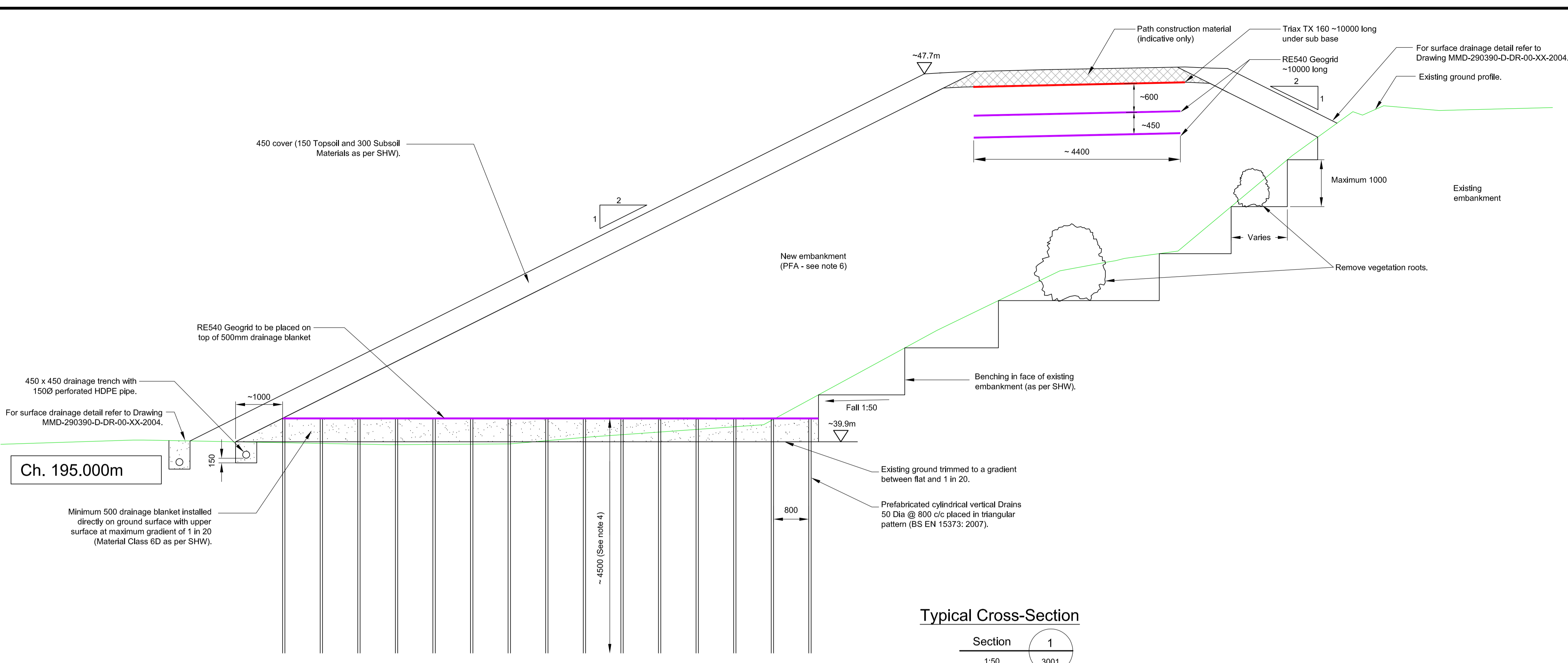
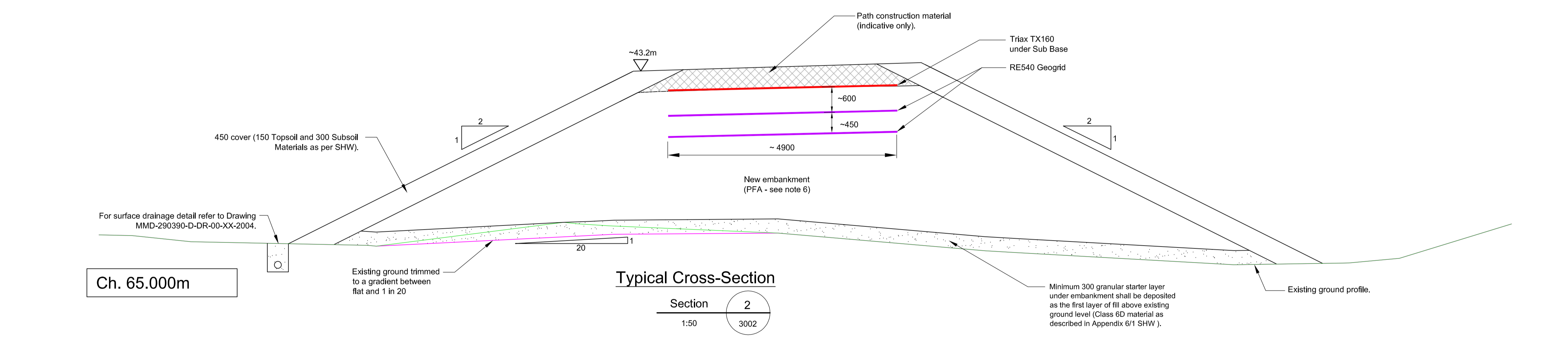


