration (kPa)	77	Modulus of Subgrade Reaction (Mn/M²/M)	38.5
Calculated CBR (%) at 1.25mm	5		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

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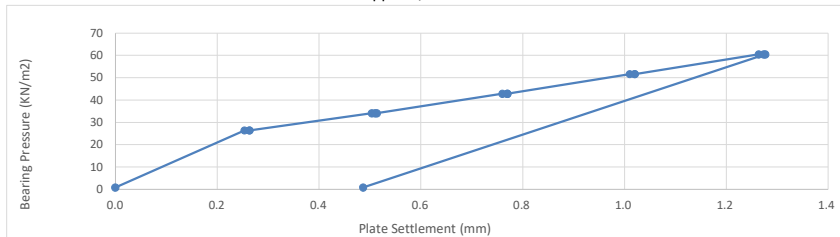
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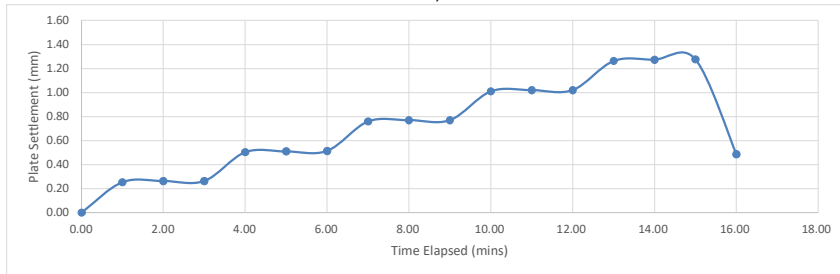
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D105578
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	15/06/2022
		Weather Conditions	Cloudy
		Air Temperature °C	16°C
		Sample Description	Clay
		Reaction Load	40t Tracked Excavator
Depth of Test from Groundlevel	38	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 4 433099.080-558583.475
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	60	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	60	Modulus of Subgrade Reaction (Mn/M²/M)	29.9
Calculated CBR (%) at 1.25mm	3		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

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Laboratory Manager

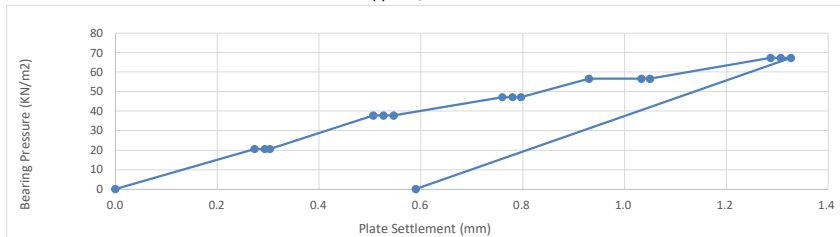
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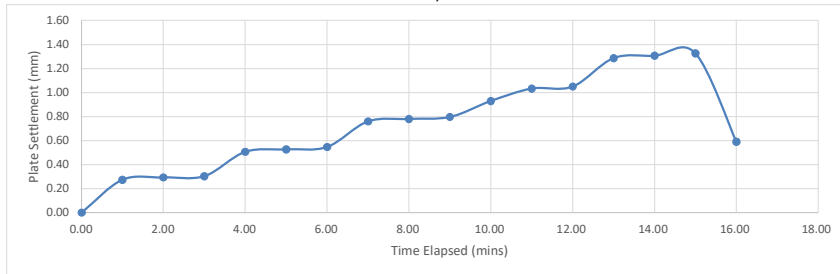
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557C
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	16/06/2022
		Weather Conditions	Sunny
		Air Temperature °C	19°C
		Sample Description	Clay
		Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 1 -E 433087-N558615
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	67	Maximum Deformation (mm)	1.33
Pressure at 1.25mm penetration (kPa)	66	Modulus of Subgrade Reaction (Mn/M²/M)	32.7
Calculated CBR (%) at 1.25mm	4		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superceded document HD 25/94

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Test Carried Out By:

D. Tennant
Materials Technician

Approved By:

N. Hodson

Approved Date:

17 June 2022



Unit 8B Bowburn South Industrial Estate
Durham, DH6 5AD

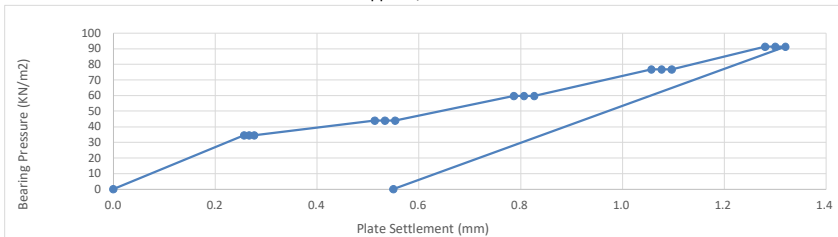


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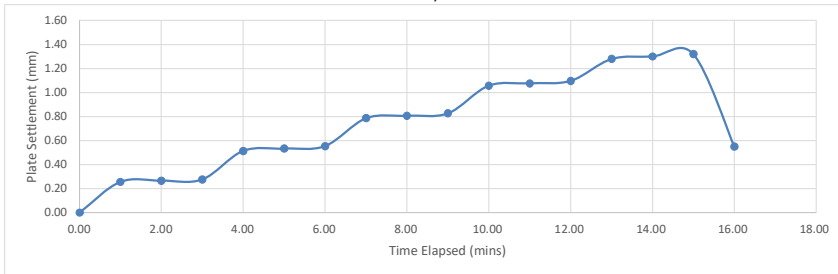
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557C
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	16/06/2022
		Weather Conditions	Sunny
		Air Temperature °C	19°C
		Sample Description	Clay
		Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 1 -E 433080-N558635
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	91	Maximum Deformation (mm)	1.32
Pressure at 1.25mm penetration (kPa)	89	Modulus of Subgrade Reaction (Mn/M²/M)	44.3
Calculated CBR (%) at 1.25mm	7		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superceded document HD 25/94

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Materials Technician

Approved By:

N. Hodson

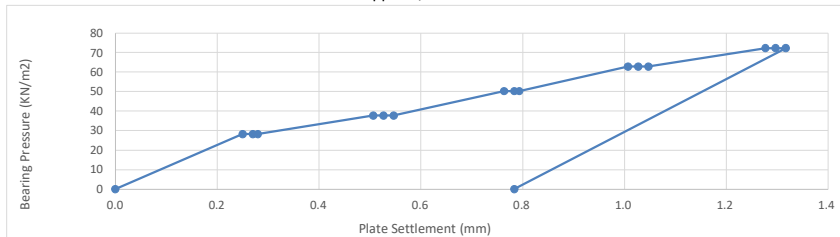
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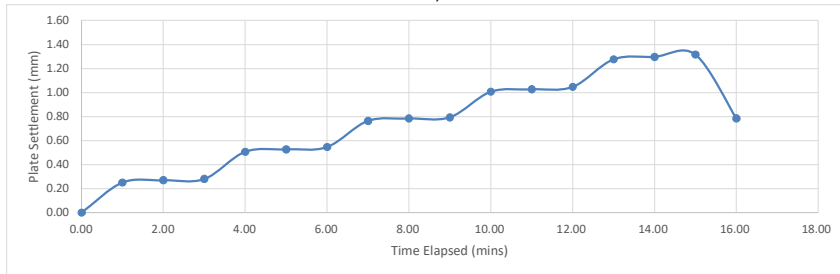
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557C-1
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	17/06/2022
		Weather Conditions	Sunny
		Air Temperature °C	19°C
		Sample Description	Clay
		Reaction Load	14t Tracked Excavator
Depth of Test from Groundlevel	38.55	Density & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 1 -E 433113-N558633
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	72	Maximum Deformation (mm)	1.32
Pressure at 1.25mm penetration (kPa)	71	Modulus of Subgrade Reaction (Mn/M²/M)	35.5
Calculated CBR (%) at 1.25mm	5		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

