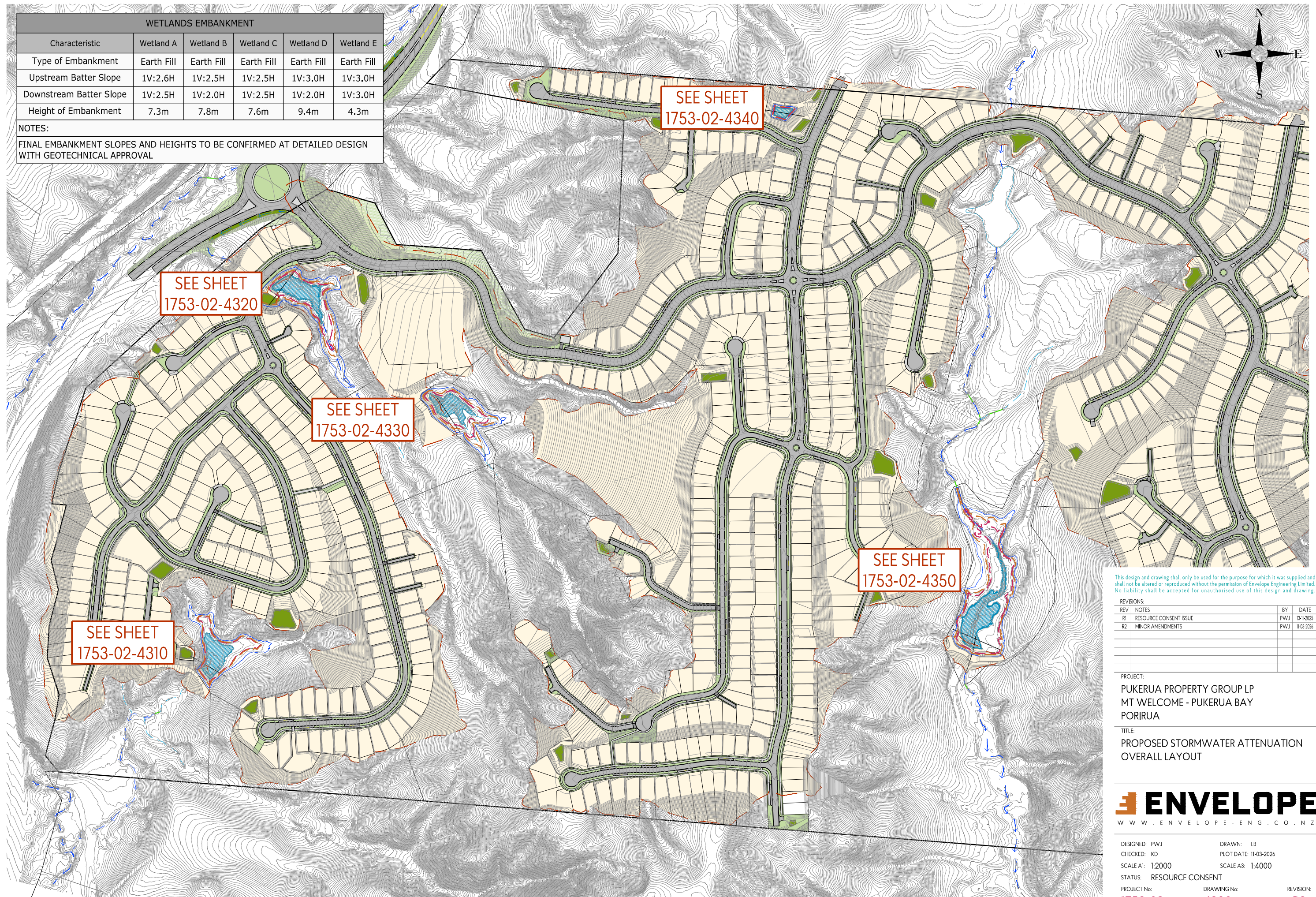
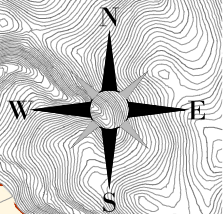


WETLANDS EMBANKMENT					
Characteristic	Wetland A	Wetland B	Wetland C	Wetland D	Wetland E
Type of Embankment	Earth Fill	Earth Fill	Earth Fill	Earth Fill	Earth Fill
Upstream Batter Slope	1V:2.6H	1V:2.5H	1V:2.5H	1V:3.0H	1V:3.0H
Downstream Batter Slope	1V:2.5H	1V:2.0H	1V:2.5H	1V:2.0H	1V:3.0H
Height of Embankment	7.3m	7.8m	7.6m	9.4m	4.3m

