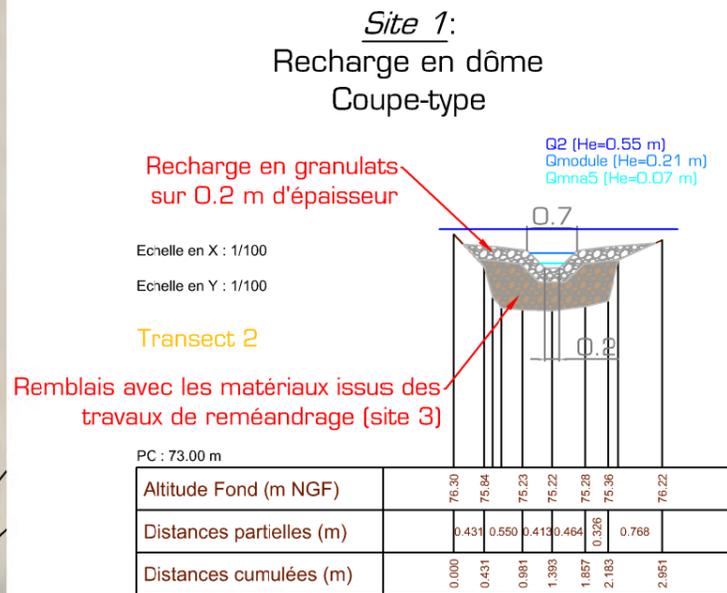
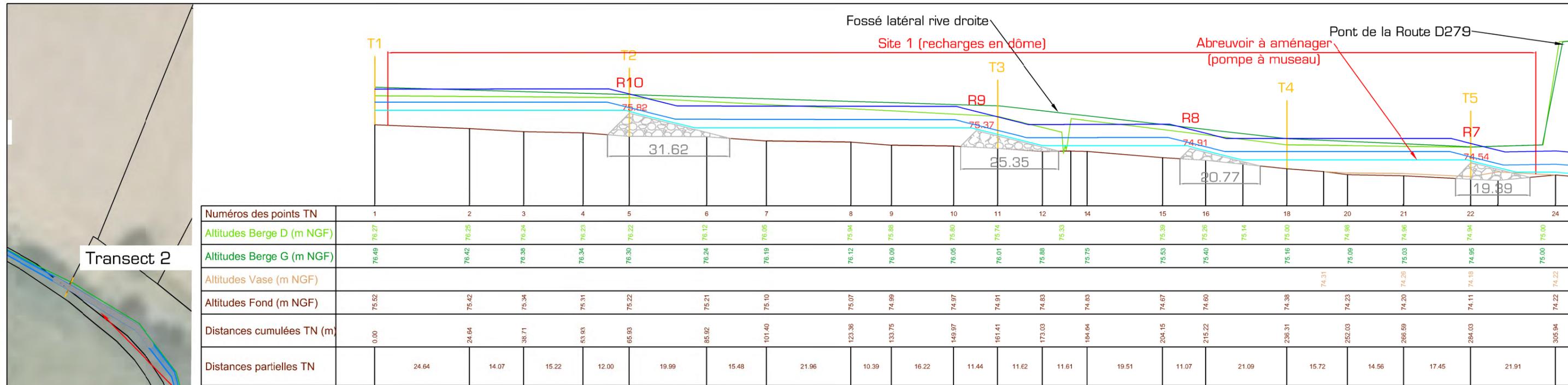


ETUDE POUR LA RESTAURATION ECOLOGIQUE DU RUISSEAU DE LA BOUDARDIERE

Plans des propositions d'aménagement



La Boudardière



Site 1 :
4 zones de recharge du lit avec pente aval à 2.5%
[L aménagée. ≈ 118 m, Vol. remblais = 38 m³, matelas de substrats granulats 0-150 mm = 61 m³]

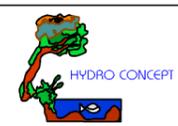
Syndicat Mixte du Bassin de l'Authion et de ses Affluents

Etude pour la restauration écologique du ruisseau de la Boudardière

Avant-projet:
Proposition d'aménagement sur site 1 amont: recharge en dôme

COMMUNE DE NOYANT-VILLAGES

N° Plan: BOUDSIT1 Format: A3 Echelle:
Date: 20/09/2018 Dessiné par: C.L



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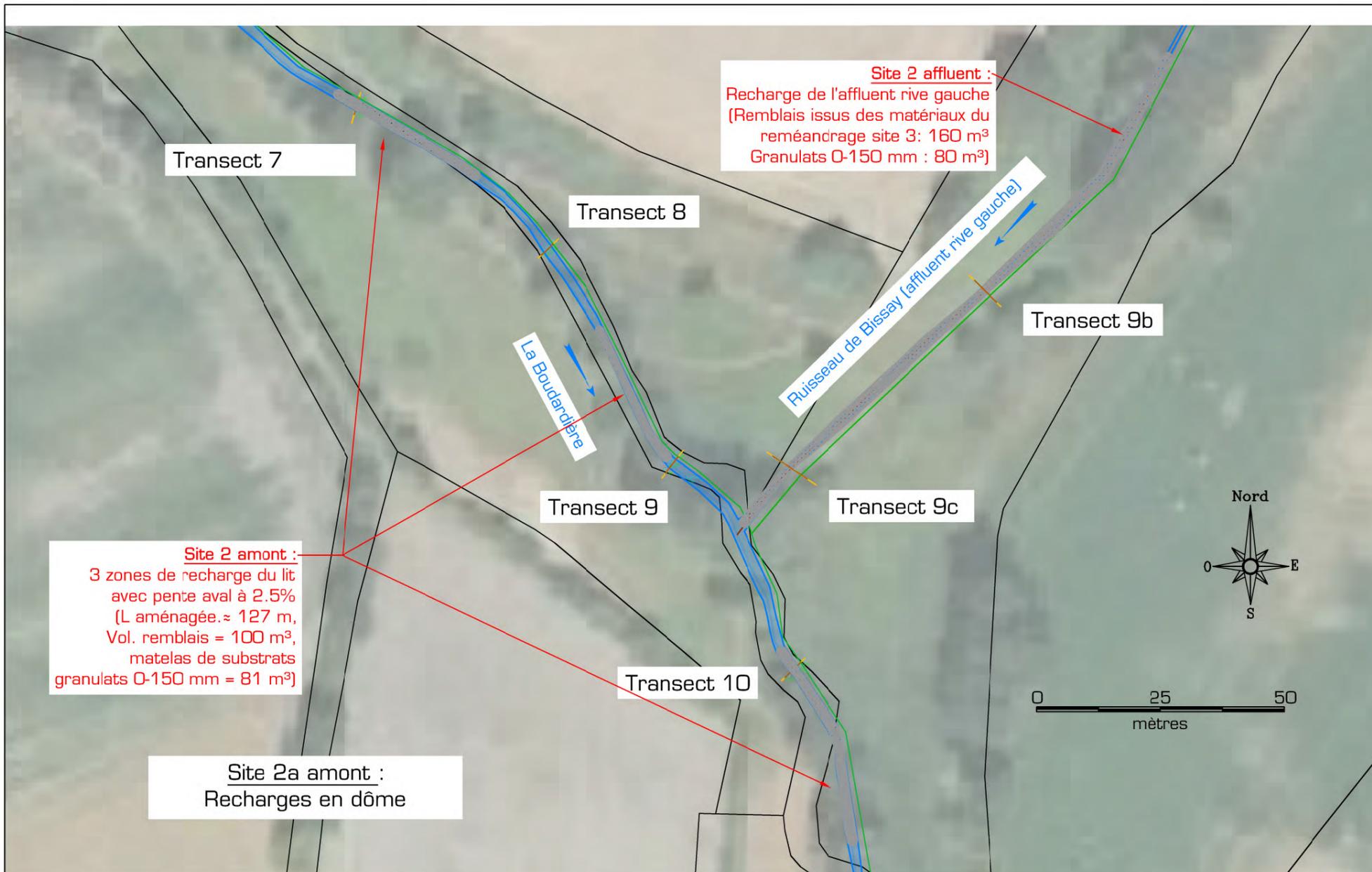
Transect 2

Transect 3

Transect 4

Abreuvoir à aménager (pompe à museau)

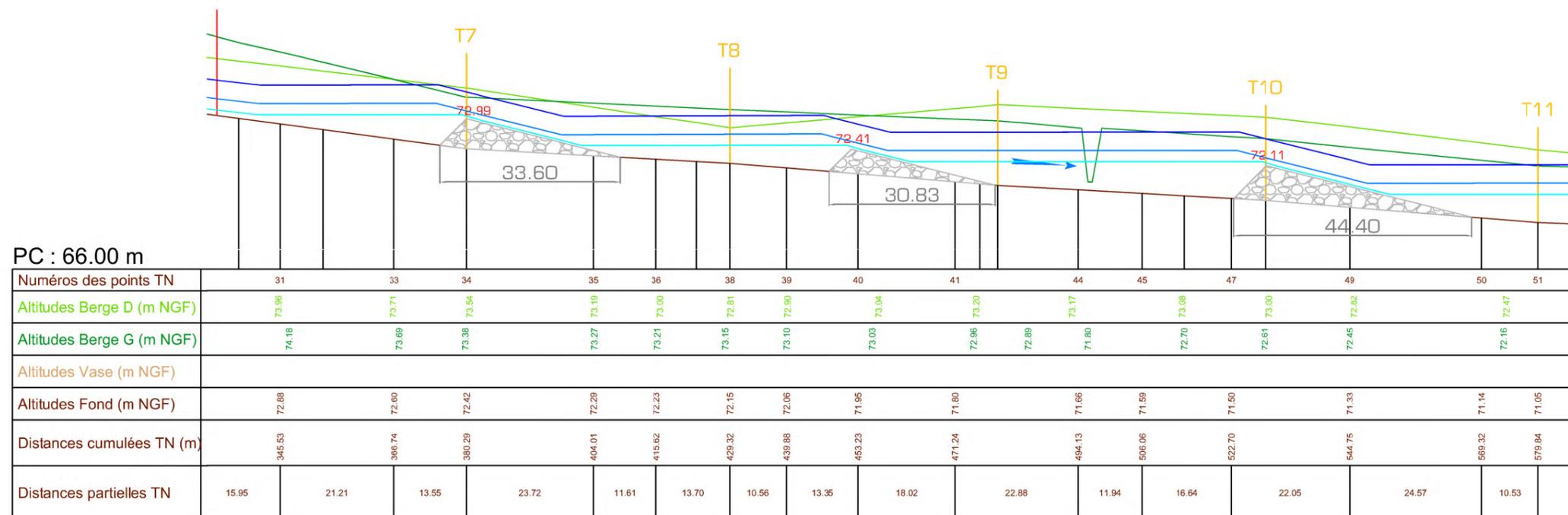
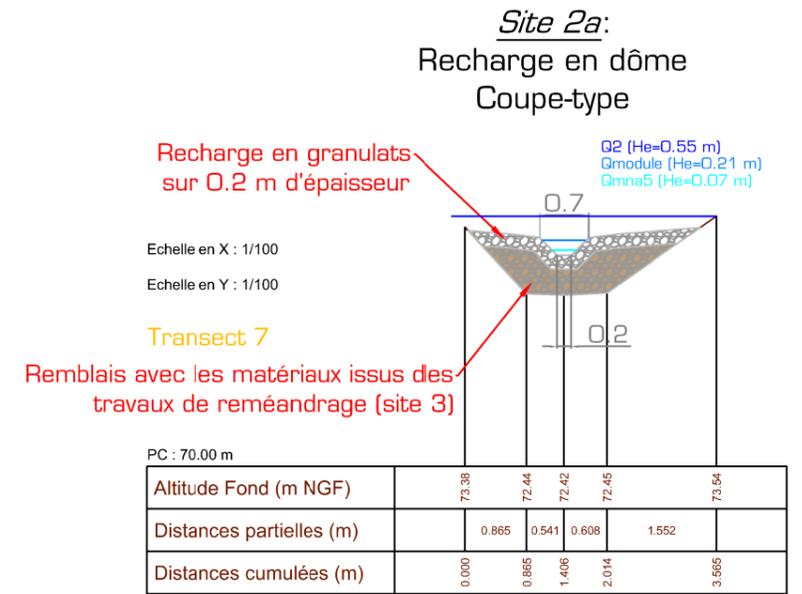
Transect 5



Site 2 amont :
 3 zones de recharge du lit
 avec pente aval à 2.5%
 (L aménagée. ≈ 127 m,
 Vol. remblais = 100 m³,
 matelas de substrats
 granulats 0-150 mm = 81 m³)

Site 2 affluent :
 Recharge de l'affluent rive gauche
 (Remblais issus des matériaux du
 reméandrage site 3: 160 m³
 Granulats 0-150 mm : 80 m³)

Site 2a amont :
 Recharges en dôme



**Syndicat Mixte du Bassin de l'Authion
 et de ses Affluents**

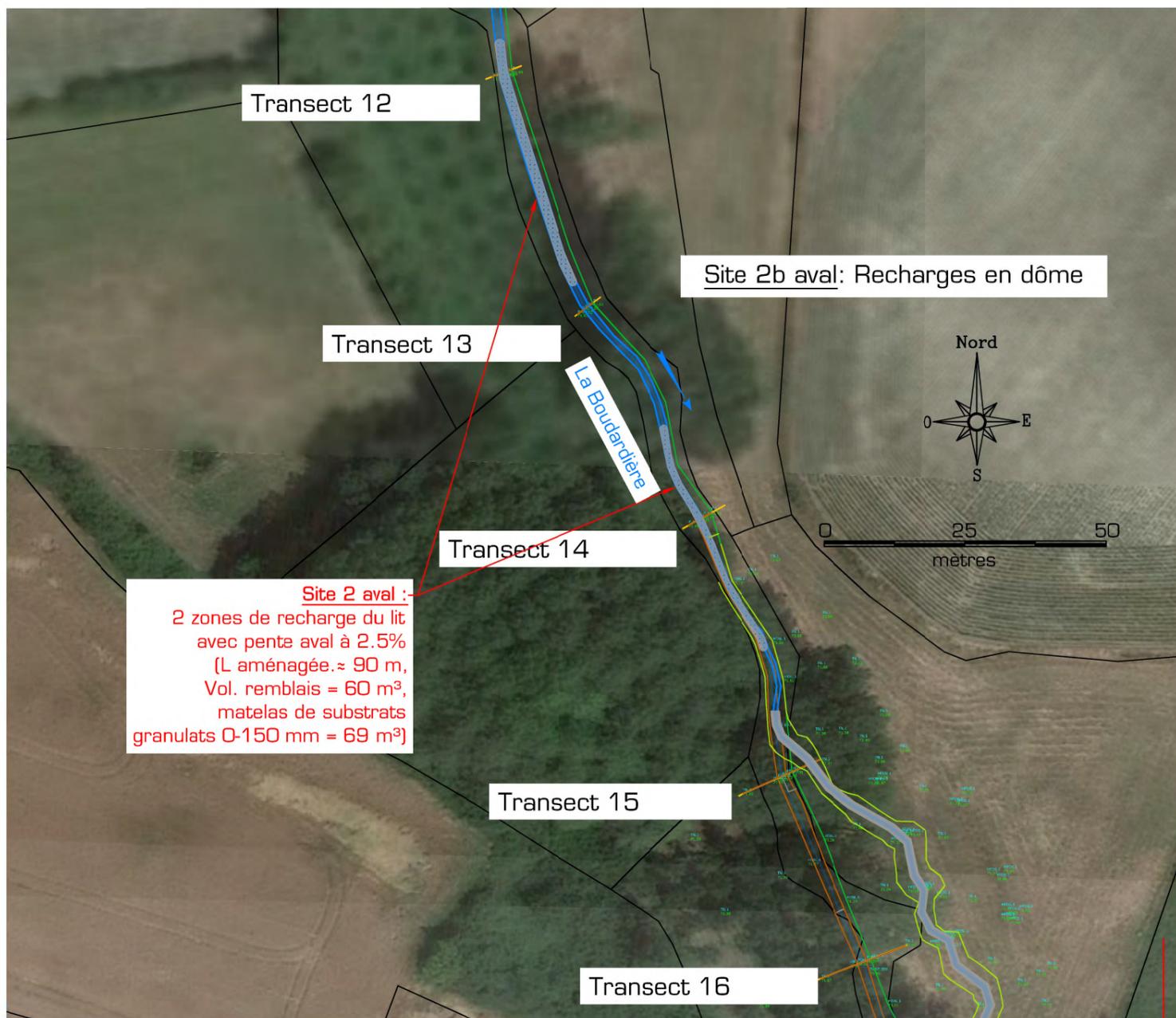
Etude pour la restauration écologique du ruisseau de la
 Boudardière

