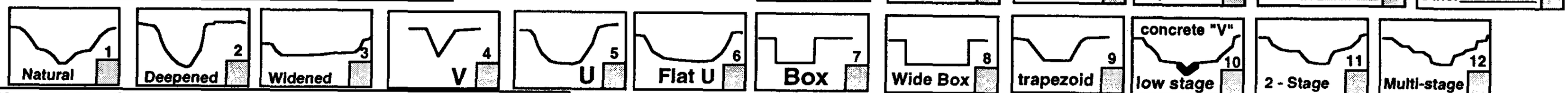
Riverine Habitat Audit Procedure — SHEET 12 *Channel Features / Modifications*

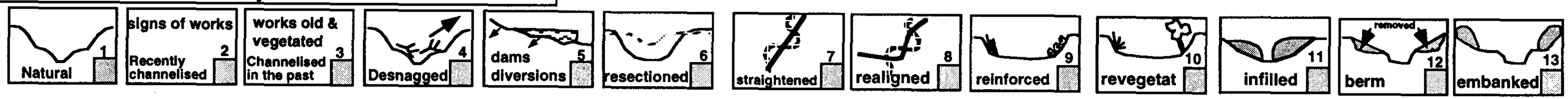
Date (dd/mm/yy) ☐☐/☐☐/☐☐ Recorder _____

Basin ☐☐☐ Sub-section ☐☐☐☐ Site ☐☐☐☐ Tributary Name _____

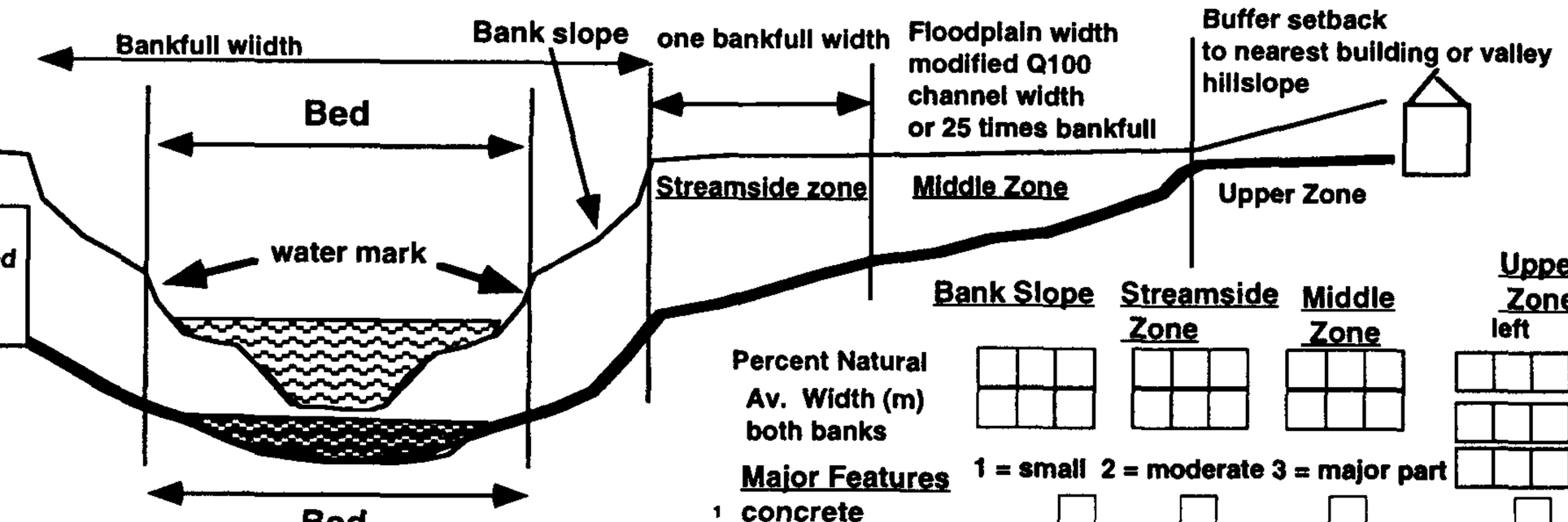
Channel Shape - record one on more for reach



Channel Modification History -record one or more for reach



Channel Modification, Reinforcement and Buffer / Setback features



☐ Natural Channel?

☐ Modified or reinforced Channel?

Natural Channels - Not modified as Floodways

Key attribute is banktop (bankfull width)
What is it here ? ☐☐☐☐ m

The channel and floodplain can be divided into the following areas or zones

- bed - between water marks
- bankslopes -from water mark to bank top
- Streamside Buffer Zone - one bankfull width (minimum 10m)
- Middle Buffer Zone - from stream side to extent of floodplain or 25 times banktop width (whichever is greater)
- Outer Zone - from Middle Buffer to valley or hillside slopes or to first permanent building, road or structure.

Modified Channels

Key features are the modifications to the bankslope as a concrete lining, the changes on the floodway and the re-shaping of the channel to keep the river within the Q100 - the 100 year flood.

The channel and floodplain can be divided into the following areas or zones

- bed - between water marks or top of invert
- bankslopes -from water mark to top of reinforced slope
- Streamside Buffer Zone - bankslope width + bed width (minimum 10m)
- Middle Buffer Zone - from streamside to Q100 design channel, point of inflexion for modified channel, or floodplain
- Outer Zone - from Middle Buffer to first permanent building or structure (max), or first private land (min).

Bed Features

% natural bed ☐☐☐☐

Bed Features

1	concrete lining	12	deflectors
2	rock piles	13	groynes
3	drop struct	14	retards
4	low dams	15	dykes
5	dredged	16	vane dykes
6	junk piles	17	boulders
7	rehab riffles	18	fishway
8	rehab pool	19	rock chute
9	rehab habitat	20	grass chute
10	ducks habitat	21	pipe drop
11	rehab fish	22	Other_____

Roughness estimate

low ☐
mod ☐
high ☐
very high ☐

Bank Slope | Streamside Zone | Middle Zone | Upper Buffer Zone (left / right)

Percent Natural Av. Width (m) both banks ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐ ☐☐☐

width to building/road ☐☐☐ ☐☐☐

width to private land ☐☐☐ ☐☐☐

1 = small 2 = moderate 3 = major part

Major Features

1	concrete				
2	sheet piling				
3	wood piling/logs				
4	gabion-wire bag				
5	brick / laid stone				
6	rip rap				
7	grouted rip rap				
8	builder waste/junk				
9	Planted vegetation				
10	battered/ reshaped				
11	mown grass				
12	unmown grass				
13	sedges				
14	shrubs				
14	trees				
16	Roughness estimate				
17	low				
18	mod				
19	high				
20	very high				
21	bike path				
22	playing field				

Definitions # rip rap = piles of rocks (may be grouted) # gabion = rocks or gravel within wire bags # battering = excavation to reduce steepness of bank # retard = fence from bank into channel # groyne = barrier extending from bank into flow # van Dykes = short structure in the stream to change flow patterns # floodway/cuts = excavated channel to take flood flows.