

All'interno del piano generale di potenziamento strutturale in Bosnia, supportato da fondi della Comunità Europea, è stato pianificato un collegamento stradale tra la E70 croata e la E661 bosniaca che necessita di un attraversamento sul fiume Sava. La E661 attualmente termina a pochi chilometri da Gradiska e costringe i viaggiatori ad attraversare la città con conseguente aumento del tempo di viaggio. Il progetto, pertanto, si concentra sulla realizzazione di un ponte con struttura ad arco a via intermedia e relative rampe di accesso che permettono il collegamento diretto tra le due strade a scorrimento veloce. Il piano generale prevede, inoltre, un potenziamento del tratto Banja Luka - Livno, un potenziamento del tratto Banja Luka - Zenica come estensione della A1 per Sarajevo e della E73 Zenica fino a Samac passando per Doboj.



1

2

3

4

SCHEMA GENERALE



5



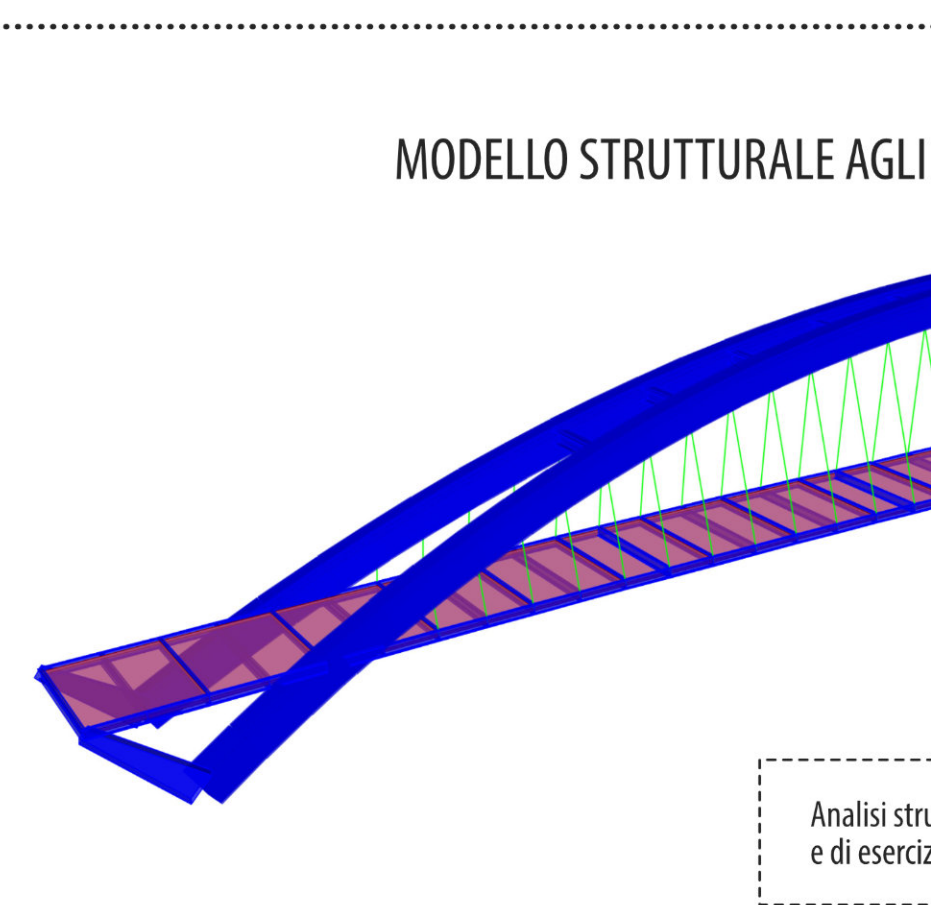
Maslenica (Croazia)

6



Krka (Croazia)

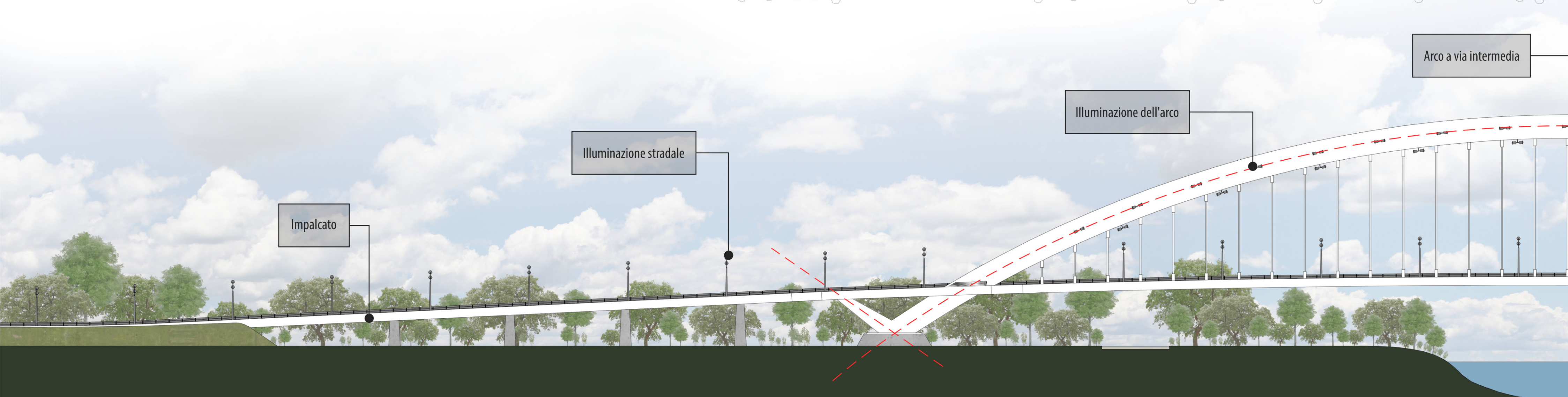
PONTI AD ARCO PRESENTI NEL TERRITORIO CROATO ED IN BOSNIA-HERZEGOVINA



MODELLO STRUTTURALE AGLI

Analisi stru e di eserciz

INQUADRAMENTO



Arco a via intermedia

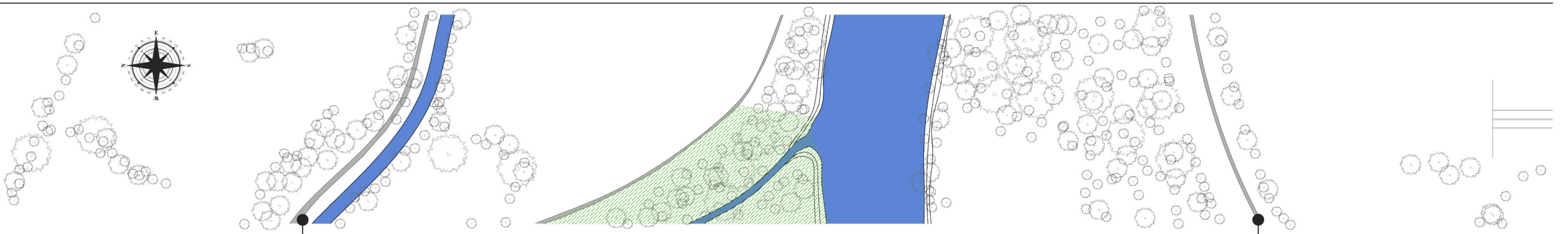
Illuminazione dell'arco

Illuminazione stradale

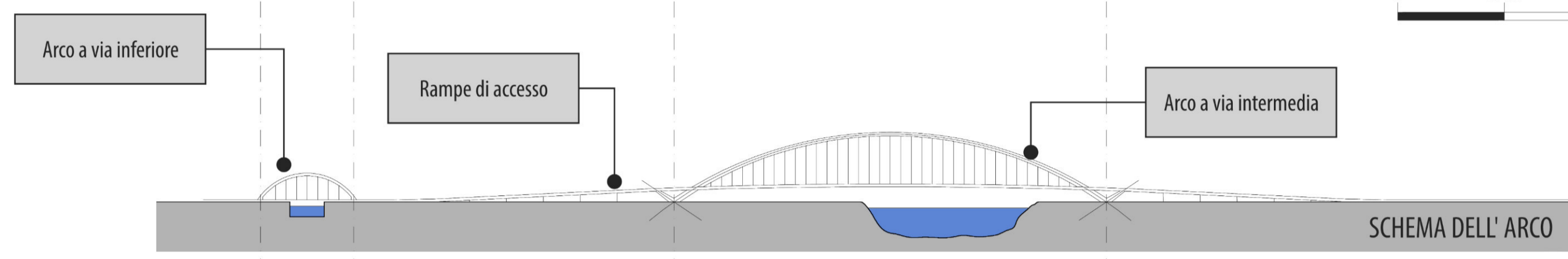
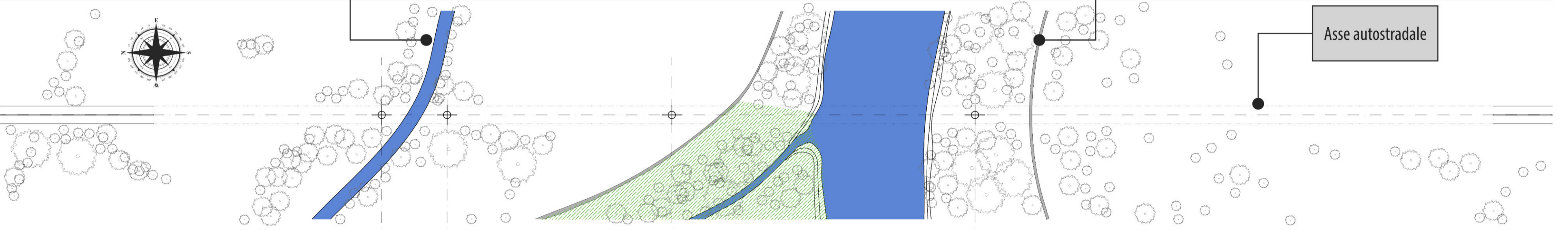
Impalcato