Avant-projet:
 Proposition d'aménagement sur site 2
 amont: recharge en dôme

COMMUNE DE NOYANT-VILLAGES

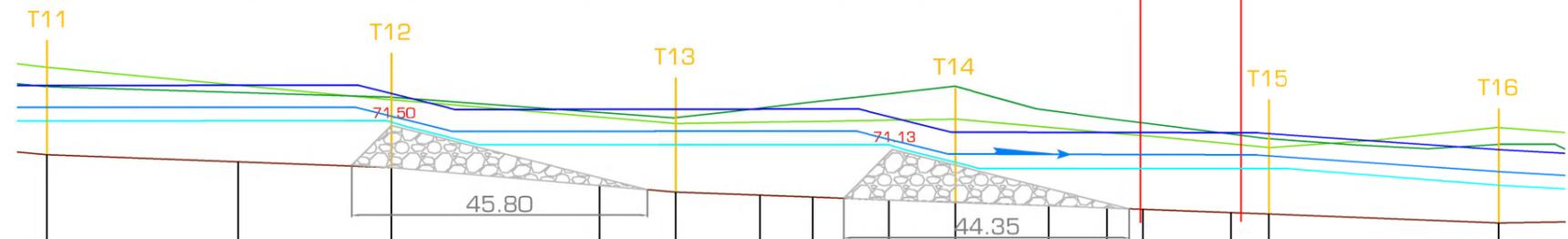
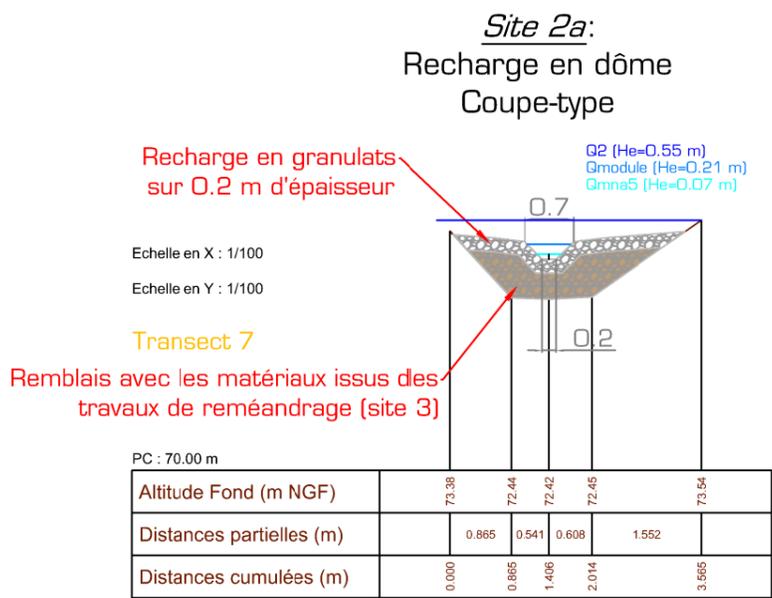
| | | |
|--------------------------|-----------------|----------|
| N° Plan: BOUDSIT2a-amont | Format: A3 | Echelle: |
| Date: 20/09/2018 | Dessiné par:C.L | |

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Site 2 aval :
 2 zones de recharge du lit
 avec pente aval à 2.5%
 (L aménagée. ≈ 90 m,
 Vol. remblais = 60 m³,
 matelas de substrats
 granulats 0-150 mm = 69 m³)

Site 2b aval: Recharges en dôme



PC : 66.00 m

| | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Numéros des points TN | 51 | 52 | 53 | 54 | 55 | 56 | 58 | 59 | 60 | 62 | 63 | 65 |
| Altitudes Berge D (m NGF) | | | 71.90 | 71.62 | 71.53 | 71.55 | 71.57 | 71.58 | 71.49 | 71.38 | 71.24 | 71.47 |
| Altitudes Berge G (m NGF) | | | 71.94 | 71.70 | 71.62 | 71.77 | 72.00 | 71.76 | 71.59 | 71.30 | 71.20 | 71.14 |
| Altitudes Vase (m NGF) | | | 71.94 | 71.70 | 71.62 | 71.77 | 72.00 | 71.76 | 71.59 | 71.30 | 71.20 | 71.14 |
| Altitudes Fond (m NGF) | 71.05 | 70.94 | 70.85 | 70.57 | 70.47 | 70.42 | 70.35 | 70.31 | 70.26 | 70.20 | 70.15 | 69.99 |
| Distances cumulées TN (m) | 579.84 | 609.40 | 633.43 | 665.73 | 677.59 | 690.59 | 710.70 | 720.93 | 735.45 | 750.08 | 763.85 | 805.52 |
| Distances partielles TN | 53 | 29.56 | 24.03 | 32.31 | 11.85 | 13.01 | 20.11 | 10.22 | 14.52 | 14.63 | 13.77 | 41.67 |

Syndicat Mixte du Bassin de l'Authion et de ses Affluents

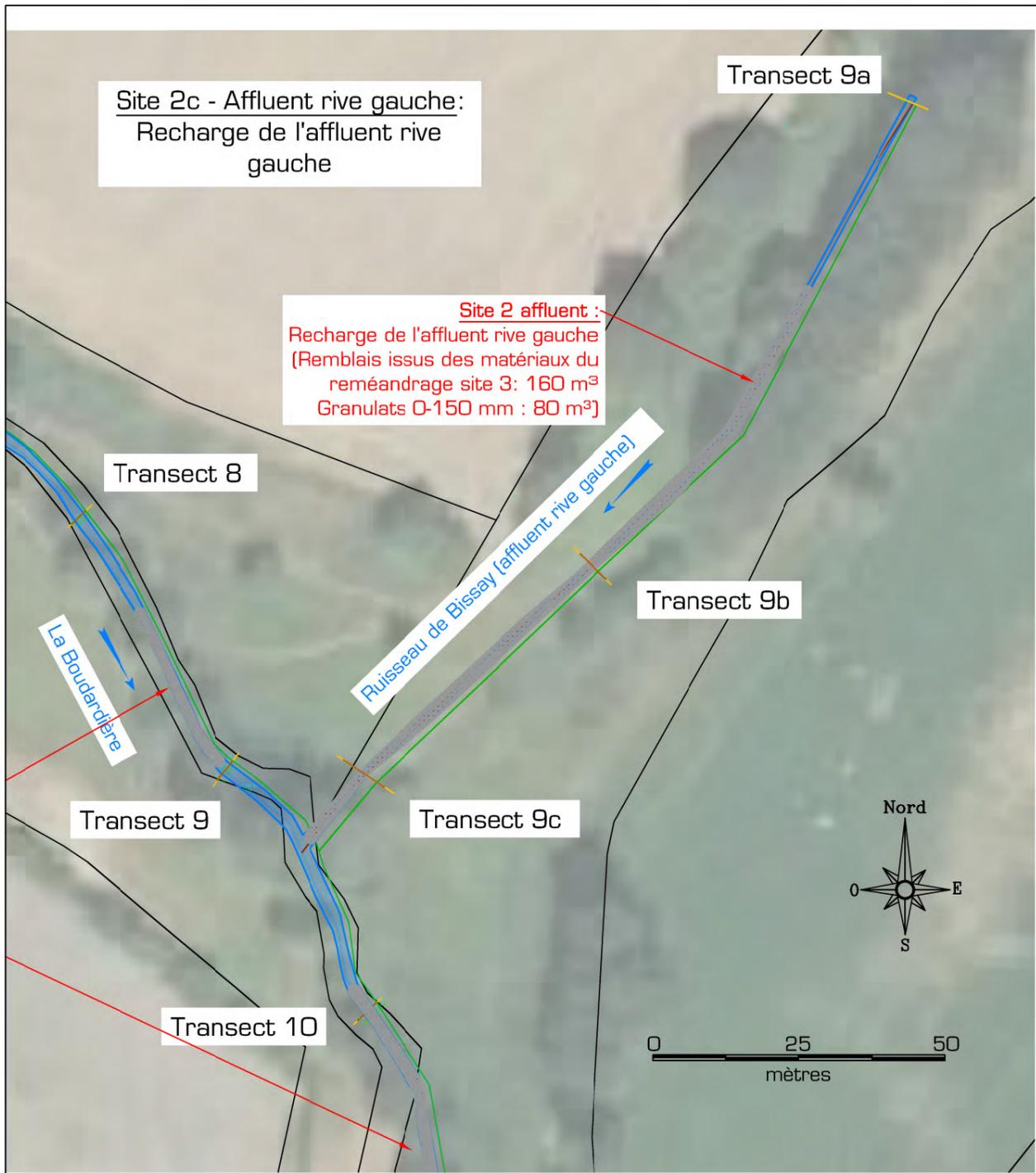
Etude pour la restauration écologique du ruisseau de la Boudardière

Avant-projet:
 Proposition d'aménagement sur site 2 aval
 Recharges en dôme

COMMUNE DE NOYANT-VILLAGES

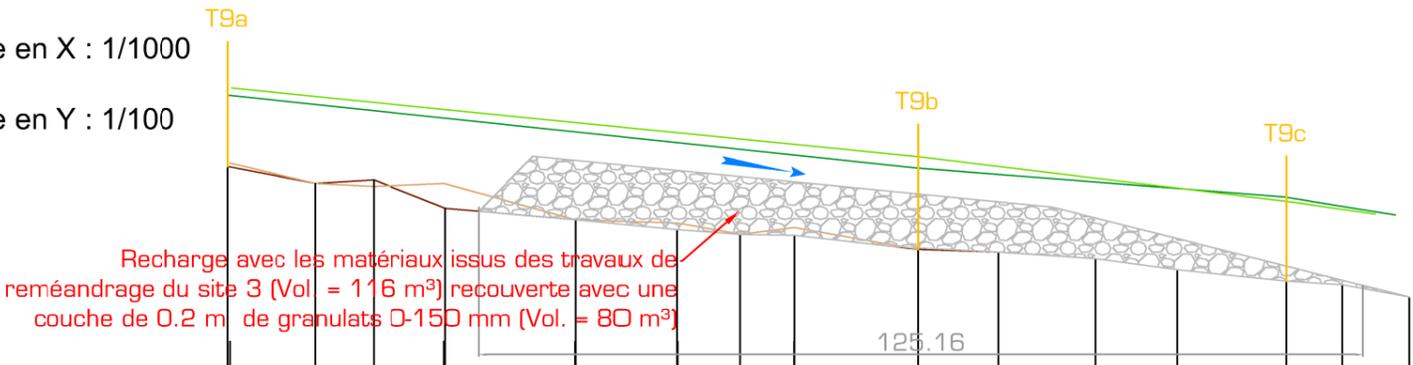
| | | |
|-------------------------|-----------------|----------|
| N° Plan: BOUDSIT2b-aval | Format: A3 | Echelle: |
| Date: 20/09/2018 | Dessiné par:C.L | |

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Echelle en X : 1/1000

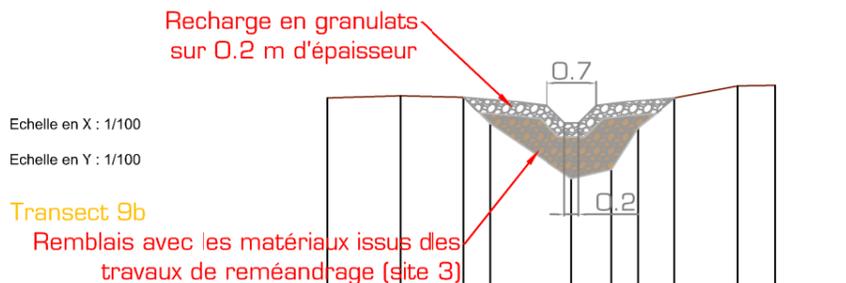
Echelle en Y : 1/100



PC : 70.00 m

| | | | | | | | | | | | | |
|---------------------------|-------|-------|-------|---|-------|---|-------|----|-------|----|-------|--------|
| Numéros des points TN | 1 | 2 | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 13 | 15 |
| Altitudes Berge D (m NGF) | 74.58 | | 74.21 | | 73.95 | | 73.61 | | | | 72.97 | 72.80 |
| Altitudes Berge G (m NGF) | 74.48 | | 73.23 | | 73.81 | | 73.45 | | | | 73.04 | 72.79 |
| Altitudes Vase (m NGF) | 73.52 | 73.23 | 73.23 | | 72.72 | | 72.30 | | | | 72.26 | 72.17 |
| Altitudes Fond (m NGF) | 73.47 | 73.23 | 72.88 | | 72.72 | | 72.58 | | 72.50 | | 72.01 | 71.85 |
| Distances cumulées TN (m) | 0.00 | 12.47 | 30.88 | | 49.35 | | 63.72 | | 80.30 | | 97.78 | 109.16 |
| Distances partielles TN | | 12.47 | 18.41 | | 18.47 | | 14.37 | | 16.59 | | 17.48 | 11.38 |

Site 2:
Recharge de l'affluent rive gauche
Coupe-type



PC : 70.00 m

| | | | | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Altitude Fond (m NGF) | 73.44 | 73.47 | 73.45 | 73.08 | 72.30 | 72.43 | 73.02 | 73.44 | 73.61 | 73.62 |
| Distances partielles (m) | | 1.038 | 0.694 | 0.377 | 1.150 | 0.562 | 0.374 | 0.523 | 0.890 | 0.524 |
| Distances cumulées (m) | 0.000 | 1.038 | 1.933 | 2.310 | 3.460 | 4.022 | 4.396 | 4.919 | 5.809 | 6.333 |

