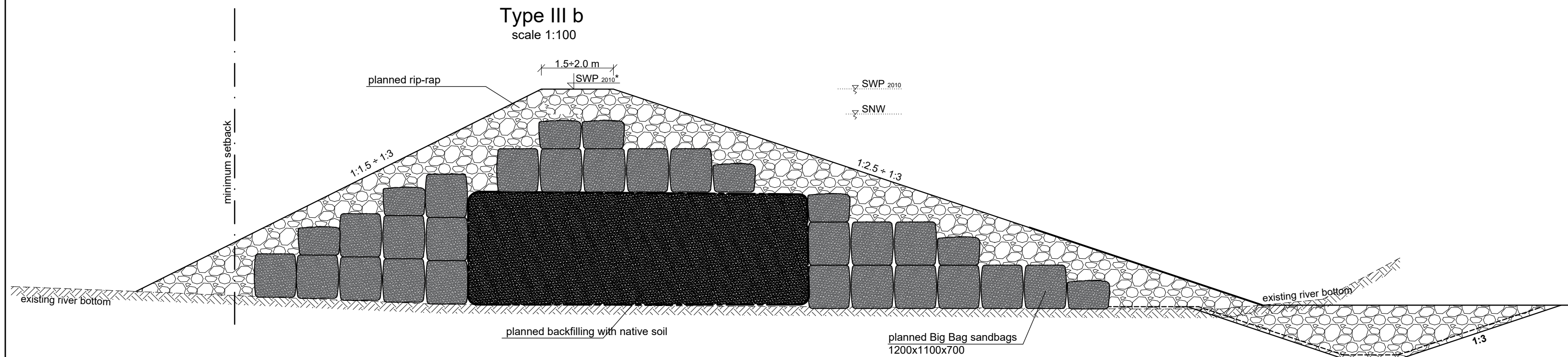
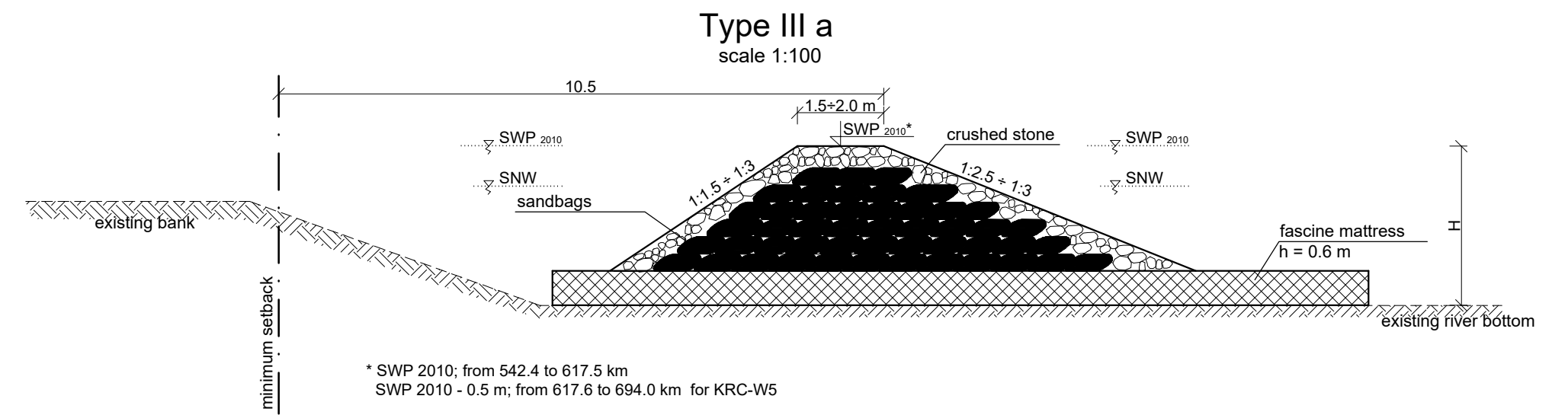
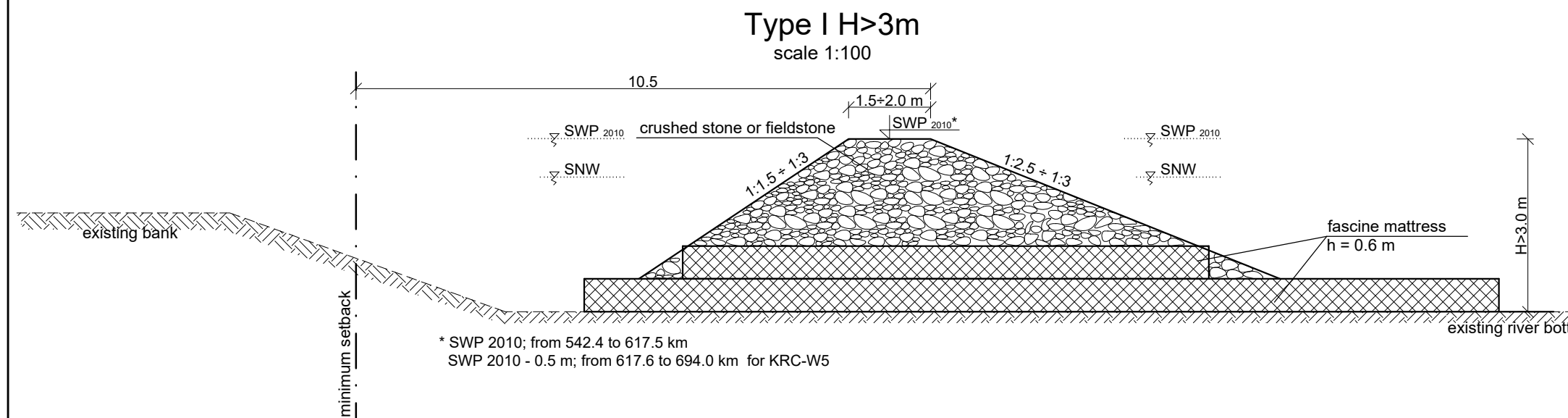
