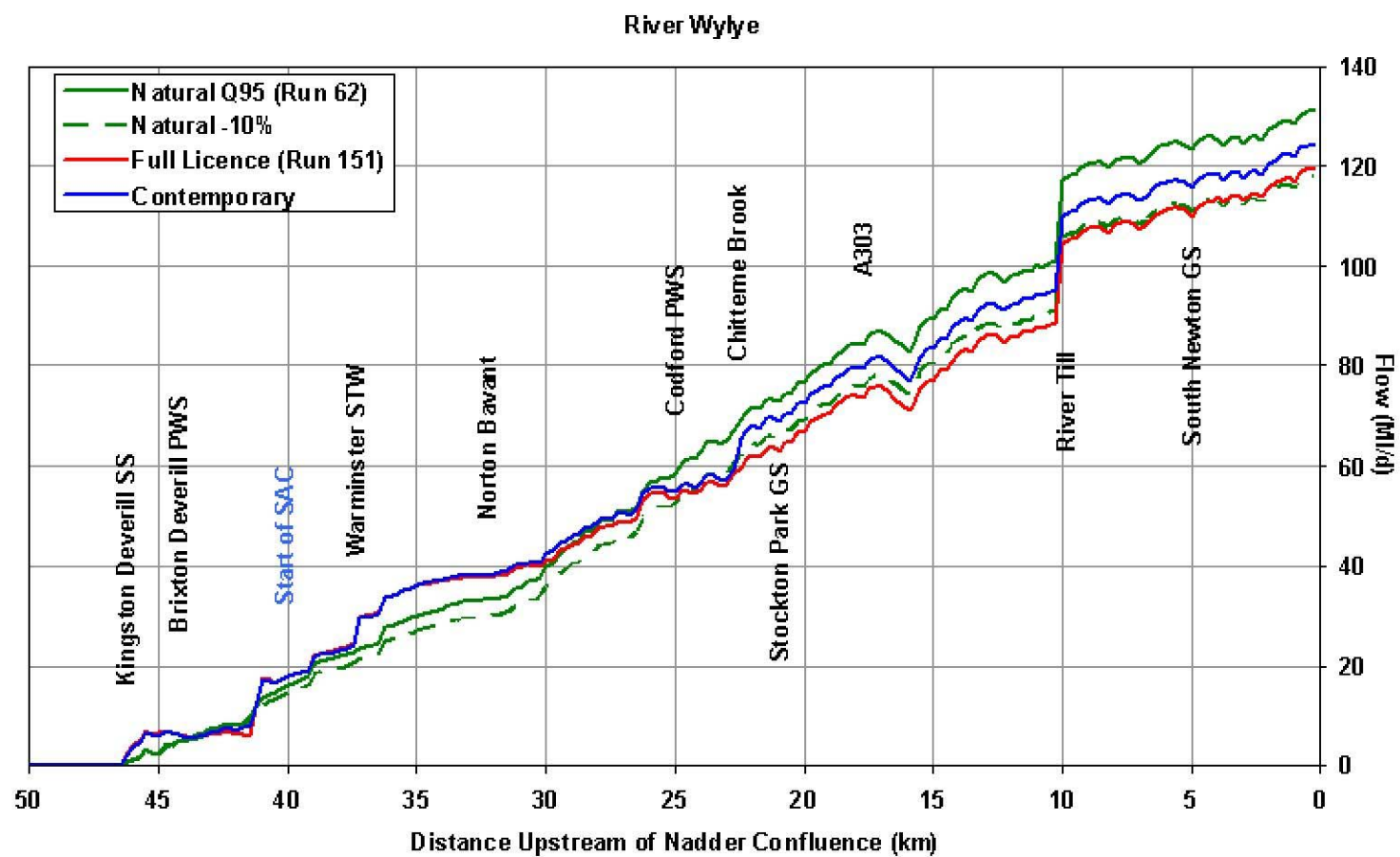
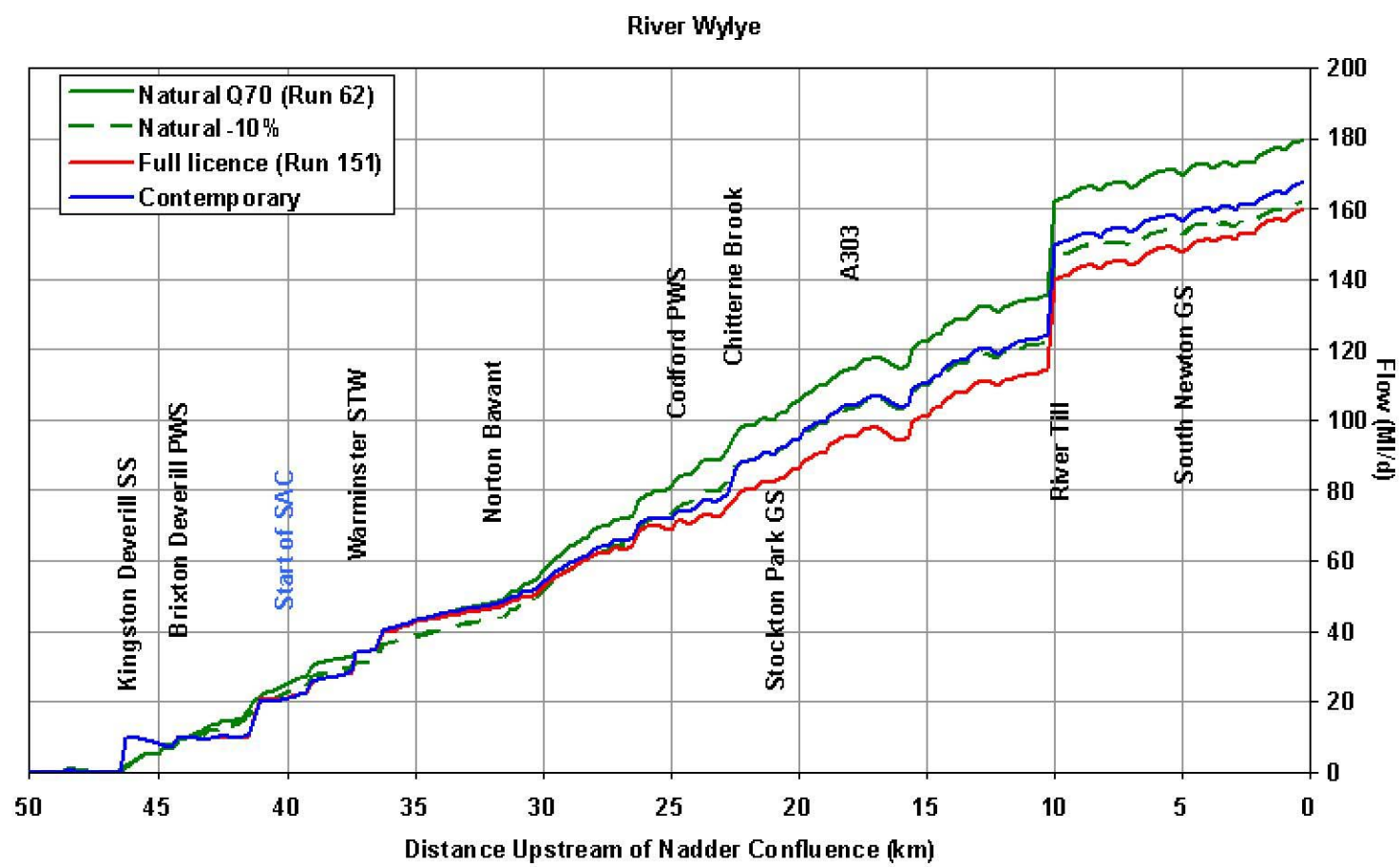
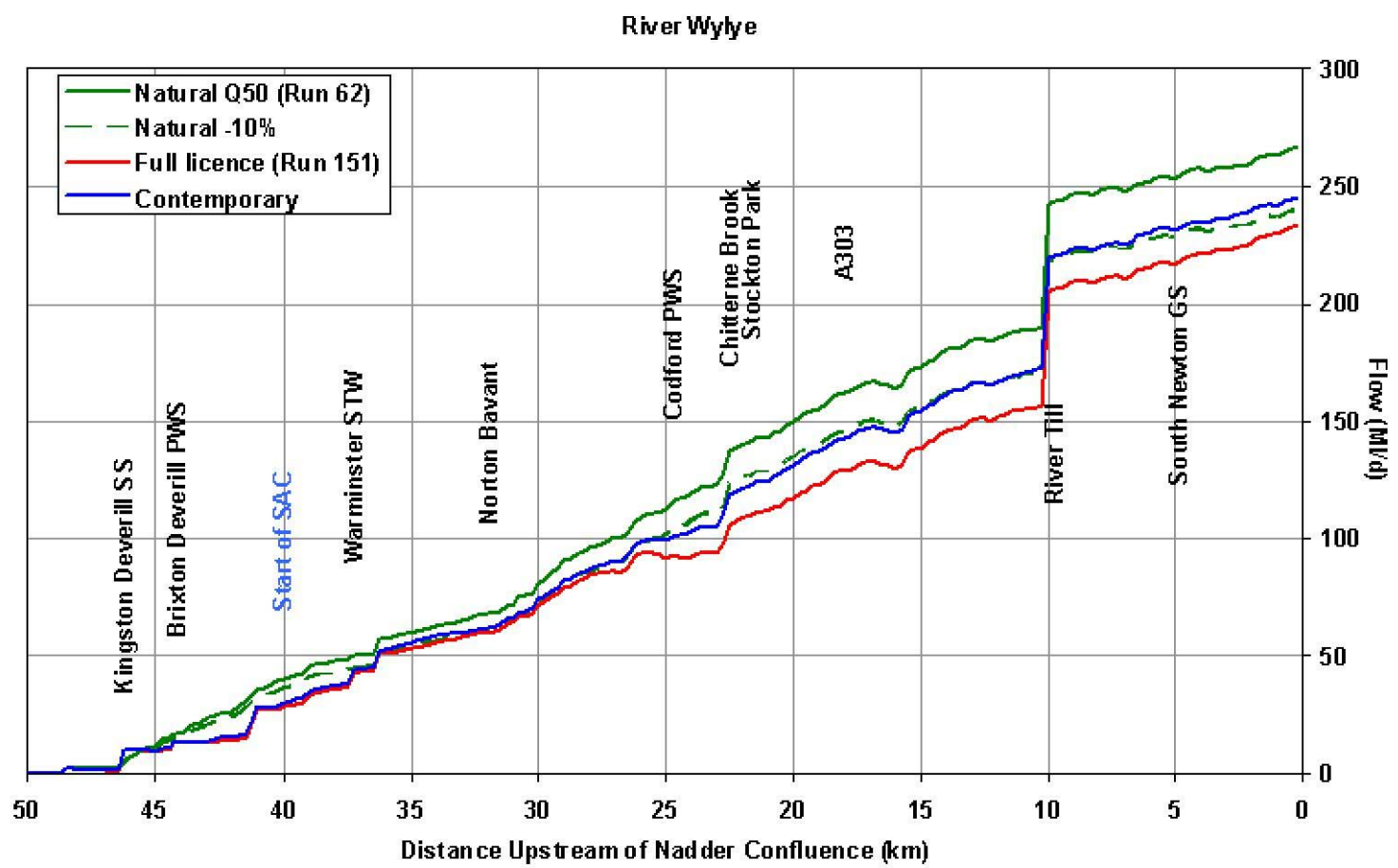