PROGETTO

STATO DI FATTO DELL' AREA

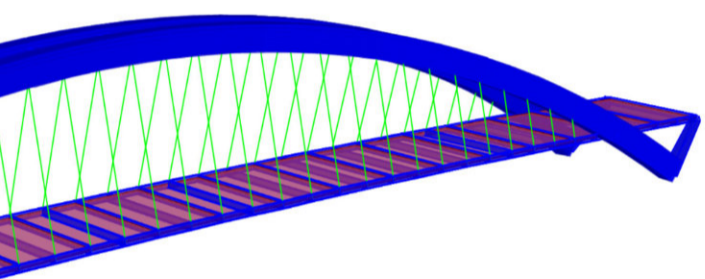


STATO DI PROGETTO DELL' AREA



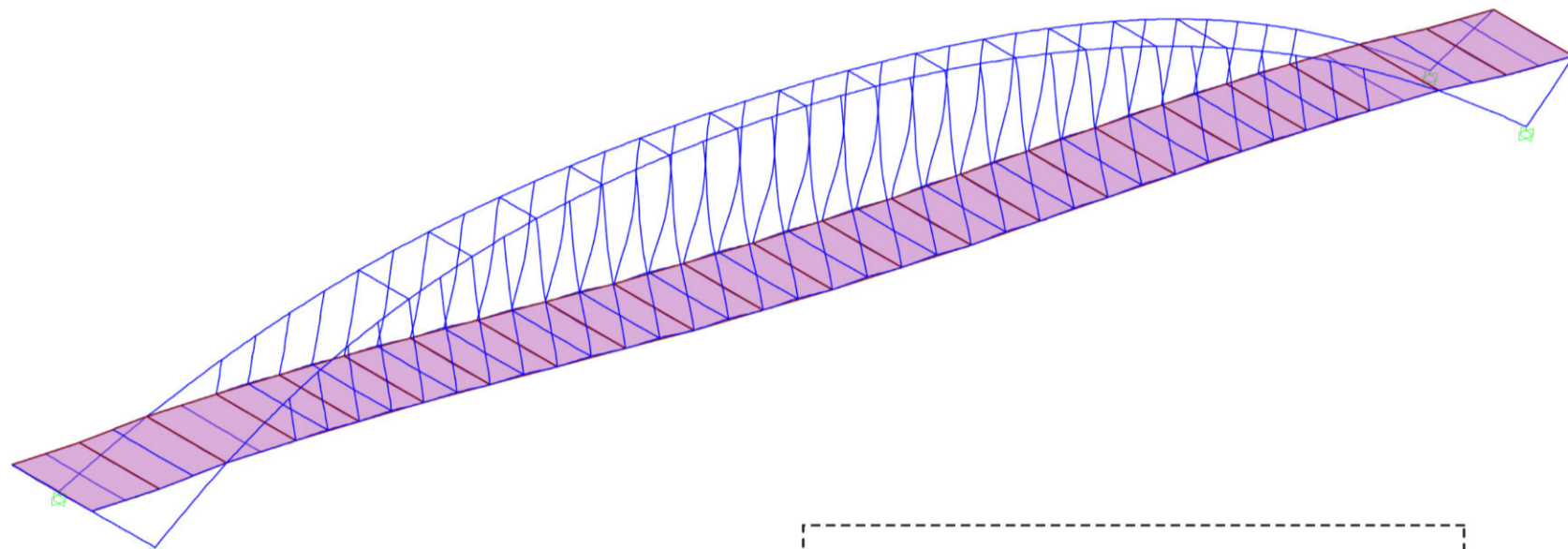
ANALISI STRUTTURALE

ELEMENTI FINITI



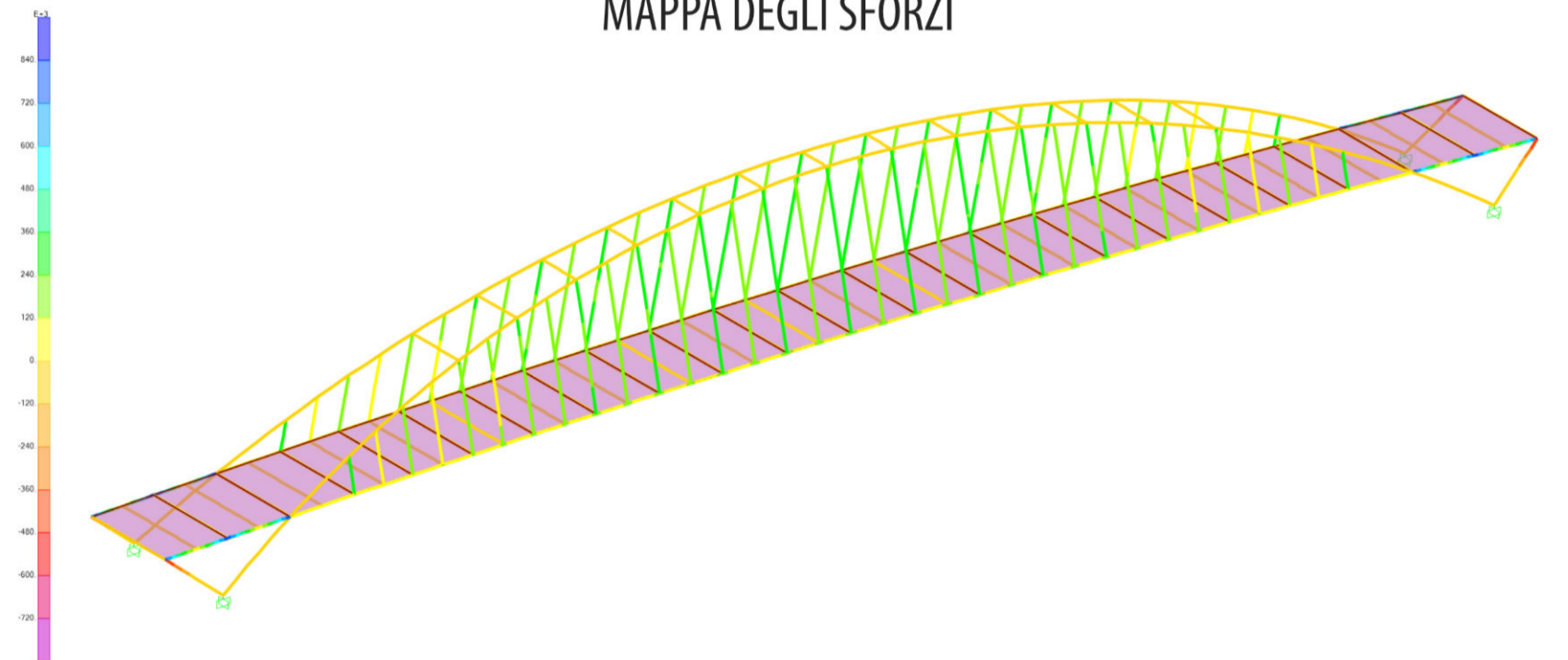
Struttura elastica lineare allo stato limite ultimo
in accordo con le NTC 2018.

