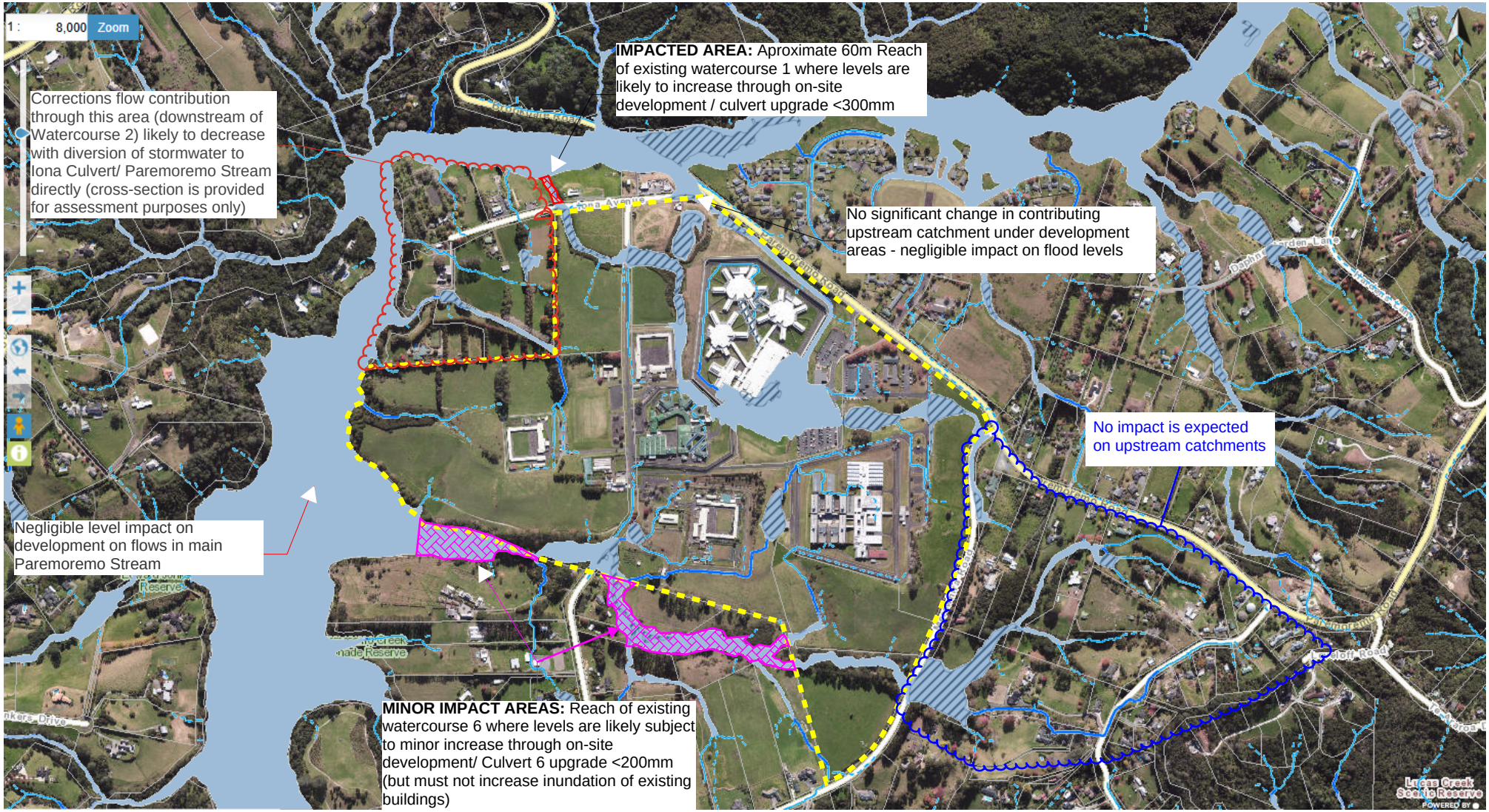


Image Source: Auckland Council GIS (25Sep26)

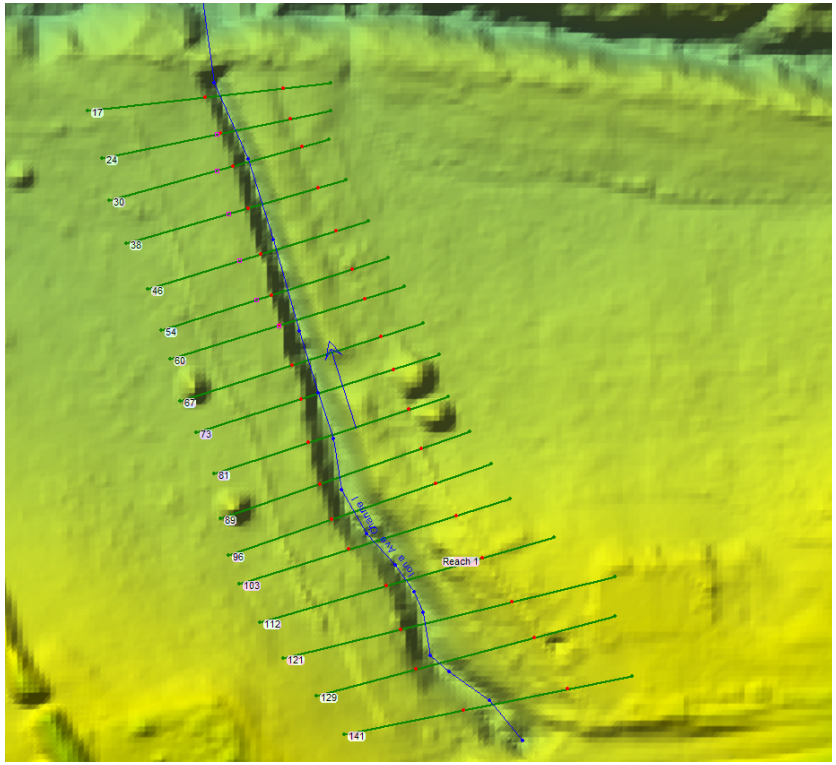
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Auckland Prison

