INTERNATIONAL SAVA RIVER BASIN COMMISSION

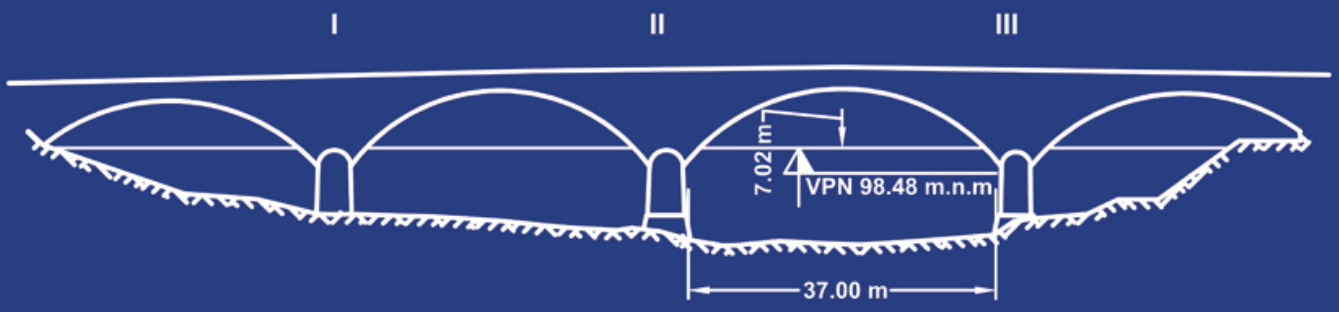
MEĐUNARODNA KOMISIJA ZA SLIV RIJEKE SAVE
INTERNATIONAL SAVA RIVER BASIN COMMISSION

ALBUM MOSTOVA

NA RIJECI SAVI I NJEZINIM PLOVNIM PRITOKAMA

ALBUM OF BRIDGES

ON THE SAVA RIVER AND ITS NAVIGABLE TRIBUTARIES



ZAGREB 2021

MEĐUNARODNA KOMISIJA ZA SLIV RIJEKE SAVE
ZAGREB
INTERNATIONAL SAVA RIVER BASIN COMMISSION
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ALBUM MOSTOVA
NA RIJECI SAVI I NJEZINIM PLOVNIM PRITOKAMA
(opis uvjeta plovidbe u plovnim otvorima mostova)

ALBUM OF BRIDGES
ON THE SAVA RIVER AND ITS NAVIGABLE TRIBUTARIES
(description of navigation conditions in bridge openings)

Zagreb 2021

INTERNATIONAL SAVA RIVER BASIN COMMISSION

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MEĐUNARODNA KOMISIJA ZA SLIV RIJEKE SAVE

ALBUM MOSTOVA
NA RIJECI SAVI I NJEZINIM PLOVNIM PRITOKAMA
(opis uvjeta plovidbe u plovnim otvorima mostova)

HR

ZAGREB

INTERNATIONAL SAVA RIVER BASIN COMMISSION

2021

Sadržaj:

Pregled slika:

Riječnik pojmova:
(po redoslijedu pojavljivanja)

Pojam	Značenje
HEC RAS	Hydrologic Engineering Centers River Analysis System – softverski alat za jednodimenzionalnu analizu riječnog toka
NPN	Niski plovni nivo (ili vodostaj) slobodnoprotočne rijeke na nekom vodomjeru odgovara vodostaju 95%-tne trajnosti: NPN = V95% [cm ili m n.m.], a u bilo kojoj točki slobodnoprotočne rijeke odgovara razini vodnog lica od protoka trajnosti 95% dana u godini (Q95%). Određuje se temeljem statističkog proračuna trajnosti vodostaja iz 25 godišnjeg razdoblja opažanja. (EN – etiage navigable).
VPN	Visoki plovni nivo (ili vodostaj) slobodnoprotočne rijeke na nekom vodomjeru odgovara vodostaju 1%-tne trajnosti: VPN = V1% [cm ili m n.m.], a u bilo kojoj točki slobodnoprotočne rijeke odgovara razini vodnog lica od protoka trajnosti 1% dana u godini (Q1%). Određuje se temeljem statističkog proračuna trajnosti vodostaja iz 25 godišnjeg razdoblja opažanja..

Predgovor

Treće, dopunjeno izdanje “Albuma mostova na rijeci Savi i njezinim plovnim pritokama” rezultat je velikog interesa stručne javnosti i mogućnosti da se u ovom izdanju prikažu i mostovi koji nisu bili obuhvaćeni u prethodnim edicijama. Pored mostova na međunarodnom plovnom putu rijeke Save, definiranom „Protokolom o režimu plovidbe” uz Okvirni sporazum o slivu rijeke Save, i mostova na rijeci Savi, na dionici uzvodno od Siska do granice sa Republikom Slovenijom na kojoj važi državni režim plovidbe, po prvi put su uvršteni u album i mostovi na dijelu toka rijeke Save u Republici Sloveniji, konkretno do brane u Krškom.

Ovo izdanje, urađeno prema postojećoj klasifikaciji plovnog puta, usklađeno je s novim izmjenjenim vrijednostima referentnih plovnih nivoa na vodomjernim postajama u Republici Hrvatskoj, te su urađena ažuriranja relevantnih vrijednosti referentnih plovnih nivoa u profilima postojećih mostova na koje se odnose te izmjene.

Prema *Okvirnom sporazumu*, strateški cilj Savske komisije je koordinacija suradnje savskih država u području voda, radi osiguravanja uvjeta za održivi razvoj slivnog područja. *Okvirnim sporazumom*, koji objedinjuje sve vidove upravljanja vodama u slivu, definirana su tri konkretna cilja ove suradnje:

- uspostavljanje međunarodnog režima plovidbe na Savi i njezinim plovnim pritokama;
- uspostavljanje održivog upravljanja vodama na slivu Save i
- upravljanje opasnostima, kao što su poplave, suše, pojave leda i onečišćenja voda.

Uspostavljanje međunarodnog režima plovidbe na Savi, uz istodobno uvažavanje drugih navedenih ciljeva, podrazumijeva provedbu niza aktivnosti u vezi s obnovom i razvitkom plovidbene infrastrukture, povećanje sigurnosti i unapređenje tehničkih standarda plovidbe, kojima se stvaraju uvjeti za razvoj plovidbe na suvremen i ekološki održiv način.

U tom cilju, Savska komisija je do danas izradila niz dokumenata iz područja plovidbe i donijela odluke o njihovom prihvaćanju, čime su ovi dokumenti stupili na snagu i postali obvezujući za savske države, s obzirom na pravnu sposobnost u području plovidbe, koja je Savskoj komisiji dana *Okvirnim sporazumom*.

„Album mostova na rijeci Savi i njezinim plovnim pritokama“ ima za cilj zainteresiranim subjektima u slivu Save (resorna ministarstva, lučke uprave, kapetanije, zapovjednici, brodari i drugi izravni korisnici plovnog puta), a zatim i drugim organizacijama i institucijama, zainteresiranima za aktivnosti na Savi i aktivnosti Savske komisije, ponuditi sistematizirane podatke o dimenzijama mostova, njihovim plovnim otvorima, kao i uvjetima plovidbe pri karakterističnim vodostajima u mostovnim profilima, te na taj način dodatno doprinijeti sigurnosti plovidbe u slivu Save.

Ključni doprinos točnosti i ažurnosti „Albuma mostova“, kroz osiguranje svih neophodnih podataka, dale su Stručna skupina Savske komisije za plovidbu, a osobito Direkcija za plovne puteve (Beograd), Agencija za vodne putove (Vukovar) i Direktorata za zračni i pomorski promet (Ljubljana) na čemu im se najiskrenije zahvaljujem.

Nadamo se da će uporabljivost nove naklade „Albuma mostova“, također u praksi biti potvrđena u vrlo bliskoj budućnosti, a Savska komisija time biti potaknuta na nove, slične nakladničke pothvate.

Zagreb, srpanj 2021.

Dragan Zeljko,
Tajnik Savske komisije

1. Uvod

Prvo izdanje Albuma mostova na rijeci Savi i njezinim plovnim pritokama (2011.) predstavljalo je pregled mostova i njihovih plovnih otvora s uvjetima plovidbe pri karakterističnim vodostajima i izrađeno je u skladu sa Strategijom implementacije Okvirnog sporazuma o slivu rijeke Save, Planom rada Međunarodne komisije za sliv rijeke Save (ISRBC) za 2010. godinu i Programom rada Stalne stručne skupine za plovidbu za 2010. godinu.

Drugo izdanje Albuma mostova na rijeci Savi i njezinim plovnim pritokama (2017.) dopunjeno je i mostovima na uzvodnoj dionici rijeke Save u Hrvatskoj, od Siska (rkm 594) do granice sa Slovenijom (približno rkm 711,3). U tom izdanju prvi put dan je prikaz mostova na dijelu rijeke Save na kojem ne važi međunarodni, već važi državni režim plovidbe.

Pored novoizgrađenog most na lokaciji Svilaj, ovo, treće izdanje, po prvi put sadrži mostove na dijelu toka rijeke Save u Sloveniji, od granice sa Hrvrtskom do brane u Kršk̆om.

Namijenjeno je u prvom redu svim sudionicima u plovidbi rijekom Savom, ali i ostalim dionicima, s namjerom da se pozitivno utječe na sigurnost plovidbe kroz priskrbljivanje potrebnih informacija za plovidbu kroz plovne otvore mostova.

Stalna stručna skupina za plovidbu, a posebno Agencija za vodne putove iz Vukovara (Agencija), Direkcija za plovne puteve iz Beograda (Direkcija), kao i Direktorat za zračni I pomorski promet iz Ljubljane (Direktorat) dale su izniman doprinos točnosti i ažurnosti Albuma mostova, prije svega osiguranjem svih potrebnih podataka za njegovu izradu.

2. Priprema Albuma mostova

2.1. **Izvor podataka**

Podaci korišteni za izradu ovog i ranijih izdanja izdanja Albuma mostova su osigurani kroz Stalnu stručnu skupinu za plovidbu, a dostavljeni su od strane Agencije, Direkcije i Direktorata.

2.2. **Format dostavljenih i ostalih podataka**

Podaci dobijeni od strane Agencije, Direkcije, i Direktorata su dostavljeni u različitim oblicima:

- vektorski (Autodesk Autocad format – dwg);
- rasterski (različiti rasterski formati – bmp, jpg, tiff);
- tabelarni (MS Excel).

Dostavljeni podaci različite su kvalitete i obujma i svedeni su korištenjem različitih alata na vektorski oblik, odakle su u pdf formatu pripremljeni za tisak.

2.3. **Kvaliteta podataka**

Kvaliteta raspoloživih podataka je varirala od mosta do mosta, u ovisnosti o izvoru. Najkvalitetniji podaci dio su dokumentacije korištene ili pri izgradnji ili pri rekonstrukciji mostova. U odnosu na dostavljene podatke mogu se, za sve mostove, izvesti sljedeći zaključci o kvaliteti istih:

- vektorski podaci za mostove sadrže informacije o kotama snimljenim terenskim mjerenjima i kao takvi predstavljaju neprijepornu informaciju, koja je, često puta, u neskladu s informacijama dobijenim korištenjem nacrtanih konstrukcija istih tih mostova, što je i razumljivo jer nije korištena projektna i/ili izvedbena dokumantacija. Posebno su karakteristični mostovi čiji donji rub konstrukcije nije ravan, pa je približno utvrđen geometrijskim figurama (lukovi ili elipse) neodgovarajućih promjera. U takvim slučajevima snimljene kote su mjerodavne;
- nekompletni su podaci o mostovima u uzdužnom presjeku, odnosno većina mostova je dana samo s informacijama u plovnim otvorima i neposrednoj im blizini, dakle u minor koritu, bez informacija o položaju i broju stupova i rasponu među njima u inundacijama, odnosno u major koritu. Sa stajališta upotrebne vrijednosti Albuma mostova to je ipak dostatna informacija, ali ne i sa stajališta cjelovitosti i, ipak, donekle

točnosti (numeriranje stupova među kojima se nalazi plovni otvor u tom je slučaju netočno);

- nedostatak informacija o riječnom koritu u mostovnim profilima prevaziđen je korištenjem podataka sa hidrografskog mjerenja rijeke Save od rkm 225 do rkm 0 tijekom 2002., 2004. i od rkm 211 do rkm 0, hidrografskim mjerenjima iz 2016 godine, te uz pomoć modela ranije razvijanog u HEC RAS-u za potrebe Analize sliva rijeke Save. Ovakav pristup nosi određeni stupanj aproksimacije (mostovni profili dobijeni su ili aproksimacijom ili korištenjem profila snimljenih neposredno uzvodno ili nizvodno od mosta), ali je sa stajališta plovidbe to sasvim prihvatljivo;
- vektorizacija rasterskih podataka je proces koji sam po sebi donosi određenu grešku, nužnu sa stajališta raspoloživih podloga;
- korištene se nove vrijednosti vodostaja relevantnih plovnih nivoa na vodomjernim postajama na dijelu toka rijeke Save u Hrvatskoji i graničnom dijelu između Hrvatske i BiH, određene u Studiji hidrološke analize od strane Witteveen + Boss, koja je razvijena u okviru dokumentacije Tehnička podrška za obnovu i poboljšanje plovnog puta rijeke Save u Republici Hrvatskoj. Stoga su vrijednosti relevantnih plovnih nivoa u profilima mostova na navedenom dijelu toka, određene linerarnom interpolacijom;
- podaci o karakterističnim vodostajima koji definiraju gabarite plovnih otvora, svakako će biti predmet konstantne revizije kako bi se osigurale što ažurnije informacije po pitanju predmetnih vrijednosti.

2.4. **Alati**

Pri izradi Albuma mostova korišteni su različiti informatički programi. U najvećoj mjeri je korišten od strane ISRBC licenciran software poput Autodesk AutoCAD 2008, ESRI Arc GIS 9.2 zatim MS Excel i MS Word, te različiti alati za pretvorbu formata.

3. Sadržaj Albuma

Album mostova na rijeci Savi i njezinim pritokama sastoji se iz tabelarnih i grafičkog prikaza informacija o mostovima i njihovim (plovnim) otvorima, kao i informacija o mjerodavnim vodomjernim postajama i odgovarajućim kotama i plovnim nivoima.

3.1. **Tabelarni pregled gabarita plovnih otvora mostova u odnosu na uspostavljenu klasifikaciju na vodnom putu rijeke Save**

Tabelarani pregled na jednom mjestu daje informacije o gabaritima plovnih otvora mostova u odnosu na minimalno potrebne gabarite definirane klasifikacijom vodnog puta rijeke Save. Jasno su istaknuti mostovi i gabariti koji ne ispunjavaju uvjete definirane klasifikacijom.

3.2. **Tabelarni pregled mostova i njihovih plovnih otvora na rijeci Savi i njezinim pritokama sa gabaritima pri karakterističnim vodostajima i informacije o mjerodavnim vodomjernim postajama i odgovarajućim kotama i plovnim nivoima**

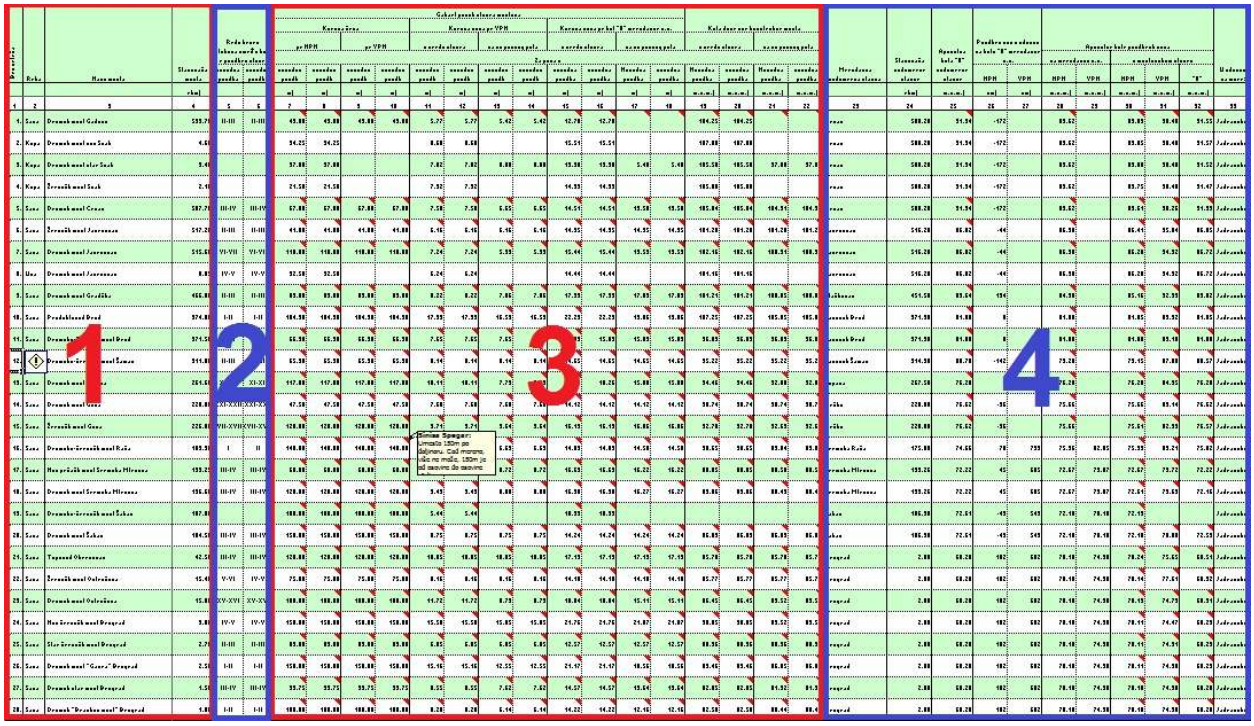
Tabelarni pregled na jednom mjestu daje pregled svih informacija važnih sa stajališta plovidbe za sve mostove na rijeci Savi i njezinim pritokama. Sastoji se iz 4 cjeline koje su označene brojevima i bojama na Slici 1:

1. informacije koje jednoznačno definiraju most i njegov položaj izražen riječnim kilometrima (redni broj u Albumu mostova, nazive rijeke, naziv mosta i stacionaža, respektivno);
2. redni broj stupova mosta (brojeći od lijeve ka desnoj obali) koji određuju plovni otvor mosta za uzvodnu i nizvodnu plovidbu;
3. veličine koje definiraju gabarite plovnog otvora mosta (korisna širina pri niskom plovnom nivou (NPN) i visokom plovidbenom nivou (VPN), korisna visina pri VPN i korisna visina pri koti "0" mjerodavne vodomjerne postaje, kota donjeg ruba konstrukcije mosta, sve za plovila i u uzvodnoj i u nizvodnoj plovidbi, te u sredini otvora i na rubu plovnog puta, respektivno);

4. informacije koje definiraju mjerodavne vodomjerne postaje i relevantne kote i plovne nivoe na njima (naziv mjerodavne vodomerne postaje, stacionaža, apsolutna kota "0", plovni nivoi (NPN i VPN) na vodomjernoj postaji u cm, apsolutne kote plovnih nivoa (NPN i VPN) na mjerodavnoj vodomjernoj postaji i u mostovnom otvoru i referentni nivo u odnosu na kojega se izražavaju apsolutne kote, respektivno);

5. za mostove na dionici uzvodno od Siska, na dijelu toka gdje ne važi međunarodni režim plovidbe, nisu utvrđeni mjerodavni niski plovni nivoi (NPN). Stoga su za njih, u zasebnom tabelarnom pregledu date informacije samo u odnosu na definirani visoki plovni nivo (VPN), kao i kote donjeg ruba konstrukcija mostova u sredini otvora i na rubu plovnog puta, a izostavljene su i vrijednosti korisne visine pri koti "0" mjerodavne vodomjerne postaje;

6. za mostove na dijelu toka u Slovenji nisu definirani relevantni plovni nivoi (VPN i NPN), već su dostavljene samo vrijedosti vodostaja za stogodišnju vodu H_{100}. Stoga su vrijednosti gabartita plovnih otvora tih mostova određeni u odnosu na H_{100}.



Slika 1: Tabelarni pregled mostova i njihovih plovnih otvora na rijeci Savi i njezinim pritokama sa gabaritima pri karakterističnim vodostajima i informacije o mjerodavnim vodomjernim postajama i odgovarajućim kotama i plovnim nivoima

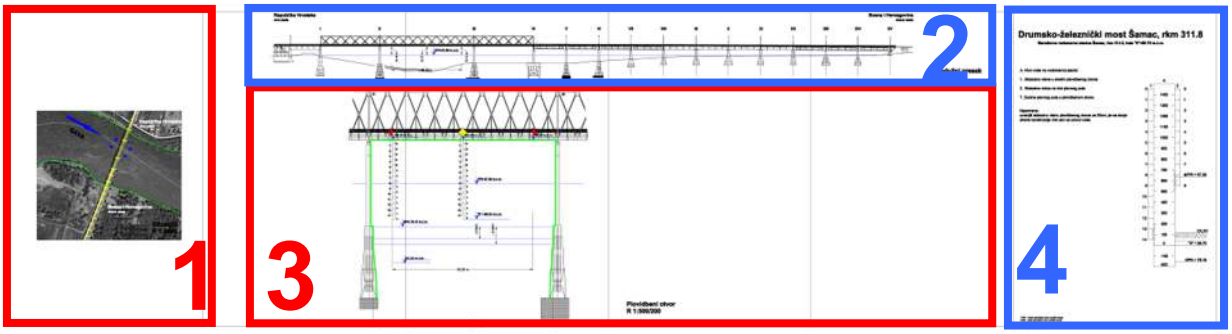
3.3. Grafički prikazi mostova i plovnih otvora mostova u razmjerama 1:5000, 1:1000 i 1:500/200

Grafički prikazi mostova i njihovih (plovnih) otvora daju informacije od važnosti za plovidbu kroz plovne otvore mostova u više razmjera i pogleda, a isto tako omogućuju da se na jednostavan način dođe do informacija o raspoloživim okomitim gabaritima pri trenutnom vodostaju na mjerodavnoj vodomjernoj postaji.

Grafički prikazi se sastoje iz 4 cjeline koje su označene brojevima i bojama na primjeru cestovno-željezničkog mosta u Šamcu:

1. situacija R 1:5000, prikazuje dispoziciju mosta u planu, s numeriranim stupovima mosta, smijerom toka i označenim plovnim otvorom (plovnim otvorima - u slučaju da se uzvodna i nizvodna plovidba odvijaju u različitim plovnim otvorima);

2. uzdužni presjek mosta R 1:1000, osigurava informacije o raspoloživoj širini u plovnom otvoru pri VPN, oznake obala i brojeve stupova, uvijek prikazan u smjeru nizvodne plovidbe, odnosno potencijalne plovidbe za mostove na dionici uzvodno od Siska;
3. uzdužni presjek plovidbenog otvora R 1:500/200, prikazuje detaljne informacije o raspoloživim gabaritima plovnog otvora i vodnog puta pri karakterističnim vodostajima;
4. naslovna strana s prikazom vodomjerne letve s koje je moguće dobiti informaciju o raspoloživoj visini u plovnom otvoru mosta (u sredini i na rubovima) pri trenutnom vodostaju, kao i o rapoloživoj dubini.



Slika 2: Grafički prikazi mostova i plovnih otvora mostova u razmjerama 1:5000, 1:1000 i 1:500/200

4. Format izdanja

Praksa je da se Album mostova svakako objavljuje u papirnom obliku, kako bi u svakom trenutku bio dostupan korisniku. Izabrani oblik omogućuje da se u prigodnim razmjerama prikažu neophodne informacije korisnicima, a u isto vrijeme da Album mostova ne zahtijeva previše prostora za rukovanje. Načinom uveza se osigurava ažuriranje samo na onim mostovima na kojima su izmjene i nastale.

Ažurni Album mostova će, svakako, biti na raspolaganju u digitalnom obliku na web stranici ISRBC u svakom trenutku.

5. Zaključne napomene

Nova verzija Albuma mostova na rijeci Savi i njezinim pritokama, isto kao prva i druga, svakako ima izvjesne nedostatke, prvenstveno zahvaljujući kvaliteti prikupljenih podataka. Međutim, kvaliteta je sasvim dovoljna kako bi se osigurale informacije potrebne za plovidbu kroz plovne otvore mostova.

Kvaliteta podataka bi se mogla unaprijediti prikupljanjem projektne dokumentacije mostova kod projektanata/izvođača.

Naročito značajna bi bila kontinuirana provjera relevantnih plovnih nivoa (NPN i VPN), što bi omogućilo točnije podatke o raspoloživim visinama i dubinama u plovnim otvorima pri karakterističnim vodostajima.

ISRBC i Stalna Stručna skupina za plovidbu će u tom smislu poduzeti odgovarajuće korake.

INTERNATIONAL SAVA RIVER BASIN COMMISSION

ALBUM OF BRIDGES
ON THE SAVA RIVER AND ITS NAVIGABLE TRIBUTARIES
(description of navigation rules through the opening of the bridges)

ENG

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INTERNATIONAL SAVA RIVER BASIN COMMISSION

2021

Content:

Figures overview:

Glossary:
(In order of appearance)

Term	Meaning
HEC RAS	Hydrologic Engineering Centers River Analysis System – software tool for one-dimensional analysis of river flow
NPN (LNL)	Low navigable water level of freeflow river at some water gauge corresponds to water level of 95% duration: LNL = V95% [cm or m.a.s.l.] and in any point of freeflow river it corresponds to level of water surface with discharge of 95% duration in a year. It is defined from statistical analysis of water level duration taking into account 25 years of observation.
VPN (HNL)	High navigable water level of freeflow river at some water gauge corresponds to water level of 1% duration: HNL = V1% [cm or m.a.s.l.] and in any point of freeflow river it corresponds to level of water surface with discharge of 1% duration in a year. It is defined from statistical analysis of water level duration taking into account 25 years of observation.

Foreword

The third, updated edition of the "Album of bridges on the Sava River and its navigable tributaries" is the result of great interest of the professional public and the possibility to present in this edition the bridges that were not included in previously. In addition to the bridges on the international Sava River waterway, defined by the "Protocol on Navigation Regime" to the Framework Agreement on the Sava River Basin and the bridges on the Sava River on the section upstream from Sisak to the border with the Republic of Slovenia with the state navigation regime, this edition includes the bridges on section of the Sava River in the Republic of Slovenia up to the dam in Krško.

This edition, developed in line with the existing classification of the waterway, is harmonized with the new changes in the values of the reference water levels at water meter stations in the Republic of Croatia. Therefore, the updates of relevant values of reference water levels in profiles of existing bridges are made with regard to those changes.