U:\52205\ACAD\Z - Working Drawings\0211-DV52205-DVD-01.dwg



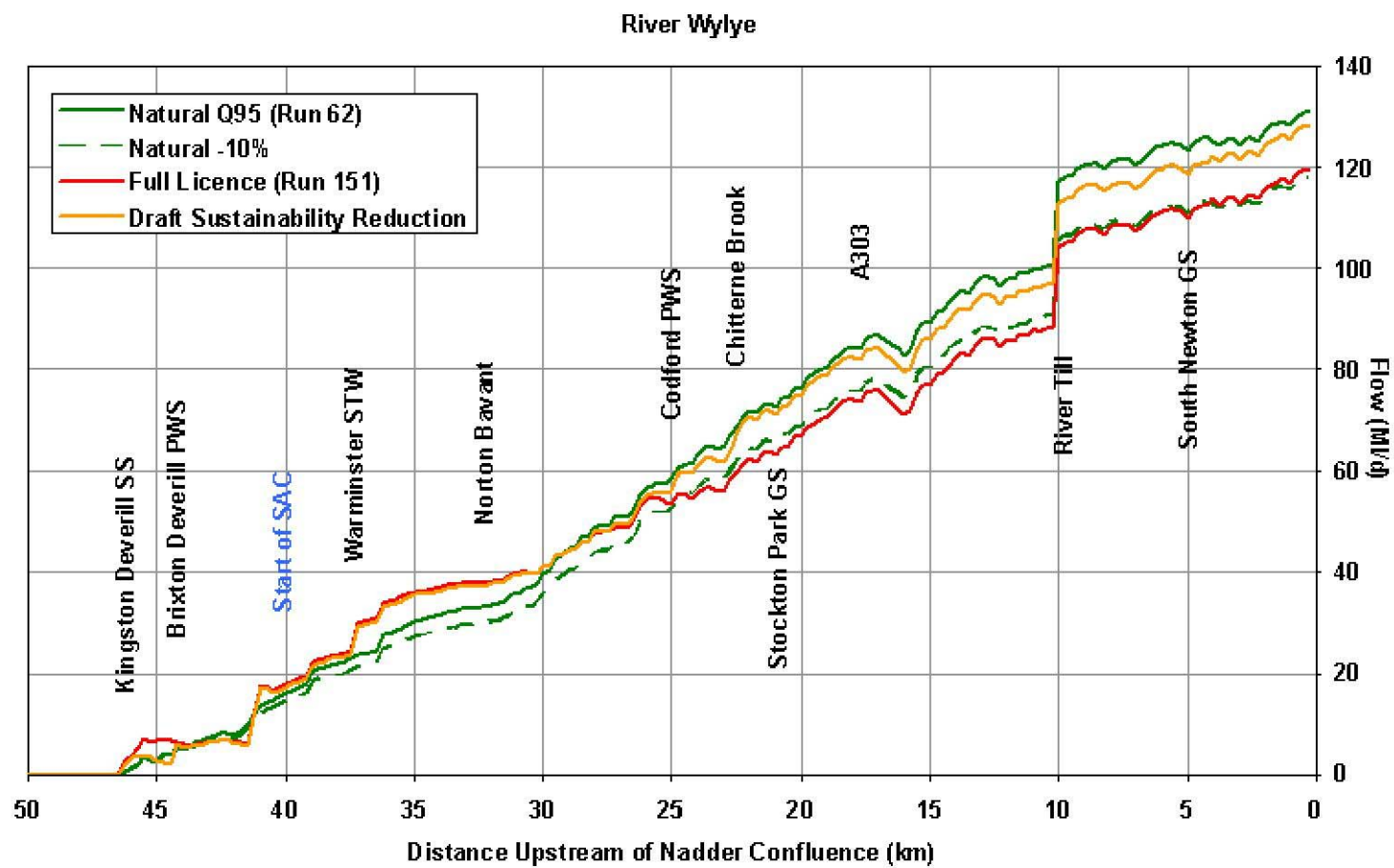
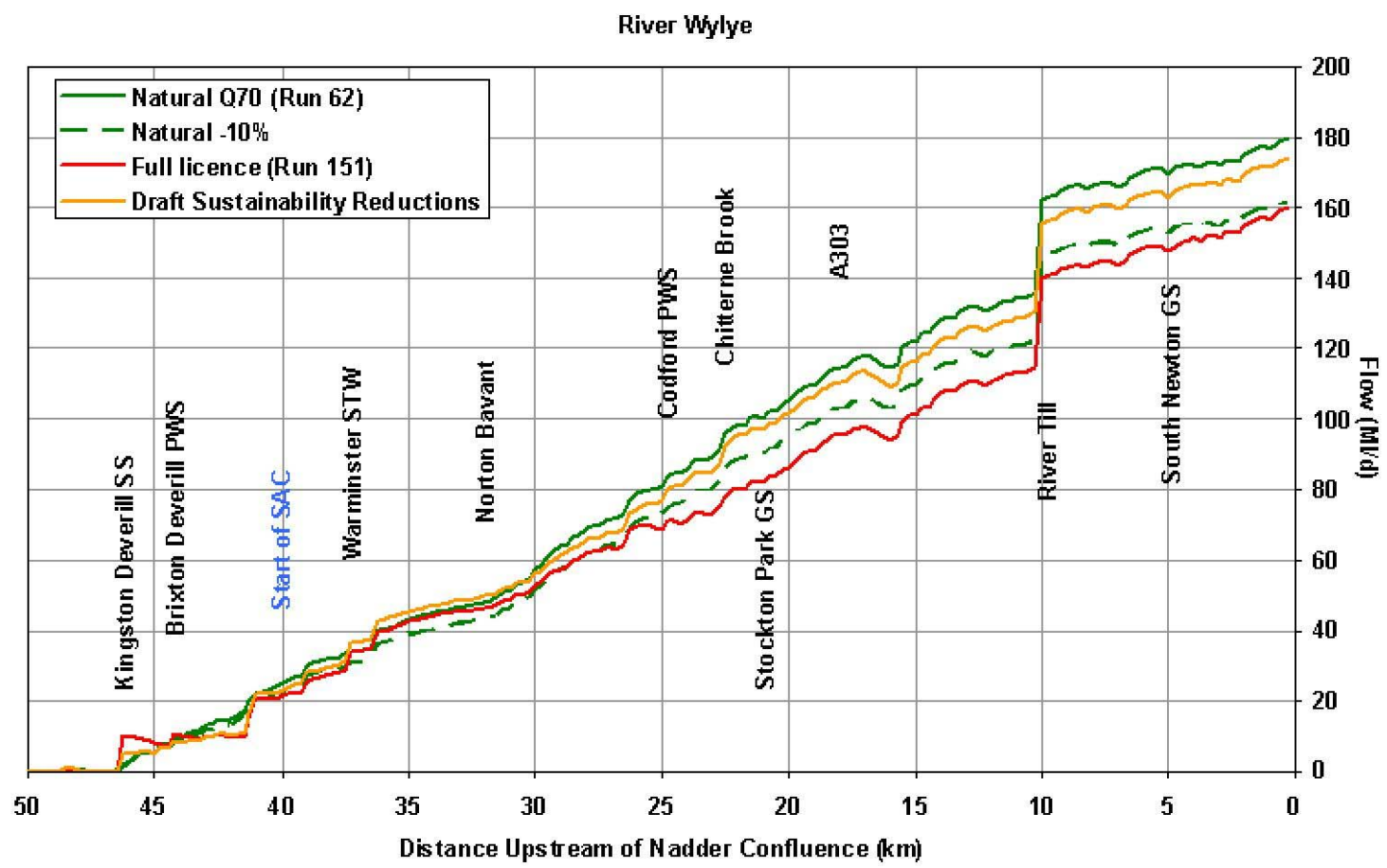
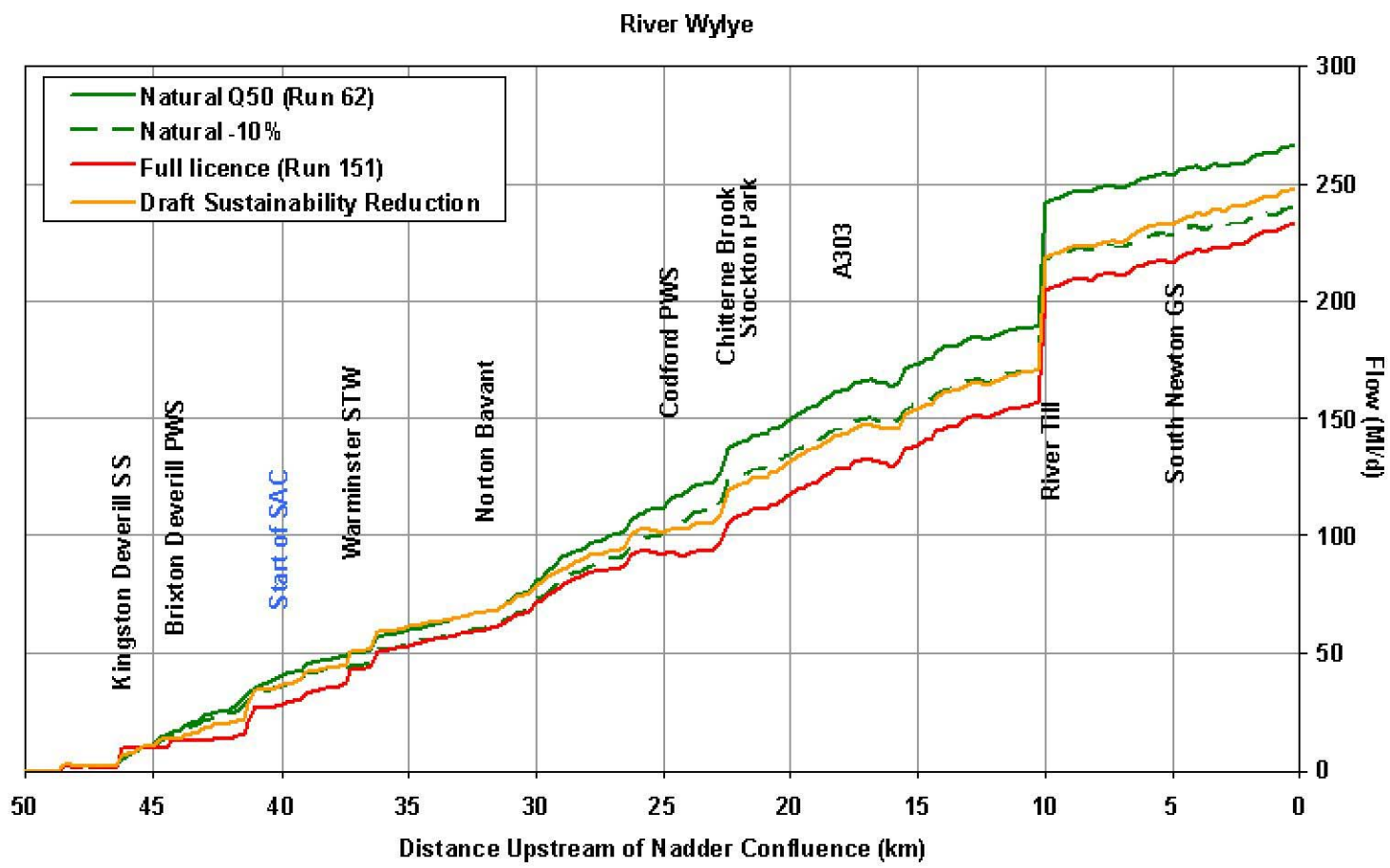
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	River Wylde Full Licence In-combination Impact	Fig 3.13
			Final Report



