

12|05|2017 Sabres
Espace rural & Projet spatial

Session doctorants
Francesco MARRAS
Université de Cagliari, Sardaigne
ENSA Toulouse, France

GESTION DE L'EAU ET GESTION DE LA TERRE
Nouvelles approches du projet pour le paysage rural de la Sardaigne

**QUEL EST LE RAPPORT ENTRE PAYSAGE
RURAL ET PROJET D'ARCHITECTURE FACE
AUX NOUVEAUX PARADIGMES DE LA
MULTIFUNCTIONALITÉ DE LA CAMPAGNE?**

**LE CHANGEMENT CLIMATIQUE ET LE RISQUE
HYDRAULIQUE PEUVENT-ILS SE TRANSFORMER DANS
UNE RESSOURCE POUR LE TERRITOIRE?**

QUESTION DE DÉPART

PROJET D'ARCHITECTURE

PAYSAGE RURAL

RISQUE



QUESTION DE DÉPART

PROJET D'ARCHITECTURE



QUESTIONI DE DÉPART

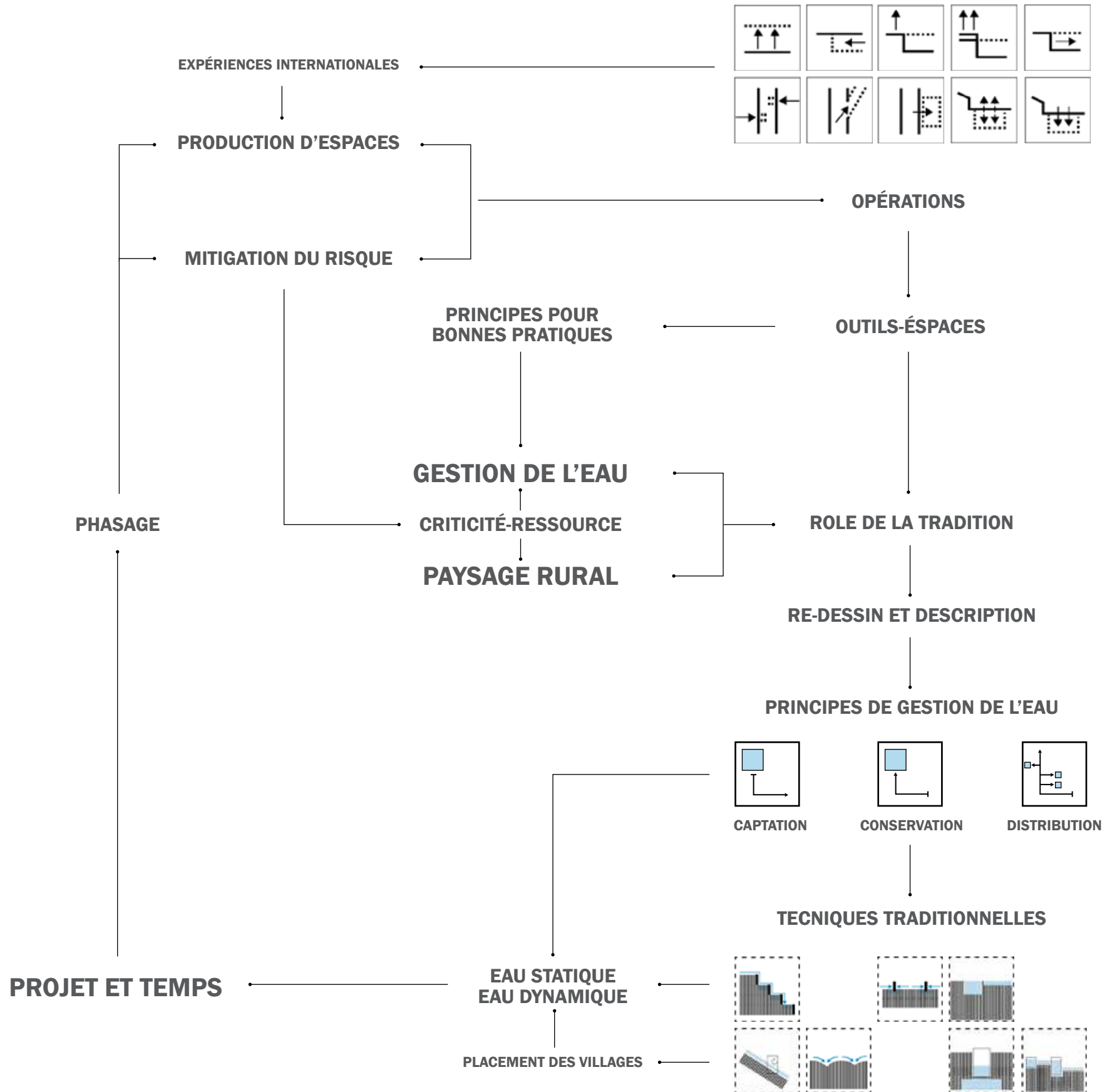


URAS 18 NOVEMBRE 2013



GIARA DI SIDDI SEPTEMBRE 2014

QUESTION DE MÉTHODE



LES SOURCES

SOURCES SAVANTES

—• **LA RECHERCHE DU DONNÉ OBJECTIF**

ÉTUDES MORPHOLOGIQUES

MARC BLOCH

ÉCOLE ITALIENNE_MURATORI CANIGGIA

—• **LA RECHERCHE DE LA DIMENSION INTERSUBJECTIF**

GEOGRAPHIE HUMAINE

- **LUCIO GAMBI**

- **EUGENIO TURRI**

- **FRANCO FARINELLI**

—• **PAYSAGE CULTUREL**

SOURCES METHODOLOGIQUES

—• **ARCHITECTURE POPULAIRE E TRADITIONNELLE**

MANUALI DEL RECUPERO_DICAAR CAGLIARI

—• **ARCHITECTURE DE LA GRANDE ECHELLE**

TOULOUSE TERRITOIRE GARONNE_ RÉMI PAPILLAULT

—• **TRANSFORMATIONS TERRITORIALES**

LA CITTÀ ISOTROPA_ BERNARDO SECCHI E PAOLA VIGANÒ

SOURCES DIRÈCTES

—• **SARDAIGNE**

—• **CRITICITÉS-RESSOURCES**

—• **CHANGEMENT CLIMATIQUE**

—• **CONSOMMATION DU SOL**

—• **MULTIFUNCTION RURAL**

fiume TEMO

fiume TIRSO

rio MOGORO

flumini MANNU

rio Lanessi
rio S'Acqua Sassa

SÉCHERESSE



TEMPS LONG

EAU STATIQUE
CONSERVATION

INONDABILITÉ



TEMPS BREF

EAU DINAMIQUE
DYNAMIQUE DE REMPLISSAGE

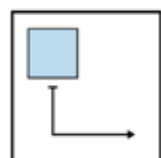
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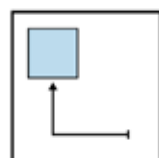
TEMPS VARIABLES

