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Project:
BRANDWELLS CONSTRUCTION
1.5m high Attenuation Tank
THORNBURY, BRISTOL
Sheet: Base Plan + Roof Plan

Drawn By: KD

REV

DATE

DRAWN

CHKD

COMMENT

Scale @ A1

European Patent Number 1522638

Date: 06/09/2017

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29/08/19

KD

PG

External units rearranged. Reissued for approval.

SEF No: SAT UK 025143

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12/09/19

KD

PG

External units rearranged. Issued for construction.

Drg. No: A101

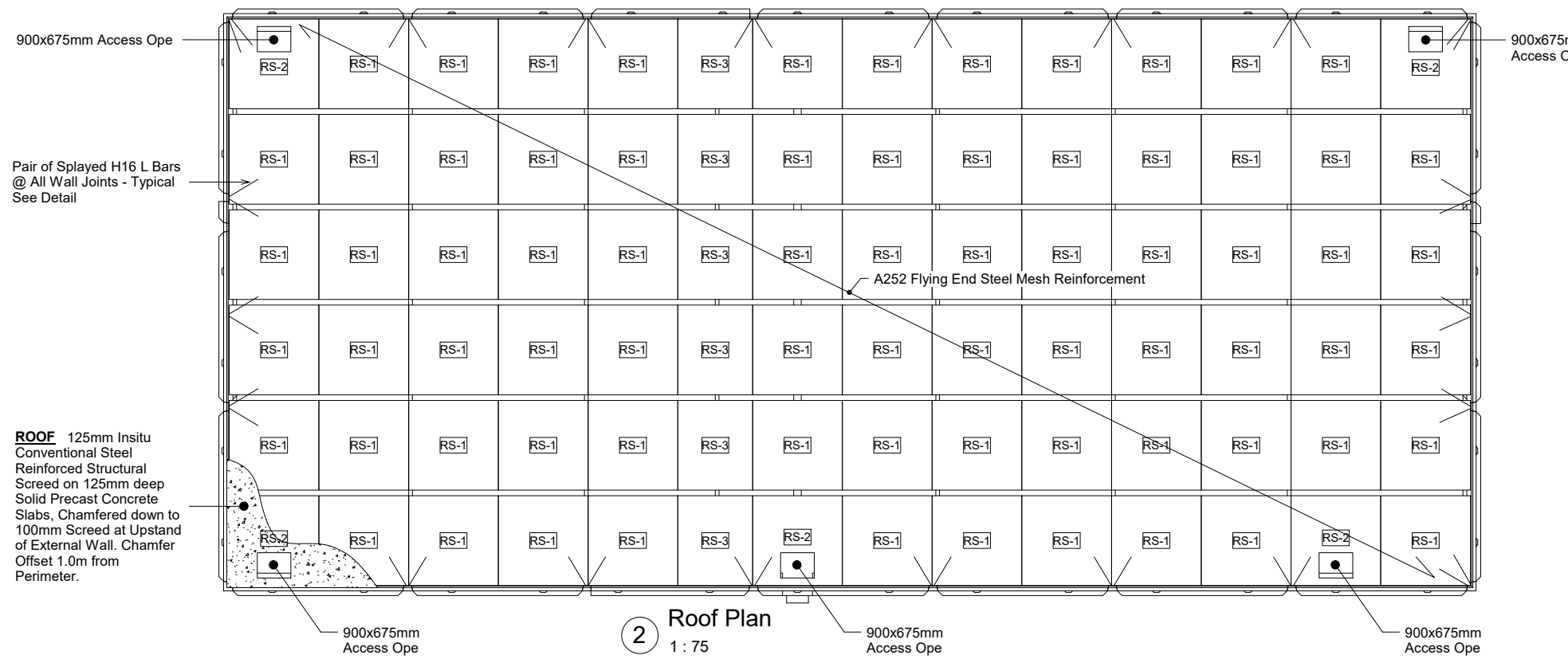
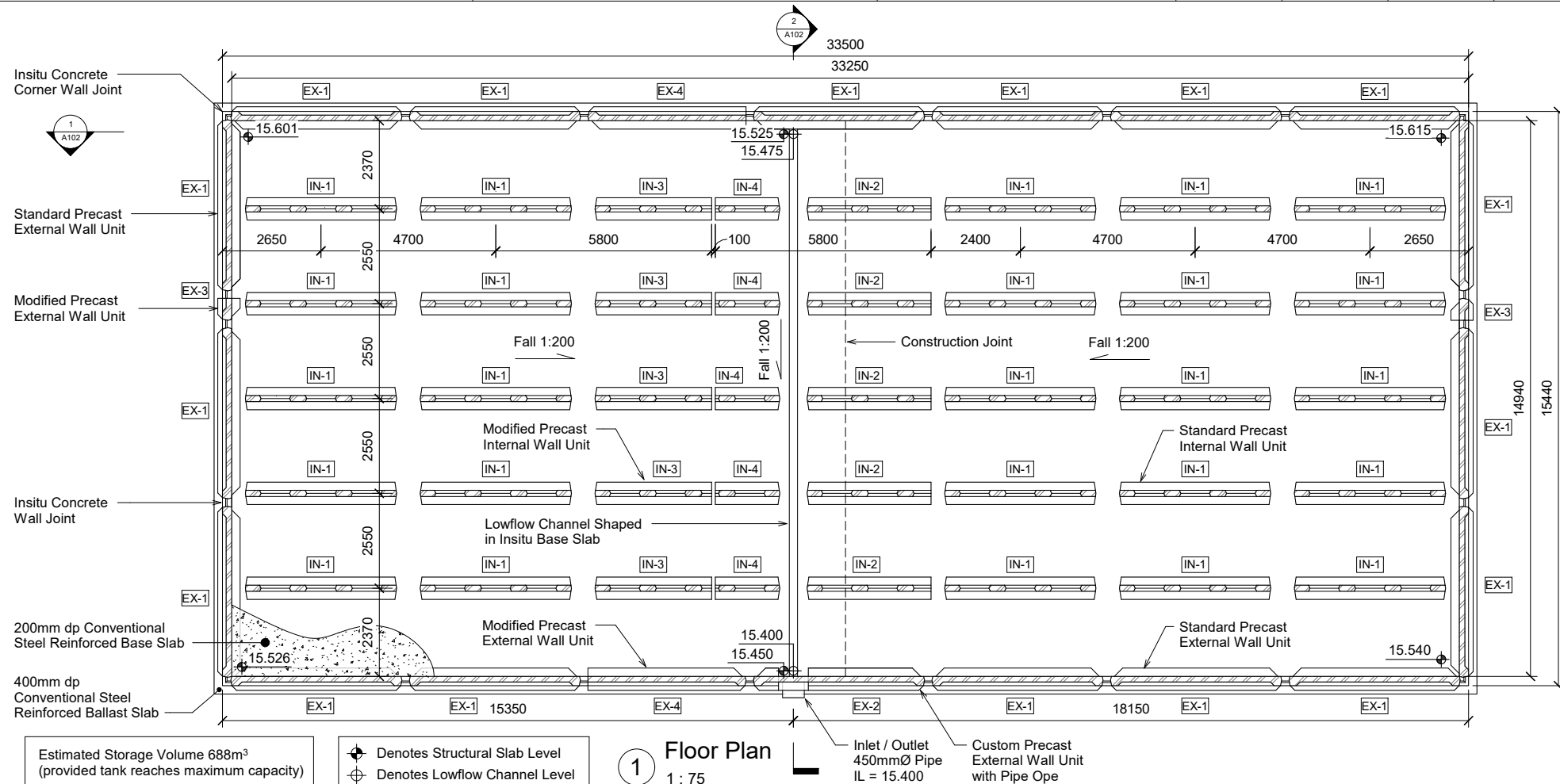
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19/02/21