**Syndicat Mixte du Bassin de l'Authion
et de ses Affluents**

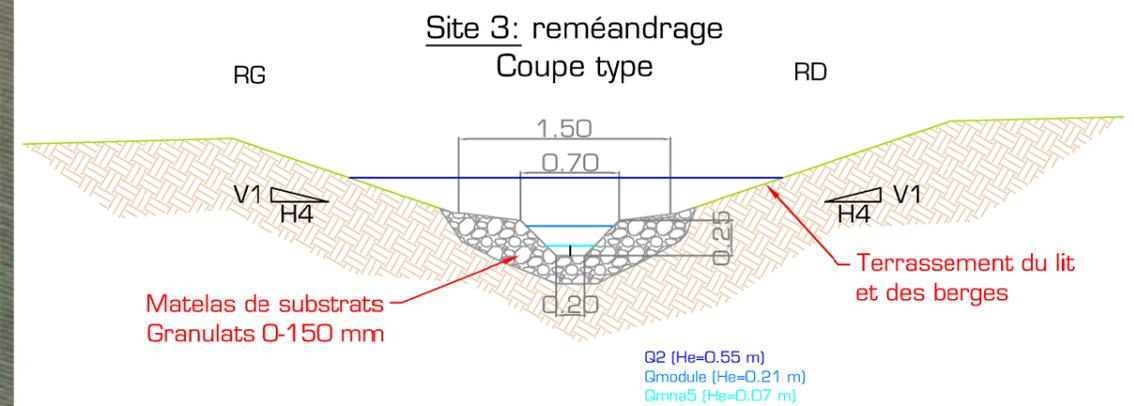
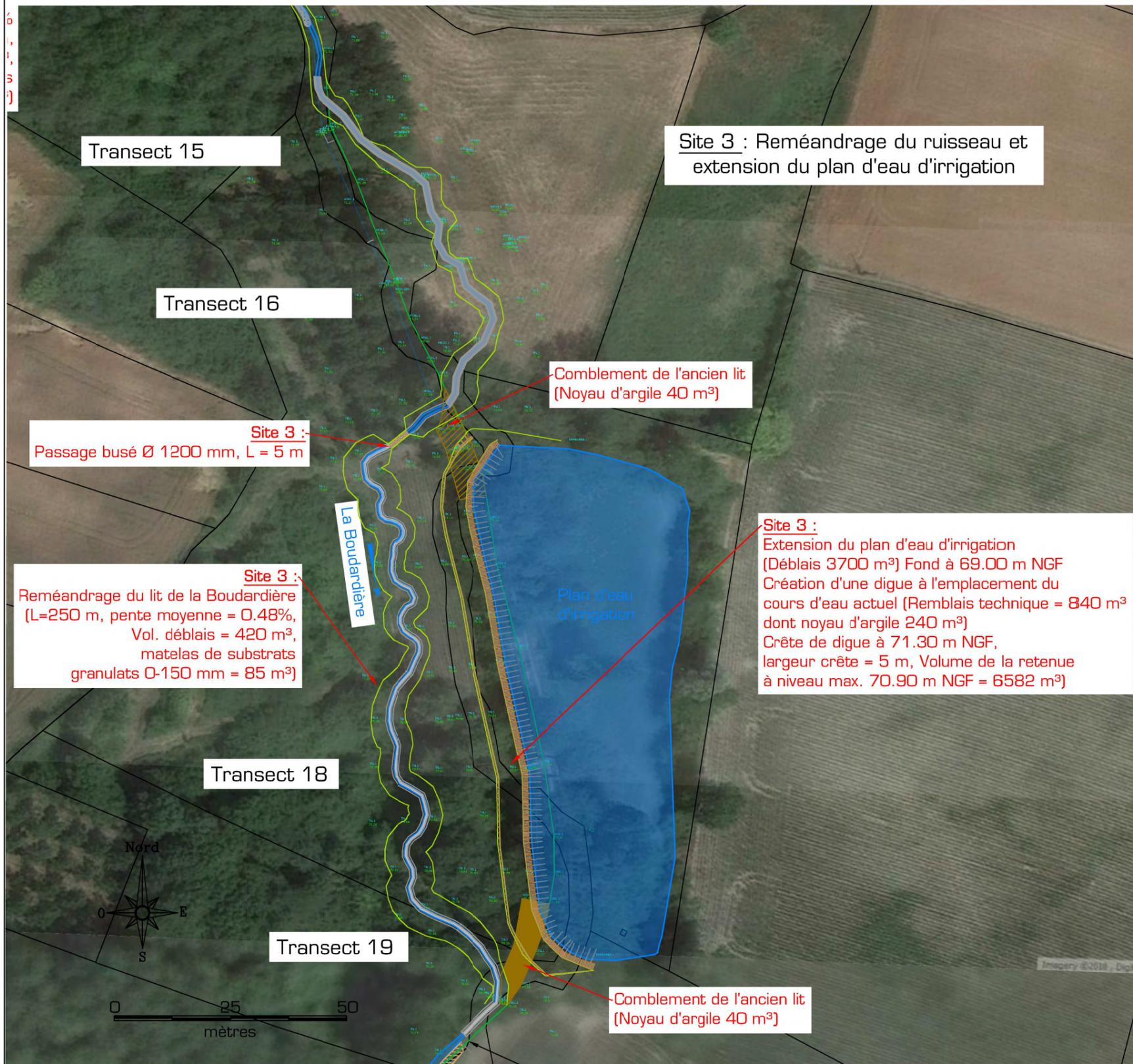
Etude pour la restauration écologique du ruisseau de la Boudardière
Avant-projet:
Proposition d'aménagement sur site 2
affluent rive gauche : Recharge du lit

COMMUNE DE NOYANT-VILLAGES

| | | |
|-------------------------------|-----------------|----------|
| N° Plan: BOUDSIT2c-affluentRG | Format: A3 | Echelle: |
| Date: 20/09/2018 | Dessiné par:C.L | |



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**Syndicat Mixte du Bassin de l'Authion
et de ses Affluents**

Etude pour la restauration écologique du ruisseau de la
Boudardière

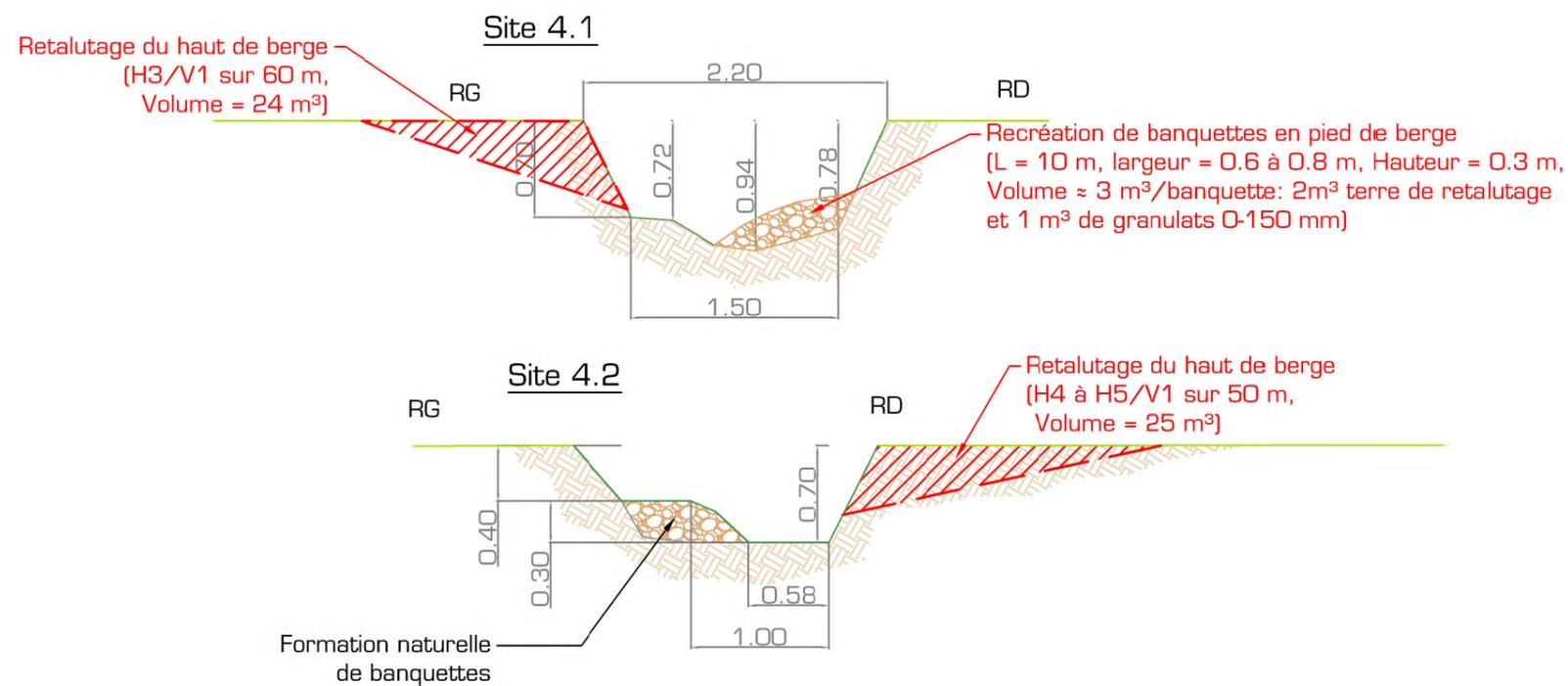
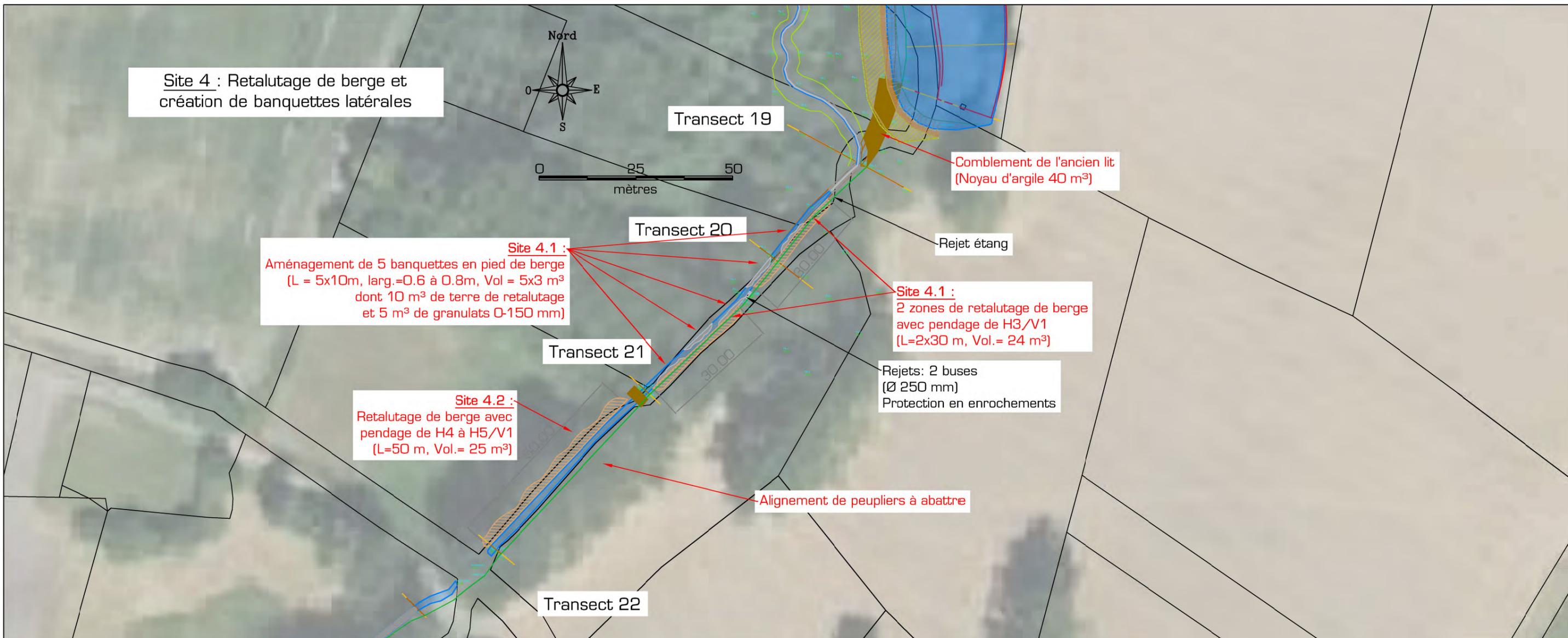
Avant-projet:
Proposition d'aménagement sur site 3
Reméandrage du ruisseau et extension du
plan d'eau d'irrigation - Vue en plan
COMMUNE DE NOYANT-VILLAGES

| | | |
|--------------------|------------------|----------|
| N° Plan: BOUDSIT3a | Format: A3 | Echelle: |
| Date: 20/09/2018 | Dessiné par: C.L | |



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Site 4 : Retalutage de berge et création de banquettes latérales



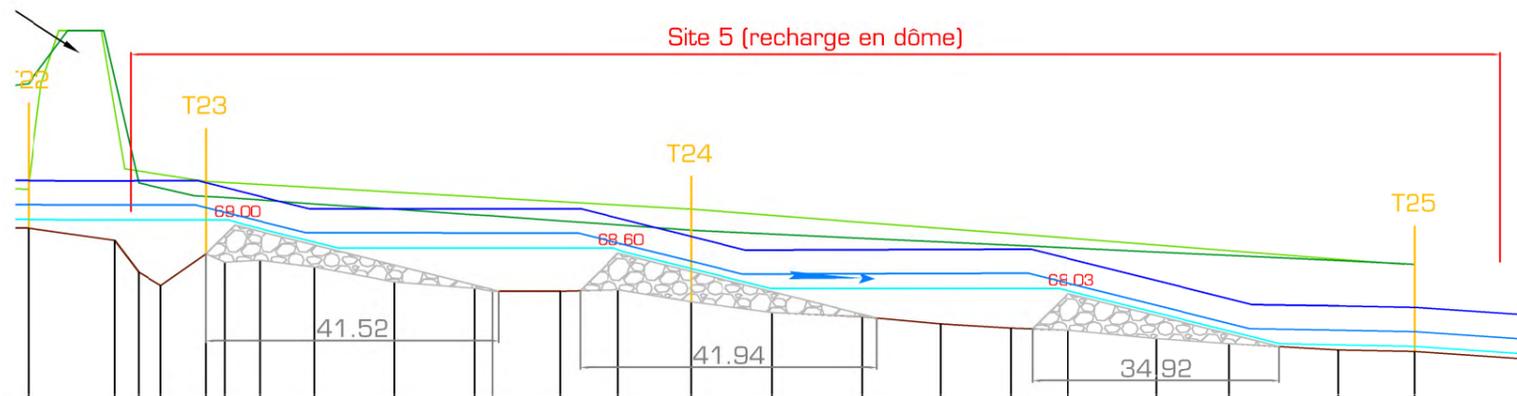
**Syndicat Mixte du Bassin de l'Authion
et de ses Affluents**