NOTES:
FINAL EMBANKMENT SLOPES AND HEIGHTS TO BE CONFIRMED AT DETAILED DESIGN WITH GEOTECHNICAL APPROVAL



This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

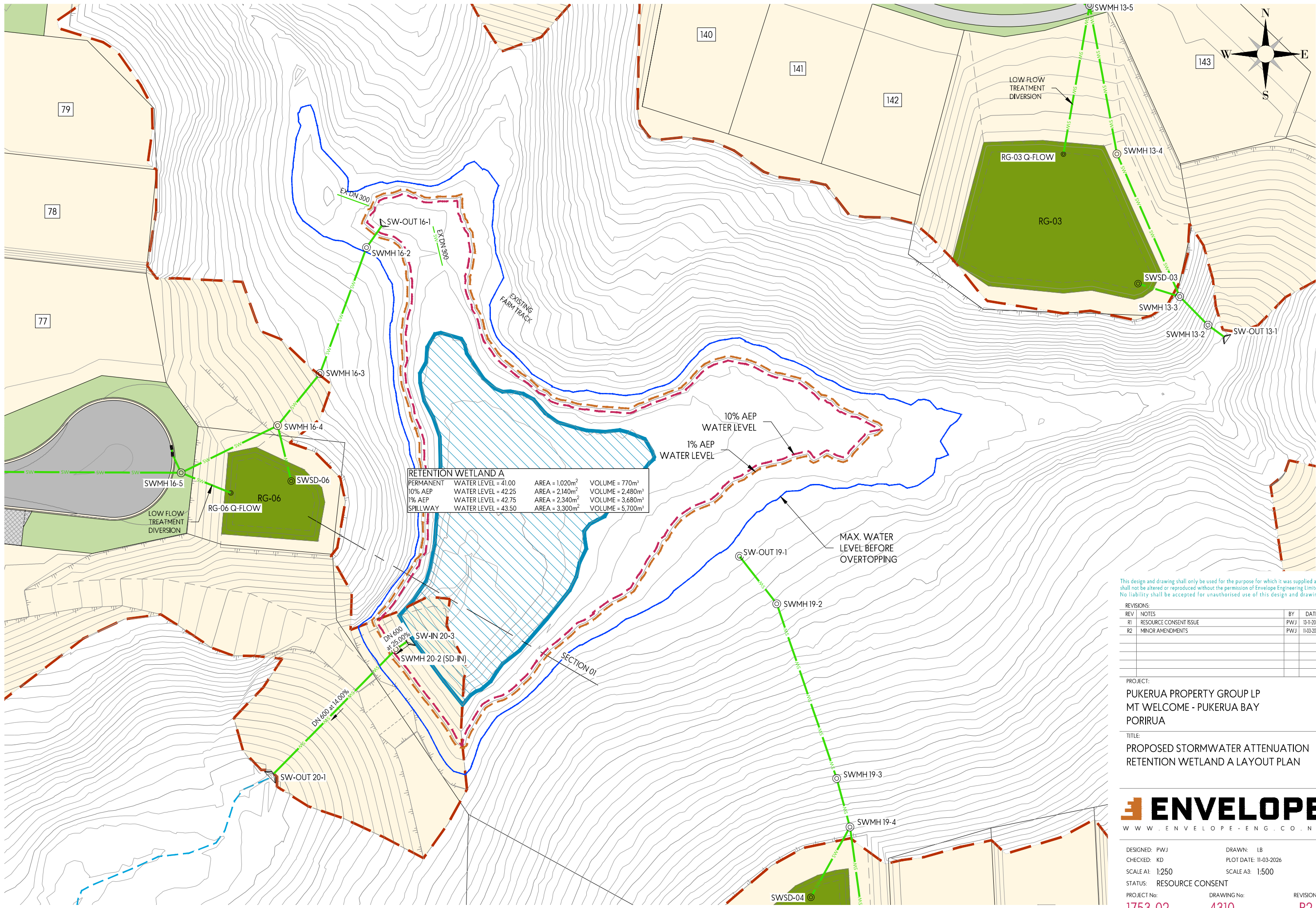
REVISIONS:			
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
PUKERUA PROPERTY GROUP LP
MT WELCOME - PUKERUA BAY
PORIRUA

TITLE:
PROPOSED STORMWATER ATTENUATION
OVERALL LAYOUT



DESIGNED: PWJ DRAWN: LB
 CHECKED: KD PLOT DATE: 11-03-2026
 SCALE A1: 1:2000 SCALE A3: 1:4000
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02 DRAWING No: 4300 REVISION: R2



RETENTION WETLAND A			
PERMANENT	WATER LEVEL = 41.00	AREA = 1,020m ²	VOLUME = 770m ³
10% AEP	WATER LEVEL = 42.25	AREA = 2,140m ²	VOLUME = 2,480m ³
1% AEP	WATER LEVEL = 42.75	AREA = 2,340m ²	VOLUME = 3,680m ³
SPILLWAY	WATER LEVEL = 43.50	AREA = 3,300m ²	VOLUME = 5,700m ³

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REVISIONS:			
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

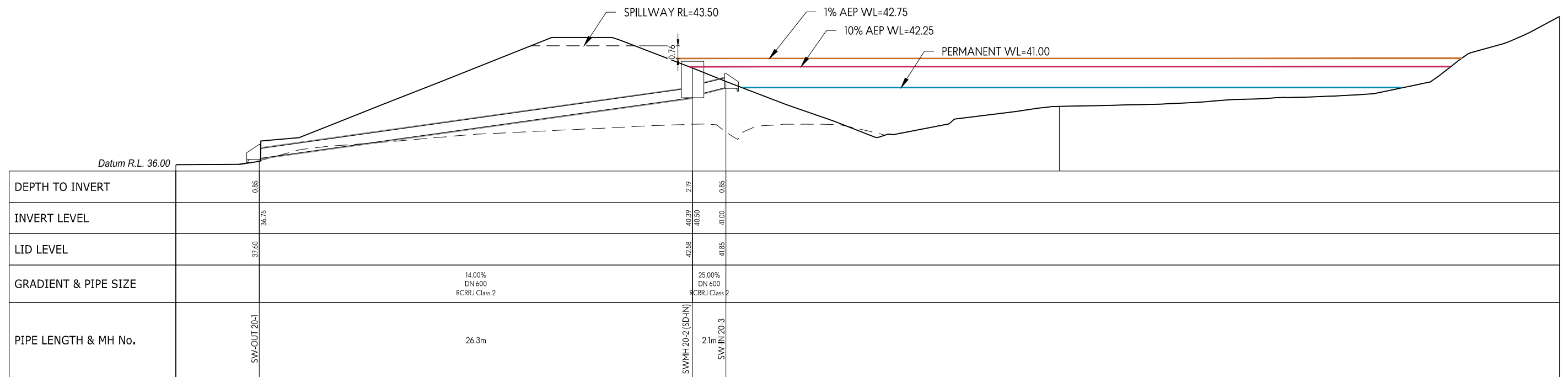
TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND A LAYOUT PLAN