DEFORMATA

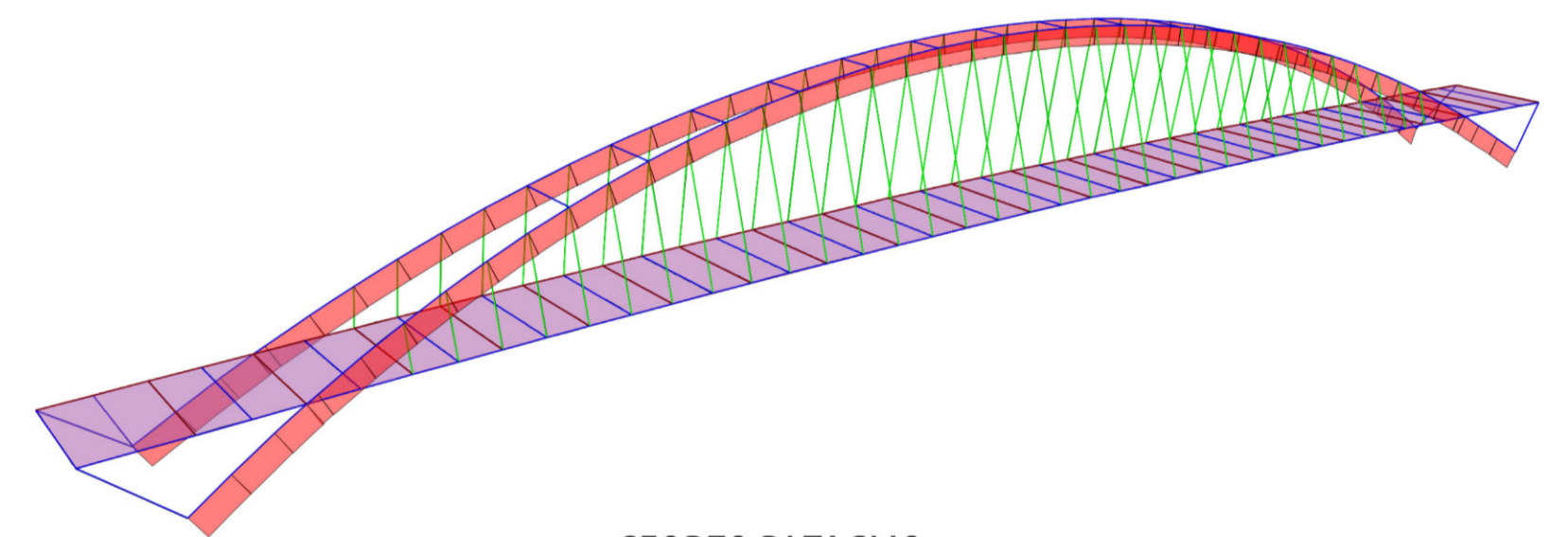


Carichi in accordo con il Cap 5 - Ponti stradali - 5.1.3.3.3

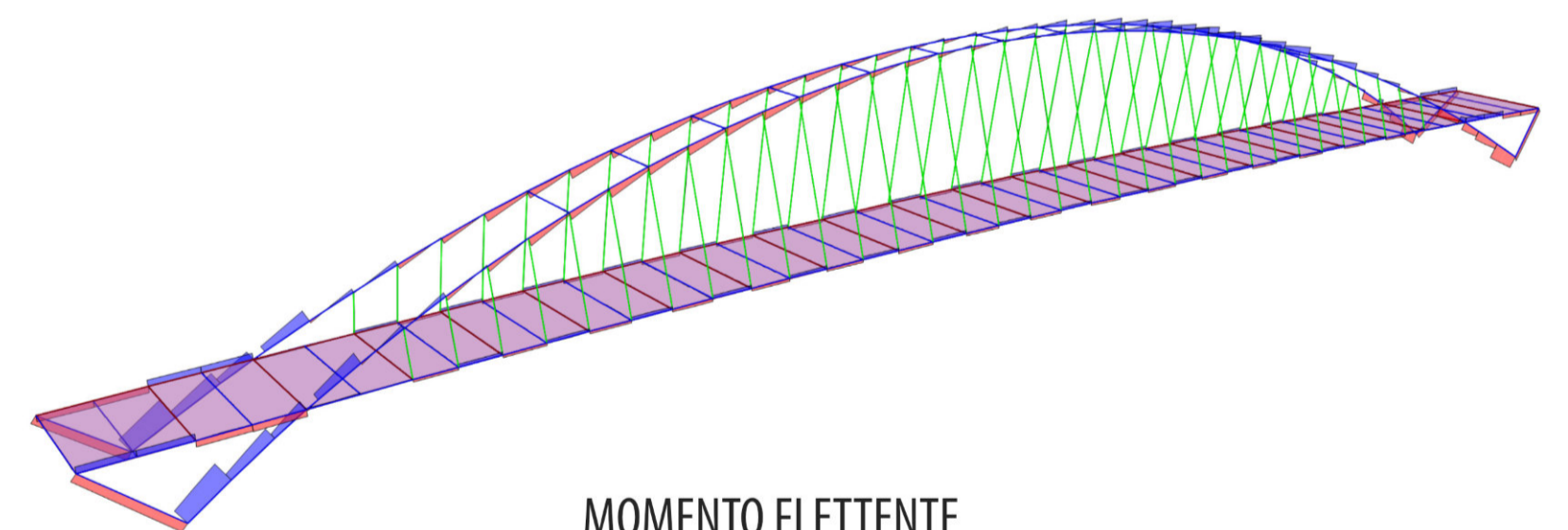
MAPPA DEGLI SFORZI



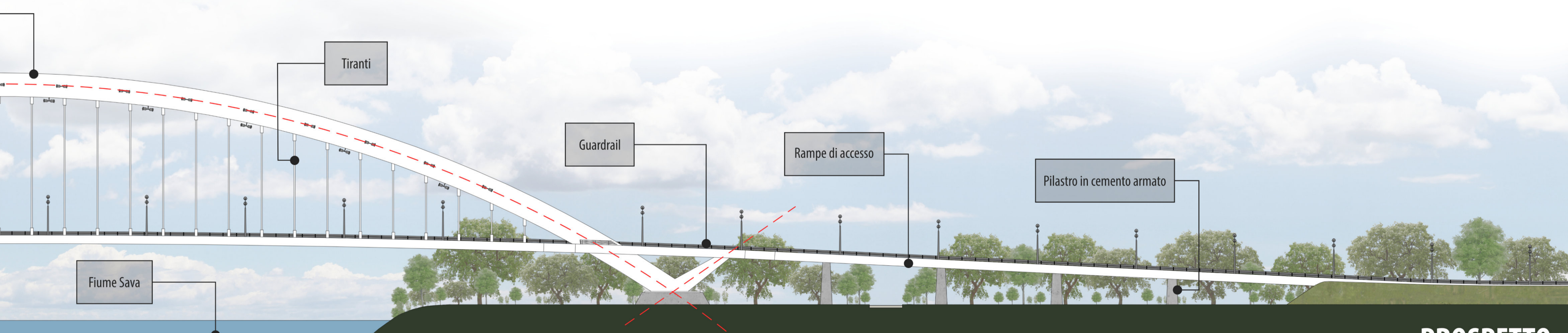
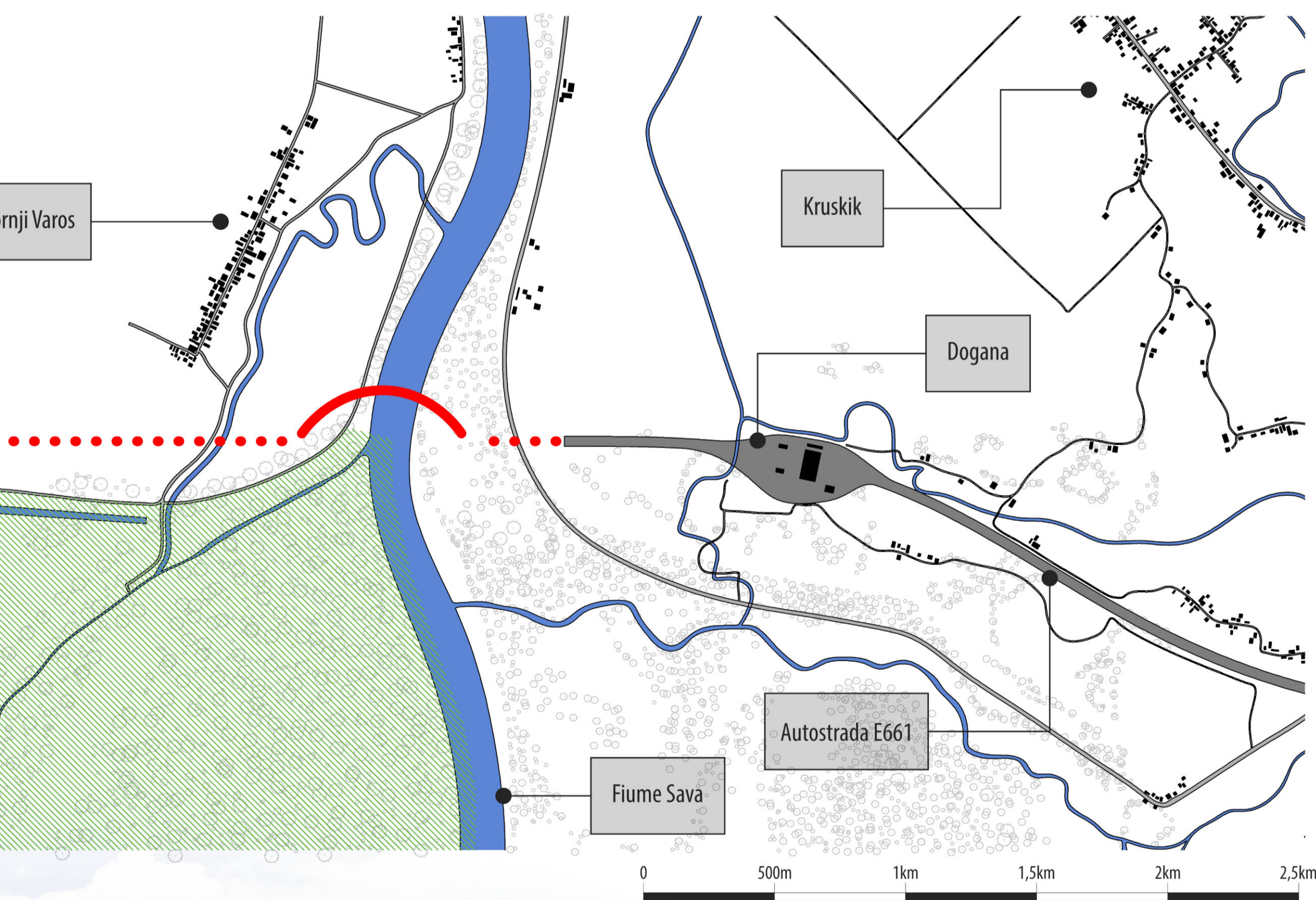
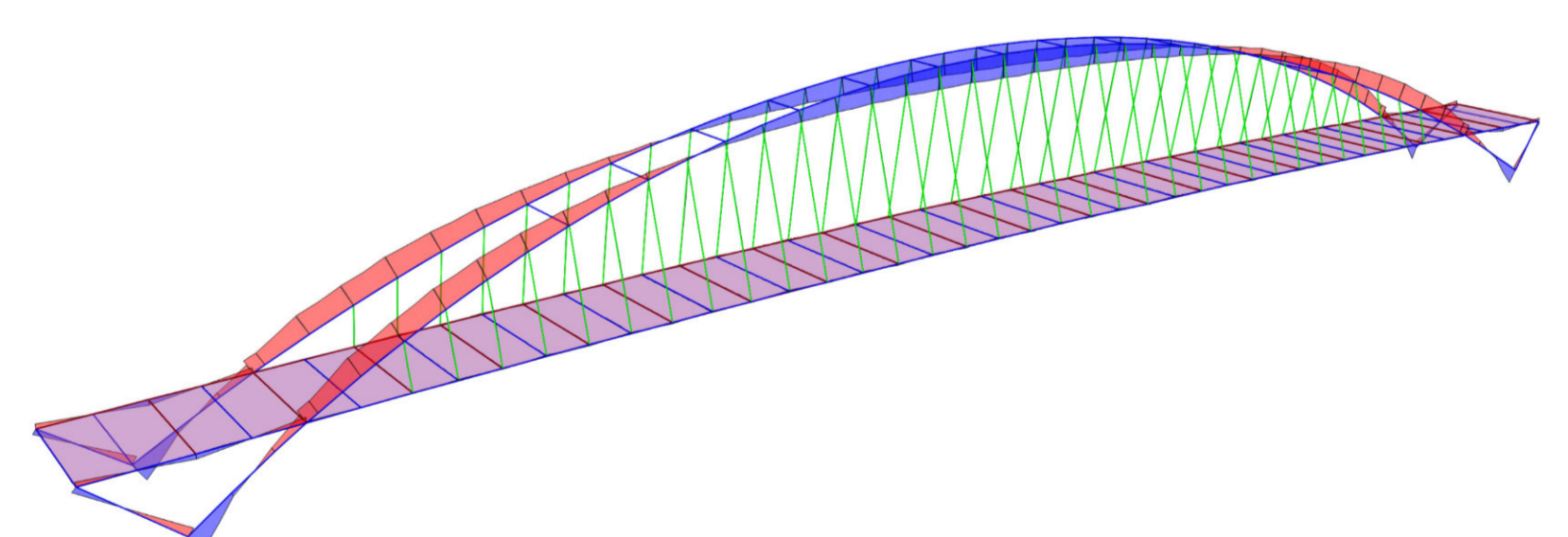
SFORZO NORMALE



