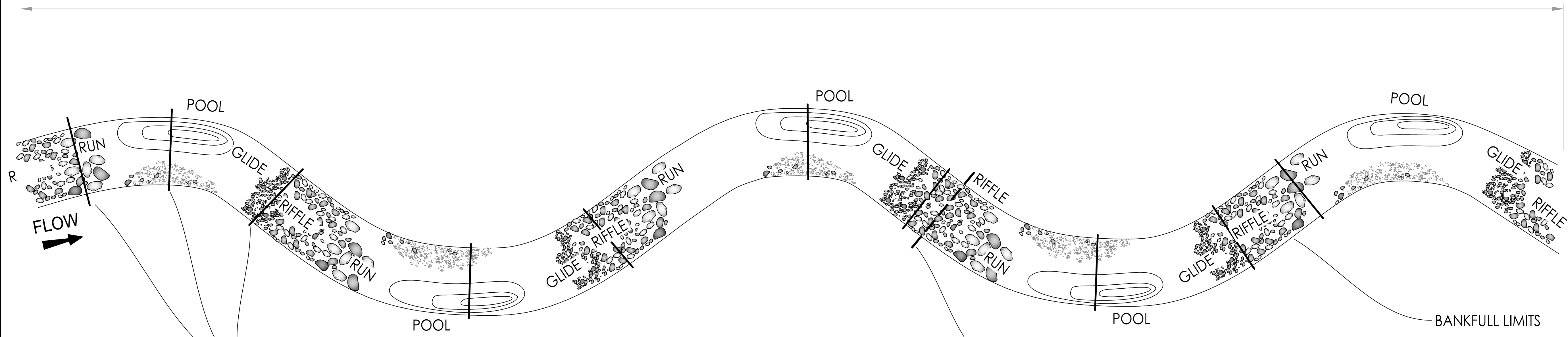


STUDY REACH



REPRESENTATIVE PEBBLE COUNT CROSS-SECTIONS
(EXAMPLE: 10 SAMPLES AT EACH CROSS-SECTION)

PLAN VIEW

ACTIVE BED PEBBLE COUNT CROSS-SECTION

REPRESENTATIVE PEBBLE COUNT:

1. THE REPRESENTATIVE PEBBLE COUNT (MULTIPLE CROSS-SECTIONS) IS INTENDED TO ASSIST WITH REACH CHARACTERIZATION
2. THIS PEBBLE COUNT SHOULD CONSIST OF AT LEAST 100 MEASUREMENTS
3. ESTIMATE PERCENTAGE OF REACH LENGTH THAT CAN BE CHARACTERIZED AS RIFFLES AND POOLS (EXAMPLE: 1000FT REACH WITH 600 FT OF RIFFLES AND 400 FT OF POOLS; 60% RIFFLES, 40% POOLS)
4. ATTEMPT TO SAMPLE EACH FEATURE (RIFFLES, AND POOLS) AT THE SAME FREQUENCY AS FOUND IN THE REACH(EXAMPLE: 60 RIFFLE SAMPLES, 40 POOL SAMPLES)
5. SAMPLE THE ENTIRE BANKFULL CROSS-SECTION

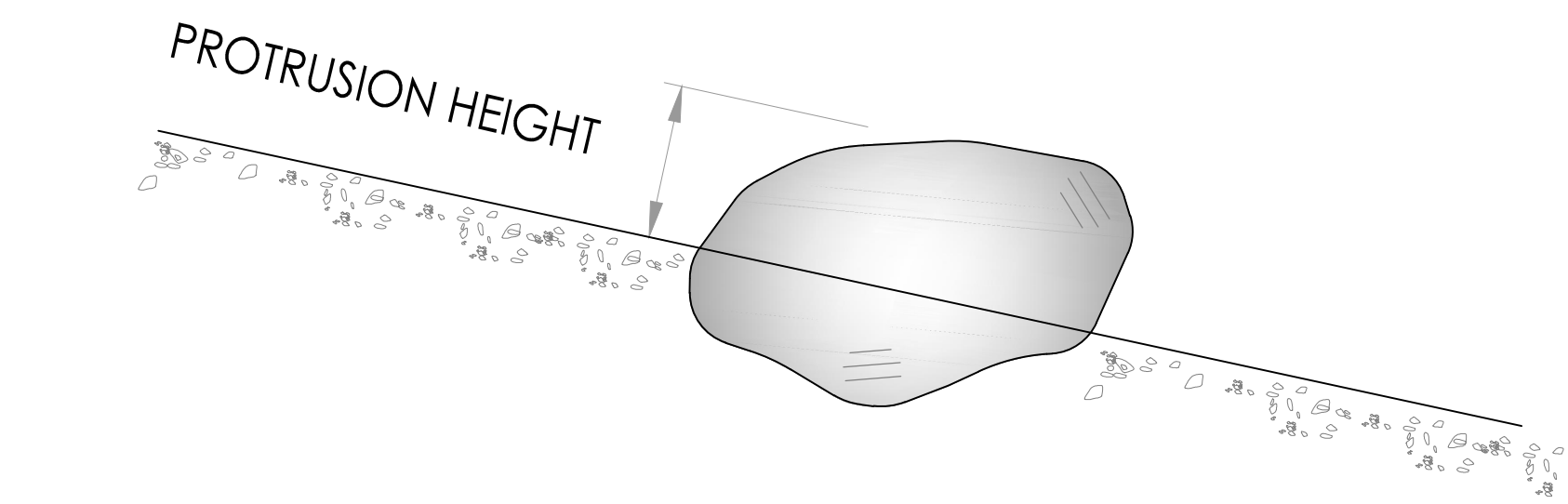
ACTIVE BED PEBBLE COUNT:

1. THE ACTIVE BED PEBBLE COUNT IS INTENDED TO BE USED FOR HYDRAULIC CALCULATIONS (D_{84}) AND FOR SEDIMENT COMPETENCE CALCULATIONS
2. AT A SINGLE RIFFLE CROSS-SECTION, 100 PARTICLES SHOULD BE MEASURED AT EQUALLY SPACED INTERVALS ACROSS THE CHANNEL BED
3. SAMPLE ONLY THE ACTIVE CHANNEL BED

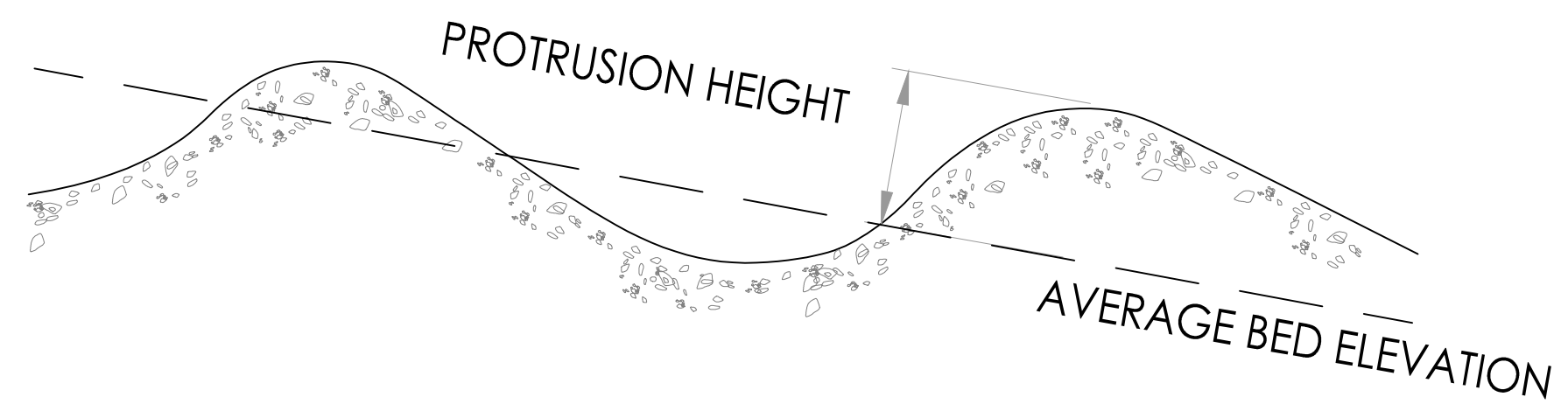
PROTRUSION HEIGHT

PROTRUSION HEIGHT CAN BE SUBSTITUTED FOR D_{84} IN THE FOLLOWING SITUATIONS

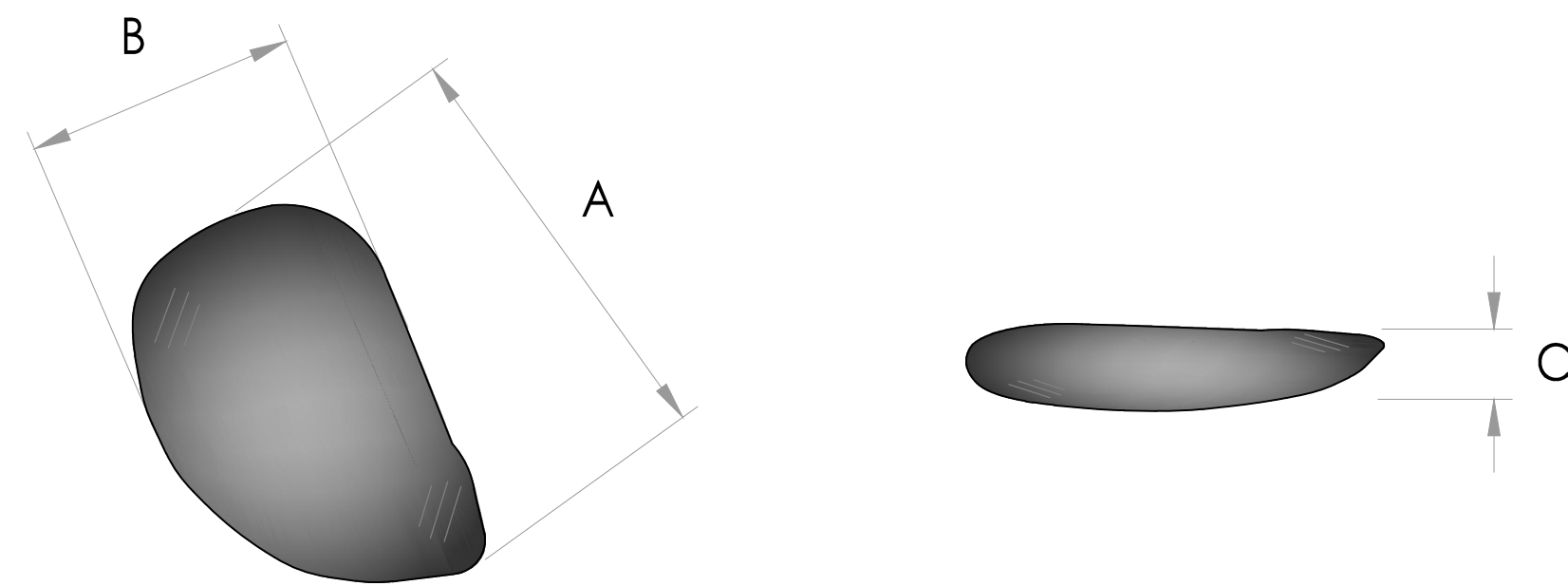
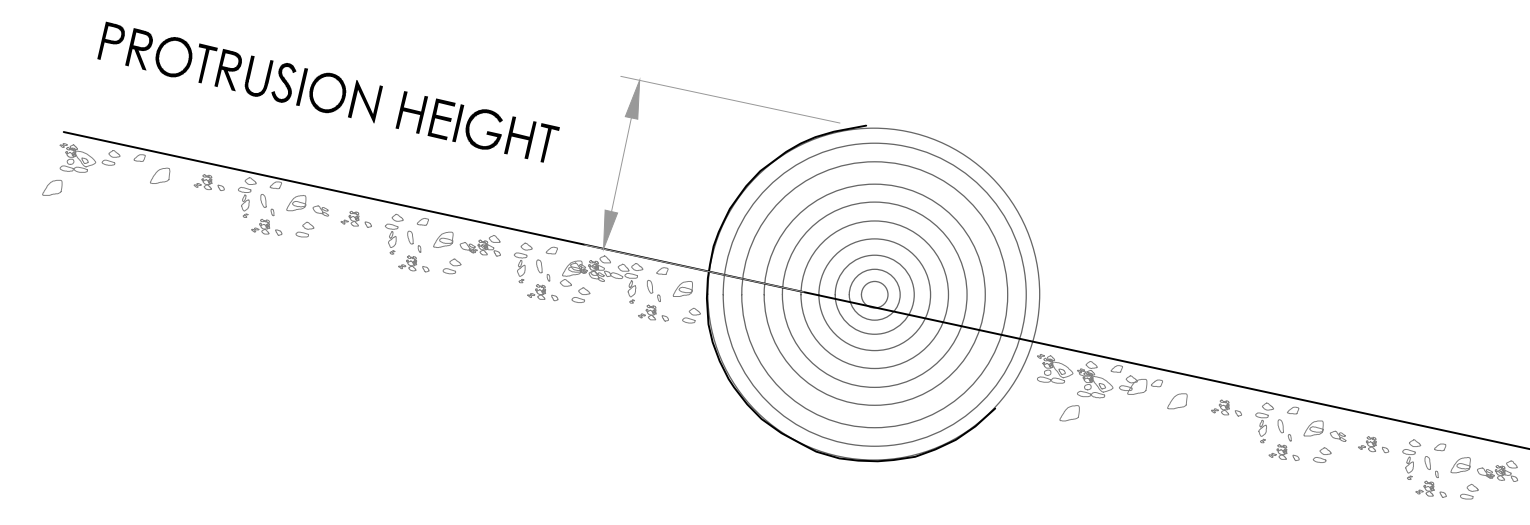
BEDROCK OR BOULDER DOMINATED SYSTEMS



SAND-BED CHANNELS WITH DUNE BEDFORMS



CHANNELS WHERE LOGS INFLUENCE RELATIVE ROUGHNESS



- (A) LONG AXIS
- (B) INTERMEDIATE AXIS
- (C) SHORT AXIS

NOTE: THE INTERMEDIATE AXIS IS WHAT IS MEASURED IN A PEBBLE COUNT



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The Contractor shall verify and be responsible for all dimensions. DO NOT scale drawings. The Contractor shall be responsible for all dimensions. DO NOT scale drawings. The Contractor shall be responsible for all dimensions. DO NOT scale drawings.

Revision	By	Appd.	Y1.MM.DD	Issued

Client/Project
IOWA DEPARTMENT OF
NATURAL RESOURCES
IOWA RIVER RESTORATION
TOOLBOX

Title
PEBBLE COUNTS

Permit-Seal

Project Number: XXXXXXXXXX
File Name: 6_Location_of_Pebble_Counts.dwg

DWN	CHKD	DSGN	XXXXXX
Dwn	Chkd.	Dsgn.	YY.MM.DD

Drawing No. PEBBLE_COUNTS
Revision Sheet
0 6 of ##