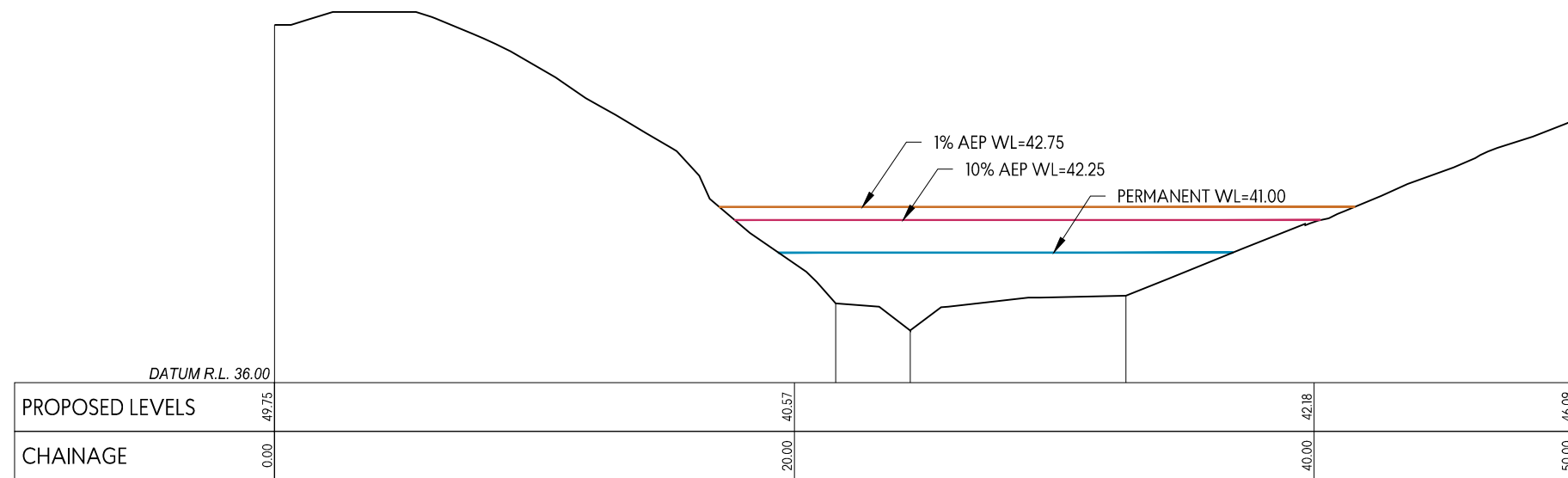
DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:500

DRAWING No: 4310
 REVISION: R2



WETLAND A OUTLET - SW LINE 20



WETLAND A SECTION 01

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

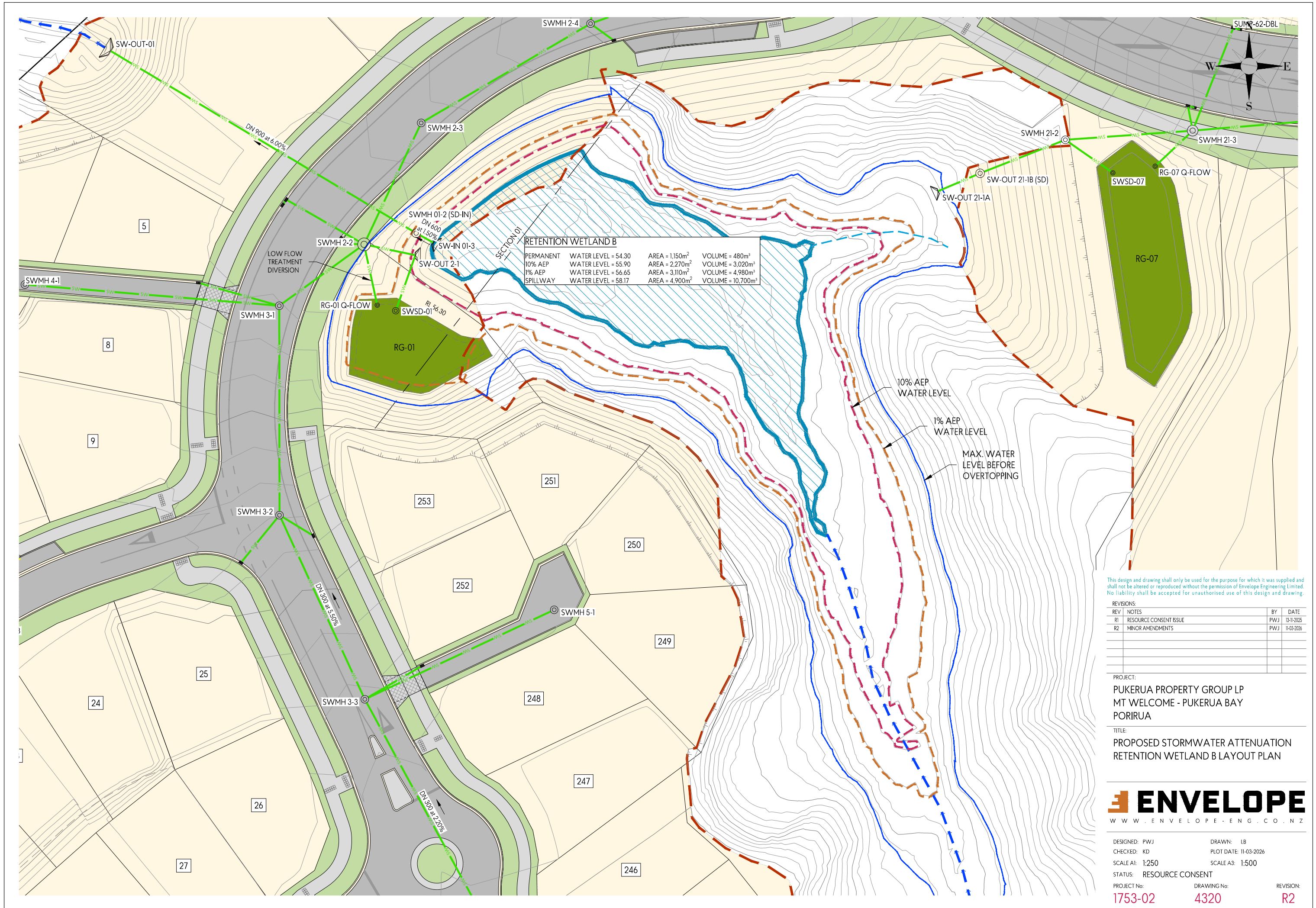
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND A SECTIONS



DESIGNED: PWJ DRAWN: LB
 CHECKED: KD PLOT DATE: 11-03-2026
 SCALE A1: 1:125 SCALE A3: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02 DRAWING No: 4311 REVISION: R2



