


Runoff to Ponds 01 and O2 via. Gravity


Stormwater Drainage - Chamber Schedule															
Manhole Name	Cover Level (m)	MH Depth (m)	Node Type	Manhole Diam. L*W (mm)	X Eastings	Y Northings	Cover Loading Class	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)	Remark
S01	105.259	0.666	Rigistorm Separate Catchpit	600	360036.501	440289.729	B125	S1.000	104.593	225					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S02	106.808	0.725	Rodding Eye		360020.768	440286.561	B125	S2.000	106.083	225					Rodding Eye located inside catcpit S13.
S03	106.045	0.725	Rigistorm Separate Catchpit	600	360044.533	440307.283	B125	S2.001	105.320	225	S2.000	105.320	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S04	105.557	0.725	Rigistorm Separate Catchpit	600	360068.454	440330.460	B125	S2.002	104.832	225	S2.001	104.832	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S05	105.200	0.858	Rigistorm Separate Catchpit	1200	360072.874	440326.622	B125	S1.001	104.342	300	S1.000	104.417	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
											S2.002	104.417	225		
S06	105.200	0.983	Rigistorm Separate Catchpit	1200	360110.315	440364.501	D400	S1.002	104.217	300	S1.001	104.217	300		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S07	105.322	0.666	Rigistorm Separate Catchpit	1200	360049.533	440276.959	B125	S3.000	104.656	225					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S08	105.200	0.794	Rigistorm Separate Catchpit	1200	360085.878	440313.719	B125	S3.001	104.406	300	S3.000	104.481	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S09	105.182	1.083	Rigistorm Separate Catchpit	1200	360123.337	440351.644	D400	S1.003	104.099	375	S1.002	104.174	300		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
											S3.001	104.174	300		
S10	105.222	0.666	Rigistorm Separate Catchpit	600	360062.487	440264.025	B125	S4.000	104.556	225					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S11	105.200	0.820	Rigistorm Separate Catchpit	600	360098.876	440300.905	B125	S4.001	104.380	225	S4.000	104.380	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S12	105.202	1.228	Rigistorm Separate Catchpit	1500	360136.449	440338.879	D400	S1.004	103.974	450	S1.003	104.049	375		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
											S4.001	104.199	225		
S13	106.795	0.665	Rigistorm Separate Catchpit	1200	360022.435	440284.874	B125	S5.000	106.130	225					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S14	106.400	0.666	Rigistorm Separate Catchpit	1200	360060.474	440249.887	B125	S5.001	105.734	225	S5.000	105.735	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S15	105.961	0.666	Rigistorm Separate Catchpit	1200	360094.945	440284.705	B125	S5.002	105.295	225	S5.001	105.295	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S16	105.332	0.666	Rigistorm Separate Catchpit	1200	360119.256	440314.404	B125	S5.003	104.666	225	S5.002	104.666	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S17	105.175	1.495	Inlet Headwall to Pond 01	1500	360151.001	440324.335	B125	S1.005	103.680	450	S1.004	103.680	450		Althon or Sandbag Outlet Headwall
											S5.003	103.905	225		
S18	105.068	1.517	Hydro-brake Flow Control Chamber	1500	360166.812	440327.133	D400	S1.006	103.551	225	S1.005	103.551	450		Design Head: 1.2m, Design Flow: 3.0l/s. Controls flow past this chamber to maximum 3.0l/s in the event of all storms up to and including the 100-year + 40% CC storm event.
S19	104.340	0.800	Rigistorm Separate Catchpit	1200	360269.345	440257.848	D400	S6.000	103.540	300					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S20	104.360	0.970	Rigistorm Separate Catchpit	1200	360240.204	440285.486	D400	S6.001	103.390	300	S6.000	103.390	300		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S21	104.389	1.148	Rigistorm Separate Catchpit	1200	360207.804	440315.892	D400	S6.002	103.242	300	S6.001	103.242	300		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S22	104.790	1.636	Hydro-brake Flow Control Chamber	1200	360215.384	440357.582	D400	S6.003	103.154	150	S6.002	103.154	300		Design Head: 1.2m, Design Flow: 3.0l/s. Controls flow past this chamber to maximum 3.0l/s in the event of all storms up to and including the 100-year + 40% CC storm event.
S23	104.880	1.809	CDG Type B Manhole	1200	360212.235	440365.768	C250	S1.007	103.071	300	S1.006	103.071	225		New Manhole. Provide a 650mm x 650mm Access Cover.
											S6.003	103.071	150		
S24	103.889	1.384	CDG Type C Manhole	1200	360266.740	440423.897	C250	S1.008	102.505	300	S1.007	102.505	300		New Manhole. Provide a 650mm x 650mm Access Cover.
S25	102.500	0.892	CDG Type D Manhole	1200	360377.757	440483.980	C250	S1.009	101.608	300	S1.008	101.608	300		New Manhole. Provide a 650mm x 650mm Access Cover.
S26	102.400	0.891	Inlet Headwall to proposed swale		360374.901	440497.568		S1.010	101.509	150	S1.009	101.509	300		Althon or Sandbag Outlet Headwall
S27	100.900	0.891	Dummy, part of proposed swale		360412.722	440505.058		S1.011	100.009	150	S1.010	100.009	150		Placeholder, no chamber here: part of a proposed swale.
S34	104.300	0.750	Diversion Chamber	1200	360253.372	440299.219	B125	S8.000	103.550	300		103.550			New Chamber. Diversion Chamber.
SexDitch	99.100	0.750	Outlet Headwall to		360421.730	440546.437					S1.011	98.350	150		Free-falling Outfall to existing watercourse. Surveyed Top Water Level of the existing watercourse was 98.120m.

Runoff to be pumped to Slurry Tanks

Runoff to be pumped to Slurry Tanks - Chamber Schedule															
Manhole Name	Cover Level (m)	MH Depth (m)	Node Type	Manhole Diam. L*W (mm)	X Eastings	Y Northings	Cover Loading Class	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)	Remark
S30	105.085	1.425	Rigistorm Separate Catchpit	600	360127.614	440357.159	D400	S7.000	104.425	225					New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S31	102.200	1.425	Rigistorm Separate Catchpit	600	360141.335	440343.766	D400	S7.001	103.775	225	S7.000	103.775	225		New Inspection Chamber. Provide a 350mm x 350mm Access Cover.
S32	104.400	1.425	Diversion Chamber	1200	360208.173	440311.318	B125	S7.002	102.975	225	S7.001	102.975	225		New Chamber. Diversion Chamber.
S33	104.400	104.650	Pumping Chamber	1200	360212.531	440315.741	B125	S7.003	102.935	80	S7.002	102.935	225		New Surface Water Pumping Station.

**Safety, Health & Environmental Information:**  
 In addition to the hazards and risks normally associated with the types of work detailed on this drawing, please note the significant hazards identified by symbols below.