According to the Framework Agreement, the strategic objective of the Sava Commission is coordination of cooperation among the Sava countries in the water sector, with the aim of providing conditions for sustainable development of the basin. The Framework Agreement, which integrates all aspects of water resources management in the basin, stipulates the following three particular objectives of cooperation:

- Establishment of the international navigation regime on the Sava river and its navigable tributaries;
- Establishment of sustainable water management in the basin, and
- Management of hazards, such as floods, droughts, ice and water pollution.

The establishment of the international navigation regime on the Sava river, while respecting the other stated objectives, includes the implementation of a series of activities related to the rehabilitation and development of waterway infrastructure, improvement of navigation safety and upgrade of the technical standards of navigation, thus providing the conditions for the navigation development in a modern and environmentally sustainable way.

To this end, the Sava Commission has so far developed a set of documents related to navigation and passed decisions on their adoption. Herewith, these documents entered into force and became obligatory for the Sava countries, given the legal capacity of the Sava Commission in the field of navigation, stipulated by the Framework Agreement.

“Album of Bridges on the Sava River and its Navigable Tributaries” aims to provide the respective stakeholders in the Sava river basin (relevant ministries, port authorities, port master offices, boatmasters, shippers, and other users of the waterway), as well as other organizations and institutions, interested in developments in the Sava river basin and activities of the Sava Commission, with the systematized data on dimensions of the bridge constructions, navigation bridge spans and navigation conditions corresponding to the characteristic water levels at the bridge cross-sections, hence additionally contributing to navigation safety in the Sava River Basin.

A key contribution to the accuracy and quality of the “Album of Bridges”, through submission of all necessary data, has been made by the Permanent Expert Group for Navigation of the Sava Commission, and especially by the Directorate for inland waterways (Belgrade), the Agency for inland waterways (Vukovar) and Directorate for air and maritime traffic (Ljubljana), whose contribution is highly recognized.

We hope that the practical usability of the new edition of the “Album of Bridges” will also be confirmed in near future, which would further motivate the Sava Commission to invest additional efforts in preparation of similar publications.

Zagreb, July 2021

Dragan Zeljko,
Secretary of the Sava Commission

1. Introduction

First edition of the Album of bridges on the Sava River and its navigable tributaries provided the overview of the bridges and their navigable openings with navigation conditions at characteristic water levels. It was made in accordance with the Strategy for implementation of the Framework Agreement on the Sava River Basin, and in line with the Work Plans for the year 2010 of the International Commission for the Sava River Basin and Permanent expert group for navigation.

The second issue of the Album of bridges on the Sava River and its navigable tributaries (2017), was augmented with bridges on the upstream section of the Sava River from the town of Sisak to the border between Croatia and Slovenia (rkm 711,3). That edition, for the first time, provided the overview of the bridges on the section with the state regime of river navigation, not only the sections with international regime of river navigation.

In addition to the newly built bridge in Svilaj, this, third edition, for the first time contains bridges on part of the Sava River in Slovenia, from the border with Hrvrtska to the dam in Krško.

It is primarily made for all participants in the navigation on the Sava River, as well as for other stakeholders, in order to contribute to the safety of navigation by providing necessary information for navigation through navigable openings of the bridges.

Permanent Expert Group for navigation, especially the Agency for Inland Waterways from Vukovar (Agency), Directorate for Inland Waterways in Belgrade (Directorate), as well as Directorate for air and maritime traffic from Ljubljana (Directorate), have made a huge contribution to the accuracy and the update of the Album of bridges, primarily through the provision of all necessary data for its preparation.

2. Preparation of the Album of bridges

2.1. Source of data

The data used for preparation of the this and previous editions of Album of bridges were provided through Permanent expert group for navigation. They were submitted by the Agency for Inland Waterways from Vukovar, Directorate of Inland Waterways from Belgrade and Directorate for air and maritime traffic from Ljubljana.

2.2. Format and other information submitted

Data obtained by the Agency and the Directorates are provided in various forms:

- vector form (Autodesk Autocad format - dwg);
- raster form (different raster formats - bmp, jpg, tiff);
- tabular form (MS Excel).

Submitted data are of varying quality and size and are reduced by means of different tools for vector form by which they were prepared for printing in .pdf format.

2.3. Quality of data

The quality of available data varied from bridge to bridge, depending on the source. The highest quality data are part of the technical documentation used for the construction or reconstruction of the bridges. With regard to the submitted data, the following conclusions on the quality of the same can be drawn for all bridges:

- vector data for bridges contain information on the elevations recorded through field measurements and as such represent unrivaled information, which is often at odds with the information obtained by using the drawings of the same bridges. It is understandable because the project documentations and/or as-drawing designs were not used. It applies particularly to the bridges whose bottom line construction is not flat, so it is approximated by geometrical figures (arcs or ellipses) of inadequate diameters. In such cases recorded elevations are relevant;

- data on bridges in longitudinal section are incomplete. In fact, for the majority of bridges was given only the information on navigable openings and their immediate vicinity in the minor bed actually, without information on the position and number of pillars and the span between them in the inundation, i.e. in the major river bed. With concern to its usability, the Album of bridges still provides enough information, but not in terms of completeness, and to some degree of accuracy (numbering of pillars between which is navigable opening is incorrect in this case);
- lack of information on the river channel in bridge profiles. It was overcome by using data from the hydrographic surveys of the Sava River from rkm 225 to rkm 0 performed in 2002, 2004 and from rkm 211 to rkm 0 performed in 2016, as well as with the help of previous models developed by HEC-RAS for the purpose of the Analysis of the Sava River Basin. This approach has approximation of certain degree (bridge profiles were obtained by approximating or using the profiles recorded immediately upstream or downstream of the bridge), but in terms of navigation it is quite acceptable.
- vectorization of raster data is a process that in itself brings about a certain error, necessary in terms of available basic data;
- new values of relevant navigable levels at water gauges on the part of the Sava River in Croatia and the bordering section between Croatia and Bosnia and Herzegovina, were defined in the Hydrological Analysis Study developed by Witteveen & Boss, within the documentation Technical Support for Navigation Restoration and Improvement of the Sava River in the Republic of Croatia. Therefore, the values of the relevant navigable levels in the profiles of the bridges on the part concerned, were determined by linear interpolation
- data on characteristic water levels, which define the vertical and horizontal clearances of navigable openings, certainly will be subject of revision in order to provide as much as possible updated information on values concerned.

2.4. Tools for the preparation

In preparation of the Album of bridges were used different software tools. For the most part was used software licensed by ISRBC such as Autodesk AutoCAD 2008, ESRI Arc GIS 9.2, MS Excel and MS Word, as well as various tools for format conversion.

3. Content of the Album

Album of bridges on the Sava River and its tributaries consists of tabular and graphical displays of information on bridges, their navigable openings, as well as information on relevant water meter stations and corresponding elevations and navigable levels.

3.1. Tabular overview of dimensions of the navigable openings of bridges in relation to the established classification of the Sava River Waterway

Tabular overview in one place gives information about the dimensions of navigable openings of bridges with regard to the minimum required dimensions defined by the classification of the Sava River waterway. They clearly point out bridges and dimensions that do not meet the requirements defined by the classification.

3.2. Tabular overview of bridges and their navigable openings on the Sava River and its tributaries with the clearance related to characteristic water levels as well as information on relevant water meter stations and corresponding elevations and navigable levels.

Tabular overview in one place provides an overview of all important information in terms of navigation for all bridges on the Sava River and its tributaries. It consists of four sections that are numbered and marked with colors in Figure 1:

1. information that unambiguously define the bridge and its location marked by river kilometers (serial number in the Album of bridges, river name, the name of the bridge and chainage, respectively);

2. number of the pillars of the bridge (counting from the left to the right bank) which determine the opening of the bridge for upstream and downstream navigation;
3. dimensions that define the clearance of the navigable bridge opening (horizontal clearance related to the low navigable level (LNL) and the high navigable level (HNL), vertical clearance related to HNL and vertical clearance related to the “zero” level of the relevant water meter station, the elevation of the bottom edge of the bridge, for all vessels navigating upstream and downstream, as well as the bottom edge of the bridge in the opening and at the edge of the fairway, respectively);
4. information that define the relevant water meter stations, as well as relevant elevations and navigable water levels (name of the relevant water meter station, chainage, the absolute elevation of the “zero” level; navigable levels (LNL and HNL) at the water mater station expressed in cm, the absolute elevations of navigable levels (LNL and HNL) at the relevant water meter station and in the opening, as well as reference level in relation to whom the absolute dimensions are expressed, respectively);
5. relevant low navigable levels (LNL) have not been determined for the bridges on the section upstream from Sisak yet. Actually they were not defined for the section without international regime of river navigation. Therefore, for such bridges, the information are given in a separate tabular overview only in relation to defined high navigable level (HNL) along with the elevation of the bottom edge of the bridge in the middle of the opening and the edge of the fairway, but relevant data related to the “zero” level of the relevant water meter station were left out.
6. for bridges on the in Slovenia, the relevant navigable levels (LNL and HNL) have not been defined yet. Only water level values for the 100-year waters H_{100} were submitted. Therefore, the clearance values of the navigable openings of these bridges were determined in relation to H_{100}.

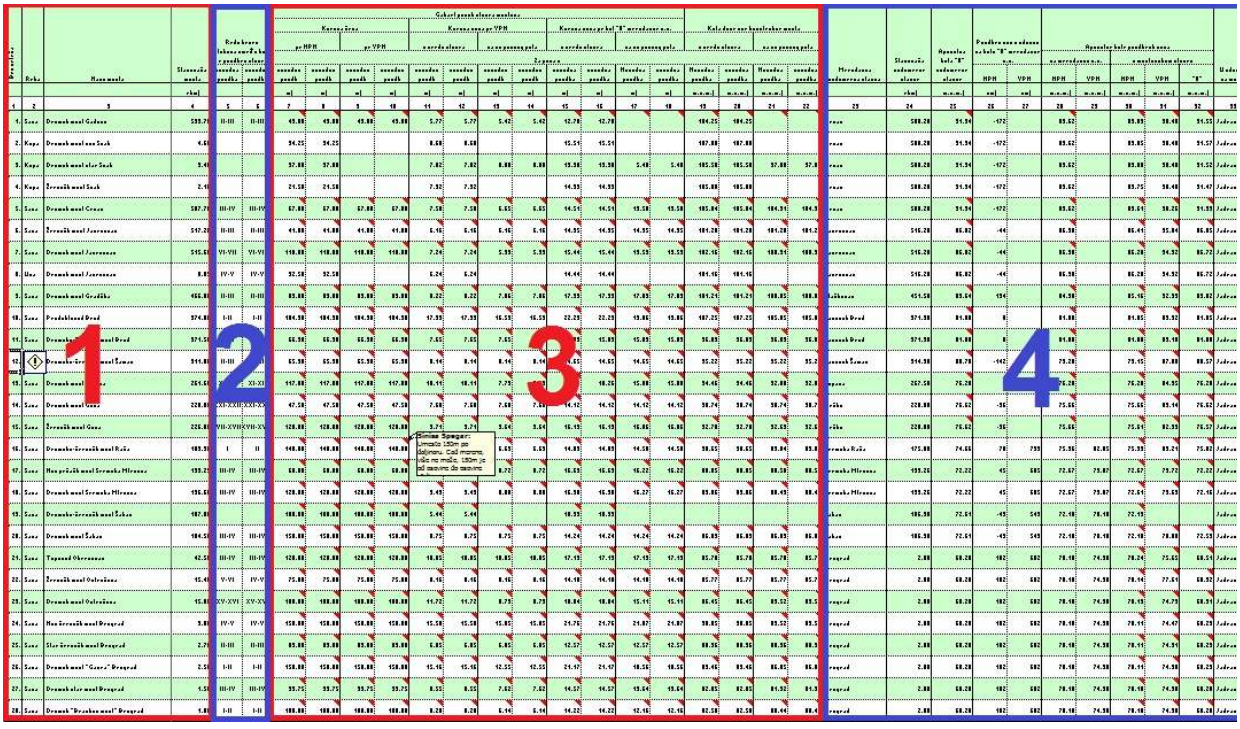

Figure 1: Tabular overview of bridges and their navigable openings on the Sava River and its tributaries with their horizontal and vertical clearances related to characteristic water levels and information on the relevant water meter stations and corresponding elevations and navigable levels

3.3. **Graphical views of navigational bridges and navigable openings in scale 1:5000, 1:1000 and 1:500 / 200**

Graphical views of bridges and their navigable openings provide information relevant for navigation through the bridge openings in different scales and views, and also make it possible

to easily obtain information about the available vertical clearances during the current water level on corresponding water meter station.

Graphical presentations are composed of 4 sections that are marked with numbers and colors shown in the example of road-railway bridge in Šamac:

1. situation R 1:5000, showing the disposition of the bridge in the plan, with numbered pillars of the bridge, marked direction of the flow and navigable opening (navigable openings - in case the upstream and downstream navigation are performed in different openings);
2. longitudinal section of the bridge R 1:1000, provides information on the available horizontal clearance of the navigable opening related to the HNL, marks of the banks and numbers of the pillars, always shown in the direction of the downstream navigation;
3. longitudinal section of navigable opening R 1:500 / 200, displays detailed information on available clearance of the navigable opening and dimensions of the fairway related to characteristic water levels;
4. front page showing the water meter rods which allow obtaining the information on the available horizontal clearance of the navigable opening of the bridge (in the middle and at the edges) related to the current water level, as well as information on the available depth.

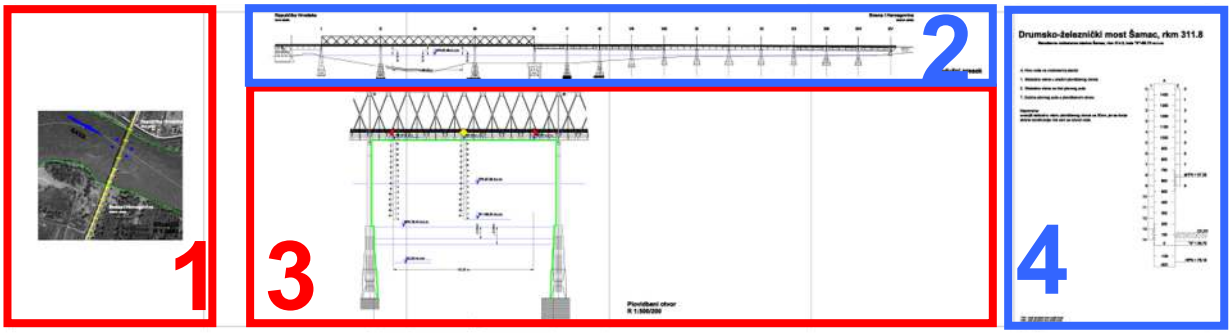

Figure 2: Graphical views of navigational openings of the bridges in scale 1:5000, 1:1000 and 1:500 / 200

4. Publication Format

It is a practice that certainly every Album of bridges is issued in paper form, so that at any time it could be available to the user. The chosen format allows overview of necessary information to users, in adequate scales, while at the same time the album of bridges does not require too much space for manipulation. The method of binding ensures that the update is performed only for those bridges where the changes happened.

The updated Album of bridges will certainly be available in digital form on a Web site of ISRBC at any time.

5. Concluding Remarks

New edition of the Album of bridges on the Sava River and its tributaries, as well as the first ever one, certainly have some drawbacks, primarily due to the quality of data collected. However, the quality is quite sufficient to provide the information necessary for navigation through navigable bridge openings.

Data quality could be improved by collecting technical documentation of bridges from designers / contractors.

In particular, the continuous check of relevant navigable levels (LNL and HNL) would provide accurate information on the available vertical clearances and depths in navigable openings related to the characteristic water levels.

ISRBC and Permanent Expert Group for navigation in this regard will take appropriate steps.

Tabelarni pregled gabarita plovnih otvora mostova
u odnosu na uspostavljenu klasifikaciju na vodnom putu rijeke Save

Overview of dimensions of the bridge openings for navigation
in comparison to defined classification on the Sava River fairway

Br. No.	Rijeka River	Naziv mosta Bridge Name	Stacionaža mosta (rkm) Bridge Chainage (rkm)	Gabariti plovidbenog otvora Dimension of the Bridge Opening		Gabariti zahtijevani klasifikacijom Height Required by Classification	
				Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)	Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)
1.	Sava Sava	Cestovni most Galdovo Road bridge Galdovo	593.70	5.39	49.00	4	45
2.	Sava Sava	Cestovni most Crnac Road bridge Crnac	587.70	6.67	67.80	4	45
3.	Sava Sava	Željeznički most Jasenovac Railway bridge Jasenovac	517.20	6.17	41.00*	4	45
4.	Sava Sava	Cestovni most Jasenovac Road bridge Jasenovac	515.60	5.35	110.00	4	45
5.	Sava Sava	Cestovni most Gradiška Road bridge Gradiška	466.10	7.36	89.00	4	45
6.	Sava Sava	Produktovod Brod Pipeline bridge Brod	374.80	16.47	104.30	4	45
7.	Sava Sava	Cestovni most Brod Road bridge Brod	371.50	7.64	66.30	4	45
8.	Sava Sava	Cestovni most Svilaj Road bridge Svilaj	329.10	8.56	91,00	4	45
9.	Sava Sava	Cestovno-željeznički most Šamac Road-railway bridge Šamac	311.80	8.16	65.30	4	45
10.	Sava Sava	Cestovni most Županja Road bridge Županja	261.60	7.85	117.80	7	45
11.	Sava Sava	Cestovni most Gunja Road bridge Gunja	228.80	7.62	47.50	7	45

Br. No.	Rijeka River	Naziv mosta Bridge Name	Stacionaža mosta (rkm) Bridge Chainage (rkm)	Gabariti plovidbenog otvora Dimension of the Bridge Opening		Gabariti zahtijevani klasifikacijom Height Required by Classification	
				Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)	Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)
12.	Sava Sava	Željeznički most Gunja Railway bridge Gunja	226.80	9.58	120.00	7	45
13.	Sava Sava	Cestovno-željeznički most Rača Road-railway bridge Rača	183.31	-	140.00	4	45
14.	Sava Sava	Pješački most Sremska Mitrovica Pedestrian bridge Sremska Mitrovica	139.24	8.37	100.00	7	45
15.	Sava Sava	Cestovni most Sremska Mitrovica Road bridge Sremska Mitrovica	136.60	9.30	150.00	7	45
16.	Sava Sava	Željeznički most Šabac Railway bridge Šabac	106.96	6.46*	75.00	7	45
17.	Sava Sava	Cestovni most Šabac Road bridge Šabac	104.53	9.42	80.00	7	45
18.	Sava Sava	Cestovno-toplovodni most Obrenovac Road-pipeline bridge Obrenovac	42.53	11.01	1 x 80.00 1 x 120.00	7	55
19.	Sava Sava	Željeznički most Ostružnica Railway bridge Ostružnica	15.43	8.41	2x75.00	7	55
20.	Sava Sava	Cestovni most Ostružnica Road bridge Ostružnica	15.00	10.56	150.00	7	55
21.	Sava Sava	Cestovni most Beograd – Ada Ciganlija Road bridge Belgrade – Ada Ciganlija	3.80	15.06	150.00	7	55
22.	Sava Sava	Novi željeznički most Beograd New railway bridge Belgrade	3.00	16.06	120.00	7	55
23.	Sava Sava	Stari željeznički most Beograd Old railway bridge Belgrade	2.73	6.96*	90.00	7	55
24.	Sava Sava	Cestovni most "Gazela" Beograd Road bridge "Gazela" Belgrade	2.52	10.87	200.00	7	55

Br. No.	Rijeka River	Naziv mosta Bridge Name	Stacionaža mosta (rkm) Bridge Chainage (rkm)	Gabariti plovidbenog otvora Dimension of the Bridge Opening		Gabariti zahtijevani klasifikacijom Height Required by Classification	
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25.	Sava Sava	Cestovno-tramvajski most Beograd Road-tramway bridge Belgrade	1.43	10.27	90.00	7	55
26.	Sava Sava	Cestovni most Beograd "Brankov most" Road bridge Belgrade "Branko's bridge"	1.00	9.94	100.00	7	55
27.	Kupa Kupa	Cestovni most novi Sisak Road bridge new Sisak	4.68	8.60	34.25*	3	35
28.	Kupa Kupa	Cestovni most stari Sisak Road bridge old Sisak	3.40	0*	34.31*	3	35
29.	Kupa Kupa	Željeznički most Sisak Railway bridge Sisak	2.10	7.32	21.50*	3	35
30.	Una Una	Cestovni most Jasenovac Road bridge Jasenovac	0.05	6.18	32.50*	3	45
31.	Kolubara Kolubara	Cestovni most Obrenovac Road bridge Obrenovac	2.96	2.63*	14.00*	3	35
32.	Sava Sava	Cestovni most Brežice Road bridge Brežice	719.40	0.15**	34.31**	3	35
33.	Sava Sava	Cestovni most Čatež Road bridge Čatež	718.40	2.09**	27.90**	3	35
34.	Sava Sava	Cestovni most Zaprešić Road bridge Zaprešić	698.60	5.23	79.62	3	35
35.	Sava Sava	Cestovni most Podsused Road bridge Podsused	696.60	5.31	33.63	3	35
36.	Sava Sava	Željeznički most Jankomir Railway bridge Jankomir	693.60	5.85	36.90	3	35
37.	Sava Sava	Cestovni most Jadranski Road bridge Jadranski	684.80	5.00	55.83	3	35

Br. No.	Rijeka River	Naziv mosta Bridge Name	Stacionaža mosta (rkm) Bridge Chainage (rkm)	Gabariti plovidbenog otvora Dimension of the Bridge Opening		Gabariti zahtijevani klasifikacijom Height Required by Classification	
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38.	Sava Sava	Pješački most Savski Pedestrian bridge Savski	684.60	3.15	51.37	3	35
39.	Sava Sava	Željeznički most Sava Zeleni Railway bridge Sava Zeleni	684.40	7.79	78.25	3	35
40.	Sava Sava	Cestovni most Sloboda Road bridge Sloboda	682.80	4.14	55.77	3	35
41.	Sava Sava	Cestovni most Most mladosti Road bridge Most mladosti	680.70	5.93	61.10	3	35
42.	Sava Sava	Željeznički most Mičevac Railway bridge Mičevac	676.30	9.04	58.88	3	35
43.	Sava Sava	Cestovni most Domovinski most Road bridge Domovinski most	673.70	9.41	86.34	3	35
44.	Sava Sava	Cestovni most Ivanja Reka Road bridge Ivanja reka	668.80	11.38	36.57	3	35
45.	Sava Sava	Cestovni most Martinska Ves Road bridge Martinska Ves	622.80	3.92	99.57	3	45

* Gabarit plovidbenog otvora ne zadovoljava gabarit zahtijevan klasifikacijom

* Dimension of the bridge opening does not satisfies dimension required by the classification

** Vrijednosti gabarita plovidbenog otvora su dane za vrijednost vodostaja stogodišnje vode H_{100}

** Dimension of the Bridge Opening are given with reference to the values of water level of 100 year recurrence period H_{100}

Tabelarni pregled gabarita plovnih otvora mostova
u odnosu na uspostavljenu klasifikaciju na vodnom putu rijeke Save

Overview of dimensions of the bridge openings for navigation
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34.	Sava Sava	Cestovni most Zaprešić Road bridge Zaprešić	698.60	5.23	79.62	3	35
35.	Sava Sava	Cestovni most Podsused Road bridge Podsused	696.60	5.31	33.63	3	35
36.	Sava Sava	Željeznički most Jankomir Railway bridge Jankomir	693.60	5.85	36.90	3	35
37.	Sava Sava	Cestovni most Jadranski Road bridge Jadranski	684.80	5.00	55.83	3	35

Br. No.	Rijeka River	Naziv mosta Bridge Name	Stacionaža mosta (rkm) Bridge Chainage (rkm)	Gabariti plovidbenog otvora Dimension of the Bridge Opening		Gabariti zahtijevani klasifikacijom Height Required by Classification	
				Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)	Visina pri VPN (m) Height at HNL (m)	Širina pri VPN (m) Width at HNL (m)
38.	Sava Sava	Pješački most Savski Pedestrian bridge Savski	684.60	3.15	51.37	3	35
39.	Sava Sava	Željeznički most Sava Zeleni Railway bridge Sava Zeleni	684.40	7.79	78.25	3	35
40.	Sava Sava	Cestovni most Sloboda Road bridge Sloboda	682.80	4.14	55.77	3	35
41.	Sava Sava	Cestovni most Most mladosti Road bridge Most mladosti	680.70	5.93	61.10	3	35
42.	Sava Sava	Željeznički most Mičevac Railway bridge Mičevac	676.30	9.04	58.88	3	35
43.	Sava Sava	Cestovni most Domovinski most Road bridge Domovinski most	673.70	9.41	86.34	3	35
44.	Sava Sava	Cestovni most Ivanja Reka Road bridge Ivanja reka	668.80	11.38	36.57	3	35
45.	Sava Sava	Cestovni most Martinska Ves Road bridge Martinska Ves	622.80	3.92	99.57	3	45

* Gabarit plovidbenog otvora ne zadovoljava gabarit zahtijevan klasifikacijom

* Dimension of the bridge opening does not satisfies dimension required by the classification

** Vrijednosti gabarita plovidbenog otvora su dane za vrijednost vodostaja stogodišnje vode H_{100}

** Dimension of the Bridge Opening are given with reference to the values of water level of 100 year recurrence period H_{100}

Tabelarni pregled mostova i njihovih plovidbenih otvora na rijeci Savi i njezinim plovnim pritokama na kojima važi međunarodni režim plovidbe
Tabular overview of bridges and their navigable openings on the Sava River and its navigable tributaries with international regime of navigation