EAU DINAMIQUE ET STATIQUE
DYNAMIQUE DU PLEIN ET VIDE

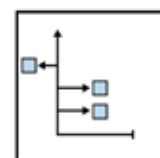
LA MÉTHODE



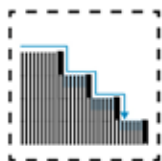
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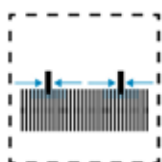
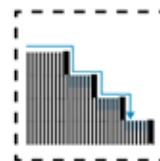
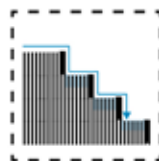
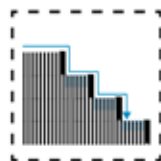
CONSERVATION



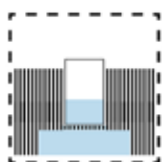
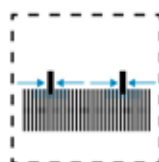
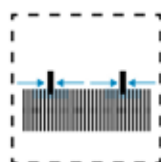
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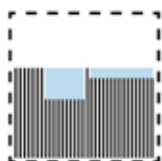
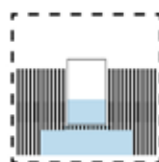
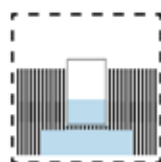
TERRACES



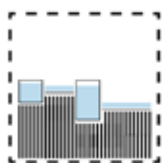
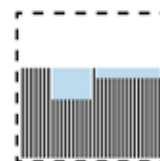
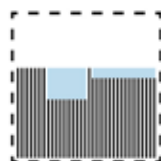
MURS À SEC



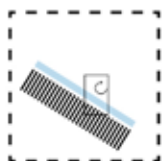
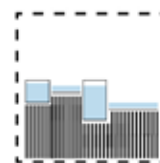
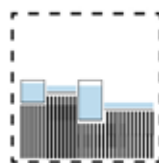
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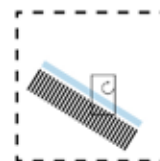
PRISES D'EAU



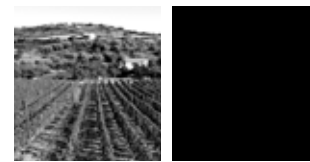
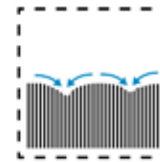
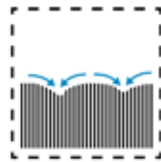
CANAUX



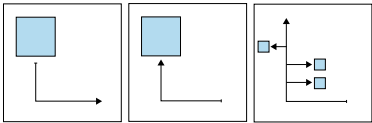
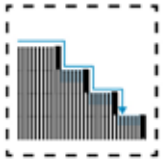
MOULINS



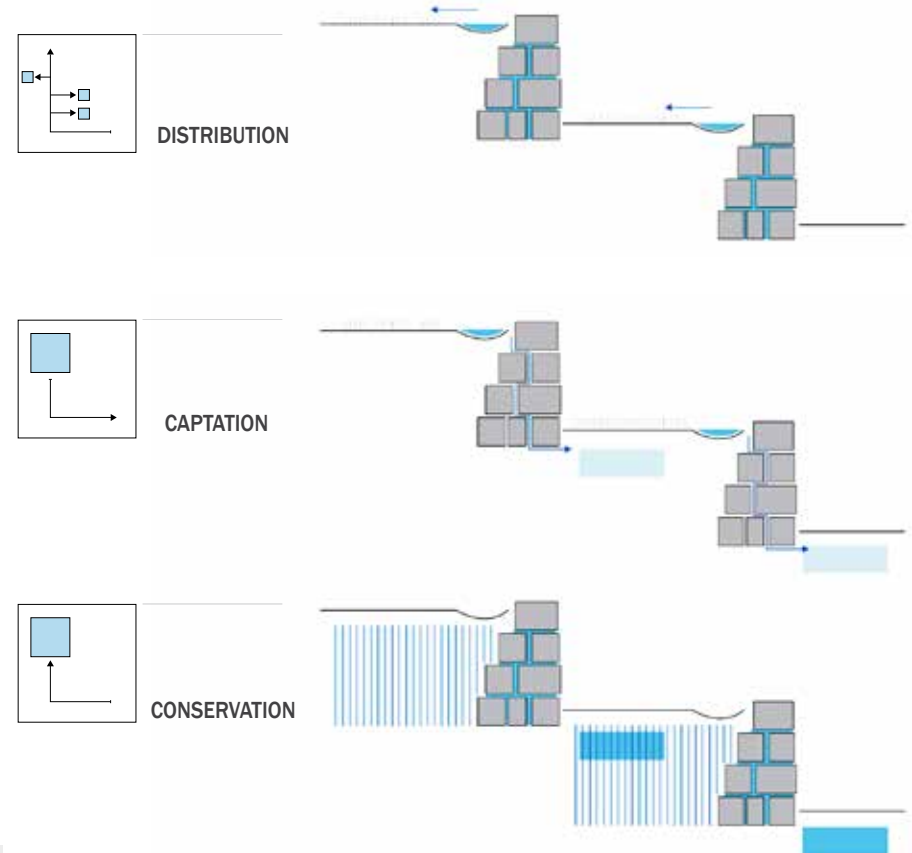
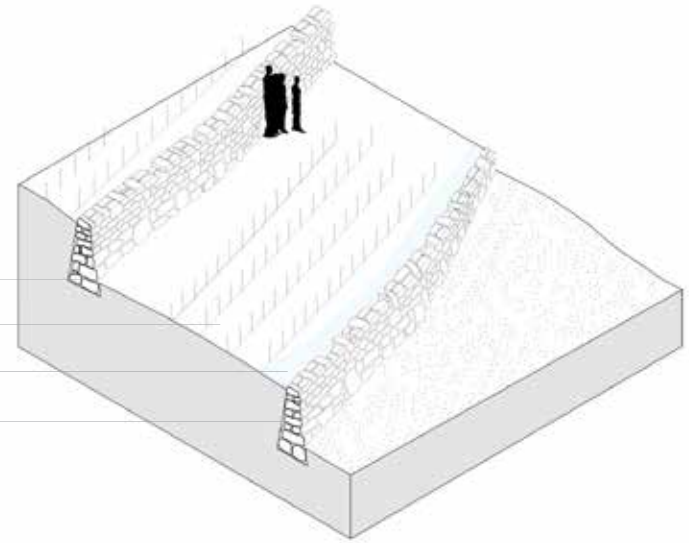
AMÉNAGEMENTS
DU TERRAIN