KD

PG

As Built issue



Roof Slab Schedule						
Type	Count	Description	Material: Volume	Total Volume	Unit Weight	Total Weight
RS-1	73	Standard Precast Roof Slab 2400x2400	0.72 m ³	52.56	1.87	136.66
RS-2	5	Custom Precast Roof Slab with Access Ope	0.64 m ³	3.22	1.67	8.37
RS-3	6	Modified Precast Roof Slab 2000 wide	0.60 m ³	3.60	1.56	9.36
Grand total: 84				59.38		154.39

Precast Schedule						
Type	Count	Description	Material: Volume	Total Volume	Unit Weight	Total Weight
EX-1	17	Standard Precast External Wall Unit	1.81 m ³	30.80	4.71	80.09
EX-2	1	Custom Precast External Wall Unit with Pipe Ope	1.64 m ³	1.64	4.26	4.26
EX-3	2	Modified Precast External Wall Unit 590 long	0.25 m ³	0.50	0.65	1.29
EX-4	2	Modified Precast External Wall Unit 4250 long	1.66 m ³	3.32	4.32	8.64
IN-1	25	Standard Precast Internal Wall Unit	1.46 m ³	36.40	3.79	94.63
IN-2	5	Modified Precast Internal Wall Unit 3600 long	1.17 m ³	5.86	3.05	15.23
IN-3	5	Modified Precast Internal Wall Unit 3400 long	1.11 m ³	5.55	2.89	14.43
IN-4	5	Modified Precast Internal Wall Unit 2000 long	0.64 m ³	3.18	1.65	8.27
Grand total: 62				87.25		226.84

In-situ Schedule						
Type	Count	Description	Material: Volume	Total Volume	Unit Weight	Total Weight
200mm Slab	1	Base Floor Slab	97.77 m ³	97.77	234.66	234.66
EX-2	1	Custom Precast External Wall Unit with Pipe Ope	0.13 m ³	0.13	0.32	0.32
Generic 400mm	1	Ballast Slab	215.79 m ³	215.79	517.89	517.89
J-1	4	Wall Joint 1	0.10 m ³	0.38	0.23	0.92
J-2	14	Wall Joint 2	0.10 m ³	1.44	0.25	3.45
J-4	4	Corner Wall Joint 4	0.11 m ³	0.42	0.25	1.02
Roof screed	1		65.51 m ³	65.51	157.22	157.22
Grand total: 26				381.44		915.47

Placement & Cast of Inlet / Outlet Pipes by Others

Allow for 5% Wastage for Insitu Concrete

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Design Assumptions	
Design Life:	50 Years
Exposure Classification	XC4/XD1/XF1
Design Chemical Class	DC-2
Imposed Loading	26t HGV Axle Loading to Annex D BD21/01

Curing of Base Slab:
Curing agent to be applied immediately upon disappearance of surface water.