Chainage	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
Proposed level (along CL)	47.96	47.95	47.94	47.93	47.92	47.91	47.90	47.89	47.88	47.87	47.86	47.85	47.84	47.83	47.82	47.81	47.80	47.79	47.78	47.77	47.76	47.75	47.74	47.73	47.72	47.71	47.70	47.69	47.68	47.67	47.66	47.65	47.64	47.63	47.62	47.61	47.60	47.59	47.58	47.57	47.56	47.55	47.54	47.53	47.52	47.51	47.50	47.49	47.48	47.47	47.46	47.45	47.44	47.43	47.42	47.41	47.40	47.39	47.38	47.37	47.36	47.35	47.34	47.33	47.32	47.31	47.30	47.29	47.28	47.27	47.26	47.25	47.24	47.23	47.22	47.21	47.20	47.19	47.18	47.17	47.16	47.15	47.14	47.13	47.12	47.11	47.10	47.09	47.08	47.07	47.06	47.05	47.04	47.03	47.02	47.01	47.00	46.99	46.98	46.97	46.96	46.95	46.94	46.93	46.92	46.91	46.90	46.89	46.88	46.87	46.86	46.85	46.84	46.83	46.82	46.81	46.80	46.79	46.78	46.77	46.76	46.75	46.74	46.73	46.72	46.71	46.70	46.69	46.68	46.67	46.66	46.65	46.64	46.63	46.62	46.61	46.60	46.59	46.58	46.57	46.56	46.55	46.54	46.53	46.52	46.51	46.50	46.49	46.48	46.47	46.46	46.45	46.44	46.43	46.42	46.41	46.40	46.39	46.38	46.37	46.36	46.35	46.34	46.33	46.32	46.31	46.30	46.29	46.28	46.27	46.26	46.25	46.24	46.23	46.22	46.21	46.20	46.19	46.18	46.17	46.16	46.15	46.14	46.13	46.12	46.11	46.10	46.09	46.08	46.07	46.06	46.05	46.04	46.03	46.02	46.01	46.00	45.99	45.98	45.97	45.96	45.95	45.94	45.93	45.92	45.91	45.90	45.89	45.88	45.87	45.86	45.85	45.84	45.83	45.82	45.81	45.80	45.79	45.78	45.77	45.76	45.75	45.74	45.73	45.72	45.71	45.70	45.69	45.68	45.67	45.66	45.65	45.64	45.63	45.62	45.61	45.60	45.59	45.58	45.57	45.56	45.55	45.54	45.53	45.52	45.51	45.50	45.49	45.48	45.47	45.46	45.45	45.44	45.43	45.42	45.41	45.40	45.39	45.38	45.37	45.36	45.35	45.34	45.33	45.32	45.31	45.30	45.29	45.28	45.27	45.26	45.25	45.24	45.23	45.22	45.21	45.20	45.19	45.18	45.17	45.16	45.15	45.14	45.13	45.12	45.11	45.10	45.09	45.08	45.07	45.06	45.05	45.04	45.03	45.02	45.01	45.00	44.99	44.98	44.97	44.96	44.95	44.94	44.93	44.92	44.91	44.90	44.89	44.88	44.87	44.86	44.85	44.84	44.83	44.82	44.81	44.80	44.79	44.78	44.77	44.76	44.75	44.74	44.73	44.72	44.71	44.70	44.69	44.68	44.67	44.66	44.65	44.64	44.63	44.62	44.61	44.60	44.59	44.58	44.57	44.56	44.55	44.54	44.53	44.52	44.51	44.50	44.49	44.48	44.47	44.46	44.45	44.44	44.43	44.42	44.41	44.40	44.39	44.38	44.37	44.36	44.35	44.34	44.33	44.32	44.31	44.30	44.29	44.28	44.27	44.26	44.25	44.24	44.23	44.22	44.21	44.20	44.19	44.18	44.17	44.16	44.15	44.14	44.13	44.12	44.11	44.10	44.09	44.08	44.07	44.06	44.05	44.04	44.03	44.02	44.01	44.00	43.99	43.98	43.97	43.96	43.95	43.94	43.93	43.92	43.91	43.90	43.89	43.88	43.87	43.86	43.85	43.84	43.83	43.82	43.81	43.80	43.79	43.78	43.77	43.76	43.75	43.74	43.73	43.72	43.71	43.70	43.69	43.68	43.67	43.66	43.65	43.64	43.63	43.62	43.61	43.60	43.59	43.58	43.57	43.56	43.55	43.54	43.53	43.52	43.51	43.50	43.49	43.48	43.47	43.46	43.45	43.44	43.43	43.42	43.41	43.40	43.39	43.38	43.37	43.36	43.35	43.34	43.33	43.32	43.31	43.30	43.29	43.28	43.27	43.26	43.25	43.24	43.23	43.22	43.21	43.20	43.19	43.18	43.17	43.16	43.15	43.14	43.13	43.12	43.11	43.10	43.09	43.08	43.07	43.06	43.05	43.04	43.03	43.02	43.01	43.00	42.99	42.98	42.97	42.96	42.95	42.94	42.93	42.92	42.91	42.90	42.89	42.88	42.87	42.86	42.85	42.84	42.83	42.82	42.81	42.80	42.79	42.78	42.77	42.76	42.75	42.74	42.73	42.72	42.71	42.70	42.69	42.68	42.67	42.66	42.65	42.64	42.63	42.62	42.61	42.60	42.59	42.58	42.57	42.56	42.55	42.54	42.53	42.52	42.51	42.50	42.49	42.48	42.47	42.46	42.45	42.44	42.43	42.42	42.41	42.40	42.39	42.38	42.37	42.36	42.35	42.34	42.33	42.32	42.31	42.30	42.29	42.28	42.27	42.26	42.25	42.24	42.23	42.22	42.21	42.20	42.19	42.18	42.17	42.16	42.15	42.14	42.13	42.12	42.11	42.10	42.09	42.08	42.07	42.06	42.05	42.04	42.03	42.02	42.01	42.00	41.99	41.98	41.97	41.96	41.95	41.94	41.93	41.92	41.91	41.90	41.89	41.88	41.87	41.86	41.85	41.84	41.83	41.82	41.81	41.80	41.79	41.78	41.77	41.76	41.75	41.74	41.73	41.72	41.71	41.70	41.69	41.68	41.6																																																																																									