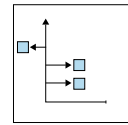
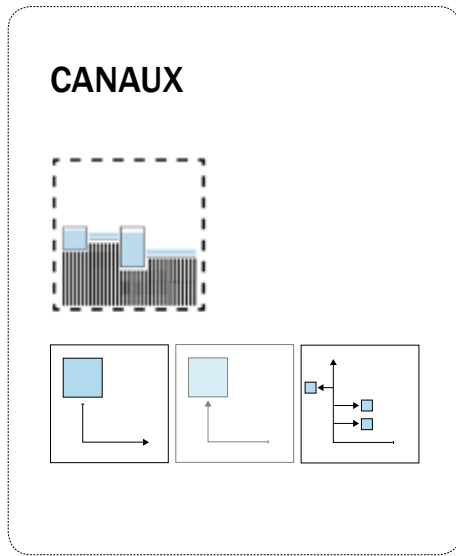
TERRACES



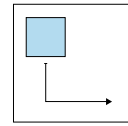
mur à sec
terrace avec jardins
distribution de l'eau
mur de soutènement



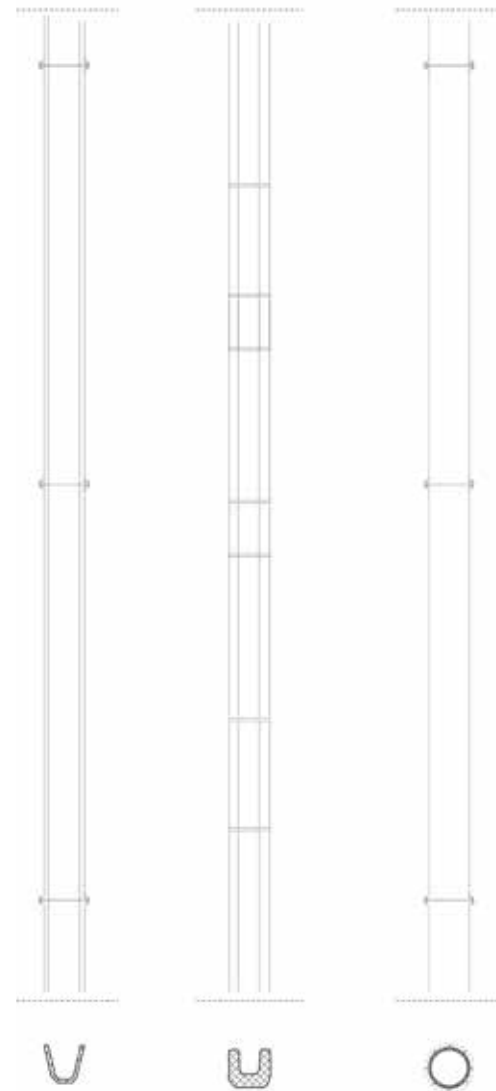
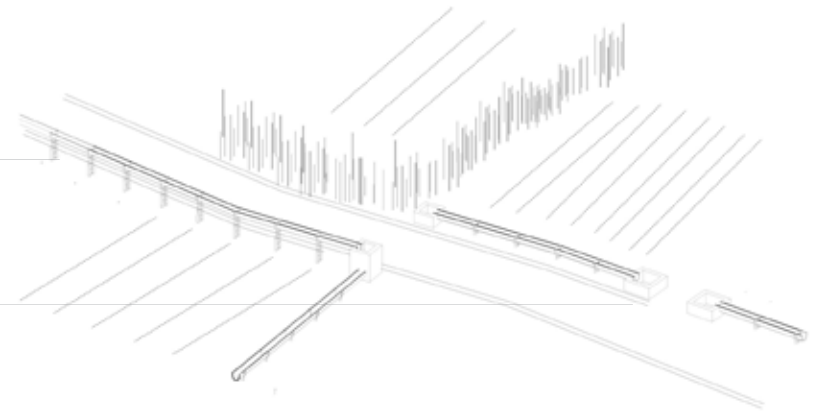
LA MÉTHODE