Overview of Areas of Influence - Flood Plain

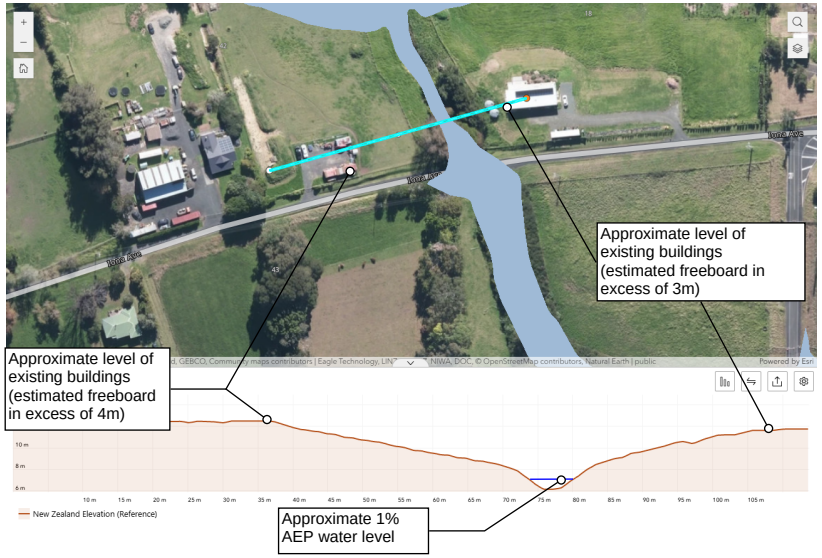
25/09/2026

WATERCOURSE 1 - ESTIMATED WATER LEVELS DOWNSTREAM OF IONA AVENUE



Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Reach 1	141	Existing	5.95	6.79	7.40	7.40	7.61	0.022200	2.02	2.95	7.22	1.01
Reach 1	141	Proposed	8.73	6.79	7.53	7.53	7.78	0.020822	2.24	3.91	7.89	1.01
Reach 1	129	Existing	5.95	5.95	7.05		7.16	0.014016	1.45	4.10	6.02	0.56
Reach 1	129	Proposed	8.73	5.95	7.27		7.40	0.013472	1.58	5.51	6.88	0.56
Reach 1	121	Existing	5.95	5.90	6.93		7.04	0.015105	1.48	4.01	6.05	0.58
Reach 1	121	Proposed	8.73	5.90	7.17		7.29	0.013261	1.58	5.51	6.75	0.56
Reach 1	112	Existing	5.95	5.45	6.62		6.85	0.031899	2.09	2.84	4.14	0.81
Reach 1	112	Proposed	8.73	5.45	6.80	6.72	7.10	0.035731	2.40	3.63	4.66	0.87
Reach 1	103	Existing	5.95	5.44	6.63		6.69	0.006270	1.05	5.67	7.53	0.39
Reach 1	103	Proposed	8.73	5.44	6.84		6.92	0.006541	1.19	7.34	8.29	0.40
Reach 1	96	Existing	5.95	5.55	6.52		6.62	0.015223	1.39	4.27	7.23	0.58
Reach 1	96	Proposed	8.73	5.55	6.74		6.85	0.012518	1.47	5.94	7.96	0.54
Reach 1	89	Existing	5.95	5.28	6.48		6.54	0.007349	1.15	5.17	6.60	0.41
Reach 1	89	Proposed	8.73	5.28	6.69		6.78	0.007705	1.31	6.68	7.19	0.43
Reach 1	81	Existing	5.95	5.25	6.40		6.48	0.009188	1.25	4.78	6.43	0.46
Reach 1	81	Proposed	8.73	5.25	6.61		6.71	0.009493	1.40	6.23	7.16	0.48