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Materials Technician

Approved By:


Materials Director

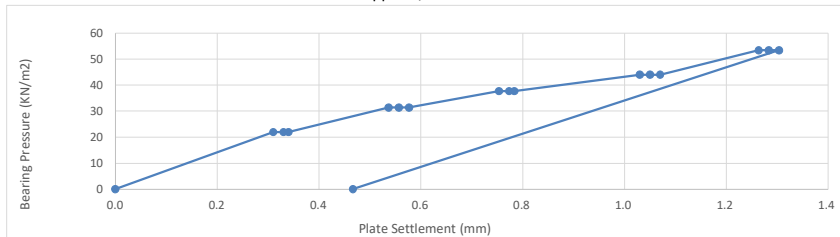
Approved Date:

20 June 2022

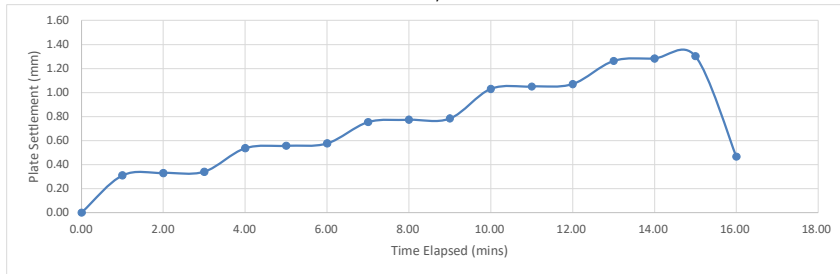
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557C-1
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	17/06/2022
		Weather Conditions	Sunny
		Air Temperature °C	19°C
		Sample Description	Clay
		Reaction Load	14t Tracked Excavator
Depth of Test from Groundlevel	38.55	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 2 -E 433096-N558632
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	53	Maximum Deformation (mm)	1.30
Pressure at 1.25mm penetration (kPa)	53	Modulus of Subgrade Reaction (Mn/M²/M)	26.3
Calculated CBR (%) at 1.25mm	3		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superceded document HD 25/94

Comments:

Unless otherwise stated, this test has been carried out in accordance with the published standard, with no deviations from the test method outlined.

The published results are appertaining only to the locations tested

Test Carried Out By:

D. Tennant
Materials Technician

Approved By:


Materials Director

Approved Date:

20 June 2022



Unit 8B Bowburn South Industrial Estate
Durham, DH6 5AD

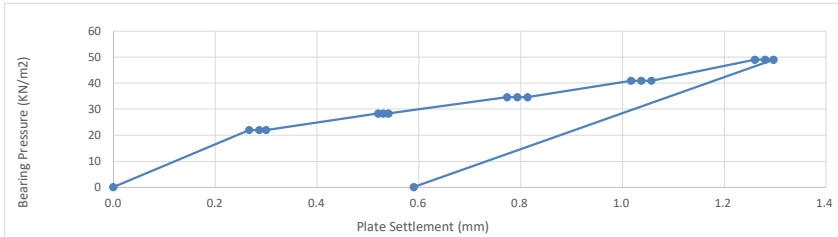


Tel. (+44) 0191 389 6543

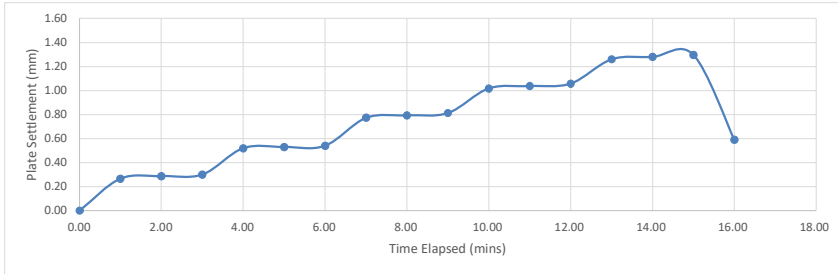
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557C-1
Client	Groundwork Services (Durham) Limited Thistle Road Littleburn Industrial Estate	Date Tested	17/06/2022
		Weather Conditions	Sunny
		Air Temperature °C	19°C
		Sample Description	Clay
		Reaction Load	14t Tracked Excavator
Depth of Test from Groundlevel	38.55	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	CBR 3 -E 433103-N558640
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	49	Maximum Deformation (mm)	1.30
Pressure at 1.25mm penetration (kPa)	49	Modulus of Subgrade Reaction (Mn/M²/M)	24.2
Calculated CBR (%) at 1.25mm	2		

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superceded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superceded document HD 25/94

Comments:

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The published results are appertaining only to the locations tested

Test Carried Out By:

D. Tennant
Materials Technician

Approved By:

M. Chohan
Materials Director



Approved Date:

20 June 2022

Test Report

Client	Groundwork Services (Durham) Limited
Address	Littleburn Industrial Estate Langley Moor Durham DH7 8HJ
F.A.O	Paul Barton
Project:	Giga One Factory, Washington
Project Number:	D10557AE
Report Number:	L22-564
Date Received:	21st July 2022

Testing Required:	<p>Insitu Density by Core Cutter - BS:1377-9:1990 Clause 2.3</p> <p>Hand Shear Vane*</p> <p>Vertical Deformation and Strength Characteristics by the Incremental Plate Load Test - BS:1377-9:1990 Clause 4.1</p> <p>Determination of Equivalent CBR Value using the Plate Bearing Test - Design Manual for Roads and Bridges, Volume 7: Pavement Design and Maintenance - Foundations HD25/9</p>
Date Started:	20th July 2022
Date Finished:	21st July 2022


Report Issue Date:	21st July 2022
Reviewed By:	 Natalie Hodson - Materials Director
Authorised By:	 Nik O'Brien - Laboratory Manager
Remarks:	(*) denotes testing is outside of UKAS Scope of Accreditation. (+) denotes subcontracted testing.

Samples will be stored for one month after the report has been issue before being disposed of.

The published results appertain only to the specimens tested.