Design Assumptions				
	Base Slab	Pads	Wall Joints / Roof Screed	Walls / Roof Slabs
Design Chemical Class	DC-2	DC-2	DC-2	DC-2
Exposure Classification	XC4/XD1/XF1	XC4/XD1/XF1	XC4/XD1/XF1	XC4/XD1/XF1
Design Life	50 Years	50 Years	50 Years	50 Years
Concrete Grade	C32/40	C32/40	C32/40	C50/60
Cement Type	CEM IIIA+SR*	CEM IIIA+SR*	CEM IIIA+SR*	CEM II B-S
Min Cement Content	325kg/m ³	325kg/m ³	360kg/m ³	350kg/m ³
Max W/C Ratio	0.55	0.55	0.55	0.45
Max Aggregate Size	20mm	20mm	10mm	14mm
Aggregate Type	Limestone	Limestone	Limestone	Limestone
Required Slump	120mm	120mm	120mm	N/A
Max GGBS Content	50%	50%	50%	-
Steel Fibre Dosage	N/A	N/A	N/A	N/A
Steel Fibre Type	N/A	N/A	N/A	N/A

Notes: * = Unless otherwise agreed with supplier



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Project:
BRANDWELLS CONSTRUCTION
1.5m high Attenuation Tank
THORNBURY, BRISTOL
Sheet: Sections

Drawn By: KD
Date: 06/09/2017
SEF No: SAT UK 025143
Drg. No: A102

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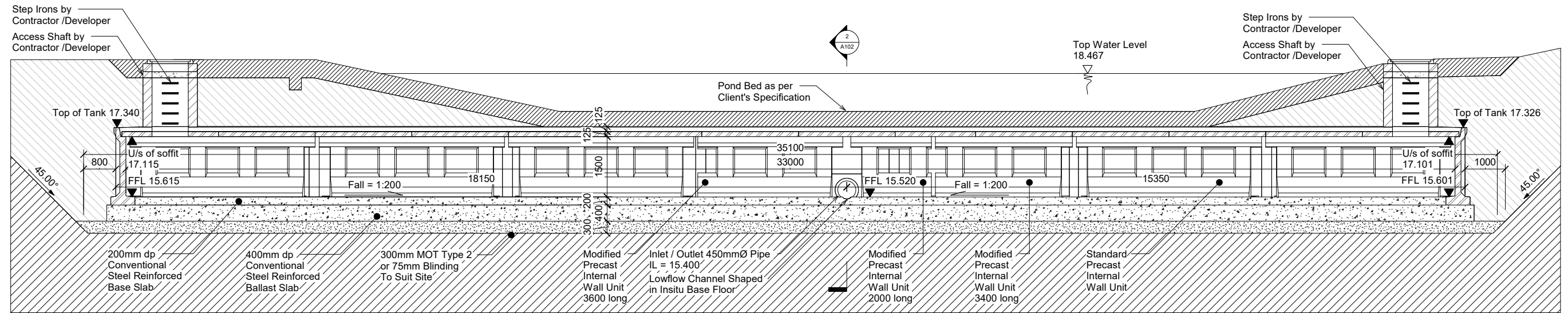
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12/09/19
19/02/21

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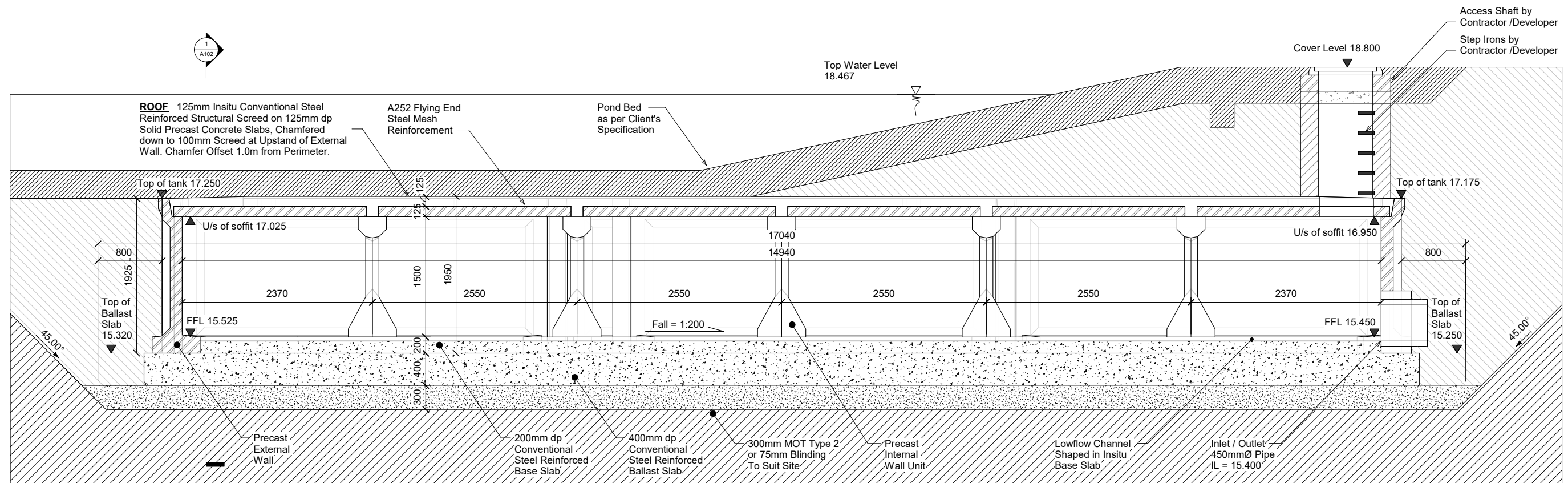
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COMMENT
External units rearranged. Reissued for approval.
External units rearranged. Issued for construction.
As Built issue

Scale @ A1



1 Section 1
1 : 50



Note: Ballast slab and base slab to be tied together with rebars. Details to be shown on reinforcement drawings.