 INDICATES A RESIDUAL RISK AS A WARNING

 INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

**Construction/Maintenance/Cleaning/Demolition**  
 Refer to Drawing:

- General Notes:**
- Do not scale from this drawing.
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- NOTE:**
- For Drainage Plan Layout refer to drawings CSH-BML-XX-XX-DR-C-0500.
  - For Catchment Areas refer to drawings CSH-BML-XX-XX-DR-C-0505 & 0509.
  - For Flood Flow Analysis refer to drawings CSH-BML-XX-XX-DR-C-0506 & 0507.
  - For Drainage Details refer to drawings CSH-BML-XX-XX-DR-C-0501 to 0503.
  - Pipe material shall be as follows:  
1000 to 2250 - Vitrious Clay Class 120 to BS EN 295.
  - All pipes to have Class S bedding as per detail on drawing CSH-BML-XX-XX-DR-C-0501 unless otherwise specified.

Rev	By / Chk'd	Date	Description
P03	IW/AM	28/02/2024	Drainage details updated
P02	DH/AM	06/02/2024	Schedules updated
P01	DH/AM	26/01/2024	Preliminary Issue

**PRELIMINARY DRAWING**  
 This drawing is not to be used for construction

Client



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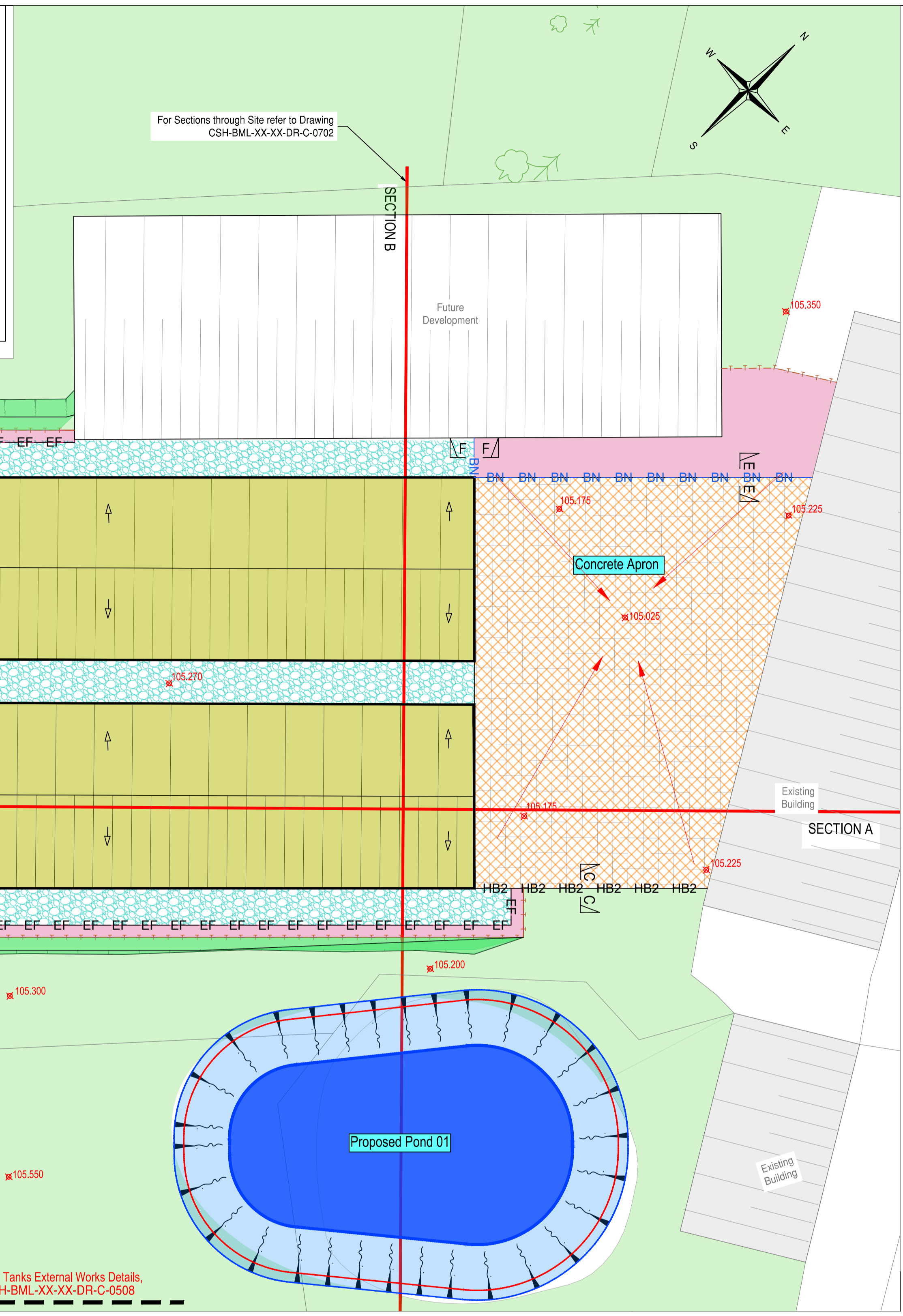
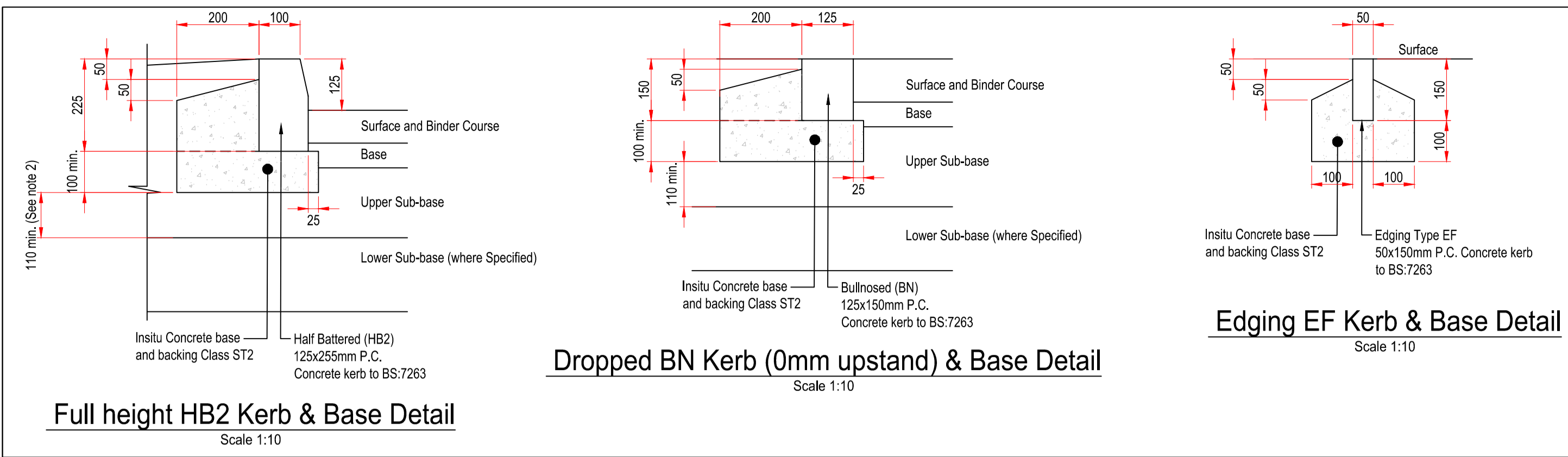
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Project  
**Cow Shed**  
 Elmridge Lane, Preston,  
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Drawing  
**Proposed Surface Water**  
**Stormwater Manhole & Pipe Schedules**

By/Chk'd	RA/GM	Date	05/04/2023
Drawing No.	CSH-BML-XX-XX-DR-C-0504	Revision	P03
BML Job No.	1000-05	Status	-
Drawing Scale at A1:	As Shown		
CAD Filename:	Y:\Project\100-05 Cow Shed\Barnsley - BarnsleyMarshall\CSH-BML-XX-XX-DR-C-0504-0501.rvt - Design\Rev\Latest		





**Safety, Health & Environmental Information:**  
 In addition to the hazards and risks normally associated with the types of work detailed on this drawing, please note the significant hazards identified by symbols below.

INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION and described below:

**Construction/Maintenance/Cleaning/Demolition**  
 Refer to Drawing:

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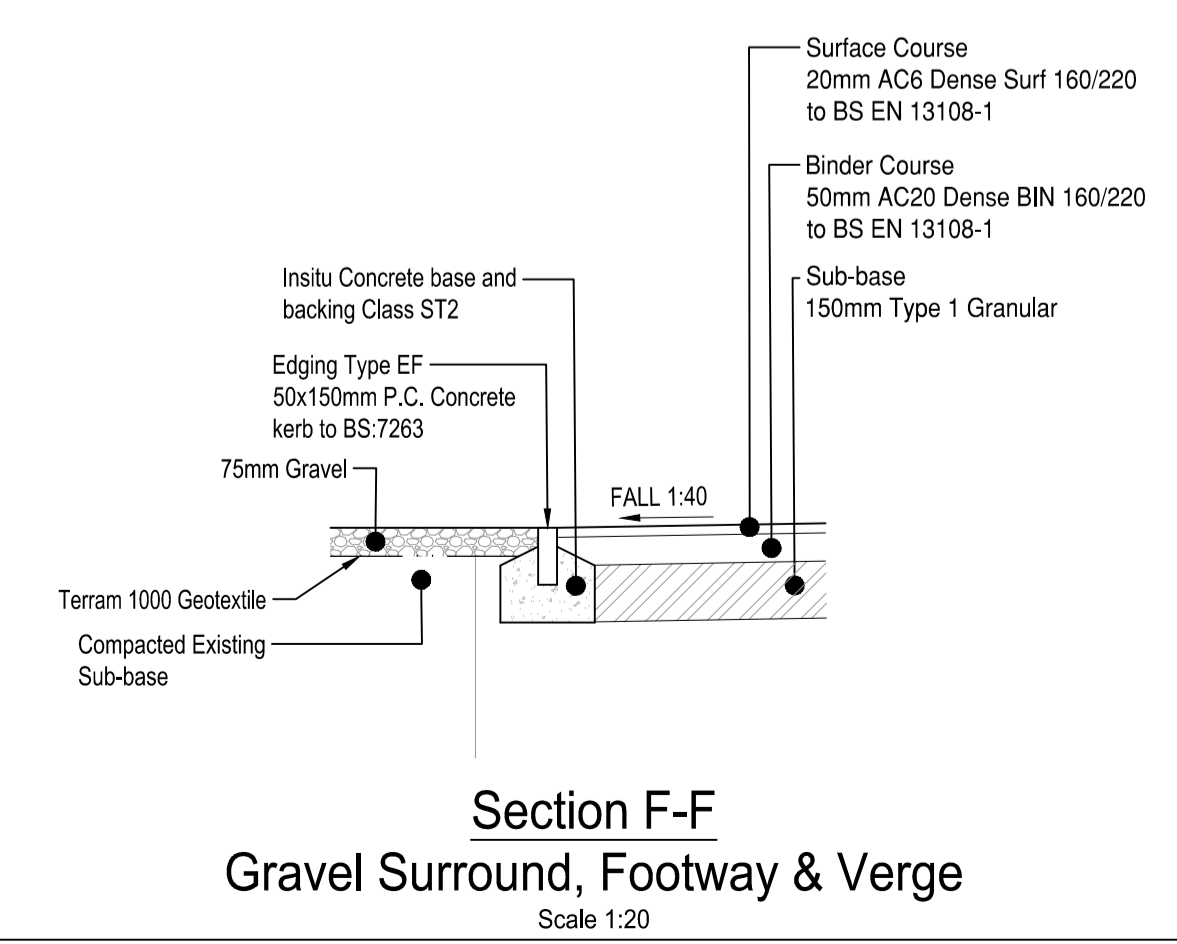
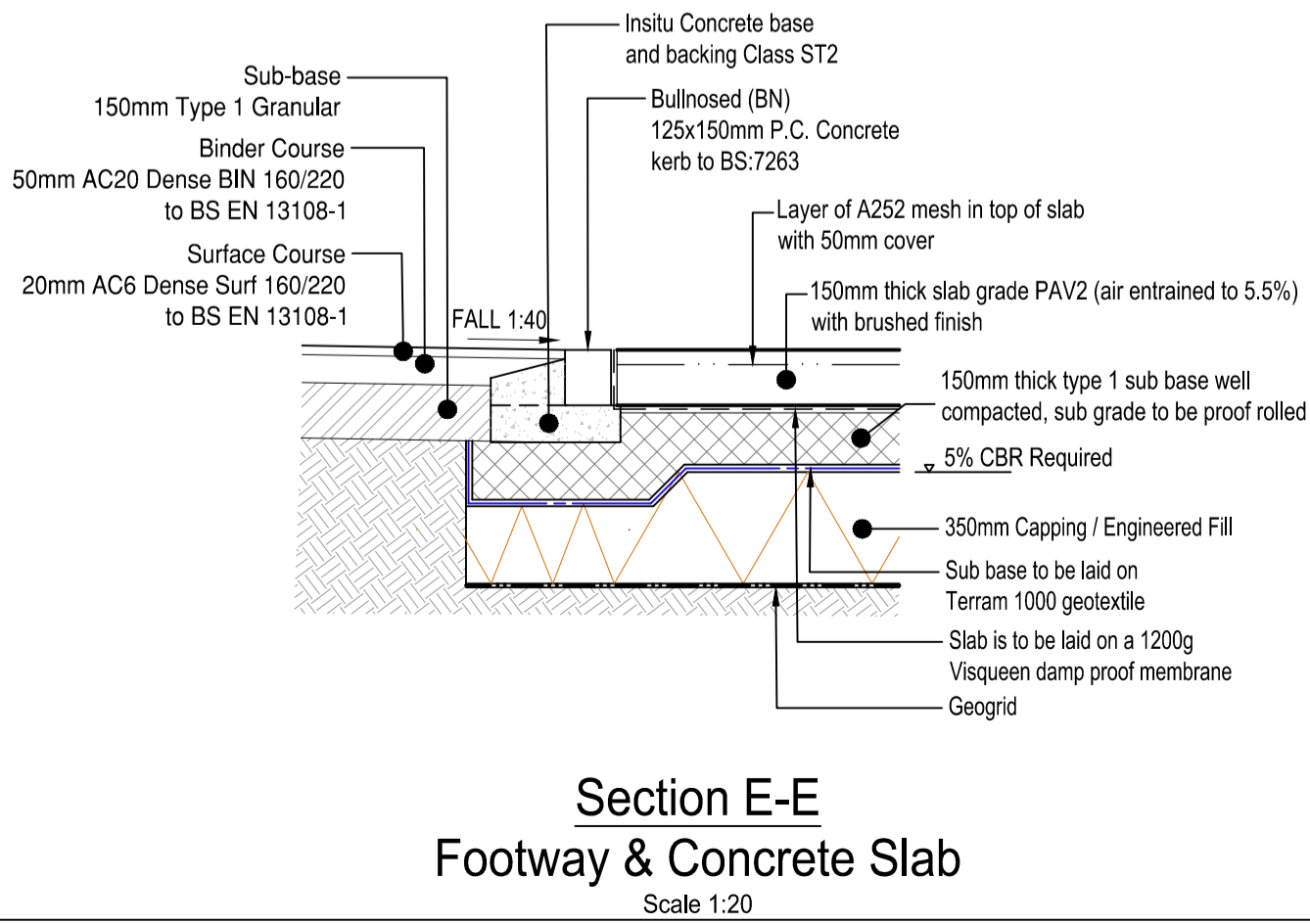
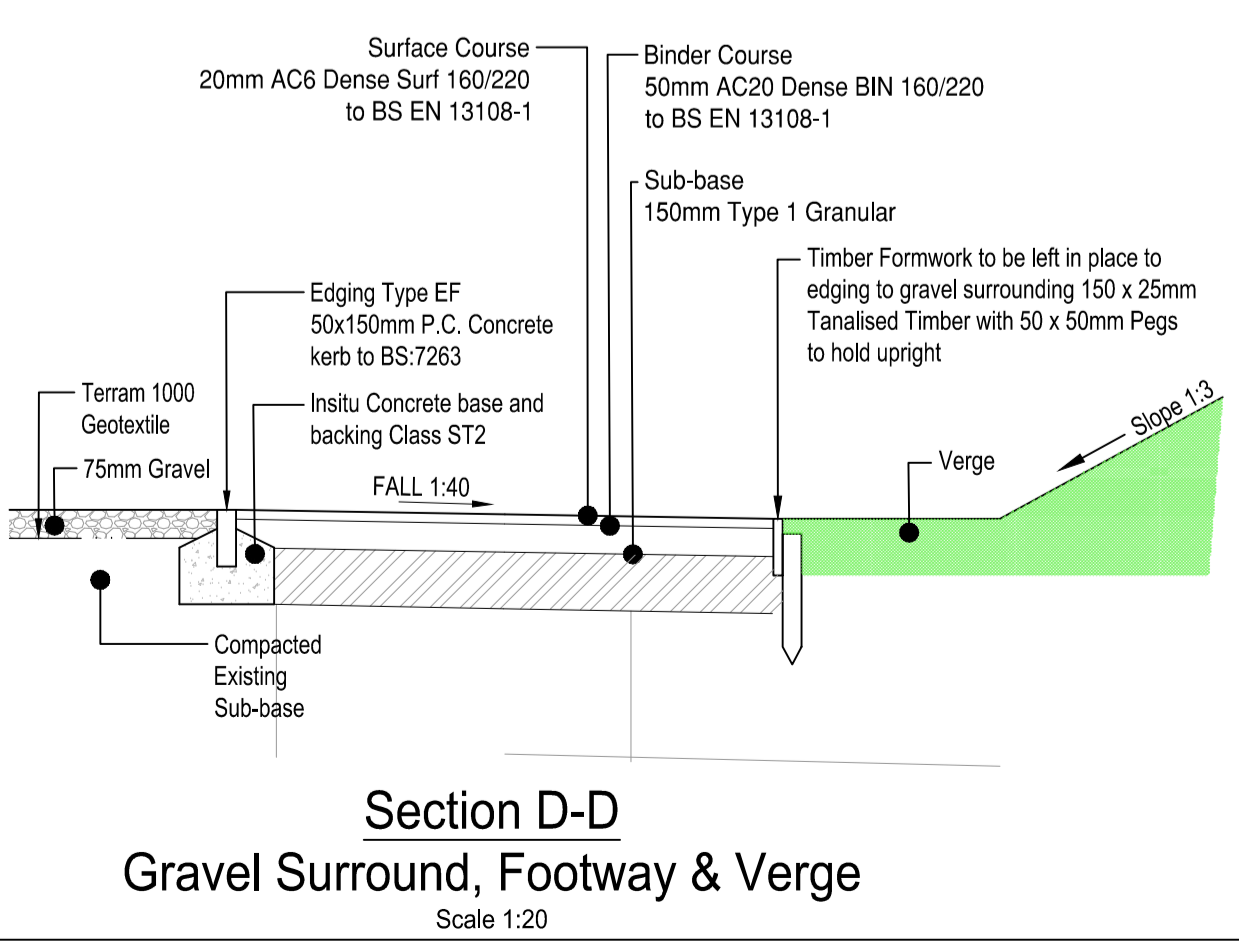
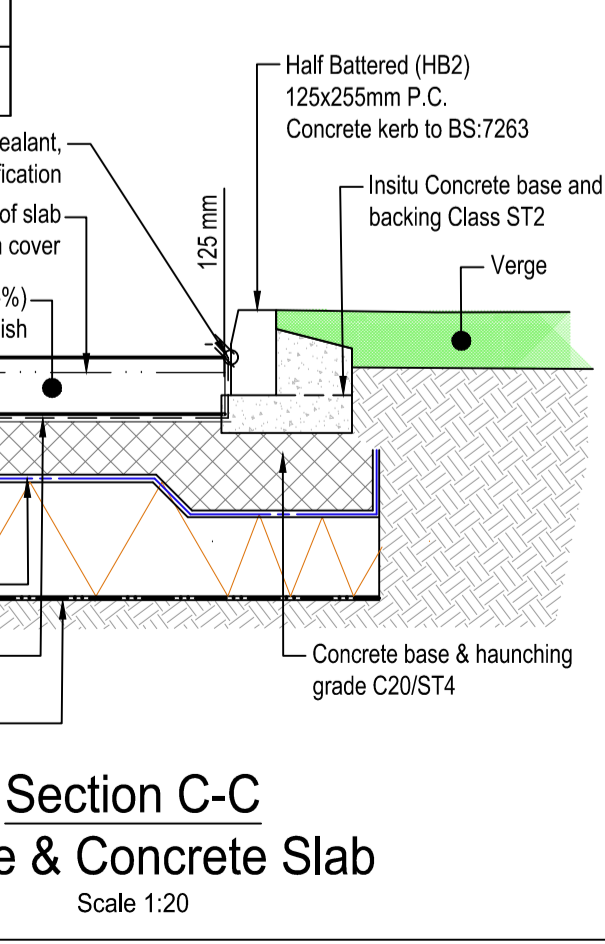
- Notes:**
- The contractor is to check all information provided prior to commencing works, and seek clarification from the engineer in respect to any ambiguities found.
  - Assumed CBR for the site is < 2% - contractor to check insitu CBR at time of construction
  - Frost susceptibility - All materials, including sub-grade within 450mm of the finished road level shall be non-frost susceptible. Where the sub-grade is within 450mm of the finished road level, it shall be tested for frost susceptibility and if found to be so, shall be removed and replaced with suitable non-frost susceptible material to Clause 602.19 of the Specification for Highway Works.
  - Bituminous sealing grit to be applied to binder course if left exposed for more than 5 days.
  - Sub formation / formation shall be proof rolled and any soft spots removed and replaced with adequately compacted 6F2 material. Testing to be undertaken to ensure a minimum CBR of 2.5% is achieved at any point.
  - To ensure continuity of foundation drainage at all times, the bottom of new sub-base must not be above the bottom of existing sub-base, therefore thickness of new sub-base to be increased to match bottom of existing sub-base where necessary.
  - All bound surfaces shall be treated with Polymer modified bond coat prior to placing of each successive layer to BS434 and in accordance SHW clause 920.
  - All Retaining Walls to have Edge protection to Architecture Details