Exploration and Testing Associates Limited, registered in England and Wales #11803869 at 8B, Bowburn South Industrial Estate, Bowburn, Durham, DH6 5AD

Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L3-433413-558754	CC333	CC333	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	21	1.69	
Z7-L3-433444-558765	CC334	CC334	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.09	19	1.76	
Z7-L3-433396-558747	CC335	CC335	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.13	16	1.84	
Z7-L3-433428-558760	CC336	CC336	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.05	23	1.67	
Z7-L3-433403-558772	CC337	CC337	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	19	1.72	
Z7-L2-433377-558803	CC338	CC338	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	1.99	25	1.60	
Z7-L3-433379-558782	CC339	CC339	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	24	1.66	
Z7-L3-433410-558793	CC340	CC340	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.06	20	1.72	
Z7-L3-433413-558754	CC341	CC341	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	20	1.72	
Z7-L3-433424-558801	CC342	CC342	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	23	1.69	
Z7-L3-433419-558779	CC343	CC343	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.09	17	1.78	
Z7-L3-433389-558765	CC344	CC344	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.07	17	1.77	
Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method							Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632		


Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type see below	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L3-433435-558788	CC345	CC345	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.03	16	1.75	
Z7-L2-433394-558811	CC346	CC346	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.08	19	1.75	
Z9-L1-433464-558766	CC347	CC347	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.08	20	1.73	
Z9-L1-433455-558785	CC348	CC348	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.10	19	1.77	
Z9-L1-433444-558802	CC349	CC349	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.05	21	1.69	
Z9-L1-433438-558817	CC350	CC350	0.00	20/07/22	Brown, Slightly Sandy CLAY	Ckear, 22C	CCD	2.06	20	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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Summary of in-situ density test results

Project No.				Project Name							
D10557AE				Giga One, Washington							
Test Position Reference	Test reference	Test No.	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
CC294-RT	CC294-RT	CC294-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	17	1.72	
CC298-RT	CC298-RT	CC298-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.04	21	1.69	
CC299-RT	CC299-RT	CC299-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.00	18	1.70	
CC303-RT	CC303-RT	CC303-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	17	1.73	
CC308-RT	CC308-RT	CC308-RT	0.00	20/07/22	Brown, Slightly Sandy CLAY	Clear, 22C	CCD	2.02	18	1.71	
CC311-RT	CC311-RT	CC311-RT	0.00	20/07/22	Brown, Sandy CLAY	Clear, 22C	CCD	2.01	17	1.72	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 21/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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TEST CERTIFICATE
Determination of the Shear Strength Using the Laboratory Handvane

Client: Groundwork Services (Durham) Ltd

Project No: D10557AE

Project: Envision, Washington

Date Tested: 20th July 2022

Sampled By: J. Curry for ETA


Ambient Temperature: 20°C

Weather Conditions: Dry, Cloudy

Vane Used: Small

Comments:

	433377-558803	433394-558811	433407-558818	433396-558747	433389-558765	433379-558782
Client Reference	Z7, L2	Z7, L2	Z7, L2	Z7, L3	Z7, L3	Z7, L3
Reading 1	9.6	11.6	12.0	9.6	9.6	8.8
Reading 2	10.2	10.8	12.0	10.2	10.4	9.4
Reading 3	10.4	11.2	12.0	10.0	9.2	10.0
Average Readings:	10.0	11.2	12.0	9.9	9.7	9.4
Equivalent Shear Stress (kN/m ²)	201	224	240	199	195	188
	433413-558754	433403-558772	433395-558788	433428-558760	433419-558779	433410-558793
Client Reference	Z7, L3	Z7, L3	Z7, L3	Z7, L3	Z7, L3	Z7, L3
Reading 1	11.2	11.8	10.2	11.0	11.4	10.6
Reading 2	8.6	11.0	10.6	11.2	11.6	9.8
Reading 3	9.8	11.2	11.0	10.6	11.8	11.2
Average Readings:	9.8	11.3	10.6	10.9	11.6	10.5
Equivalent Shear Stress (kN/m ²)	197	227	212	219	232	211
	433444-558765	433435-558788	433424-558801	433464-558766	433455-558785	433444-558802
Client Reference	Z7, L3	Z7, L3	Z7, L3	Z9, L1	Z9, L1	Z9, L1
Reading 1	11.6	12.0	10.4	11.0	12.0	12.0
Reading 2	12.0	12.0	11.2	10.8	12.0	12.0
Reading 3	11.2	12.0	10.4	11.4	12.0	12.0
Average Readings:	11.6	12.0	10.6	11.0	12.0	12.0
Equivalent Shear Stress (kN/m ²)	232	240	213	221	240	240
	433438-558817					
Client Reference	Z9, L1					
Reading 1	12.0					
Reading 2	12.0					
Reading 3	12.0					
Average Readings:	12.0					
Equivalent Shear Stress (kN/m ²)	240					

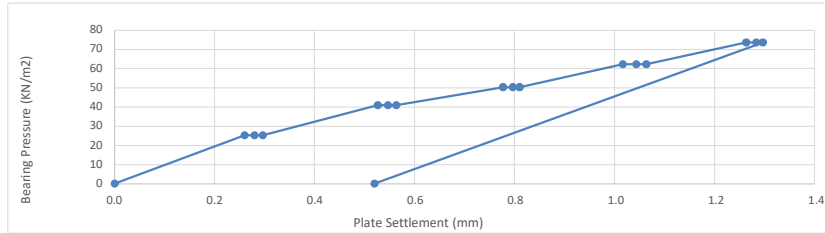
Approved By: 
N. Hodson
Materials Director

Date: 21st July 2022

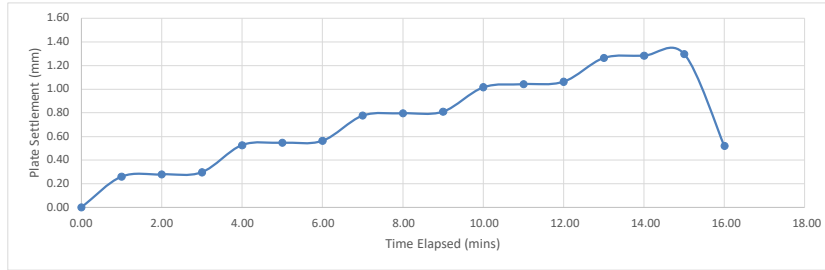
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	433122/558596 - Zone 5
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	74	Maximum Deformation (mm)	1.30
Pressure at 1.25mm penetration (kPa)	73	Modulus of Subgrade Reaction (Mn/M²/M)	48.5
Calculated CBR (%) at 1.25mm	4.9		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

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Test Carried Out By:

D. Tennant

Materials Technician

Approved By:



Materials Director

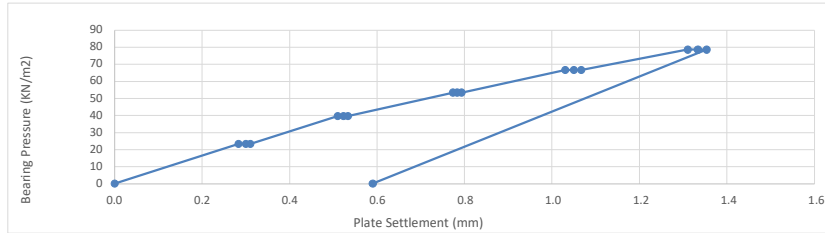
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20 July 2022