Broj crteža	Rijeka	Naziv mosta	Stacionaža mosta	Redni brojevi stupova između kojih je plovni otvor		Gabariti plovnih otvora mostova												Kota donjeg ruba konstrukcije mosta				Mjerodavna vodomjerna postaja	Stacionaža vodomjerne postaje	Apsolutna kota "0" vodomjerne postaje	Plovidbeni nivoi u odnosu na kotu "0" mjerodavne v.p.		Apsolutne kote plovnih nivoa					U odnosu na more:
						Korisna širina				Korisna visina pri VPN				Korisna visina pri koti "0" mjerodavne v.s.				u sredini otvora		na rubu plovnog puta							na mjerodavnoj v.p.		u mostovnom otvoru			
						pri NPN		pri VPN		u sredini otvora		na rubu plovnog puta		u sredini otvora		na rubu plovnog puta		u sredini otvora		na rubu plovnog puta												
				nizvodna plovidba	uzvodna plovidba	Za plovila u																											
						nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi	nizvodnoj plovidbi	uzvodnoj plovidbi			NPN	VPN	NPN	VPN	NPN	VPN	"0"	
			(rkm)			(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m.n.m.)	(m.n.m.)	(m.n.m.)	(m.n.m.)		(rkm)	(m.n.m.)	(cm)	(cm)	(m.n.m.)	(m.n.m.)	(m.n.m.)	(m.n.m.)	(m.n.m.)	(m.n.m.)	
Drawing No.	River	Bridge name	Bridge chainage	Numerals representing the fairway opening		Dimensions of bridge openings												Absolute height of the bottom edge of the bridge structure				Corresponding gauging station	Gauging station chainage	"0" level of the gauging station	Representative water stages in comparison to "0" level of corresponding gauging station		Absolute water stages					In reference to sea:
						Available width				Available clearance at HNL				Clearance at the "0" level of corresponding gauging station				in the middle of the opening		at the fairway edge							at corr. station		at the bridge opening			
						at LNL		at HNL		in the middle of the opening		at the fairway edge		in the middle of the opening		at the fairway edge															
				downstream navigation	upstream navigation	For vessels navigating																											
						downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream	downstream	upstream				LNL	HNL	LNL	HNL	LNL	HNL	"0"	
			(rkm)			(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m.a.s.l.)	(m.a.s.l.)	(m.a.s.l.)	(m.a.s.l.)		(rkm)	(m.a.s.l.)	(cm)	(cm)	(m.a.s.l.)	(m.a.s.l.)	(m.a.s.l.)	(m.a.s.l.)	(m.a.s.l.)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
1.	Sava Sava	Cestovni most Galdovo Road bridge Galdovo	593,70	I-II	I-II	49,00	49,00	49,00	49,00	5,74	5,74	5,39	5,39	12,91	12,91	12,56	12,56	104,25	104,25	103,90	103,90	Crnac Crnac	588,20	91,34	-183	692	89,51	98,26	89,77	98,51	91,55		Jadransko Adriatic
2.	Sava Sava	Cestovni most Crnac Road bridge Crnac	587,70	III-IV	III-IV	67,80	67,80	67,80	67,80	7,60	7,60	6,67	6,67	14,50	14,50	13,57	13,57	105,84	105,84	104,91	104,91	Crnac Crnac	588,20	91,34	-183	692	89,51	98,26	89,49	98,24	91,33		Jadransko Adriatic
3.	Sava Sava	Željeznički most Jasenovac Railway bridge Jasenovac	517,20	II-III	II-III	41,00	41,00	41,00	41,00	6,17	6,17	6,17	6,17	14,38	14,38	14,38	14,38	101,20	101,20	101,20	101,20	Jasenovac Jasenovac	516,20	86,82	-74	816	86,08	94,98	86,13	95,03	86,85		Jadransko Adriatic
4.	Sava Sava	Cestovni most Jasenovac Road bridge Jasenovac	515,60	VI-VII	VI-VII	110,00	110,00	110,00	110,00	7,20	7,20	5,35	5,35	15,34	15,34	13,49	13,49	102,16	102,16	100,31	100,31	Jasenovac Jasenovac	516,20	86,82	-74	816	86,08	94,98	86,06	94,96	86,72		Jadransko Adriatic
5.	Sava Sava	Cestovni most Gradiška Road bridge Gradiška	466,80	II-III	II-III	89,00	89,00	89,00	89,00	7,72	7,72	7,36	7,36	18,62	18,62	18,26	18,26	101,21	101,21	100,85	100,85	Davor Davor	423,80	82,59	90	960	83,49	92,19	84,70	93,49			Jadransko Adriatic
6.	Sava Sava	Produktovod Brod Pipeline bridge Brod	374,80	I-II	I-II	104,30	104,30	104,30	104,30	17,87	17,87	16,47	16,47	25,45	25,45	24,05	24,05	107,25	107,25	105,85	105,85	Slavonski Brod Slavonski Brod	371,30	81,80	-13	738	81,67	89,18	81,79	89,38	81,85		Jadransko Adriatic
7.	Sava Sava	Cestovni most Brod Road bridge Brod	371,50	II-III	II-III	66,30	66,30	66,30	66,30	7,64	7,64	7,64	7,64	15,03	15,03	15,03	15,03	96,83	96,83	96,83	96,83	Slavonski Brod Slavonski Brod	371,30	81,80	-13	738	81,67	89,18	81,68	89,19	81,80		Jadransko Adriatic
8.	Sava Sava	Cestovni most Svilaj Road bridge Svilaj	329,10	IV-V	IV-V	91,00	91,00	91,00	91,00	9,46	9,46	8,56	8,56	16,48	16,48	15,58	15,58	97,18	97,18	96,28	96,28	Slavonski Šamac Slavonski Šamac	314,30	80,70	-191	651	78,79	87,21	79,54	87,72			Jadransko Adriatic
9.	Sava Sava	Cestovno-željeznički most Šamac Road-railway bridge Šamac	311,80	II-III	II-III	65,30	65,30	65,30	65,30	8,16	8,16	8,16	8,16	14,52	14,52	14,52	14,52	95,22	95,22	95,22	95,22	Slavonski Šamac Slavonski Šamac	314,30	80,70	-191	651	78,79	87,21	78,64	87,06	80,57		Jadransko Adriatic
10.	Sava Sava	Cestovni most Županja Road bridge Županja	261,60	XI-XII	XI-XII	117,80	117,80	117,80	117,80	10,23	10,23	7,85	7,85	18,18	18,18	15,80	15,80	94,46	94,46	92,08	92,08	Županja Županja	267,50	76,28	-38	815	75,90	84,43	75,86	84,23	76,20		Jadransko Adriatic
11.	Sava Sava	Cestovni most Gunja Road bridge Gunja	228,80	XXI-XXII	XXI-XXII	47,50	47,50	47,50	47,50	7,62	7,62	7,62	7,62	16,42	16,42	16,42	16,42	90,74	90,74	90,74	90,74	Gunja Gunja	228,80	74,32	131	880	75,63	83,12	75,63	83,12	74,32		Jadransko Adriatic
12.	Sava Sava	Željeznički most Gunja Railway bridge Gunja	226,80	XVII-XVIII	XVII-XVIII	120,00	120,00	120,00	120,00	9,65	9,65	9,58	9,58	18,38	18,38	18,31	18,31	92,70	92,70	92,63	92,63	Gunja Gunja	228,80	74,32	131	880	75,63	83,12	75,62	83,05			Jadransko Adriatic
13.	Sava Sava	Cestovno-željeznički most Rača Road-railway bridge Rača	183,31	I-II	I-II	140,00	140,00	140,00	140,00					17,23	17,23	17,23	17,23	89,67	89,67	89,67	89,67	Jamena Jamena	204,80	72,44					73,17				Jadransko Adriatic
14.	Sava Sava	Pješački most Sremska Mitrovica Pedestrian bridge Sremska Mitrovica	139,24	III-IV	III-IV	100,00	100,00	100,00	100,00	10,30	10,30	8,37	8,37	16,52	16,52	14,59	14,59	88,74	88,74	86,81	86,81	Sremska Mitrovica Sremska Mitrovica	139,24	72,22	37	622	72,59	78,44	72,59	78,44	72,22		Jadransko Adriatic
15.	Sava Sava	Cestovni most Sremska Mitrovica Road bridge Sremska Mitrovica	136,60	III-IV	III-IV	150,00	150,00	150,00	150,00	11,18	11,18	9,30	9,30	17,32	17,32	15,44	15,44	89,54	89,54	87,66	87,66	Sremska Mitrovica Sremska Mitrovica	139,24	72,22	37	622	72,59	78,44	72,54	78,36	72,17		Jadransko Adriatic
16.	Sava Sava	Željeznički most Šabac Railway bridge Šabac	106,96	III-IV	III-IV	75,00	75,00	75,00	75,00	6,68	6,68	6,46	6,46	11,48	11,48	11,26	11,26	84,09	84,09	83,87	83,87	Šabac Šabac	106,28	72,61	-64	478	71,97	77,39	71,98	77,41	72,62		Jadransko Adriatic
17.	Sava Sava	Cestovni most Šabac Road bridge Šabac	104,53	III-IV	III-IV	80,00	80,00	80,00	80,00	9,42	9,42	9,42	9,42	14,13	14,13	14,13	14,13	86,74	86,74	86,74	86,74	Šabac Šabac	106,28	72,61	-64	478	71,97	77,39	71,89	77,32	72,53		Jadransko Adriatic
18.	Sava Sava	Cestovno-toplovodni most Obrenovac Road-pipeline bridge Obrenovac	42,53	XII-XIII	XI-XII	120,00	80,00	120,00	80,00	11,14	11,07	11,13	11,01	17,97	17,90	17,96	17,84	86,25	86,18	86,24	86,12	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	70,06	75,11	68,44		Jadransko Adriatic
19.	Sava Sava	Željeznički most Ostružnica Railway bridge Ostružnica	15,43	V-VI	IV-V	75,00	75,00	75,00	75,00	8,49	8,45	8,46	8,41	14,52	14,48	14,49	14,44	82,80	82,76	82,77	82,72	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,95	74,31	68,33		Jadransko Adriatic
20	Sava Sava	Cestovni most Ostružnica Road bridge Ostružnica	15,00	XV-XVI	XV-XVI	150,00	150,00	150,00	150,00	12,20	12,20	10,56	10,56	18,22	18,22	16,58	16,58	86,50	86,50	84,86	84,86	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,95	74,30	68,33		Jadransko Adriatic
21	Sava Sava	Cestovni most Beograd - Ada Ciganlija Road bridge Belgrade - Ada Ciganlija	3,80	V-VI	V-VI	150,00	150,00	150,00	150,00	15,93	15,93	15,33	15,33	21,62	21,62	21,02	21,02	89,90	89,90	89,30	89,30	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,91	73,97	68,29		Jadransko Adriatic
22	Sava Sava	Novi željeznički most Beograd New railway bridge Belgrade	3,00	IV-V	IV-V	120,00	120,00	120,00	120,00	16,06	16,06	16,06	16,06	21,72	21,72	21,72	21,72	90,00	90,00	90,00	90,00	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,91	73,94	68,29		Jadransko Adriatic
23	Sava Sava	Stari željeznički most Beograd Old railway bridge Belgrade	2,73	II-III	II-III	90,00	90,00	90,00	90,00	6,96	6,96	6,96	6,96	12,62	12,62	12,62	12,62	80,90	80,90	80,90	80,90	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,91	73,94	68,29		Jadransko Adriatic
24	Sava Sava	Cestovni most "Gazela" Beograd Road bridge "Gazela" Belgrade	2,52	III-IV	III-IV	200,00	200,00	200,00	200,00	15,41	15,41	10,87	10,87	21,06	21,06	16,52	16,52	89,34	89,34	84,80	84,80	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,91	73,93	68,29		Jadransko Adriatic
25	Sava Sava	Cestovni-tramvajski most Beograd Road-tramway bridge Belgrade	1,43	III-IV	III-IV	90,00	90,00	90,00	90,00	10,86	10,86	10,27	10,27	16,48	16,48	15,89	15,89	84,76	84,76	84,17	84,17	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,9	73,9	68,28		Jadransko Adriatic
26	Sava Sava	Cestovni most Beograd "Brankov most" Road bridge Belgrade "Branko's bridge"	1,00	I-II	I-II	100,00	100,00	100,00	100,00	10,75	10,75	9,94	9,94	16,36	16,36	15,55	15,55	84,64	84,64	83,83	83,83	Beograd Beograd	0,82	68,28	162	560	69,90	73,88	69,9	73,89	68,28		Jadransko Adriatic
27	Kupa Kupa	Cestovni most novi Sisak Road bridge new Sisak	4,68	II-III	II-III	34,25	34,25	34,25	34,25	8,60	8,60	8,60	8,60	15,51	15,51	15,51	15,51	107,08	107,08	107,80	107,80	Crnac Crnac	588,2	91,34	-172		89,62		89,85	98,48	91,57		Jadransko Adriatic
28	Kupa Kupa	Cestovni most stari Sisak Road bridge old Sisak	3,40	II-III	II-III	37,00	37,00	37,00	37,00	7,02	7,02	0,00	0,00	13,98	13,98	5,48	5,48	105,50	105,50	97,00	97,00	Crnac Crnac	588,2	91,34	-172		89,62		89,8	98,48	91,52		Jadransko Adriatic
29	Kupa Kupa	Željeznički most Sisak Railway bridge Sisak	2,10	I-desna obala I-right bank	I-desna obala I-right bank	21,50	21,50	21,50	21,50	7,32	7,32	7,32	7,32	14,11	14,11	14,11	14,11	105,68	105,68	105,68	105,68	Crnac Crnac	588,2	91,34	-172		89,62		89,75	98,48	91,47		Jadransko Adriatic
30	Una Una	Cestovni most Jasenovac Road bridge Jasenovac	0,05	IV-V	IV-V	32,50	32,50	32,50	32,50	6,24	6,24	6,18	6,18	14,44	14,44	14,38	14,38	101,16	101,16	101,10	101,10	Jasenovac Jasenovac	516,2	86,82	-44		86,38		86,28	94,92	86,72		Jadransko Adriatic
31	Kolubara Kolubara	Cestovni most Obrenovac Road bridge Obrenovac	2,96	I-II	I-II	15,23	15,23	15,23	15,23	2,63	2,63	2,63	2,63	9,02	9,02	9,02	9,02	77,30	77,30	77,30	77,30	Beograd Beograd	0,82	86,28	162	560	68,28	70,00	68,28	70,00			Jadransko Adriatic

Tabelarni pregled mostova i njihovih plovidbenih otvora na rijeci Savi na dionici na kojoj važi državni režim plovidbe
Tabular overview of bridges and their navigable openings on the Sava River on the section with state regime of navigation

Broj crteža	Rijeka	Naziv mosta	Stacionaža mosta	Redni brojevi stupova između kojih je plovni otvor	Gabariti plovnih otvora mostova			Kota donjeg ruba konstrukcije mosta		Mjerodavna vodomjerna postaja	Stacionaža vodomjerne postaje	Apsolutna kota "0" vodomjerne postaje	Apsolutna kota VPN/V_{100}	U odnosu na more:
					Korisna širina	Korisna visina pri VPN								
			(rkm)		pri VPN	u sredini otvora	na rubu plovnog puta	u sredini otvora	na rubu plovnog puta		(rkm)	(m.n.m.)	(m.n.m.)	
Drawing No.	River	Bridge name	Bridge chainage	Numerals representing the fairway opening	Dimensions of bridge openings			Absolute height of the bottom edge of the bridge structure		Corresponding gauging station	Gauging station chainage	"0" level of the gauging station	Absolute HNL/H_{100} stage	In reference to sea:
					Available width	Available clearance at HNL								
					at HNL	in the middle of the opening	at the fairway edge	in the middle of the opening	at the fairway edge					
			(rkm)		(m)	(m)	(m)	(m.a.s.l.)	(m.a.s.l.)		(rkm)	(m.a.s.l.)	(m.a.s.l.)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
32.	Sava Sava	Cestovni most Brežice* Road bridge Brežice*	719.40	II-III	34.54	0,15	0,15	147,80	147,80	Čatež 1 Čatež 1	717,9	137,28	147,45	Jadransko Adriatic
33.	Sava Sava	Cestovni most Čatež* Road bridge Čatež*	718.40	III-IV	27.90	2,31	2,09	149,45	145,23	Čatež 1 Čatež 1	717,9	137,28	146,3	Jadransko Adriatic
34.	Sava Sava	Cestovni most Zaprešić Road bridge Zaprešić	698.60	I-II	79,62	7,59	5,23	132,49	130,13	Podsused Podsused	695,60	119,13	124,90	Jadransko Adriatic
35.	Sava Sava	Cestovni most Podsused Road bridge Podsused	696.60	VI-VII	33,63	5,32	5,31	127,73	127,72	Podsused Podsused	695,60	119,13	122,41	Jadransko Adriatic
36.	Sava Sava	Željeznički most Jankomir Railway bridge Jankomi	693.60	III-IV	36,90	5,89	5,85	125,70	125,66	Podsused Podsused	695,60	119,13	119,81	Jadransko Adriatic
37.	Sava Sava	Cestovni most Jadranski Road bridge Jadranski	684.80	III-IV	58,53	5,14	5,00	119,83	119,69	Zagreb Zagreb	687,70	112,26	114,69	Jadransko Adriatic
38.	Sava Sava	Pješački most Savski Pedestrian bridge Savski	684.60	I-II	51,37	3,28	3,15	117,87	117,74	Zagreb Zagreb	687,70	112,26	114,59	Jadransko Adriatic
39.	Sava Sava	Željeznički most Sava Zeleni Railway bridge Sava Zeleni	684.40	I-II	78,25	7,96	7,79	122,48	122,31	Zagreb Zagreb	687,70	112,26	114,52	Jadransko Adriatic
40.	Sava Sava	Cestovni most Sloboda Road bridge Sloboda	682.80	V-VI	55,77	6,39	4,12	119,61	117,36	Zagreb Zagreb	687,70	112,26	113,22	Jadransko Adriatic
41.	Sava Sava	Cestovni most Most mladosti Road bridge Most mladosti	680.70	III-IV	61,10	5,93	5,93	116,80	116,80	Zagreb Zagreb	687,70	112,26	110,87	Jadransko Adriatic
42.	Sava Sava	Željeznički most Mičevac Railway bridge Mičevac	676.30	IV-V	58,88	9,09	9,04	115,43	115,38	Zagreb Zagreb	687,70	112,26	106,34	Jadransko Adriatic
43.	Sava Sava	Cestovni most Domovinski most Road bridge Domovinski most	673.70	III-IV	86,34	9,72	9,41	115,15	114,84	Zagreb Zagreb	687,70	112,26	105,43	Jadransko Adriatic
44.	Sava Sava	Cestovni most Ivanja reka Road bridge Ivanja reka	668.80	II-III	36,57	11,60	11,38	115,24	115,02	Rugvica Rugvica	657,30	95,61	103,64	Jadransko Adriatic
45.	Sava Sava	Cestovni most Martinska Ves Road bridge Martinska Ves	622.80	I-II	99,57	6,00	3,92	106,12	104,04	Tišina Kaptolska Tišina Kaptolska	612,00	90,45	100,12	Jadransko Adriatic

* Vrijednosti gabarita plovidbenog otvora su dane za vrijednost vodostaja stogodišnje vode H_{100}
* Dimension of the Bridge Opening are given with reference to the values of water level of 100 year recurrence period H_{100}

Mostovi na rijeci Savi i njezinim plovnim pritokama
Bridges on the Sava River and its Navigable Tributaries

Mostovi na međunarodnom vodnom putu

1 Cestovni most Galdovo
Road bridge Galdovo

2 Cestovni most Crnac
Road bridge Crnac

3 Željeznički most Jasenovac
Railway bridge Jasenovac

4 Cestovni most Jasenovac
Road bridge Jasenovac

5 Cestovni most Gradiška
Road bridge Gradiška

6 Produktovod Brod
Pipeline bridge Brod

7 Cestovni most Brod
Road bridge Brod

8 Cestovni most Svilaj
Road bridge Svilaj

9 Cestovno-Železnički most Šamac
Road-railway bridge Šamac

10 Cestovni most Županja
Road bridge Županja

11 Cestovni most Gunja
Road bridge Gunja

12 Željeznički most Gunja
Railway bridge Gunja

13 Cestovno-željeznički most Rača
Road-railway bridge Rača

14 Pješački most Sremska Mitrovica
Pedestrian bridge Sremska Mitrovica

15 Cestovni most Sremska Mitrovica
Road bridge Sremska Mitrovica

16 Željeznički most Šabac
Railway bridge Šabac

17 Cestovni most Šabac
Road bridge Šabac

18 Cestovno-toplovodni most Obrenovac
Road-pipeline bridge Obrenovac

19 Željeznički most Ostružnica
Railway bridge Ostružnica

20 Cestovni most Ostružnica
Road bridge Ostružnica

21 Cestovni most Beograd - Ada Ciganlija
Road bridge Belgrade – Ada Ciganlija

22 Novi željeznički most Beograd
New railway bridge Belgrade

23 Stari željeznički most Beograd
Old railway bridge Belgrade

24 Cestovni most “Gazela” Beograd
Road bridge "Gazela" Belgrade

25 Cestovno-tramvajski most Beograd
Road-tram bridge Belgrade

26 Cestovni most Beograd “Brankov most”
Road bridge Belgrade - "Branko's bridge"

27 Cestovni most novi Sisak
Road bridge new Sisak

28 Cestovni most stari Sisak
Road bridge old Sisak

29 Željeznički most Sisak
Railway bridge Sisak

30 Cestovni most Jasenovac
Road bridge Jasenovac

31 Cestovni most Obrenovac
Road bridge Obrenovac

Mostovi na državnom vodnom putu

32 Cestovni most Brežice
Road bridge Brežice

33 Cestovni most Čatež
Road bridge Čatež

34 Cestovni most Zaprešić
Road bridge Zaprešić

35 Cestovni most Podsused
Road bridge Podsused

36 Željeznički most Jankomir
Railway bridge Jankomi

37 Cestovni most Jadranski
Road bridge Jadranski

38 Pješački most Savski
Pedestrian bridge Savski

39 Željeznički most Sava Zeleni
Railway bridge Sava Zeleni

40 Cestovni most Sloboda
Road bridge Sloboda

41 Cestovni most Most mladosti
Road bridge Most mladosti

42 Željeznički most Mičevac
Railway bridge Mičevac

43 Cestovni most Domovinski most
Road bridge Domovinski most

44 Cestovni most Ivanja reka
Road bridge Ivanja reka

45 Cestovni most Martinska Ves
Road bridge Martinska Ves

LEGENDA
LEGEND

Most
Bridge

10 Lokacija mosta
Bridge location

Kilometarska oznaka
Kilometer sign

Grad
Town

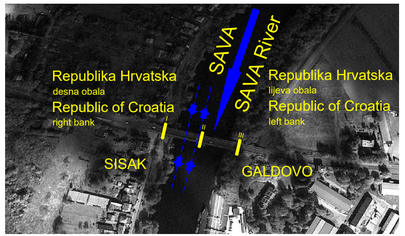
Kupa Rijeka
River

Cestovni most Galdovo, Sava, rkm 593.7

Mjerodavni vodomjer Crnac, rkm 588.2, kota "0"=91.34 m.n.m.

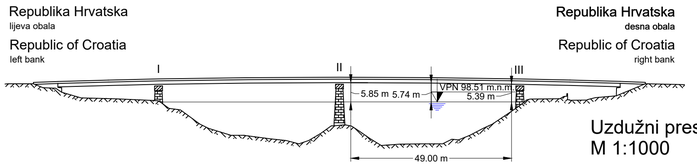
Road bridge Galdovo, Sava River, rkm 593.7

Referent water gauge Crnac, rkm 588.2, water level "0"=91.34 m.a.s.l.



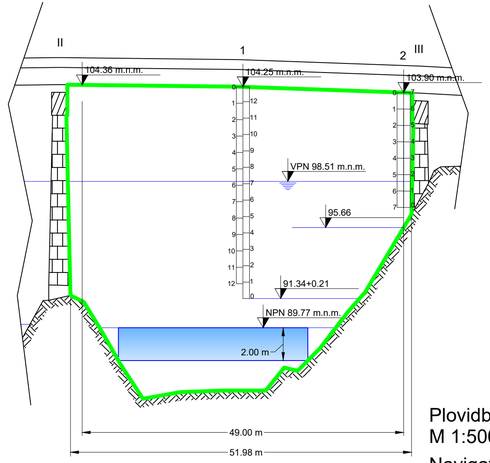
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

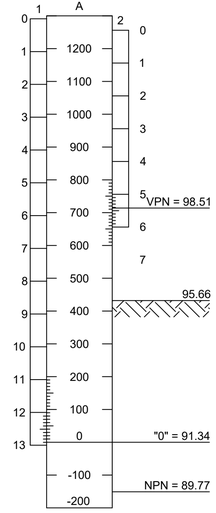
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

INTERNATIONAL SAVA RIVER BASIN COMMISSION

Cestovni most Crnac, Sava, rkm 587.7

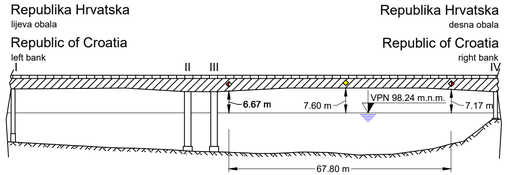
Mjerodavni vodomjer Crnac, rkm 588.2, kota "0"=91.34 m.n.m.

Road bridge Crnac, Sava River, rkm 587.7

Referent water gauge Crnac, rkm 588.2, water level "0"=91.34 m.a.s.l.

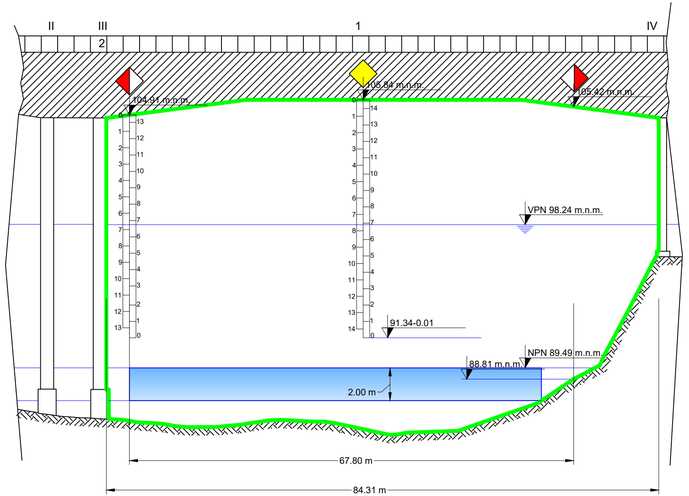
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

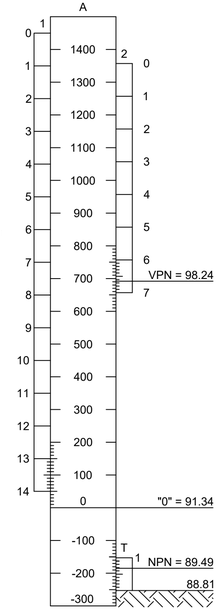
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 120m uzvodno od mosta
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l. 3
- all dimensions are in meters
- bridge cross section corresponding the cross section measured 120m upstream
- piers and piers foundation dimensions are not reliable information

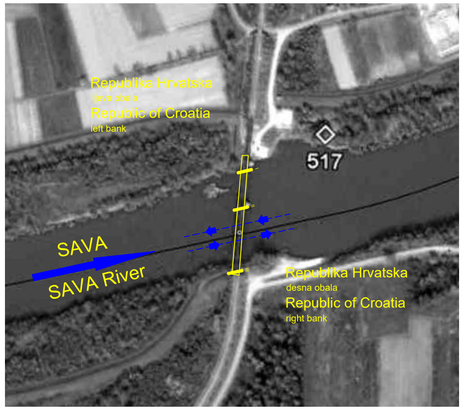
INTERNATIONAL SAVA RIVER BASIN COMMISSION

Željeznički most Jasenovac, Sava, rkm 517.2

Mjerodavni vodomjer Jasenovac, rkm 516.2, kota "0"=86.82 m.n.m.