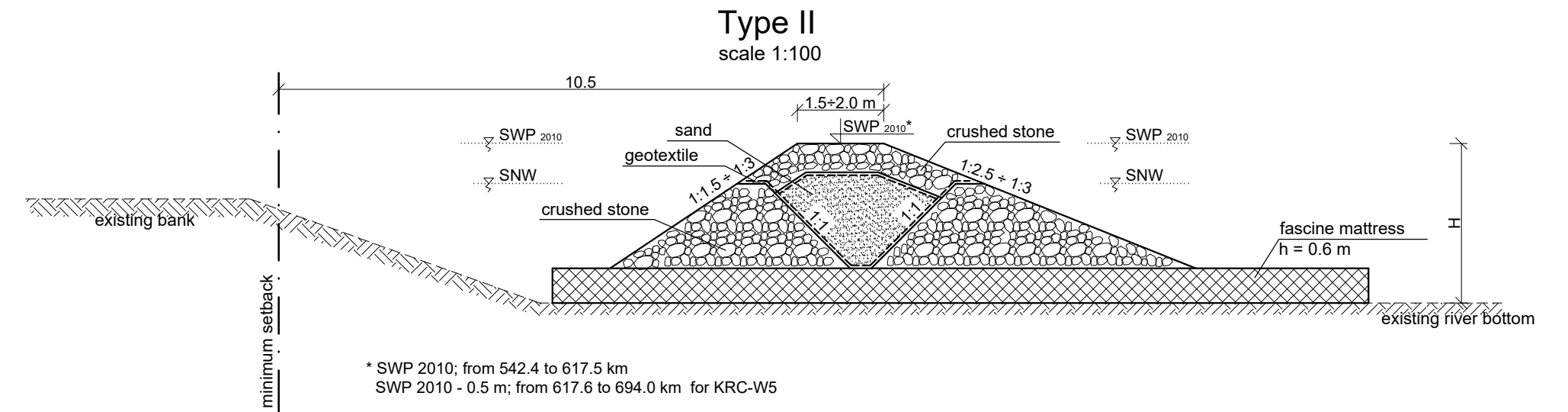
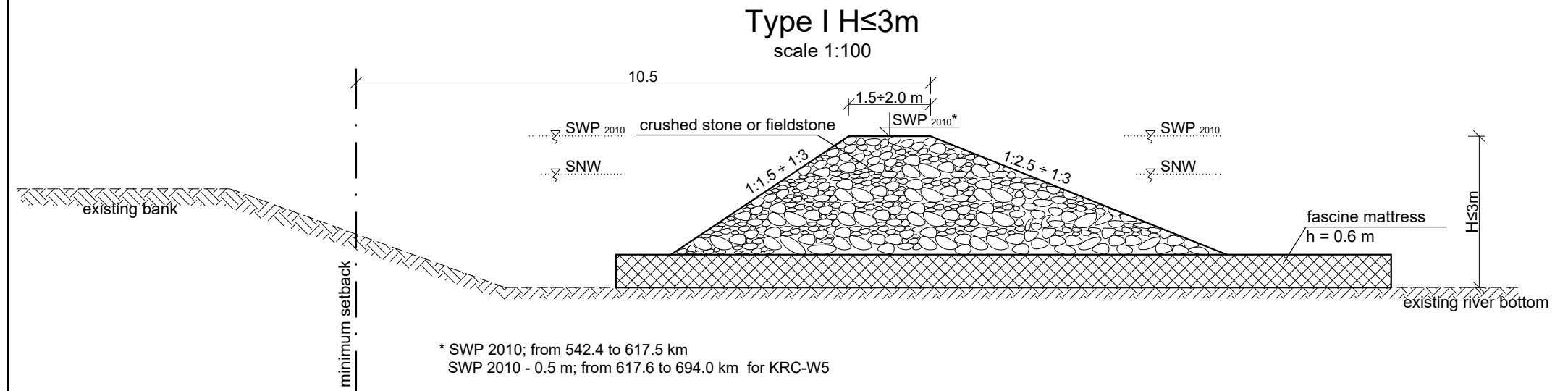