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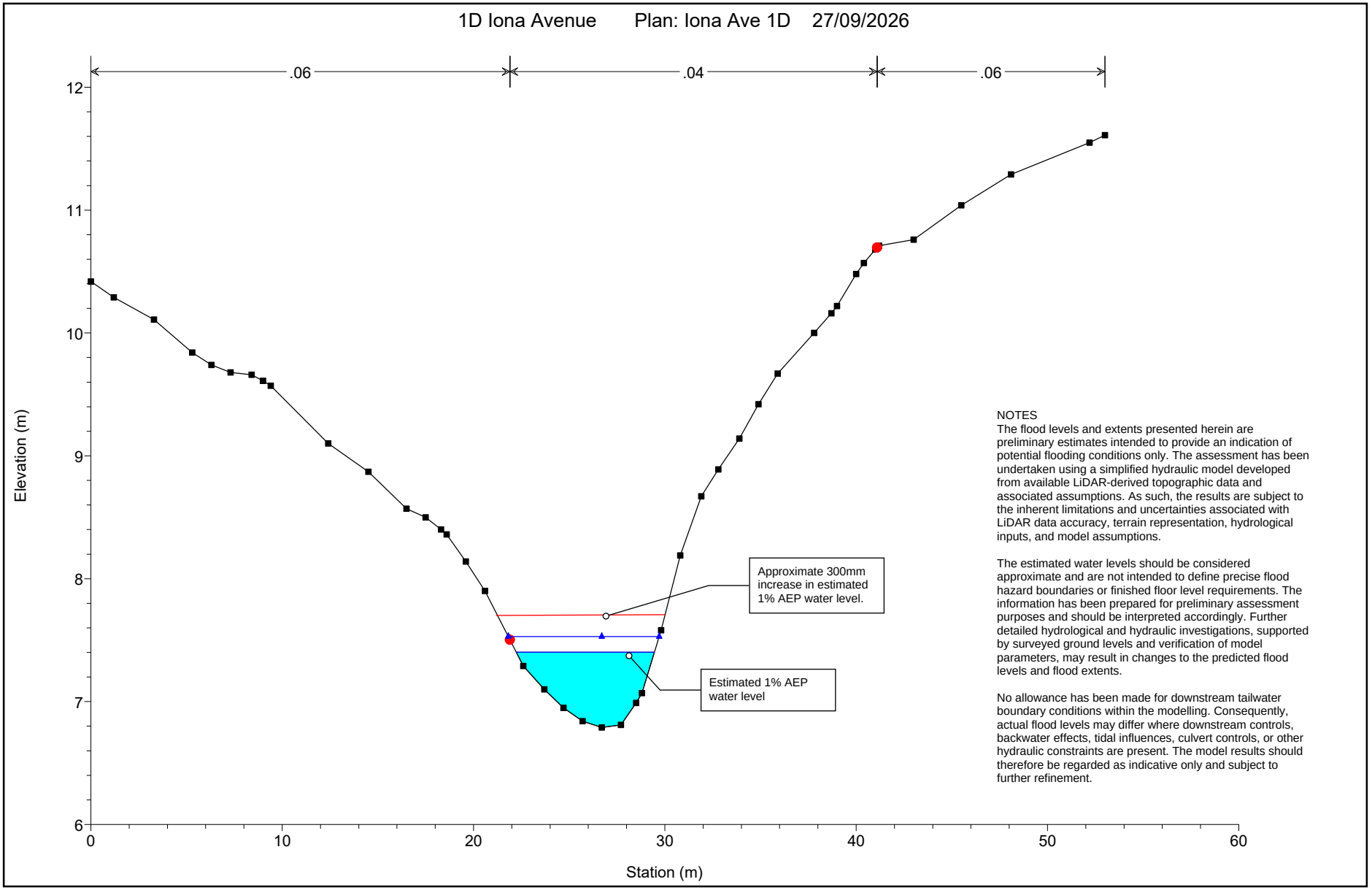
The flood levels and extents presented herein are preliminary estimates intended to provide an indication of potential flooding conditions only. The assessment has been undertaken using a simplified hydraulic model developed from available LiDAR-derived topographic data and associated assumptions. As such, the results are subject to the inherent limitations and uncertainties associated with LiDAR data accuracy, terrain representation, hydrological inputs, and model assumptions.

The estimated water levels should be considered approximate and are not intended to define precise flood hazard boundaries or finished floor level requirements. The information has been prepared for preliminary assessment purposes and should be interpreted accordingly. Further detailed hydrological and hydraulic investigations, supported by surveyed ground levels and verification of model parameters, may result in changes to the predicted flood levels and flood extents.

No allowance has been made for downstream tailwater boundary conditions within the modelling. Consequently, actual flood levels may differ where downstream controls, backwater effects, tidal influences, culvert controls, or other hydraulic constraints are present. The model results should therefore be regarded as indicative only and subject to further refinement.