DISTRIBUTION



CAPTATION

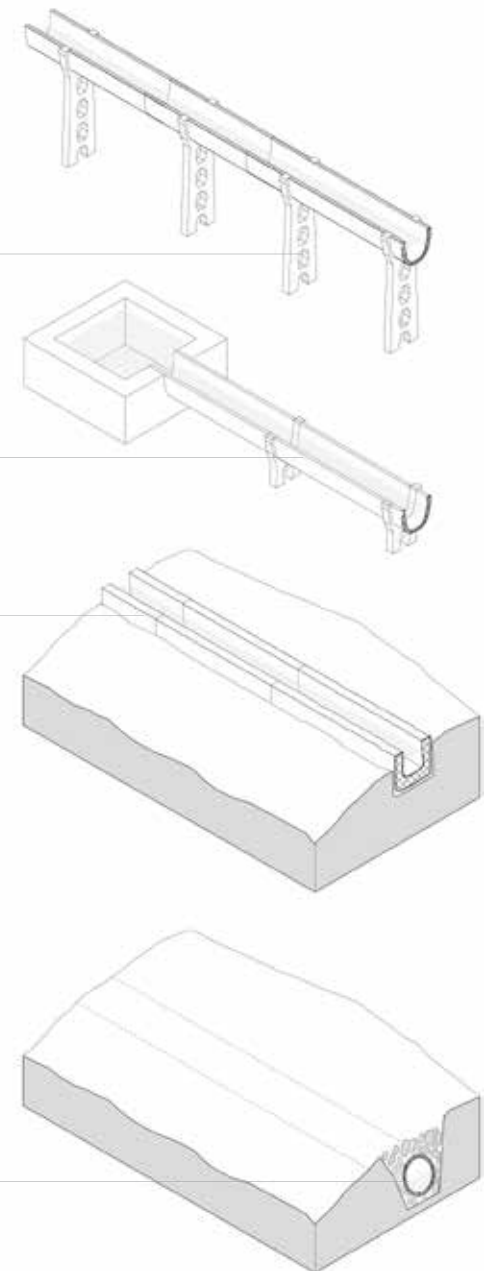


fourchettes préfabriquées en béton

éléments préfabriqués en béton

élément en pierres creusée

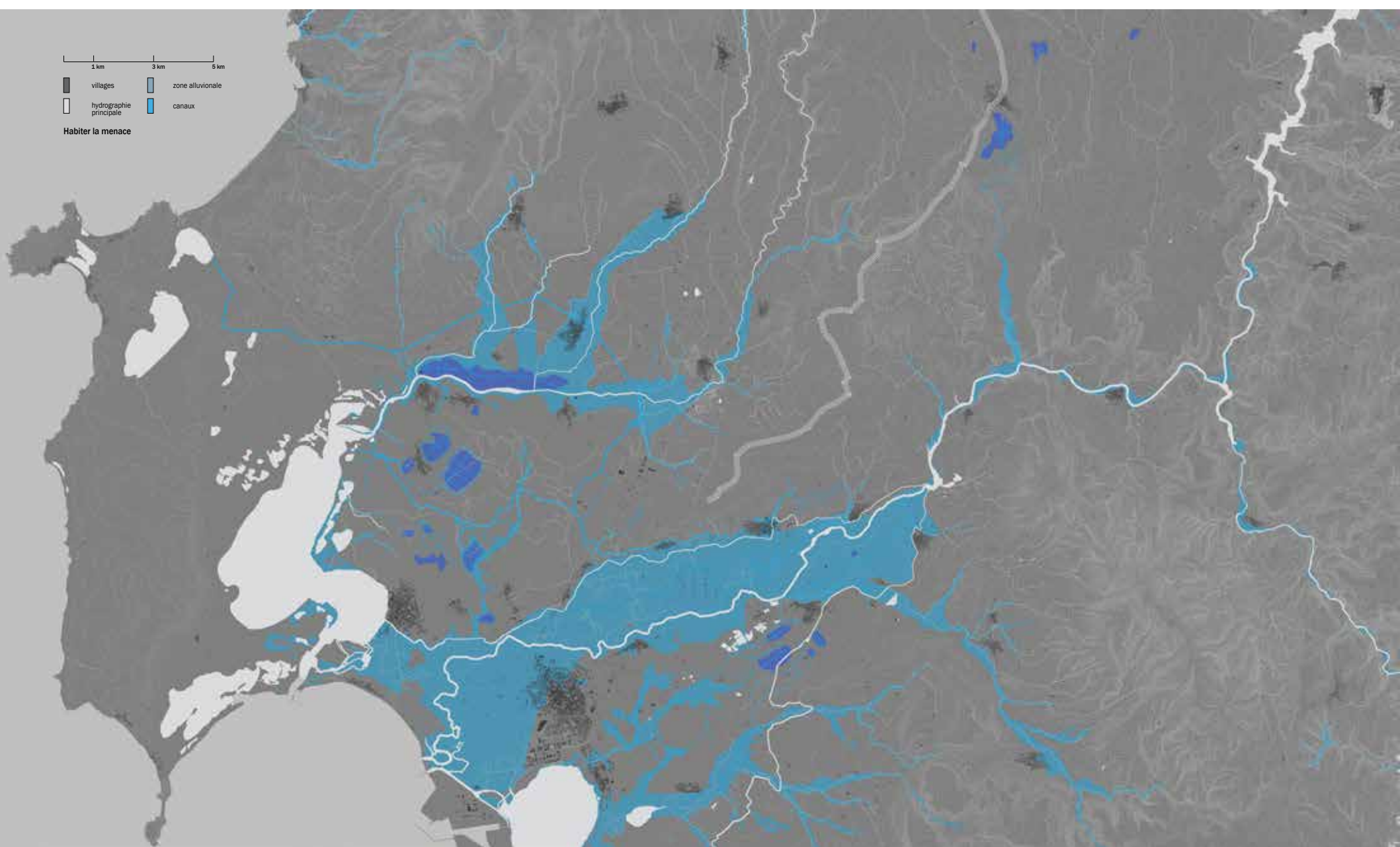
tube en pvc à pression contrôlée



LA MÉTHODE

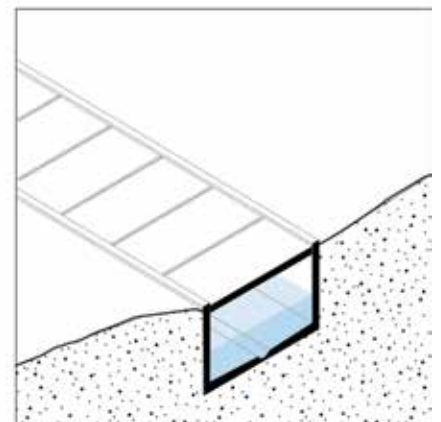
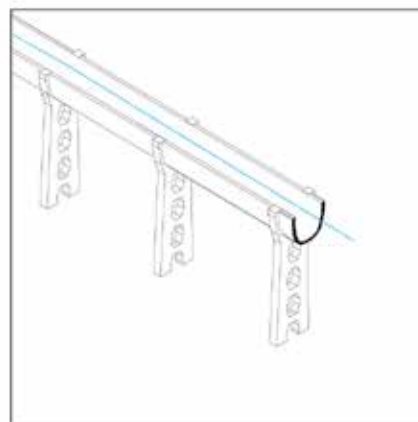
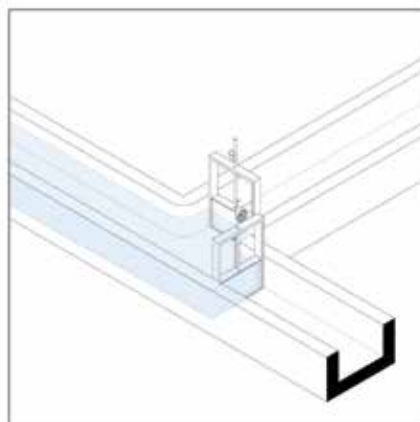
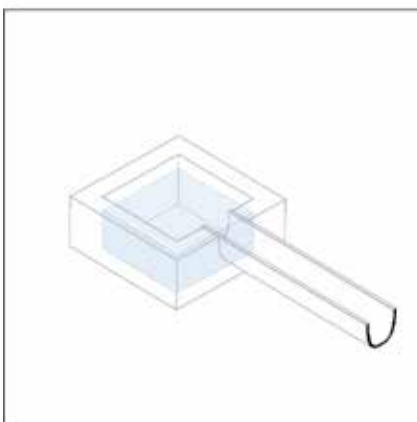