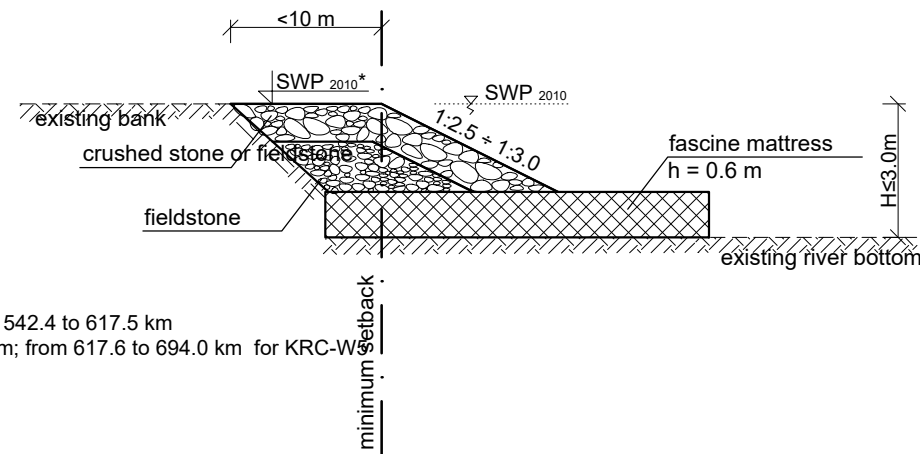
# CONSTRUCTION OF NEWLY-DESIGNED LONGITUDINAL DAMS