Rev	By / Chkd	Date	Description
P04	DH/AM	06/02/2024	External Details updated
P03	DH/AM	26/01/2024	External Details updated
P02	DH/AM	15/08/23	Details updated
P01	DH/AM	2/07/2023	Preliminary Issue

**PRELIMINARY DRAWING**  
 This drawing is not to be used for construction

**Key:**

	Existing Building
	Proposed Concrete Slab
	Proposed Footpath
	Existing and Proposed Green Areas
	Proposed Building
	Proposed Gravel Surround
	Proposed Area in Cut
	Proposed HB2 kerbs with 125mm upstand
	Proposed BN kerbs
	Proposed EF Kerbs
	Proposed Timber Edging
	Design Levels



Client: **FI REAL ESTATE MANAGEMENT**

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Project: **Cow Shed**  
 Elmridge Lane, Preston,  
 PR3 2NY

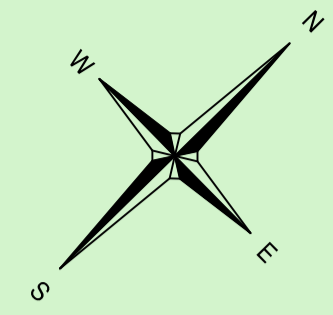
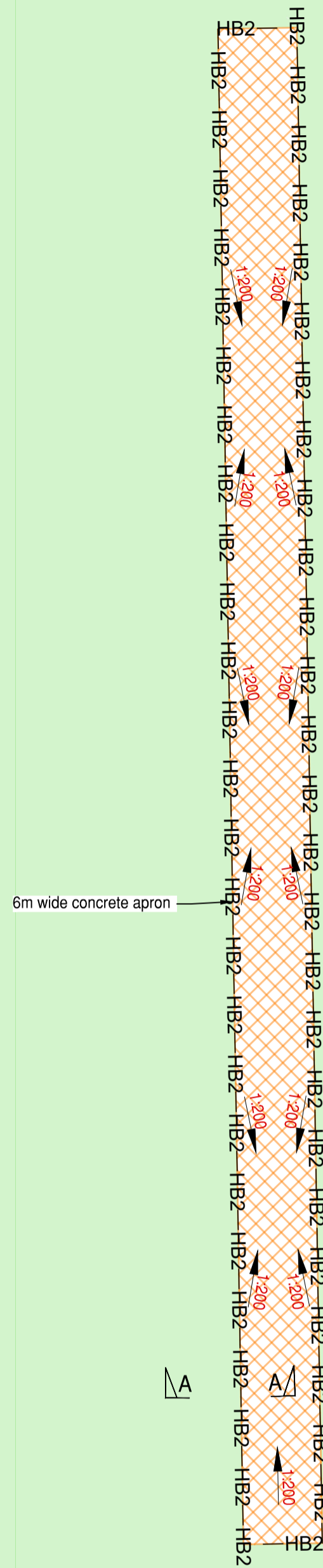
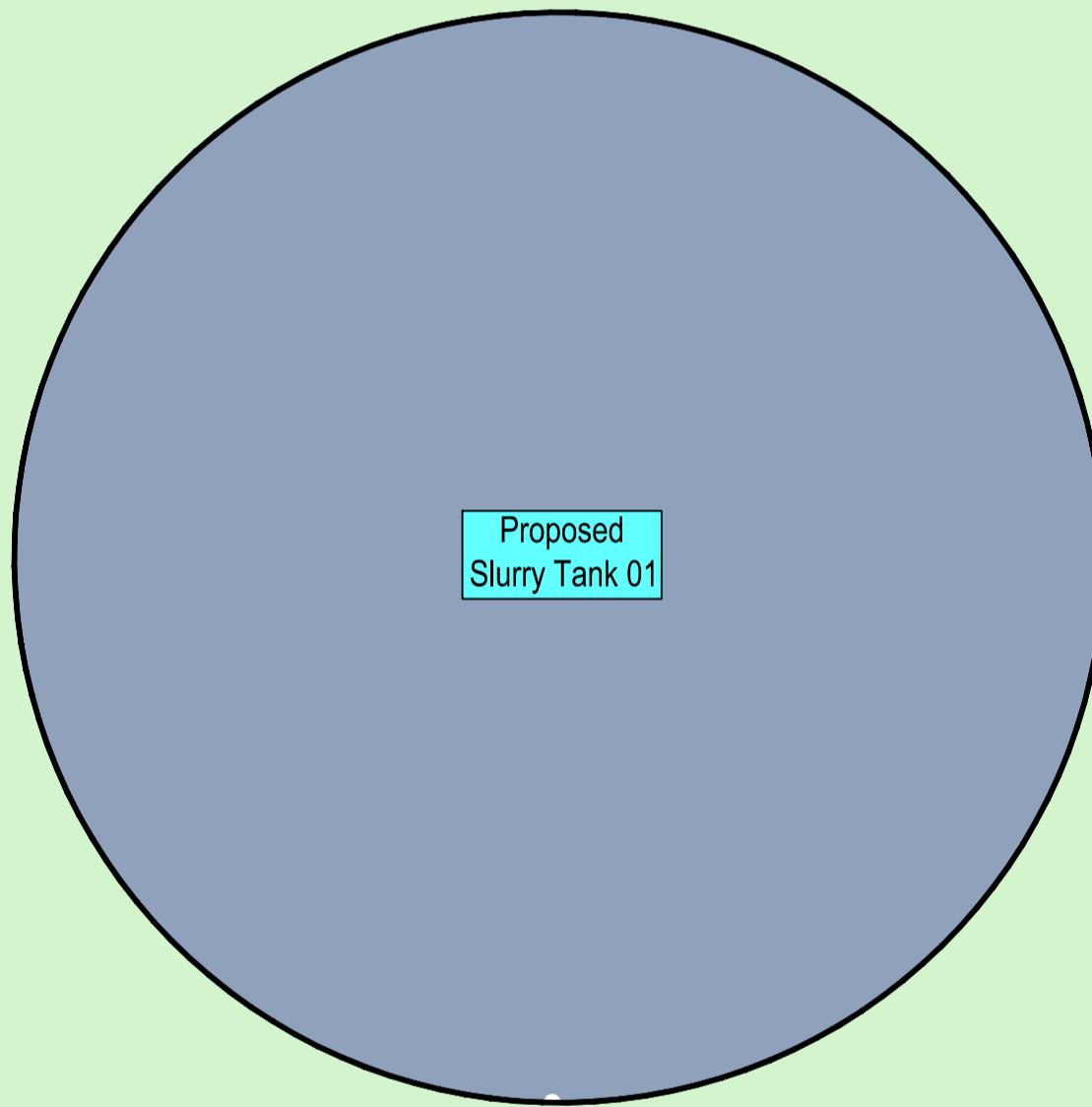
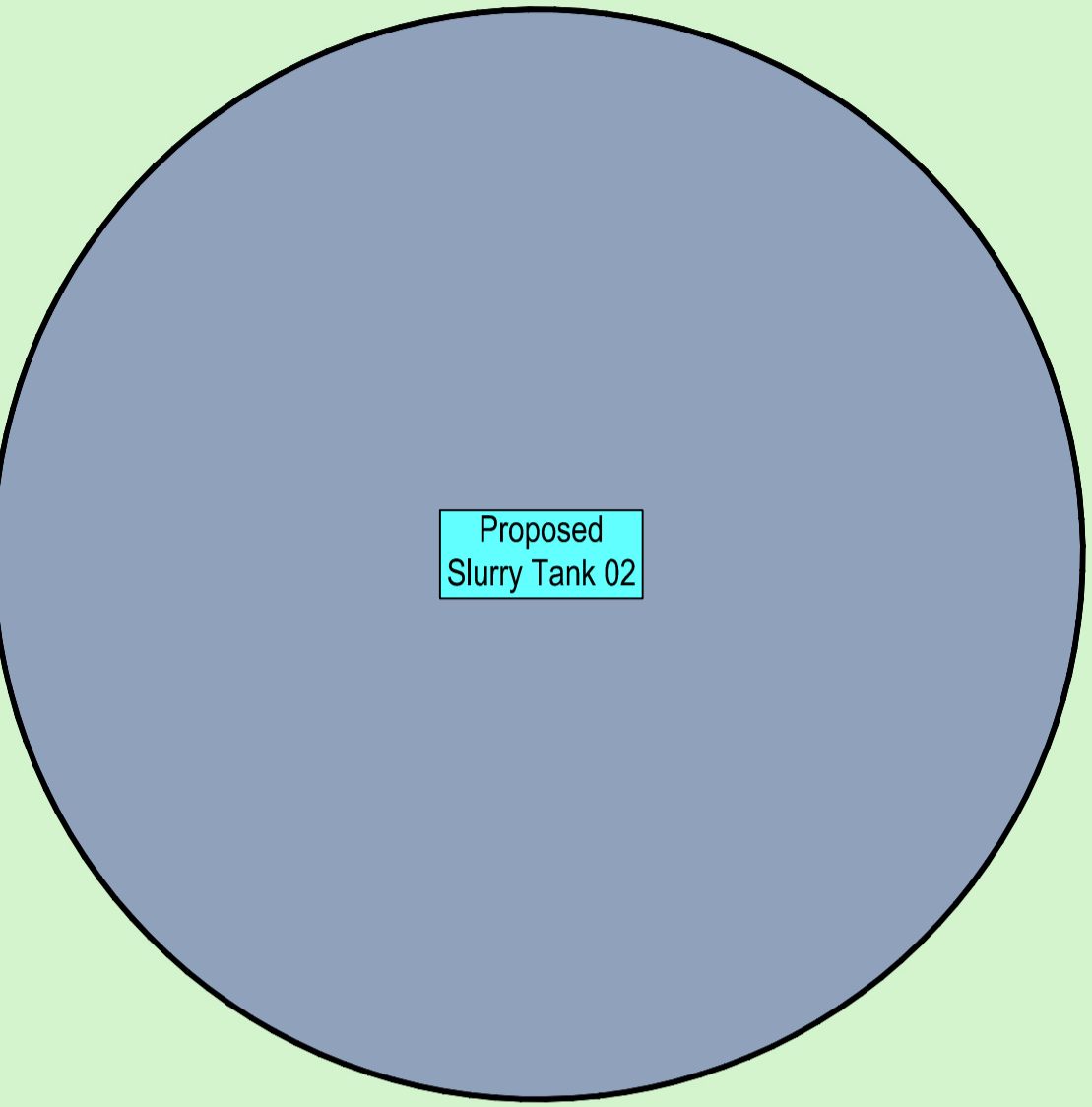
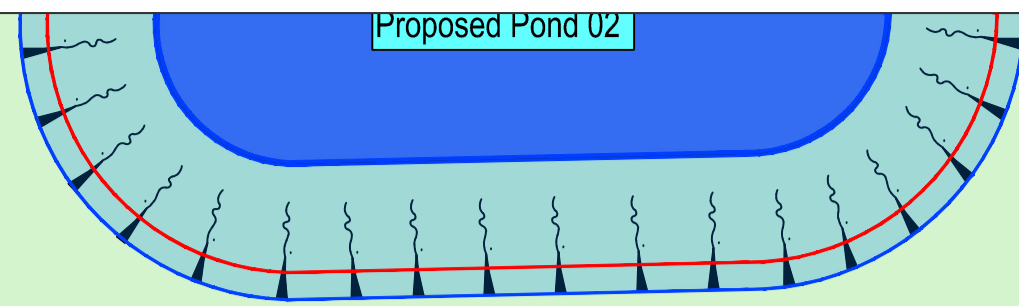
Drawing: **External Works 01**  
 Main Site