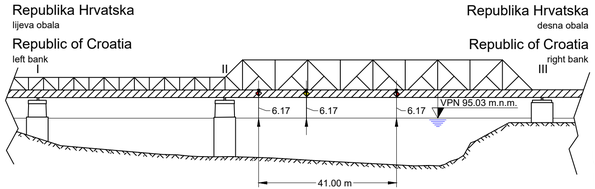
Railway bridge Jasenovac, Sava River, rkm 517.2

Referent water gauge Jasenovac, rkm 516.2, water level "0"=86.82 m.a.s.l.



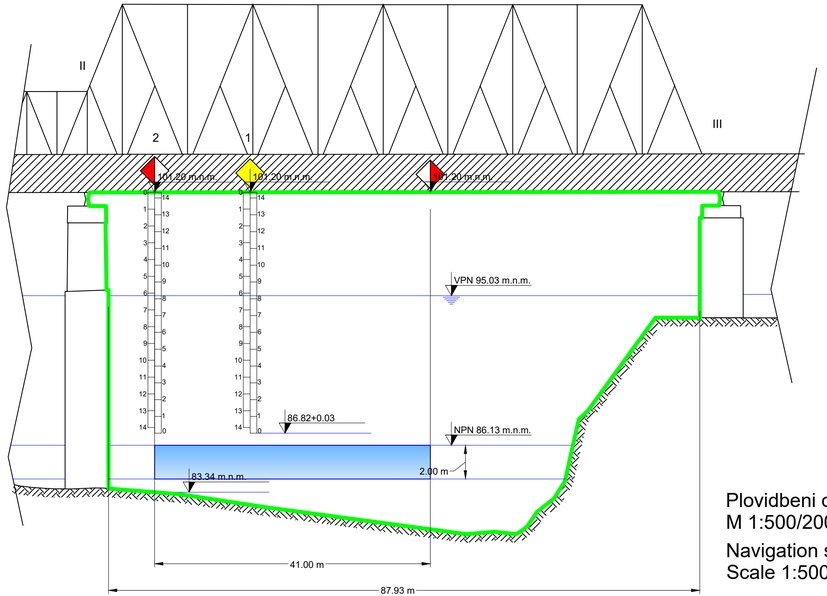
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

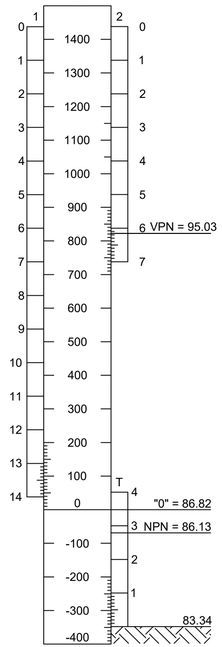
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 35m uzvodno od mosta
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

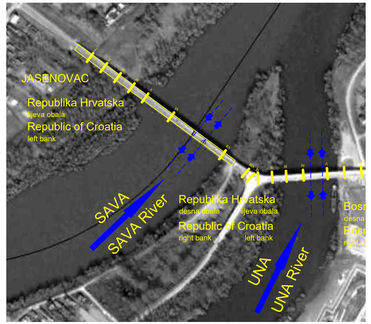
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section corresponding the cross section measured 35m upstream
- piers and piers foundation dimensions are not reliable information

Cestovni most Jasenovac, Sava, rkm 515.6

Mjerodavni vodomjer Jasenovac, rkm 516.2, kota "0"=86.82 m.n.m.

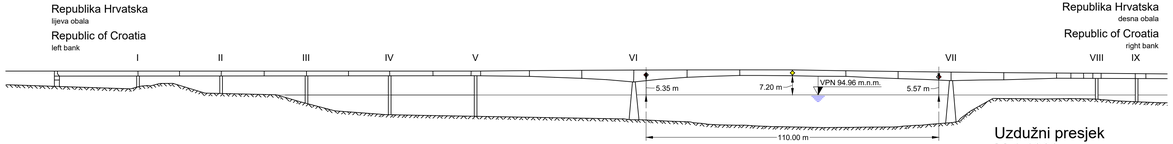
Road bridge Jasenovac, Sava River, rkm 515.6

Referent water gauge Jasenovac, rkm 516.2, water level "0"=86.82 m.a.s.l.



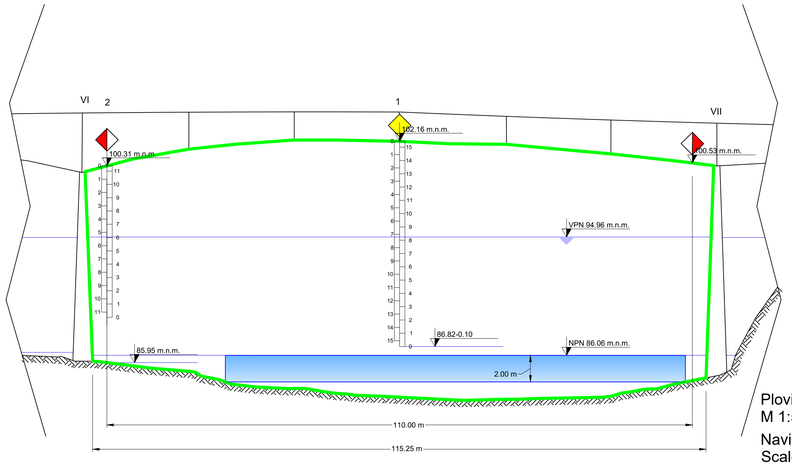
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

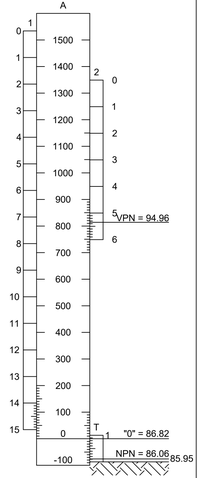
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

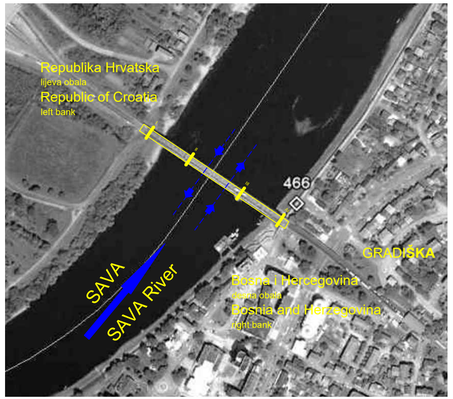
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Gradiška, Sava, rkm 466.1

Mjerodavni vodomjer Davor, rkm 423.8, kota "0"=82.59 m.n.m.

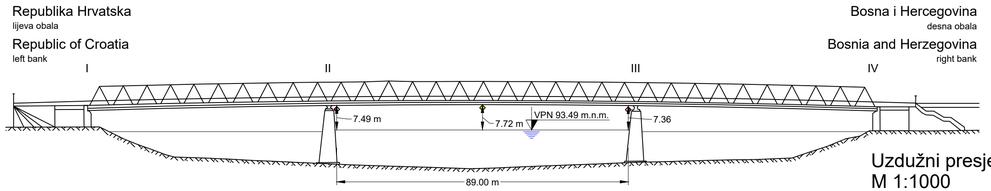
Road bridge Gradiška, Sava River, rkm 466.1

Referent water gauge Davor, rkm 423.8, water level "0"=82.59 m.a.s.l.



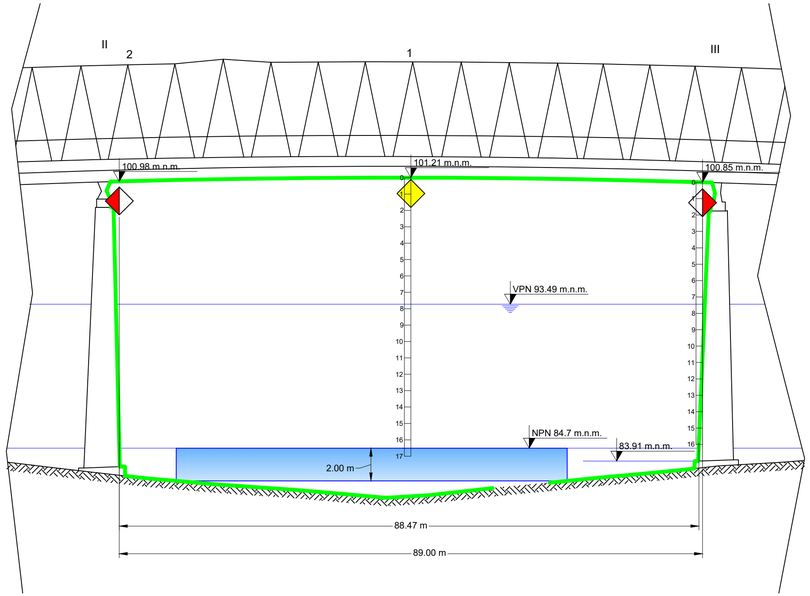
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

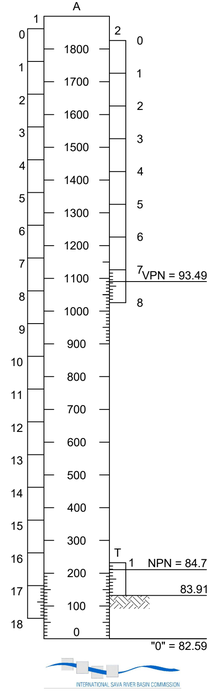
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 295m nizvodno od mosta
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section corresponding the cross section 295m downstream
- piers and piers foundation dimensions are not reliable information

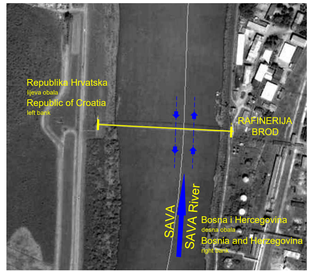
INTERNATIONAL SAVA RIVER BASIN COMMISSION

Produktovod Brod, Sava, rkm 374.8

Mjerodavni vodomjer Slavonski Brod, rkm 371.3, kota "0"=81.80 m.n.m.

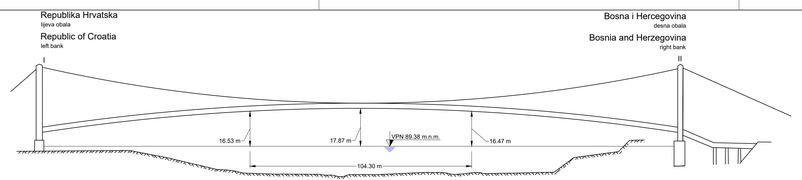
Pipeline bridge Brod, Sava River, rkm 374.8

Referent water gauge Slavonski Brod, rkm 371.3, water level "0"=81.80 m.a.s.l.



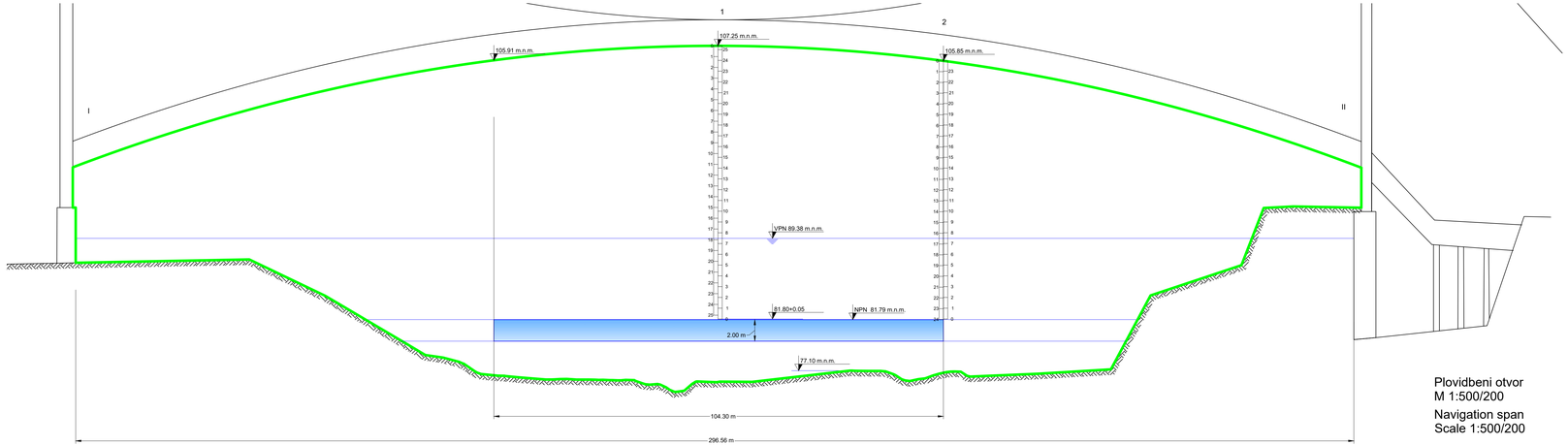
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

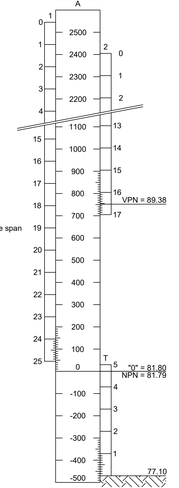
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 275m nizvodno od mosta
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

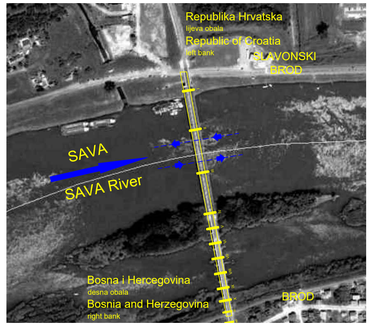
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section corresponding the cross section 275m downstream
- piers and piers foundation dimensions are not reliable information

Cestovni most Brod, Sava, rkm 371.5

Mjerodavni vodomjer Slavonski Brod, rkm 371.3, kota "0"=81.80 m.n.m.

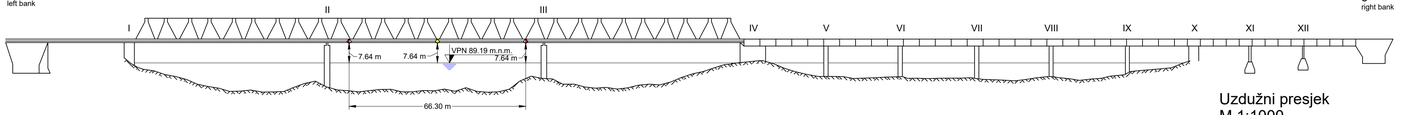
Road bridge Brod, Sava River, rkm 371.5

Referent water gauge Slavonski Brod, rkm 371.3, water level "0"=81.80 m.a.s.l.



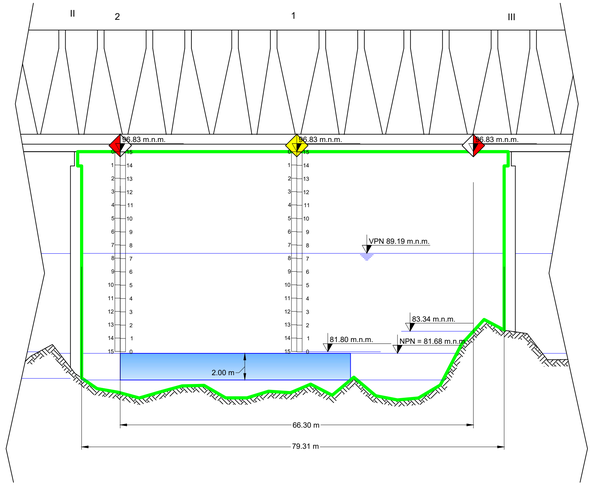
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

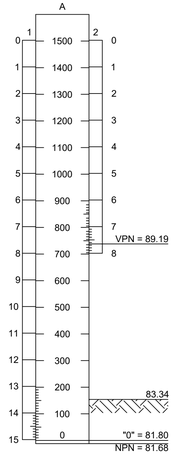
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru snimljen 2001. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

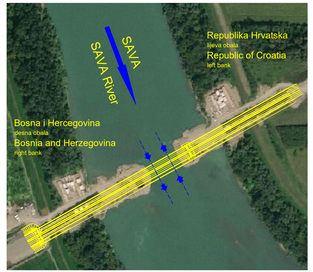
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section measured Year 2001
- piers and piers foundation dimensions are not reliable information

Cestovni most Svilaj, Sava, rkm 329.1

Mjerodavni vodomjer Slavonski šamac, rkm 314.5, kota "0"=80.70 m.n.m.

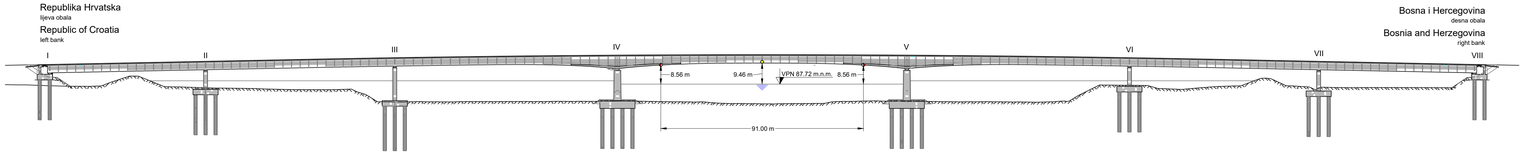
Road bridge Svilaj, Sava River, rkm 329.1

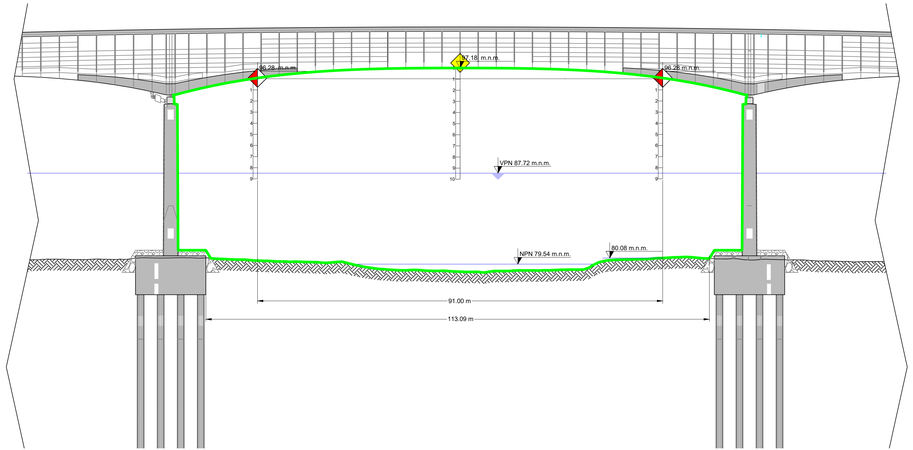
Referent water gauge Slavonski šamac, rkm 314.5, water level "0"=80.70 m.a.s.l.



Situacioni plan
M 1:5000

Layout
Scale 1:5000





Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000

Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

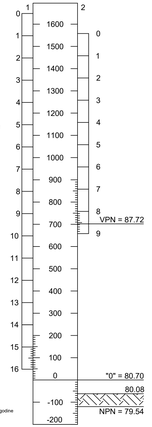
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 25m uzvodno od mosta, snimljen 2009. godine
- gabariti stupova i temelja stupova mosta su pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- the bridge cross section corresponding the cross section measured 25m upstream in Year 2009
- piers and piers foundation dimensions are reliable information

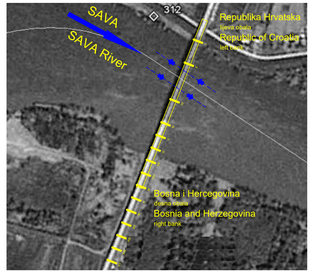
INTERNATIONAL SAVA RIVER BASIN COMMISSION

Cestovno-željeznički most Šamac, Sava, rkm 311.8

Mjerodavni vodomjer Šamac, rkm 314.3, kota "0"=80.70 m.n.m.

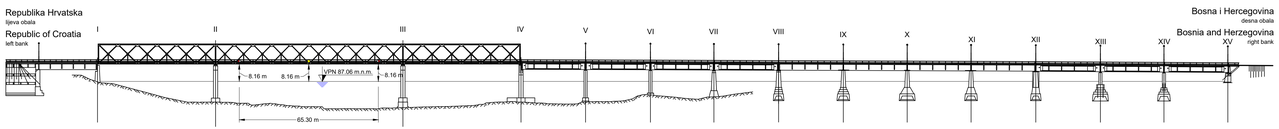
Road-railway bridge Šamac, Sava River, rkm 311.8

Referent water gauge Šamac, rkm 314.3, water level "0"=80.70 m.a.s.l.



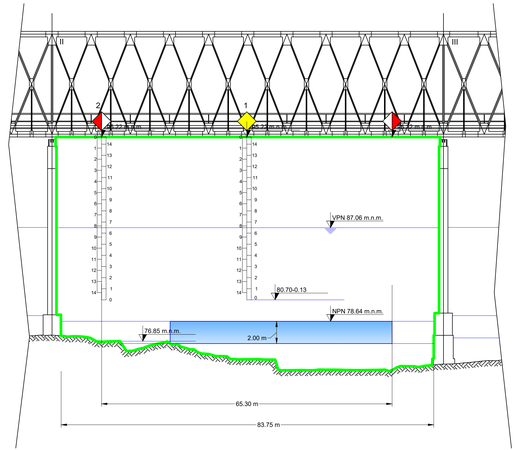
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 30cm, zbog cijevi za odvodnju vode sa donje strane konstrukcije.

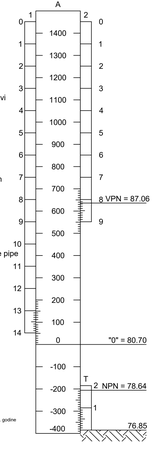
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 30cm, due to drainage pipe below the lower edge of bridge construction.



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 25m uzvodno od mosta, snimljen 2009. godine
- geland stupova i temelja stupova mosta su pouzdana informacija

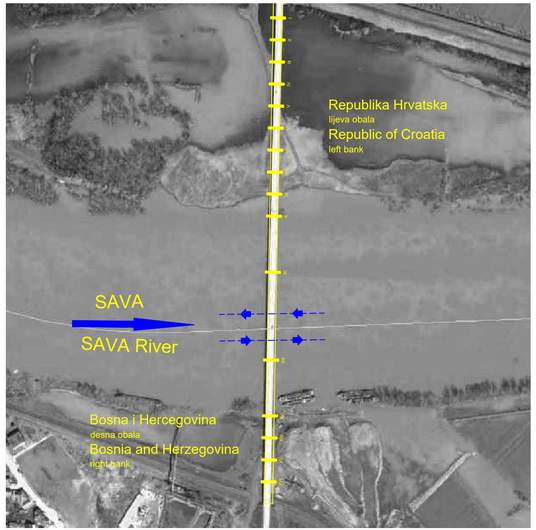
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- the cross section corresponding the cross section measured 25m upstream in Year 2009
- piers and piers foundation dimensions are reliable information

Cestovni most Županja, Sava, rkm 261.6

Mjerodavni vodomjer Županja, rkm 267.5, kota "0"=76.28 m.n.m.

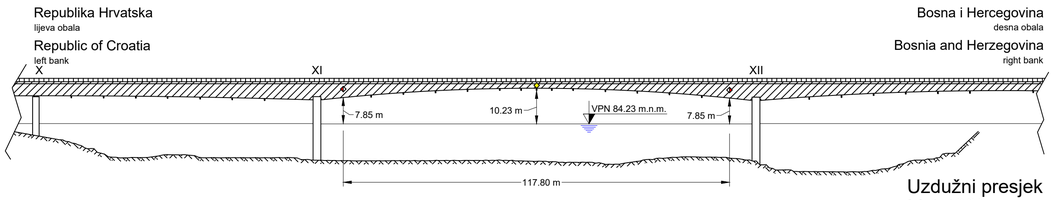
Road bridge Županja, Sava River, rkm 261.6

Referent water gauge Županja, rkm 267.5, water level "0"=76.28 m.a.s.l.



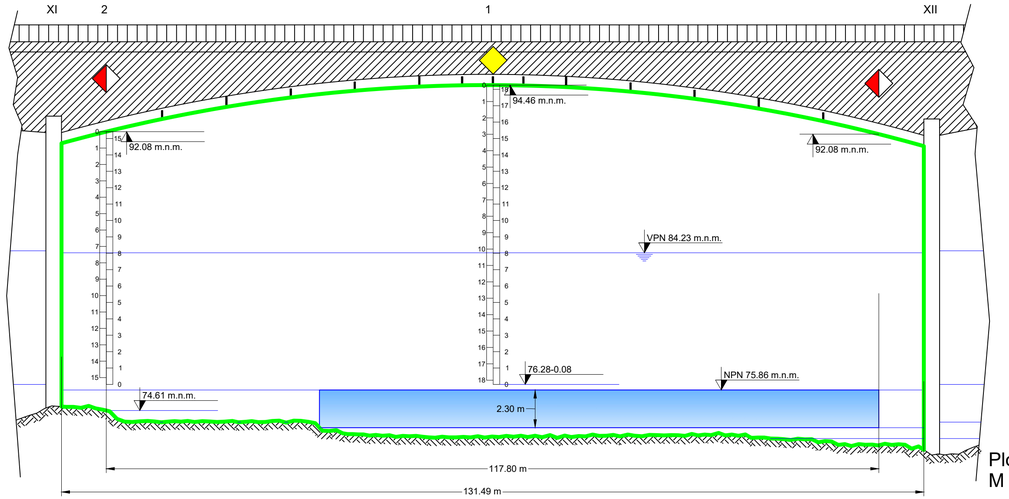
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

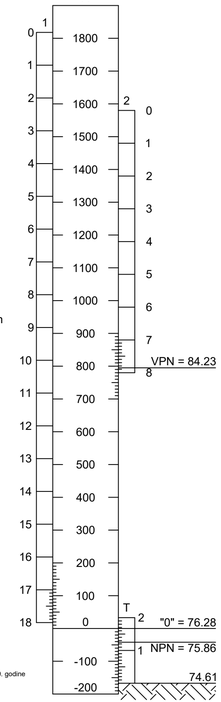
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 70m nizvodno od mosta, snimljen 2009. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

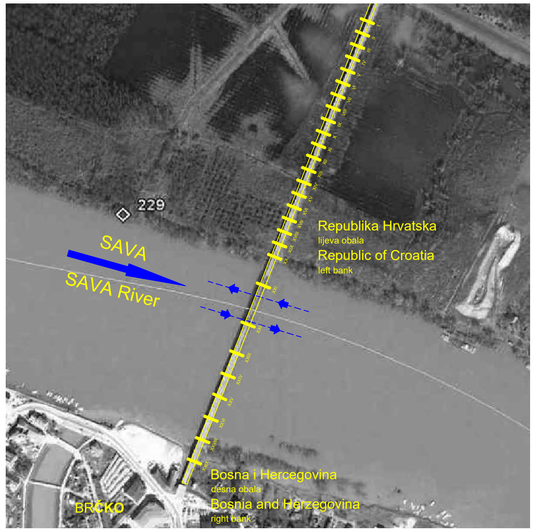
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section corresponding the cross section measured 70m downstream in Year 2009
- piers and piers foundation dimensions are not reliable information

Cestovni most Gunja, Sava, rkm 228.8

Mjerodavni vodomjer Gunja, rkm 228.8, kota "0"=74.32 m.n.m.