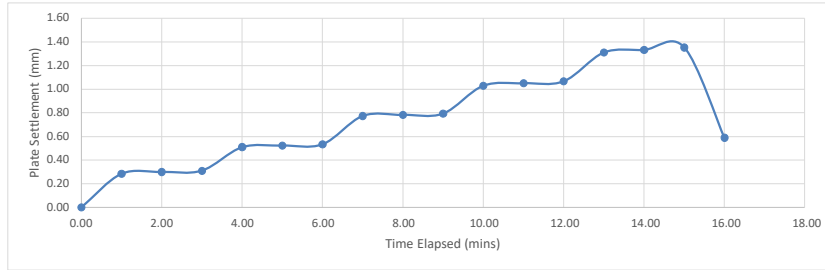
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5 433163/ 558523
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	79	Maximum Deformation (mm)	1.35
Pressure at 1.25mm penetration (kPa)	76	Modulus of Subgrade Reaction (Mn/M²/M)	50.6
Calculated CBR (%) at 1.25mm	5.2		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

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Test Carried Out By:

D. Tennant

Materials Technician

Approved By:



Materials Director

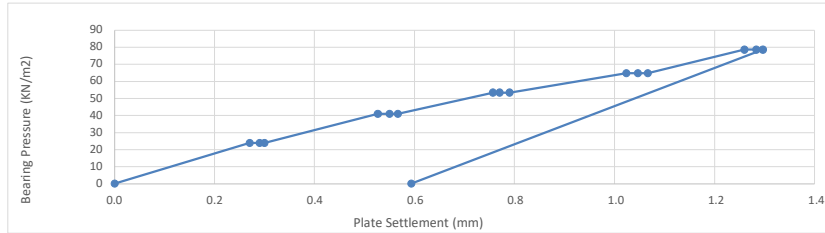
Approved Date:

20 July 2022

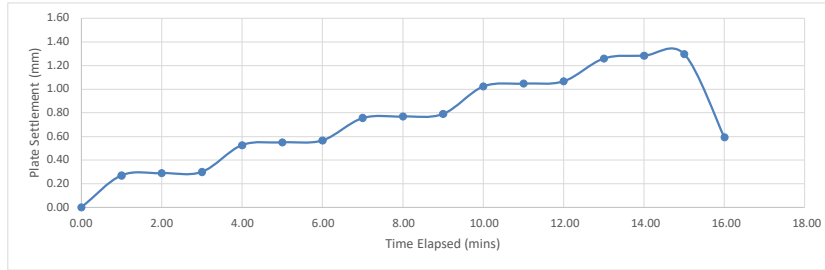
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5 433168/ 558598
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	79	Maximum Deformation (mm)	1.30
Pressure at 1.25mm penetration (kPa)	78	Modulus of Subgrade Reaction (Mn/M²/M)	52.2
Calculated CBR (%) at 1.25mm	5.5		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

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Test Carried Out By:

D. Tennant

Materials Technician

Approved By:



Materials Director

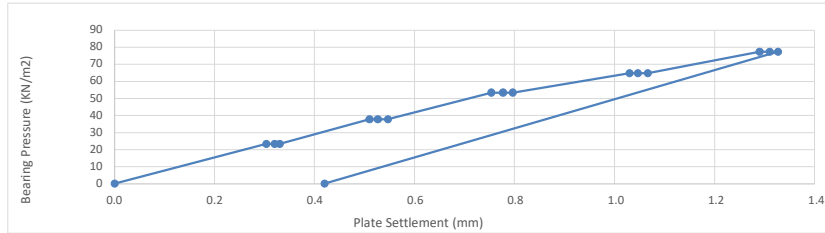
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20 July 2022

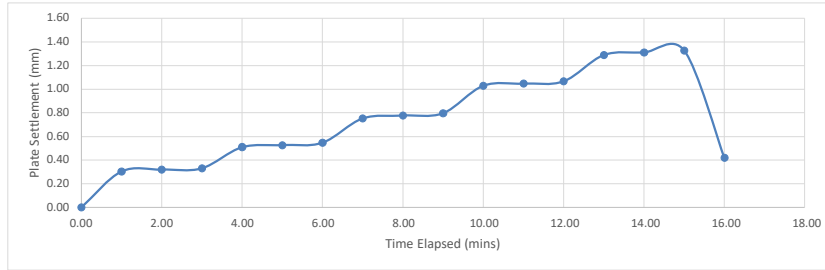
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5 433181/ 558590
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	77	Maximum Deformation (mm)	1.33
Pressure at 1.25mm penetration (kPa)	75	Modulus of Subgrade Reaction (Mn/M²/M)	50.1
Calculated CBR (%) at 1.25mm	5.1		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

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Test Carried Out By:

D. Tennant
 Materials Technician

Approved By:

M. Chou
 Materials Director

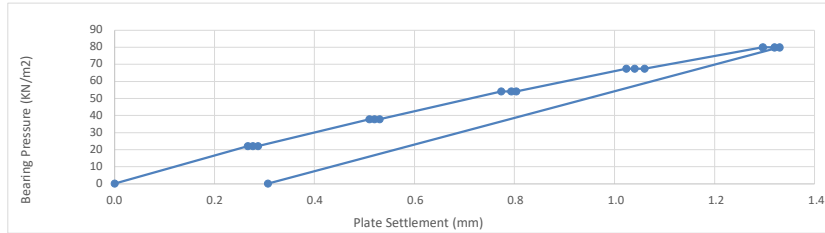
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20 July 2022

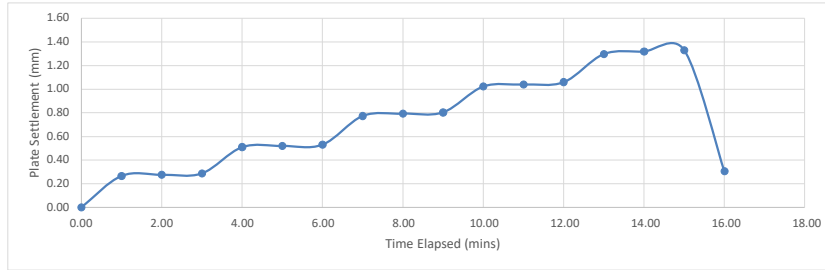
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5 433194/ 558566
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	80	Maximum Deformation (mm)	1.33
Pressure at 1.25mm penetration (kPa)	77	Modulus of Subgrade Reaction (Mn/M²/M)	51.9
Calculated CBR (%) at 1.25mm	5.4		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

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Test Carried Out By:

D. Tennant

Materials Technician

Approved By:



Materials Director

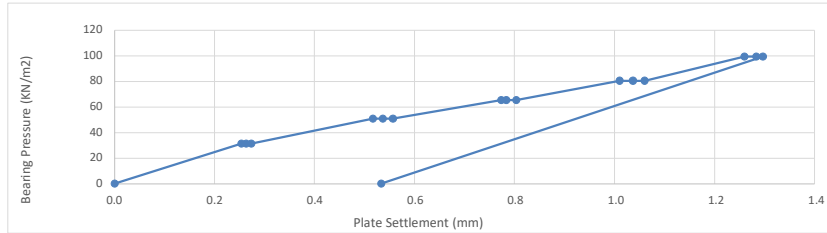
Approved Date:

20 July 2022

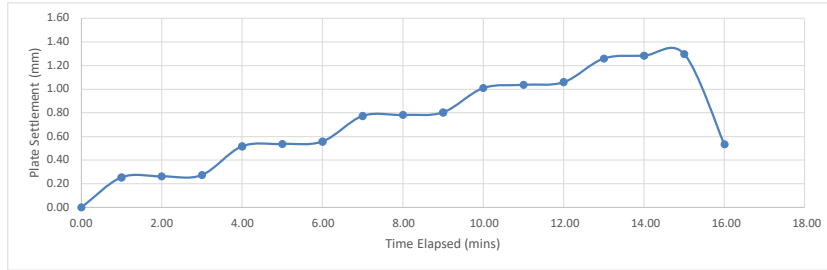
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AE
Client	Groundwork Services (Durham) Limited	Date Tested	20/07/2022
	Thistle Road	Weather Conditions	Sunny, Dry
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	21t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 6 433097/ 558535 Dock Leveller
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	99	Maximum Deformation (mm)	1.30
Pressure at 1.25mm penetration (kPa)	98	Modulus of Subgrade Reaction (Mn/M²/M)	67.7
Calculated CBR (%) at 1.25mm	8.2		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

Unless otherwise stated, this test has been carried out in accordance with the published standard, with no deviations from the test method outlined.

The published results are appertaining only to the locations tested

Test Carried Out By:

D. Tennant

Materials Technician

Approved By:



Materials Director



Approved Date:

20 July 2022

Test Report

Client	Groundwork Services (Durham) Limited
Address	Littleburn Industrial Estate Langley Moor Durham DH7 8HJ
F.A.O	Paul Barton
Project:	Giga One Factory, Washington
Project Number:	D10557AF
Report Number:	L22-574
Date Received:	21st July 2022

Testing Required:	<p>Insitu Density by Core Cutter - BS:1377-9:1990 Clause 2.3</p> <p>Hand Shear Vane*</p> <p>Vertical Deformation and Strength Characteristics by the Incremental Plate Load Test - BS:1377-9:1990 Clause 4.1</p> <p>Determination of Equivalent CBR Value using the Plate Bearing Test - Design Manual for Roads and Bridges, Volume 7: Pavement Design and Maintenance - Foundations HD25/9</p>
Date Started:	21st July 2022
Date Finished:	22nd July 2022

Report Issue Date:	22nd July 2022
Reviewed By:	 Natalie Hodson - Materials Director
Authorised By:	 Nik O'Brien - Laboratory Manager
Remarks:	(*) denotes testing is outside of UKAS Scope of Accreditation. (+) denotes subcontracted testing.


Samples will be stored for one month after the report has been issue before being disposed of.

The published results appertain only to the specimens tested.

Exploration and Testing Associates Limited, registered in England and Wales #11803869 at
 8B, Bowburn South Industrial Estate, Bowburn, Durham, DH6 5AD

Summary of in-situ density test results

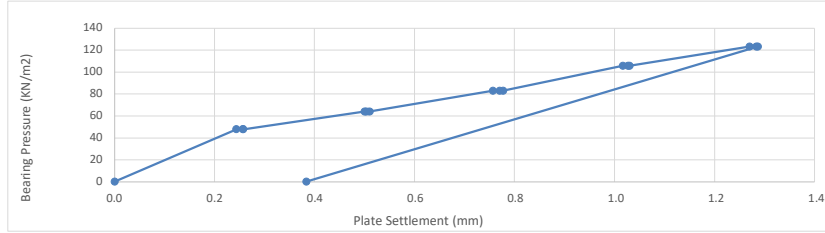
Project No.			Project Name							
D10557AF			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z7-L2-433406-558836	CC351		21/07/22	Clay	Cloudy	CCD	2.05	21	1.70	
Z7-L2-433356-558837	CC352		21/07/22	Clay	Clear	CCD	2.03	23	1.65	
Z7-L2-433364-558818	CC353		21/07/22	Clay	Cloudy	CCD	2.07	19	1.74	
Z7-L3-433393-558806	CC354		21.07.22	Clay	Sunny	CCD	2.08	19	1.75	
Z7-L3-433379-558799	CC355		21/07/22	Clay	Cloudy	CCD	2.09	22	1.72	
Z7-L2-433371-558843	CC356		21/07/22	Clay	Cloudy	CCD	2.04	24	1.65	
Z7-L2-433382-558850	CC357		21/07/22	Clay	Cloudy	CCD	2.06	23	1.67	
Z7-L2-433390-558858	CC358		21/07/22	Clay	Clear	CCD	2.03	22	1.66	
Z7-L2-433378-558804	CC359		21/07/22	Clay	Clear	CCD	2.12	16	1.83	
Z7-L2-433393-558831	CC360		21/07/22	Clay	Clear	CCD	2.06	21	1.70	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 22/07/2022	N O'Brien Laboratory Manager 	UKAS Accredited Laboratory No. 20632
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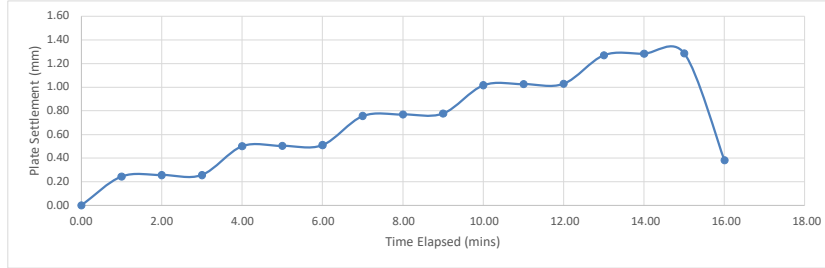
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AF
Client	Groundwork Services (Durham) Limited	Date Tested	21/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	23t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	123	Maximum Deformation (mm)	1.29
Pressure at 1.25mm penetration (kPa)	122	Modulus of Subgrade Reaction (Mn/M²/M)	85.7
Calculated CBR (%) at 1.25mm	11.9		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

Unless otherwise stated, this test has been carried out in accordance with the published standard, with no deviations from the test method outlined.