By/Chkd	RA/GM	Date	Revision
CSH-BML-XX-XX-DR-C-0700		05/04/2023	P04
BML Job No. 1000-05			Status -

Drawing Scale at A1: As Shown  
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For Proposed Buildings External Works details, refer to drawing CSH-BML-XX-XX-DR-C-0700



**Safety, Health & Environmental Information:**

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INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

**Construction/Maintenance/Cleaning/Demolition**  
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**Notes:**

- The contractor is to check all information provided prior to commencing works, and seek clarification from the engineer in respect to any ambiguities found.
- Assumed CBR for the site is < 2% - contractor to check in situ CBR at time of construction
- Frost susceptibility - All materials, including sub-grade within 450mm of the finished road level shall be non-frost susceptible. Where the sub-grade is within 450mm of the finished road level, it shall be tested for frost susceptibility and if found to be so, shall be removed and replaced with suitable non-frost susceptible material to Clause 602.19 of the Specification for Highway Works.
- Bituminous sealing grit to be applied to binder course if left exposed for more than 5 days.
- Sub formation / formation shall be proof rolled and any soft spots removed and replaced with adequately compacted 6F2 material. Testing to be undertaken to ensure a minimum CBR of 2.5% is achieved at any point.
- To ensure continuity of foundation drainage at all times, the bottom of new sub-base must not be above the bottom of existing sub-base, therefore thickness of new sub-base to be increased to match bottom of existing sub-base where necessary.
- All bound surfaces shall be treated with Polymer modified bond coat prior to placing of each successive layer to BS434 and in accordance SHW clause 920.
- All Retaining Walls to have Edge protection to Architecture Details

P03	DH/AM	26/02/2024	External Details updated
P02	DH/AM	06/02/2024	External Details updated
P01	DH/AM	15/08/23	Preliminary Issue
Rev	By / Chk'd	Date	Description