I:\A52205\ACAD\Z... Working Drawings\0212-DV52205-DVD-01.dwg



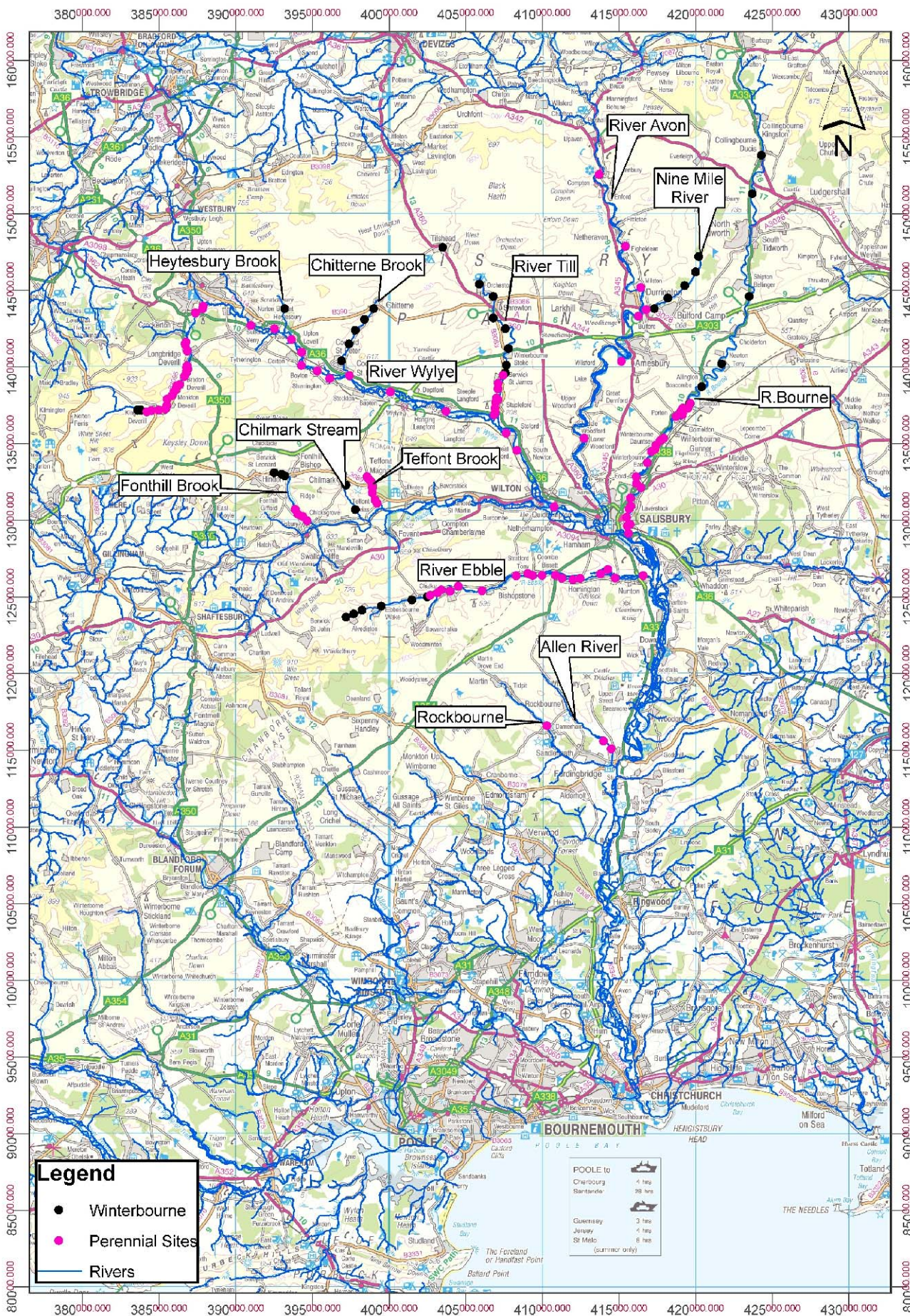
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	River Wylde River Flow Reduction due to Contemporary Rates of Abstraction	Fig 3.18
			Final Report