The published results are appertaining only to the locations tested

Test Carried Out By:

J. Curry
 Quality Technician

Approved By:

M. Chou
 Materials Director

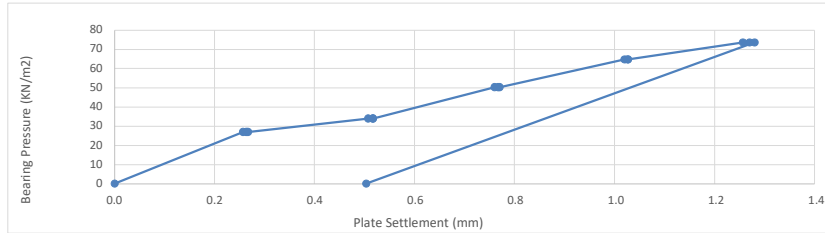
Approved Date:

22 July 2022

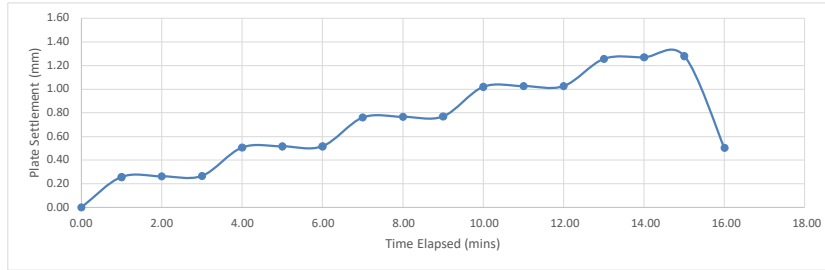
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AF
Client	Groundwork Services (Durham) Limited	Date Tested	21/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	22°C
	Langley Moor	Sample Description	Clay
	DH7 8HJ	Reaction Load	23t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	Zone 5
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	74	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	73	Modulus of Subgrade Reaction (Mn/M²/M)	48.9
Calculated CBR (%) at 1.25mm	4.9		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

Unless otherwise stated, this test has been carried out in accordance with the published standard, with no deviations from the test method outlined.

The published results are appertaining only to the locations tested

Test Carried Out By:

J. Curry
Quality Technician

Approved By:


Materials Director

Approved Date:

22 July 2022

TEST CERTIFICATE
Determination of the Shear Strength Using the Laboratory Handvane

Client: Groundwork Services (Durham) Ltd

Project No: D10557AF

Project: Envision, Washington

Date Tested: 21st July 2022

Sampled By: J. Curry for ETA


Ambient Temperature: 20°C

Weather Conditions: Dry, Cloudy

Vane Used: Small

Comments:

	433364-558818	433356-558837	433378-558804	433371-558843	433393-558831	433382-558850
Client Reference	Z7, L2	Z7, L2	Z7, L2	Z7, L2	Z7, L2	Z7, L2
Reading 1	11.4	8.0	12.0	10.6	11.4	10.4
Reading 2	11.0	8.8	12.0	11.2	11.2	9.6
Reading 3	11.8	8.6	12.0	10.8	11.8	10.2
Average Readings:	11.4	8.5	12.0	10.8	11.4	10.0
Equivalent Shear Stress (kN/m ²)	228	163	240	217	229	201
	433406-558836	433390-558858	433379-558799	433393-558806		
Client Reference	Z7, L2	Z7, L2	Z7, L3	Z7, L3		
Reading 1	12.0	8.8	9.2	11.2		
Reading 2	12.0	10.0	8.8	11.2		
Reading 3	12.0	9.4	10.0	10.8		
Average Readings:	12.0	9.4	9.3	11.0		
Equivalent Shear Stress (kN/m ²)	240	188	187	221		

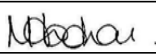

Approved By: 
 N.Hodson
 Materials Director

Date: 22nd July 2022

Test Report

Client	Groundwork Services (Durham) Limited
Address	Littleburn Industrial Estate Langley Moor Durham DH7 8HJ
F.A.O	Paul Barton
Project:	Giga One Factory, Washington
Project Number:	D10557AG
Report Number:	L22-586
Date Received:	22nd July 2022

Testing Required:	<p>Insitu Density by Core Cutter - BS:1377-9:1990 Clause 2.3</p> <p>Hand Shear Vane*</p> <p>Vertical Deformation and Strength Characteristics by the Incremental Plate Load Test - BS:1377-9:1990 Clause 4.1</p> <p>Determination of Equivalent CBR Value using the Plate Bearing Test - Design Manual for Roads and Bridges, Volume 7: Pavement Design and Maintenance - Foundations HD25/9</p>
Date Started:	22nd July 2022
Date Finished:	25th July 2022

Report Issue Date:	21st July 2022
Reviewed By:	 Natalie Hodson - Materials Director
Authorised By:	 Nik O'Brien - Laboratory Manager
Remarks:	(*) denotes testing is outside of UKAS Scope of Accreditation. (+) denotes subcontracted testing.


Samples will be stored for one month after the report has been issue before being disposed of.

The published results appertain only to the specimens tested.

Exploration and Testing Associates Limited, registered in England and Wales #11803869 at
8B, Bowburn South Industrial Estate, Bowburn, Durham, DH6 5AD

Summary of in-situ density test results

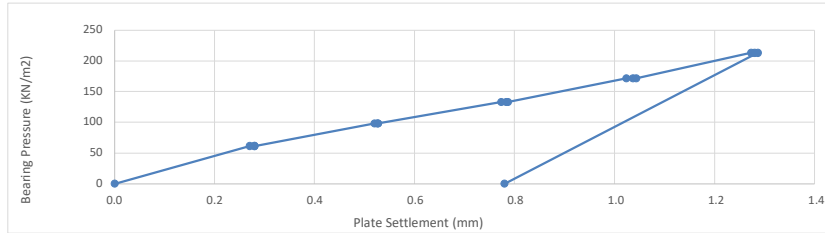
Project No.			Project Name							
D10557AG			Giga One, Washington							
Test Position Reference	Test reference	Depth to top m	Date of test	Soil Description	Site conditions during test	Test Type <small>see below</small>	In-situ Bulk Density Mg/m ³	Moisture Content %	In-situ Dry Density Mg/m ³	Remarks
Z9-L1-433433-558838	CC361		22/07/22	Clay	Cloudy	CCD	2.08	20	1.74	
Z9-L1-433424-558851	CC362		22/07/22	Clay	Cloudy	CCD	2.10	21	1.74	
Z9-L1-433418-558861	CC363		22/07/22	Clay	Cloudy	CCD	2.06	17	1.76	
Z9-L2-433427-558851	CC364		22/07/22	Clay	Cloudy	CCD	2.07	21	1.71	
Z9-L2-433419-558862	CC365		22/07/22	Clay	Cloudy	CCD	1.96	17	1.67	
Z9-L3-433445-558808	CC366		22/07/22	Clay	Cloudy	CCD	1.96	14	1.71	
Z9-L3-433434-558825	CC367		22/07/22	Clay	Cloudy	CCD	1.99	18	1.68	
Z9-L3-433427-558842	CC368		22/07/22	Clay	Cloudy	CCD	1.99	21	1.65	
Z9-L3-433420-558859	CC369		22/07/22	Clay	Cloudy	CCD	2.05	19	1.73	
Z9-L2-433465-558767	CC370		22/07/22	Clay	Cloudy	CCD	2.08	20	1.73	
Z9-L2-433454-558787	CC371		22/07/22	Clay	Cloudy	CCD	2.06	21	1.70	
Z9-L2-433448-558803	CC372		22/07/22	Clay	Cloudy	CCD	2.05	23	1.67	