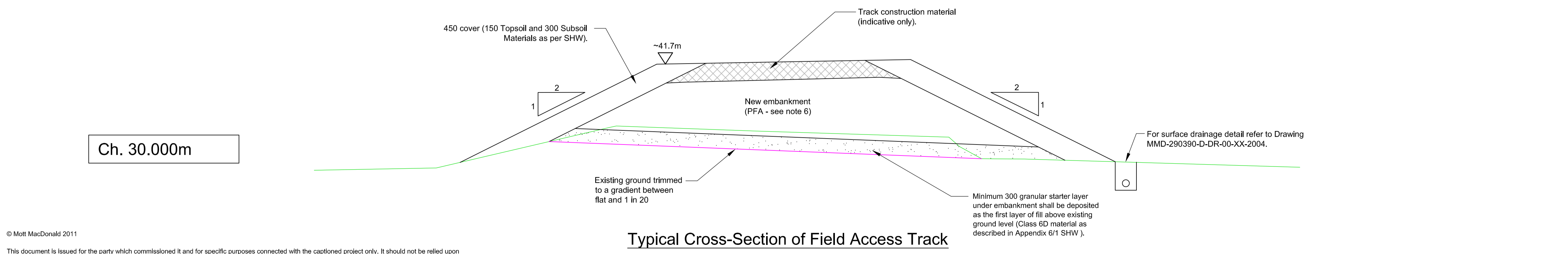
Typical Cross-Section

Section 1
1:50 3001

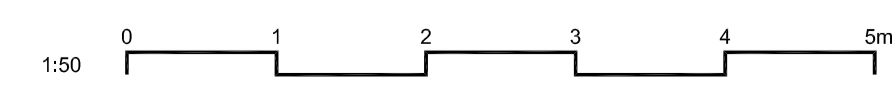


Typical Cross-Section

Section 2
1:50 3002



Typical Cross-Section of Field Access Track



- Notes
- All dimensions are in mm and chainages and co ordinates in m unless otherwise noted.
 - All levels are in metres AOD unless otherwise noted.
 - This drawing to be read in conjunction with all other relevant drawings and specification.
 - The length of the vertical drains to be confirmed on site and to terminate at top of gravel.
 - All materials classes are specified in Appendix 6/1 of the Specification for Highways Works Series 600 Earthworks (SHW).
 - PFA shall have maximum particle size of 3mm as per SHW Clause 6001.
 - Existing topsoil material shall be stripped to nominal depths of 200mm from all areas of cutting and from all areas to be covered by embankment. Topsoil shall wherever practicable be used immediately after its stripping and if not shall be stored in stockpiles of heights not exceeding 2 m.

- Key to symbols
- Triax TX 160 by www.tensar.co.uk (or equivalent standard and quality)
 - RE540 Geogrid by www.tensar.co.uk (or equivalent standard and quality)

- Reference drawings
- 290390 - SHF - 2000 - General Arrangement and Longitudinal Section
 - 290390 - SHF - 2004 - Drainage General Arrangement and Construction Details
 - 290390 - SHF - 3001 - Geotechnical Long Section (Rail Bridge) and Vertical Drains Plan
 - 290390 - SHF - 3002 - Geotechnical Long Section (River Bridge)