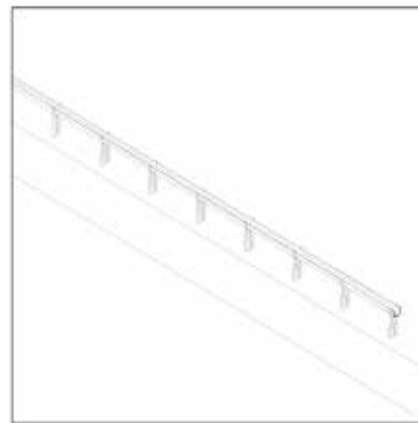
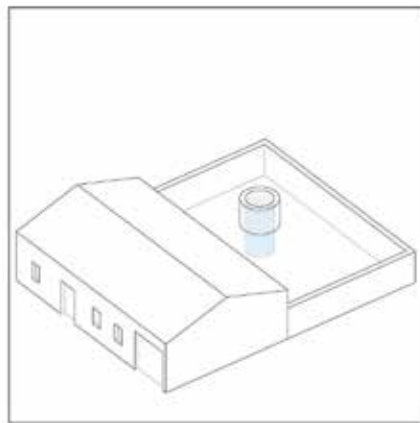
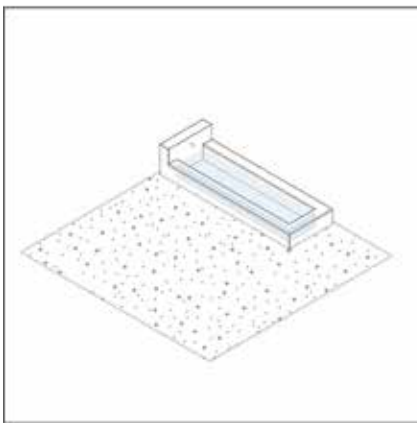
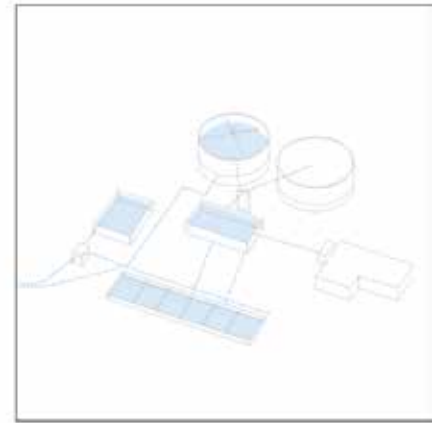
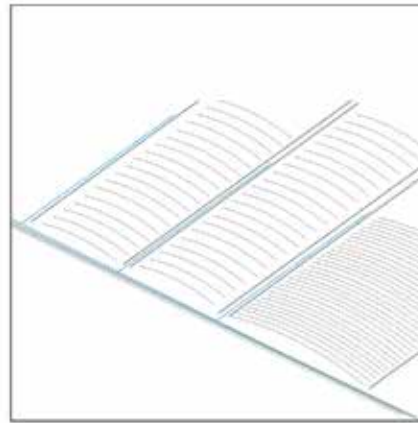
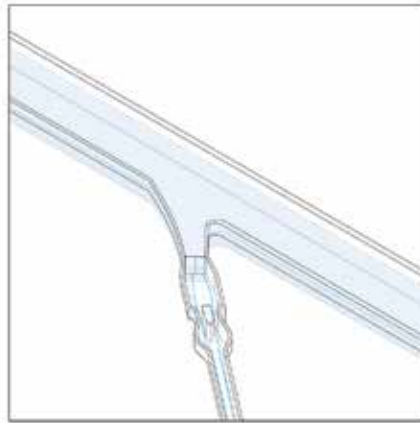
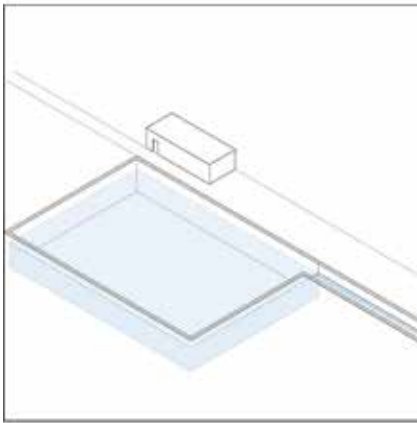
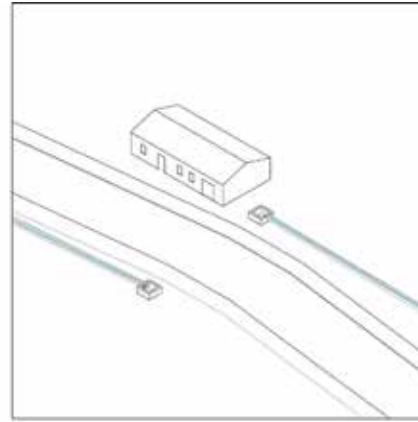
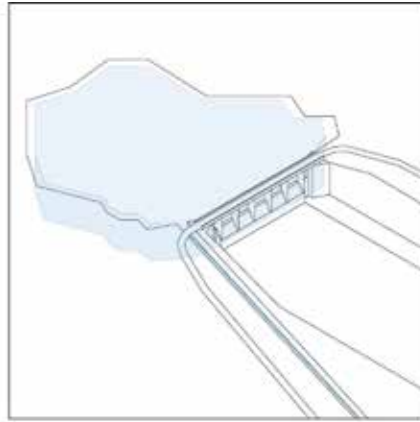
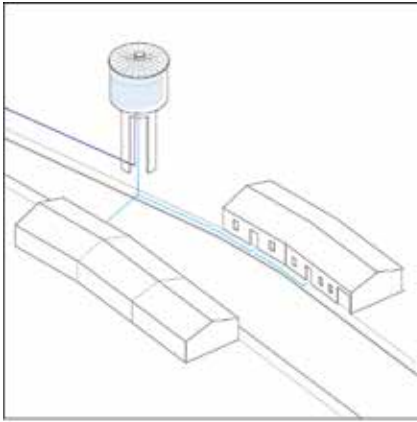