Specifications BS 1377 : Part 2 : 1990 Clause 3 Moisture content by oven drying method BS 1377 : Part 9 : 1990 : In situ density tests, clauses : SRDS 2.1 Sand replacement method (Small pouring cylinder) SRDL 2.2 Sand replacement method (Large pouring cylinder) CCD 2.4 Core cutter method	Approved By Date 25/07/2022	N O'Brien Materials Director 	UKAS Accredited Laboratory No. 20632
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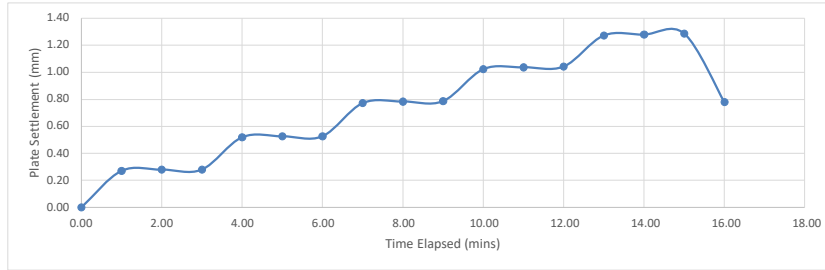
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AG
Client	Groundwork Services (Durham) Limited	Date Tested	22/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	16°C
	Langley Moor	Sample Description	Type 1
	DH7 8HJ	Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	PLT1 Zone 3
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	213	Maximum Deformation (mm)	1.29
Pressure at 1.25mm penetration (kPa)	209	Modulus of Subgrade Reaction (Mn/M²/M)	156.0
Calculated CBR (%) at 1.25mm	30.3		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

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Test Carried Out By:

J. Curry
 Quality Technician

Approved By:

M. Chou
 Materials Director

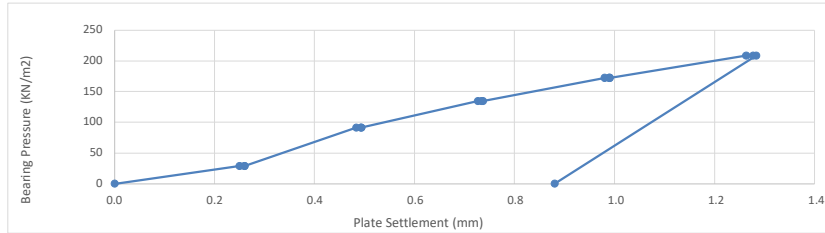
Approved Date:

24 July 2022

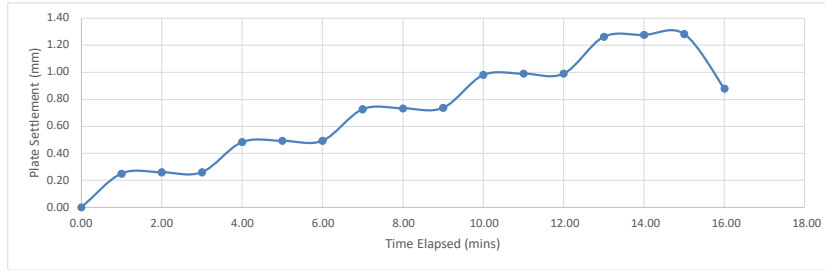
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AG
Client	Groundwork Services (Durham) Limited	Date Tested	22/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	16°C
	Langley Moor	Sample Description	Type 1
	DH7 8HJ	Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	PLT2 Zone 2
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	209	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	207	Modulus of Subgrade Reaction (Mn/M²/M)	154.4
Calculated CBR (%) at 1.25mm	29.8		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

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Test Carried Out By:

J. Curry
 Quality Technician

Approved By:

M. Chou
 Materials Director

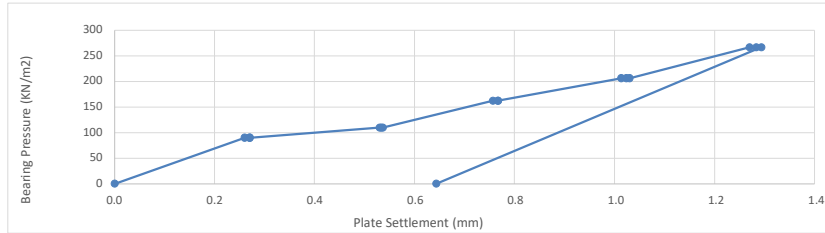
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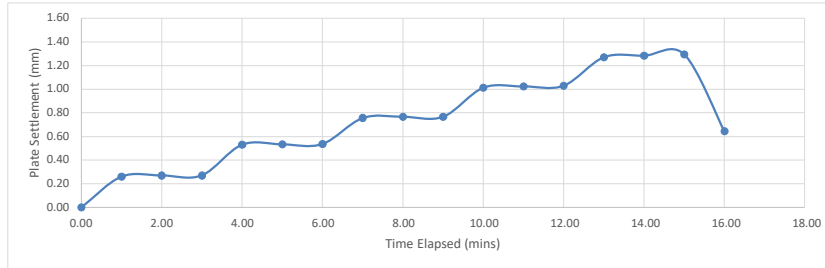
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AG
Client	Groundwork Services (Durham) Limited	Date Tested	22/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	16°C
	Langley Moor	Sample Description	Type 1
	DH7 8HJ	Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	PLT3 No2 Zone 3
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	267	Maximum Deformation (mm)	1.29
Pressure at 1.25mm penetration (kPa)	262	Modulus of Subgrade Reaction (Mn/M²/M)	200.2
Calculated CBR (%) at 1.25mm	44.7		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

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Test Carried Out By:

J. Curry
 Quality Technician

Approved By:

M. Chou
 Materials Director

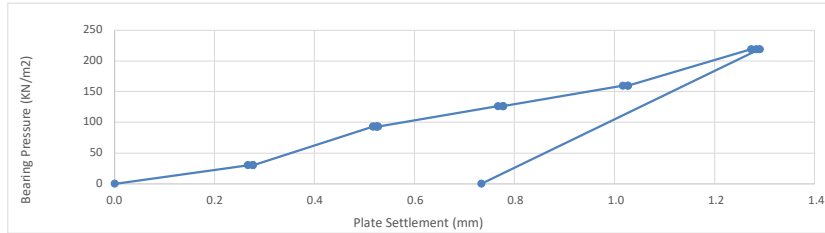
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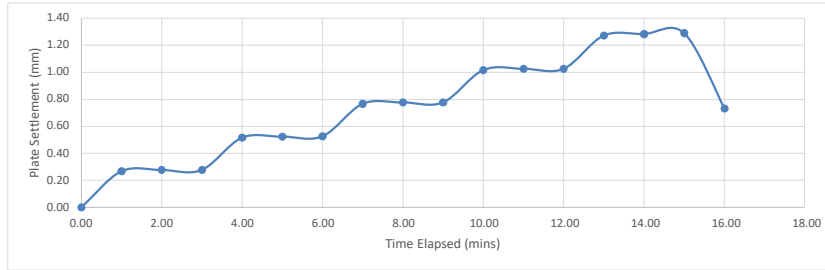
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AG
Client	Groundwork Services (Durham) Limited	Date Tested	22/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	16°C
	Langley Moor	Sample Description	Type 1
	DH7 8HJ	Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	PLT4 No1 Zone 2
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	219	Maximum Deformation (mm)	1.29
Pressure at 1.25mm penetration (kPa)	213	Modulus of Subgrade Reaction (Mn/M²/M)	159.6
Calculated CBR (%) at 1.25mm	31.3		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