This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

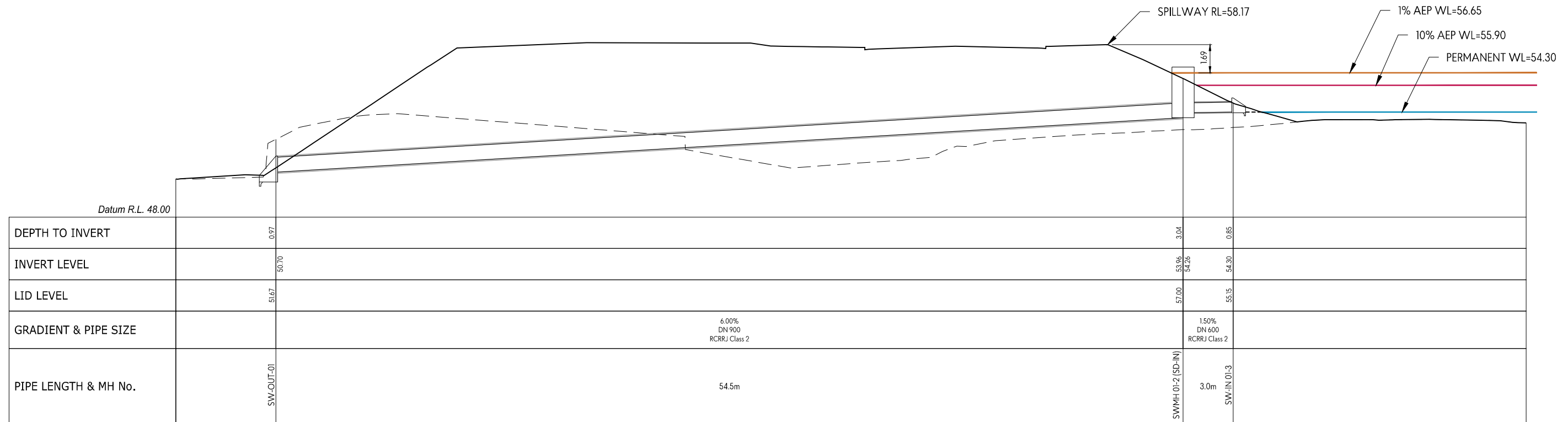
TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND B LAYOUT PLAN



DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:500
 DRAWING No: 4320

REVISION: R2



WETLAND B OUTLET - SW LINE 01

- NOTES:**
- PIPE SIZES SHOWN FOR HYDRAULIC FLOW.
 - FINAL PIPE SIZING AND FISH PASSAGE TO BE DESIGNED AT DETAILED DESIGN (EPA) PHASE.

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REVISIONS:

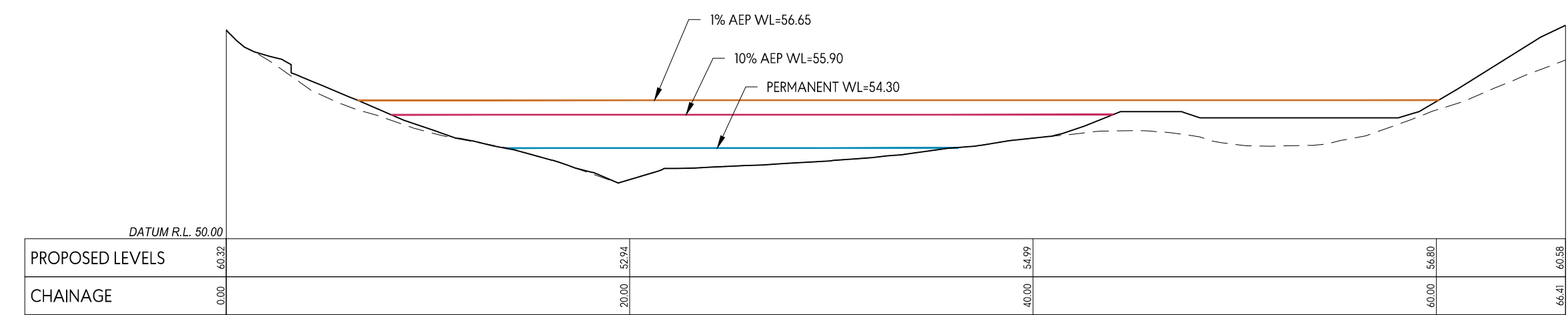
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

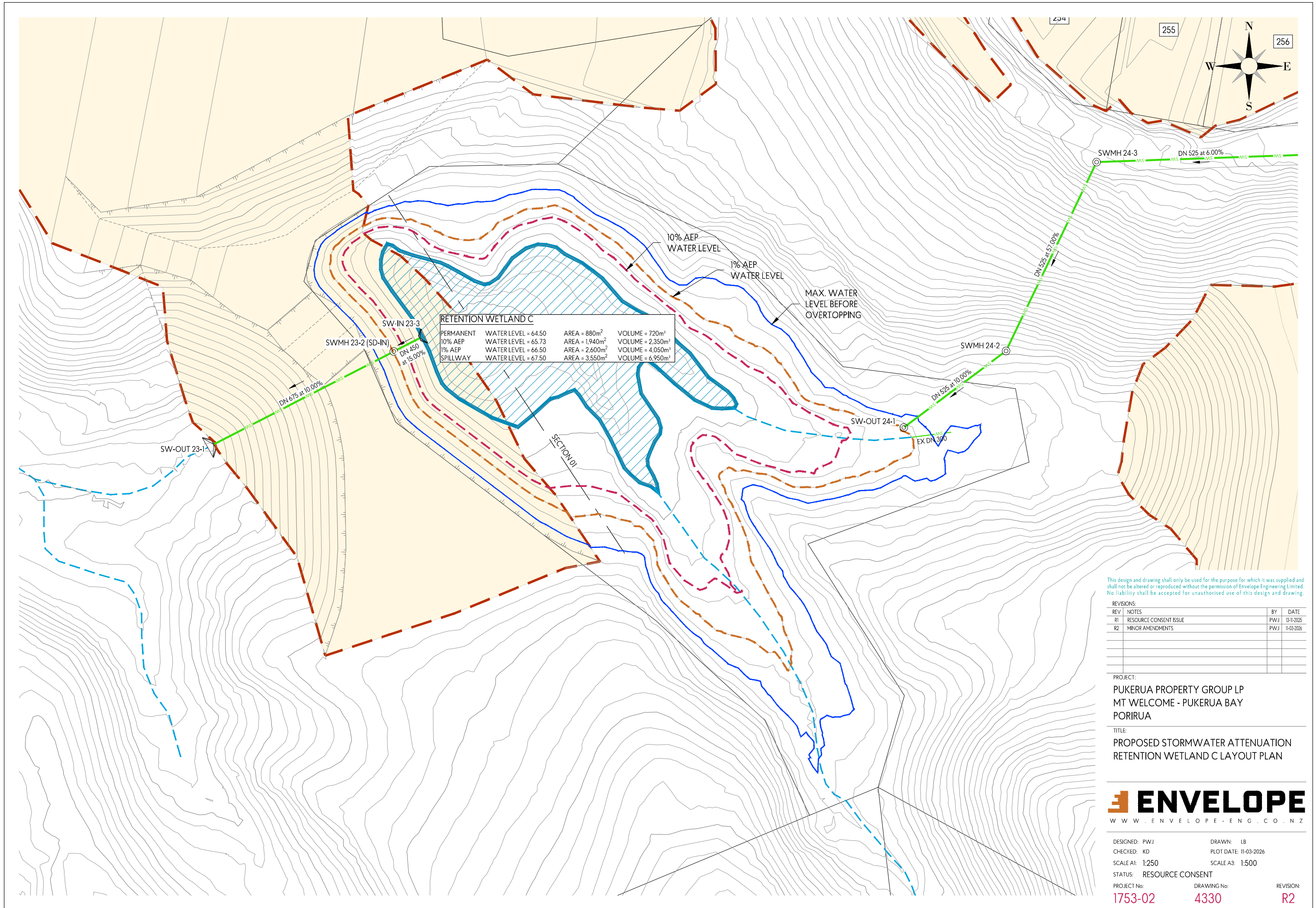
TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND B SECTIONS



