

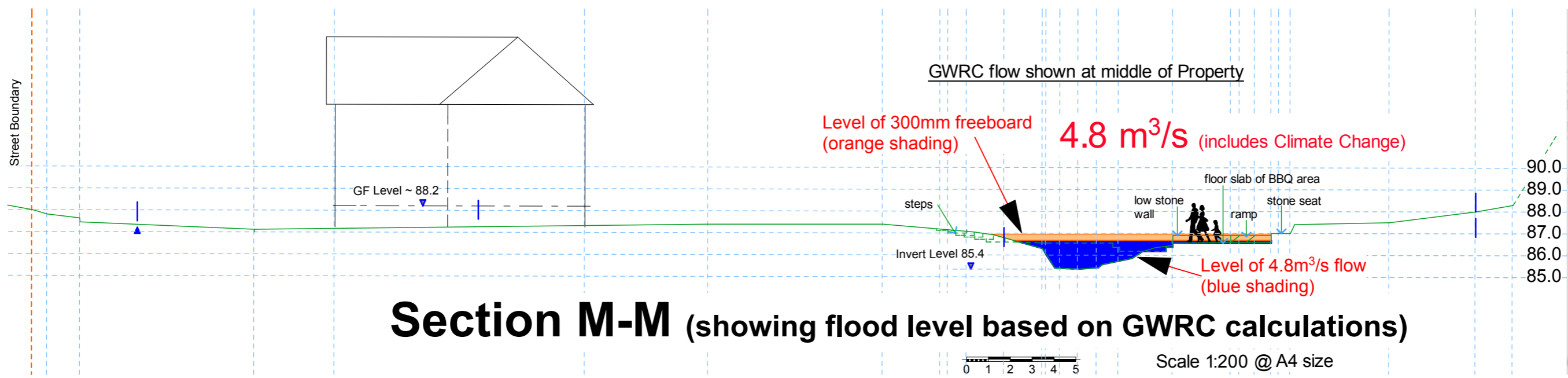
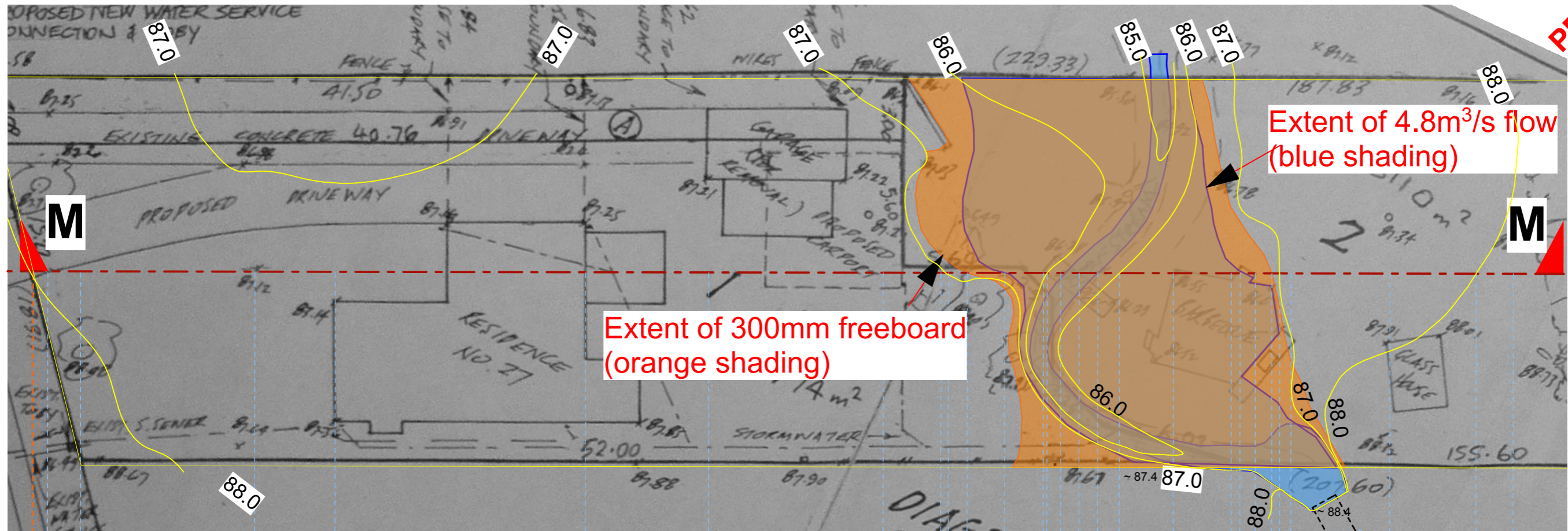
GWRC Pinehaven Stream Flood Calculations for All Sub-Catchments (includes Climate Change)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2.534386	3.070882	1.606346	2.135655	2.250476	2.718146	1.776157	1.892866	0.964157	1.514168	1.635654	1.22115	0.761737	0.875657	1.196021

GWRC spreadsheet shows the discharge for sub-catchments A + F = 5.25 m<sup>3</sup>/s (which includes climate change).

Based on MWH / GWRC calculations the 1/100 yr flow at 27 Elmslie Rd is approx.:  
 100ha / 109 ha x 5.25 m<sup>3</sup>/s = **4.8 m<sup>3</sup>/s**  
 (which includes climate change)

**PRELIMINARY**



**Section M-M (showing flood level based on GWRC calculations)**

Secton MM (through middle of 27 Elmslie Road)

#Architect Full Address  
 PHONE: #Architect Phone Number  
 FAX: #Architect Fax  
 #Architect E-mail  
 #Architect Web

**CASE STUDY 1: based on GWRC CALCULATIONS**  
 Cross-Section of GWRC Calculations  
 27 Elmslie Road, Pinehaven

SHEET TITLE: Case Study 1\_Calcs  
 REVISION #:  
 ISSUED: 23/12/14 #Pin  
 PROJECT #:  
**1**