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Test Carried Out By:

J. Curry
Quality Technician

Approved By:

Materials Director

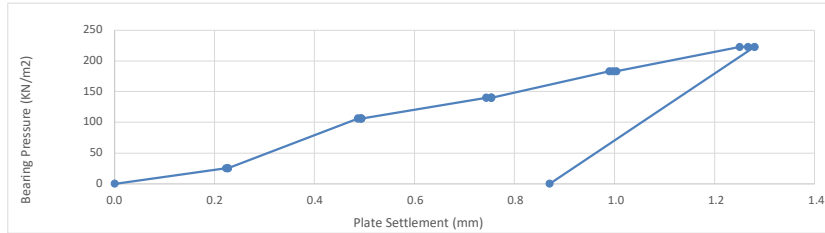
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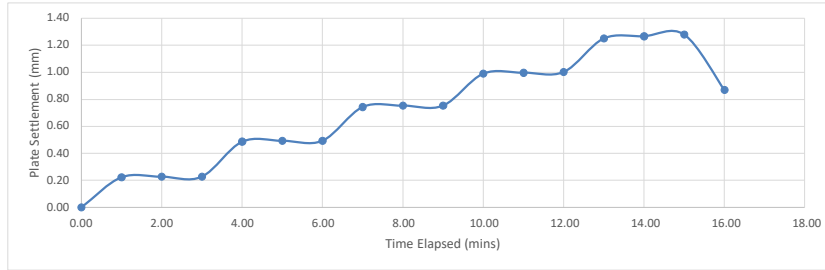
Test Report
Determination of the Vertical Deformation and Strength Characteristics of Soil by the Plate Load Testing
BS 1377-9:1990 Clause 4.1

Project	Envision, Washington	Job Number	D10557AG
Client	Groundwork Services (Durham) Limited	Date Tested	22/07/2022
	Thistle Road	Weather Conditions	Cloudy
	Littleburn Industrial Estate	Air Temperature °C	16°C
	Langley Moor	Sample Description	Type 1
	DH7 8HJ	Reaction Load	13t Tracked Excavator
Depth of Test from Groundlevel	0	Denisty & Moisture	Not Requested
Plate Diameter (mm)	450	Test Location	PLT5 No3 Zone 2
Distance between the edge of the plate and the wall of the excavation (mm)			N/A

Pressure Applied / Plate Settlement



Settlement / Time



Maximum Pressure Applied (kPa)	223	Maximum Deformation (mm)	1.28
Pressure at 1.25mm penetration (kPa)	223	Modulus of Subgrade Reaction (Mn/M²/M)	167.4
Calculated CBR (%) at 1.25mm	33.8		

In Accordance with CD225 Design for New Pavement Foundations, CBR Value has been calculated in conjunction with superseded document IAN 73/06 Revision 1 (2009)

In Accordance with CD225 Design for New Pavement Foundations, Modulus of Subgrade Reaction has been calculated in conjunction with superseded document HD 25/94

Comments:

Unless otherwise stated, this test has been carried out in accordance with the published standard, with no deviations from the test method outlined.

The published results are appertaining only to the locations tested

Test Carried Out By:

J. Curry
 Quality Technician

Approved By:

M. Chou
 Materials Director

Approved Date:

24 July 2022

TEST CERTIFICATE
Determination of the Shear Strength Using the Laboratory Handvane
Client: Groundwork Services (Durham) Ltd

Project No: D10557AG

Project: Envision, Washington

Date Tested: 22nd July 2022

Sampled By: J. Curry for ETA

Ambient Temperature: 15°C

Weather Conditions: Dry, Cloudy

Vane Used: Small

Comments:

	433465-558767	433454-558787	433448-558803	433440-558822	433433-558838	433424-558857
Client Reference	Z9, L2	Z9, L2	Z9, L2	Z9, L2	Z9, L1	Z9, L1
Reading 1	12.0	10.8	8.8	8.2	10.2	8.6
Reading 2	12.0	11.0	9.2	9.4	8.8	8.0
Reading 3	12.0	11.2	10.0	8.8	9.6	9.0
Average Readings:	12.0	11.0	9.3	8.8	9.2	8.5
Equivalent Shear Stress (kN/m ²)	240	220	187	176	191	171
	433418-558861	433432-558838	433427-558851	433419-558862	433445-558808	433434-558825
Client Reference	Z9, L1	Z9, L2	Z9, L2	Z9, L2	Z9, L3	Z9, L3
Reading 1	11.2	9.6	11.2	12.0	10.0	8.8
Reading 2	10.2	10.0	11.4	12.0	9.6	10.2
Reading 3	10.8	10.4	10.6	12.0	10.2	9.6
Average Readings:	10.7	10.0	11.0	12.0	9.9	9.5
Equivalent Shear Stress (kN/m ²)	215	200	221	240	199	191
	433427-558842	433420-558859				
Client Reference	Z9, L3	Z9, L3				
Reading 1	9.2	11.2				
Reading 2	9.4	11.8				
Reading 3	10.0	11.4				
Average Readings:	9.5	11.4				
Equivalent Shear Stress (kN/m ²)	191	229				



Approved By:

N.Hodson
Materials Director
Date: 25th July 2022

Test Report

Client	Groundwork Services (Durham) Limited
Address	Littleburn Industrial Estate Langley Moor Durham DH7 8HJ
F.A.O	Paul Barton
Project:	Giga One Factory, Washington
Project Number:	D10557AI
Report Number:	L22-621
Date Received:	27th July 2022

Testing Required:	<p>In situ Density by Core Cutter - BS:1377-9:1990 Clause 2.3</p> <p>Hand Shear Vane*</p> <p>Vertical Deformation and Strength Characteristics by the Incremental Plate Load Test - BS:1377-9:1990 Clause 4.1</p> <p>Determination of Equivalent CBR Value using the Plate Bearing Test - Design Manual for Roads and Bridges, Volume 7: Pavement Design and Maintenance - Foundations HD25/9</p>
Date Started:	27th July 2022
Date Finished:	28th July 2022

Report Issue Date:	28th July 2022
Reviewed By:	 Natalie Hodson - Materials Director
Authorised By:	 Nik O'Brien - Laboratory Manager
Remarks:	(*) denotes testing is outside of UKAS Scope of Accreditation. (+) denotes subcontracted testing.

Samples will be stored for one month after the report has been issue before being disposed of.

The published results appertain only to the specimens tested.

Exploration and Testing Associates Limited, registered in England and Wales #11803869 at
 8B, Bowburn South Industrial Estate, Bowburn, Durham, DH6 5AD