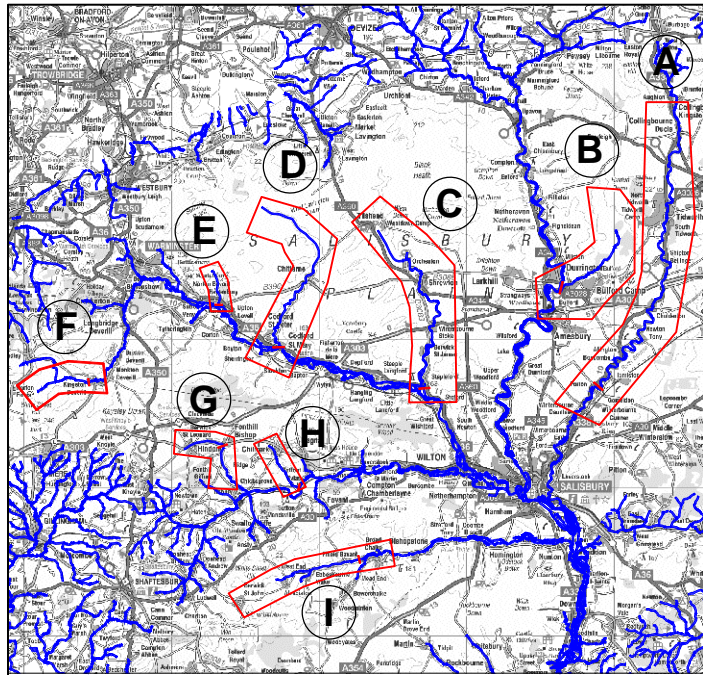
I:\A52205\ACAD\Z_Working Drawings\A02\B-DVS2205-DVD-01.dwg



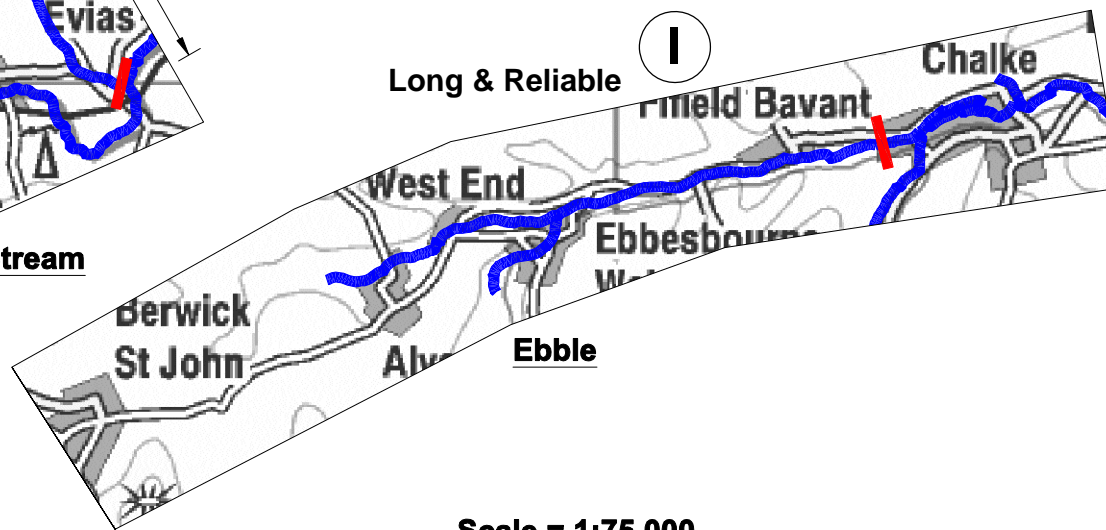
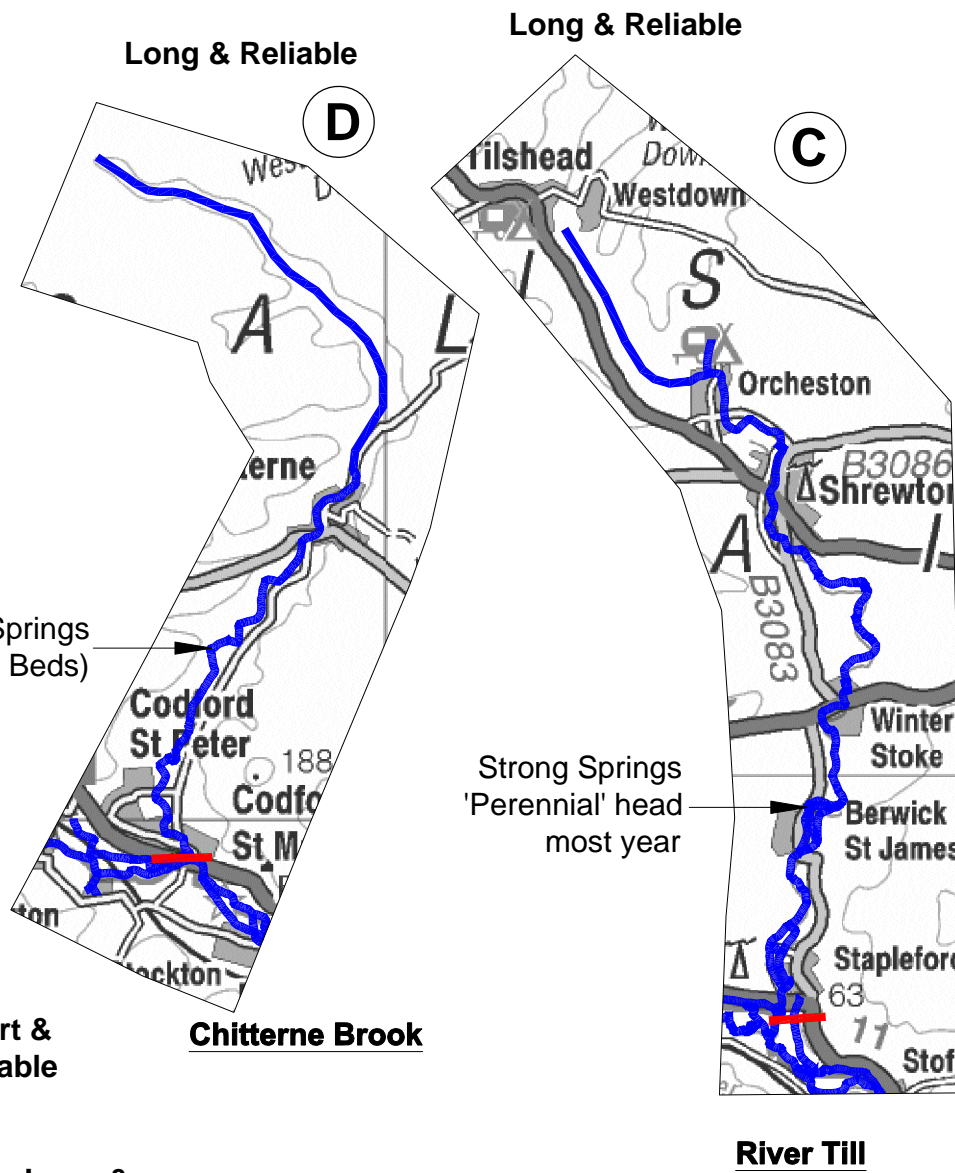
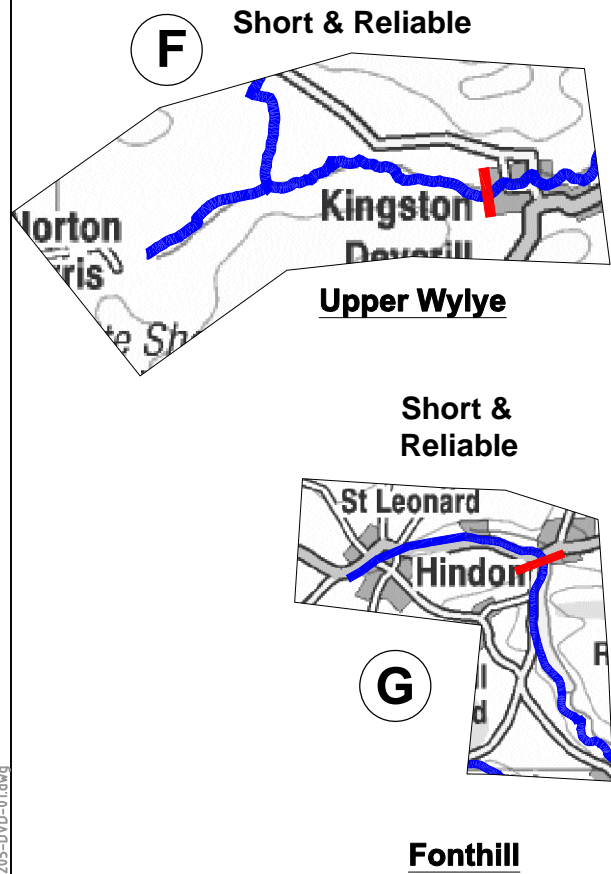
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	River Wylfe Accretion Profile following Sustainability Reductions	Fig 3.20
			Final Report