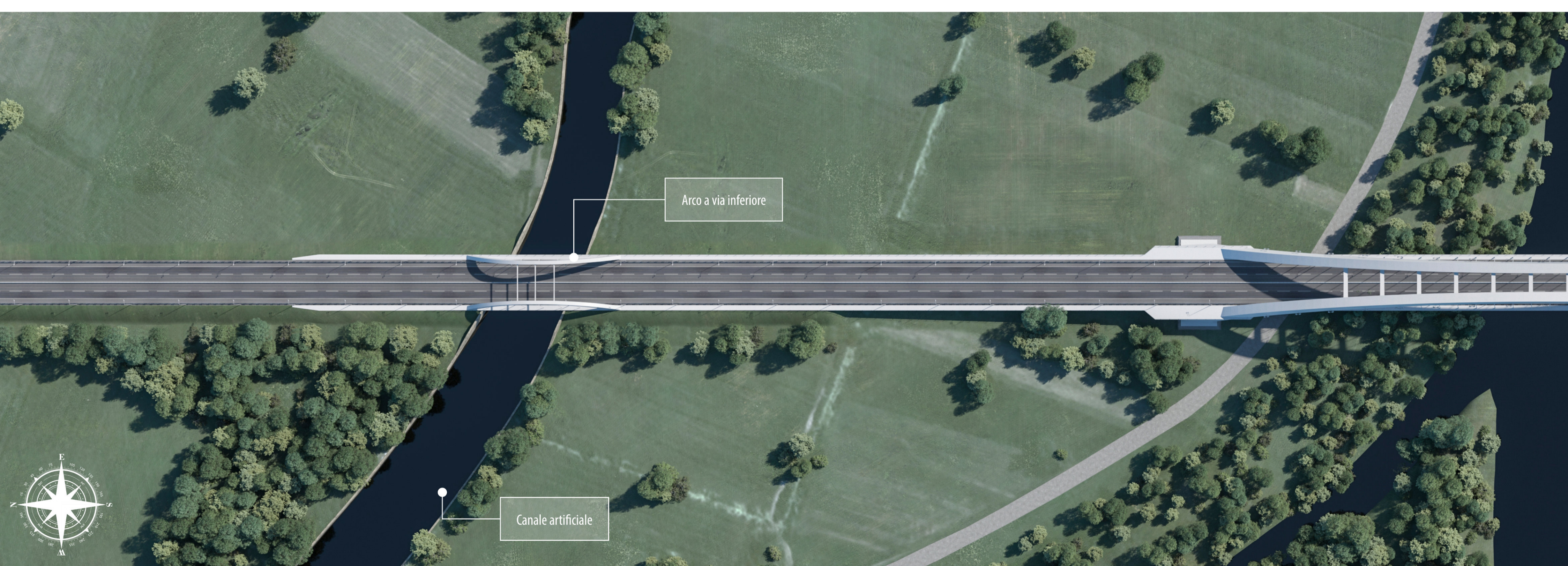
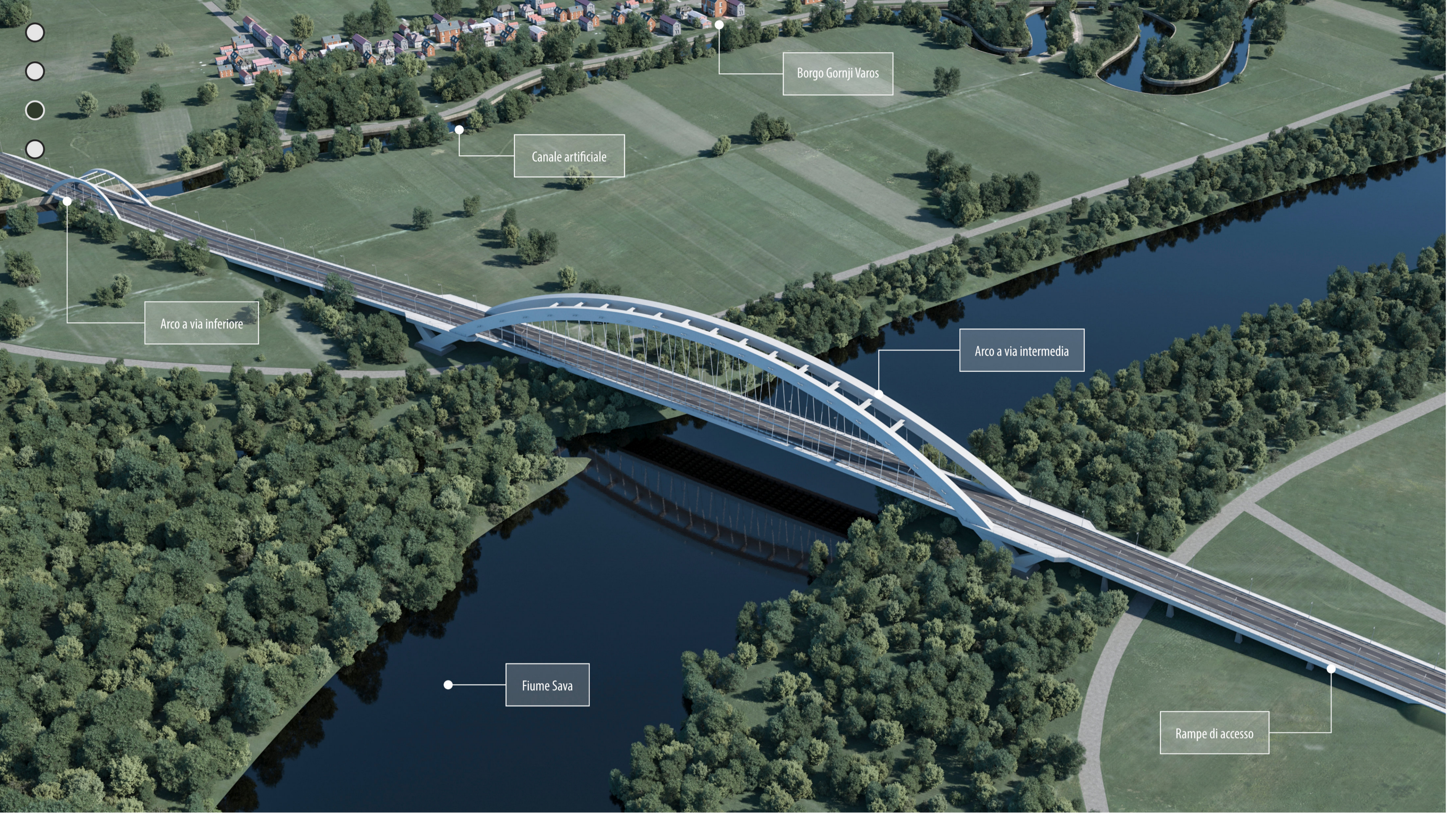
SFORZO DI TAGLIO