2 Section 2
1 : 25

AS BUILT

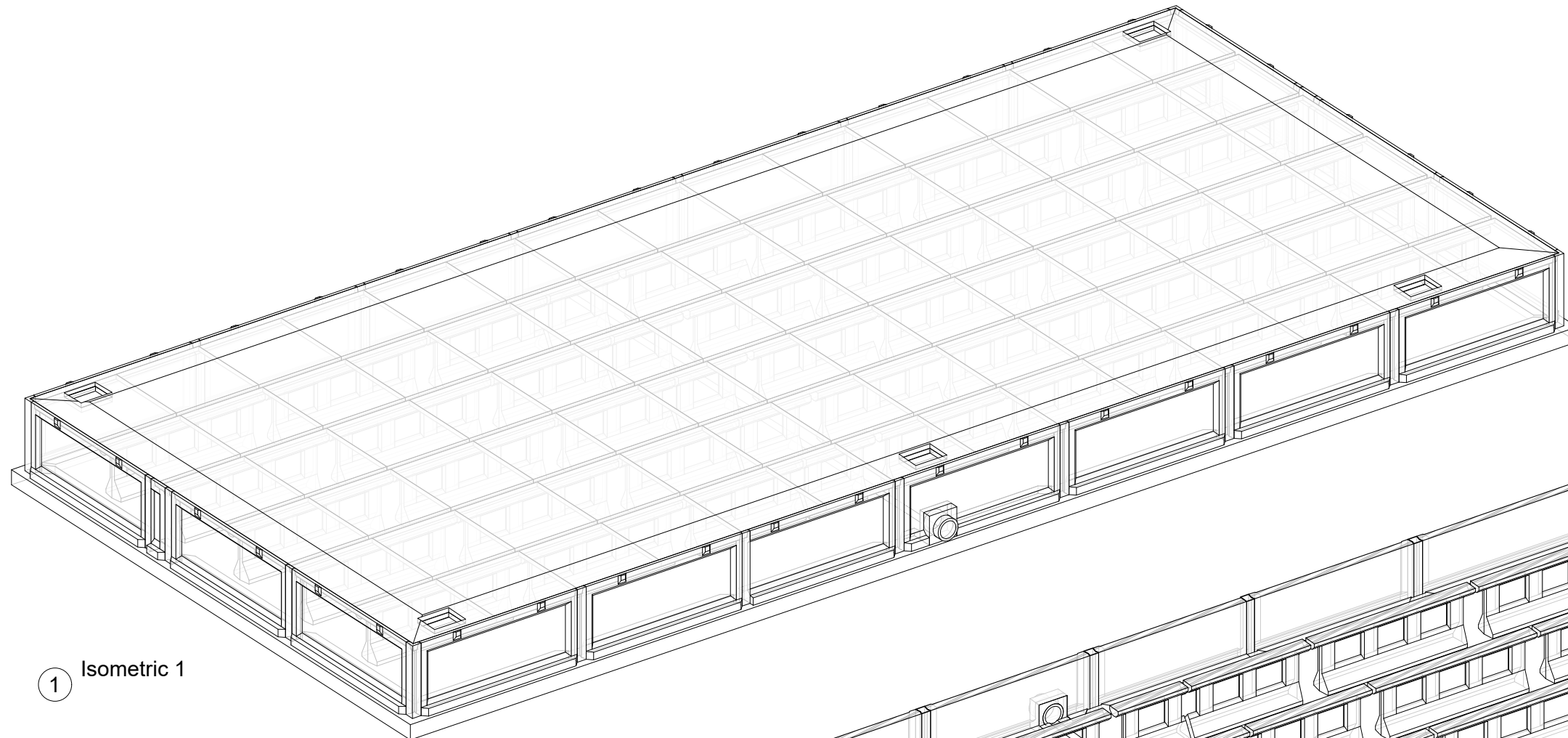


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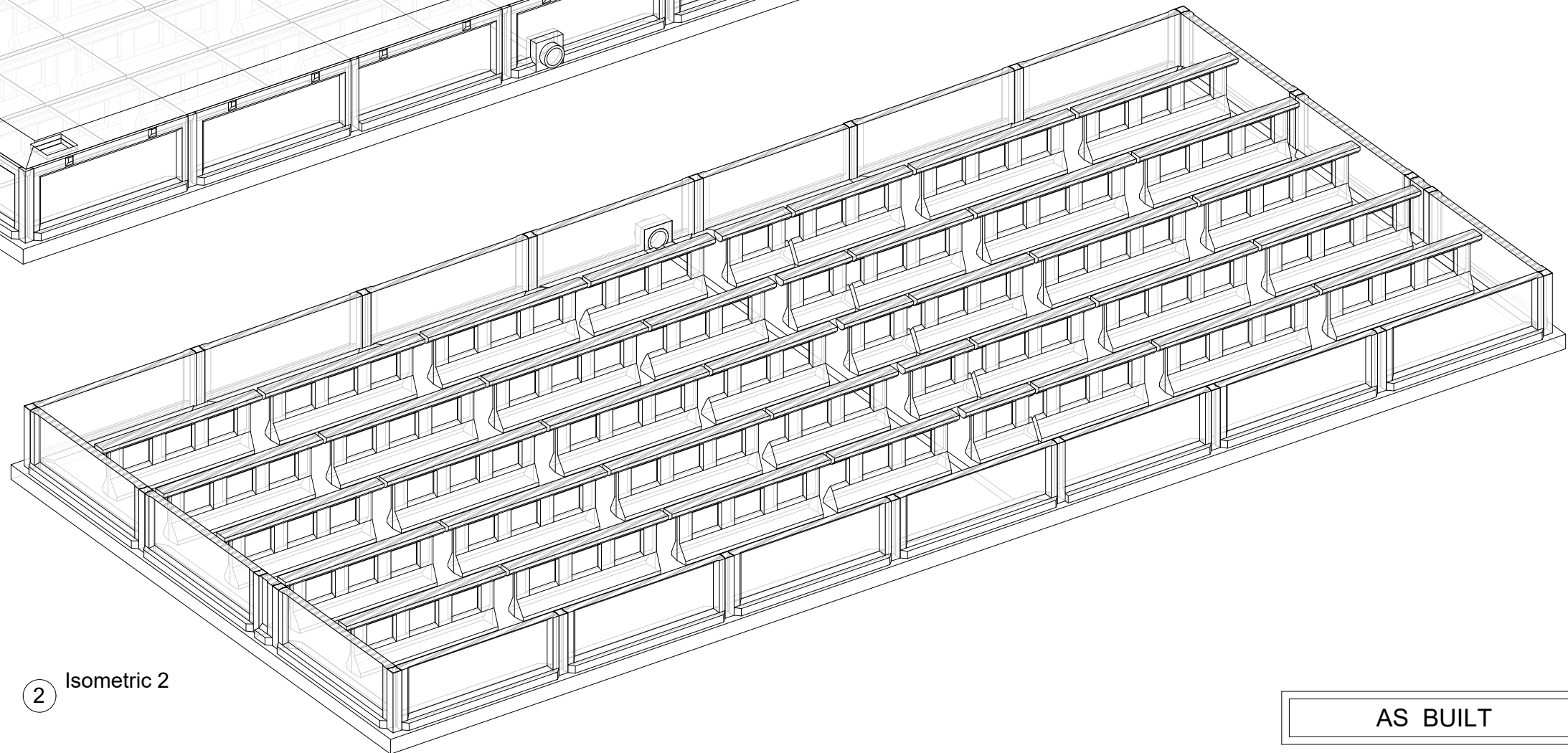
Project:
BRANDWELLS CONSTRUCTION
1.5m high Attenuation Tank
THORNBURY, BRISTOL
Sheet: Isometrics