Etude pour la restauration écologique du ruisseau de la Boudardière
Avant-projet:
 Proposition d'aménagement sur site 4
 Retalutage de berge et banquettes latérales
 COMMUNE DE NOYANT-VILLAGES

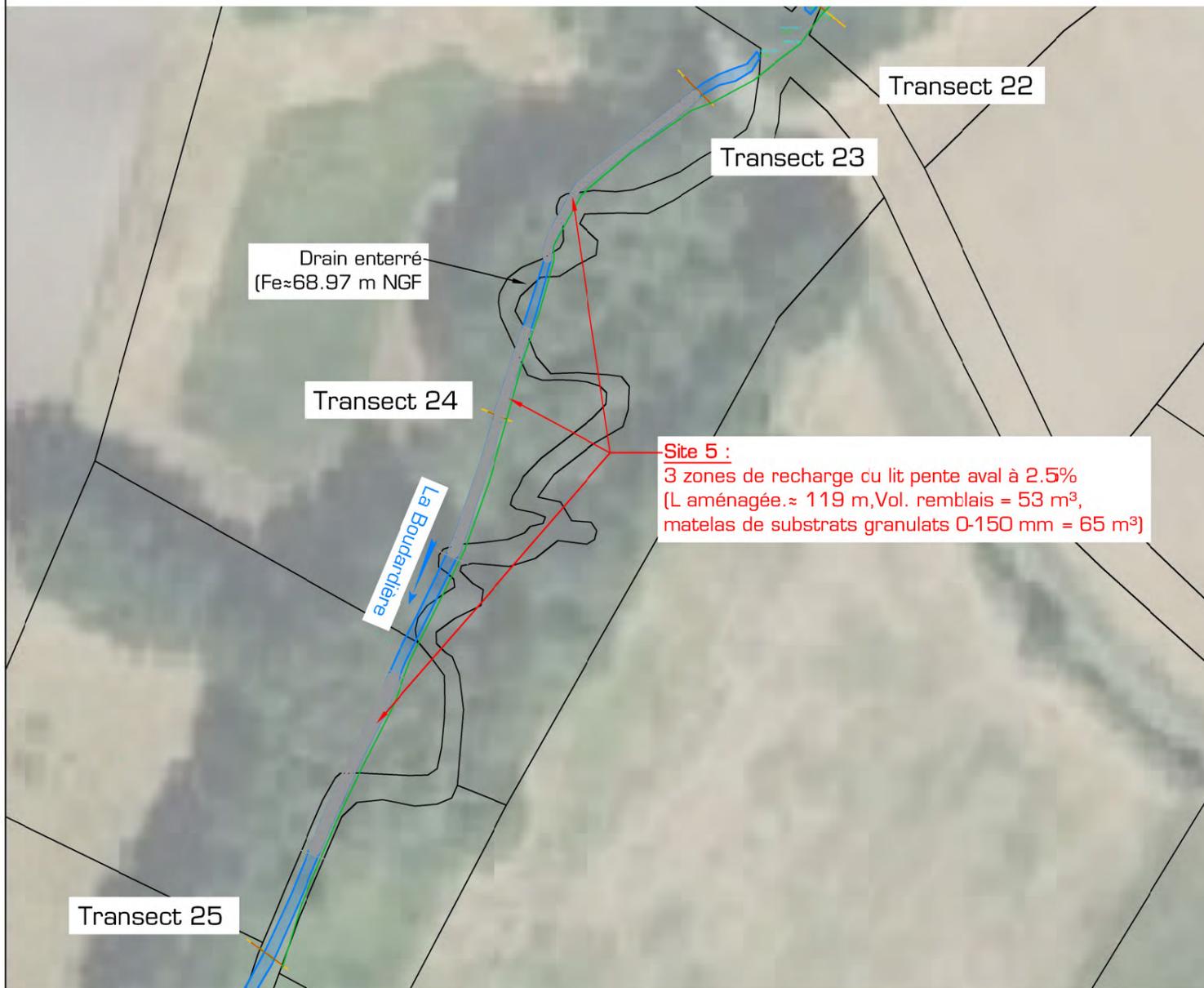
| | | |
|-------------------|------------------|----------|
| N° Plan: BOUDSIT4 | Format: A3 | Echelle: |
| Date: 20/09/2018 | Dessiné par: C.L | |



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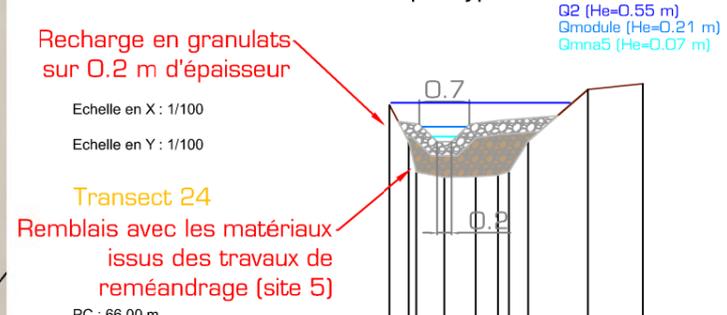
| Numéros des points TN | 90 | 91 | 94 | 97 | 98 | 99 | 101 | 103 | 104 | 105 | 106 | 108 | 109 | 110 | 111 | 112 | 113 |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Altitudes Berge D (m NGF) | 69.71 | 71.95 | 69.52 | 69.73 | 69.67 | 69.61 | | 69.43 | 69.34 | 69.25 | 69.16 | | 68.93 | | | 68.65 | |
| Altitudes Berge G (m NGF) | 71.20 | 71.95 | 69.62 | 69.50 | 69.42 | 69.33 | | 69.13 | 69.08 | 69.02 | 68.97 | | 68.82 | 68.78 | 68.70 | 68.65 | |
| Altitudes Vase (m NGF) | | | | | | | | | | | | | | | | | |
| Altitudes Fond (m NGF) | 69.16 | 68.99 | 68.80 | 68.61 | 68.40 | 68.31 | 68.27 | 68.12 | 67.97 | 67.91 | 67.81 | 67.72 | 67.60 | 67.53 | 67.44 | 67.42 | 67.31 |
| Distances cumulées TN (m) | 1105.21 | 1117.39 | 1130.36 | 1145.76 | 1157.15 | 1168.38 | 1180.55 | 1199.03 | 1210.51 | 1223.28 | 1234.28 | 1252.38 | 1264.81 | 1275.19 | 1290.70 | 1301.53 | 1317.61 |
| Distances partielles TN | | 12.18 | 12.97 | 15.40 | 11.38 | 11.23 | 12.18 | 18.47 | 11.49 | 12.76 | 11.01 | 18.09 | 12.44 | -0.38 | 15.51 | 10.83 | 16.08 |



Drain enterré
(Fe≈68.97 m NGF)

Site 5 :
3 zones de recharge cu lit pente aval à 2.5%
[L aménagée.≈ 119 m, Vol. remblais = 53 m³,
matelas de substrats granulés 0-150 mm = 65 m³]

Site 5:
Recharge en dôme
Coupe-type



Echelle en X : 1/100
Echelle en Y : 1/100

Recharge en granulats sur 0.2 m d'épaisseur
Transect 24 Remblais avec les matériaux issus des travaux de reméandrage (site 5)

PC : 66.00 m

| | | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Altitude Fond (m NGF) | 69.13 | 68.18 | 68.11 | 68.12 | 68.14 | 68.62 | 69.35 | 69.43 |
| Distances partielles (m) | 0.375 | 0.394 | 0.439 | 0.316 | 0.436 | 0.837 | 0.784 | |
| Distances cumulées (m) | 0.000 | 0.375 | 0.769 | 1.208 | 1.624 | 1.960 | 2.797 | 3.581 |

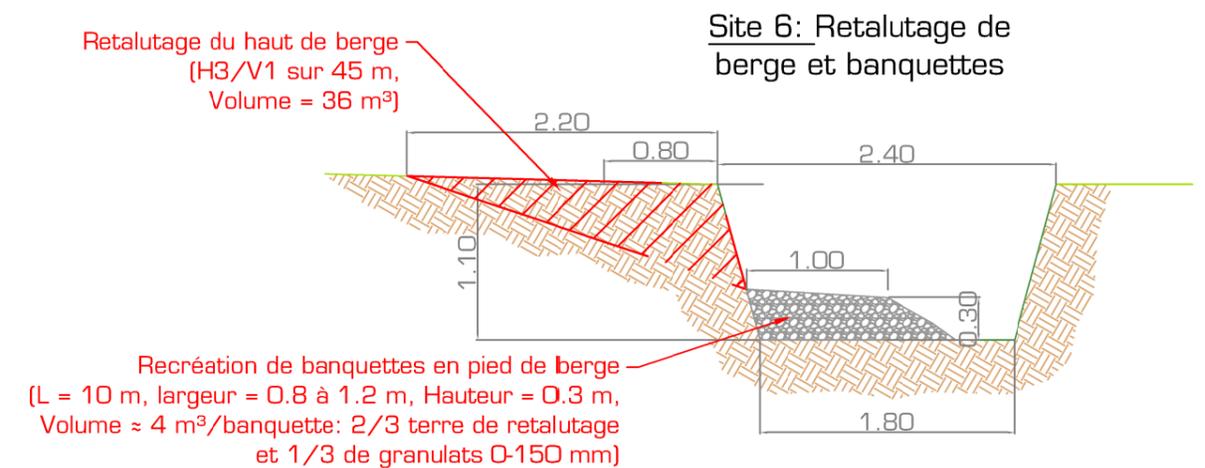
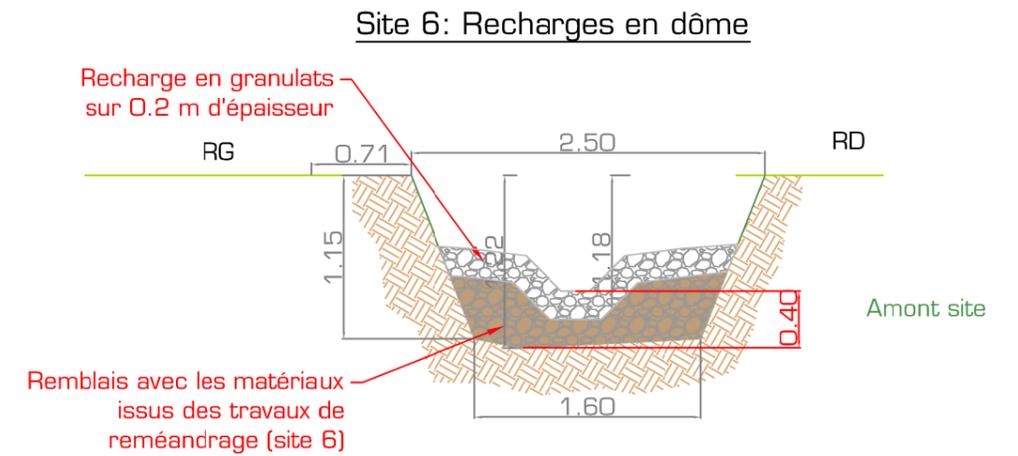
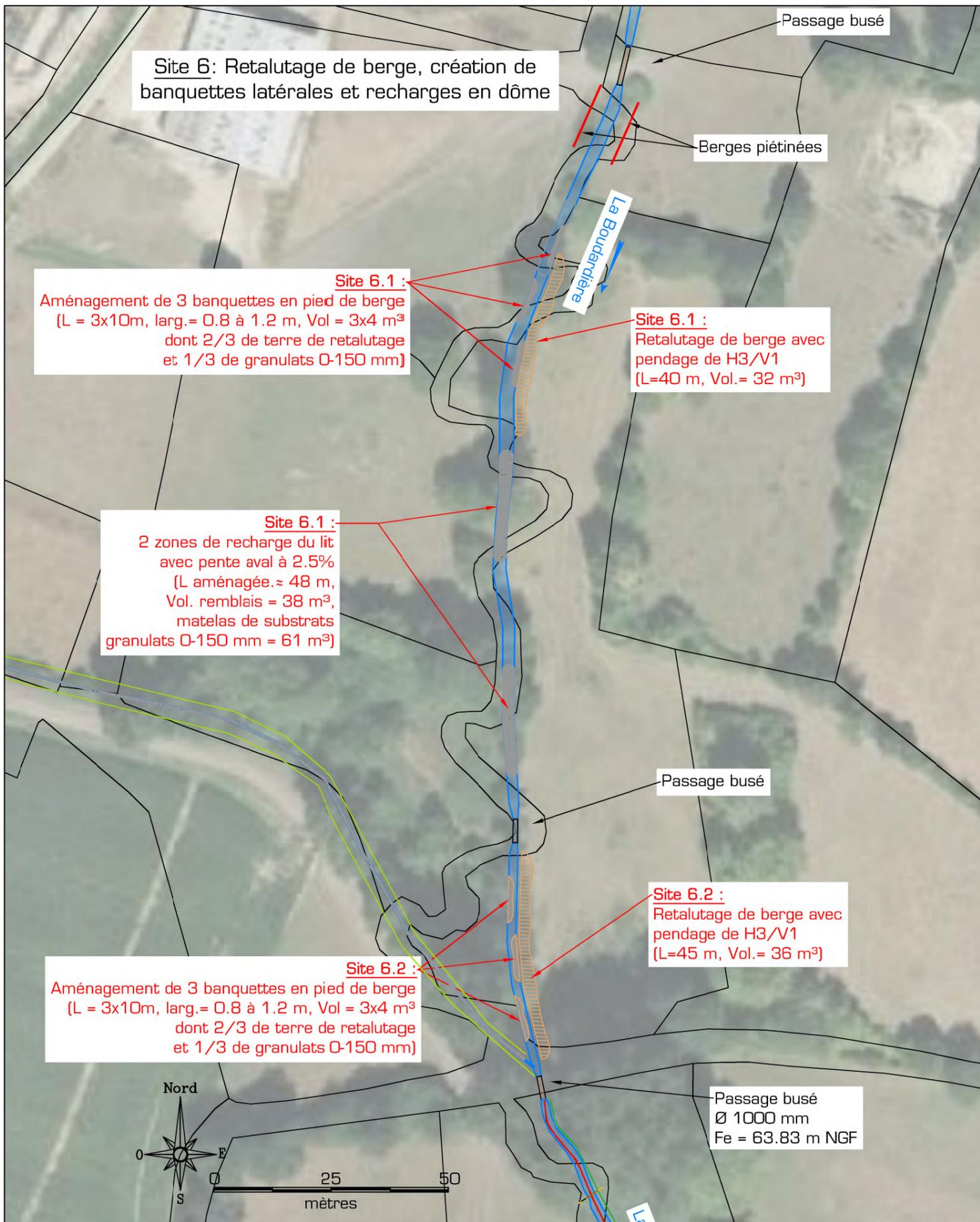
Syndicat Mixte du Bassin de l'Authion et de ses Affluents