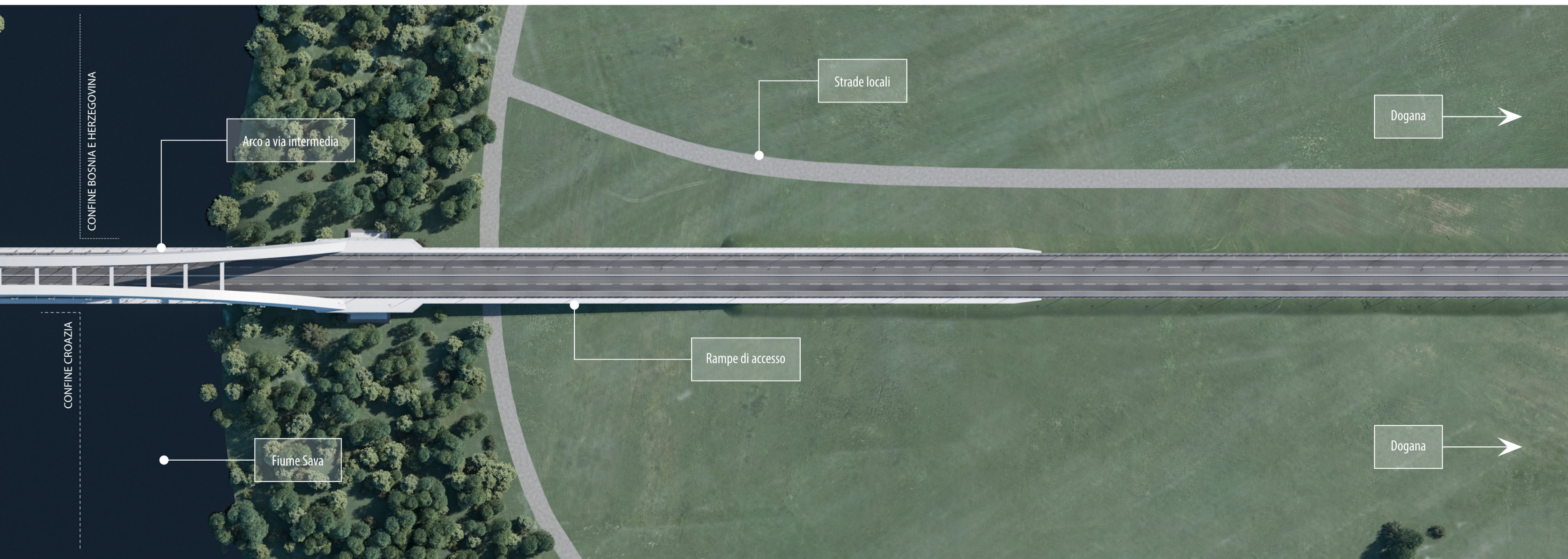
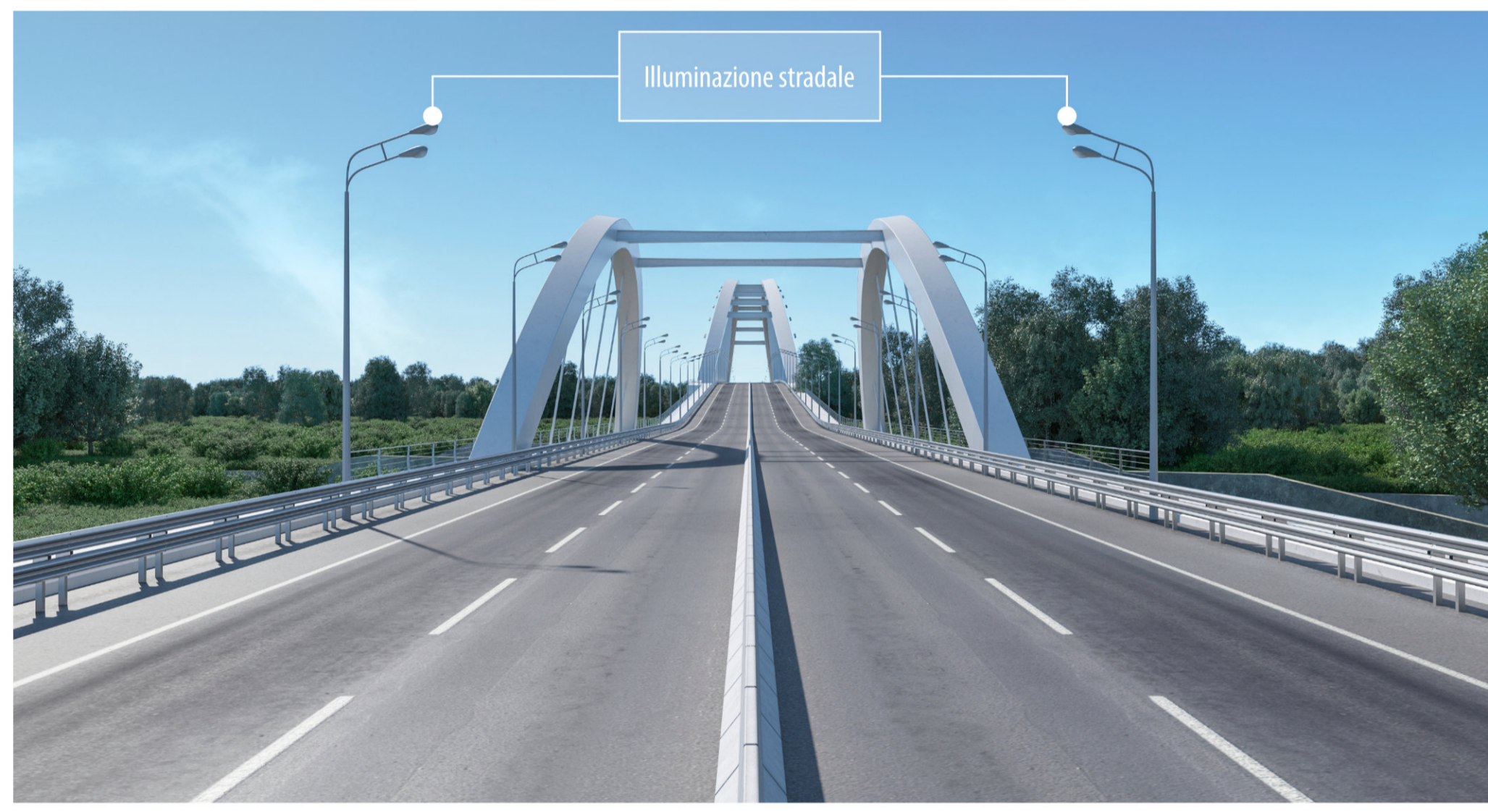
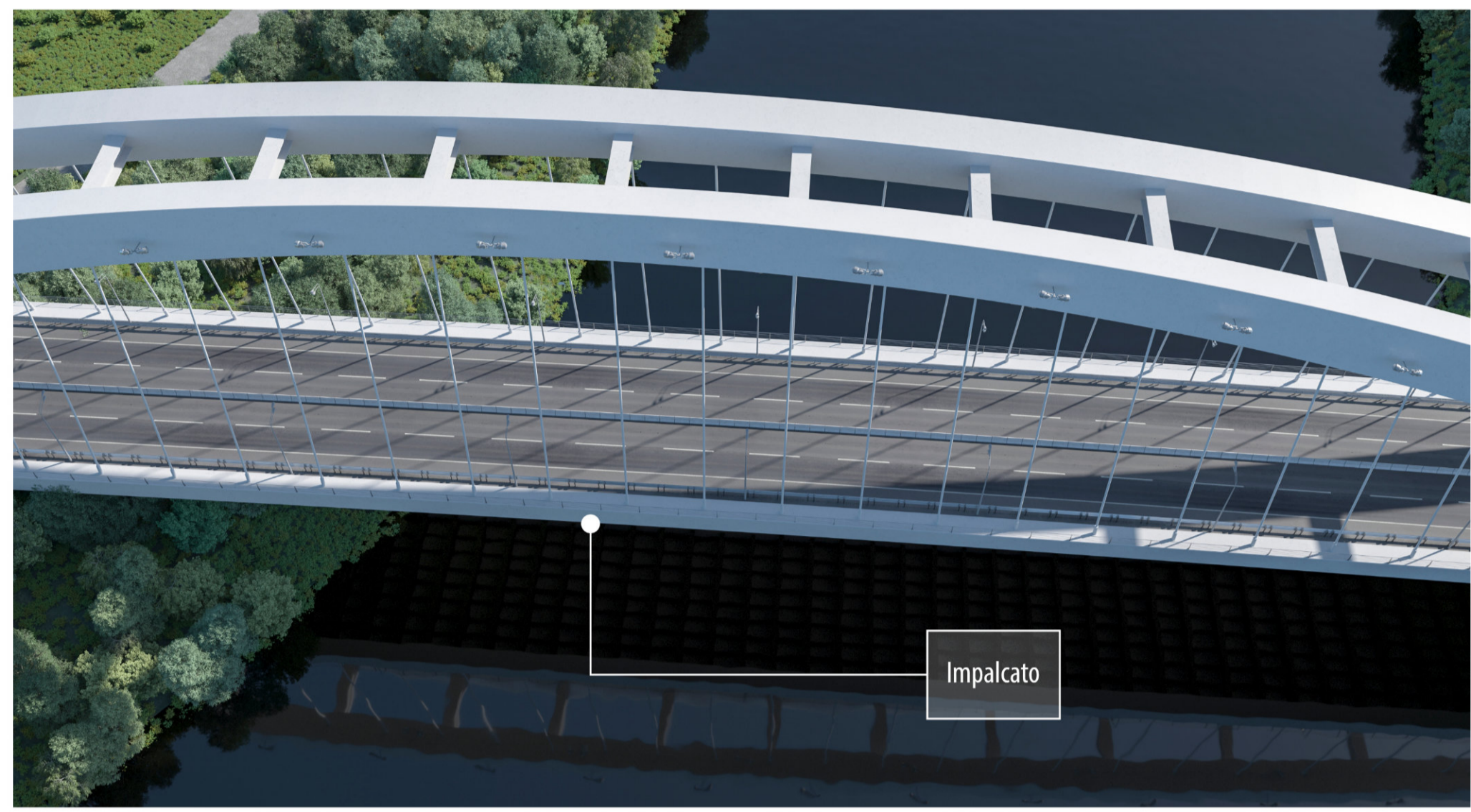