Drawn By:	REV	DATE	DRAWN	CHKD	COMMENT	Scale @ A1
KD	K	29/08/19	KD	PG	External units rearranged. Reissued for approval.	
06/09/2017	L	12/09/19	KD	PG	External units rearranged. Issued for construction.	
SAT UK 025143	AB	19/02/21	KD	PG	As Built issue	
Date:						
SEF No:						
Drg. No:						

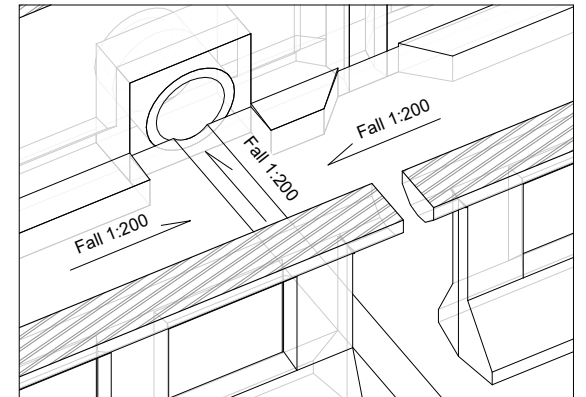
European Patent Number 1522638



1 Isometric 1



2 Isometric 2



3 Isometric 3

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Project:
BRANDWELLS CONSTRUCTION
1.5m high Attenuation Tank
THORNBURY, BRISTOL
Sheet: Wall and Pad Layout

Drawn By: KD
Date: 06/09/2017
SEF No: SAT UK 025143
Drg. No: A104

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29/08/19
12/09/19
19/02/21

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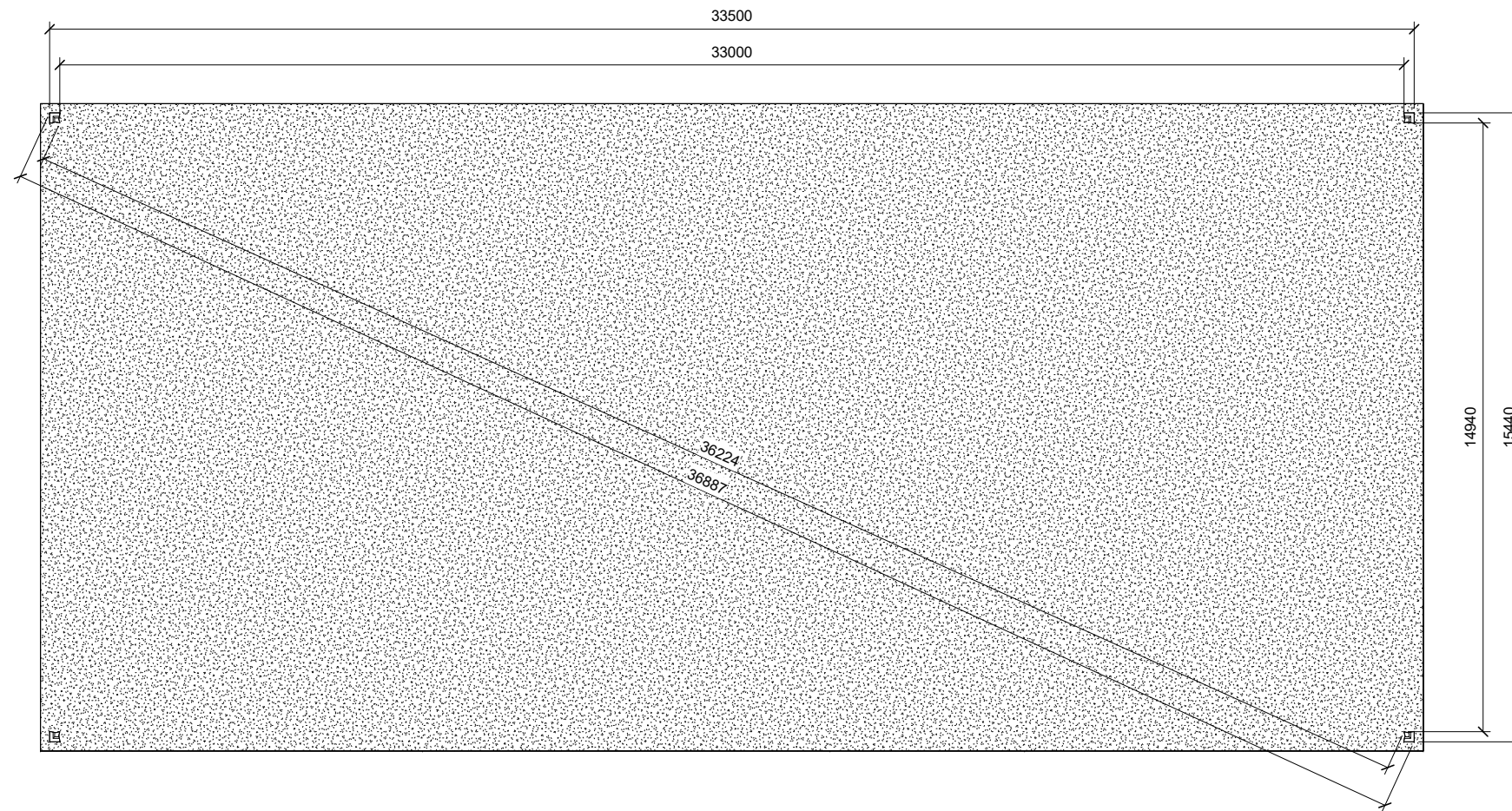
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External units rearranged. Issued for construction.
As Built issue