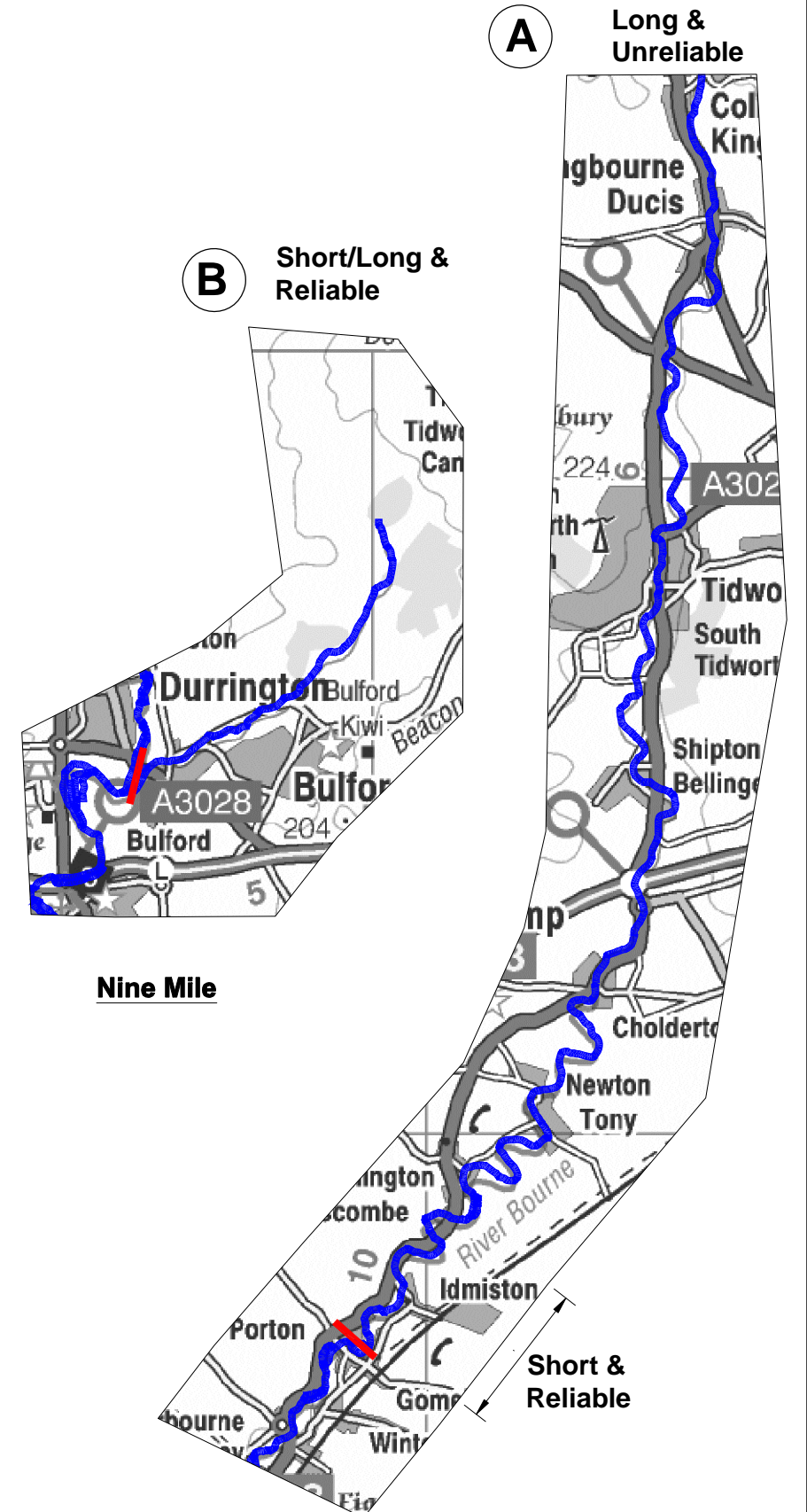
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	Ecological Sampling Location	Fig 4.1
			Final Report