Etude pour la restauration écologique du ruisseau de la Boudardière
Avant-projet:
Proposition d'aménagement sur site 5:
recharge en dôme
COMMUNE DE NOYANT-VILLAGES

N° Plan: BOUDSIT5
Date: 20/09/2018
Format: A3
Echelle:
Dessiné par:C.L



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**Syndicat Mixte du Bassin de l'Authion
et de ses Affluents**

Etude pour la restauration écologique du ruisseau de la
Boudardière

Avant-projet:
Proposition d'aménagement sur site 6:
Retalutage de berge, banquettes latérales
et recharges en dôme
COMMUNE DE NOYANT-VILLAGES

| | | |
|-------------------|------------------|----------|
| N° Plan: BOUDSIT6 | Format: A3 | Echelle: |
| Date: 22/09/2018 | Dessiné par: C.L | |

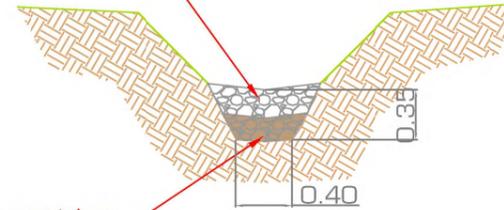


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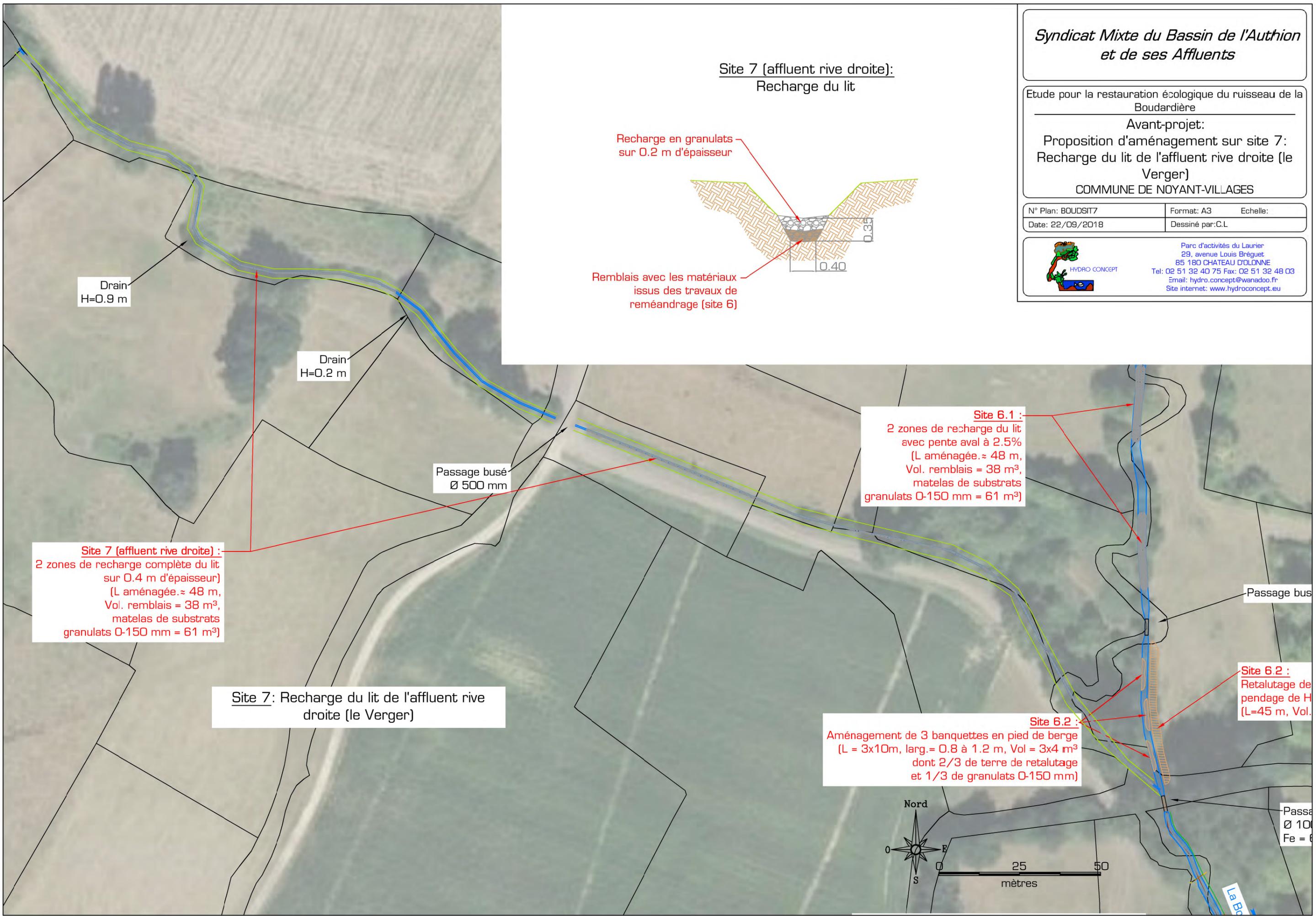


Site 7 (affluent rive droite):
Recharge du lit

Recharge en granulats
sur 0.2 m d'épaisseur



Remblais avec les matériaux
issus des travaux de
reméandrage (site 6)



Drain
H=0.9 m

Drain
H=0.2 m

Passage busé
Ø 500 mm

Site 6.1 :
2 zones de recharge du lit
avec pente aval à 2.5%
(L aménagée ≈ 48 m,
Vol. remblais = 38 m³,
matelas de substrats
granulats 0-150 mm = 61 m³)

Site 7 (affluent rive droite) :
2 zones de recharge complète du lit
sur 0.4 m d'épaisseur)
(L aménagée ≈ 48 m,
Vol. remblais = 38 m³,
matelas de substrats
granulats 0-150 mm = 61 m³)

Site 7: Recharge du lit de l'affluent rive
droite (le Verger)

Site 6.2 :
Aménagement de 3 banquettes en pied de berge
(L = 3x10m, larg. = 0.8 à 1.2 m, Vol = 3x4 m³
dont 2/3 de terre de retalutage
et 1/3 de granulats 0-150 mm)

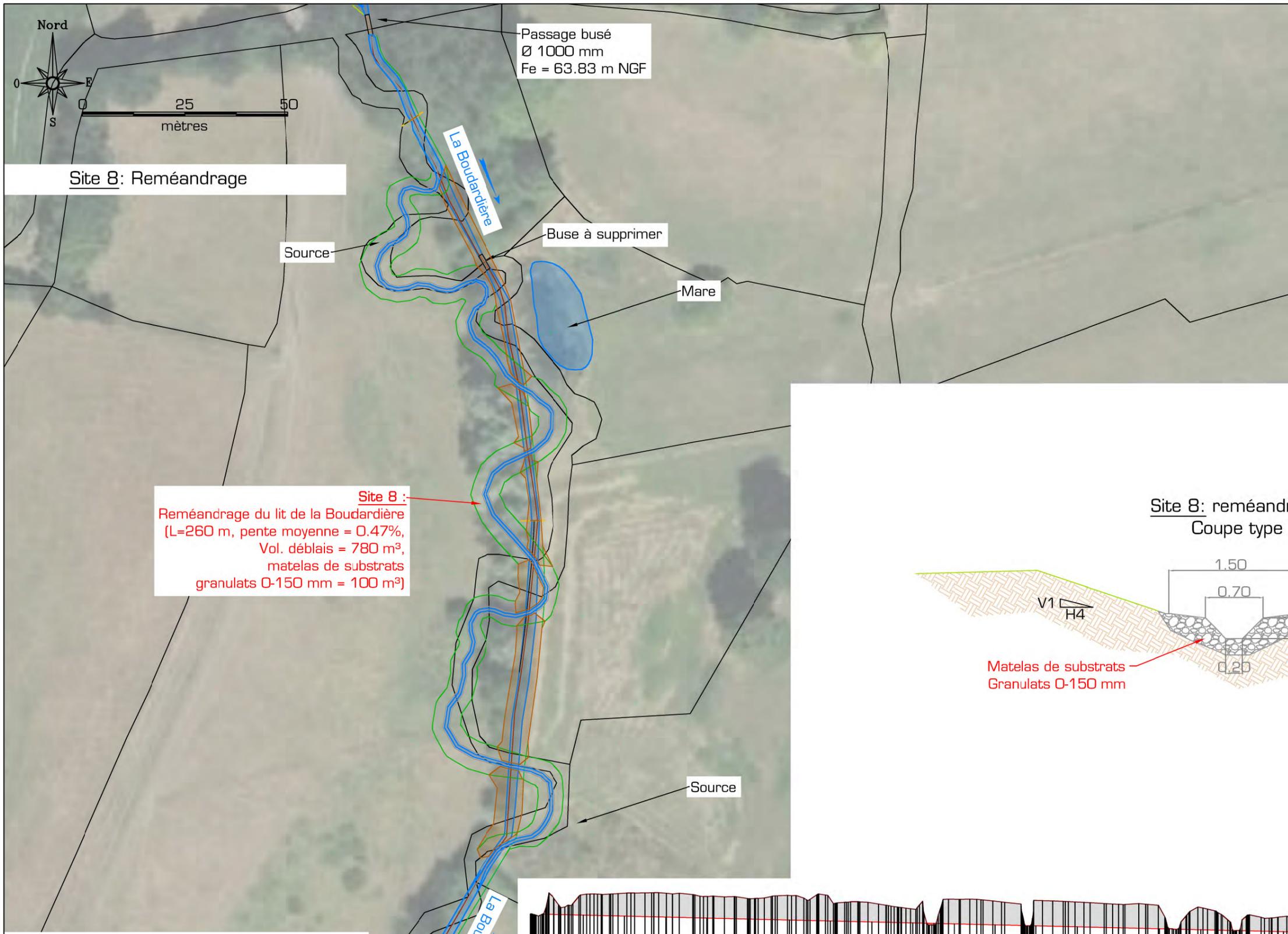
Site 6.2 :
Retalutage de
pendage de H
(L=45 m, Vol.



0 25 50
mètres

Passa
Ø 100
Fe = 6

Le Bo



**Syndicat Mixte du Bassin de l'Authion
et de ses Affluents**

Etude pour la restauration écologique du ruisseau de la
Boudardière

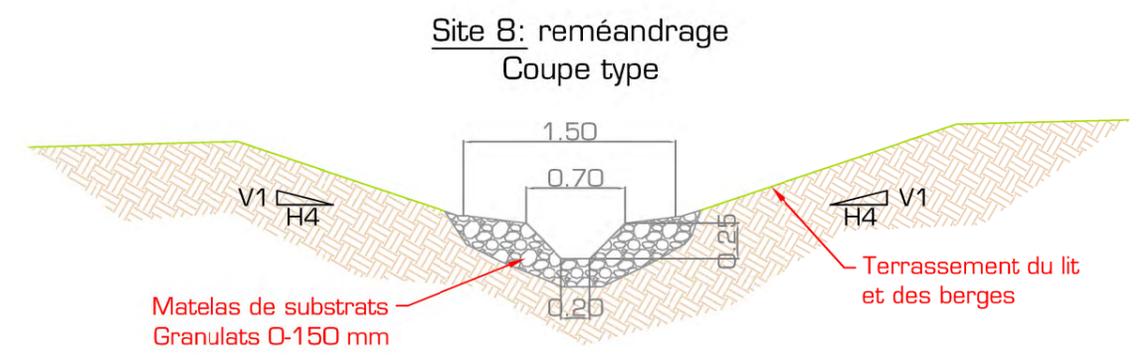
**Avant-projet: Site 8
Reméandrage du lit à la Roche**

COMMUNE DE NOYANT-VILLAGES

| | | |
|-------------------|------------------|----------|
| N° Plan: BOUDSIT8 | Format: A3 | Echelle: |
| Date: 22/09/2018 | Dessiné par: C.L | |

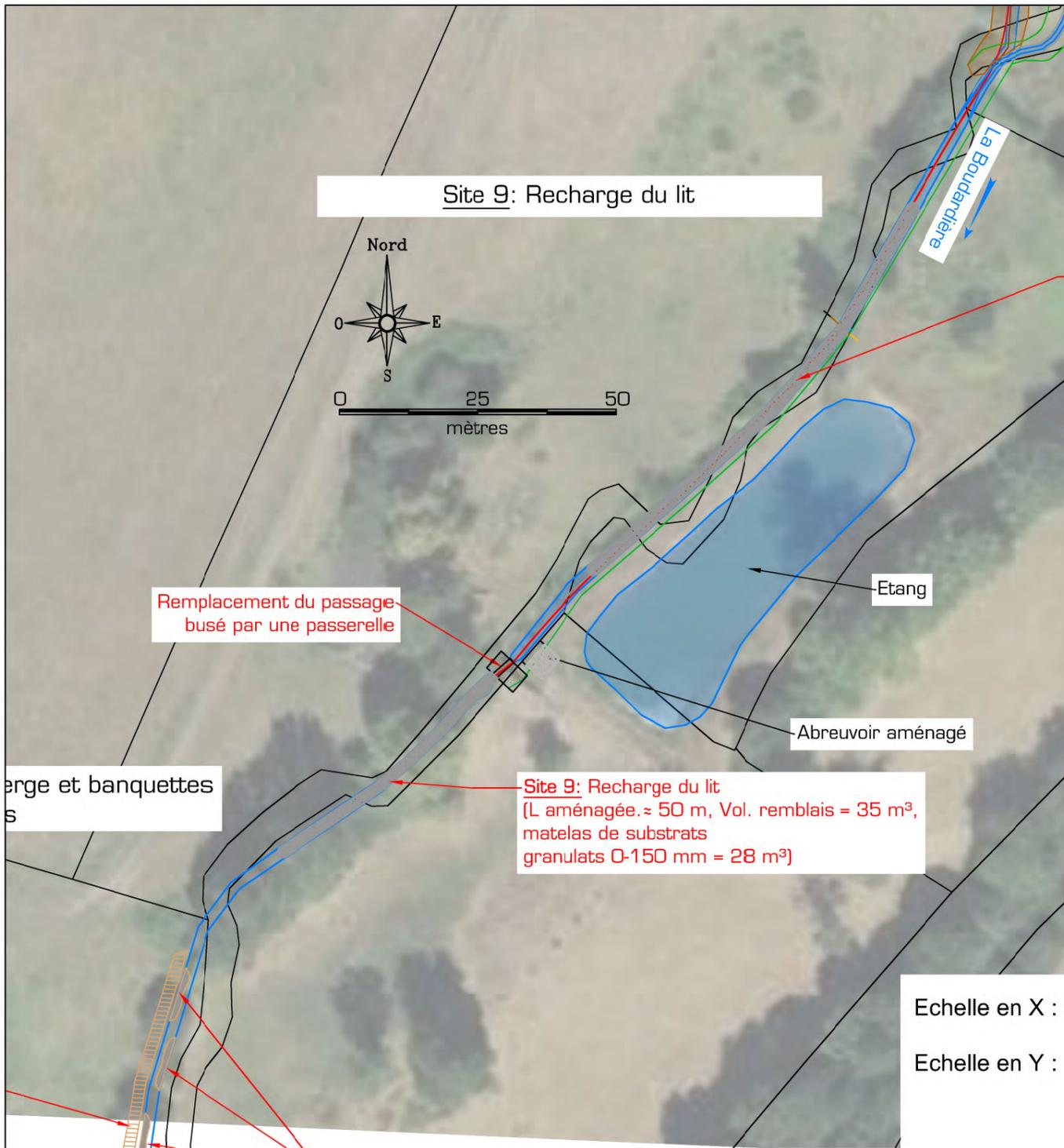
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 Email: hydro.concept@wanadoo.fr
 Site internet: www.hydroconcept.eu