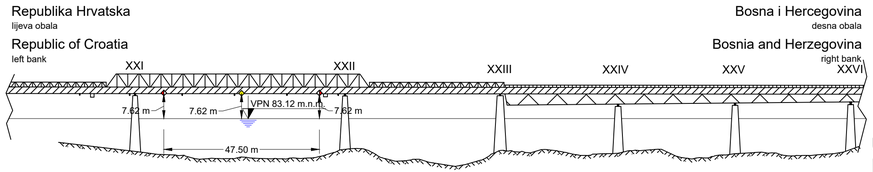
Road bridge Gunja, Sava River, rkm 228.8

Referent water gauge Gunja, rkm 228.8, water level "0"=74.32 m.a.s.l.



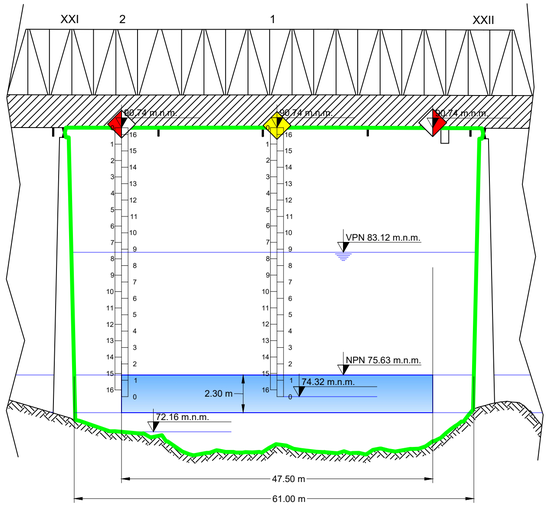
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm;
u plovidbenom otvoru, izvan obilježenog plovnog puta ispod donjeg ruba konstrukcije nalaze se željezne stepenice visine 100cm.

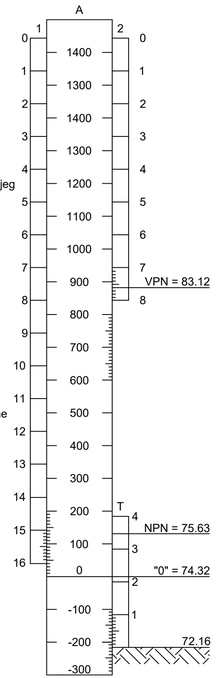
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm
There is, in navigation span, outside of marked fairway, below the lower edge of bridge construction, 100 cm high iron stairs.



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovskom otvoru snimljen 2004. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

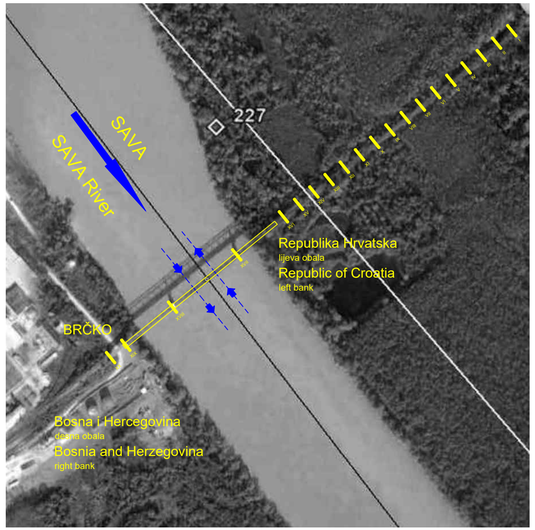
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section measured in Year 2004
- piers and piers foundation dimensions are not reliable information

Železnički most Gunja, Sava, rkm 226.8

Mjerodavni vodomjer Gunja, rkm 228.8, kota "0"=74.32 m.n.m.

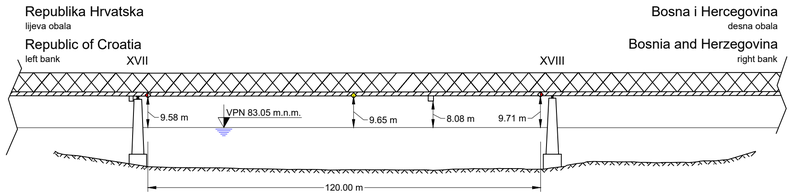
Railway bridge Gunja, Sava River, rkm 226.8

Referent water gauge Gunja, rkm 228.8, water level "0"=74.32 m.a.s.l.



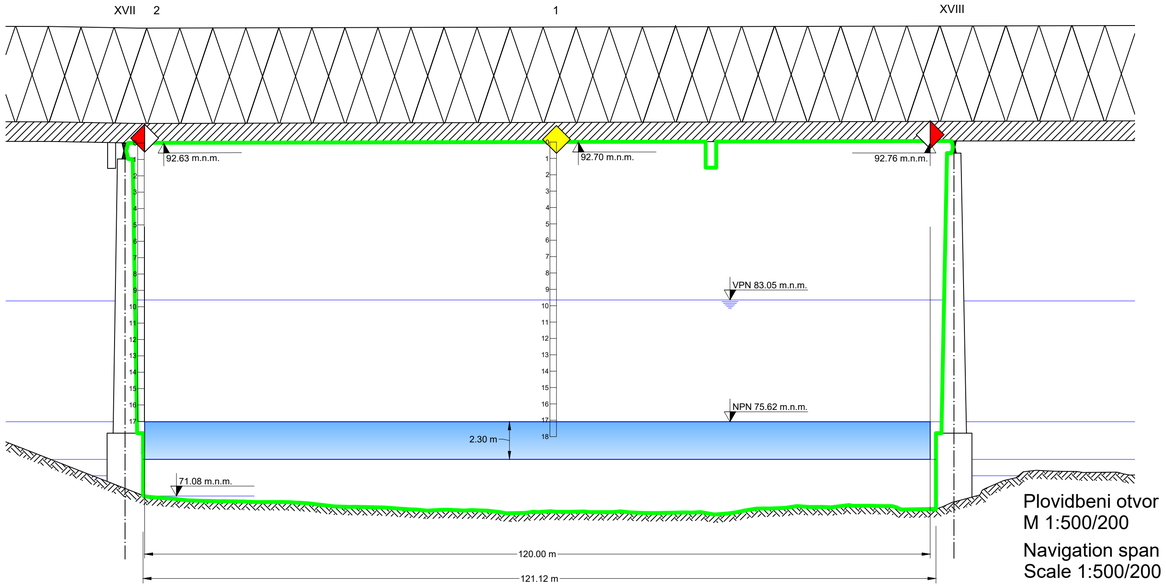
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 170cm,
zbog željeznih stepenica, koje se nalaze ispod donjeg
ruba konstrukcije u plovidbenom otvoru

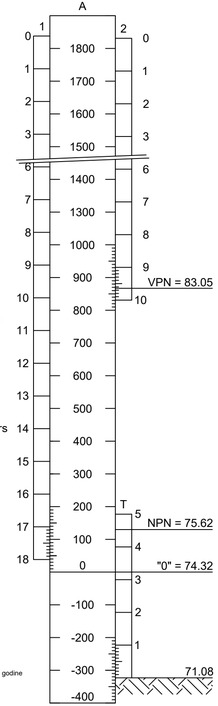
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 170cm due to iron stairs
in navigation span, below the lower edge of bridge construction.



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni presjek u mostovnom otvoru odgovara poprečnom presjeku na 40m nizvodno od mosta, snimljen 2004. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section corresponding the cross section measured 40m downstream in Year 2004
- piers and piers foundation dimensions are not reliable information

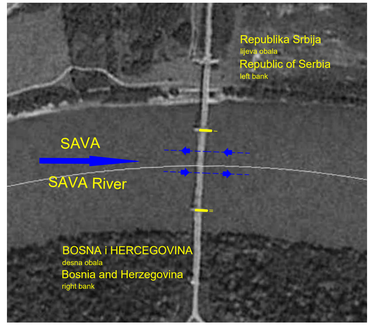
INTERNATIONAL SAVA RIVER BASIN COMMISSION

Cestovno-železnički most rača, Sava, rkm 183.31

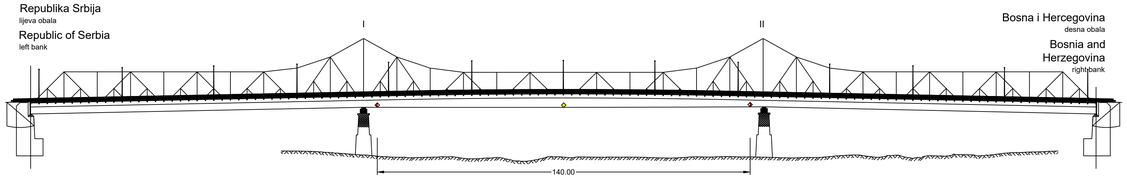
Mjerodavni vodomjer Jemena, rkm 204.84, kota "0"=72.44 m.n.m

Road-railway bridge Rača, Sava River, rkm 183.31

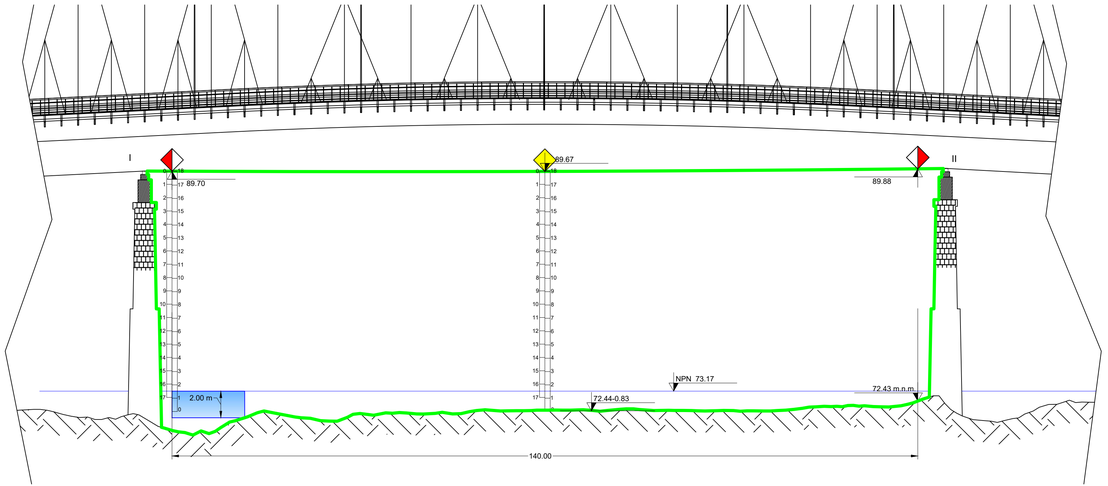
Referent water gauge Jemena, rkm 204.84, water level "0"=72.44m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

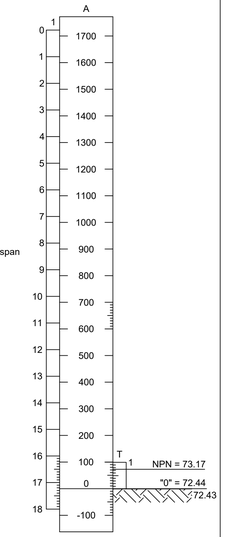
1. Slobodna visina u sredini plovidbenog otvora

T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

T. Fairway depth in navigation bridge span



- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2016. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

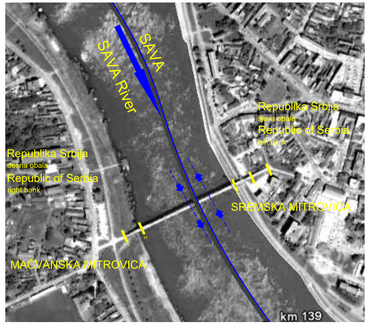
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2016
- piers and piers foundation dimensions are not reliable information

Pješački most S. Mitrovica, Sava, rkm 139.24

Mjerodavni vodomjer S.Mitrovica, rkm 139.24, kota "0"=72.22 m.n.m

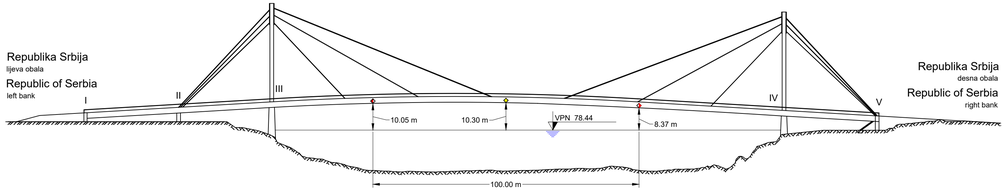
Pedestrian bridge S. Mitrovica, Sava River, rkm 139.24

Referent water gauge S. Mitrovica, rkm 139.24, water level "0"=72.22 m.a.s.l.



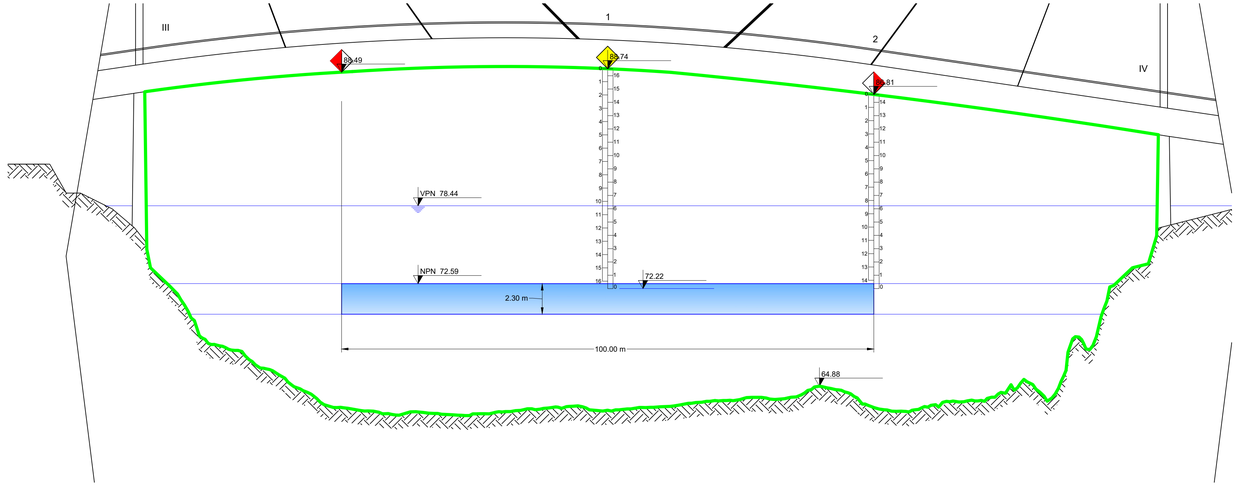
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

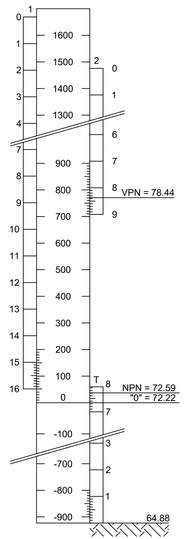
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2011. godine
- geološ stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

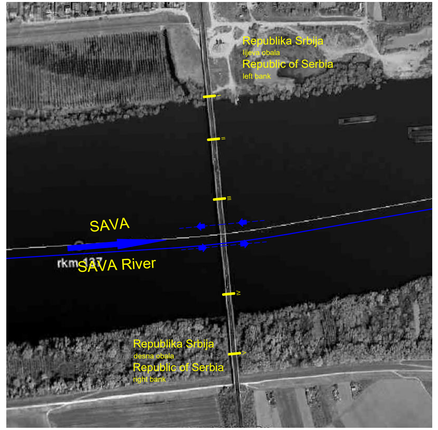
INTERNATIONAL SAVA RIVER BASIN COMMISSION

Cestovni most S. Mitrovica, Sava, rkm 136.60

Mjerodavni vodomjer S.Mitrovica, rkm 139.24, kota "0"=72.22 m.n.m

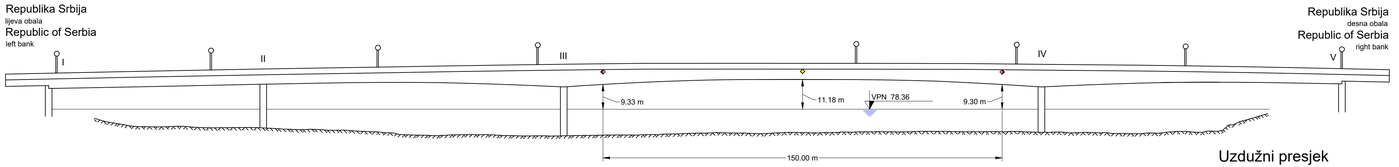
Road bridge S. Mitrovica, Sava River rkm 136.60

Referent water gauge S. Mitrovica, rkm 139.24, water level "0"=72.22 m.a.s.l.



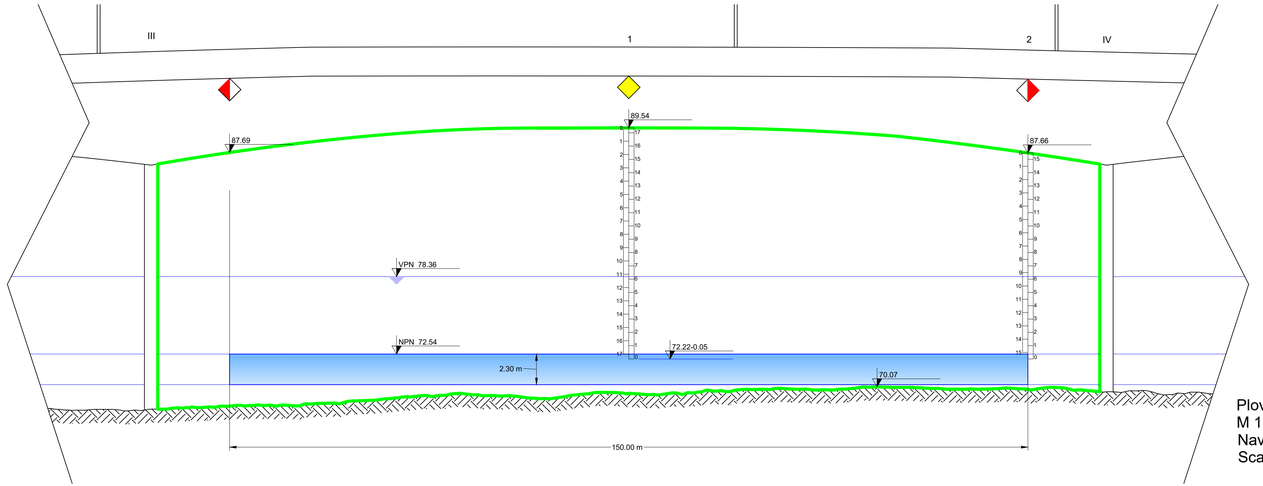
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

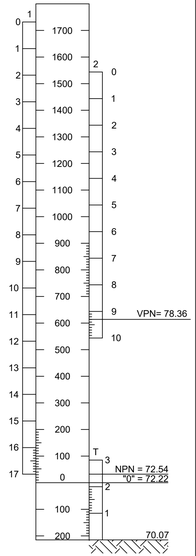
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profili u mostovnom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

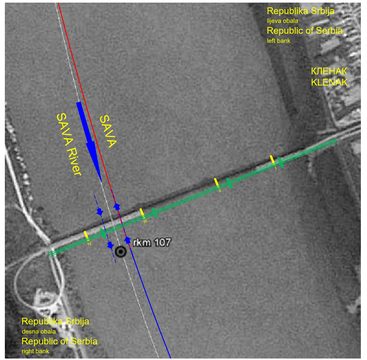
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Železnički most Šabac, Sava, rkm 106.96

Mjerodavni vodomjer Šabac, rkm 106.28, kota "0"=72.61 m.n.m

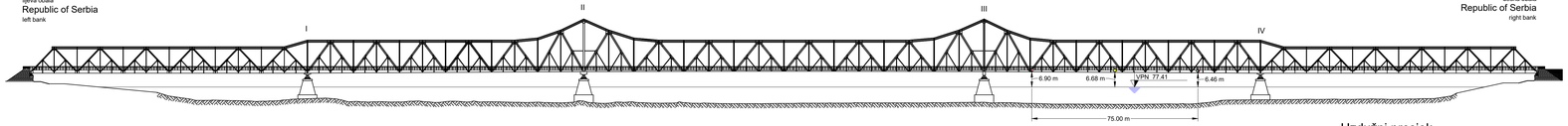
Railway bridge Šabac, Sava River, rkm 106.96

Referent water gauge Šabac, rkm 106.28, water level "0"=72.61 m.a.s.l.



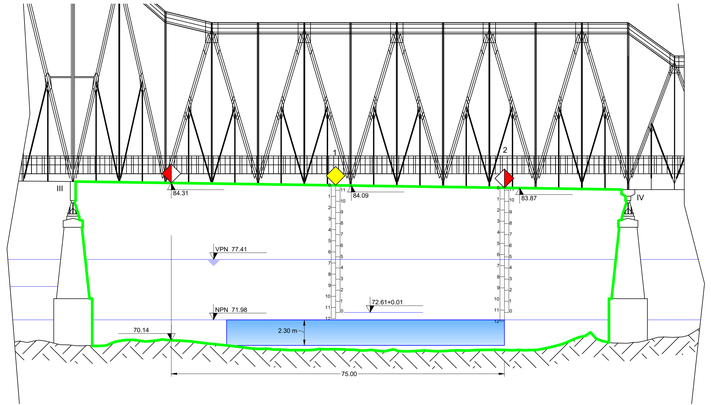
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

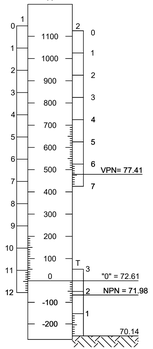
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2016. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

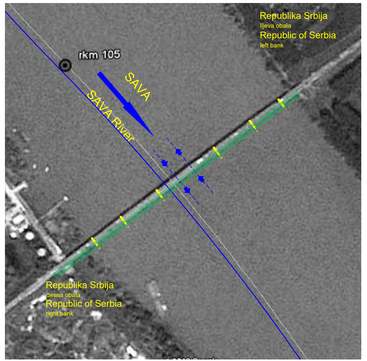
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2016
- piers and piers foundation dimensions are not reliable information

Cestovni most Šabac, Sava, rkm 104.53

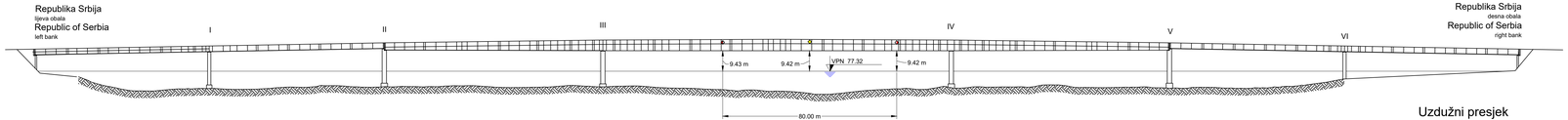
Mjerodavni vodomjer Šabac, rkm 106.28, kota "0"=72.61 m.n.m

Road bridge Šabac, Sava River, rkm 104.53

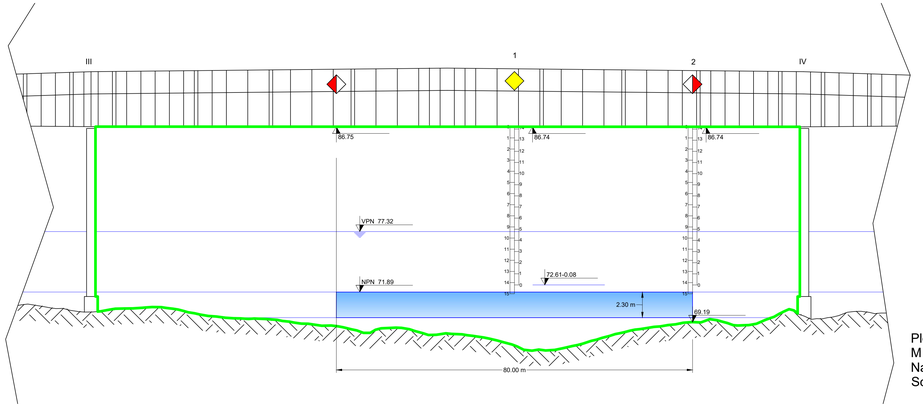
Referent water gauge Šabac, rkm 106.28, water level "0"=72.61 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

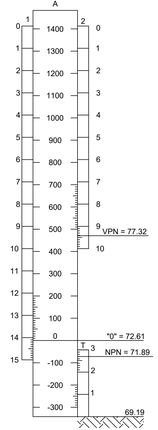
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil iz maskonzom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

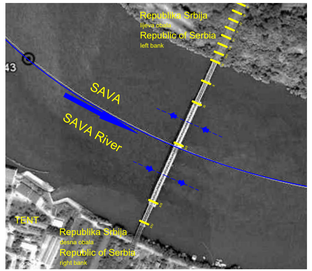
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovno toplovodni most Obrenovac, Sava, rkm 42.53

Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

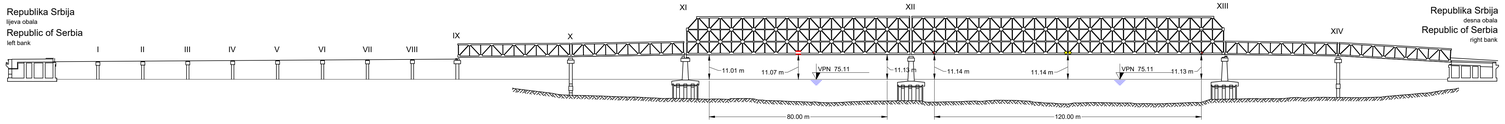
Road and pipeline bridge Obrenovac, Sava River, rkm 42.53

Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



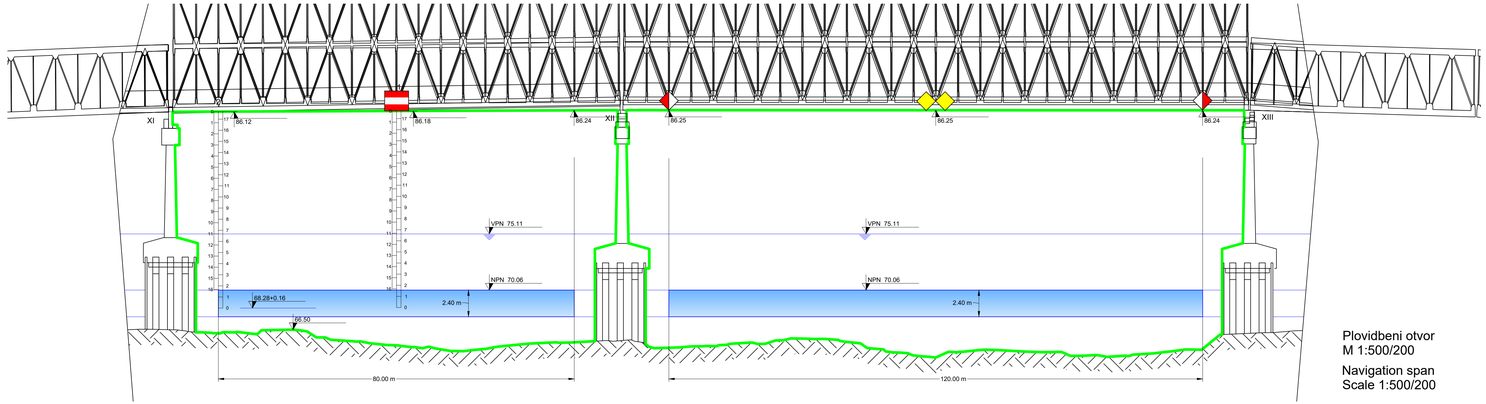
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

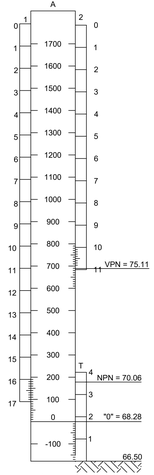
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2011. godine
- geodetik skupova i temelja stupova mosta nisu pouzdana informacija

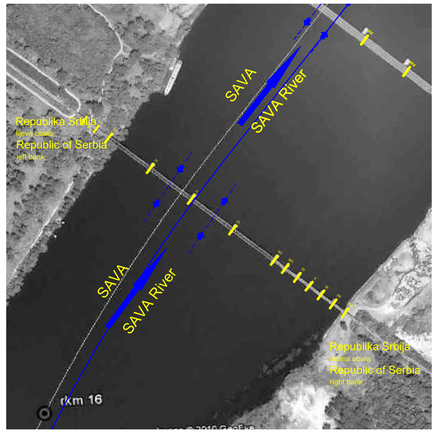
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in metres
- cross section profile in bridge measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Železnički most Ostružnica, Sava, rkm 15.43

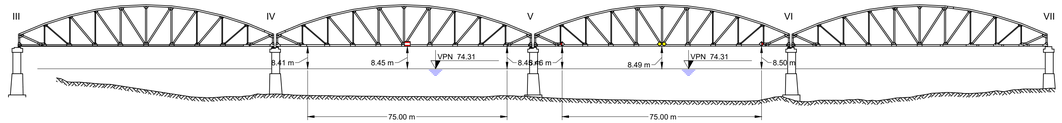
Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

Railway bridge Ostružnica, Sava River, rkm 15.43

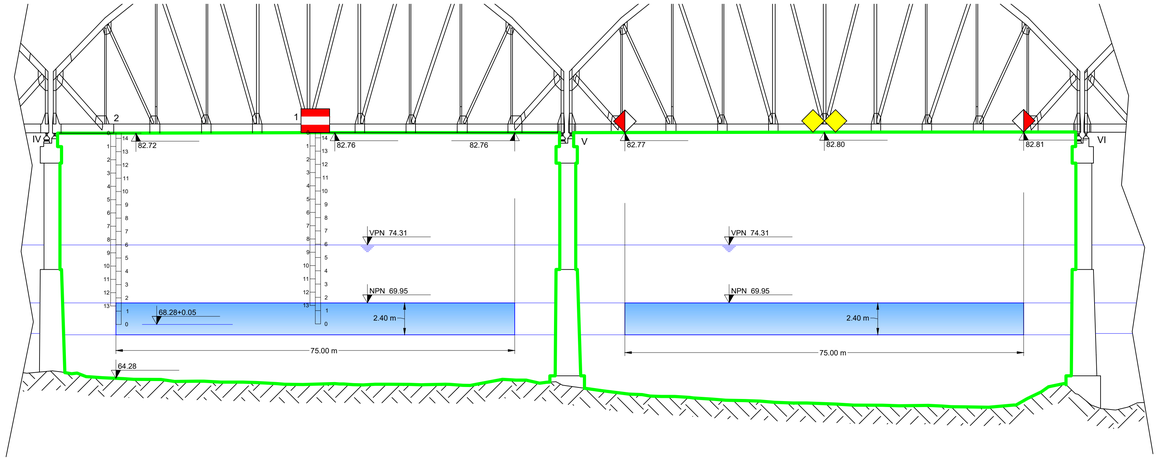
Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

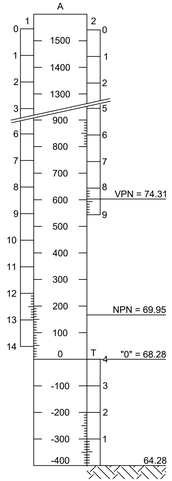
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

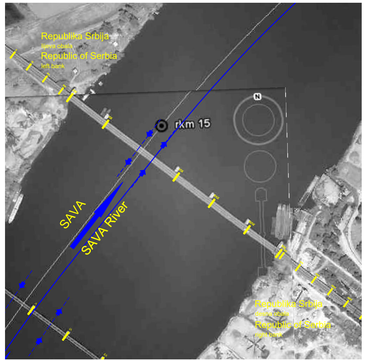
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovni most Ostružnica, Sava, rkm 15.00

Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

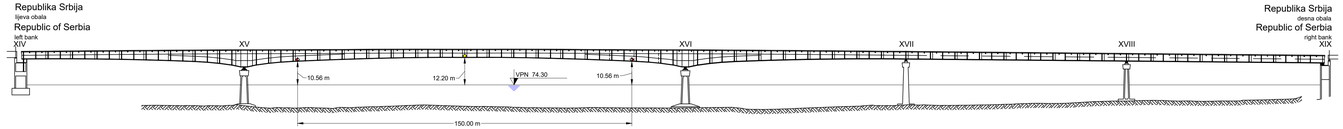
Road bridge Ostružnica, Sava River, rkm 15.00

Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.

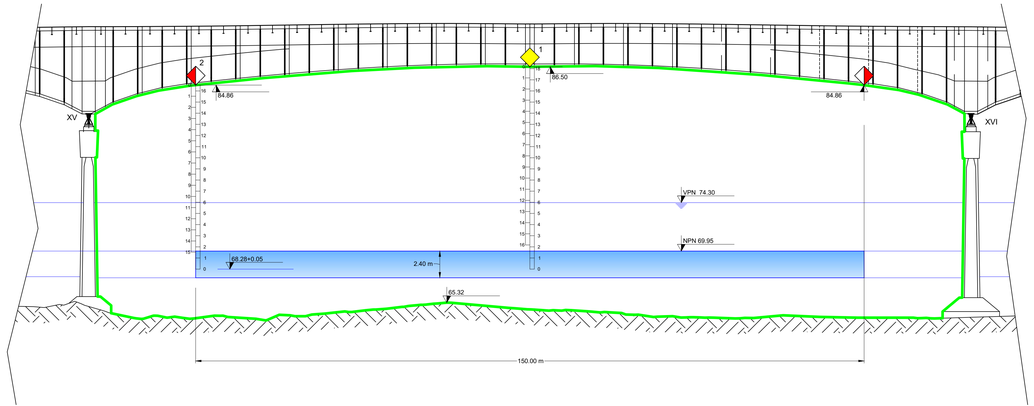


Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

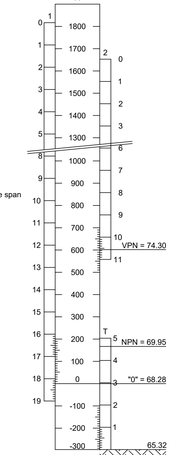
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- ove kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mjerodavnom otvoru snimljen 2011. godine
- geološki stupovi i temelji stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- "0" = 68.28 m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

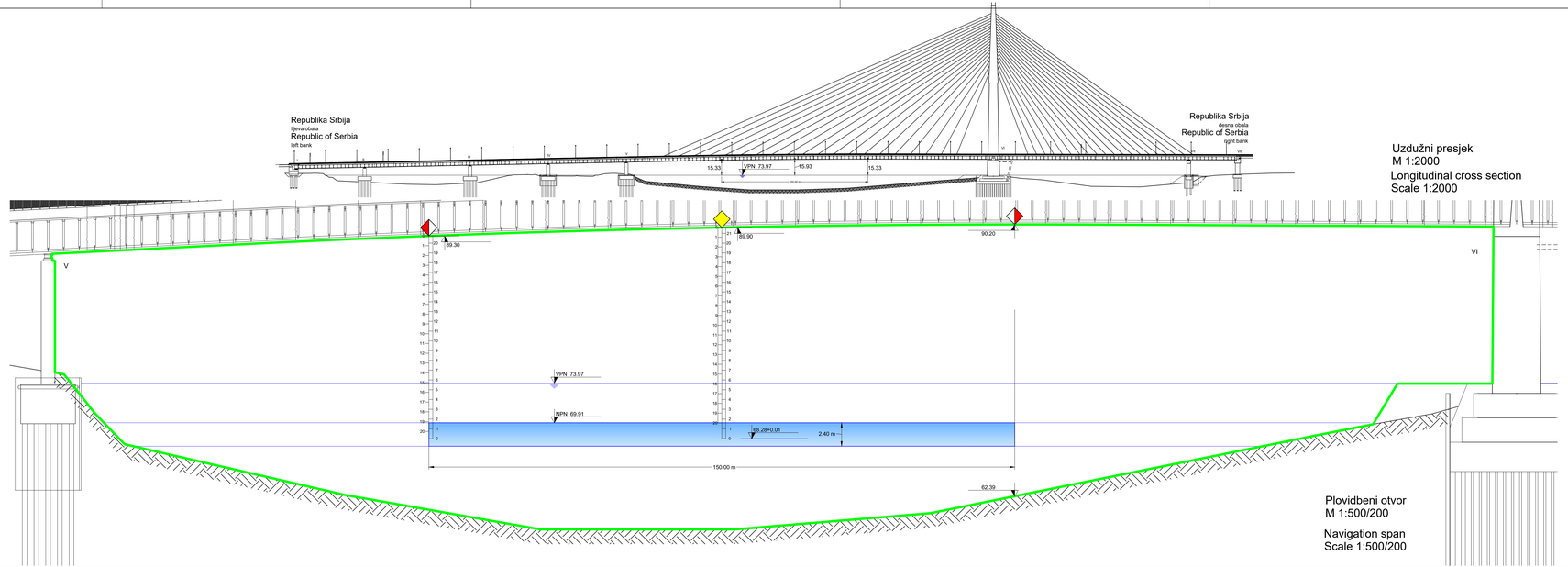
Cestovni most Beograd - "Ada Ciganlija", Sava, rkm 3.80

Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

Road bridge Belgrade - "Ada Ciganlija", Sava River, rkm 3.80

Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.

Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:2000
Longitudinal cross section
Scale 1:2000

Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

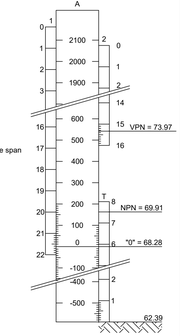
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su u cm i u metrima
- geberiti stupova i temelja stupova mosta nisu pouzdana informacija

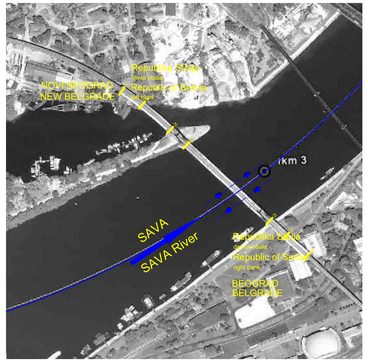
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Novi željeznički most Beograd, Sava, rkm 3.00

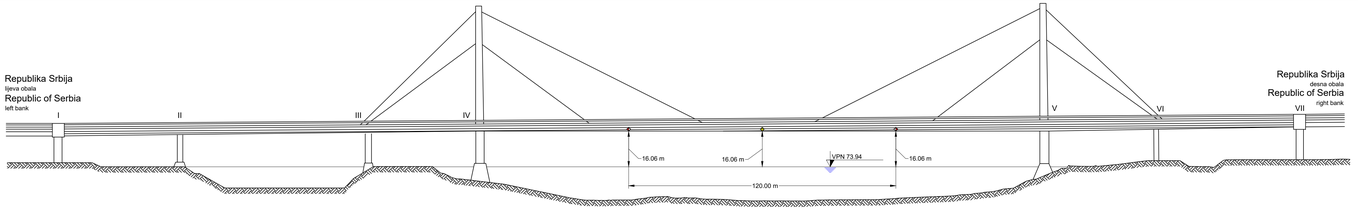
Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

New railway bridge - Belgrade, Sava River, rkm 3.00

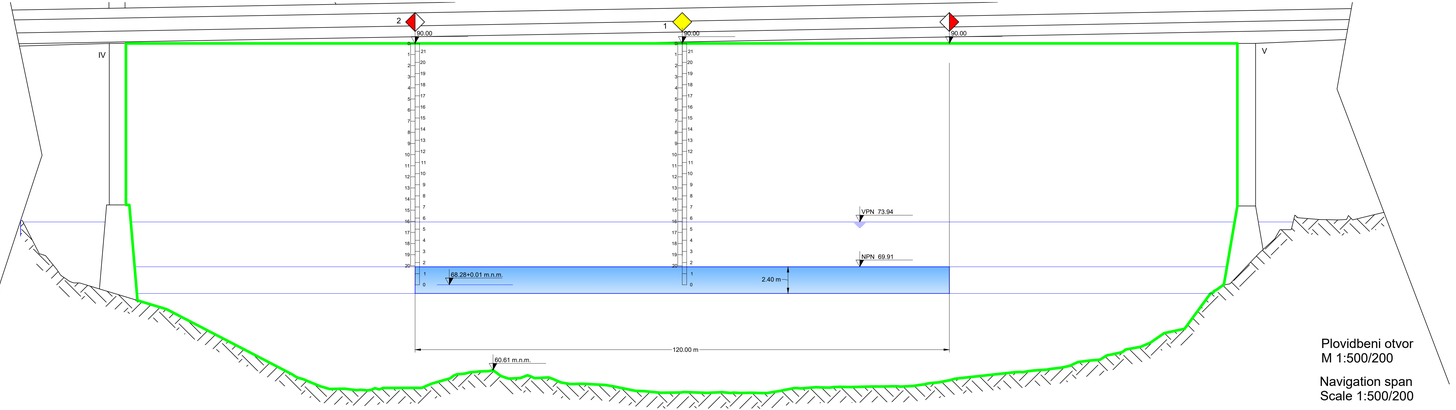
Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

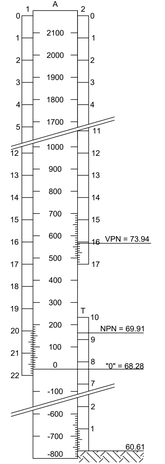
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u međunarodnom obzoru snimljen 2011. godine
- geland stupova i temelja stupova mosta nisu pouzdana informacija

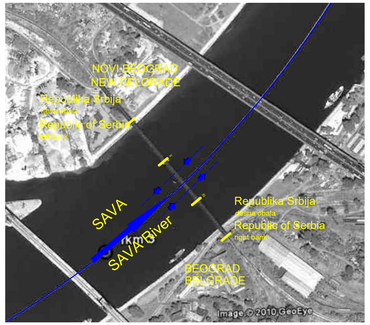
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- "0" = 68.28 m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Stari željeznički most Beograd, Sava, rkm 2.73

Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

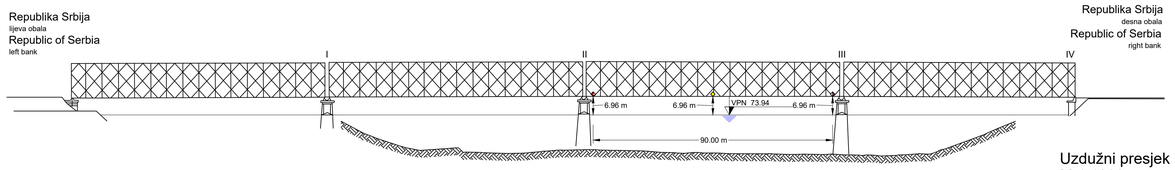
Old railway bridge Belgrade, Sava River, rkm 2.73

Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.

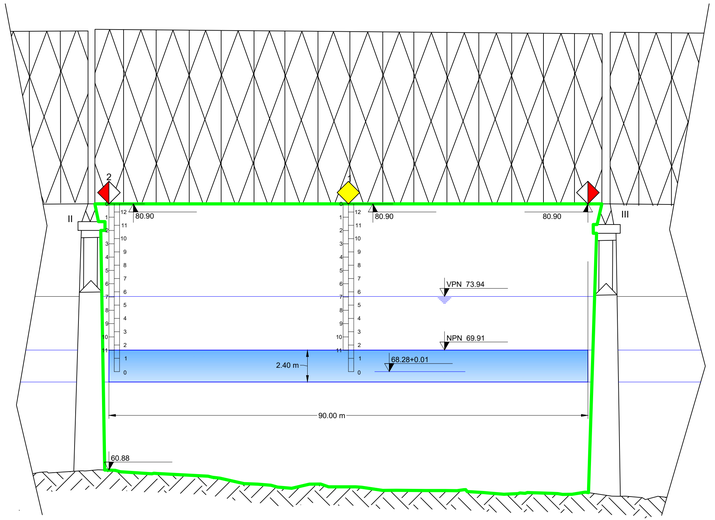


Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

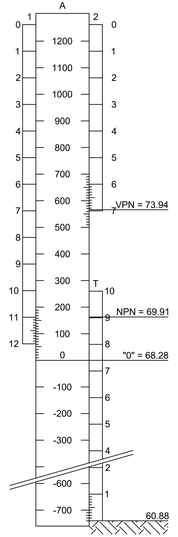
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

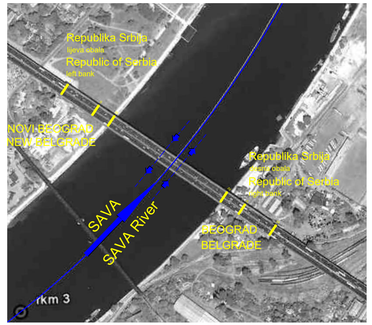
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovni most "Gazela" Beograd, Sava, rkm 2.52

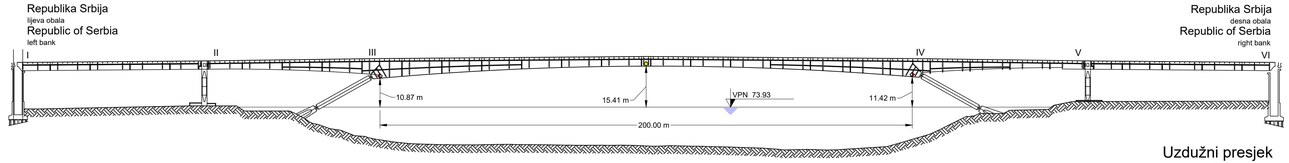
Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

Road bridge "Gazela" Belgrade, Sava River, rkm 2.52

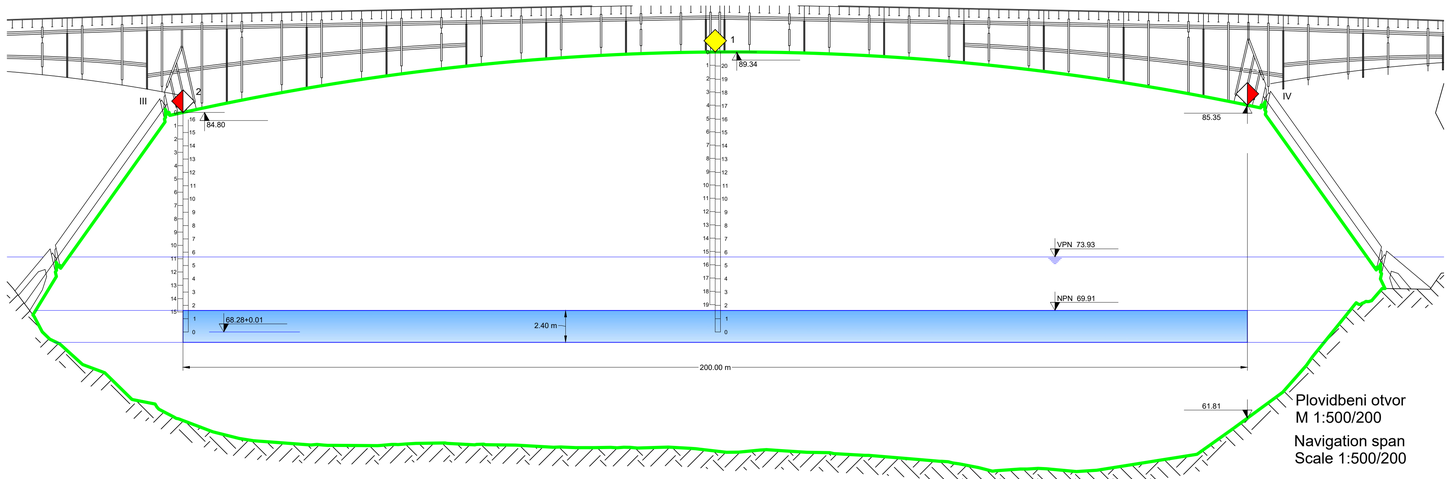
Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

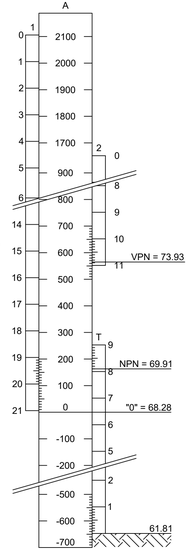
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mostovnom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

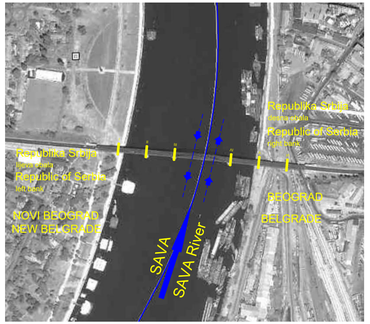
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovno-tramvajski most Beograd, Sava, rkm 1.43

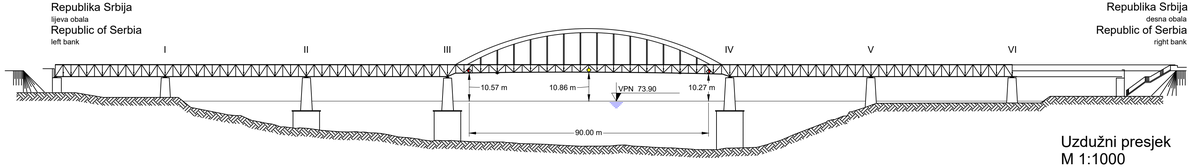
Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

Road- tramway bridge Belgrade, Sava River, rkm 1.43

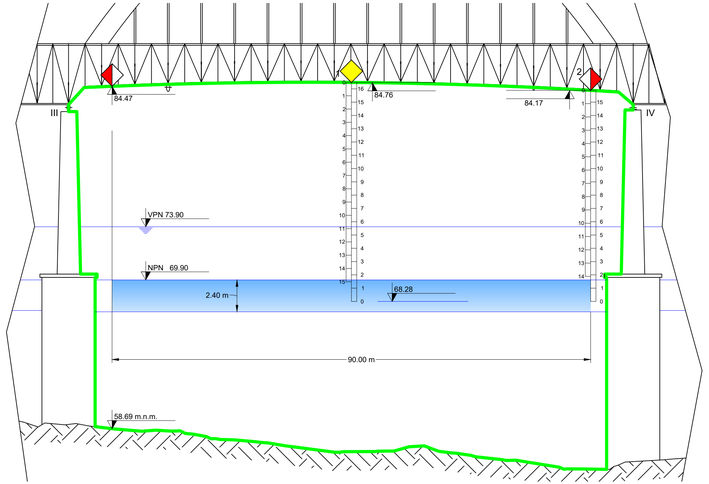
Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

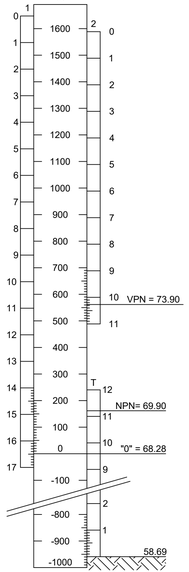
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profili u mostovnom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

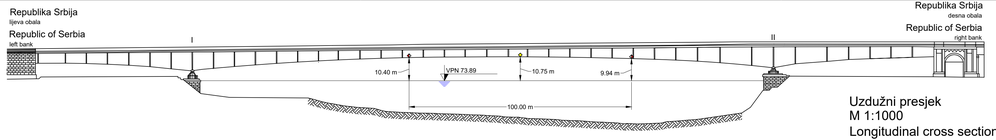
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovni most Beograd - "Brankov most", Sava, rkm 1.00

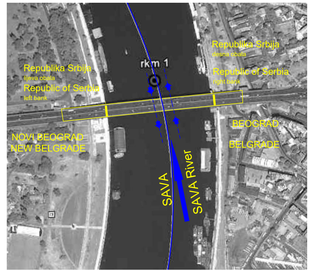
Mjerodavni vodomjer Beograd, rkm 0.82, kota "0"=68.28 m.n.m

Road bridge Belgrade - "Branko's bridge", Sava River, rkm 1.00

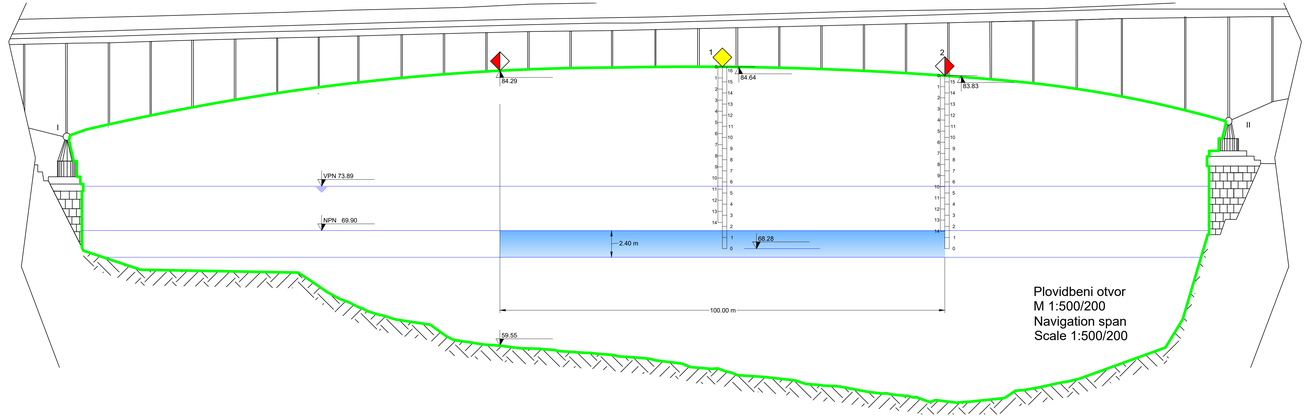
Referent water gauge Belgrade, rkm 0.82, water level "0"=68.28 m.a.s.l.