MOMENTO FLETTENTE



PROSPETTO





GRADISKA: PONTE SUL FIUME SAVA



Laureando: Alfonso Mastrangelo

Relatore: prof. Alessandro Zona

SCHEMA GENERALE



FINALITA':

- Potenziamento dell'area nord della Bosnia
- Collegamenti diretti con la E70 croata
- Collegamento diretto Livno-E70 croata

INTERVENTI:

- Livno – Banja Luka
- Zenica – Banja Luka
- Zenica – Doboj
- Doboj – Samac
- Banja Luka – Gradiska
- Gradiska – E70
- Samac – E70

○ Città

— Fiume Sava

— Autostrade

— Strade in fase di potenziamento

..... Strade in fase di progettazione



Seher-Cehaja (Bosnia)



Maslenica (Croatia)



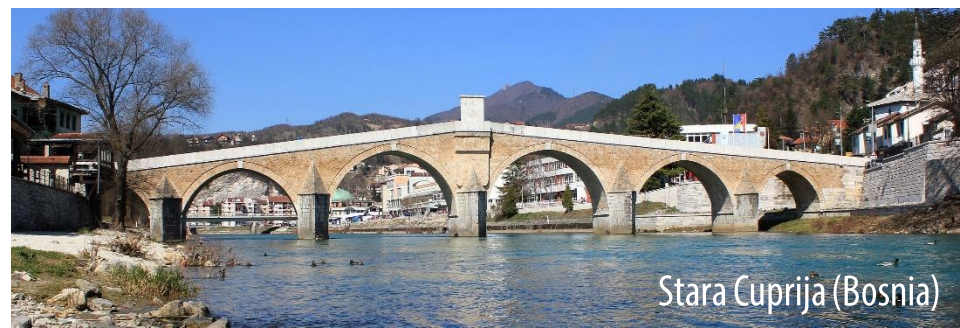
Ovciji Brod (Bosnia)



Krka (Croatia)

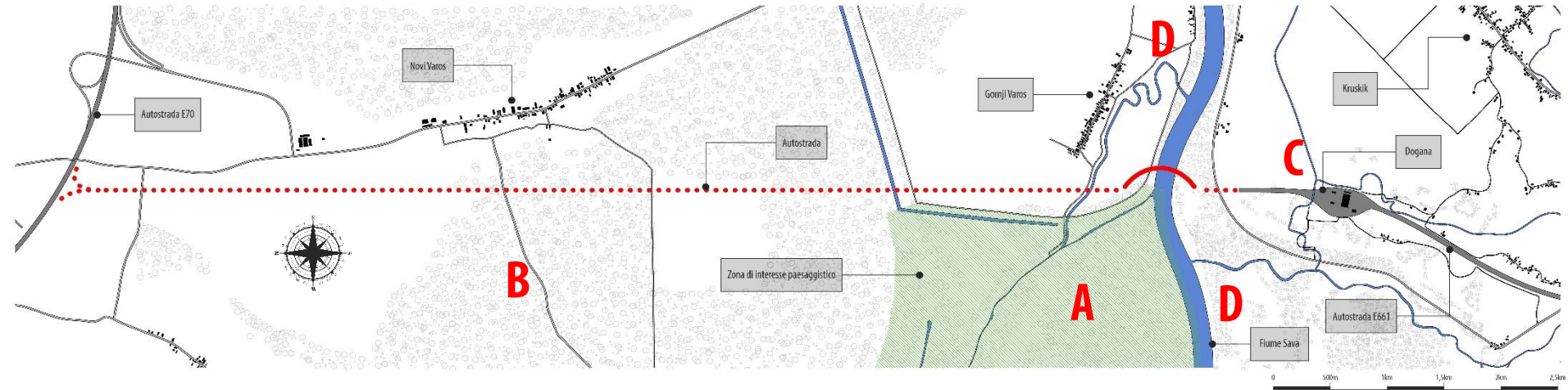


Mehmed Pasa Sokolovic (Bosnia)



Stara Cuprija (Bosnia)