Site 8 :
 Reméandrage du lit de la Boudardière
 (L=260 m, pente moyenne = 0.47%,
 Vol. déblais = 780 m³,
 matelas de substrats
 granulats O-150 mm = 100 m³)



PC : 60.00 m

| Numéro de profils en travers | P01 | P02 | P03 | P04 | P05 | P06 | P07 | P08 | P09 | P10 | P11 | P12 | P13 | P14 | P15 | P16 | P17 | P18 | P19 | P20 | P21 | P22 | P23 | P24 | P25 | P26 | P27 | P28 | P29 | P30 | P31 | P32 | P33 | P34 | P35 | P36 | P37 | P38 | P39 | P40 | P41 | P42 | P43 | P44 | P45 | P46 | P47 | P48 | P49 | P50 | P51 | P52 | P53 | P54 | P55 | P56 | P57 | P58 | P59 | P60 | P61 | P62 | P63 | P64 | P65 | P66 | P67 | P68 | P69 | P70 | P71 | P72 | P73 | P74 | P75 | P76 | P77 | P78 | P79 | P80 | P81 | P82 | P83 | P84 | P85 | P86 | P87 | P88 | P89 | P90 | P91 | P92 | P93 | P94 | P95 | P96 | P97 | P98 | P99 | P100 | P101 | P102 | P103 | P104 | P105 | P106 | P107 | P108 | P109 | P110 | P111 | P112 | P113 | P114 | P115 | P116 | P117 | P118 | P119 | P120 | P121 | P122 | P123 | P124 | P125 | P126 | P127 | P128 | P129 | P130 | P131 | P132 | P133 | P134 | P135 | P136 | P137 | P138 | P139 | P140 | P141 | P142 | P143 | P144 | P145 | P146 | P147 | P148 | P149 | P150 | P151 | P152 | P153 | P154 | P155 | P156 | P157 | P158 | P159 | P160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Altitudes TN | 63.75 | 63.74 | 63.73 | 63.72 | 63.71 | 63.70 | 63.69 | 63.68 | 63.67 | 63.66 | 63.65 | 63.64 | 63.63 | 63.62 | 63.61 | 63.60 | 63.59 | 63.58 | 63.57 | 63.56 | 63.55 | 63.54 | 63.53 | 63.52 | 63.51 | 63.50 | 63.49 | 63.48 | 63.47 | 63.46 | 63.45 | 63.44 | 63.43 | 63.42 | 63.41 | 63.40 | 63.39 | 63.38 | 63.37 | 63.36 | 63.35 | 63.34 | 63.33 | 63.32 | 63.31 | 63.30 | 63.29 | 63.28 | 63.27 | 63.26 | 63.25 | 63.24 | 63.23 | 63.22 | 63.21 | 63.20 | 63.19 | 63.18 | 63.17 | 63.16 | 63.15 | 63.14 | 63.13 | 63.12 | 63.11 | 63.10 | 63.09 | 63.08 | 63.07 | 63.06 | 63.05 | 63.04 | 63.03 | 63.02 | 63.01 | 63.00 | 62.99 | 62.98 | 62.97 | 62.96 | 62.95 | 62.94 | 62.93 | 62.92 | 62.91 | 62.90 | 62.89 | 62.88 | 62.87 | 62.86 | 62.85 | 62.84 | 62.83 | 62.82 | 62.81 | 62.80 | 62.79 | 62.78 | 62.77 | 62.76 | 62.75 | 62.74 | 62.73 | 62.72 | 62.71 | 62.70 | 62.69 | 62.68 | 62.67 | 62.66 | 62.65 | 62.64 | 62.63 | 62.62 | 62.61 | 62.60 | 62.59 | 62.58 | 62.57 | 62.56 | 62.55 | 62.54 | 62.53 | 62.52 | 62.51 | 62.50 | 62.49 | 62.48 | 62.47 | 62.46 | 62.45 | 62.44 | 62.43 | 62.42 | 62.41 | 62.40 | 62.39 | 62.38 | 62.37 | 62.36 | 62.35 | 62.34 | 62.33 | 62.32 | 62.31 | 62.30 | 62.29 | 62.28 | 62.27 | 62.26 | 62.25 | 62.24 | 62.23 | 62.22 | 62.21 | 62.20 | 62.19 | 62.18 | 62.17 | 62.16 | 62.15 | 62.14 | 62.13 | 62.12 | 62.11 | 62.10 | 62.09 | 62.08 | 62.07 | 62.06 | 62.05 | 62.04 | 62.03 | 62.02 | 62.01 | 62.00 | 61.99 | 61.98 | 61.97 | 61.96 | 61.95 | 61.94 | 61.93 | 61.92 | 61.91 | 61.90 | 61.89 | 61.88 | 61.87 | 61.86 | 61.85 | 61.84 | 61.83 | 61.82 | 61.81 | 61.80 | 61.79 | 61.78 | 61.77 | 61.76 | 61.75 | 61.74 | 61.73 | 61.72 | 61.71 | 61.70 | 61.69 | 61.68 | 61.67 | 61.66 | 61.65 | 61.64 | 61.63 | 61.62 | 61.61 | 61.60 | 61.59 | 61.58 | 61.57 | 61.56 | 61.55 | 61.54 | 61.53 | 61.52 | 61.51 | 61.50 | 61.49 | 61.48 | 61.47 | 61.46 | 61.45 | 61.44 | 61.43 | 61.42 | 61.41 | 61.40 | 61.39 | 61.38 | 61.37 | 61.36 | 61.35 | 61.34 | 61.33 | 61.32 | 61.31 | 61.30 | 61.29 | 61.28 | 61.27 | 61.26 | 61.25 | 61.24 | 61.23 | 61.22 | 61.21 | 61.20 | 61.19 | 61.18 | 61.17 | 61.16 | 61.15 | 61.14 | 61.13 | 61.12 | 61.11 | 61.10 | 61.09 | 61.08 | 61.07 | 61.06 | 61.05 | 61.04 | 61.03 | 61.02 | 61.01 | 61.00 | 60.99 | 60.98 | 60.97 | 60.96 | 60.95 | 60.94 | 60.93 | 60.92 | 60.91 | 60.90 | 60.89 | 60.88 | 60.87 | 60.86 | 60.85 | 60.84 | 60.83 | 60.82 | 60.81 | 60.80 | 60.79 | 60.78 | 60.77 | 60.76 | 60.75 | 60.74 | 60.73 | 60.72 | 60.71 | 60.70 | 60.69 | 60.68 | 60.67 | 60.66 | 60.65 | 60.64 | 60.63 | 60.62 | 60.61 | 60.60 | 60.59 | 60.58 | 60.57 | 60.56 | 60.55 | 60.54 | 60.53 | 60.52 | 60.51 | 60.50 | 60.49 | 60.48 | 60.47 | 60.46 | 60.45 | 60.44 | 60.43 | 60.42 | 60.41 | 60.40 | 60.39 | 60.38 | 60.37 | 60.36 | 60.35 | 60.34 | 60.33 | 60.32 | 60.31 | 60.30 | 60.29 | 60.28 | 60.27 | 60.26 | 60.25 | 60.24 | 60.23 | 60.22 | 60.21 | 60.20 | 60.19 | 60.18 | 60.17 | 60.16 | 60.15 | 60.14 | 60.13 | 60.12 | 60.11 | 60.10 | 60.09 | 60.08 | 60.07 | 60.06 | 60.05 | 60.04 | 60.03 | 60.02 | 60.01 | 60.00 | 59.99 | 59.98 | 59.97 | 59.96 | 59.95 | 59.94 | 59.93 | 59.92 | 59.91 | 59.90 | 59.89 | 59.88 | 59.87 | 59.86 | 59.85 | 59.84 | 59.83 | 59.82 | 59.81 | 59.80 | 59.79 | 59.78 | 59.77 | 59.76 | 59.75 | 59.74 | 59.73 | 59.72 | 59.71 | 59.70 | 59.69 | 59.68 | 59.67 | 59.66 | 59.65 | 59.64 | 59.63 | 59.62 | 59.61 | 59.60 | 59.59 | 59.58 | 59.57 | 59.56 | 59.55 | 59.54 | 59.53 | 59.52 | 59.51 | 59.50 | 59.49 | 59.48 | 59.47 | 59.46 | 59.45 | 59.44 | 59.43 | 59.42 | 59.41 | 59.40 | 59.39 | 59.38 | 59.37 | 59.36 | 59.35 | 59.34 | 59.33 | 59.32 | 59.31 | 59.30 | 59.29 | 59.28 | 59.27 | 59.26 | 59.25 | 59.24 | 59.23 | 59.22 | 59.21 | 59.20 | 59.19 | 59.18 | 59.17 | 59.16 | 59.15 | 59.14 | 59.13 | 59.12 | 59.11 | 59.10 | 59.09 | 59.08 | 59.07 | 59.06 | 59.05 | 59.04 | 59.03 | 59.02 | 59.01 | 59.00 | 58.99 | 58.98 | 58.97 | 58.96 | 58.95 | 58.94 | 58.93 | 58.92 | 58.91 | 58.90 | 58.89 | 58.88 | 58.87 | 58.86 | 58.85 | 58.84 | 58.83 | 58.82 | 58.81 | 58.80 | 58.79 | 58.78 | 58.77 | 58.76 | 58.75 | 58.74 | 58.73 | 58.72 | 58.71 | 58.70 | 58.69 | 58.68 | 58.67 | 58.66 | 58.65 | 58.64 | 58.63 | 58.62 | 58.61 | 58.60 | 58.59 | 58.58 | 58.57 | 58.56 | 58.55 | 58.54 | 58.53 | 58.52 | 58.51 | 58.50 | 58.49 | 58.48 | 58.47 | 58.46 | 58.45 | 58.44 | 58.43 | 58.42 | 58.41 | 58.40 | 58.39 | 58.38 | 58.37 | 58.36 | 58.35 | 58.34 | 58.33 | 58.32 | 58.31 | 58.30 | 58.29 | 58.28 | 58.27 | 58.26 | 58.25 | 58.24 | 58.23 | 58.22 | 58.21 | 58.20 | 58.19 | 58.18 | 58.17 | 58.16 | 58.15 | 58.14 | 58.13 | 58.12 | 58.11 | 58.10 | 58.09 | 58.08 | 58.07 | 58.06 | 58.05 | 58.04 | 58.03 | 58.02 | 58.01 | 58.00 | 57.99 | 57.98 | 57.97 | 57.96 | 57.95 | 57.94 | 57.93 | 57.92 | 57.91 | 57.90 | 57.89 | 57.88 | 57.87 | 57.86 | 57.85 | 57.84 | 57.83 | 57.82 | 57.81 | 57.80 | 57.79 | 57.78 | 57.77 | 57.76 | 57.75 | 57.74 | 57.73 | 57.72 | 57.71 | 57.70 | 57.69 | 57.68 | 57.67 | 57.66 | 57.65 | 57.64 | 57.63 | 57.62 | 57.61 | 57.60 | 57.59 | 57.58 | 57.57 | 57.56 | 57.55 | 57.54 | 57.53 | 57.52 | 57.51 | 57.50 | 57.49 | 57.48 | 57.47 | 57.46 | 57.45 | 57.44 | 57.43 | 57.42 | 57.41 | 57.40 | 57.39 | 57.38 | 57.37 | 57.36 | 57.35 | 57.34 | 57.33 | 57.32 | 57.31 | 57.30 | 57.29 | 57.28 | 57.27 | 57.26 | 57.25 | 57.24 | 57.23 | 57.22 | 57.21 | 57.20 | 57.19 | 57.18 | 57.17 | 57.16 | 57.15 | 57.14 | 57.13 | 57.12 | 57.11 | 57.10 | 57.09 | 57.08 | 57.07 | 57.06 | 57.05 | 57.04 | 57.03 | 57.02 | 57.01 | 57.00 | 56.99 | 56.98 | 56.97 | 56.96 | 56.95 | 56.94 | 56.93 | 56.92 | 56.91 | 56.90 | 56.89 | 56.88 | 56.87 | 56.86 | 56.85 | 56.84 | 56.83 | 56.82 | 56.81 | 56.80 | 56.79 | 56.78 | 56.77 | 56.76 | 56.75 | 56.74 | 56.73 | 56.72 | 56.71 | 56.70 | 56.69 | 56.68 | 56.67 | 56.66 | 56.65 | 56.64 | 56.63 | 56.62 | 56.61 | 56.60 | 56.59 | 56.58 | 56.57 | 56.56 | 56.55 | 56.54 | 56.53 | 56.52 | 56.51 | 56.50 | 56.49 | 56.48 | 56.47 | 56.46 | 56.45 | 56.44 | 56.43 | 56.42 | 56.41 | 56.40 | 56.39 | 56.38 | 56.37 | 56.36 | 56.35 | 56.34 | 56.33 | 56.32 | 56.31 | 56.30 | 56.29 | 56.28 | 56.27 | 56.26 | 56.25 | 56.24 | 56.23 | 56.22 | 56.21 | 56.20 | 56.19 | 56.18 | 56.17 | 56.16 | 56.15 | 56.14 | 56.13 | 56.12 | 56.11 | 56.10 | 56.09 | 56.08 | 56.07 | 56.06 | 56.05 | 56.04 | 56.03 | 56.02 | 56.01 | 56.00 | 55.99 | 55.98 | 55.97 | 55.96 | 55.95 | 55.94 | 55.93 | 55.92 | 55.91 | 55.90 | 55.89 | 55.88 | 55.87 | 55.86 | 55.85 | 55.84 | 55.83 | 55.82 | 55.81 | 55.80 | 55.79 | 55.78 | 55.77 | 55.76 | 55.75 | 55.74 | 55.73 | 55.72 | 55.71 | 55.70 | 55.69 | 55.68 | 55.67 | 55.66 | 55.65 | 55.64 | 55.63 | 55.62 | 55.61 | 55.60 | 55.59 | 55.58 | 55.57 | 55.56 | 55.55 | 55.54 | 55.53 | 55.52 | 55.51 | 55.50 | 55.49 | 55.48 | 55.47 | 55.46 | 55.45 | 55.44 | 55.43 | 55.42 | 55.41 | 55.40 | 55.39 | 55.38 | 55.37 | 55.36 | 55.35 | 55.34 | 55.33 | 55.32 | 55.31 | 55.30 | 55.29 | 55.28 | 55.27 | 55.26 | 55.25 | 55.24 | 55.23 | 55.22 | 55.21 | 55.20 | 55.19 | 55.18 | 55.17 | 55.16 | 55.15 | 55.14 | 55.13 | 55.12 | 55.11 | 55.10 | 55.09 | 55.08 | 55.07 | 55.06 | 55.05 | 55.04 | 55.03 | 55.02 | 55.01 | 55.00 | 54.99 | 54.98 | 54.97 | 54.96 | 54.95 | 54.94 | 54.93 | 54.92 | 54.91 | 54.90 | 54.89 | 54.88 | 54.87 | 54.86 | 54.85 | 54.84 | 54.83 | 54.82 | 54.81 | 54.80 | 54.79 | 54.78 | 54.77 | 54.76 | 54.75 | 54.74 | 54.73 | 54.72 | 54.71 | 54.70 | 54.69 | 54.68 | 54.67 | 54.66 | 54.65 | 54.64 | 54.63 | 54.62 | 54.61 | 54.60 | 54.59 | 54.58 | 54.57 | 54.56 | 54.55 | 54.54 | 54.53 | 54.52 | 54.51 | 54.50 | 54.49 | 54.48 | 54.47 | 54.46 | 54.45 | 54.44 | 54.43 | 54.42 | 54.41 | 54.40 | 54.39 | 54.38 | 54.37 | 54.36 | 54.35 | 54.34 | 54.33 | 54.32 | 54.31 | 54.30 | 54.29 | 54.28 | 54.27 | 54.26 | 54.25 | 54.24 | 54.23 | 54.22 | 54.21 | 54.20 | 54.19 | 54.18 | 54.17 | 54.16 | 54.15 | 54.14 | 54.13 | 54.12 | 54.11 | 54.10 | 54.09 | 54.08 | 54.07 | 54.06 | 54.05 | 54.04 | 54.03 | 54.02 | 54.01 | 54.00 | 53.99 | 53.98 | 53.97 | 53.96 | 53.95 | 53.94 | 53.93 | 53.92 | 53.91 | 53.90 | 53.89 | 53.88 | 53.87 | 53.86 | 53.85 | 53.84 | 53.83 | 53.82 | 53.81 | 53.80 | 53.79 | 53.78 | 53.77 | 53.76 | 53.75 | 53.74 | 53.73 | 53.72 | 53.71 | 53.70 | 53.69 | 53.68 | 53.67 | 53.66 | 53.65 | 53.64 | 53.63 | 53.62 | 53.61 | 53.60 | 53.59 | 53.58 | 53.57 | 53.56 | 53.55 | 53.5 |