Scale = 1:500,000



Scale = 1:75,000



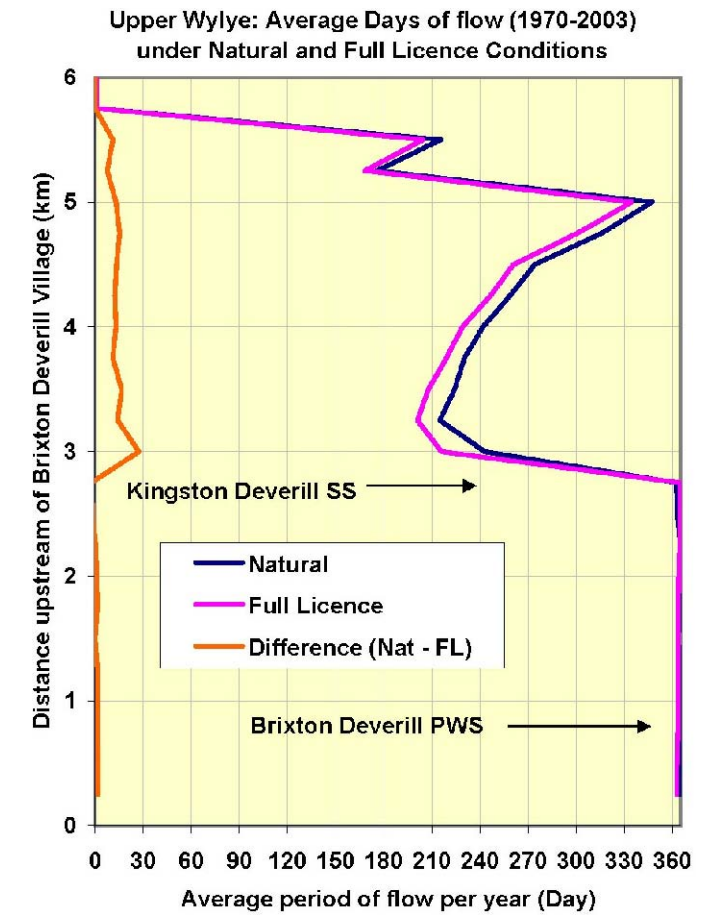
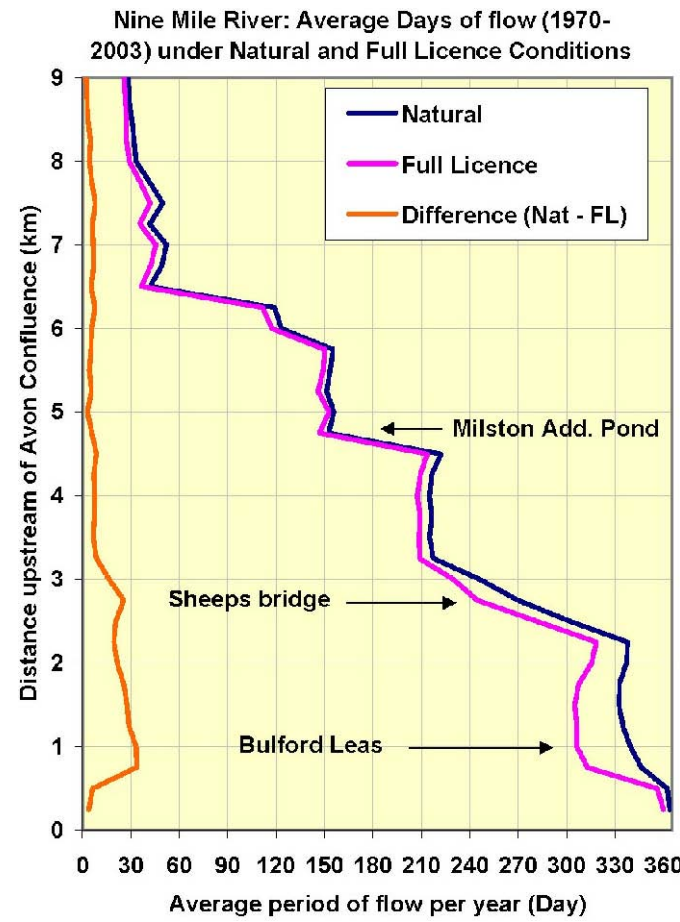
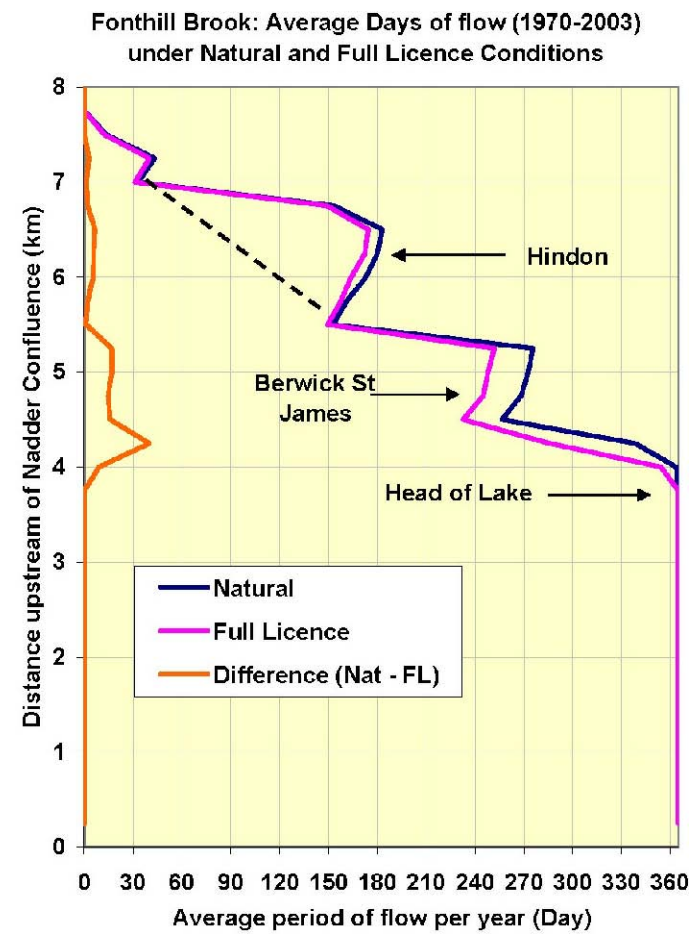
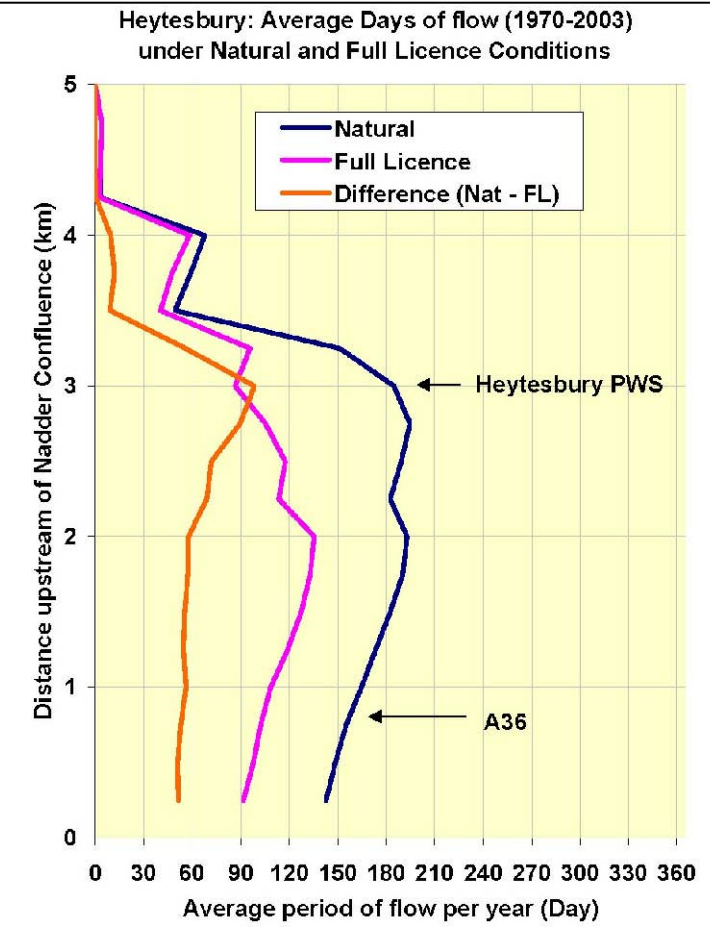
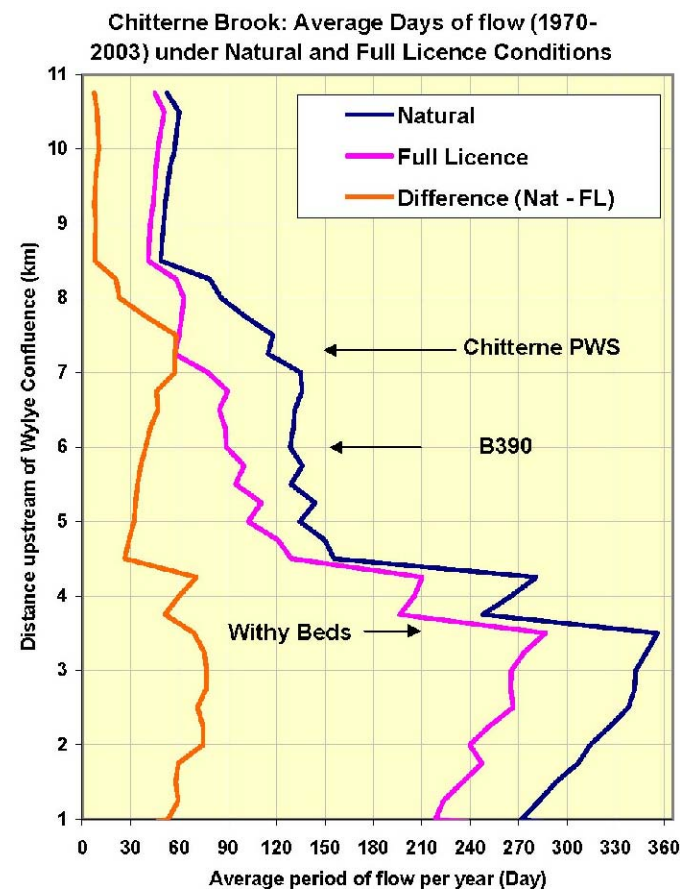
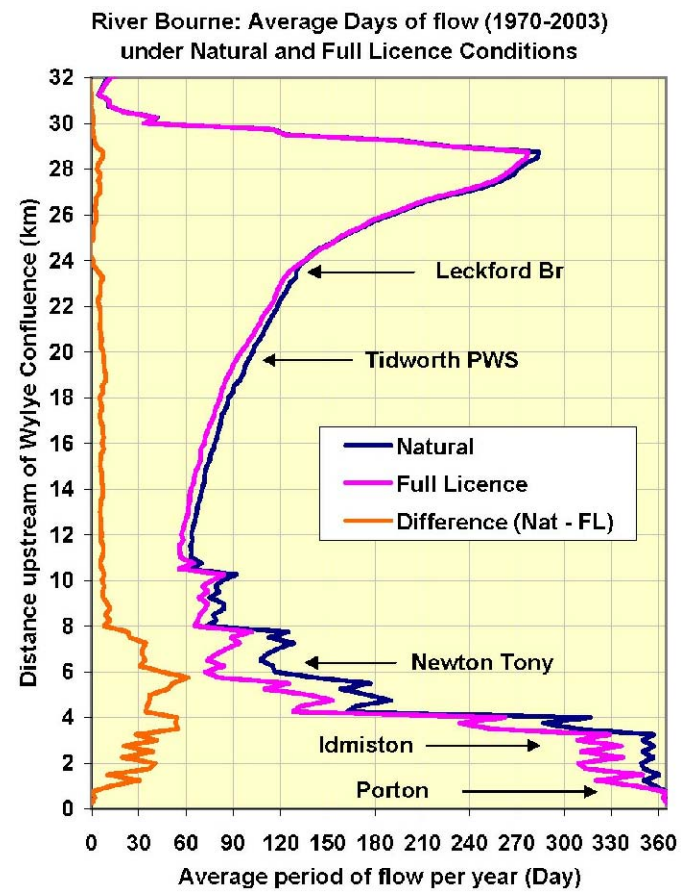
Nine Mile

KEY
— Perennial head (Where Rivers can Dry to)