**PRELIMINARY DRAWING**  
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Project

**Cow Shed**  
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Drawing

**External Works 02**  
Slurry Tanks

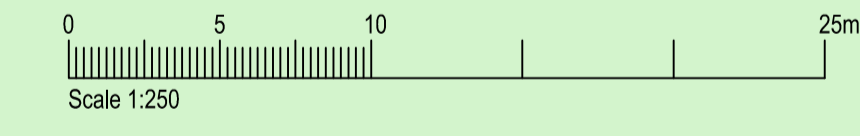
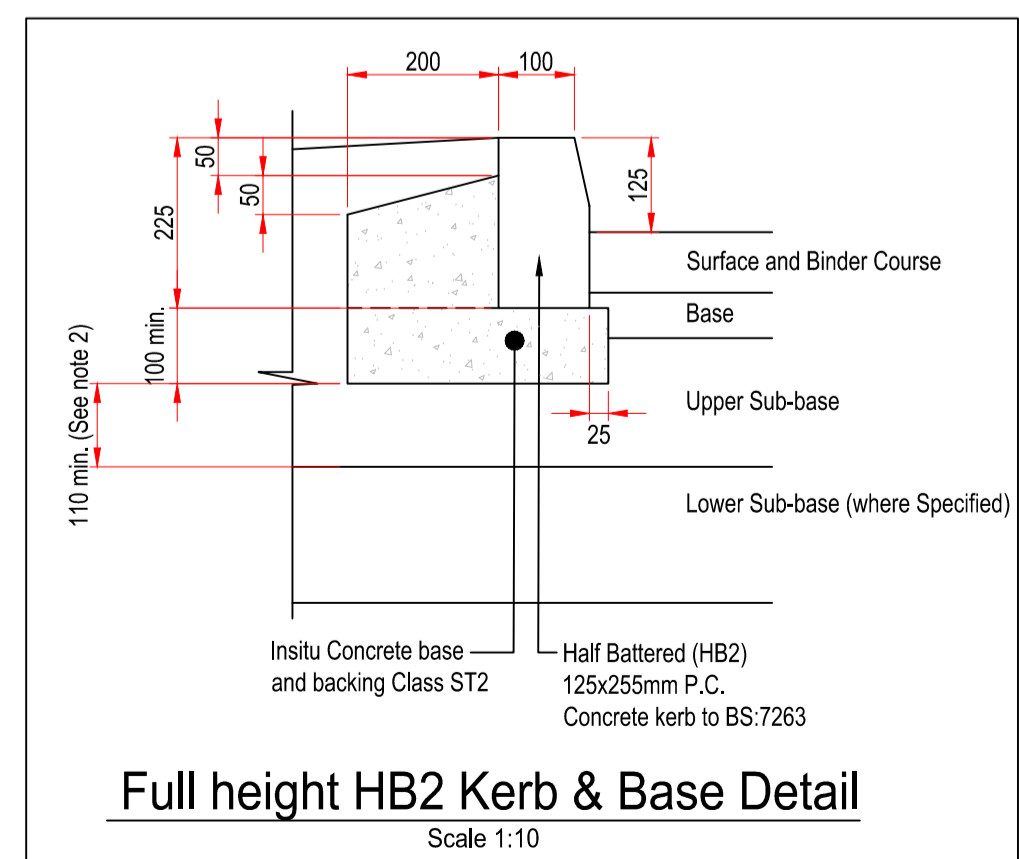
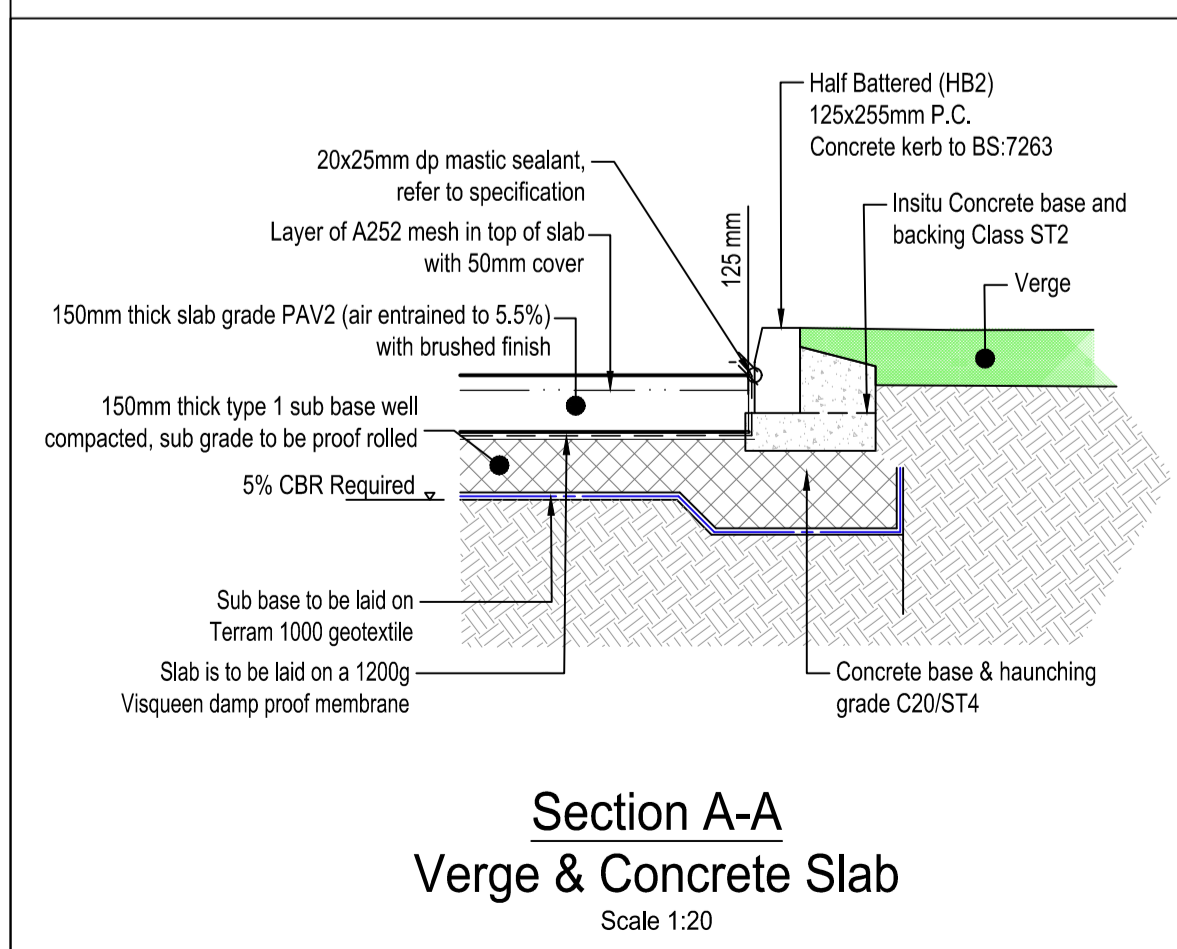
By/Chk'd	RA/GM	Date	05/04/2023
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Drawing No. CSH-BML-XX-XX-DR-C-0701 Revision P03