Berge et banquettes

Site 9: Recharge du lit
(L aménagé ≈ 50 m, Vol. remblais = 35 m³,
matelas de substrats
granulats 0-150 mm = 28 m³)

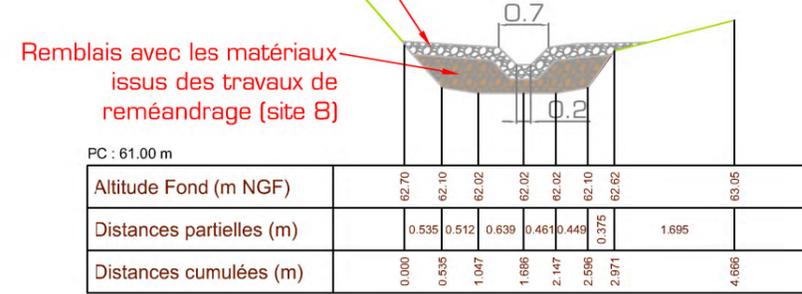
Abreuvoir aménagé

Echelle en X : 1/1000

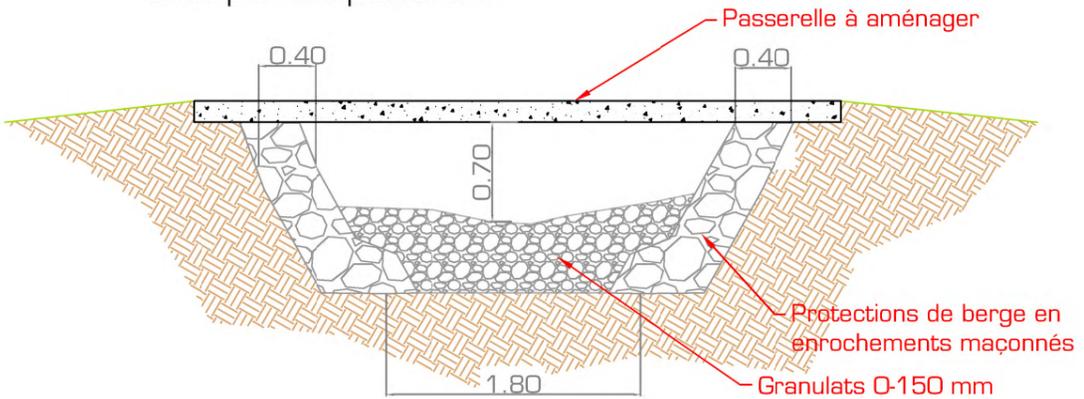
Echelle en Y : 1/100

Site 9 : Recharge en granulats

Recharge en granulats
sur 0.2 m d'épaisseur
Echelle en X : 1/100
Echelle en Y : 1/100

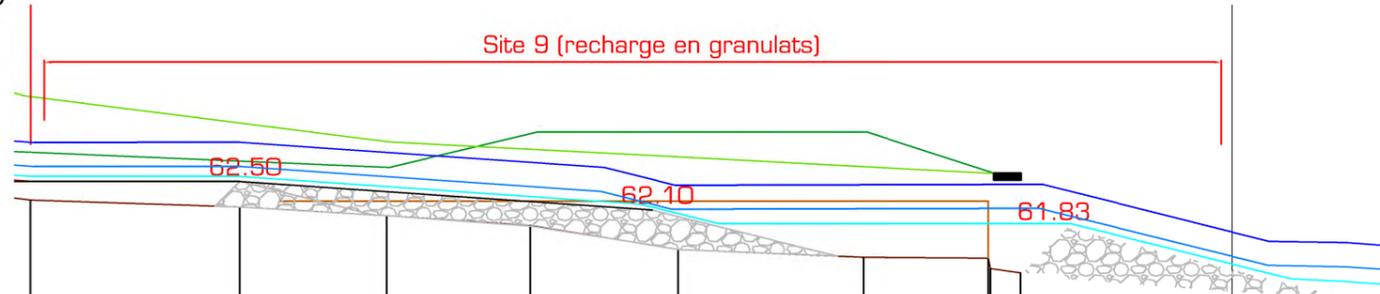


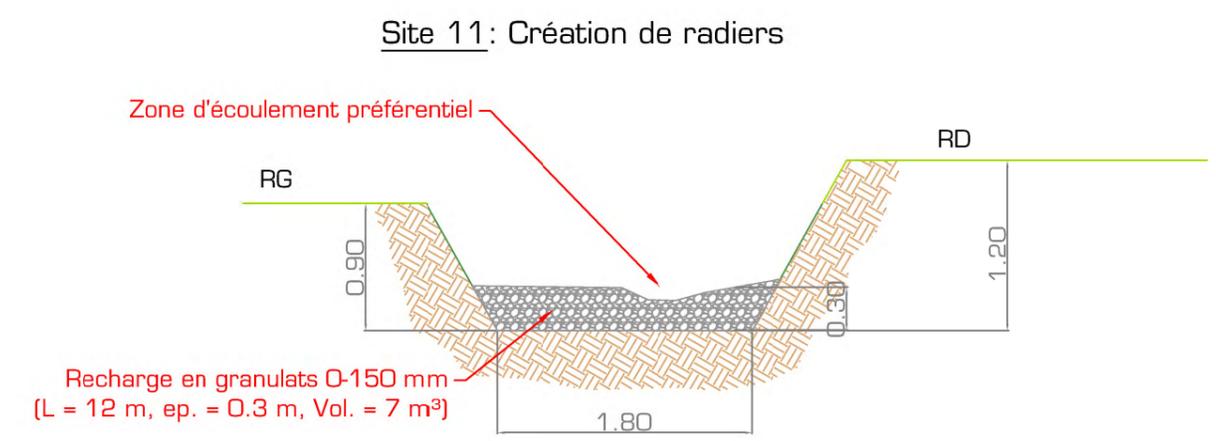
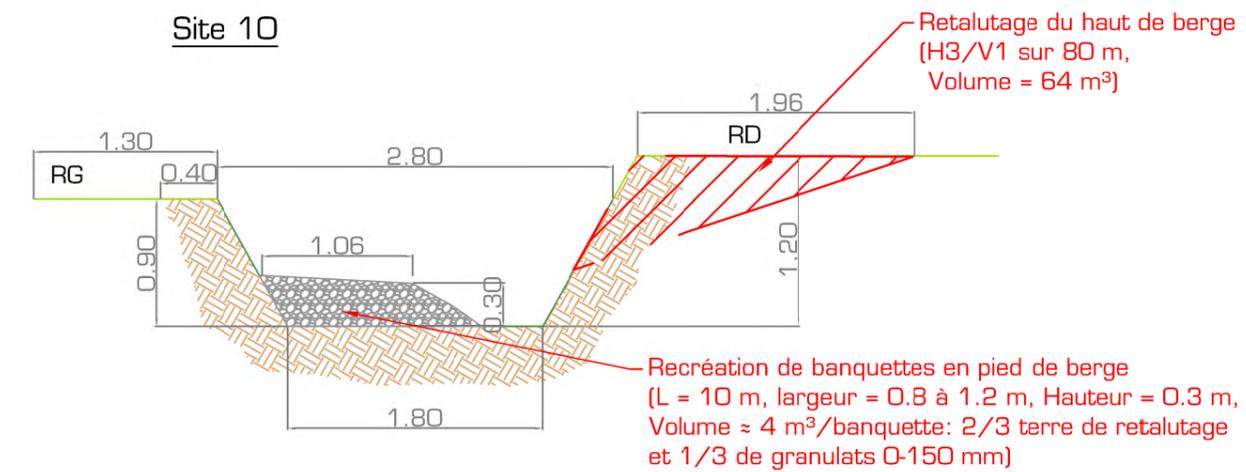
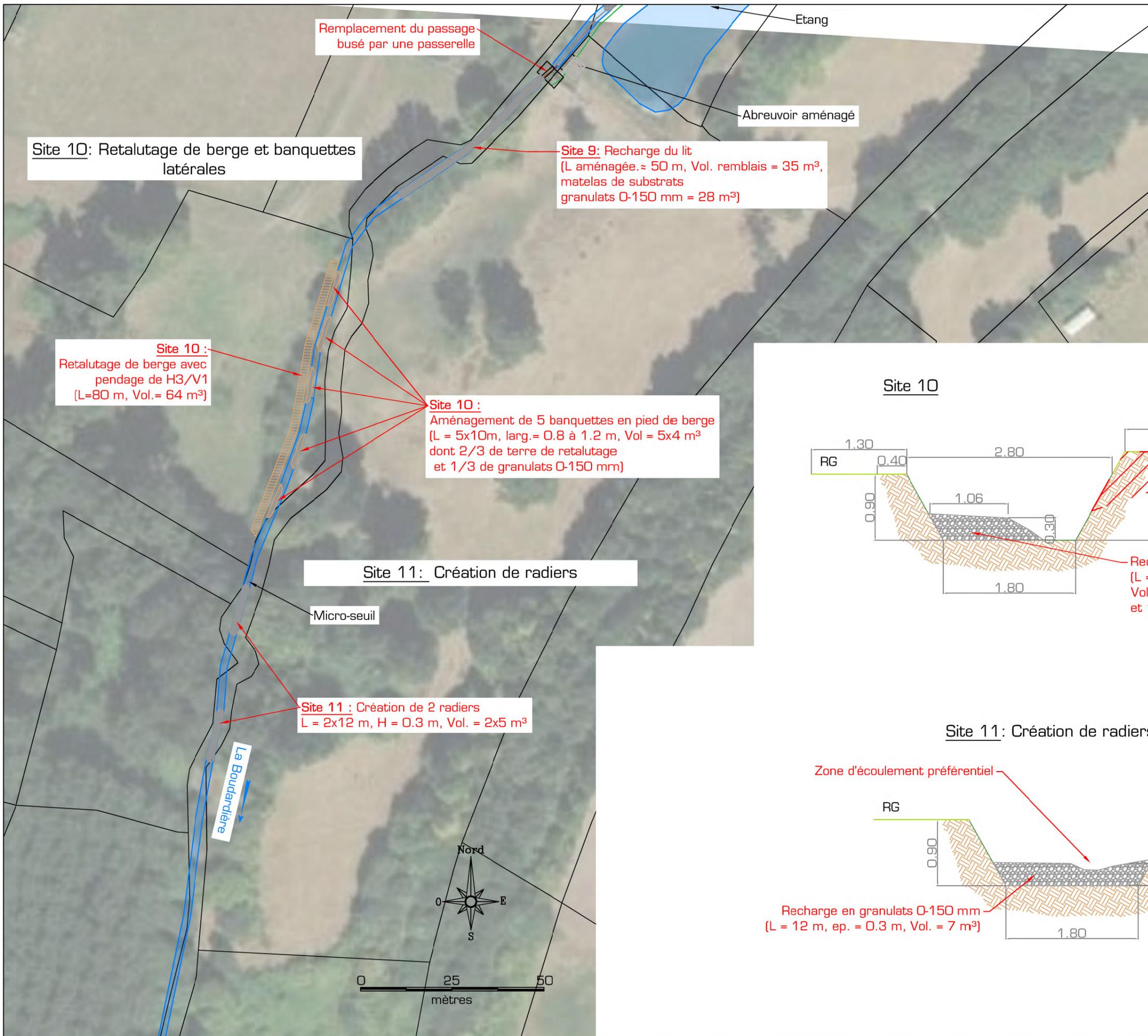
Site 9 : Remplacement du passage busé par une passerelle



PC : 60.00 m

| | | | | | | | |
|---------------------------|--|--------|--------|--------|--------|--------|--------|
| Numeros des points TN | | 25 | 26 | 27 | 28 | 29 | 32 |
| Altitudes Berge D (m NGF) | | | 63.06 | 62.96 | 62.85 | 62.71 | 62.60 |
| Altitudes Berge G (m NGF) | | 62.70 | 63.20 | 63.20 | 63.20 | 63.20 | 62.60 |
| Altitudes Vase (m NGF) | | | | | | | |
| Altitudes Fond (m NGF) | | 62.14 | 62.02 | 61.88 | 61.54 | 61.43 | 61.21 |
| Distances cumulées TN (m) | | 241.36 | 262.19 | 282.43 | 303.45 | 329.60 | 351.87 |
| Distances partielles TN | | 37.55 | 20.83 | 20.24 | 21.03 | 26.15 | 22.27 |