U:\52205\ACAD\2 - Working Drawings\0193-DV52205-DVD-01.dwg



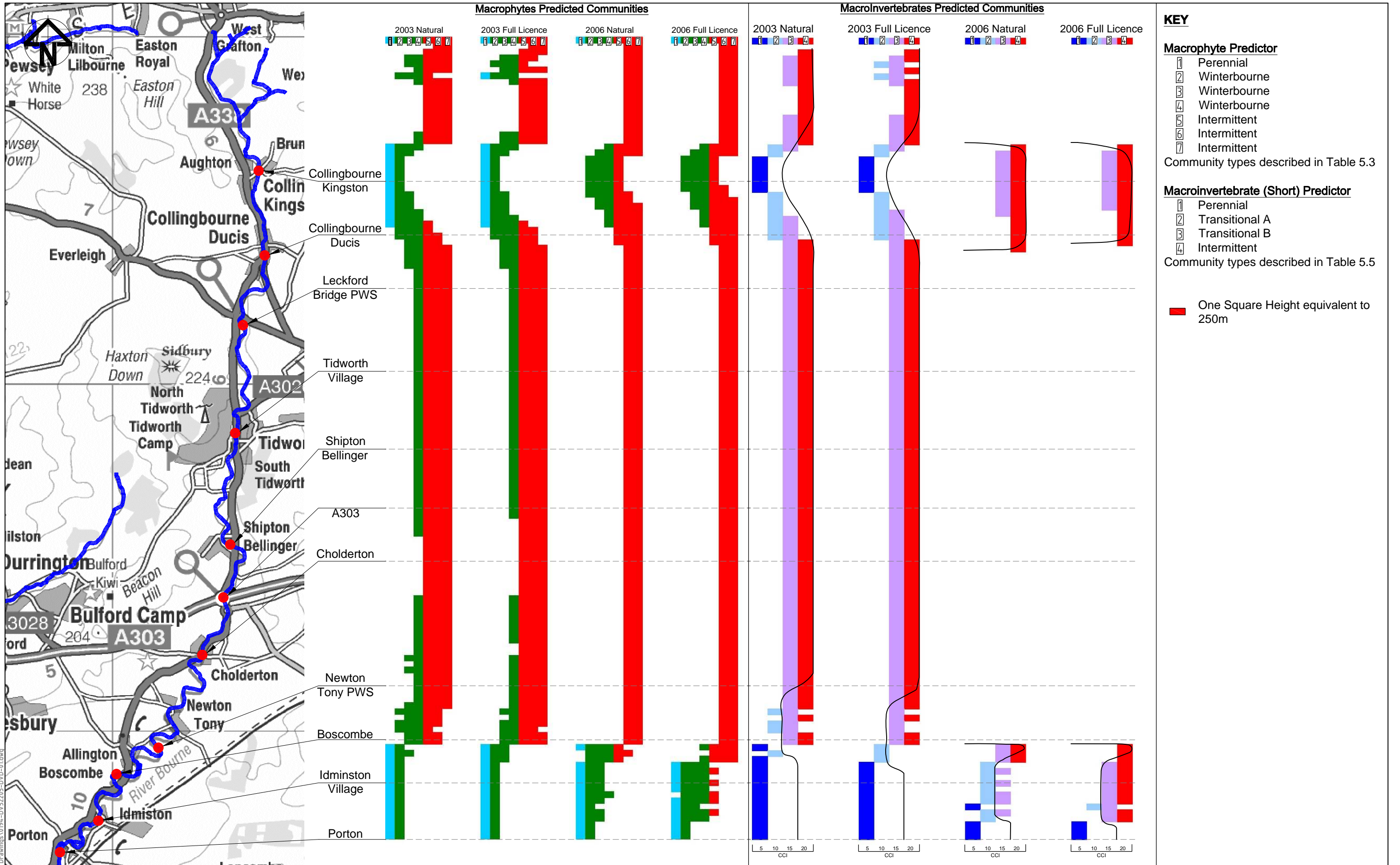
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	Location & Nature of Study Winterbournes	Figure 5.2
			Final Report



U:\52205\ACAD\Z - Working Drawings\0192-DV52205-DVD-01.dwg



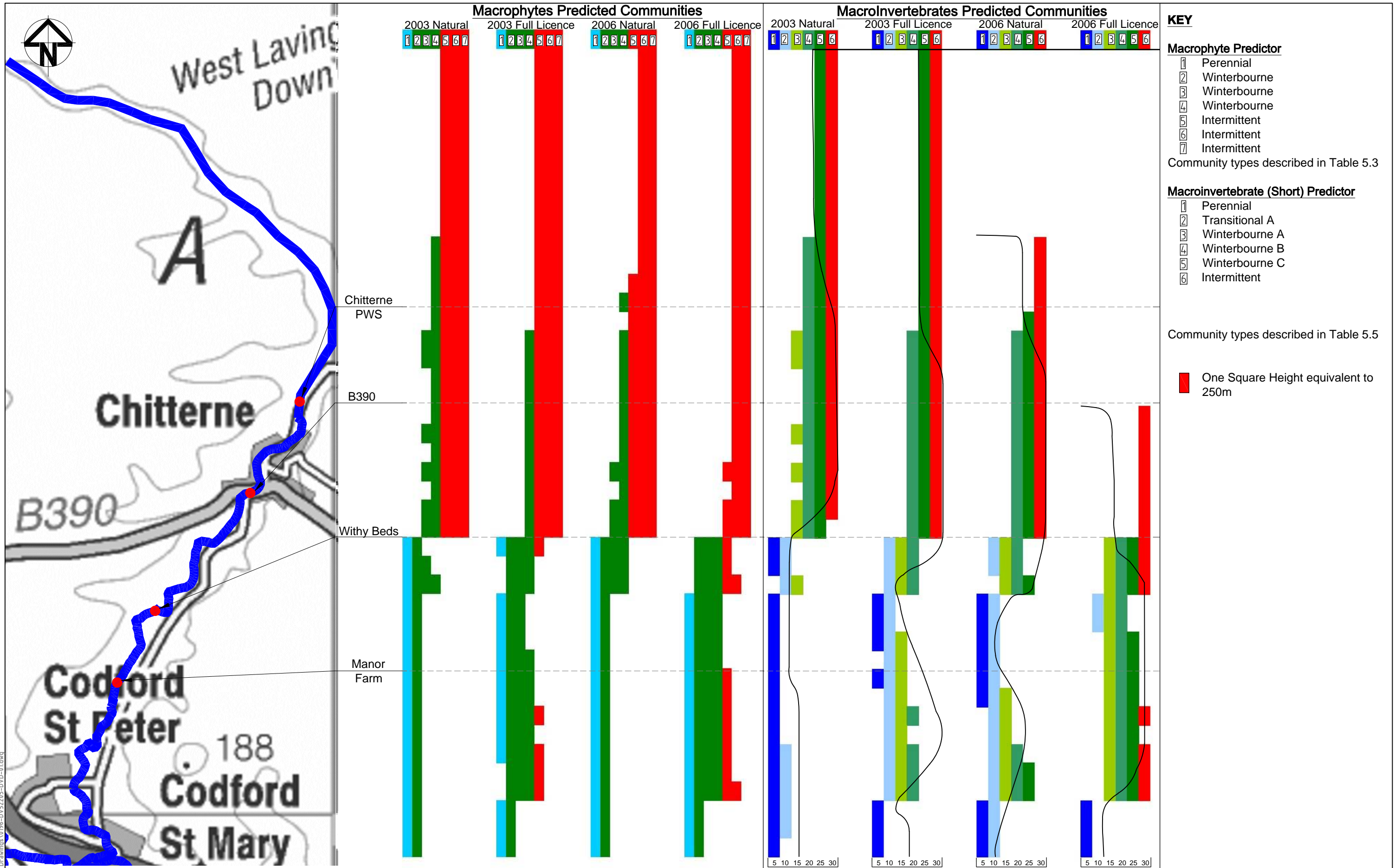
Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	Winterbourne Average (1970 - 2003) Period of Drying Under Natural & Full Licence Conditions	Fig 5.3
			Final Report