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Cross Section 141



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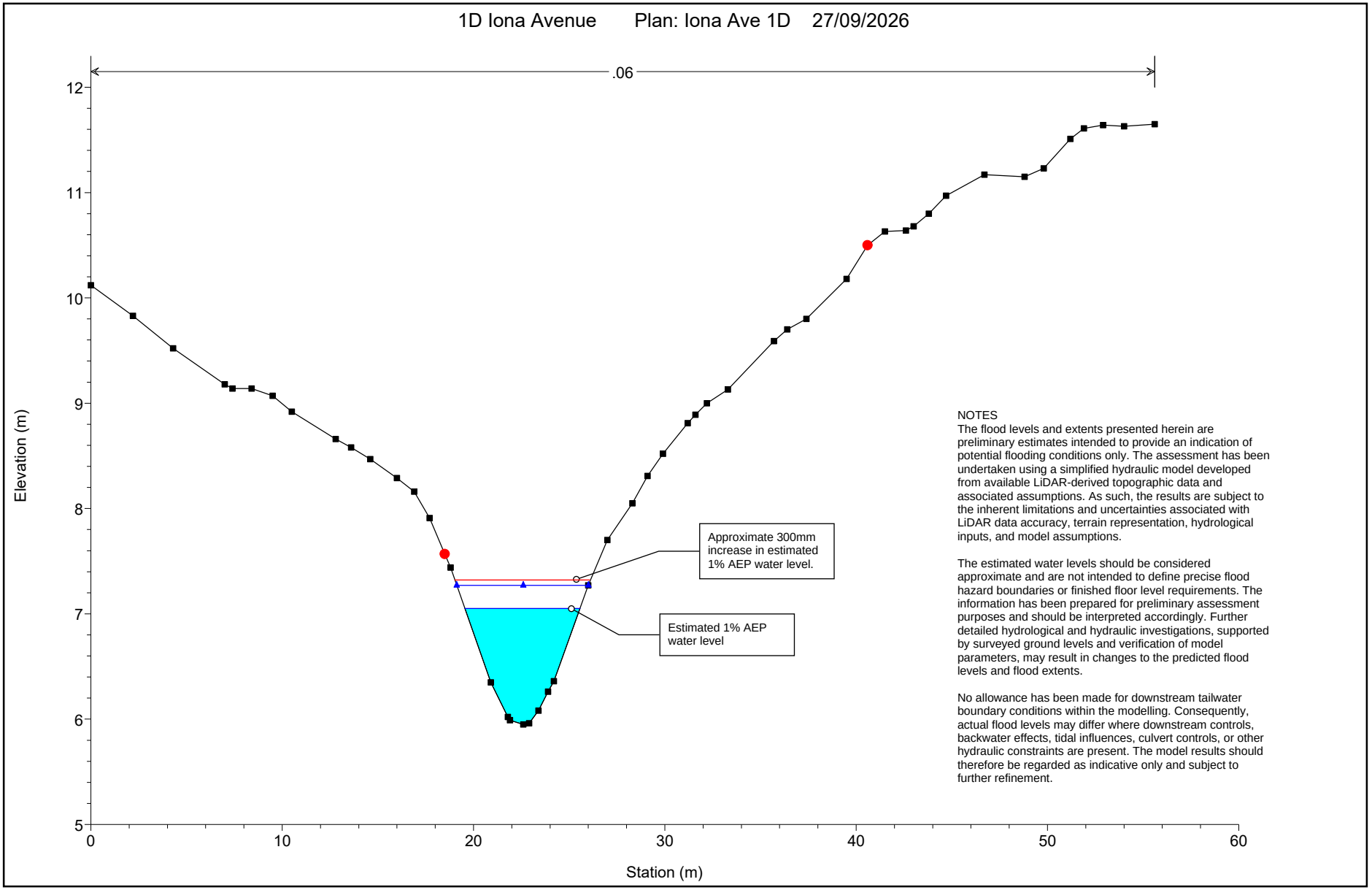
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Cross Section 129

