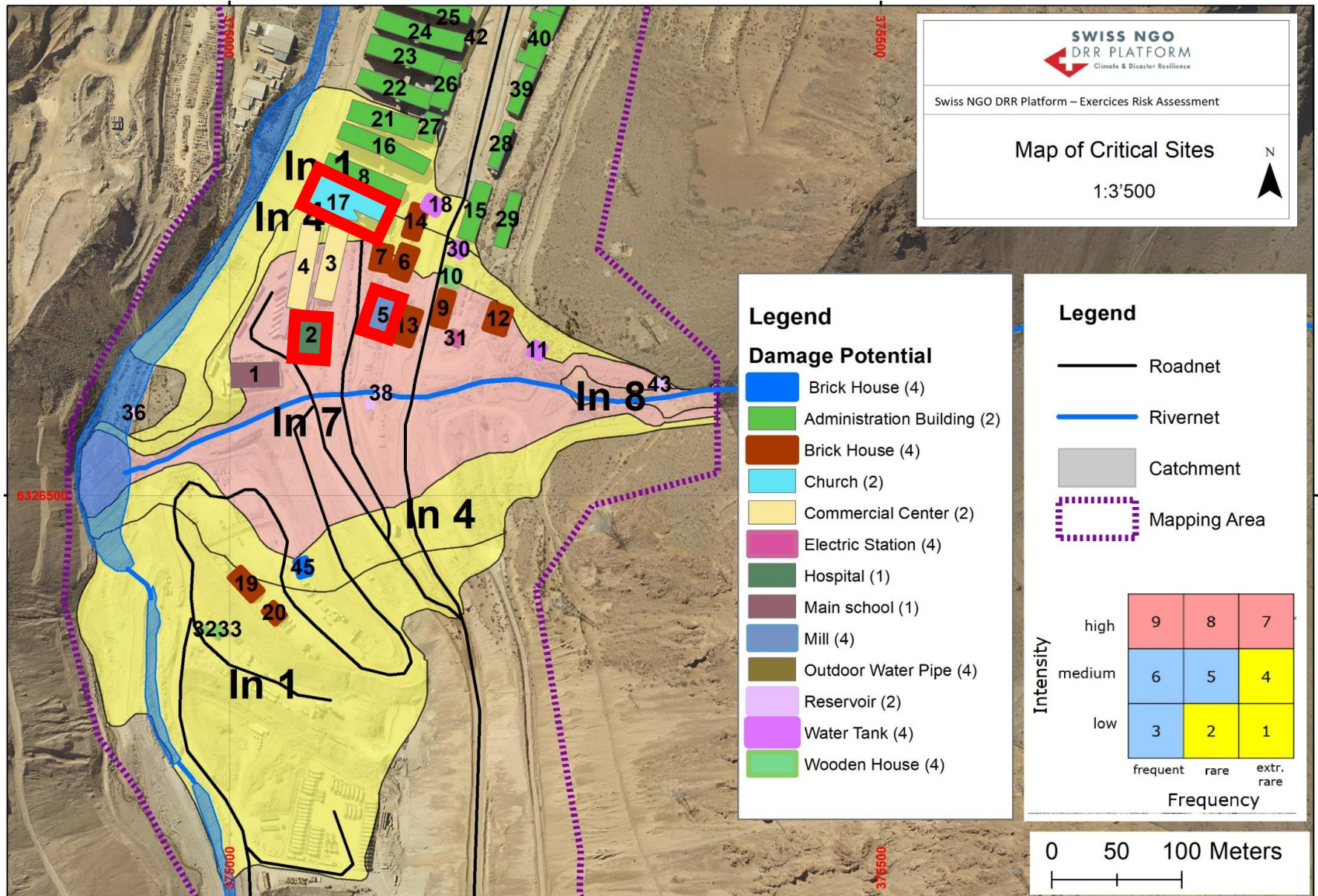# Exercice: Calculate the Risk for the buildings No. 2, 5, 17

Exercice: Calculate the Risk for the buildings No. 2, 5, 17

Risk Assets = physical vulnerability * Object value / return period

Risk Persons = Mortality * Willingness to pay / return period

Objetct type	Value per unit	# persons x floor	low intensity	medium intensity	high intensity	low intensity	medium intensity	high intensity
Brick house	100'000	5	0.25	0.60	0.90	0.00002	0.00030	0.0360
Church	400'000	20	0.25	0.60	0.90	0.00002	0.00030	0.0360
Water tank	8'000	0	0.15	0.30	0.60	0.00000	0.0000	0.0000
Mill	10'000	2	0.25	0.60	0.90	0.00002	0.0003	0.0360
Administration building	1'000'000	20	0.15	0.30	0.60	0.00001	0.0002	0.0180
Market, Comercial Center	2'000'000	100	0.25	0.60	0.90	0.00002	0.00030	0.03600
Hospital	20'000'000	50	0.15	0.30	0.60	0.00001	0.00015	0.01800
Main School	1'300'000	50	0.15	0.30	0.60	0.00001	0.00015	0.01800
Power Station	30'000	0	0.10	0.45	0.85	0.0000	0.0000	0.0000
Reservoir (including pumps)	10'000	0	0.00	0.01	0.10	0.0000	0.0000	0.0000
Data to fill in			**Physical vulnerability**			**Mortality**		

Assets

Physical vulnerability (PhV)

Object value (OV)

Risk Asset = PhV * OV / RP

+

Persons

Exposed time/d (T)
Probability to flee (H)
Physical vulnerability (PhV)

Mortality (M)

Willingness to pay (WP)

Risk Person = M * WP / RP * number People