CAS D'ÉTUDE

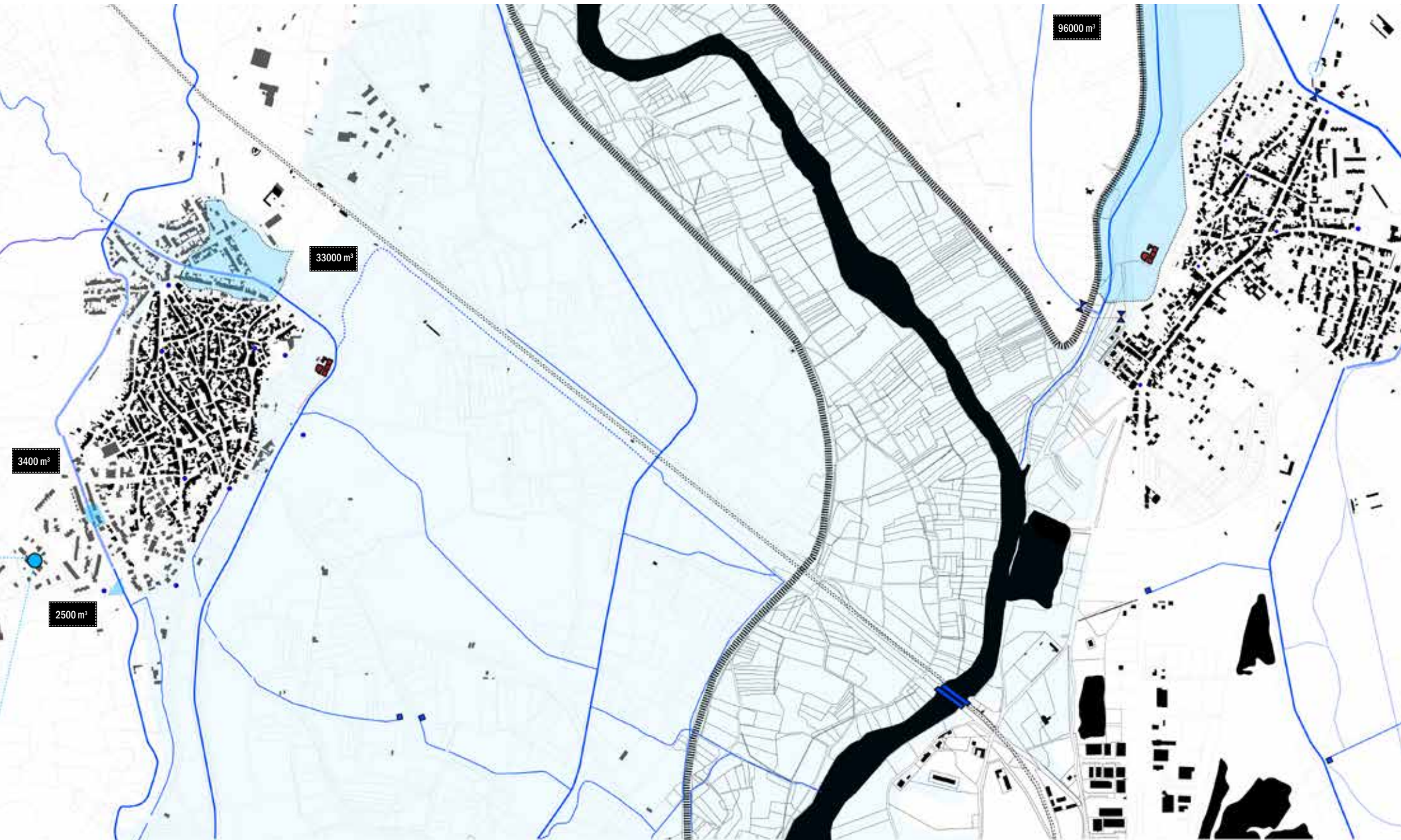


GEOGRAPHIES DU RISQUE

CAS D'ÉTUDE



CAS D'ÉTUDE



ÉPAISSEUR DU FLEUVE
CAS DE SOLARUSSA-SIMAXIS

CAS D'ÉTUDE



RISQUE DE DÉPASSEMENT DES BARRAGES



RISQUE DE INONDATION DES VILLAGES



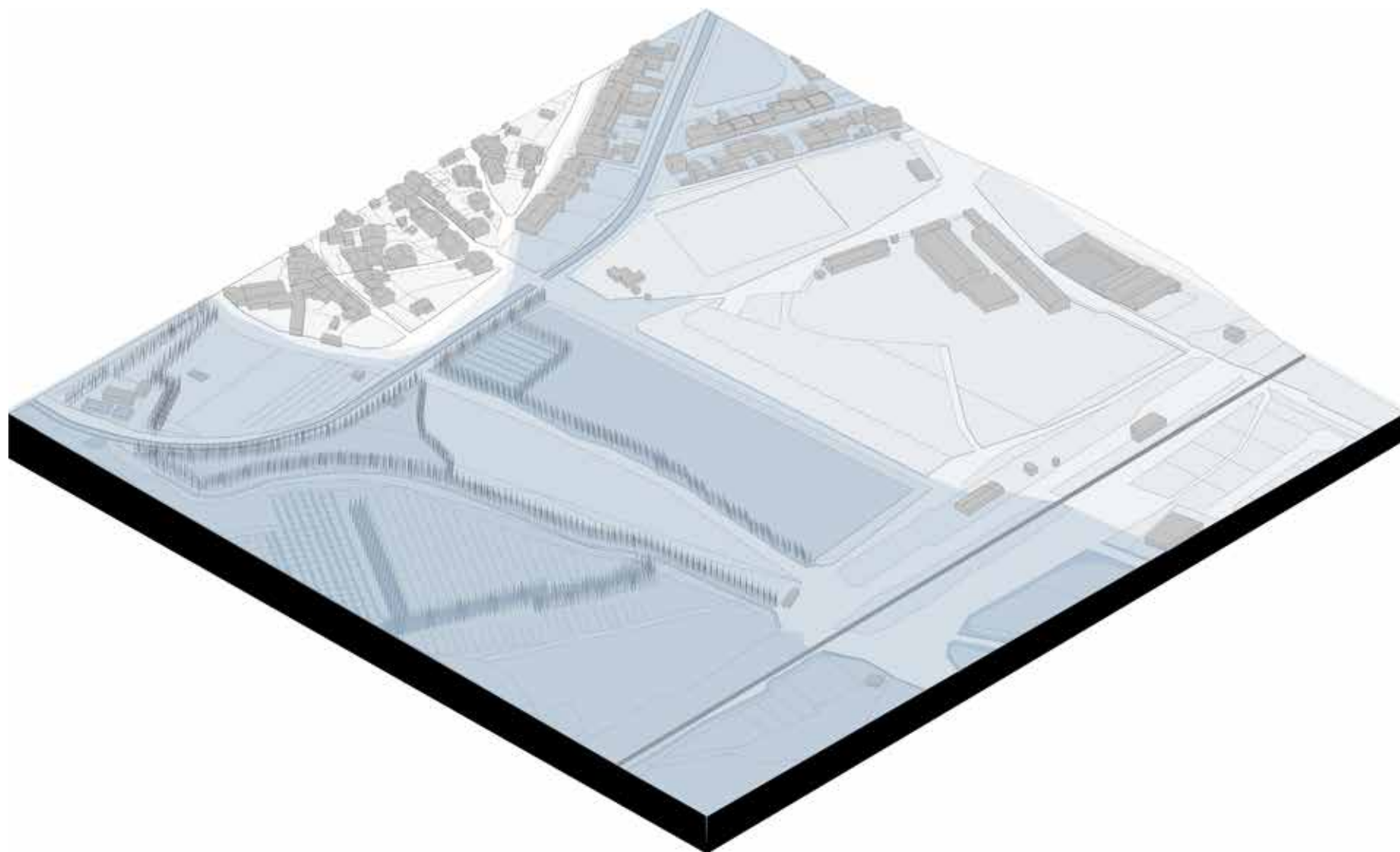
RISQUE DE CREUE DANS LA CAMPAGNE



RISQUE DE SÉCHERESSE DU LIT DU FLEUVE



SÉCHERESSE DES EAUX SOUTERRAINES



bacino idrografico
12 km²



portata di piena per tempi di ritorno di 50 anni
43 m³/s



volume acqua da laminare
40.000 m³