U:\52205\ACAD\Z - Working Drawings\0194-DVS2205-DVD-01.dwg

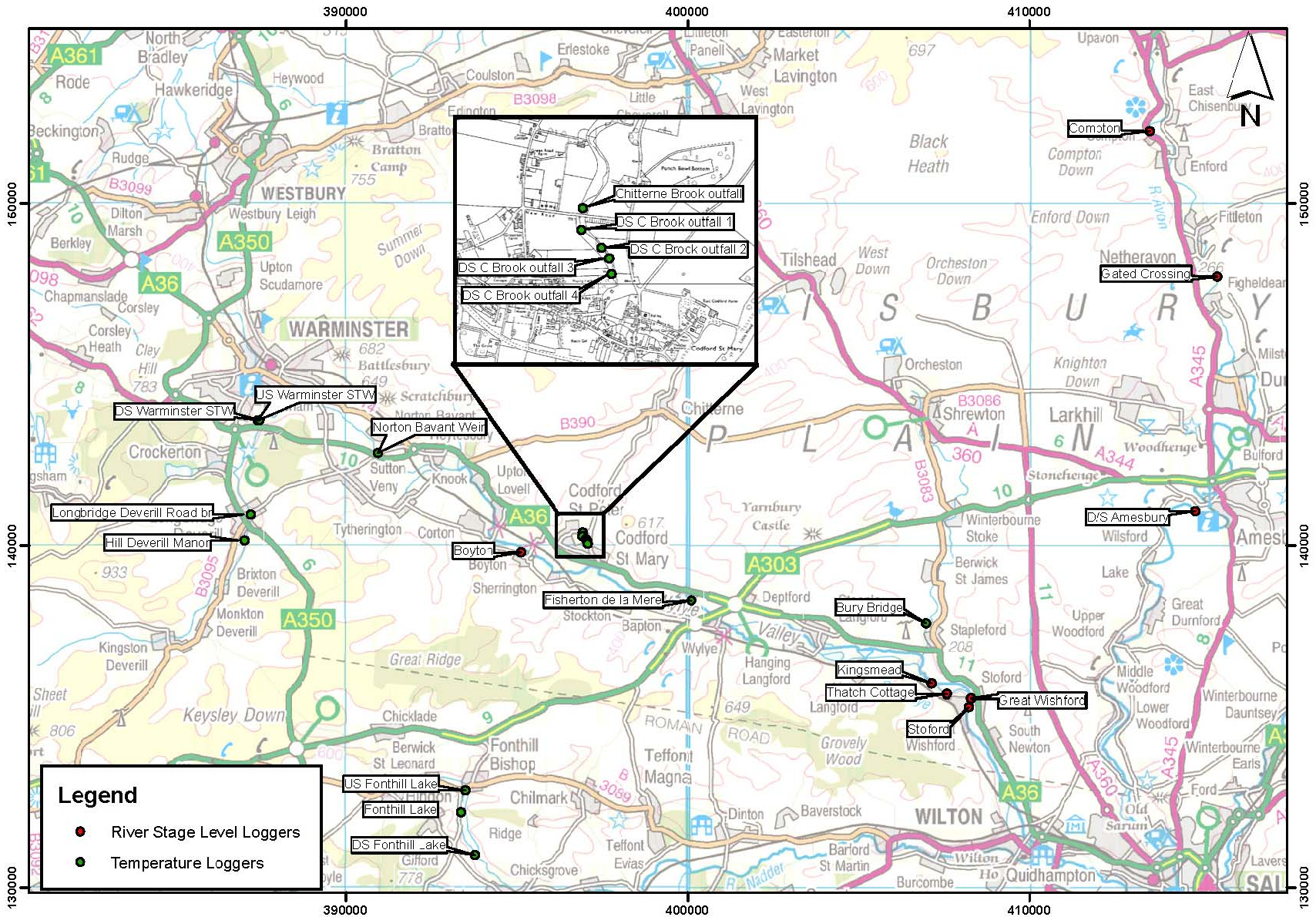


Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	River Avon SAC	River Bourne Predicted Macrophyte & Macroinvertebrate Communities in 2003 & 2006	Fig 5.12
			Final Report



	Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
	B9965	River Avon SAC	Chitterne Brook Predicted Macrophyte & Macroinvertebrate Communities in 2003 & 2006	Fig 5.13
				Final Report

U:\52205\ACAD\Z - Working Drawings\0196-DV52205-DVD-01.dwg



U:\52205\ACAD\Z - Working Drawings\0995-DV52205-DVD-01.dwg



Low Flow Investigations	Investigation Name:	Drawing Name:	Drawing Number:
B9965	Avon SAC	River Temperature & Stage Logging Locations	Figure 6.2
			Final Report

10 Data CD

All the data collected as part of this study is on the CD contained in the wallet attached inside the back cover of the report. The contents of the CD are listed below.

DATA PACK

Folder	Title	Type
Ecology data	DM-#954906-v1- The_impacts_of_groundwater_abstraction_on_the_plant_community_of_the_River_Wylfe_and_its_tributaries	Word
	DM-#921381-v1 D-River_Avon_SAC_salmon_tech_report	Word
	DM-#731979-v3- Winterbourne_Signatures	Excel
	DM-#808105-v2- Avon_substrate_data_summary	Excel
	DM-#936326-v1- Avon_SAC_Macroinvertebrate_Species_Level_Data_AMP4_Final	Excel
	DM-#953801-v1- Avon_SAC_Winterbourne_Macrophyte_Data_AMP4_Final	Excel
	DM-#953927-v1- H_Avon_Winterbourne_Ecology_AMP4_Final_Macroinvertebrate_Spring_Data	Excel
	DM-#954410-v1- Historic_macrophyte_presence_absence_data_for_Chitterne_&_Heytesbury	Excel
	DM-#950567-v1- Macrophyte_audit	Word
	DM-#951506-v1- Macroinvertebrate_audit	Word
River Stage & Temperature data	River Temperature data	Excel
	River Stage data	Excel
	Tinytag & Solinst Logger Locations	PDF
Misc. Reports	DM-#868336-v1- Hampshire_Avon_SIMCAT_Investigation_following_sustainability_reductions_doc	Word
	DM-#920872-v2- halcrow_7_hatch_report_final	Word
	DM-#937608-v1 A-Lower_Wylfe_AMP4_investigation	Word
	DM-#850690-v1- Hampshire_Avon_GW_Model_-_run_log_summary_doc	Word
	DM-#921381- River Avon SAC salmon tech report	Word
	DM-#954906- MSc Thesis: The impacts of groundwater abstraction on the plant community of the R Wylfe and its tributaries	Word
	DM-#859818-v12A- Avon_winterbourne_phase_3_report	PDF
	DM-#954820-v1- APEM_Final_Report_March_08	PDF

11 Glossary & Abbreviations

Abstraction	The removal of water from any source, either permanently or temporarily.
Abstraction licence	The authorisation granted by the Environment Agency to allow the removal of water from a source.
AMP	An asset management plan is produced by water companies for the industry regulator Ofwat. It sets out the water industry investment programme. These plans are drawn up through consultation with the Environment Agency and other bodies to cover a five year period. AMPs have to be agreed by Defra and Ofwat.
ASPT	Average score per taxa- a method for determining the water quality from the invertebrate species present
BAP	Biodiversity action plan.
BFI	Base flow index as defined by the former Institute of Hydrology (now CEH) base flow separation technique using a daily average river flow hydrograph. Base flow is the proportion of river flow arising from the ground.
BTO	British Trust for Ornithology
B&WHW	Bournemouth and West Hampshire Water
CAMS	Catchment abstraction management strategy; an EA document
CCI	Community Conservation Index
CEH	Centre for Ecology and Hydrology, incorporates the former Institute of Hydrology (IoH).
CFMP	Catchment flood management plan
CMG	Current meter gauging
CSM	Common standards monitoring (JNCC methodology) for plant monitoring
DO	Dissolved oxygen (measured in water)
EA	Environment Agency - environmental regulators who aim to maintain and improve the condition of water, air and soil quality
EN	English Nature - environmental regulators promoting wildlife and conservation interests
EQIs	Environmental quality indices
FAP	Fisheries action plan
Fauna	Animals, wildlife
Flora	Plants
Flow Duration Curve	A graph showing the plot of flow versus exceedance value. Thus Q95 (see below) will be a low rate of flow, and Q5 will be a high rate of flow.
GIS	Geographical information system
GQA	General quality assessment ; monitoring system for surface water quality undertaken by the EA
HAM	Hampshire Avon groundwater Model
JNCC	Joint nature conservation committee – organisation responsible for the designation of wildlife sites
LIFE	Lotic-invertebrate Index for Flow Evaluation – an index of the effect of flow on invertebrate species (e.g. shrimps, fly larvae)
Lst	Limestone
Macroinvertebrate	Aquatic invertebrate species (e.g. shrimps, fly larvae)used as indicators of flow and

	water quality
Macrophyte	Plants (typically aquatic macrophytes which are plants in water)
mAOD	metres above Ordnance datum (altitude)
MFR	Macrophyte flow rank (flow sensitivity score) measure of health of river through the plants present
MORECS	Met Office rainfall and evaporation calculation system
MTR	Mean tropic rank (plant survey methodology to measure of health of river)
MI, MI/d, MI/day	MI = megalitres = 1,000,000 litres = 1,000 cubic metres = 1,000 m ³ = 220,000 gallons. MI/d = MI/day = MI per day, = tcmd, thousand cubic metres per day.
MI/a	MI/a = MI per year = megalitres per year
Naturalised discharge	The gauged discharge adjusted to take account of net abstractions and discharges upstream of the gauging station
NNR	National Nature Reserve (designation to protect the most important areas of wildlife habitat and geological formations in Britain, and as places for scientific research.)
NVC	National vegetation classification ; method of measuring plant communities
PE	Potential evaporation (the evaporation that would occur if water was never a limiting factor. Surface and air temperatures, insulation, and wind all affect this).
PMF	Permitted minimum flow; a level set for river flows below which abstraction must be limited
PWS	Public water supply
Q95, Q5	The flow of a river which is equalled or exceeded on average for 95% or 5% of the time respectively.
Ramsar	Wetland sites formally listed as wetlands of international importance by the secretary of state
RIVPACS	River invertebrate prediction and classification system, a software package allowing site-specific comparison of river invertebrates with predicted to determine environmental stress.
RHS	River habitat survey; a river monitoring method
RSA	Restoring sustainable abstraction
<i>Ranunculus</i>	Water crowfoot- a typical plant found in chalk streams; a good indicator of river condition
SAC	Special area of conservation (designated under the European Habitats Directive, 1991)
SAP	Salmon action plan
SPA	Special protection area (classified under the European Birds Directive, 1979), designated for its wetland bird numbers
SS	Stream support
SSSI	Site of Special Scientific Interest (a site designated because it is particularly important nature conservation or geological value.)
STW	Sewage treatment works
Winterbourne	A stream or headwater which dries annually, usually during the summer months
WTW	Water treatment works
WWT	Wetland and Wildfowl Trust