DESIGNED: PWJ DRAWN: LB
 CHECKED: KD PLOT DATE: 11-03-2026
 SCALE A1: 1:125 SCALE A3: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02 DRAWING No: 4321 REVISION: R2



WETLAND B SECTION 01



RETENTION WETLAND C			
PERMANENT	WATER LEVEL = 64.50	AREA = 880m ²	VOLUME = 720m ³
10% AEP	WATER LEVEL = 65.73	AREA = 1,940m ²	VOLUME = 2,350m ³
1% AEP	WATER LEVEL = 66.50	AREA = 2,600m ²	VOLUME = 4,050m ³
SPILLWAY	WATER LEVEL = 67.50	AREA = 3,550m ²	VOLUME = 6,950m ³

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REVISIONS:			
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

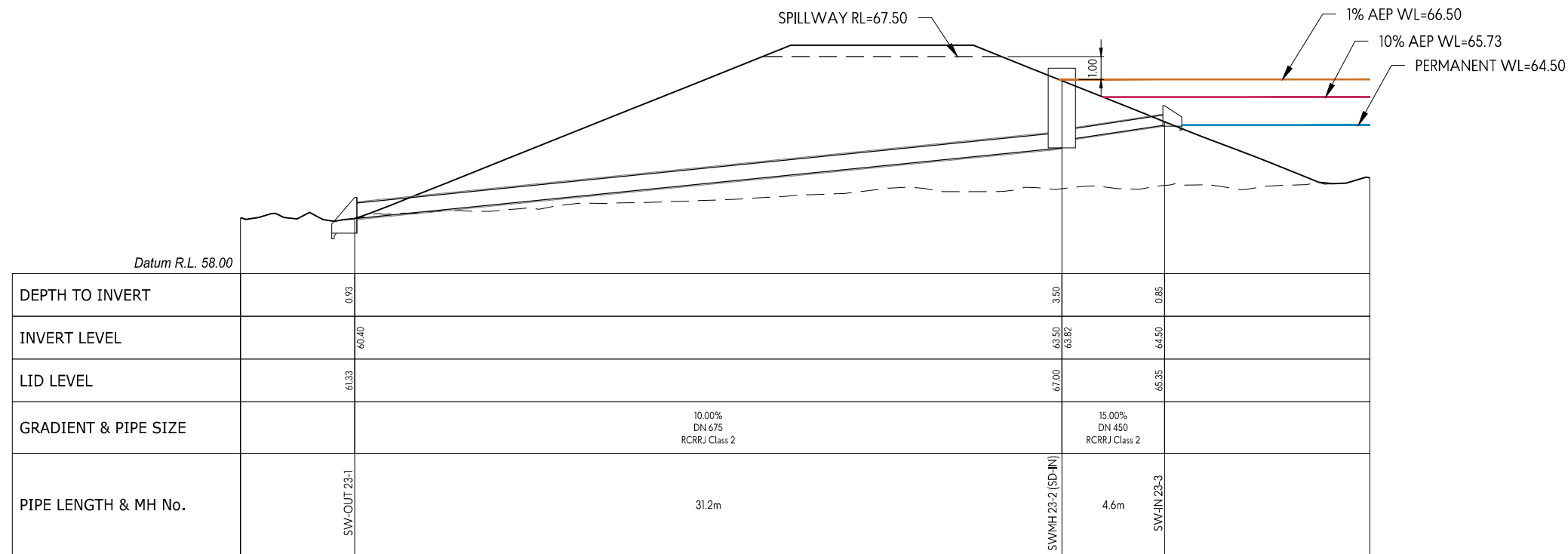
TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND C LAYOUT PLAN



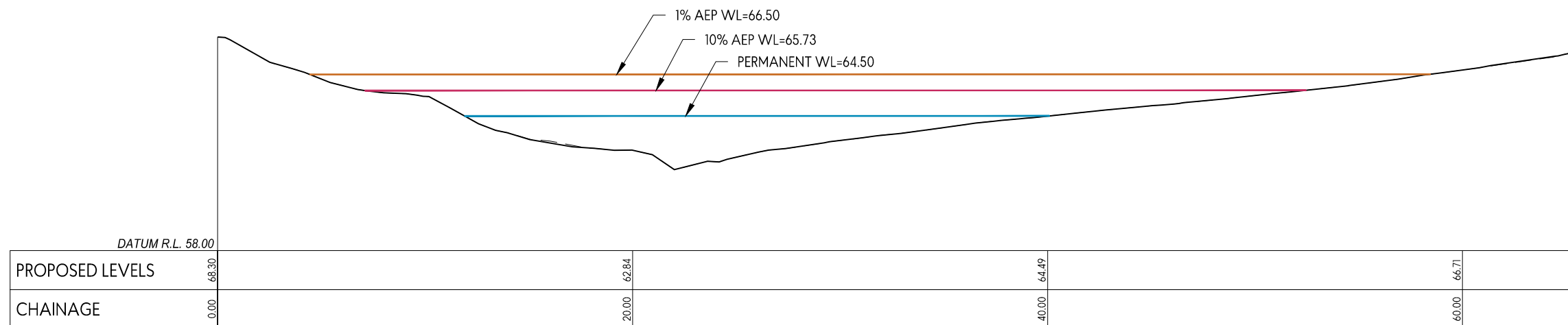
DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:500
 DRAWING No: 4330

REVISION: R2



WETLAND C OUTLET - SW LINE 23



WETLAND C SECTION 01

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

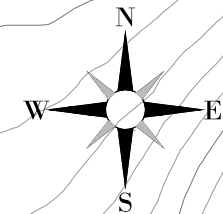
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND C SECTIONS