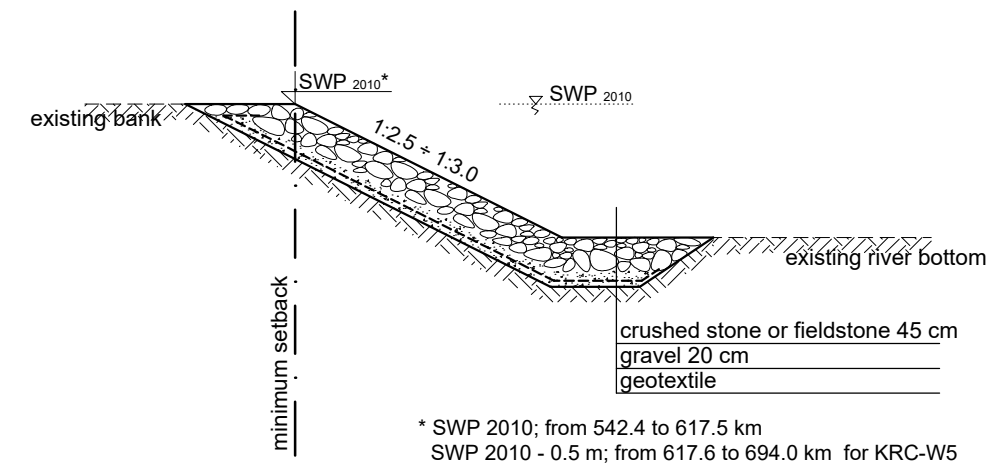
Project unit: <b>SWECO</b>		Sweco Consulting Sp.z o.o. 60-829 Poznań, ul. Franklina Roosevelta 22; Tel. (0-61) 864 93 00; Fax. (0-61) 864 93 01	Sweco Consulting Sp.z o.o. Office in Szczecin 71-641 Szczecin, ul. Łyskowskiego 16; Tel. 605 071 242
Employer: State Water Management Polish Waters Regional Water Management Authority in Szczecin ul. Tama Pomorzańska 13a 70-030 Szczecin	Project title: Odra-Vistula Flood Management Project Contract 5.4: Design and Construction Supervision for works, Project Management, Technical Assistance and Training Technical Support for the Project and Strengthening of PIU's Institutional Capacity for RZGW in Szczecin		
Project No.: 353688	Subject of document: 1B.2 Modernisation works on border Odra, Stage I: Modernisation works on border Odra to enable winter icebreaking Stage II: Reconstruction of river control infrastructure		
Type of document: EMP	Figure title: Construction of newly-designed longitudinal dams	Fig. No.: 2	
Trade: Hydro engineering	Date: 04.2020	Scale: 1:100	
Function:	Title, full name	Licence No., speciality	Signature
Chief designer:	mgr inż. Witold Samoląg	82/Sz/76 <small>Special licence qualification hydrological construction No. 873 from 4.5.13</small>	
Designer:	mgr inż. Łukasz Gontarz	ZAP/0004/POOK/11 <small>Engineering licence in construction and structures</small>	
Checked by:	mgr inż. Marek Chmielewski	ZAP/0001/POOK/14 <small>Engineering licence in construction and structures</small>	
Prepared by:			