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

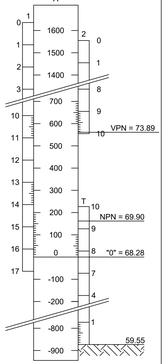
T. Dubina vodnog puta u plovidbenom otvoru

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- poprečni profil u mosbenom otvoru snimljen 2011. godine
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

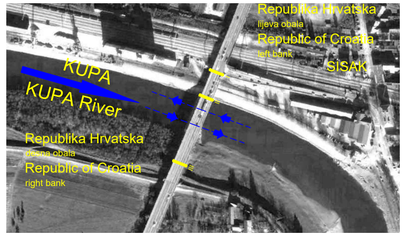
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- "0" = 68.28 m.a.s.l.
- all dimensions are in meters
- bridge cross section is measured in Year 2011
- piers and piers foundation dimensions are not reliable information

Cestovni most novi Sisak, Kupa, rkm 4.68

Mjerodavni vodomjer Crnac, rkm 588.2, kota "0"=91.34 m.n.m.

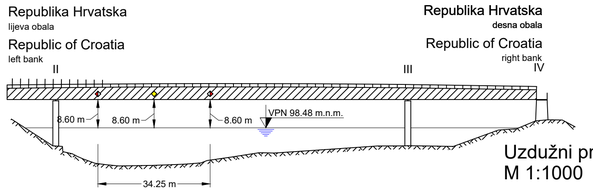
Road bridge new Sisak, Kupa River, rkm 4.68

Referent water gauge Crnac, rkm 588.2, water level "0"=91.34 m.a.s.l.



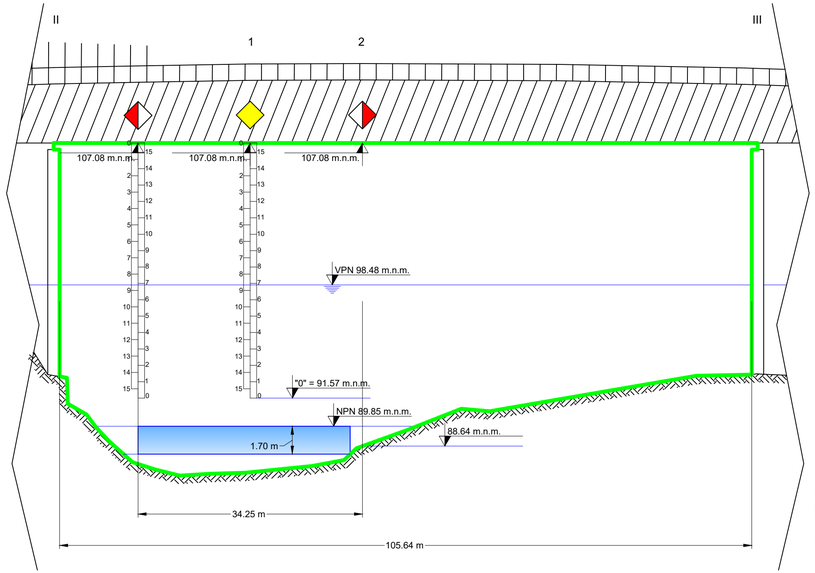
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

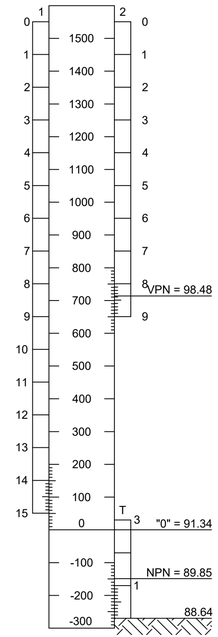
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

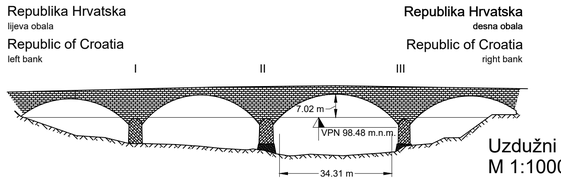
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most stari Sisak, Kupa, rkm 3.4

Mjerodavni vodomjer Crnac, rkm 588.2, kota "0"=91.34 m.n.m.

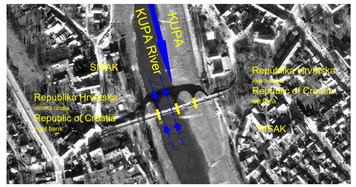
Road bridge old Sisak, Kupa River, rkm 3.4

Referent water gauge Crnac, rkm 588.2, water level "0"=91.34 m.a.s.l.



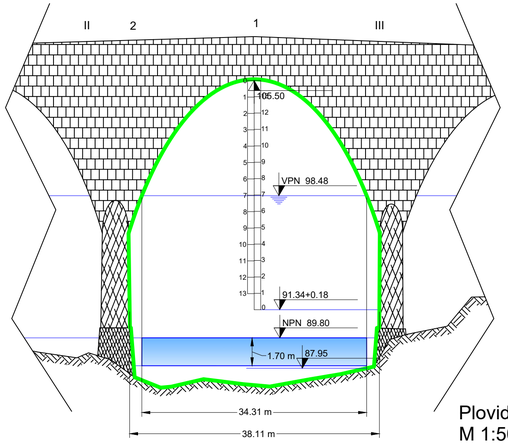
Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Situacioni plan
M 1:5000

Layout
Scale 1:5000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

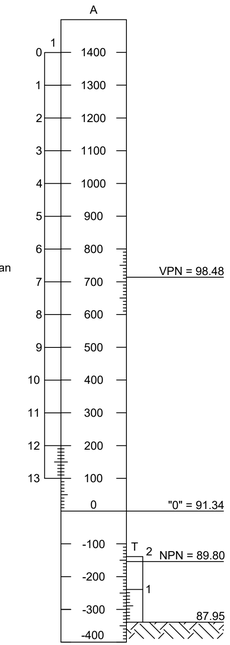
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

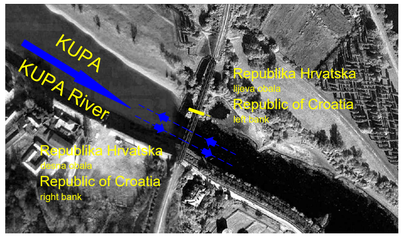
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Železnički most Sisak, Kupa, rkm 2.1

Mjerodavni vodomjer Crnac, rkm 588.2, kota "0"=91.34 m.n.m.

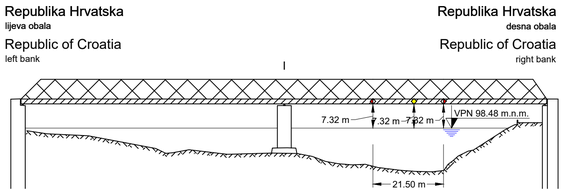
Railway bridge Sisak, Kupa River, rkm 2.1

Referent water gauge Crnac, rkm 588.2, water level "0"=91.34 m.a.s.l.



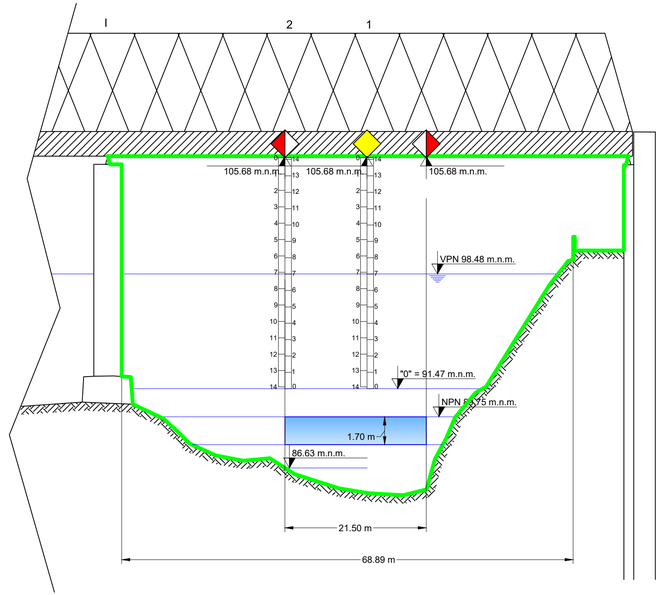
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

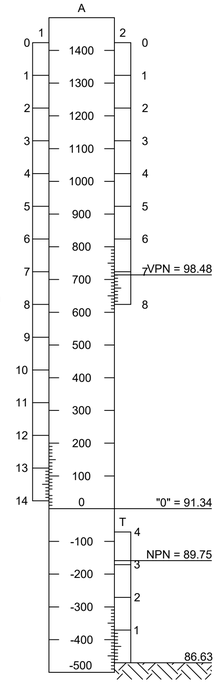
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

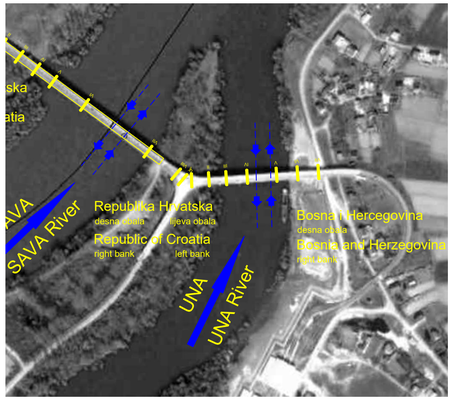
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Jasenovac, Una, rkm 0.05

Mjerodavni vodomjer Jasenovac, rkm 516.2, kota "0"=86.82 m.n.m.

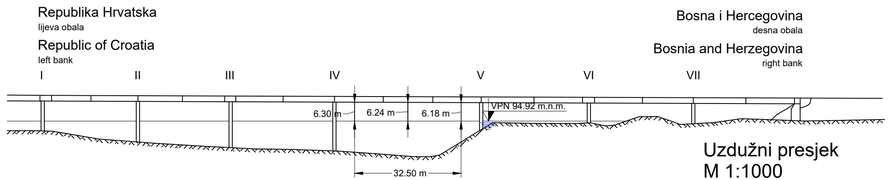
Road bridge Jasenovac, Una River, rkm 0.05

Referent water gauge Jasenovac, rkm 516.2, water level "0"=86.82 m.a.s.l.



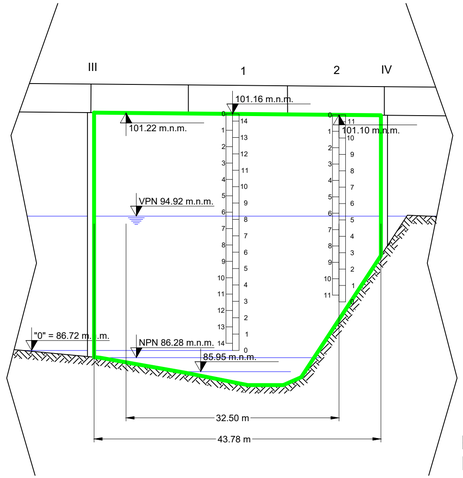
Situacioni plan
M 1:5000

Layout
Scale 1:5000



Uzdužni presjek
M 1:1000

Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200

Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu vodnog puta

T. Dubina vodnog puta u plovidbenom otvoru

Napomena:
umanjiti slobodnu visinu plovidbenog otvora za 10cm

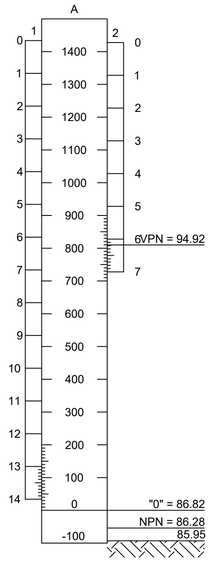
A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side

T. Fairway depth in navigation bridge span

Remark:
Vertical clearance should be lowered for 10cm



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m.
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

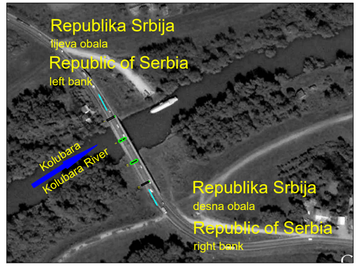
- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Obrenovac", Kolubara, rkm 2.96

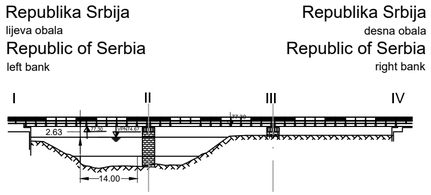
Mjerodavni vodomjer Beograd, rijeka Sava rkm 0.82, kota "0"=68.28 m.n.m.

Road bridge "Obrenovac", Kolubara River, rkm 2.96

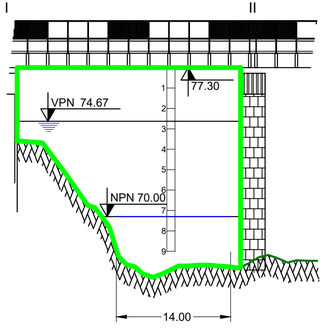
Referent water gauge Belgrade, Sava River rkm 0.82, water level "0"= 86.28 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

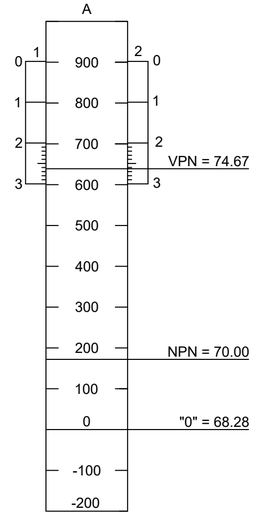
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- NPN - niski plovidbeni vodostaj u presjeku mosta
- sve dimenzije su date u metrima
- sve kote su u m.n.m.
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- NPN - low navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Brežice, Sava, rkm 719.4

Mjerodavni vodomjer Čatež I, rkm 717.9, kota "0"=137.28 m.n.m.

Road bridge Brežice, Sava River, rkm 719.4

Referent water gauge Čatež I, rkm 717.9, water level "0"=137.28 m.a.s.l.

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

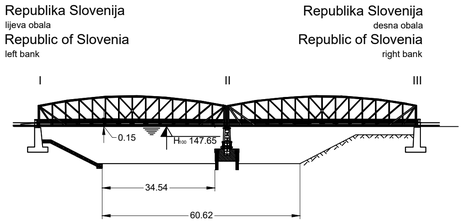
2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

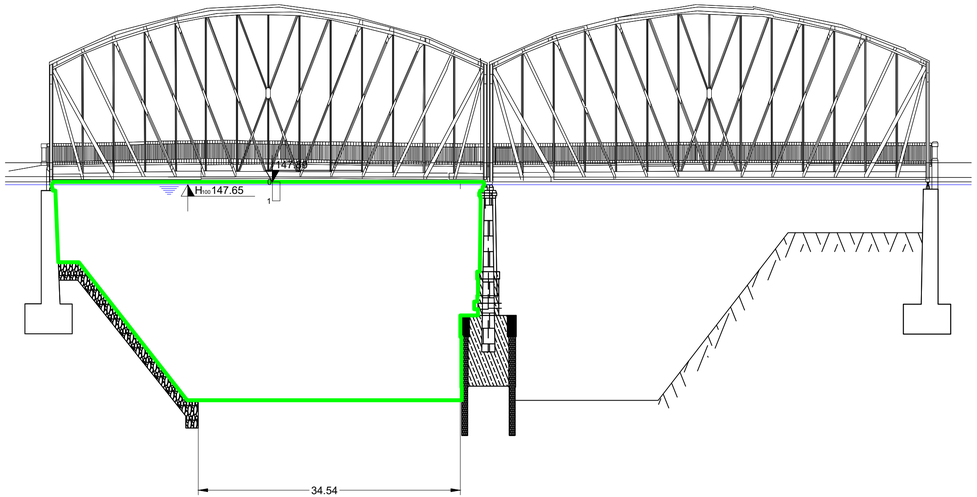
1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span

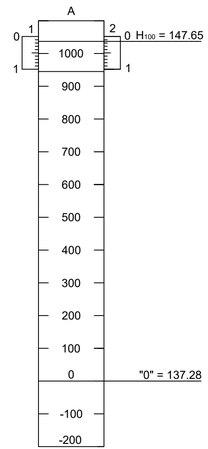
Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200



- H_{100} - vodostaj stogodišnje vode u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

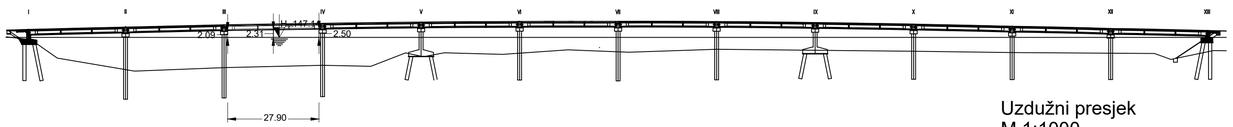
- H_{100} - water level of 100 year recurrence period (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Čatež, Sava, rkm 718.4

Mjerodavni vodomjer Čatež I, rkm 717.9, kota "0"=137.28 m.n.m.

Road bridge Čatež, Sava River, rkm 718.4

Referent water gauge Čatež I, rkm 717.9, water level "0"=137.28 m.a.s.l.

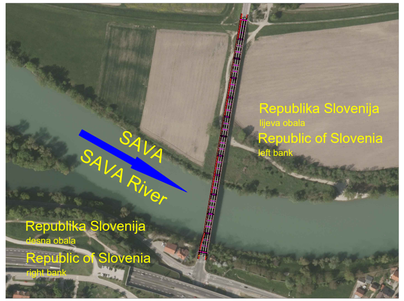


Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

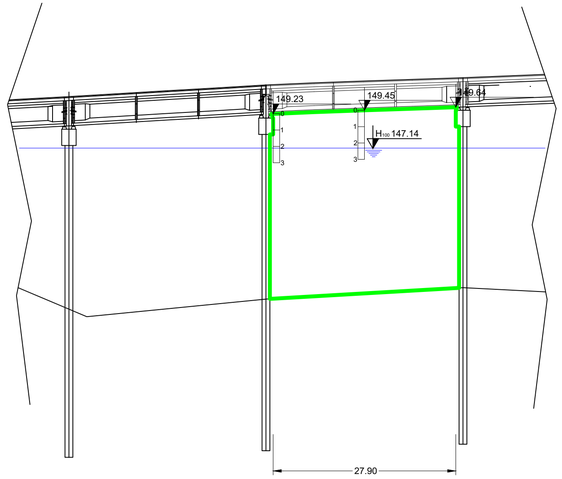
A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora



Situacioni plan
M 1:5000
Layout
Scale 1:5000

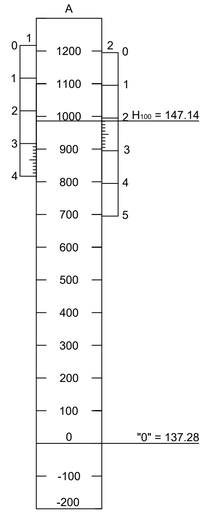


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- H_{100} - vodostaj stogodišnje vode u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

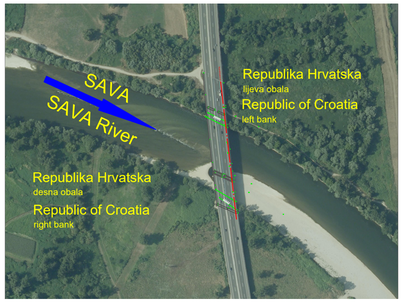
- H_{100} - water level of 100 year recurrence period (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Zaprešić, Sava, rkm 698.6

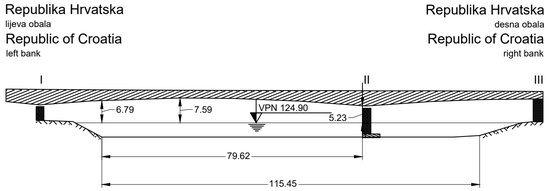
Mjerodavni vodomjer Podsused, rkm 695.6, kota "0"=119.13 m.n.m.

Road bridge Zaprešić, Sava River, rkm 698.6

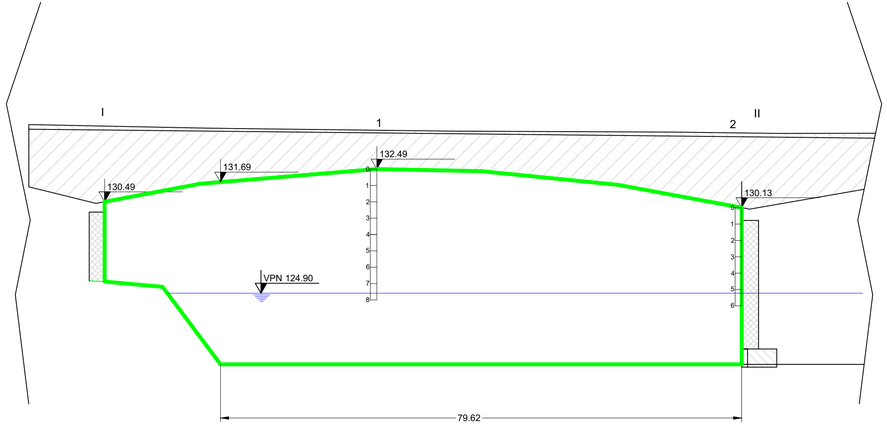
Referent water gauge Podsused, rkm 695.6, water level "0"=119.13 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

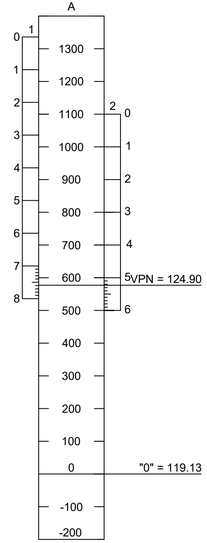
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

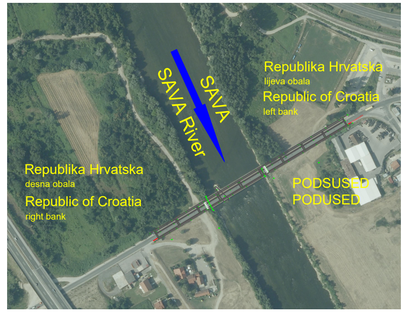
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Podsused, Sava, rkm 696.6

Mjerodavni vodomjer Podsused, rkm 695.6, kota "0"=119.13 m.n.m.

Road bridge Podsused, Sava River, rkm 696.6

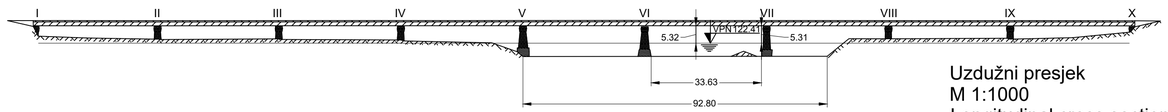
Referent water gauge Podsused, rkm 695.6, water level "0"=119.13 m.a.s.l.



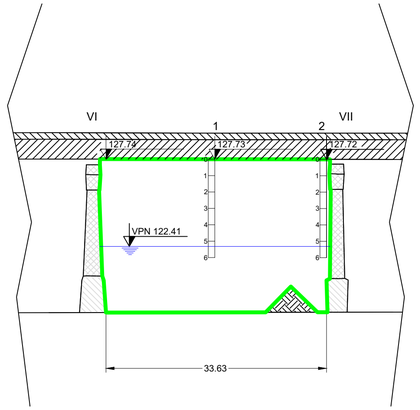
Situacioni plan
M 1:5000
Layout
Scale 1:5000

Republika Hrvatska
lijeva obala
Republic of Croatia
left bank

Republika Hrvatska
desna obala
Republic of Croatia
right bank



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

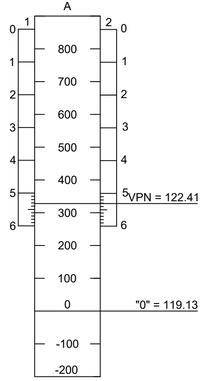
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

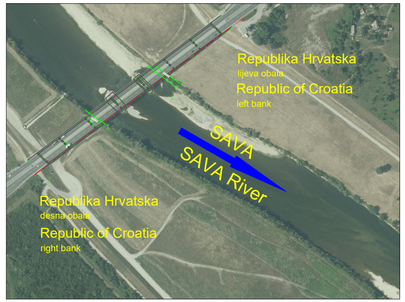
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most Jankomir, Sava, rkm 693.6

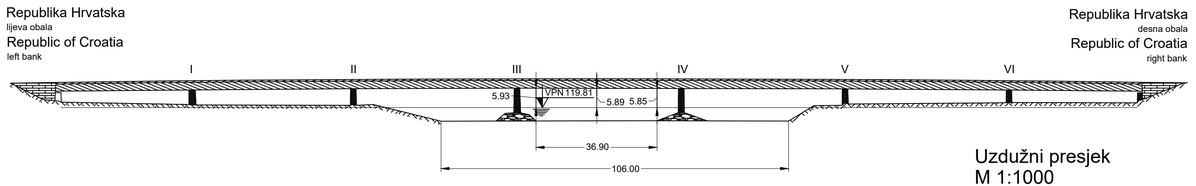
Mjerodavni vodomjer Podsused, rkm 695.6, kota "0"=119.13 m.n.m.