VINCOLI DI PROGETTO



Area di interesse paesaggistico

A



Strade locali

B



Dogana

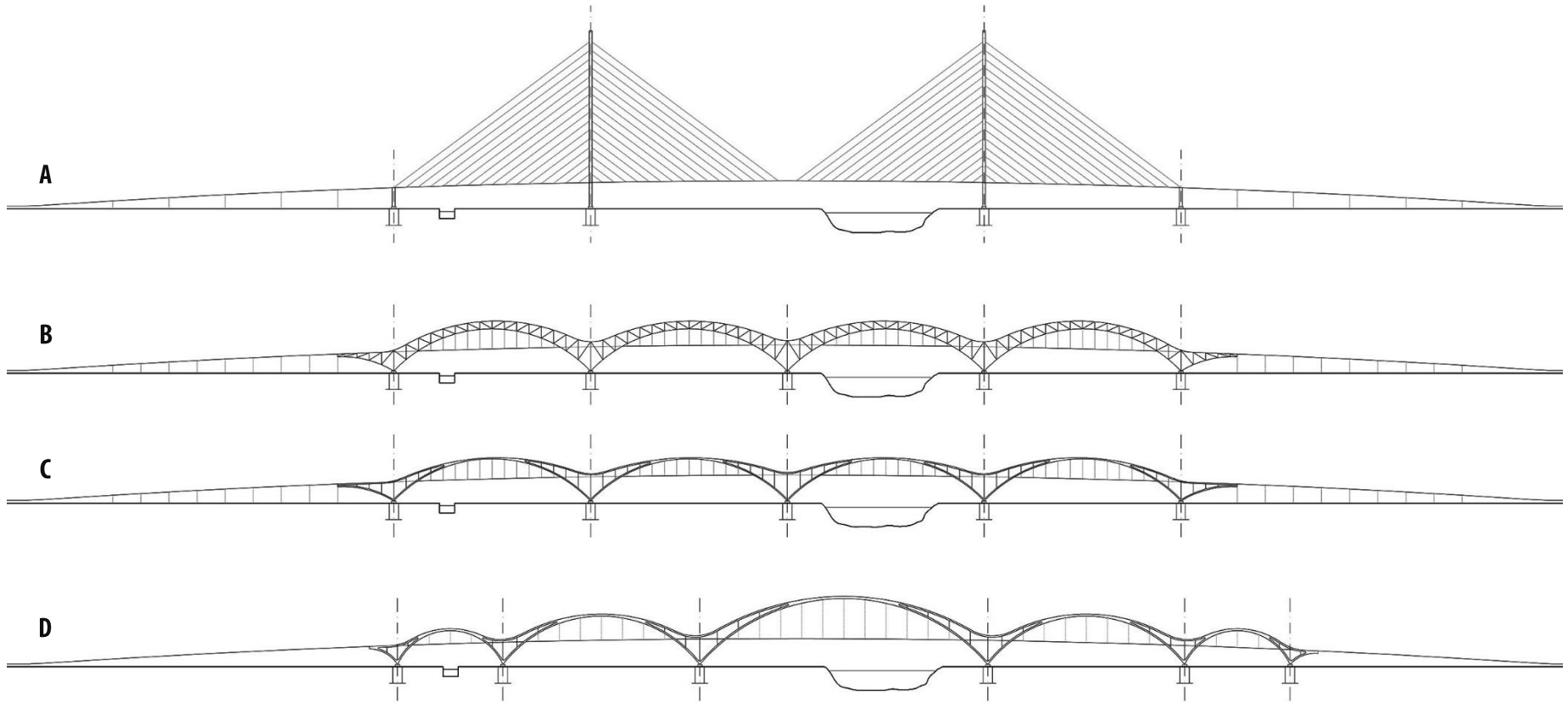
C



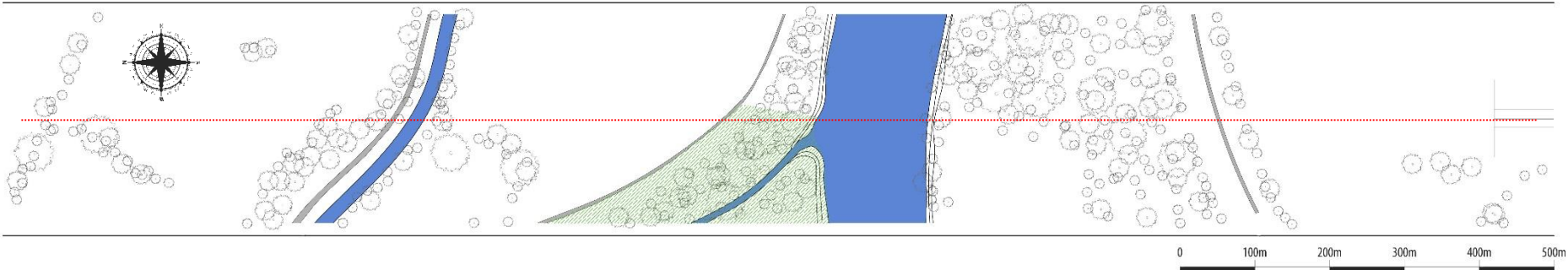
Fiume Sava
Canale/Fiume artificiale

D

BOZZE DI PROGETTO



STATO DI FATTO DELL' AREA



PROGETTO

A

Eliminazione della strada locale
lungo il fiume artificiale

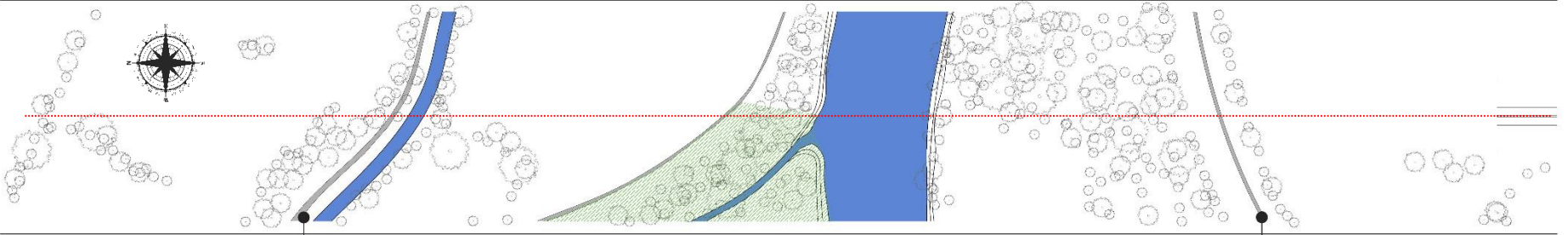
B

Avvicinamento della strada locale
sull'argine bosniaco

C

Ponte a via inferiore sul fiume
artificiale

STATO DI FATTO DELL' AREA



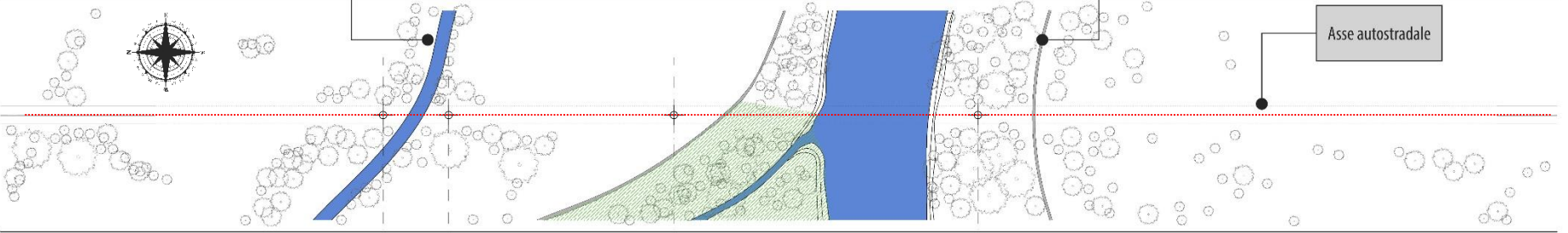
Eliminazione strada locale

A

B

Avvicinamento strada locale

STATO DI PROGETTO DELL' AREA



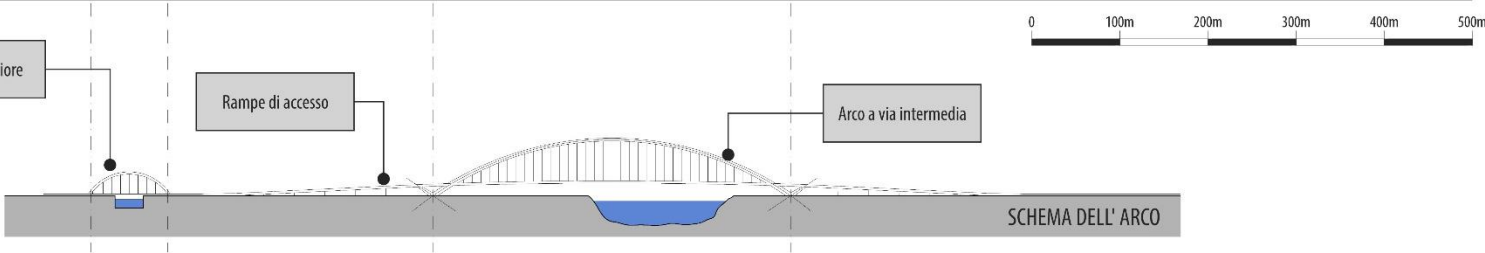
Asse autostradale

C

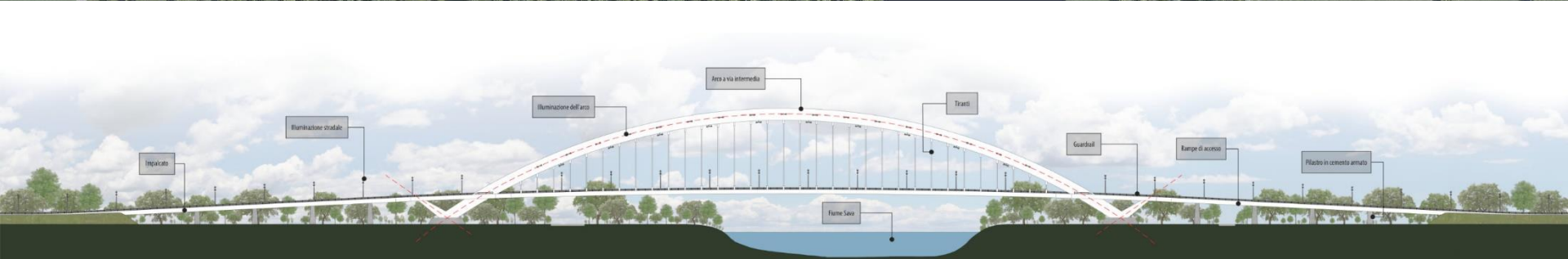
Arco a via inferiore

Rampe di accesso

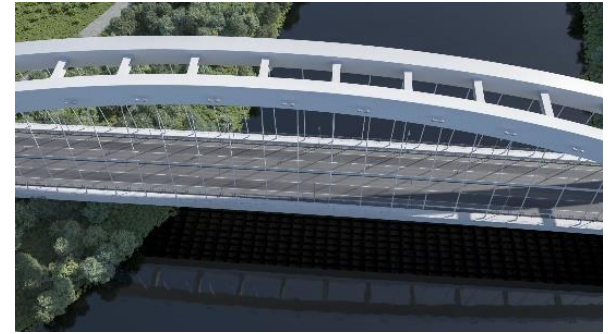
Arco a via intermedia



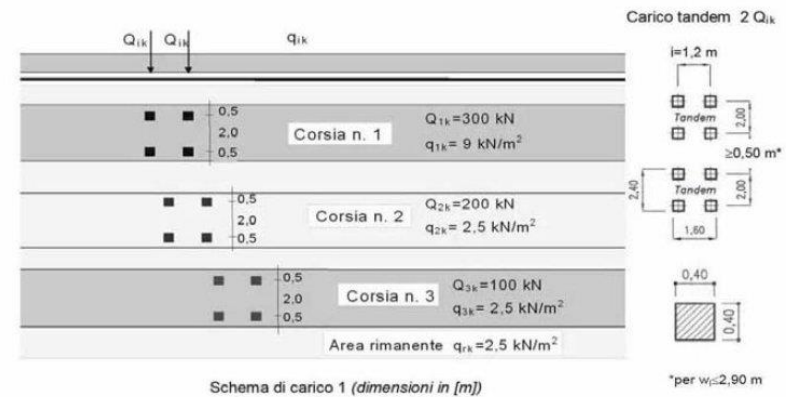
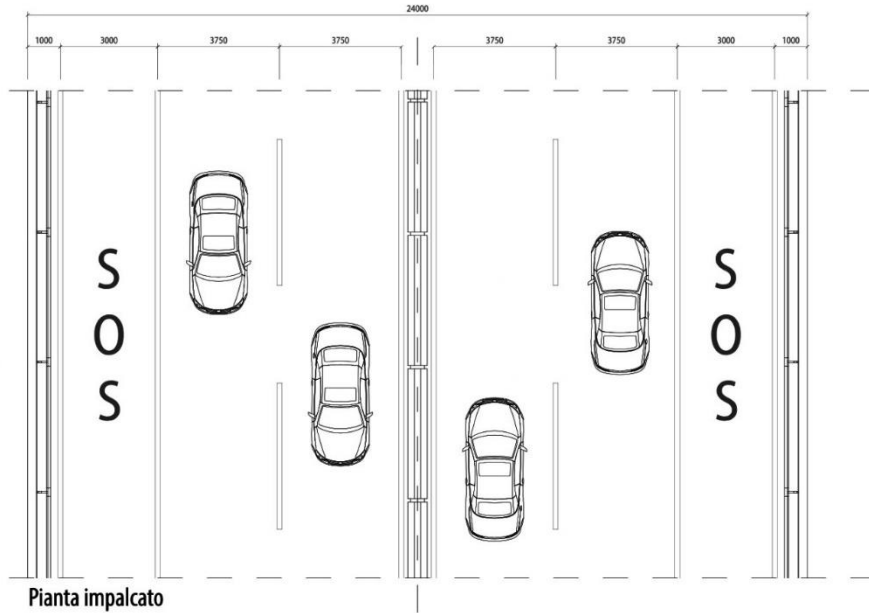
SCHEMA DELL' ARCO