DESIGNED: PWJ DRAWN: LB
 CHECKED: KD PLOT DATE: 11-03-2026
 SCALE A1: 1:125 SCALE A3: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02 DRAWING No: 4331 REVISION: R2



RETENTION WETLAND D

PERMANENT	WATER LEVEL = 108.80	AREA = 200m ²	VOLUME = 50m ³
10% AEP	WATER LEVEL = 109.17	AREA = 270m ²	VOLUME = 130m ³
1% AEP	WATER LEVEL = 109.36	AREA = 310m ²	VOLUME = 180m ³
SPILLWAY	WATER LEVEL = 109.70	AREA = 395m ²	VOLUME = 261m ³

10% AEP
WATER LEVEL

1% AEP
WATER LEVEL

MAX. WATER
LEVEL BEFORE
OVERTOPPING

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
**PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA**

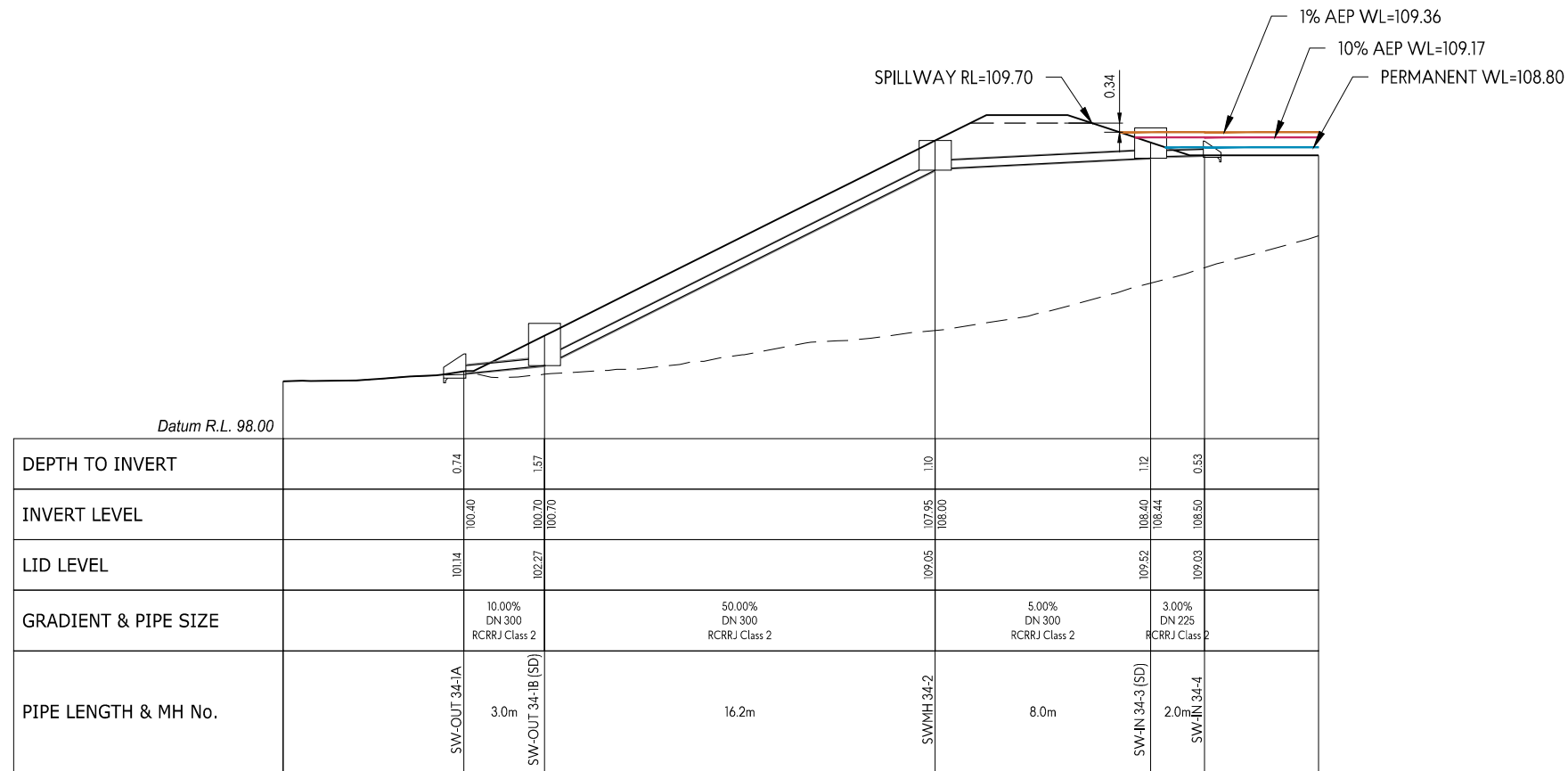
TITLE:
**PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND D LAYOUT PLAN**



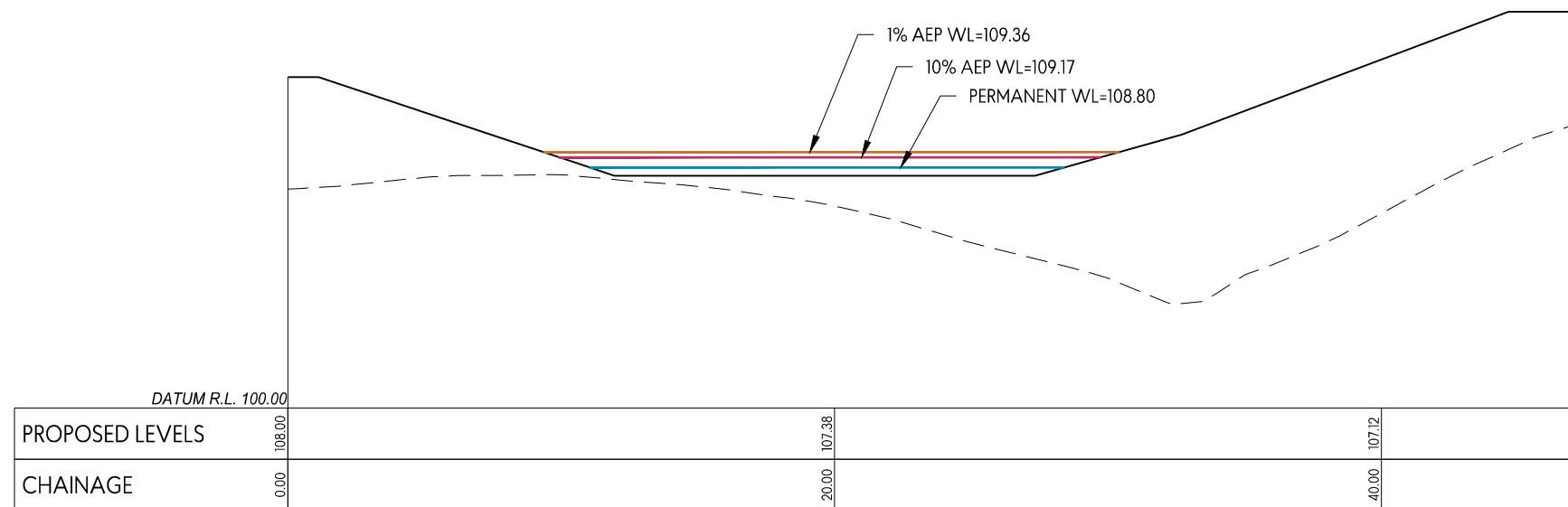
DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: **1753-02**