Road bridge Jankomir, Sava River, rkm 693.6

Referent water gauge Podsused, rkm 695.6, water level "0"=119.13 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000

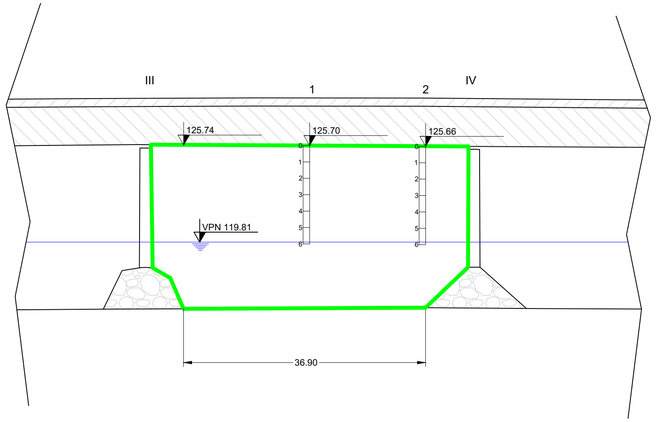


Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

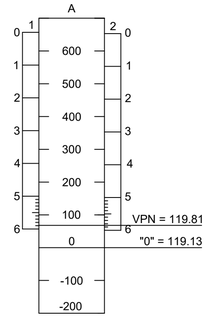


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

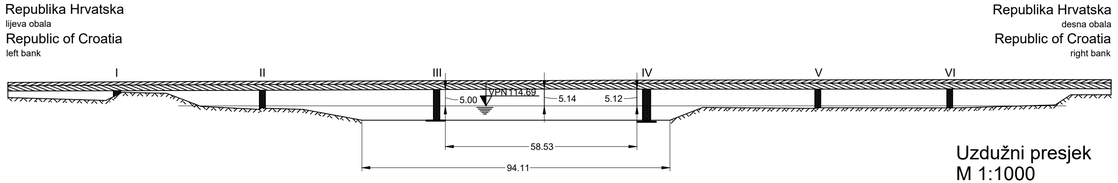
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni "Jadranski" most, Sava, rkm 684.8

Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Road "Jadranski" bridge, Sava River, rkm 684.8

Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.



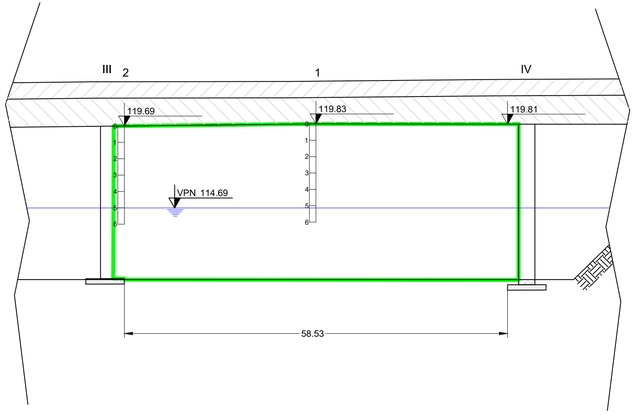
Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

Situacioni plan
M 1:5000
Layout
Scale 1:5000

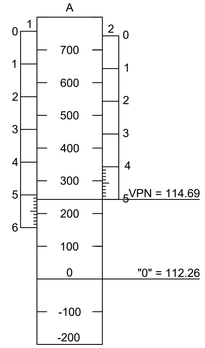


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

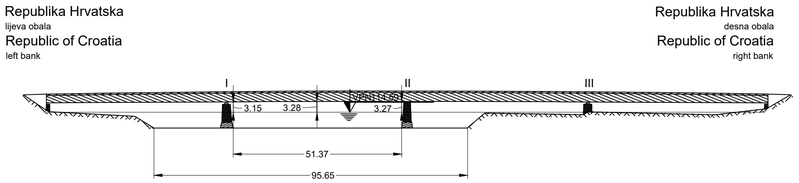
"Savski" pješački most, Sava, rkm 684.6

Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

"Savski" pedestrian bridge, Sava River, rkm 684.6

Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.

Situacioni plan
M 1:5000
Layout
Scale 1:5000

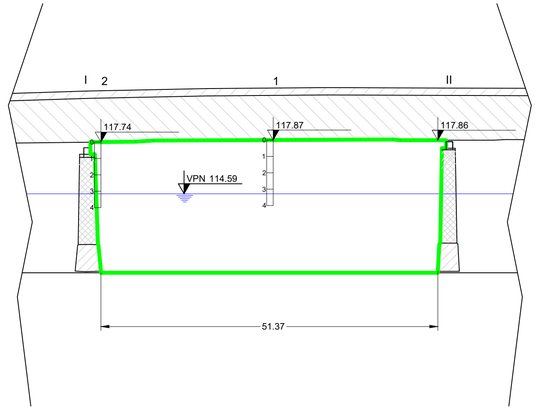


Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

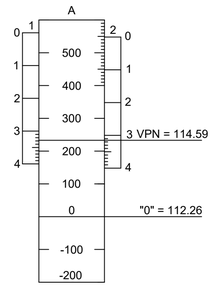


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

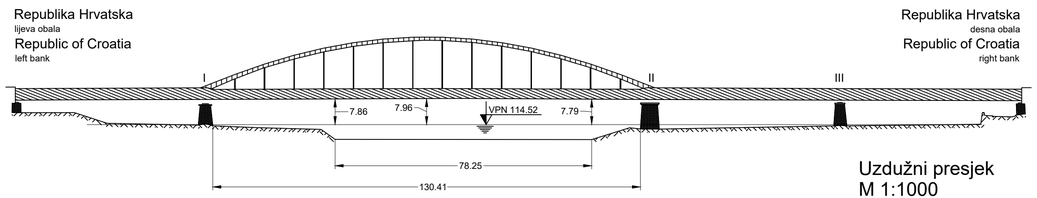
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Železnički most "Sava - Zeleni", Sava, rkm 684.4

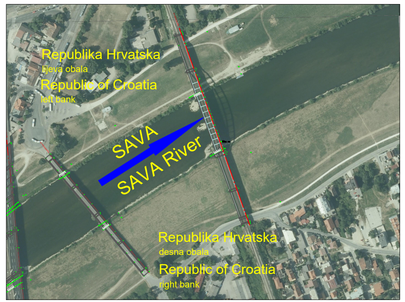
Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Railway bridge "Sava Zeleni", Sava River, rkm 684.4

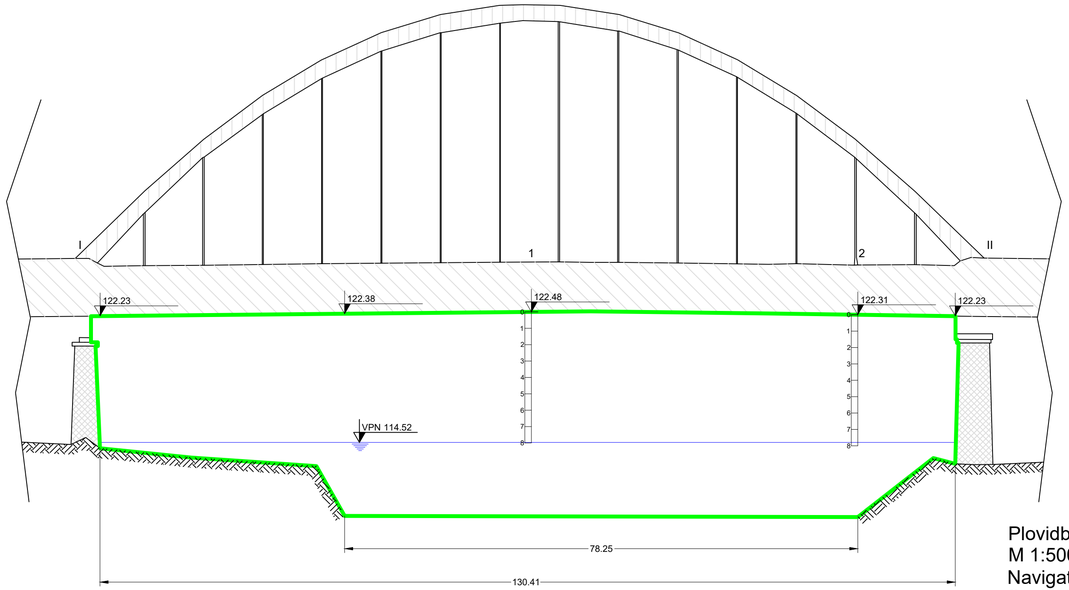
Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

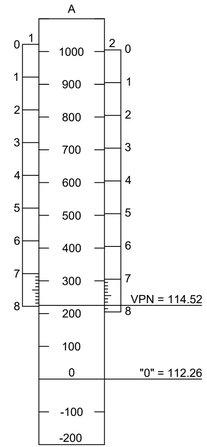
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

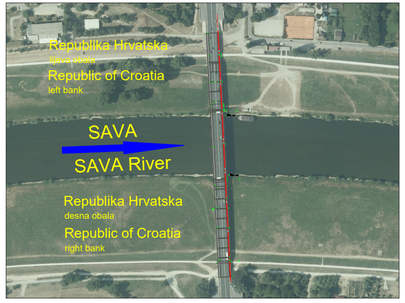
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Sloboda", Sava, rkm 682.5

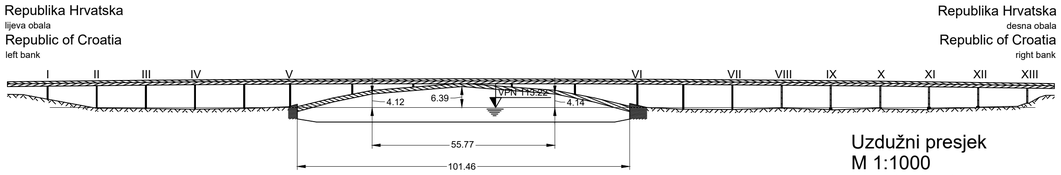
Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Road bridge "Sloboda", Sava River, rkm 682.5

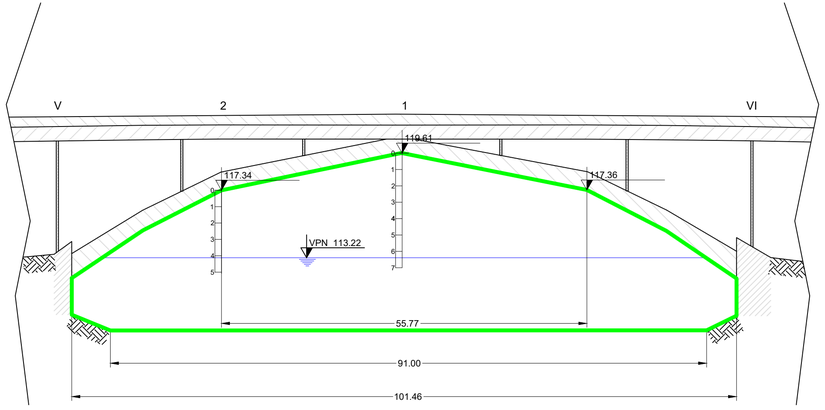
Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

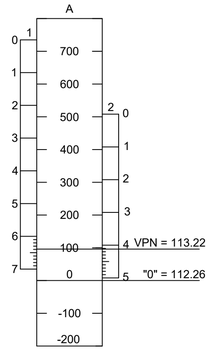
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Mladosti", Sava, rkm 680.7

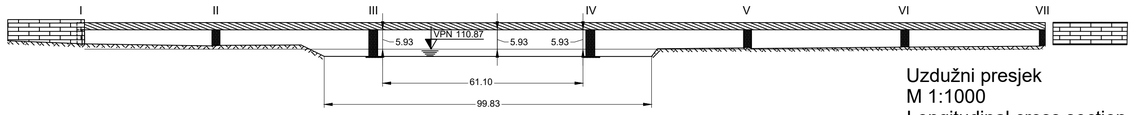
Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Road bridge "Mladost", Sava River, rkm 680.7

Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.

Republika Hrvatska
lijeva obala
Republic of Croatia
left bank

Republika Hrvatska
desna obala
Republic of Croatia
right bank

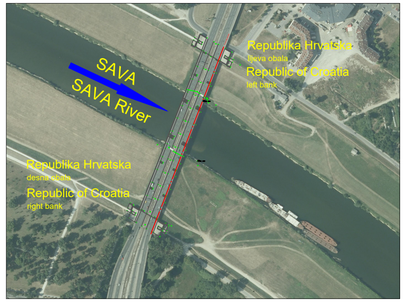


Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

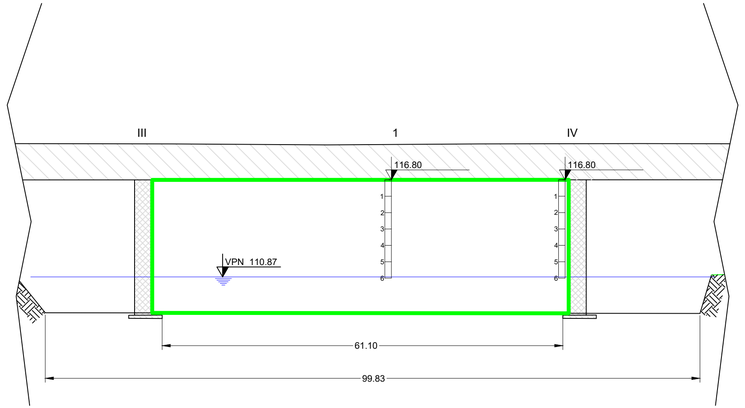
A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora



Situacioni plan
M 1:5000
Layout
Scale 1:5000

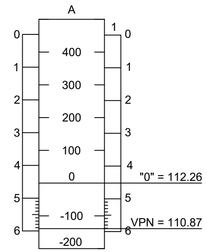


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

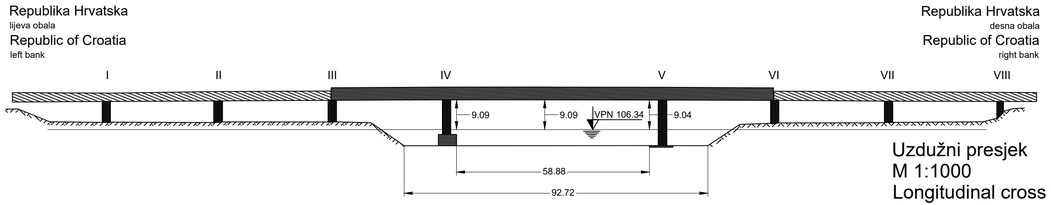
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Željeznički most "Mičevac", Sava, rkm 676.3

Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Railway bridge "Mičevac", Sava River, rkm 676.3

Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.

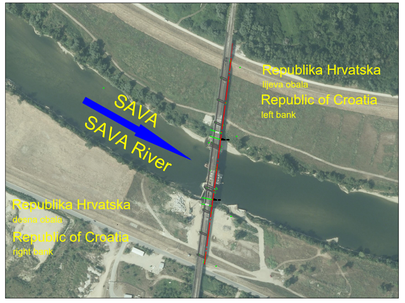


Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000

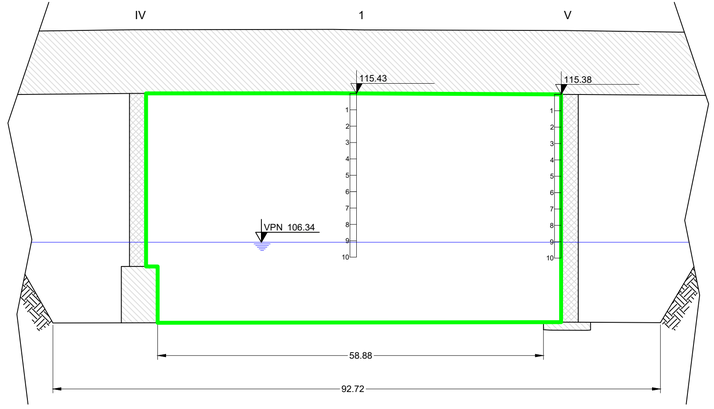
A. Razina vode na vodomjeru

1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora



Situacioni plan
M 1:5000
Layout
Scale 1:5000

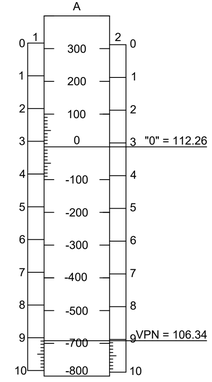


Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

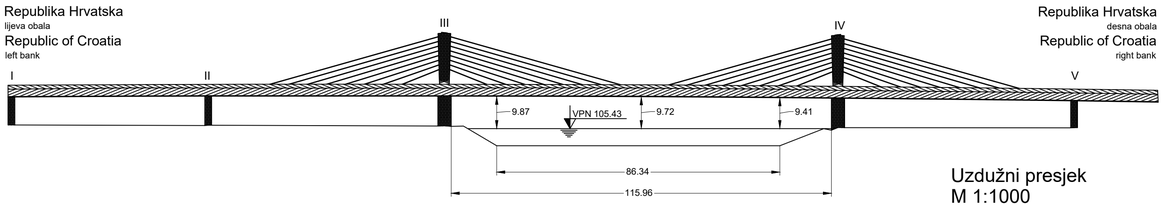
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Domovinski", Sava, rkm 673.7

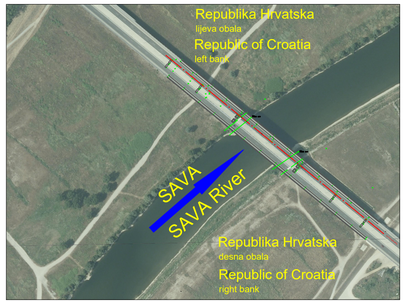
Mjerodavni vodomjer Zagreb, rkm 687.7, kota "0"=112.26 m.n.m.

Road bridge "Domovinski", Sava River, rkm 673.7

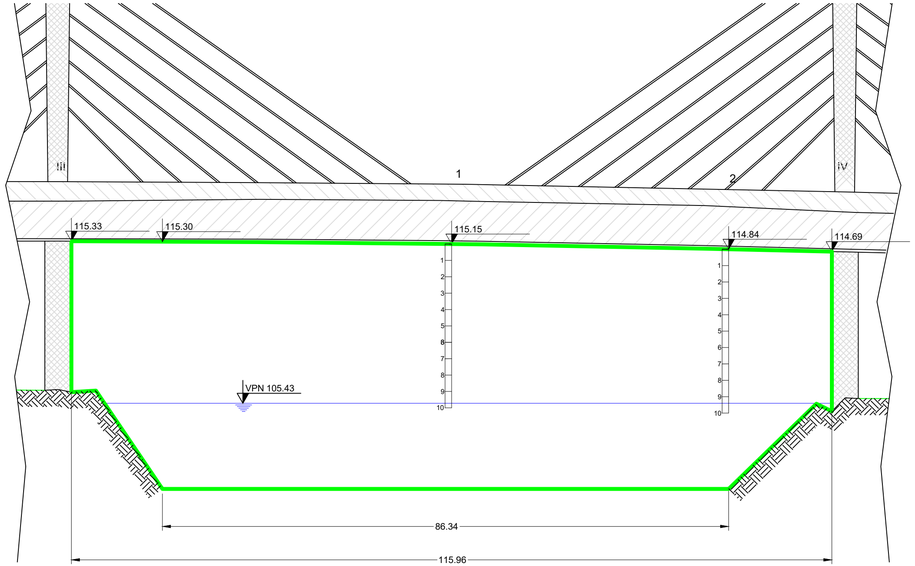
Referent water gauge Zagreb, rkm 687.7, water level "0"=112.26 m.a.s.l.



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

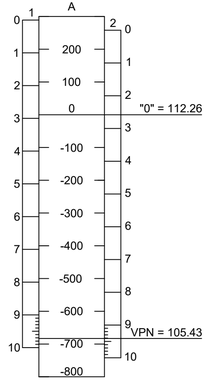
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

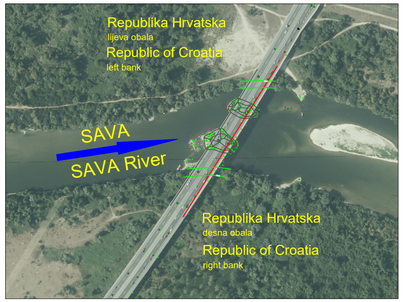
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Ivanja reka", Sava, rkm 668.8

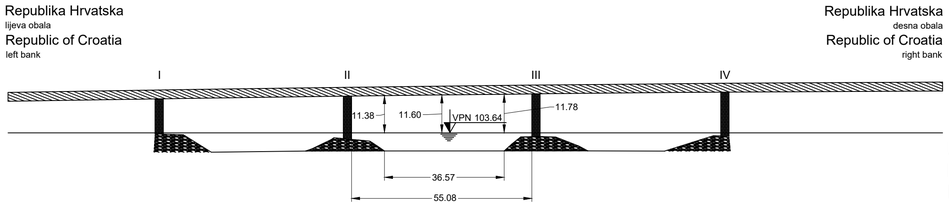
Mjerodavni vodomjer Rugvica, rkm 657.3, kota "0"=95.61 m.n.m.

Road bridge "Ivanja reka", Sava River, rkm 668.8

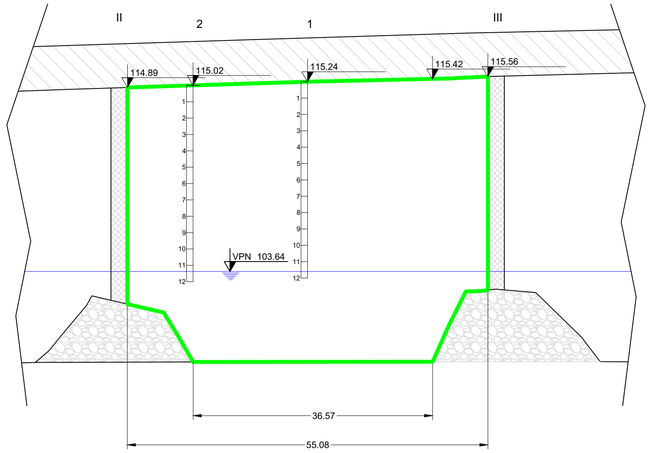
Referent water gauge Rugvica, rkm 657.3, water level "0"= 95.61 m.a.s.l.



Situacioni plan
M 1:5000
Layout
Scale 1:5000



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200

A. Razina vode na vodomjeru

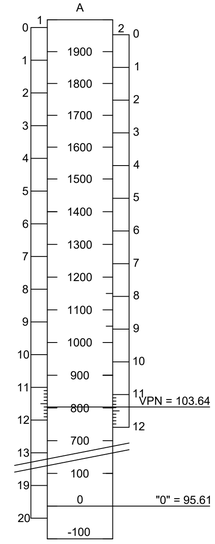
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the navigation bridge span



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

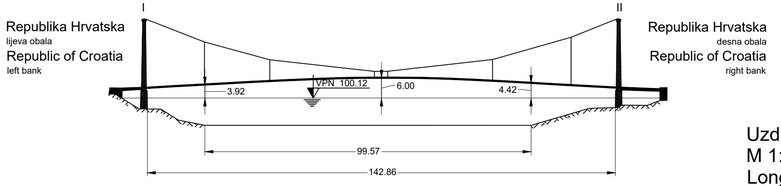
- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information

Cestovni most "Martinska Ves", Sava, rkm 622.8

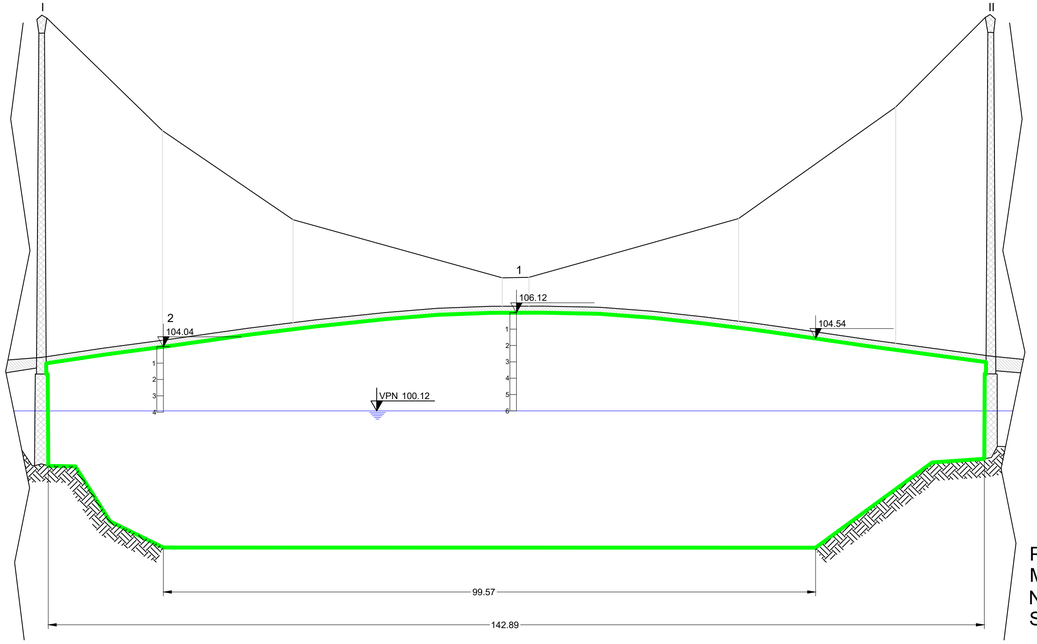
Mjerodavni vodomjer Tišina Kaptolska, rkm 612.0, kota "0"=90.45 m.n.m.

Road bridge "Martinska Ves", Sava River, rkm 622.8

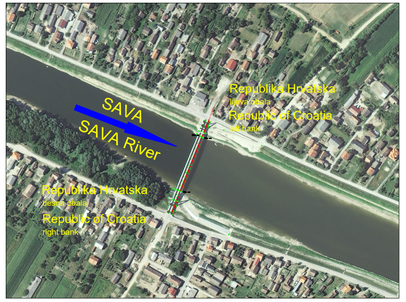
Referent water gauge Tišina Kaptolska, rkm 612.0, water level "0"= 90.45 m.a.s.l.



Uzdužni presjek
M 1:1000
Longitudinal cross section
Scale 1:1000



Plovidbeni otvor
M 1:500/200
Navigation span
Scale 1:500/200



Situacioni plan
M 1:5000
Layout
Scale 1:5000

A. Razina vode na vodomjeru

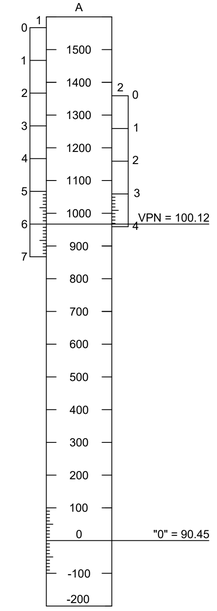
1. Slobodna visina u sredini plovidbenog otvora

2. Slobodna visina na rubu plovidbenog otvora

A. Water level at water gauge

1. Vertical bridge clearance to middle of navigation bridge span

2. Vertical bridge clearance at the fairway side



- VPN - visoki plovidbeni vodostaj u presjeku mosta
- sve kote su u m.n.m
- sve dimenzije su date u metrima
- gabariti stupova i temelja stupova mosta nisu pouzdana informacija

- VPN - high navigation water level (bridge cross section)
- all levels are in m.a.s.l.
- all dimensions are in meters
- piers and piers foundation dimensions are not reliable information