portata di piena per tempi di ritorno di 100 anni
50 m³/s



portata di piena per tempi di ritorno di 200 anni
55 m³/s

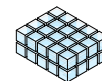


volume acqua da laminare
85.000 m³



volume acqua da laminare
105.000 m³

40.000 m³



2 x 15000 m³



V1



V2

2 x 7000 m³



V3



V4

CAS D'ÉTUDE



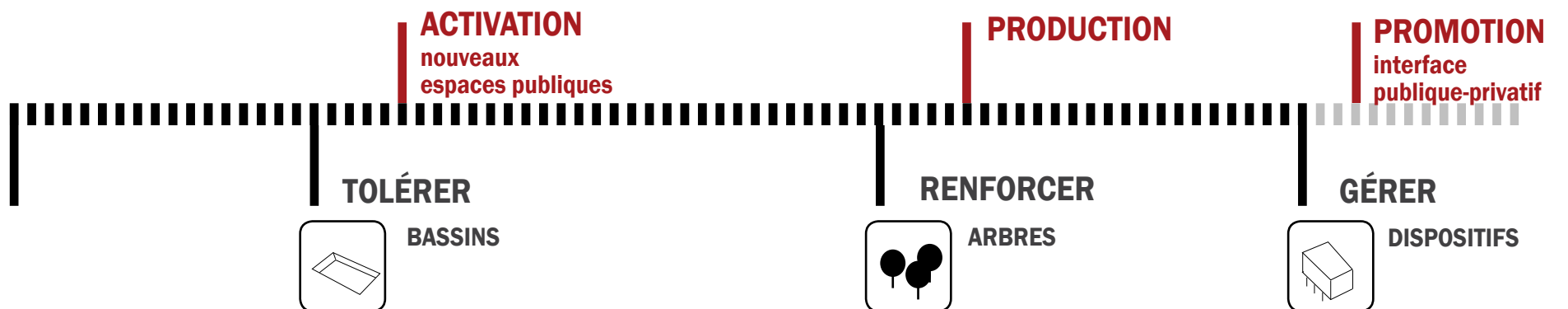
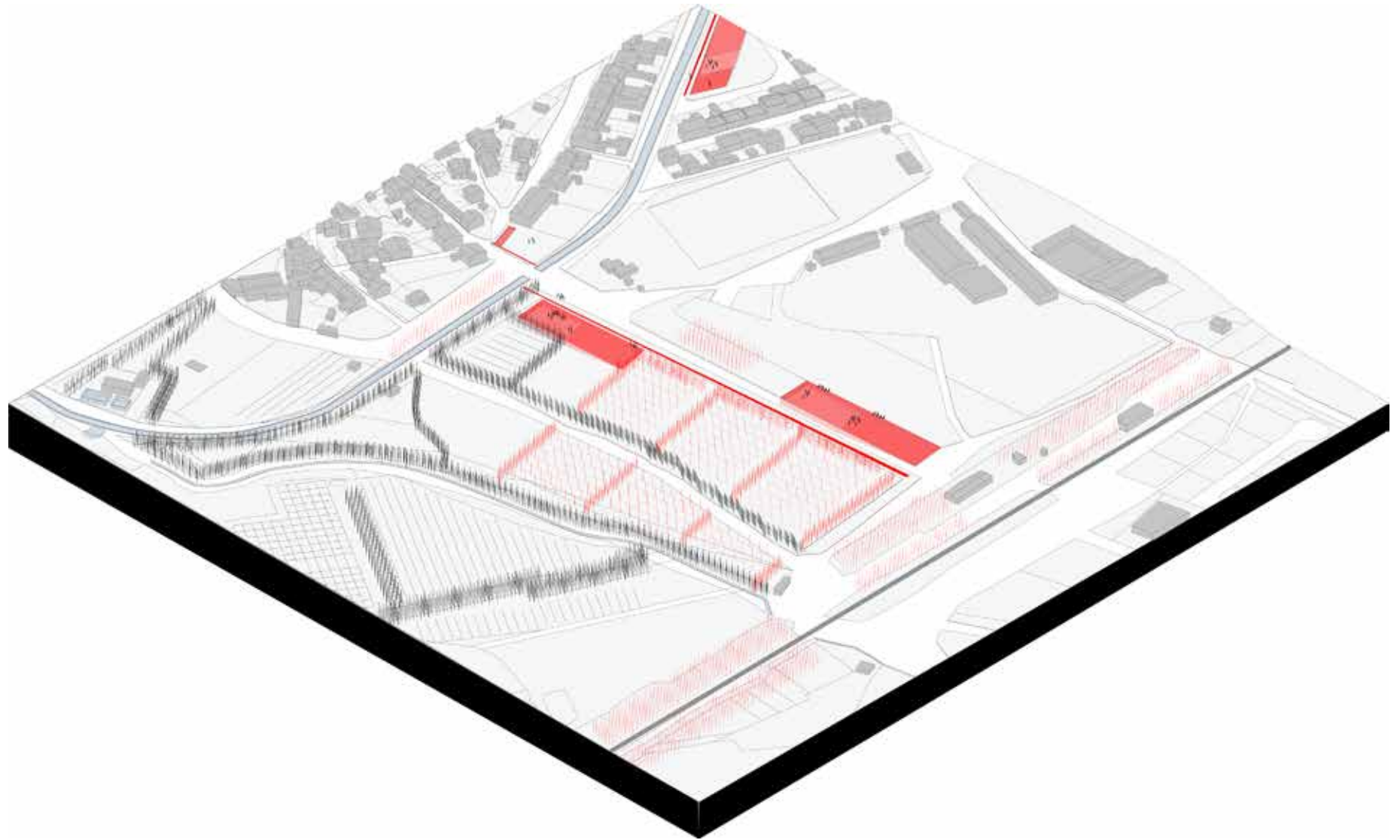
PHASE 1_drainage et bassins



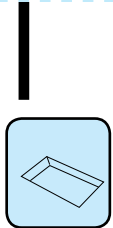
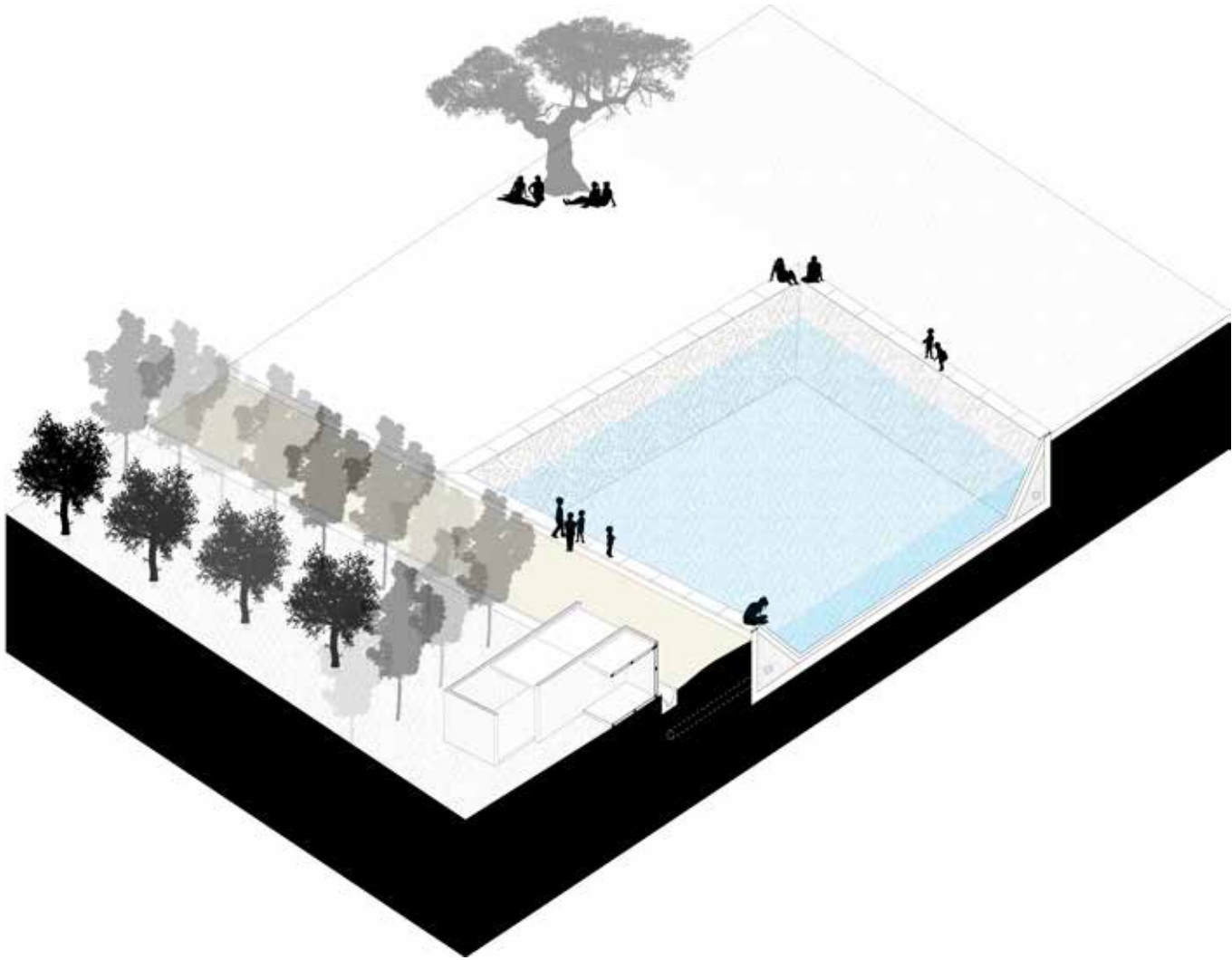
PHASE 2_jardin