# CONSTRUCTION OF RIVER WALLS AND REVETMENTS

River wall  $H \leq 3.0\text{m}$   
scale 1:100



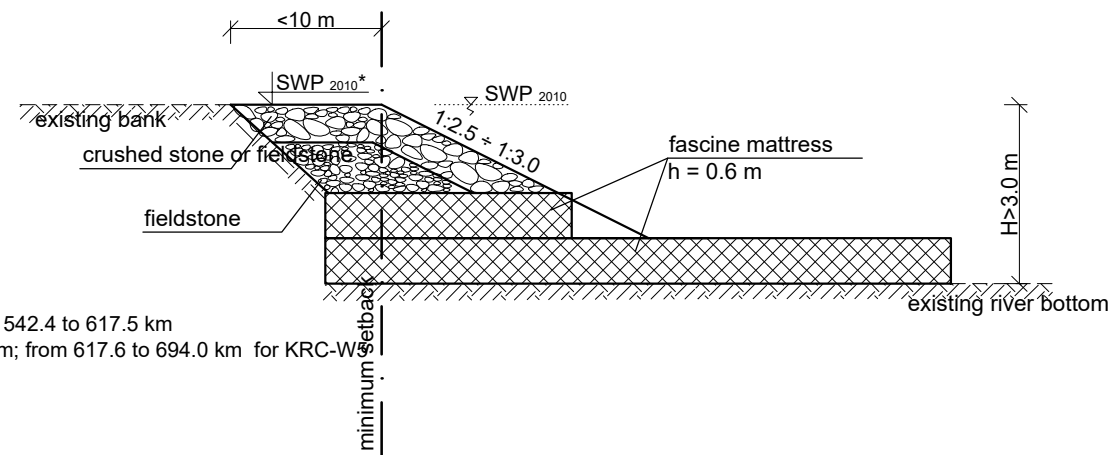
Revetment - type 1  
scale 1:100



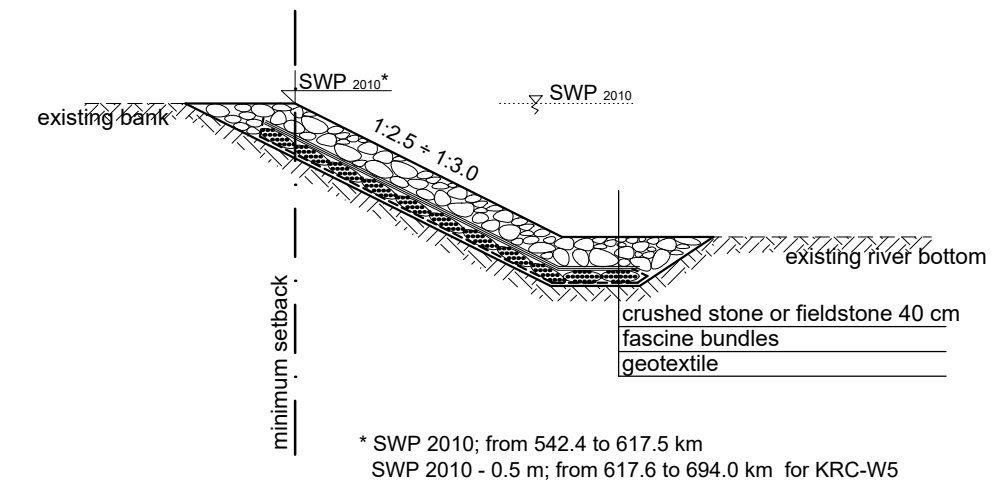
\* SWP 2010; from 542.4 to 617.5 km  
SWP 2010 - 0.5 m; from 617.6 to 694.0 km for KRC-W5

\* SWP 2010; from 542.4 to 617.5 km  
SWP 2010 - 0.5 m; from 617.6 to 694.0 km for KRC-W5

River wall  $H > 3.0\text{m}$   
scale 1:100




Revetment - type 2  
scale 1:100



\* SWP 2010; from 542.4 to 617.5 km  
SWP 2010 - 0.5 m; from 617.6 to 694.0 km for KRC-W5