1D Iona Avenue Plan: Iona Ave 1D 27/09/2026



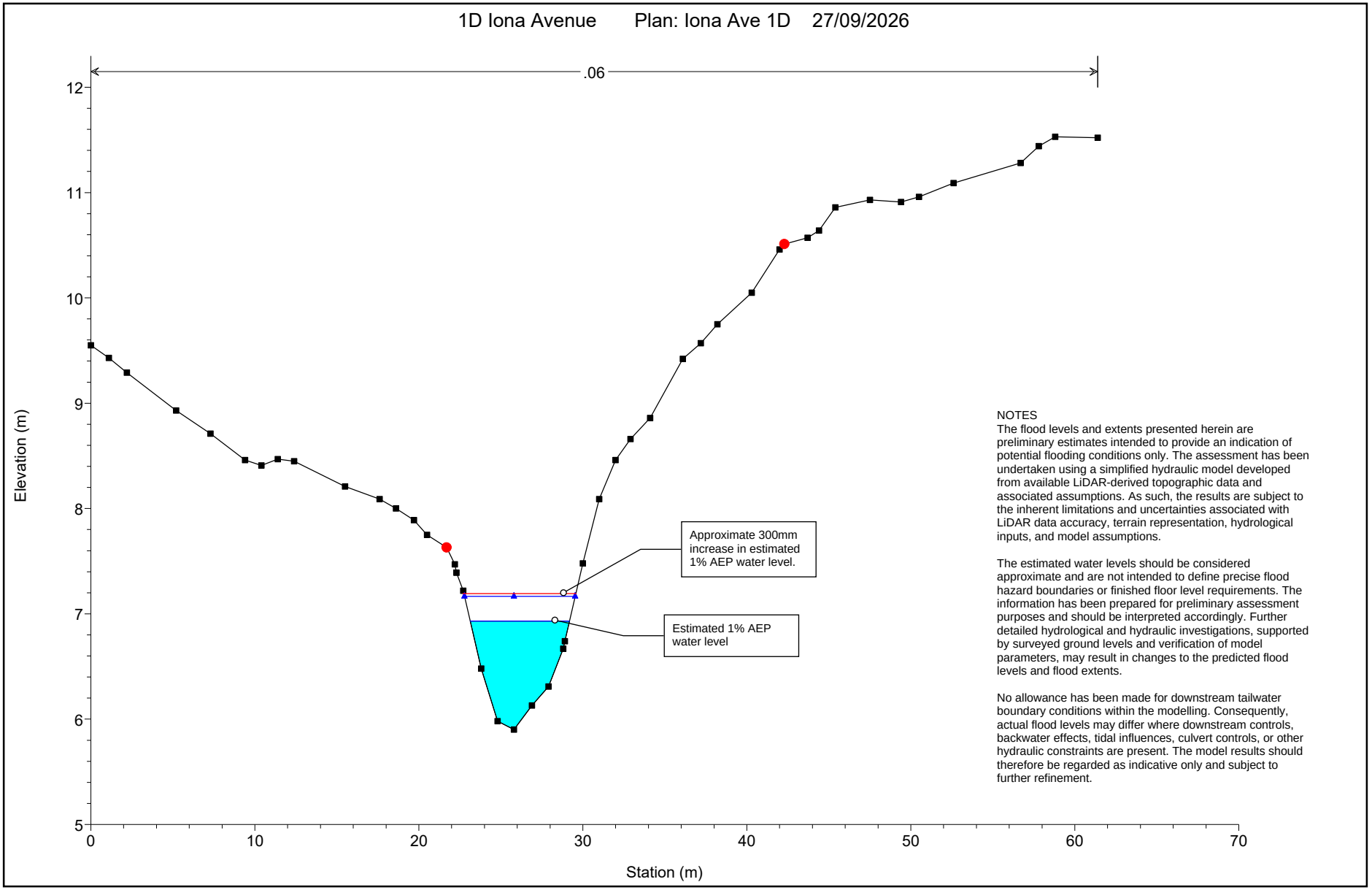
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Cross Section 112



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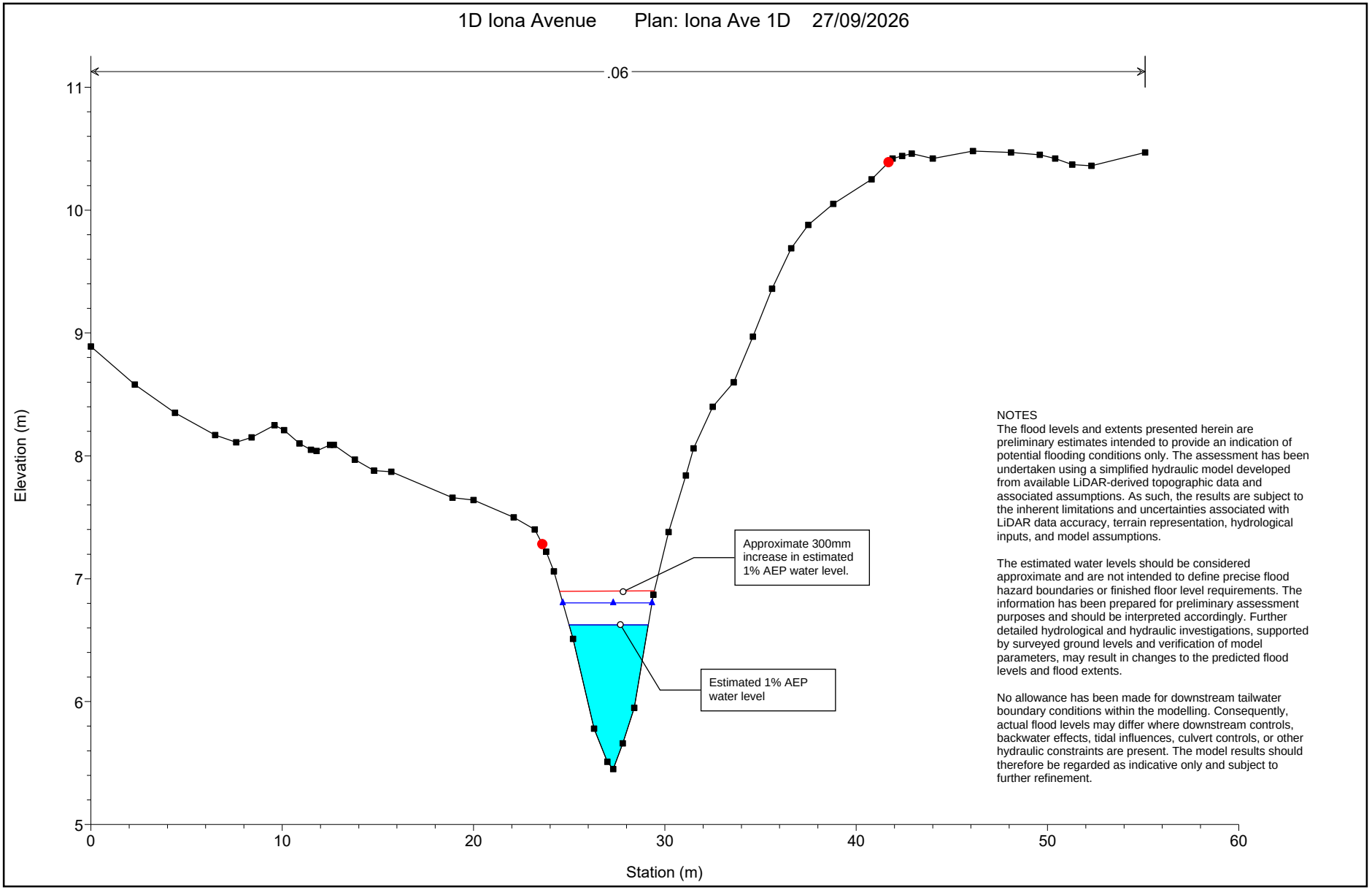
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Cross Section 103