Rev	Date	Drawn	Description	Ch'k'd	App'd
P1	05-09-11	DP	For SCC Approval	RAS	JRB

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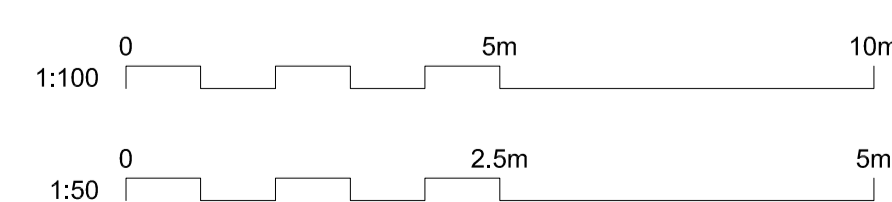
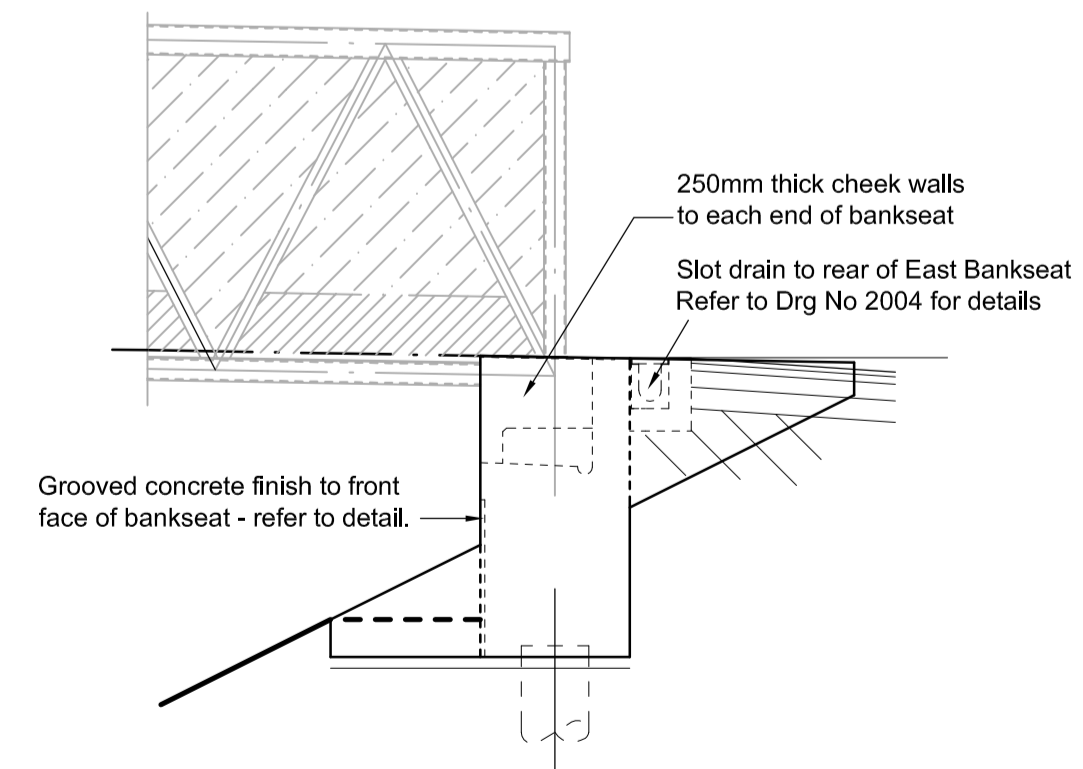
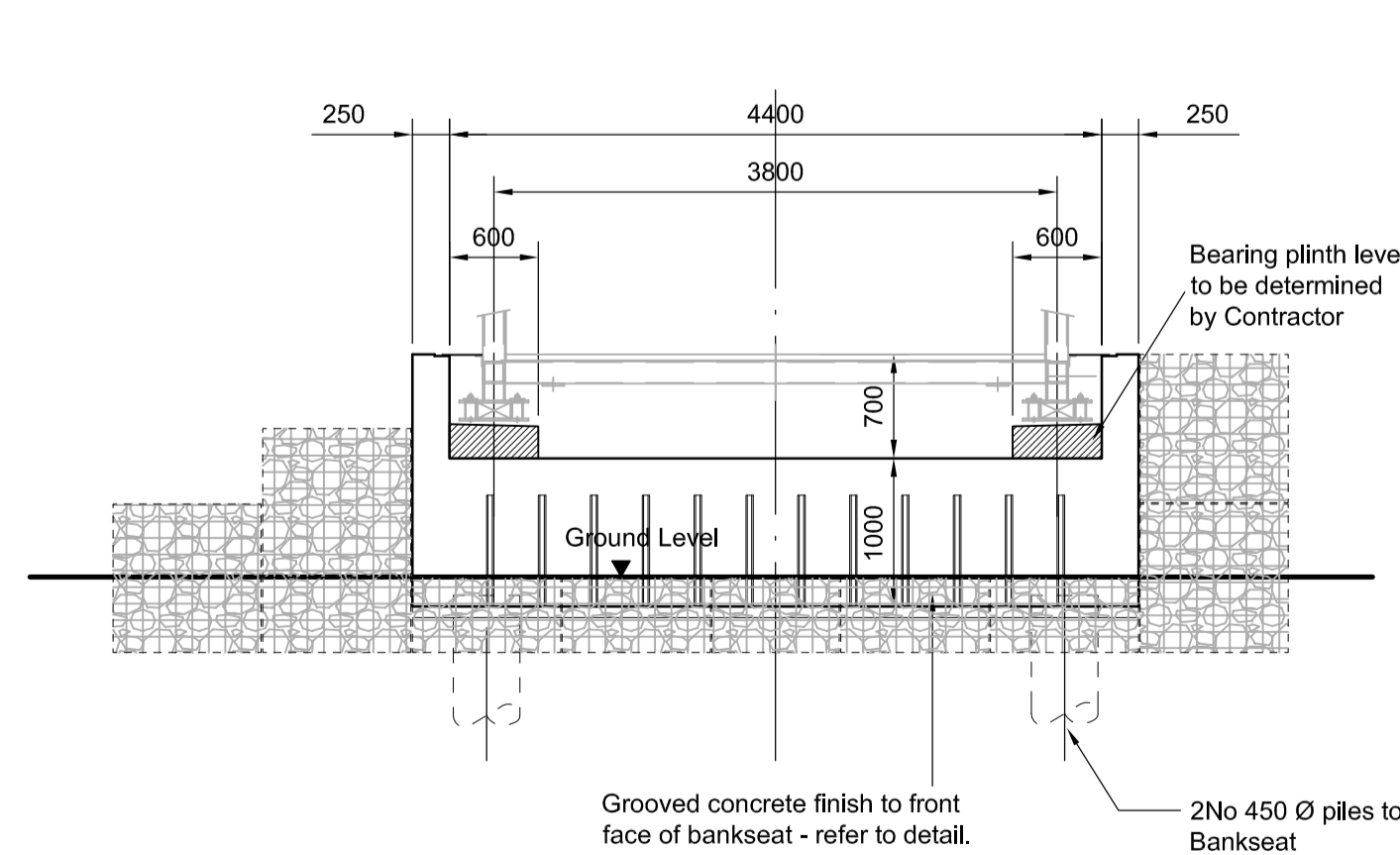
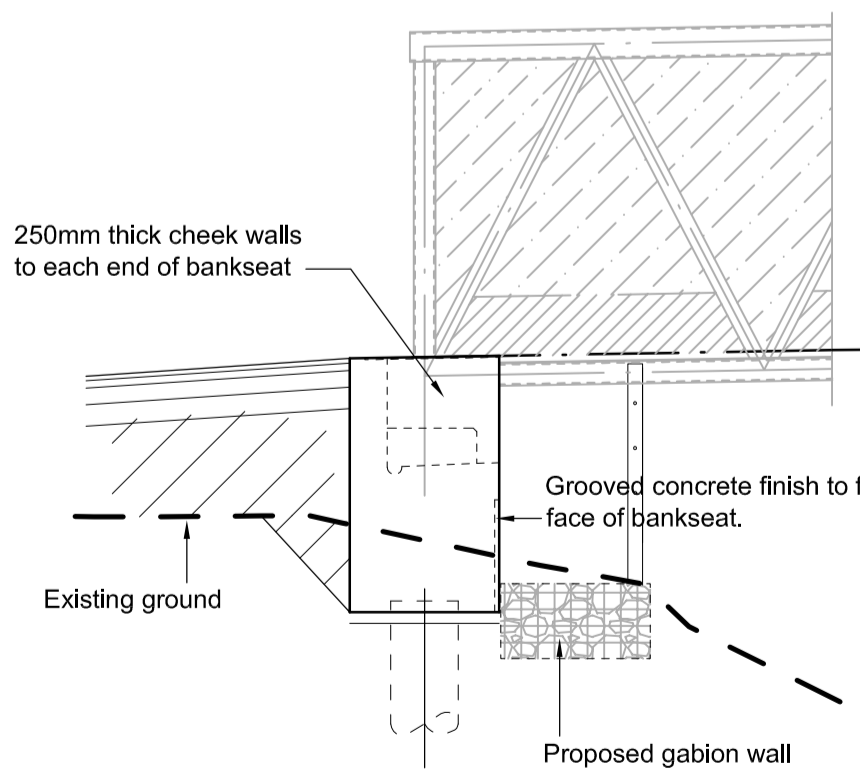
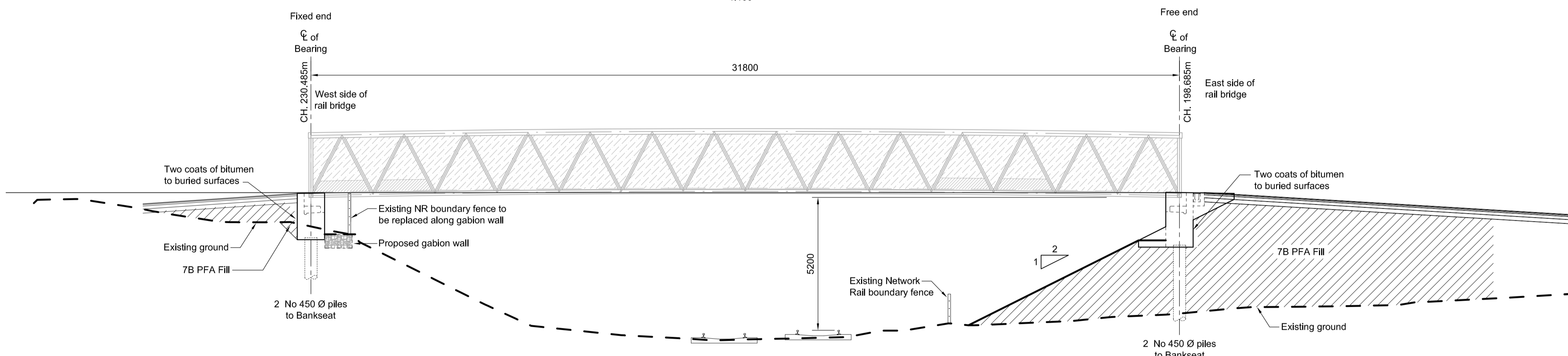
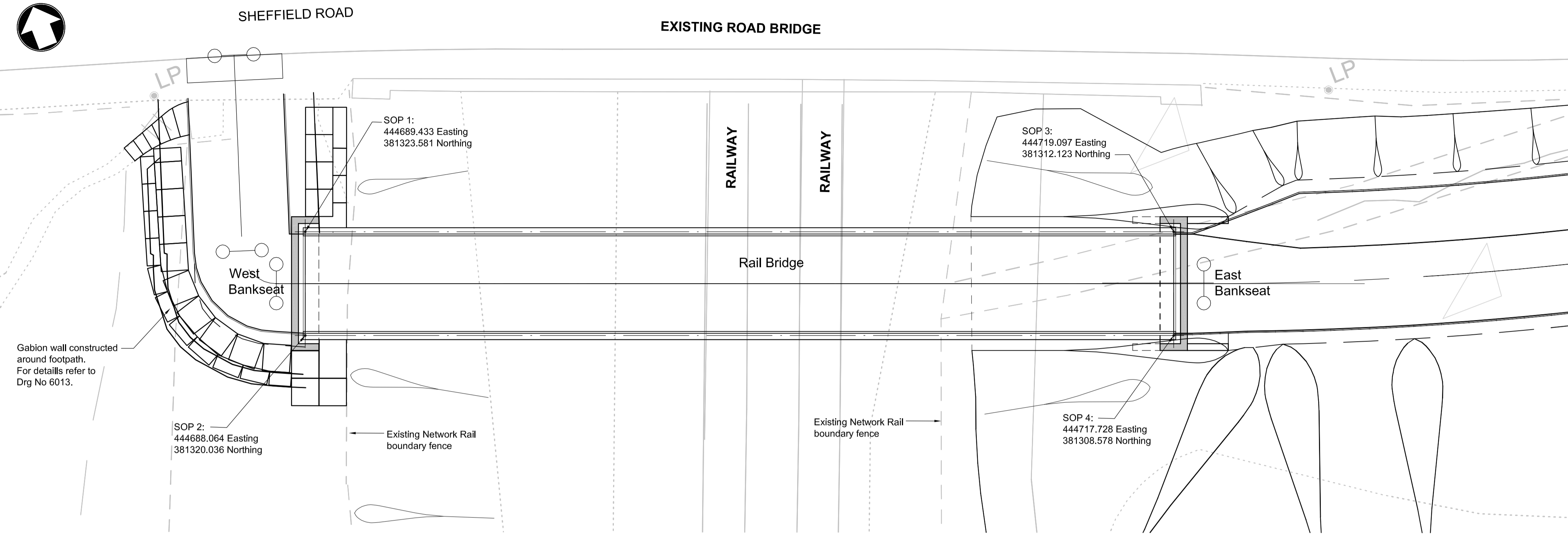
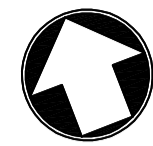
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Title
**Sustrans: Connect2
Halfway to Killamarsh (Phase 1)
Geotechnical Cross Sections**