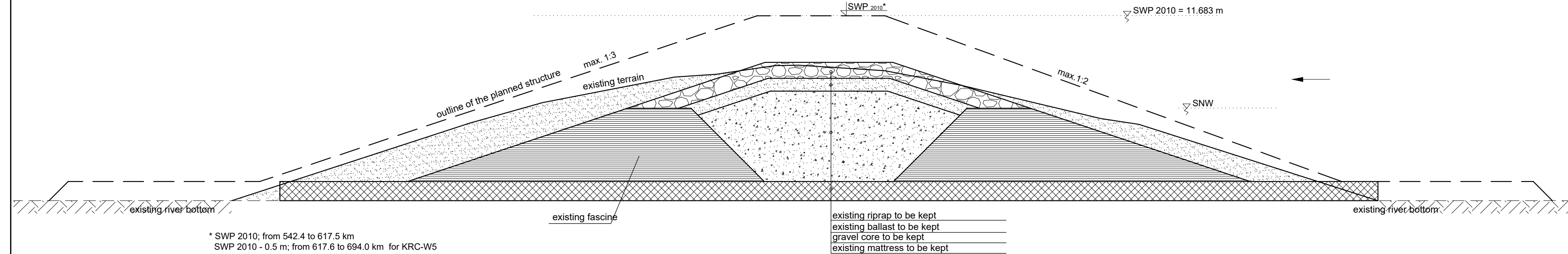
\* SWP 2010; from 542.4 to 617.5 km  
SWP 2010 - 0.5 m; from 617.6 to 694.0 km for KRC-W5

Project unit: 		Sweco Consulting Sp.z o.o. 60-829 Poznań, ul. Franklina Roosevelta 22; Tel. (0-61) 864 93 00; Fax. (0-61) 864 93 01	Sweco Consulting Sp.z o.o. Office in Szczecin 71-641 Szczecin, ul. Łyskowskiego 16; Tel. 605 071 242
Employer: State Water Management Polish Waters Regional Water Management Authority in Szczecin ul. Tama Pomorzańska 13a 70-030 Szczecin		Project title: Odra-Vistula Flood Management Project Contract 5.4: Design and Construction Supervision for works, Project Management, Technical Assistance and Training Technical Support for the Project and Strengthening of PIU's Institutional Capacity for RZGW in Szczecin	
Project No.: 353688			
Subject of document: 1B.2 Modernisation works on border Odra, Stage I: Modernisation works on border Odra to enable winter icebreaking Stage II: Reconstruction of river control infrastructure			
Type of document: EMP	Figure title: Construction of river walls and revetments		Fig. No.: <b>3</b>
Trade: Hydro engineering	Scale: 1:100		
Date: 04.2020			
Function:	Title, full name	Licence No., speciality	Signature
Chief designer:	mgr inż. Witold Samolong	82/Sz/76 <small>Special building qualifications hydrotechnical constructions No. 875 Item 48 § 13</small>	
Designer:	mgr inż. Łukasz Gontarz	ZAP/0004/POOK/11 <small>Engineering licence in construction and structures</small>	
Checked by:	mgr inż. Marek Chmielewski	ZAP/0001/POOK/14 <small>Engineering licence in construction and structures</small>	
Prepared by:			

# RECONSTRUCTION OF THE EXISTING GROUYNE

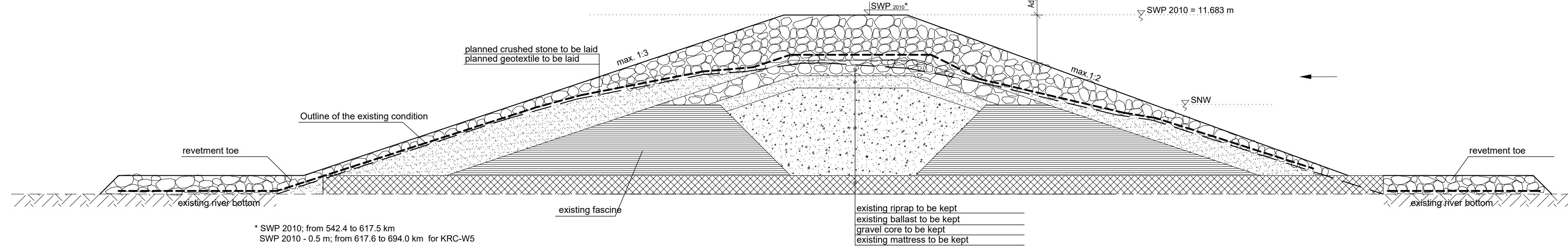
## EXISTING GROUYNE Cross-section

scale 1:50  
[dimensions in m]; [elevations in mKr]



