

Flood Assessment for Three Trout's River Housing Site

C Fram Map indicating no significant flood risk to site.



Barry's Flood Study Report - Tables on Hydraulic Design for Stream

Table 4.1 – Channel Elevation

Section Reference	Cumulative Channel Length (m)	Minimum Channel Elevation (mAOD)
1	0	0.113
2	60	0.86
3	72	1.7
4	90	1.75
5	185	2.23
6	255	2.56
7	268	3.074
8	282	3.02
9	628	4.9
10	766	6.604
11	810	6.72
12	968	7.791
13	1165	9.7
14	1215	10.927
15	1541	14.16
16	1597	14.4
17	1757	16.28
18	2050	20.268
19	2164	20.97
20	2811	28.17
21	3228	34.03
22	3381	35.81
23	3526	37.58
24	3580	38.34
25	4407	52.2
26	4517	53.14
27	4567	53.14

Figure 4.2 – 100 year fluvial, 5 year tide long section including climate change (no scheme)
 Three Trout SepRev Plan: Plan 08 04/11/2009

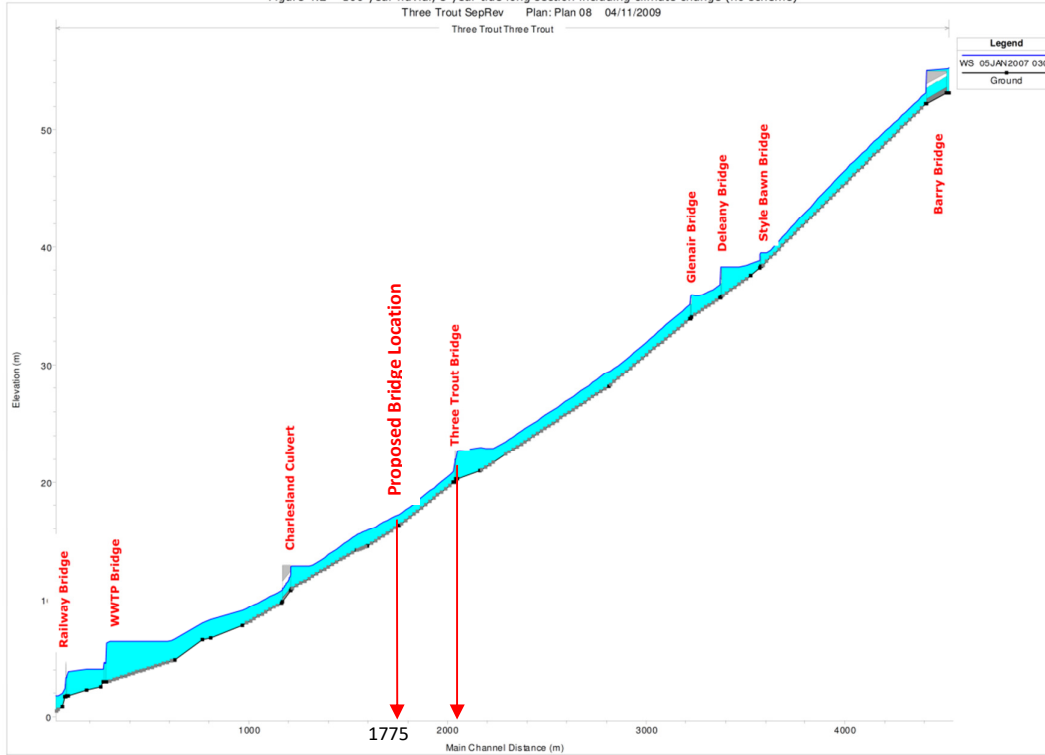


Table 4.1 – Predicted flood levels, including climate change

Model Node	Water Level (m OD) (Existing Floodplain Development)				Water level (mOD) (Development Plan Riparian Corridor)
	100yr Fluvial 5yr Tide	50yr Fluvial 5yr Tide	30yr Fluvial 5yr Tide	5yr Fluvial 200yr Tide	100yr Fluvial 5yr Tide
1	2.25	2.25	2.25	2.74	2.25
2	2.24	2.24	2.24	2.74	2.24
3	2.48	2.46	2.44	2.7	2.52
4	3.48	3.37	3.27	2.87	3.91
5	3.77	3.68	3.61	3.43	4.22
6	3.94	3.91	3.88	3.8	4.25
7	4.02	3.97	3.94	3.86	4.28