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:500
 DRAWING No: **4340**

REVISION:
R2



WETLAND D OUTLET - SW LINE 34



WETLAND D SECTION 01

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

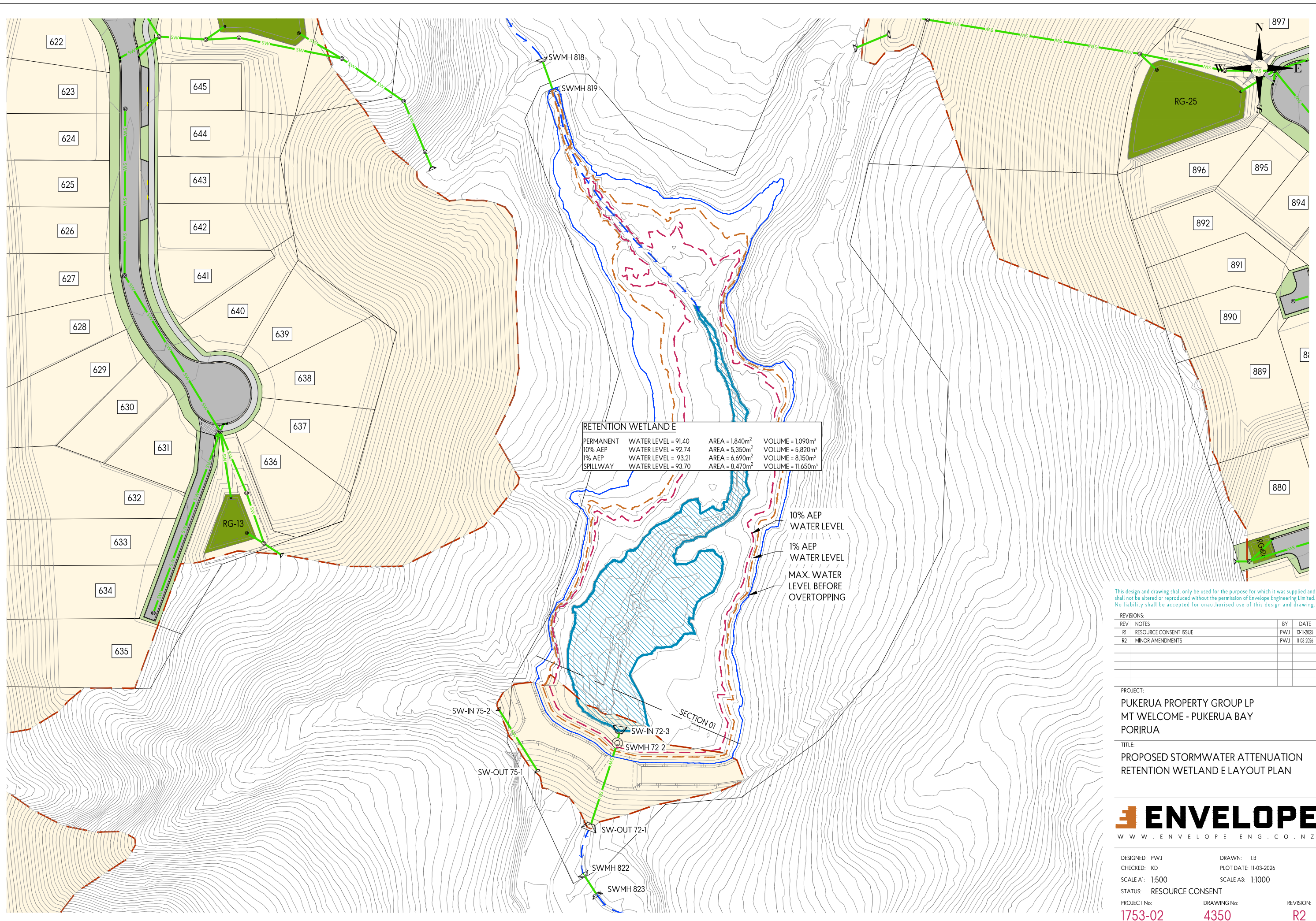
TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND D SECTIONS



DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:125
 STATUS: RESOURCE CONSENT

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:250

PROJECT No: 1753-02
 DRAWING No: 4341
 REVISION: R2



RETENTION WETLAND E			
PERMANENT	WATER LEVEL = 91.40	AREA = 1,840m ²	VOLUME = 1,090m ³
10% AEP	WATER LEVEL = 92.74	AREA = 5,350m ²	VOLUME = 5,820m ³
1% AEP	WATER LEVEL = 93.21	AREA = 6,690m ²	VOLUME = 8,150m ³
SPILLWAY	WATER LEVEL = 93.70	AREA = 8,470m ²	VOLUME = 11,650m ³

10% AEP
WATER LEVEL

1% AEP
WATER LEVEL

MAX. WATER
LEVEL BEFORE
OVERTOPPING

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

REVISIONS:			
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
PUKERUA PROPERTY GROUP LP
MT WELCOME - PUKERUA BAY
PORIRUA