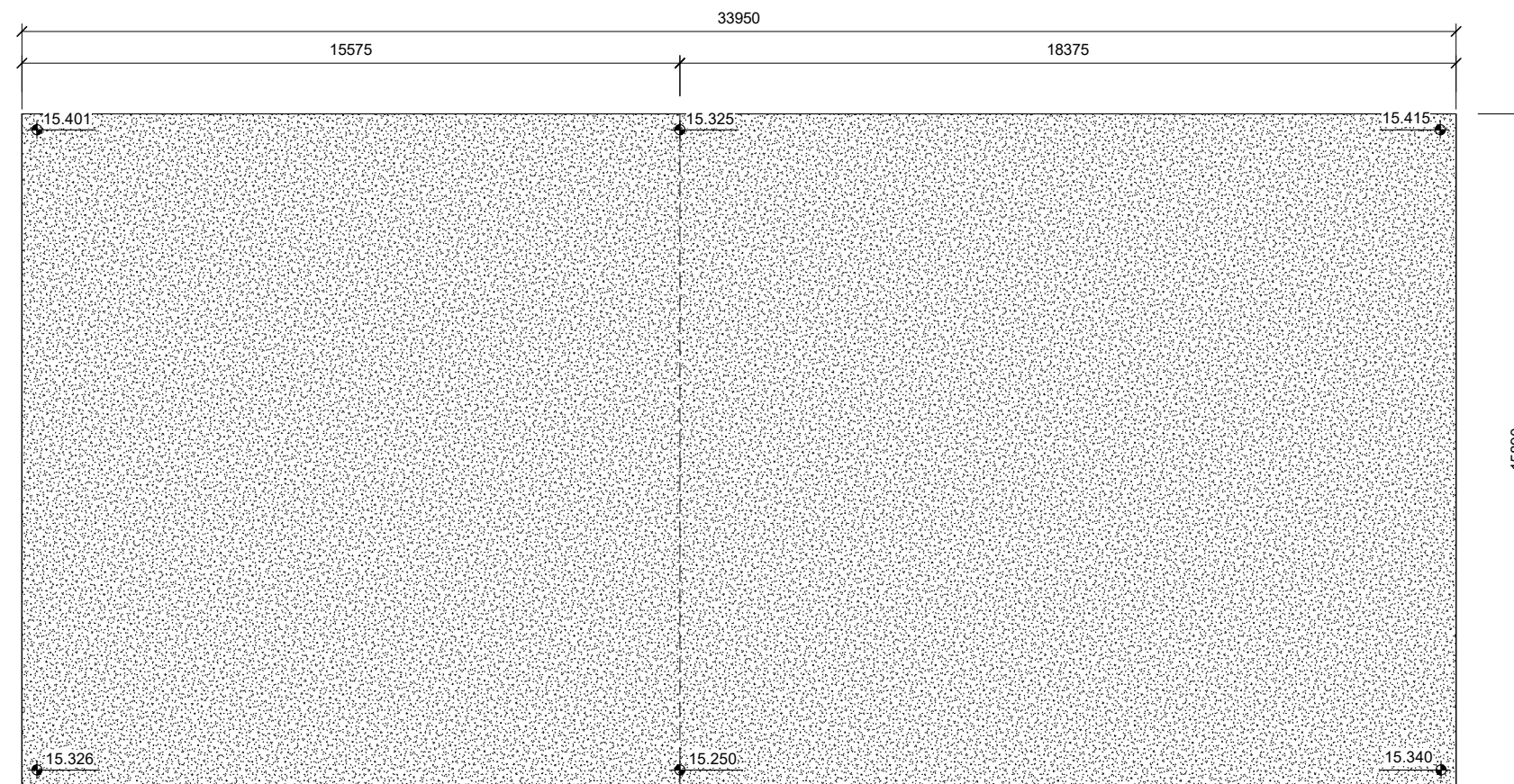
Scale @ A1



1 Setting Out Layout
1:75



2 Ballast Slab Layout
1:75



Note:
Levels Indicated Are Top of Ballast Slab

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Project:
BRANDWELLS CONSTRUCTION
1.5m high Attenuation Tank
THORNBURY, BRISTOL
Sheet: Details