Designed	E Belczyk	EBB	Eng check	C Hurst	CWH
Drawn	D Payne	DP	Coordination	R A Small	RAS
Dwg check	E Belczyk	EBB	Approved	J R Bowes	JRB
Scale at A1	1:50	Status	PRE	Rev	P1

Drawing Number
MMD-290390-D-DR-00-XX-3000



- Notes**
- All dimensions are in millimetres and chainages and coordinates in metres unless otherwise noted.
 - All levels are in metres AOD unless otherwise noted.
 - Co-ordinates relate to the Local Grid Co-ordinate Grid.
 - Bridge members are indicative.
 - Shale fill shall not be used within 10 metres of a piled structure.
 - Finishes to concrete surfaces:
Formed:
F1 to buried surfaces.
F3 to exposed sides of bankseat & wingwalls & surfaces forming a frame around patterned surfaces.
F4 to all other exposed formed surfaces, including bearing plinths.
F6 patterned grooved concrete finish to the extent shown. F6 finish to be F3 standard but with internal ties permitted. The location of ties shall be within the 'grooved' feature & shall be at regular intervals.
Unformed:
U1 to buried surfaces.
U2 to surfaces to form a seating for bearing strips etc.
U3 to exposed surfaces.
 - All exposed corners shall have a 25 x 25 chamfer unless otherwise noted.
 - All buried concrete surfaces to receive 2 coats of bitumen latex emulsion waterproofing.
 - All exposed concrete & masonry surfaces within 3m of ground shall be treated with a non-sacrificial anti-graffiti coating system that is compatible with any other protective coating system or surface impregnation applied to the surface. The colour of the system shall be clear with a matt finish. See detail drawings for specific areas.
 - Construction Sequence:
1. Piles formed.
2. Bankseat cast with Tensor ties.
3. Wingwall & cheek wall cast.
4. Backfilled.
5. Bridge Deck installed.
6. Movement joints installed.

P1	05-09-2011	ML	For SCC Approval	MS	GS
Rev	Date	Drawn	Description	Ch'k'd	App'd

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www.mottmac.com

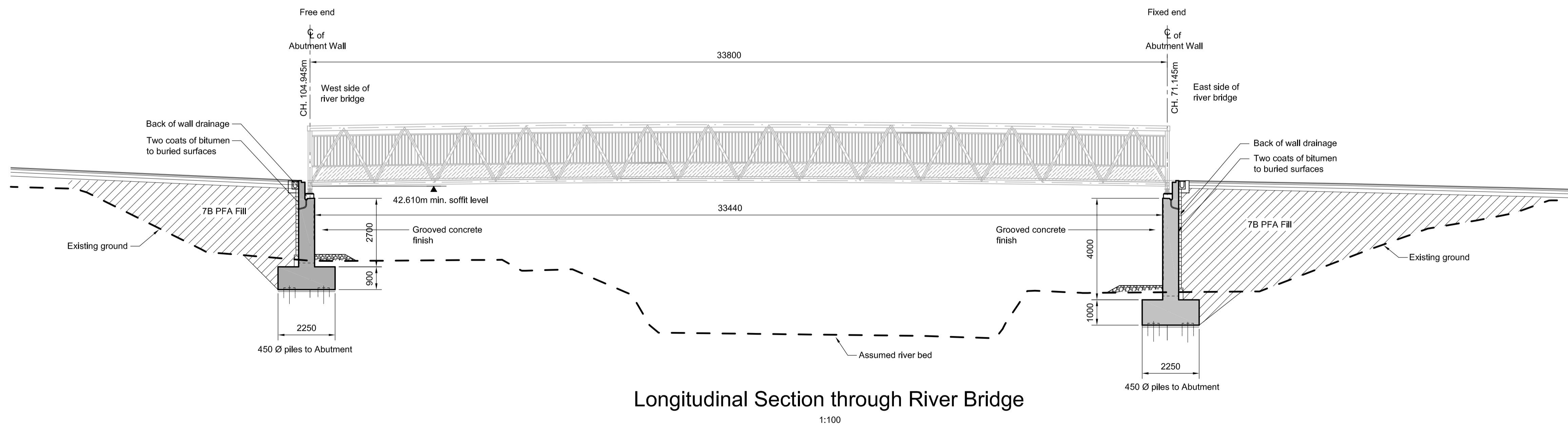
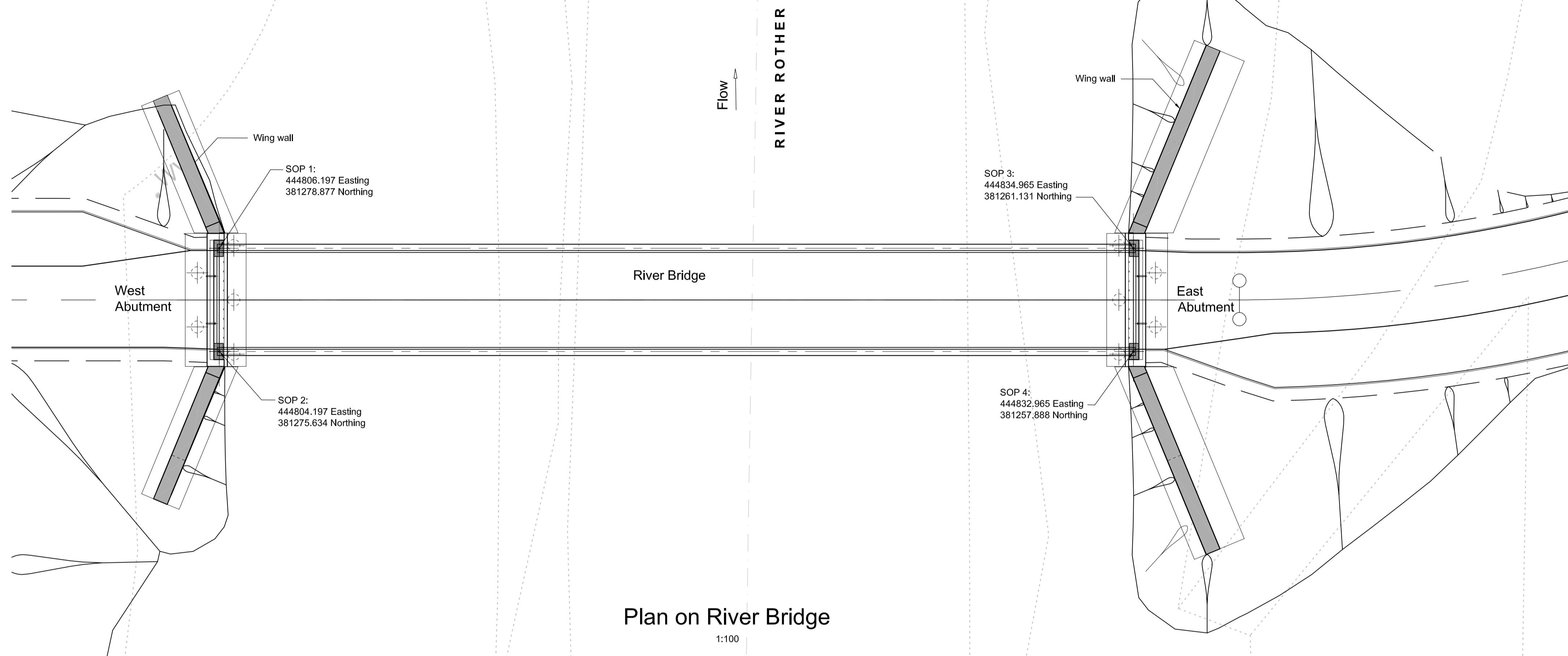
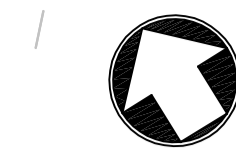
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SHEFFIELD S9 2DB
Tel. (Reception) 0114-273-6320 Fax 0114-273-6182