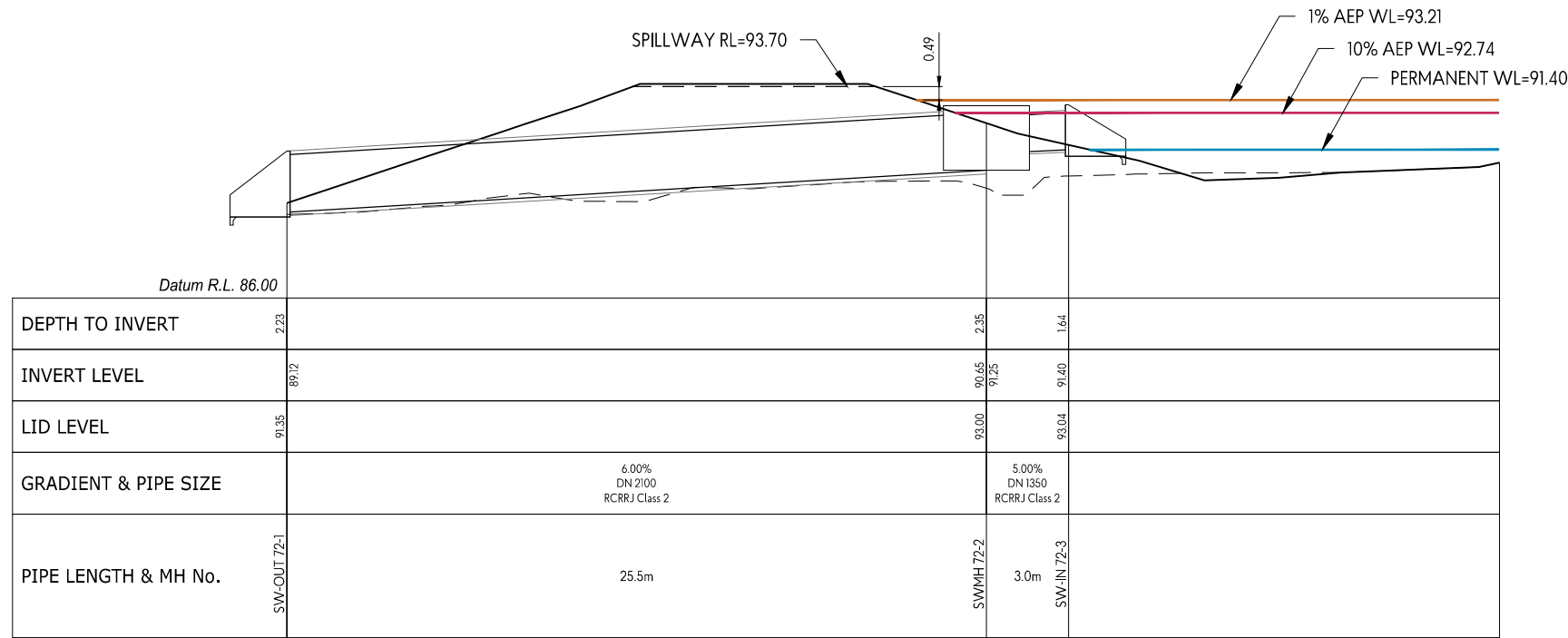
TITLE:
PROPOSED STORMWATER ATTENUATION
RETENTION WETLAND E LAYOUT PLAN



DESIGNED: PWJ
 CHECKED: KD
 SCALE A1: 1:500
 STATUS: RESOURCE CONSENT
 PROJECT No: **1753-02**

DRAWN: LB
 PLOT DATE: 11-03-2026
 SCALE A3: 1:1000
 DRAWING No: **4350**

REVISION: **R2**



WETLAND E OUTLET - SW LINE 72

NOTES:

1. PIPE SIZES SHOWN FOR HYDRAULIC FLOW.
2. FINAL PIPE SIZING AND FISH PASSAGE TO BE DESIGNED AT DETAILED DESIGN (EPA) PHASE.

This design and drawing shall only be used for the purpose for which it was supplied and shall not be altered or reproduced without the permission of Envelope Engineering Limited. No liability shall be accepted for unauthorised use of this design and drawing.

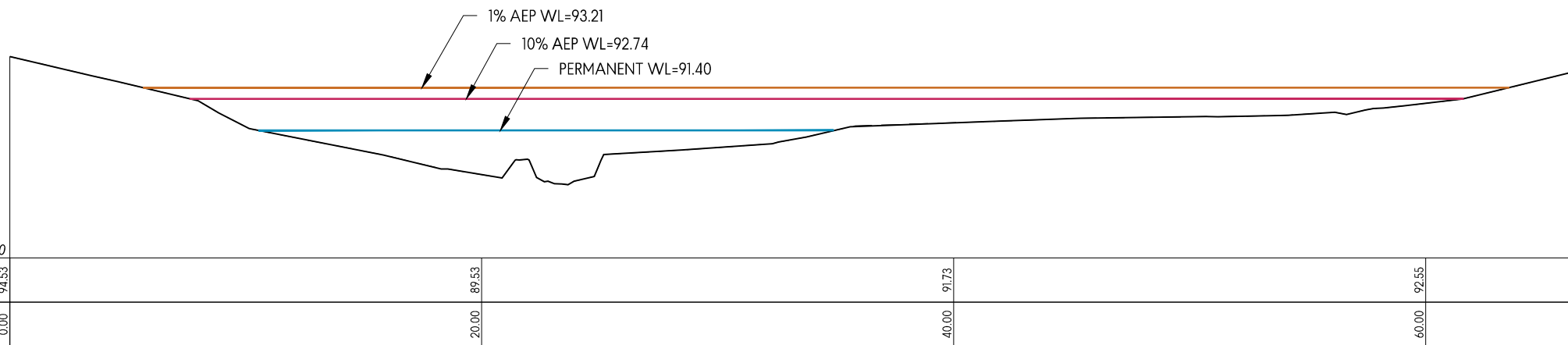
REV	NOTES	BY	DATE
R1	RESOURCE CONSENT ISSUE	PWJ	13-11-2025
R2	MINOR AMENDMENTS	PWJ	11-03-2026

PROJECT:
 PUKERUA PROPERTY GROUP LP
 MT WELCOME - PUKERUA BAY
 PORIRUA

TITLE:
 PROPOSED STORMWATER ATTENUATION
 RETENTION WETLAND E SECTIONS



DESIGNED: PWJ DRAWN: LB
 CHECKED: KD PLOT DATE: 11-03-2026
 SCALE A1: 1:125 SCALE A3: 1:250
 STATUS: RESOURCE CONSENT
 PROJECT No: 1753-02 DRAWING No: 4351 REVISION: R2



WETLAND E SECTION 01