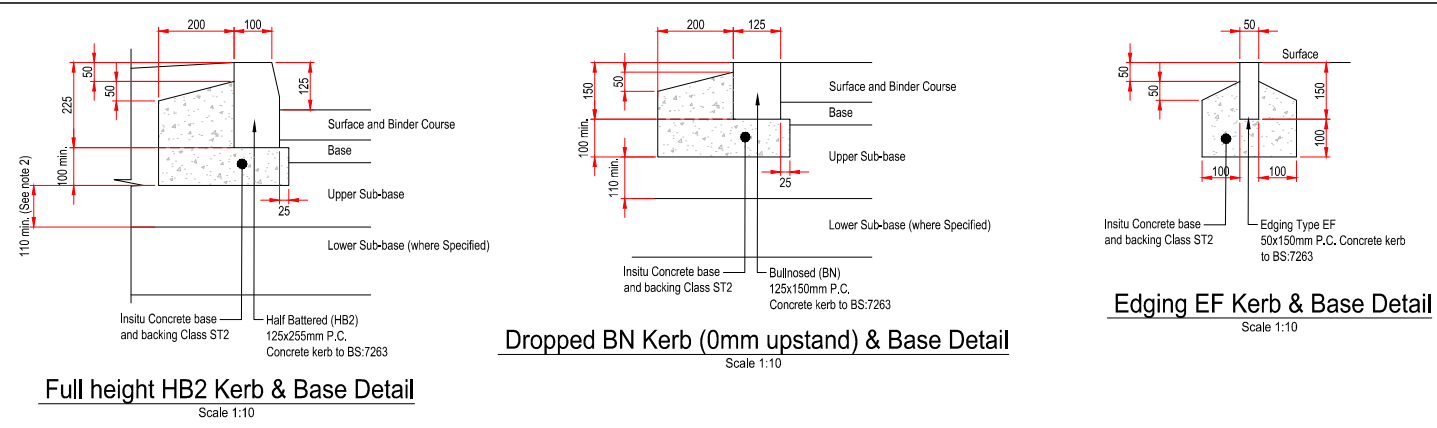
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Drawing Scale at A1: As Shown

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Key:	
	Proposed Slurry Tank
	Proposed Concrete Slab
	Existing and Proposed Green Areas
	Proposed Gravel Surround
	Proposed HB2 kerbs with 125mm upstand
	Design Levels



**Safety, Health & Environmental Information:**  
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INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION

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 Refer to Drawing:

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  - Assumed CBR for the site is < 2% - contractor to check insitu CBR at time of construction
  - Frost susceptibility - All materials, including sub-grade within 450mm of the finished road level shall be non-frost susceptible. Where the sub-grade is within 450mm of the finished road level, it shall be tested for frost susceptibility and if found to be so, shall be removed and replaced with suitable non-frost susceptible material to Clause 602.19 of the Specification for Highway Works.
  - Bituminous sealing grit to be applied to binder course if left exposed for more than 5 days.
  - Sub formation / formation shall be proof rolled and any soft spots removed and replaced with adequately compacted 6F2 material. Testing to be undertaken to ensure a minimum CBR of 2.5% is achieved at any point.
  - To ensure continuity of foundation drainage at all times, the bottom of new sub-base must not be above the bottom of existing sub-base, therefore thickness of new sub-base to be increased to match bottom of existing sub-base where necessary.
  - All bound surfaces shall be treated with Polymer modified bond coat prior to placing of each successive layer to BS434 and in accordance SHW clause 920.
  - All Retaining Walls to have Edge protection to Architecture Details

P01	DHAM	26/01/2024	Preliminary Issue
Rev	By / Chkd	Date	Description

**PRELIMINARY DRAWING**  
 This drawing is not to be used for construction



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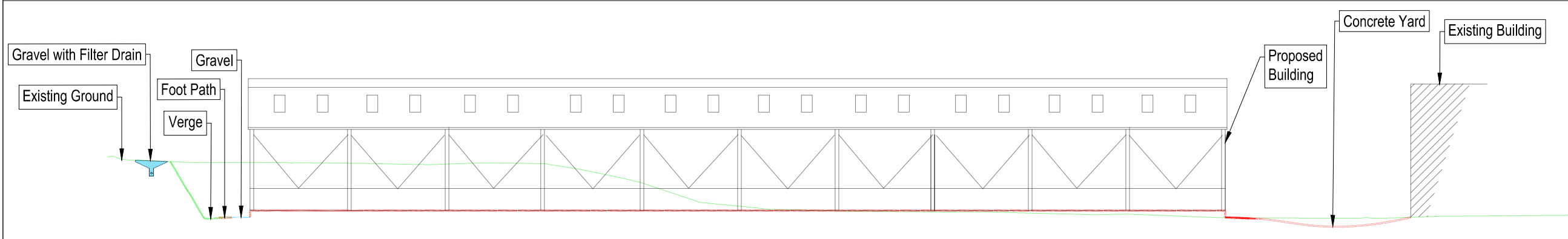
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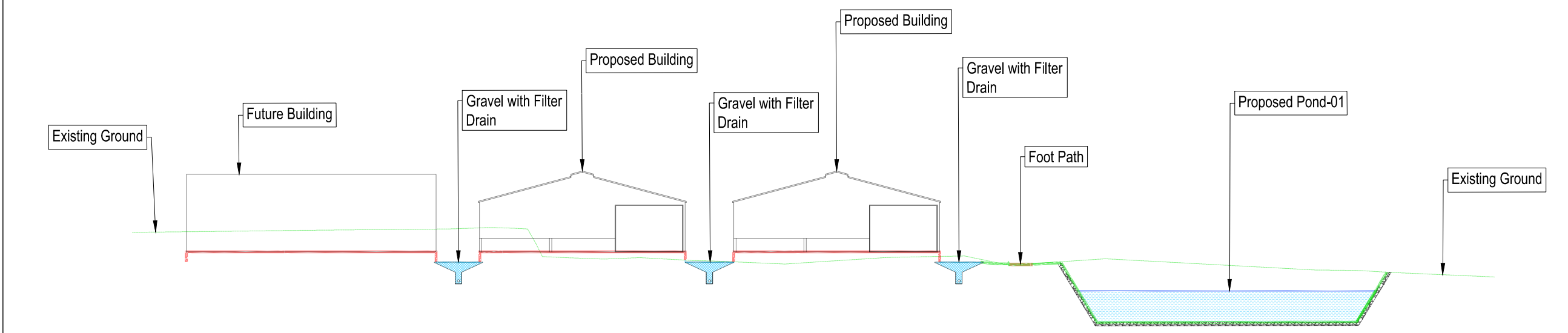
Project  
**Cow Shed**  
 Elmridge Lane, Preston,  
 PR3 2NY

Drawing  
**External Works 01**  
 Site Sections & Construction Details

By/Chkd	RA/GM	Date	05/04/2023
Drawing No.	CSH-BML-XX-XX-DR-C-0702		Revision P01
BML Job No.	1000-05		Status -
Drawing Scale at A1:	As Shown		
CAD Filename:	P:\Projects\2023\05\04\CSH-BML-XX-XX-DR-C-0702-01.dwg		



**Site Section A-A**  
 Scale: 1:500



**Site Section B-B**  
 Scale: 1:500