1D Iona Avenue Plan: Iona Ave 1D 27/09/2026



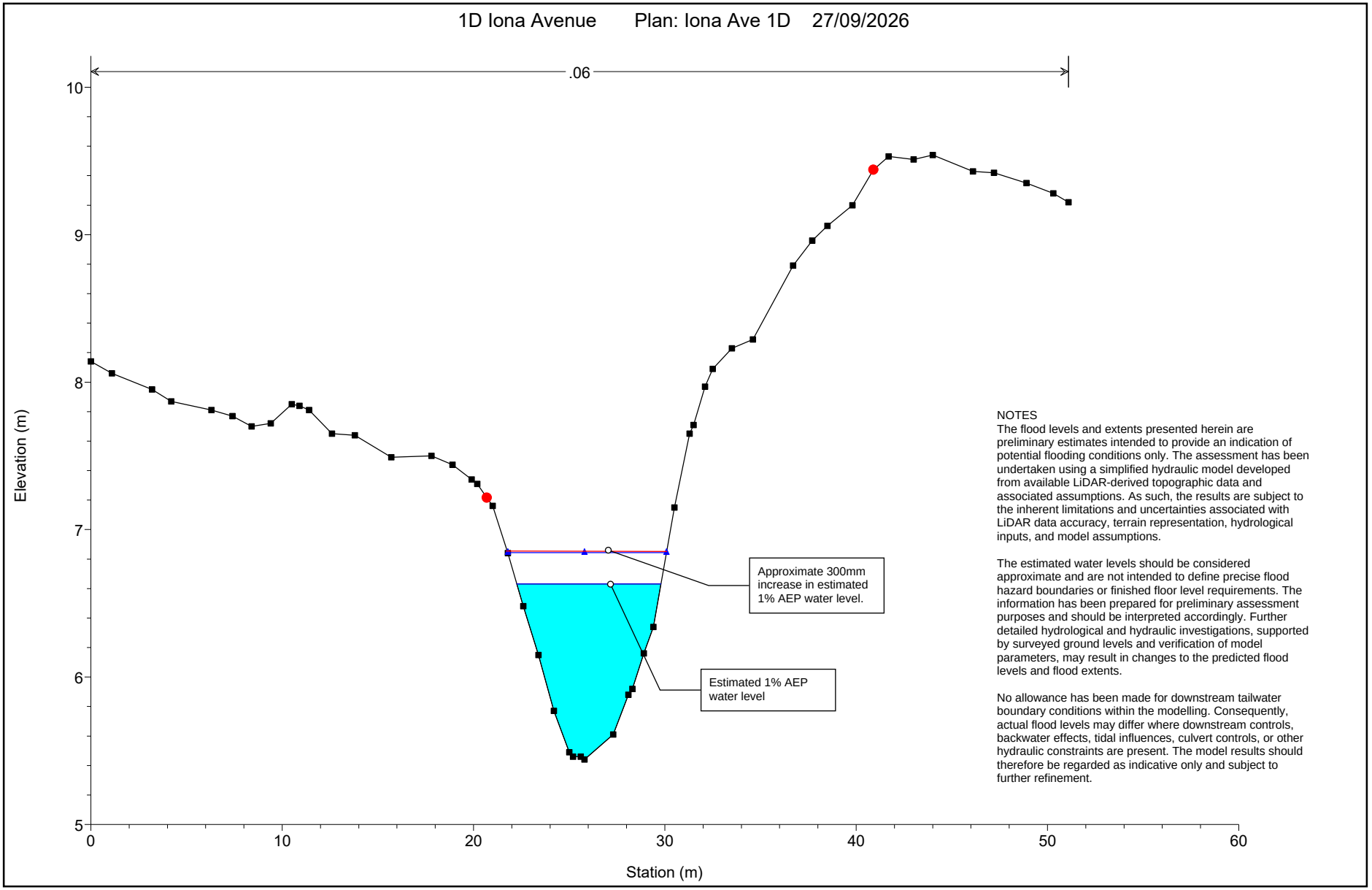
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Cross Section 96