Title
**Sustrans: Connect2
Halfway to Killamarsh (Phase 1)
Rail Bridge
General Arrangement**

Designed	M Stocks	MAS	Eng check	D Carr	DC
Drawn	M Lincoln	ML	Coordination	R A Small	RAS
Dwg check	M Stocks	MAS	Approved	J R Bowes	JRB
Scale at A1	Status		Rev		
1:100, 1:50	PRE			P1	

Drawing Number
MMD-290390-D-DR-00-XX-6010

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P:\Sheffield\290390 Killamarsh Cycle Route\5.0 MM Drawings\5.4 Current Master\Highways\6000-6999 Structures\ML CONSTRUCTION_RAIL.dwg Sep 6, 2011 - 9:30AM lin06305



Notes

1. All dimensions are in millimetres and chainages and coordinates in metres unless otherwise noted.
2. All levels are in metres AOD unless otherwise noted.
3. Co-ordinates relate to the Local Grid Co-ordinate Grid.
4. Bridge members are indicative.
5. Shale fill shall not be used within 10 metres of a piled structure.
6. Finishes to concrete surfaces:
Formed:
F1 to buried surfaces.
F3 to exposed sides of Abutment & wingwalls & surfaces forming a frame around patterned surfaces.
F4 to all other exposed formed surfaces, including bearing plinths.
F6 patterned grooved concrete finish to the extent shown. F6 finish to be F3 standard but with internal ties permitted. The location of ties shall be within the 'grooved' feature & shall be at regular intervals.
Unformed:
U1 to buried surfaces.
U2 to surfaces to form a seating for bearing strips etc.
U3 to exposed surfaces.
7. All exposed corners shall have a 25 x 25 chamfer unless otherwise noted.
8. All buried concrete surfaces to receive 2 coats of bitumen latex emulsion waterproofing.
9. All exposed concrete & masonry surfaces within 3m of ground shall be treated with a non-sacrificial anti-graffiti coating system that is compatible with any other protective coating system or surface impregnation applied to the surface. The colour of the system shall be clear with a matt finish. See detail drawings for specific areas.
10. Construction Sequence:
1. Piles formed.
2. Abutment cast with Tensar ties.
3. Wingwall & cheek wall cast.
4. Backfilled.
5. Bridge Deck installed.
6. Movement joints installed.

Rev	Date	Drawn	Description	Ch'kd	App'd
P1	05-09-2011	ML	For SCC Approval	RAS	JRB

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Title
 Sustrans: Connect2
 Halfway to Killamarsh (Phase 1)
 River Bridge
 General Arrangement

Designed	M Stocks	MAS	Eng check	D Carr	DC
Drawn	M Lincoln	ML	Coordination	R A Small	RAS
Dwg check	M Stocks	MAS	Approved	J R Bowes	JRB
Scale at A1	1:100		Status	PRE	Rev P1

Drawing Number
MMD-290390-D-DR-00-XX-6020