Site 12: Création de radiers

La Boudardière

La GAUTRAIE

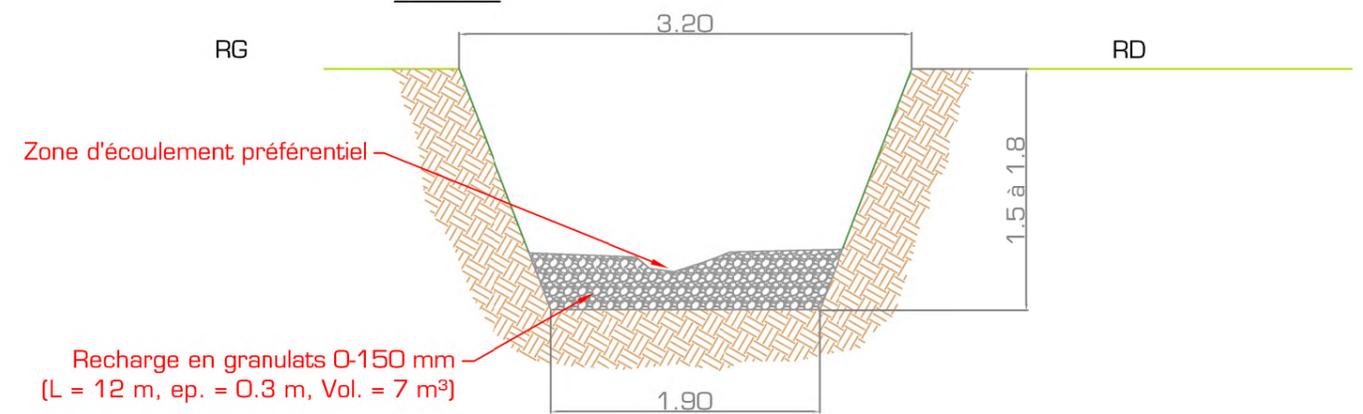
Ancien batardeau dégradé

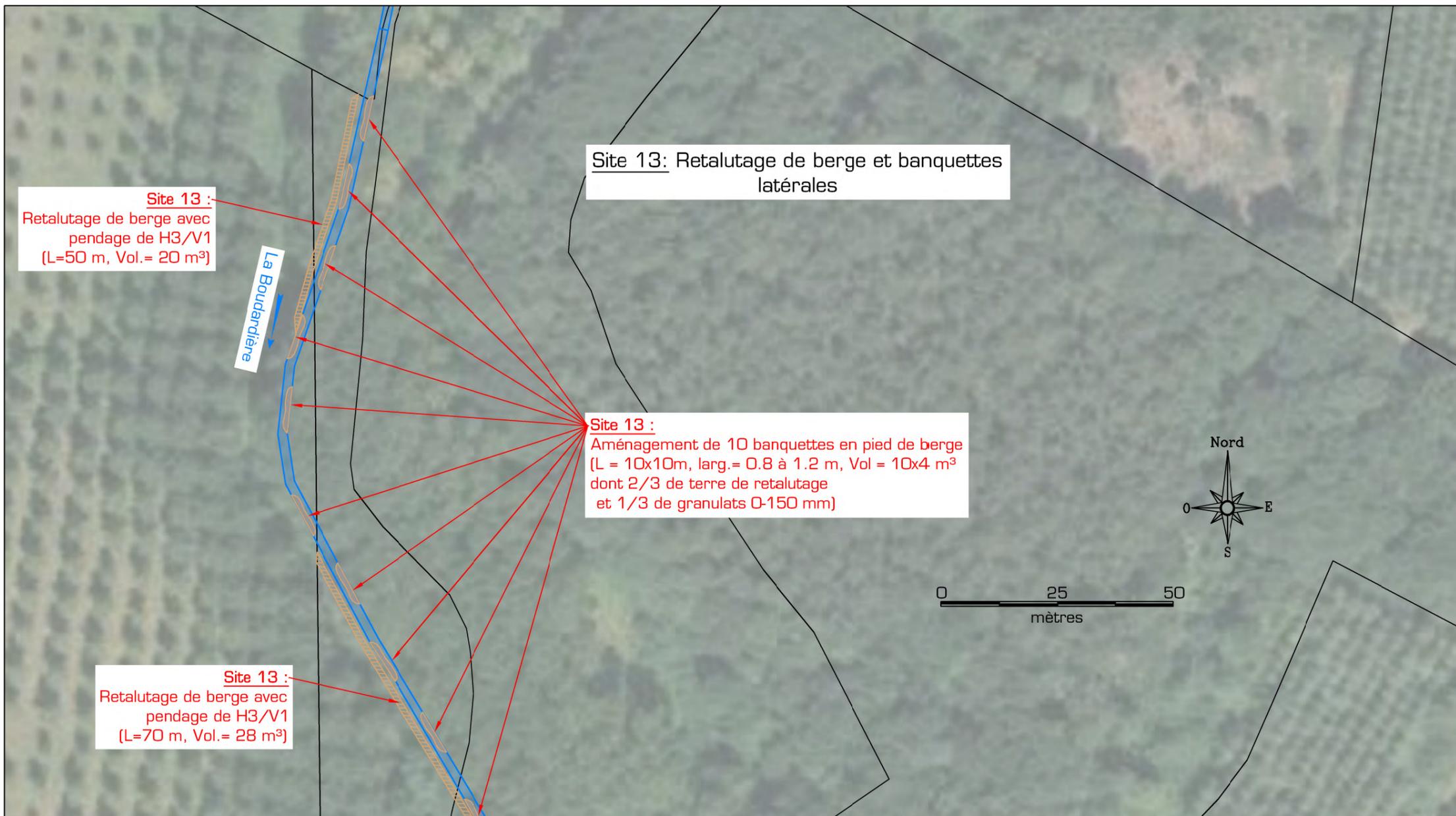
Site 11 : Création de 5 radiers
L = 5x15 m, H = 0.4 m, Vol. = 5x8 m³



0 25 50
mètres

Site 12

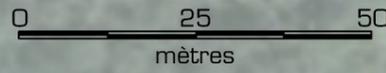




Site 13 :
Retalutage de berge avec
pendage de H3/V1
(L=50 m, Vol.= 20 m³)

Site 13: Retalutage de berge et banquettes
latérales

Site 13 :
Aménagement de 10 banquettes en pied de berge
(L = 10x10m, larg.= 0.8 à 1.2 m, Vol = 10x4 m³
dont 2/3 de terre de retalutage
et 1/3 de granulats 0-150 mm)



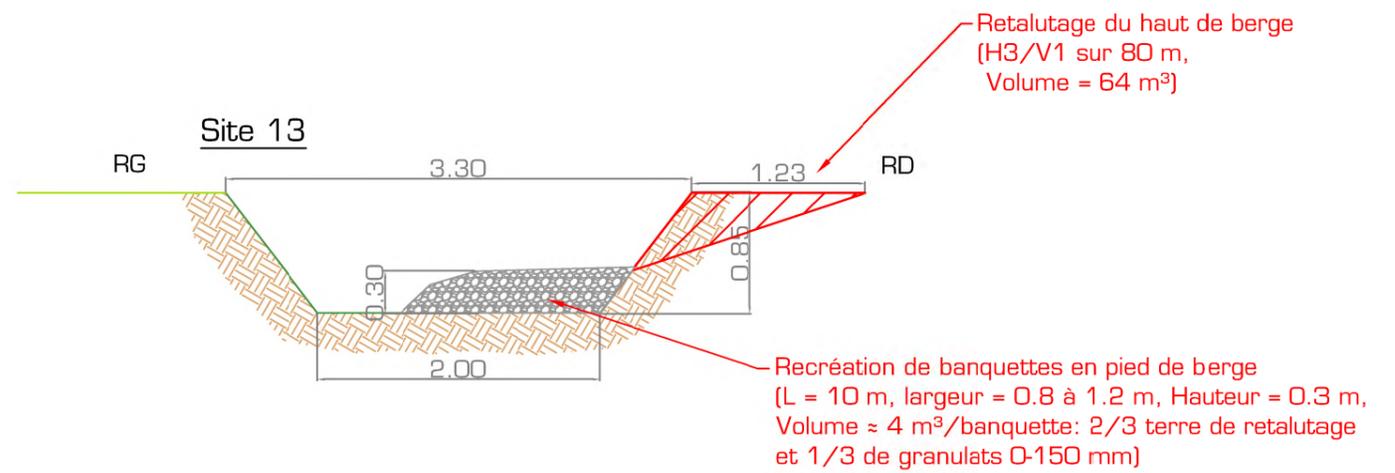
Site 13 :
Retalutage de berge avec
pendage de H3/V1
(L=70 m, Vol.= 28 m³)

Site 14: Retalutage de berge

Site 13 :
Retalutage de berge avec
pendage de H2 à H3/V1
(L=30 m, Vol.= 15 m³)

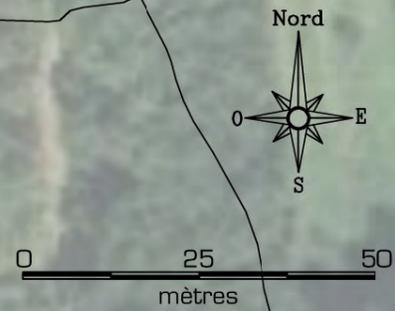
Chemin
(apport de remblais)

Route de Rabion



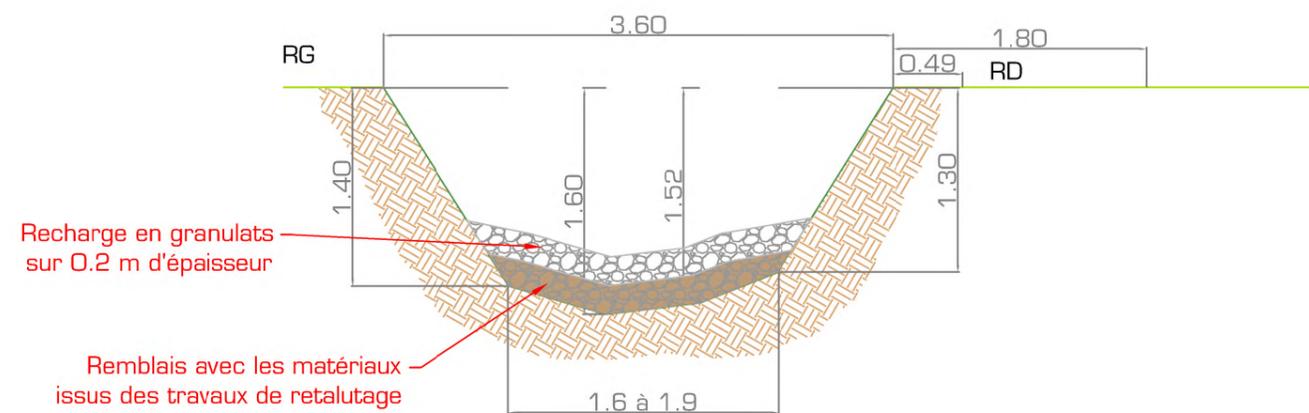


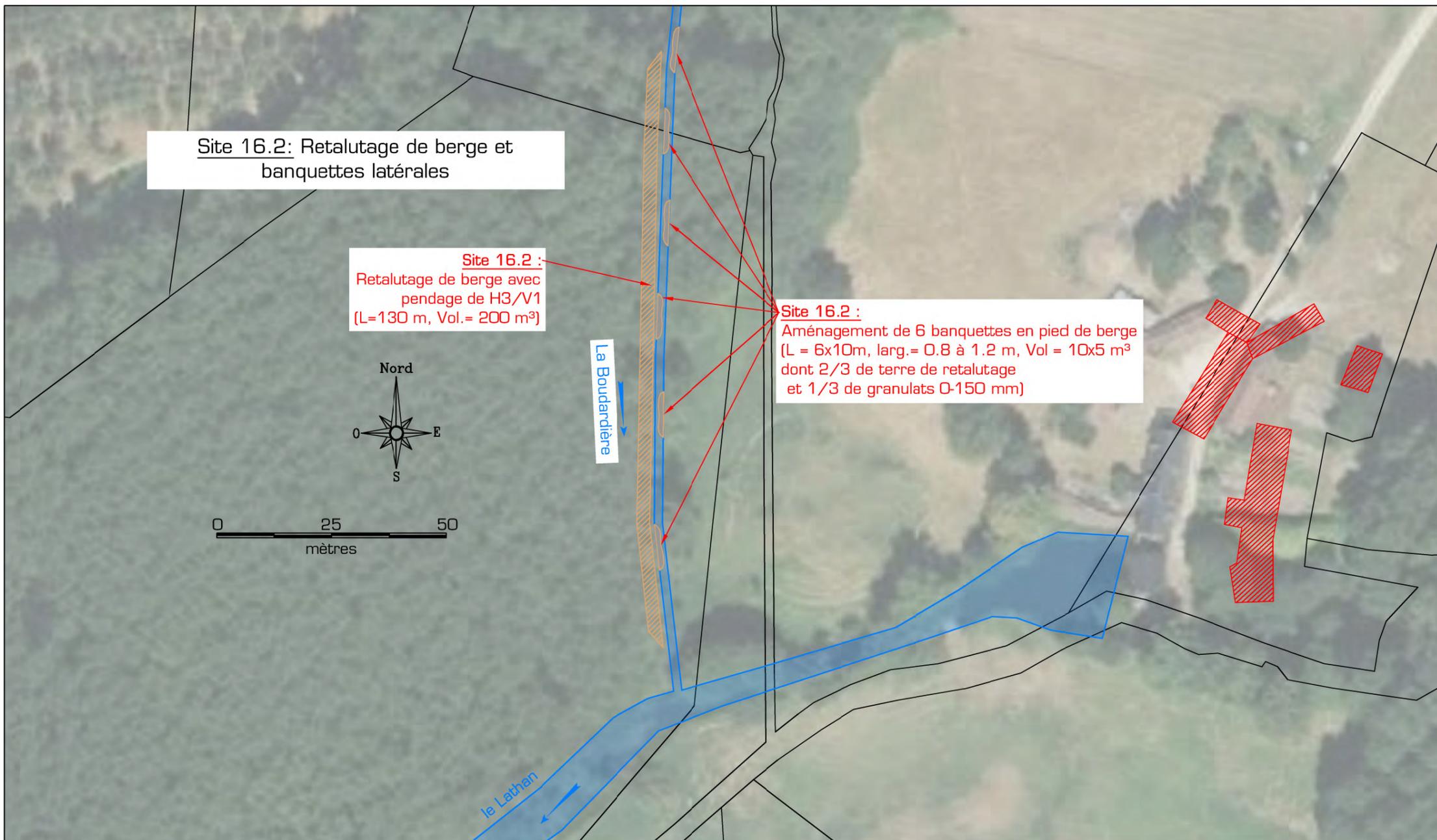
Site 16.1: Création de radiers



Site 16.1 : Création de 3 radiers
L = 3x15 m, H = 0.4 m, Vol. = 3x11 m³

Site 16.1: recharge en granulats





Site 16.2: Retalutage de berge et banquettes latérales

Site 16.2 :
Retalutage de berge avec
pendage de H3/V1
(L=130 m, Vol.= 200 m³)

Site 16.2 :
Aménagement de 6 banquettes en pied de berge
(L = 6x10m, larg.= 0.8 à 1.2 m, Vol = 10x5 m³
dont 2/3 de terre de retalutage
et 1/3 de granulats 0-150 mm)

Site 16.2: Retalutage et banquettes