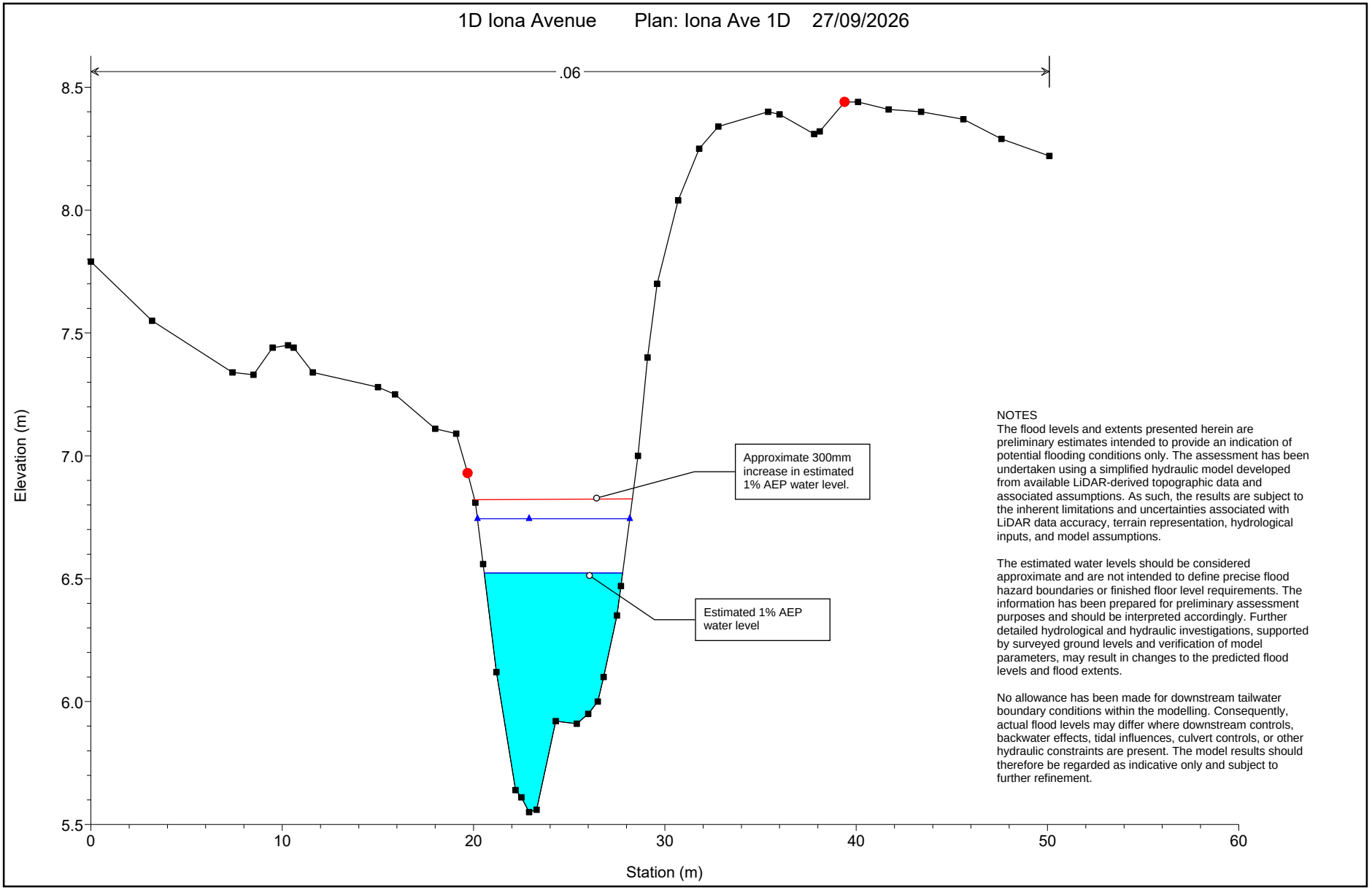
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Cross Section 89