8	5.89	5.64	5.41	4.42	6.33
9	6.62	6.57	6.52	6.22	6.99
10	8.02	7.96	7.91	7.72	8.01
11	8.32	8.25	8.2	8.04	8.34
12	9.04	8.95	8.89	8.69	9.03
13	10.77	10.71	10.67	10.5	10.79
14	12.86	12.69	12.59	12.19	12.86
15	15.46	15.41	15.36	15.17	15.4
16	15.88	15.83	15.79	15.64	15.98
17	17.27	17.23	17.2	17.07	17.27
18	22.76	22.55	22.39	21.83	22.76
19	22.99	22.79	22.65	22.16	22.99
20	29.49	29.42	29.36	29.14	29.49
21	35.96	35.9	35.85	35.64	35.96
22	38.35	38.3	38.25	37.46	38.35
23	38.62	38.58	38.56	38.44	38.71
24	39.51	39.48	39.46	39.37	39.51
25	53.15	53.09	53.04	52.86	53.15
26	55.19	55.11	55.02	54.64	55.19
27	55.25	55.17	55.08	54.69	55.25

Design Rationale Based on Flood Study Report

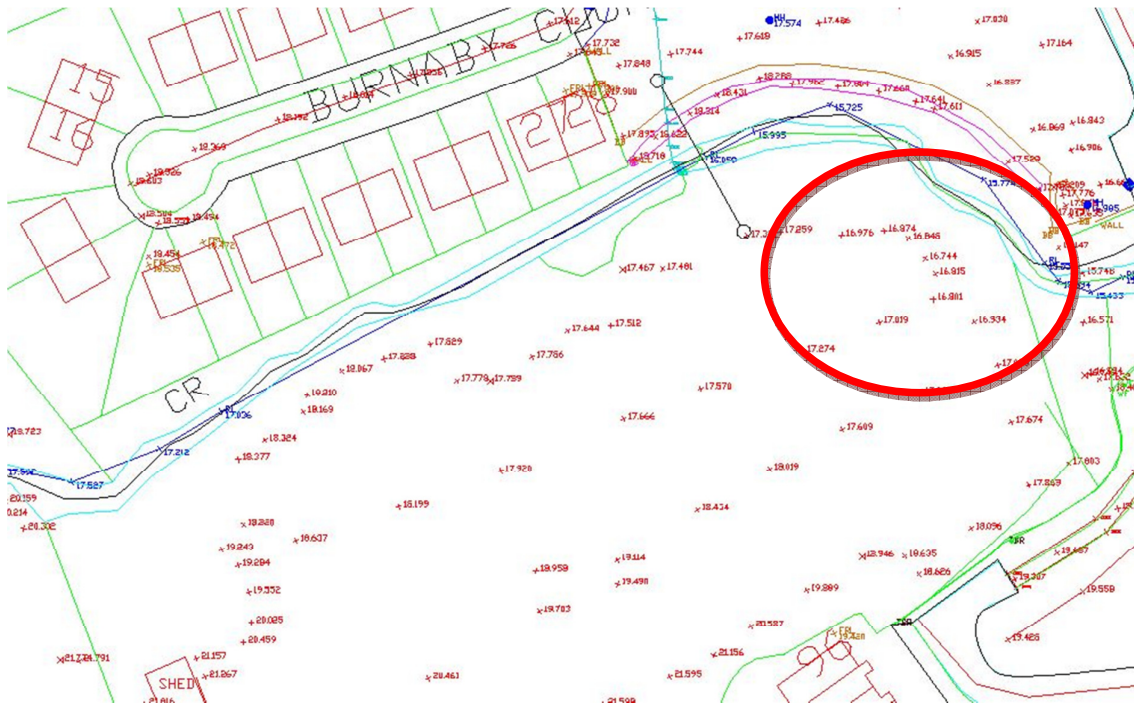
Node 18: 3 Trouts Bridge Ch 2050

Node 17: Burnabury Court Ch 1757 17m downstream of proposed bridge c/L

Flood Event Level 17.27m (taken from table)

Freeboard 0.3m (taken from Barry's report on WWTP Bridge Site)

Soffit level of Bridge 17.57m



John Reidy Topo Survey Indicating site levels. Note: Area on North East of site may be prone to flooding as site levels are below 17.27m in pocket bounding river bend. This could be mitigated by construction of landscaped earthen bank on this corner of the site. However, the CFRAM indicated only a small area of this portion of the site at flood risk?