Drawn By: KD
Date: 06/09/2017
SEF No: SAT UK 025143
Drg. No: A105

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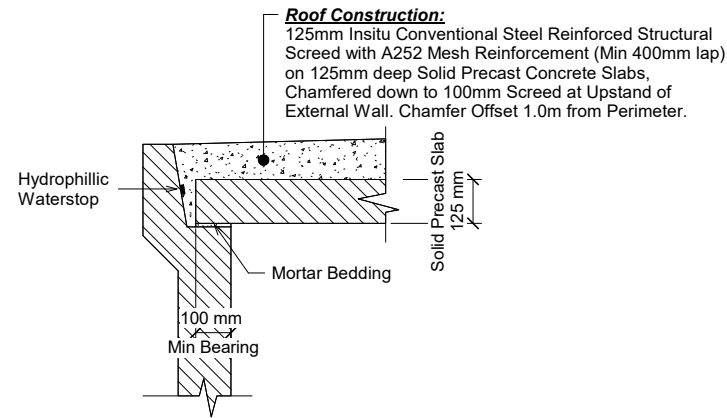
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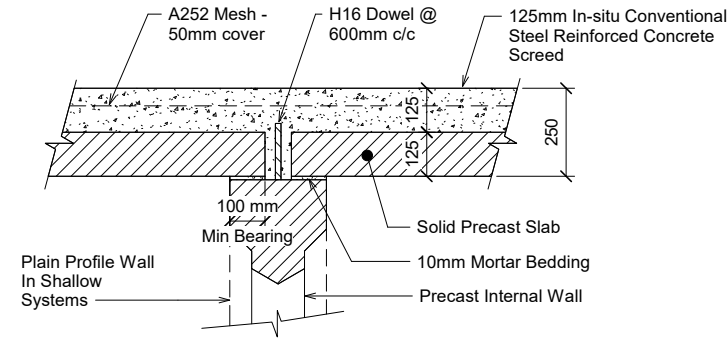
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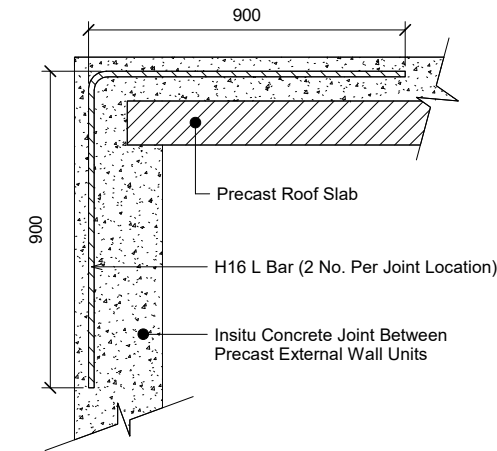
Scale @ A1



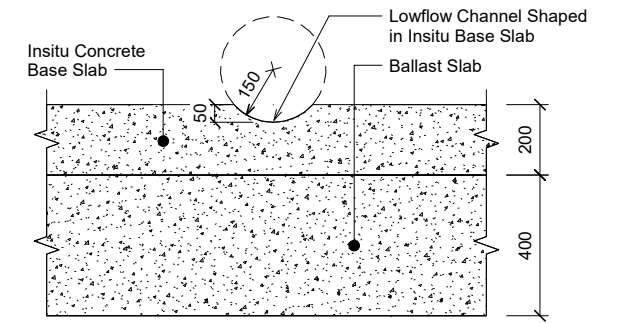
1 Typical Roof Slab Bearing Detail - External Wall 1:10



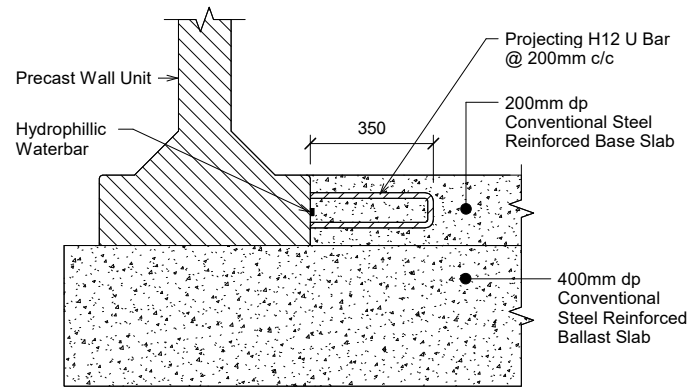
2 Typical Roof Slab Bearing Detail - Internal Wall 1:10