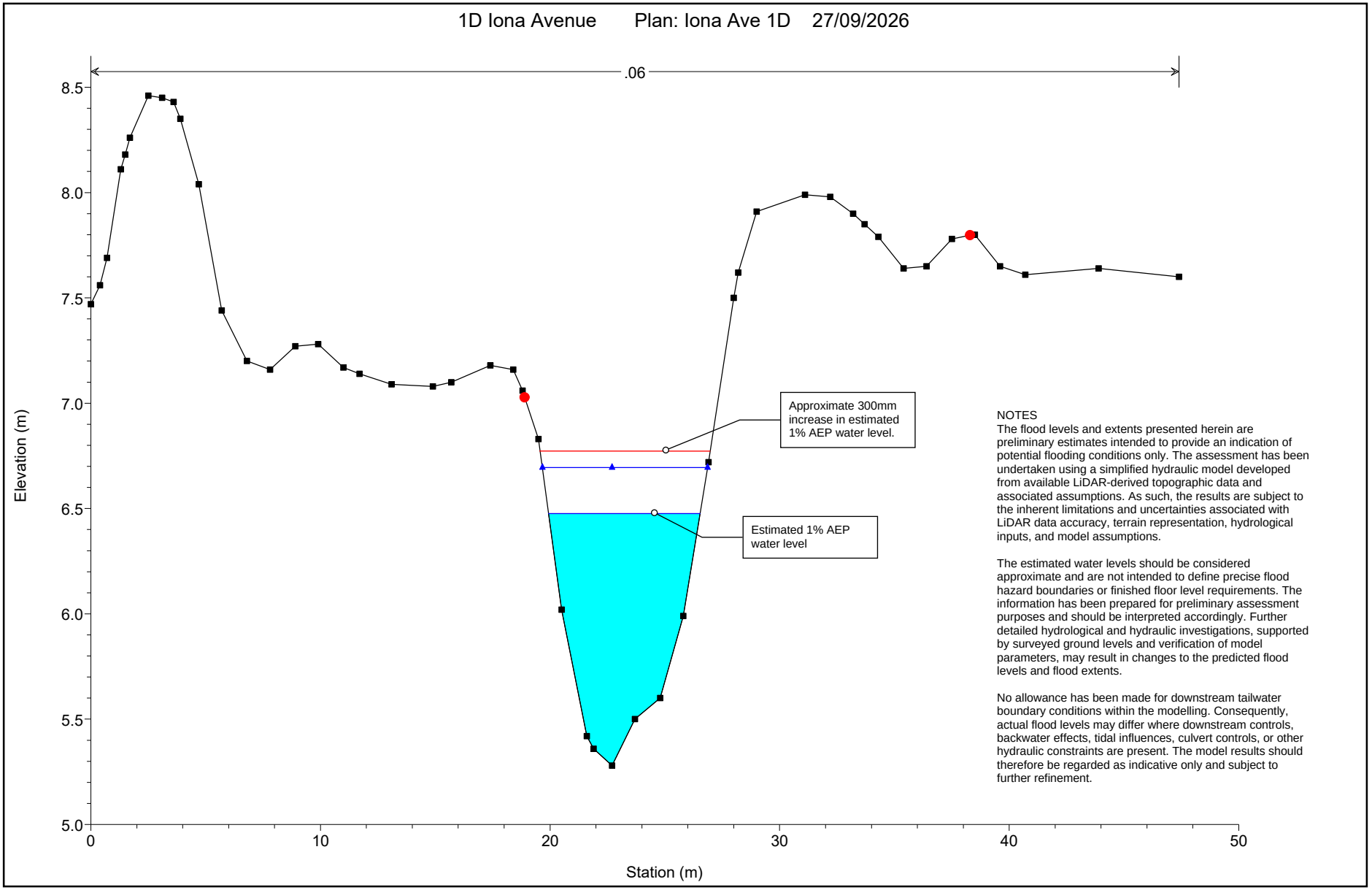
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Cross Section 81



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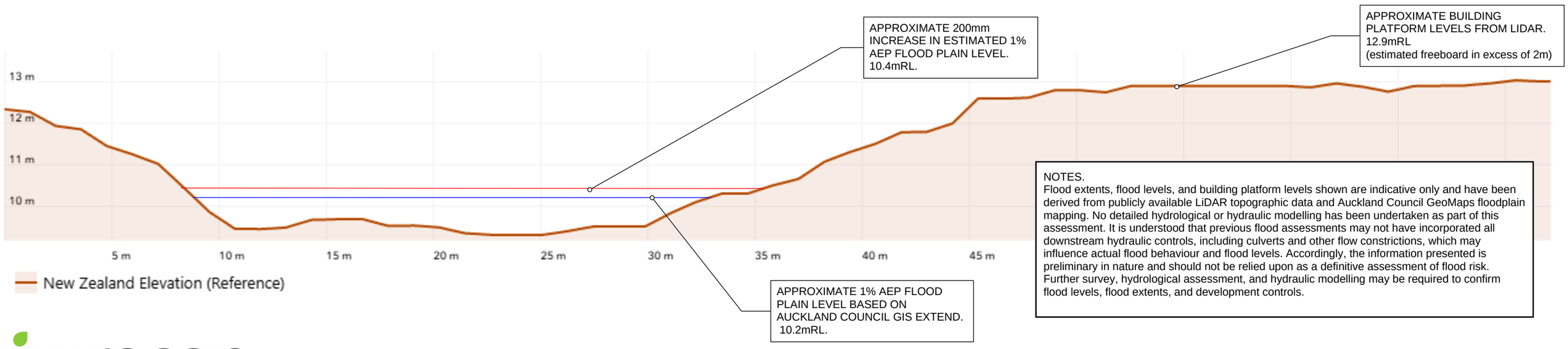
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WATERCOURSE 2 - ESTIMATED WATER LEVELS AT NO. 61 IONA AVENUE





NOTES.
Flood extents, flood levels, and building platform levels shown are indicative only and have been derived from publicly available LiDAR topographic data and Auckland Council GeoMaps floodplain mapping. No detailed hydrological or hydraulic modelling has been undertaken as part of this assessment. It is understood that previous flood assessments may not have incorporated all downstream hydraulic controls, including culverts and other flow constrictions, which may influence actual flood behaviour and flood levels. Accordingly, the information presented is preliminary in nature and should not be relied upon as a definitive assessment of flood risk. Further survey, hydrological assessment, and hydraulic modelling may be required to confirm flood levels, flood extents, and development controls.

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