PHASE 3_dispositifs minimum

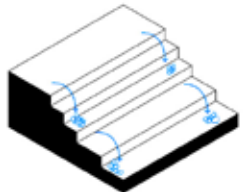


CAS D'ÉTUDE



MATRICE DES BONNES PRATIQUES

CRITICITÉS



1.1 AVALANCHES DANS LA PEINTE



1.9 DOMMAGES SUR LES TERRES PRODUCTIVES



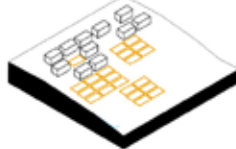
1.2 PROBLÈMES DE DRAINAGE DANS LES JARDINS



1.10 ABSENCE D'EAU POUR LES ACTIVITÉS PRODUCTIVES



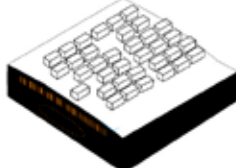
1.3 TERRAIN GRAS ET IMPERMÉABLE



1.11 SÉCHERESSE DES EAUX SOUTERRAINES



1.4 PROBLÈMES AUX BATIMENTS RURAUX



1.12 SÉCHERESSE DU LIT DU FLEUVE



1.5 DÉPASSEMENT DES BARRAGES



1.13 SÉCHERESSE DU LIT DU FLEUVE



1.6 DÉPASSEMENT DES BARRAGES



1.14 SÉCHERESSE DES BASSINS D'EAU



1.7 DÉPASSEMENT DES PONTS



1.8 INONDATION DES MARGES DES VILLAGES



OPERATIONS



2.1 TOLÉRER



2.2 ÉTENDRE



2.3 RÉSISTER



2.4 RENFORCER



2.5 SE SUPERPOSER



2.6 RECCUEILLIR



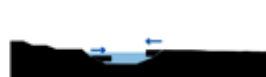
2.7 FILTRER



2.8 CONTENIR

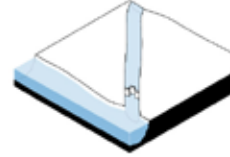


2.9 DIVERGER

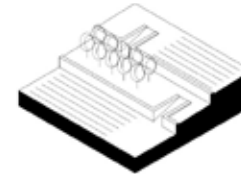


2.10 VARIER

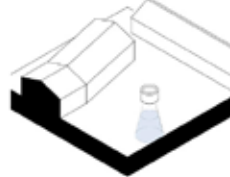
OUTILS



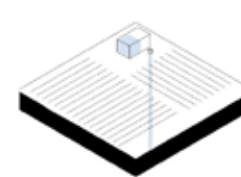
3.1 PRISES D'EAU



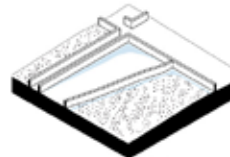
3.2 TERRACES



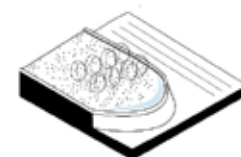
3.3 PUIITS À GRAND DIAMÈTRE



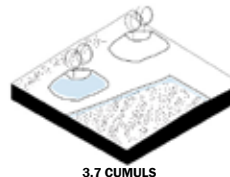
3.4 PUIITS À PETIT DIAMÈTRE



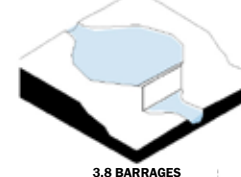
3.5 MURS À SEC



3.6 LUNETTES



3.7 CUMULS



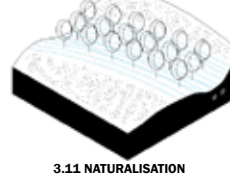
3.8 BARRAGES



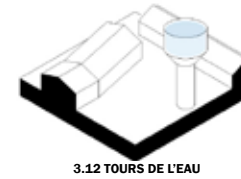
3.9 BASSINS À CIEL OUVERT



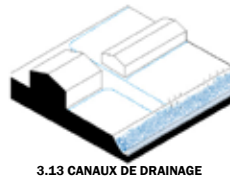
3.10 BASSINS SOUTERRAINES



3.11 NATURALISATION



3.12 TOURS DE L'EAU



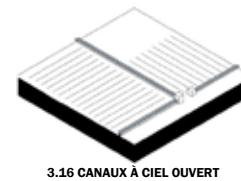
3.13 CANAUX DE DRAINAGE



3.14 SISTÈMES DE PHYTODÉPURATION

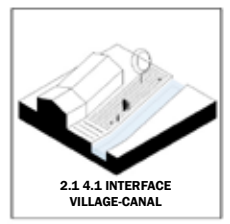


3.15 CANAUX SOUTERRAINES



3.16 CANAUX À CIEL OUVERT

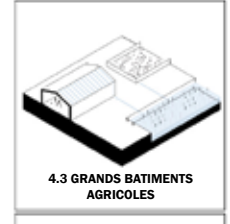
ESPACES



2.1 4.1 INTERFACE VILLAGE-CANAL



4.2 OBSERVATOIRES DE PAYSAGE



4.3 GRANDS BATIMENTS AGRICOLES



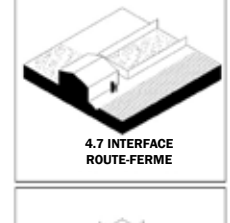
4.4 ESPACES POUR L'AQUACULTURE



4.5 ESPACES PUBLIQUES À LA CAMPAGNE



4.6 PARCOURS DANS LA CAMPAGNE



4.7 INTERFACE ROUTE-FERME



4.8 ESPACES PRODUCTIFS