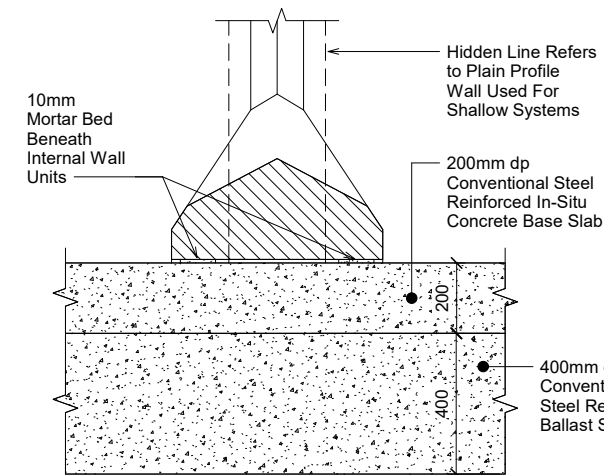
3 Typical Roof Tie Bar Detail 1:10



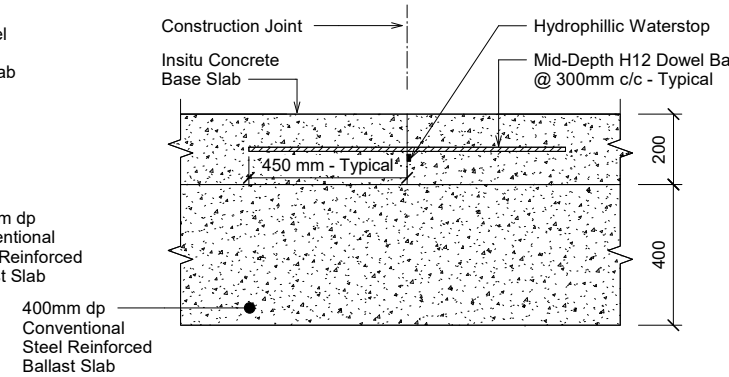
4 Typical Lowflow Channel Detail 1:10



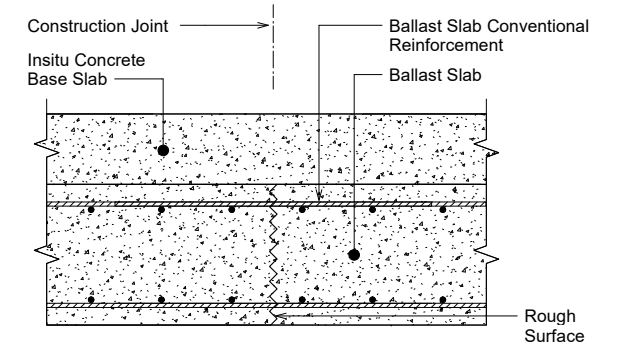
5 Typical Base Slab / Precast Wall Joint Detail 1:10



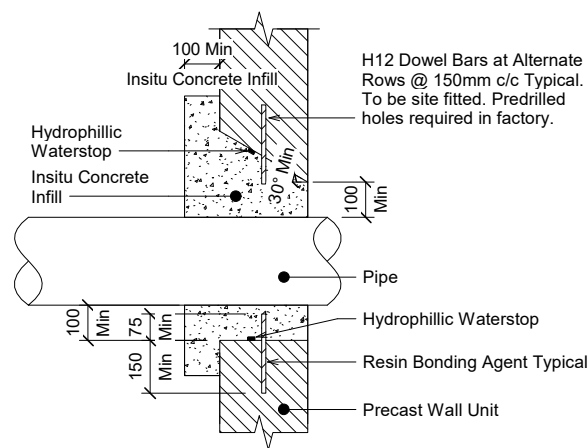
6 Typical Internal Wall Detail 1:10



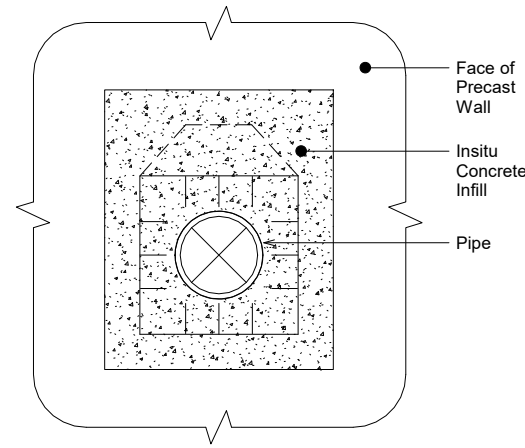
7 Typical Construction Joint in Base Slab Detail 1:10



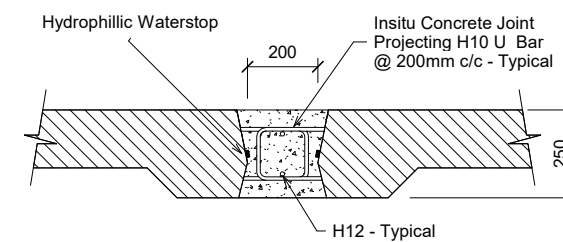
8 Typical Construction Joint in Ballast Slab Detail 1:10



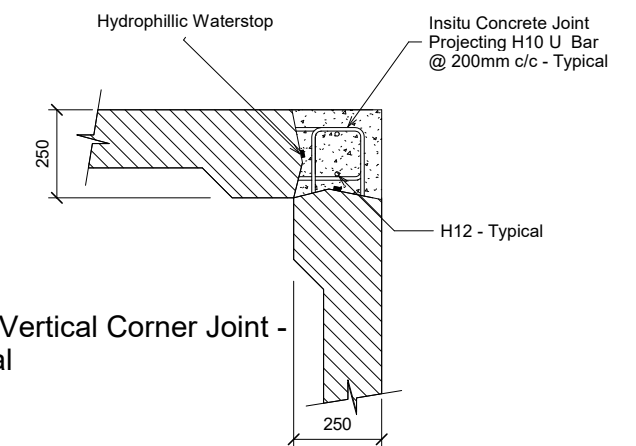
9 Pipe Connection Detail - Section 1:10



10 Pipe Connection Detail - Elevation 1:10



11 Insitu Vertical Joint Between Precast Wall Units - Typical 1:10



12 Insitu Vertical Corner Joint - Typical 1:10

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