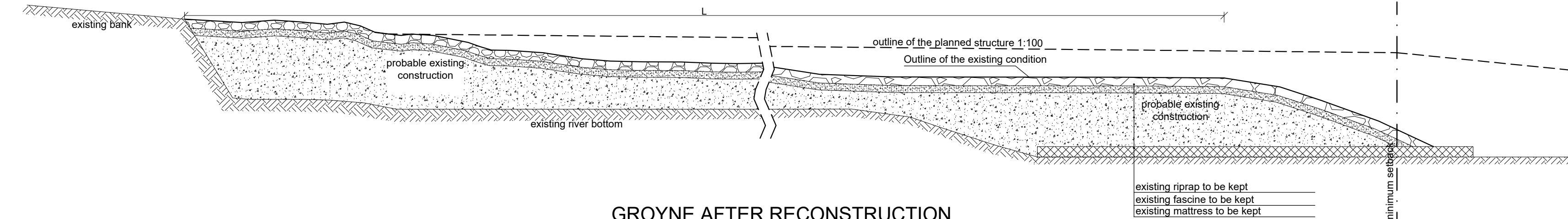
## GROUYNE AFTER RECONSTRUCTION Cross-section

scale 1:50  
[dimensions in m]; [elevations in mKr]



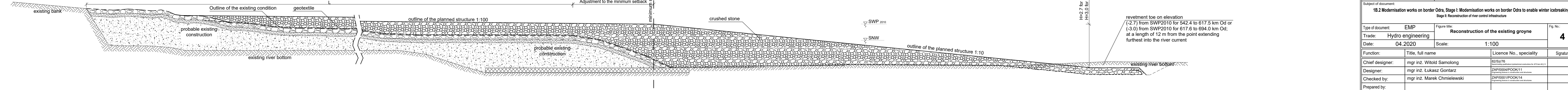
## EXISTING GROUYNE Longitudinal section

scale 1:100  
[dimensions in m]; [elevations in mKr]



## GROUYNE AFTER RECONSTRUCTION Longitudinal section

scale 1:100  
[dimensions in m]; [elevations in mKr]



### Comments:

1. Adaptation to the minimum setback consists in extending or shortening the groyne.
2. Adaptation to the regulatory elevation consists in raising or lowering the elevation of the groyne crest.
3. If the groyne crest elevation is lowered or raised by  $h < 50$  cm, the surface of the existing groyne should be demolished to a depth that will enable the laying of new riprap

Project unit: <b>SWECO</b>		Sweco Consulting Sp.z o.o. 60-829 Poznań, ul. Franklina Roosevelta 22; Tel. (0-61) 864 93 00; Fax. (0-61) 864 93 01		Sweco Consulting Sp.z o.o. Office in Szczecin 71-641 Szczecin ul. Lyskowski 16; Tel. 605 071 242	
Employer: State Water Management Polish Waters Regional Water Management Authority in Szczecin ul. Tama Pomorzanska 13a 70-030 Szczecin	Project title: Odra-Vistula Flood Management Project Contract 5.4: Design and Construction Supervision for works, Project Management, Technical Assistance and Training Technical Support for the Project and Strengthening of PIU's Institutional Capacity for RZGW in Szczecin				
Project No.:	353688				
Subject of document: 1B.2 Modernisation works on border Odra, Stage I: Modernisation works on border Odra to enable winter icebreaking Stage II: Reconstruction of river control infrastructure					
Type of document:	EMP	Figure title:	Reconstruction of the existing groyne		Fig. No.:
Trade:	Hydro engineering			4	
Date:	04.2020	Scale:	1:100		
Function:	Title, full name	Licence No., speciality	Signature		
Chief designer:	mgr inż. Witold Samoląg	82/Sz/76			
Designer:	mgr inż. Lukasz Gontarz	ZAP/0004/POOK/11			
Checked by:	mgr inż. Marek Chmielewski	ZAP/0001/POOK/14			
Prepared by:					