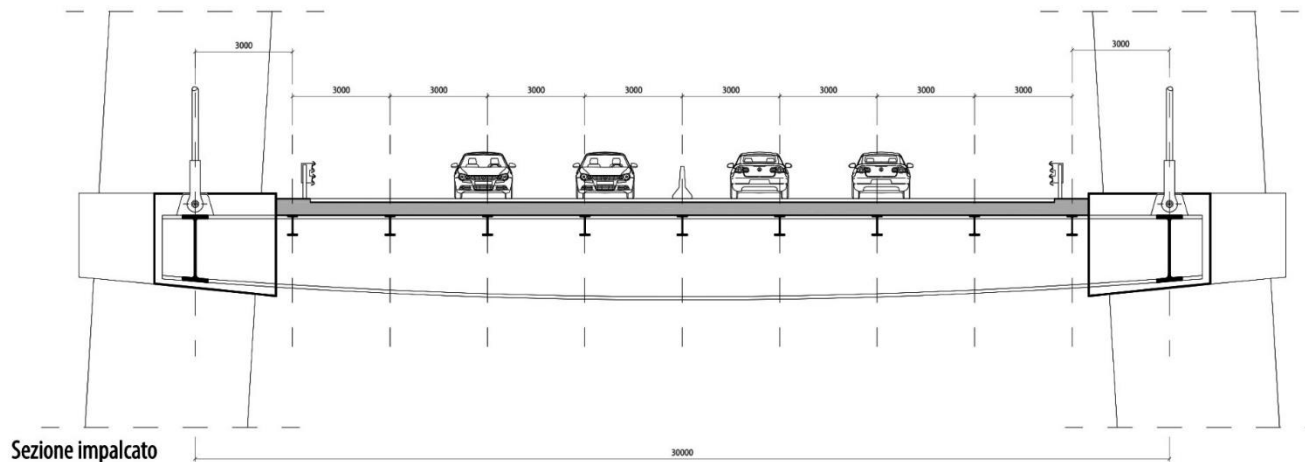
IMPALCATO



Vista impalcato dall'alto



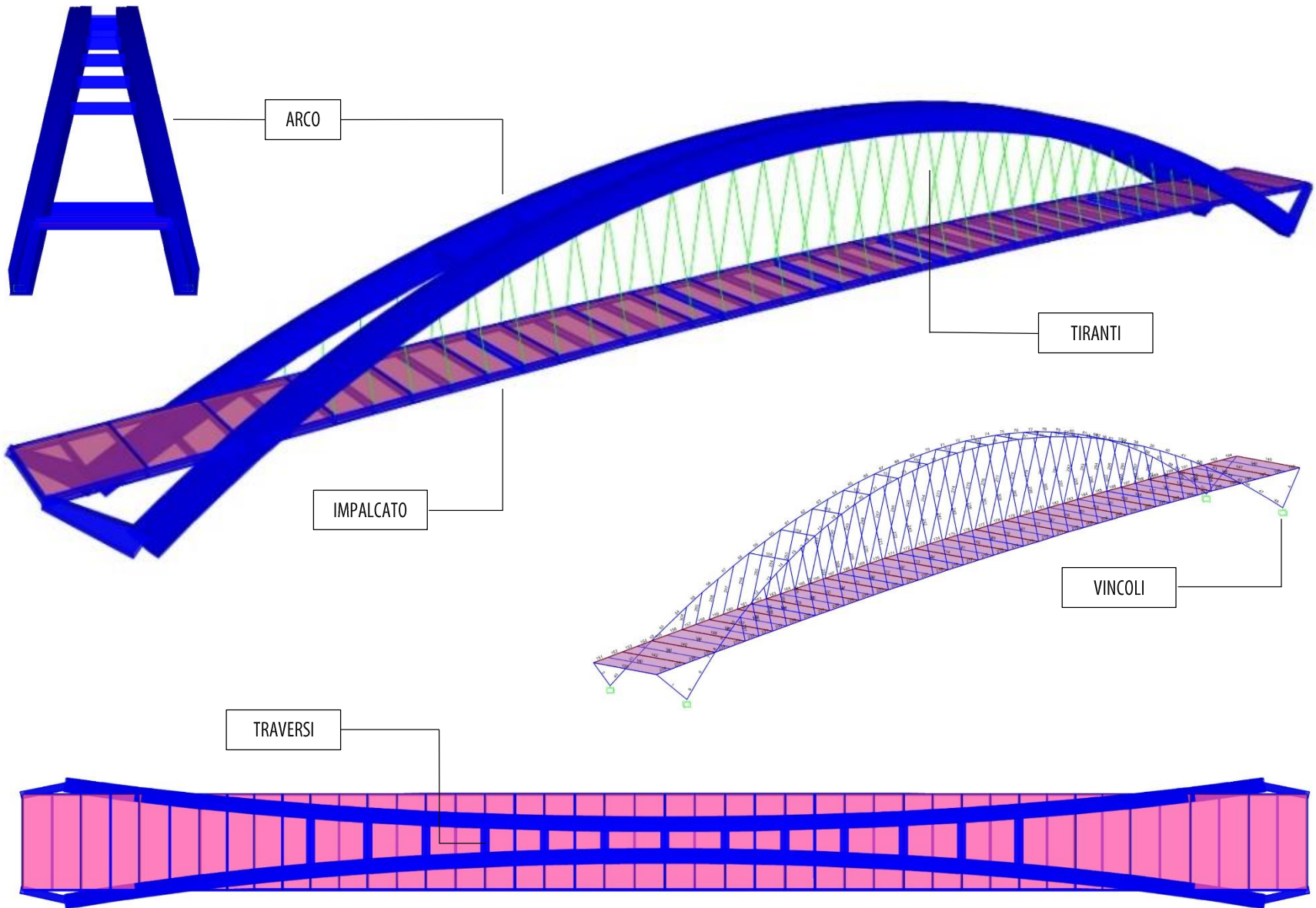
Carichi Tandem normative NTC 2018



Vista impalcato dal basso

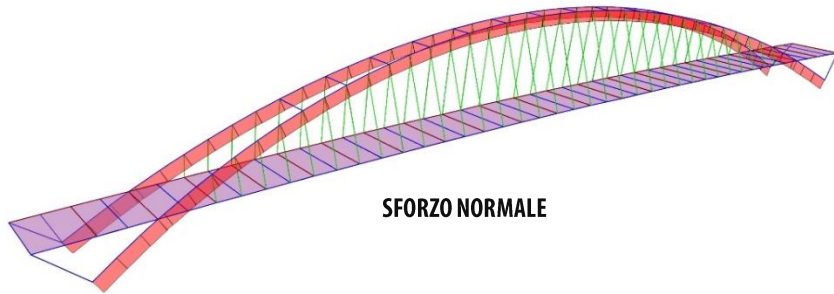
ARCO, TRAVERSI E TIRANTI

MODELLO STRUTTURALE AGLI ELEMENTI FINITI

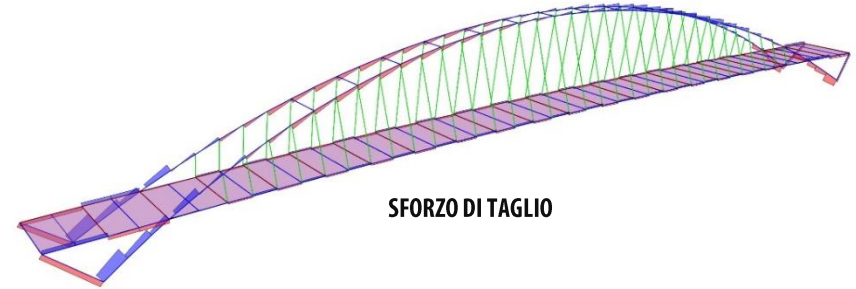


ARCO, TRAVERSI E TIRANTI

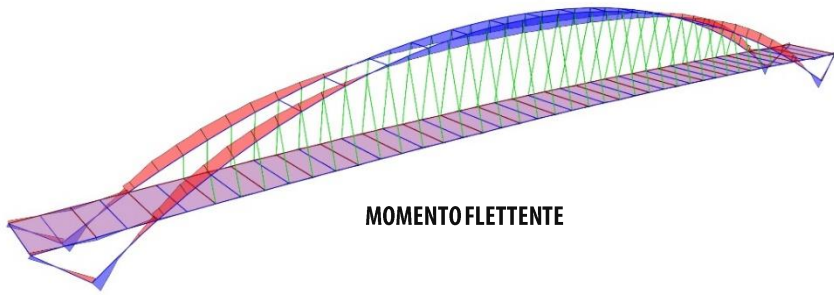
ANALISI STATICA LOCALE



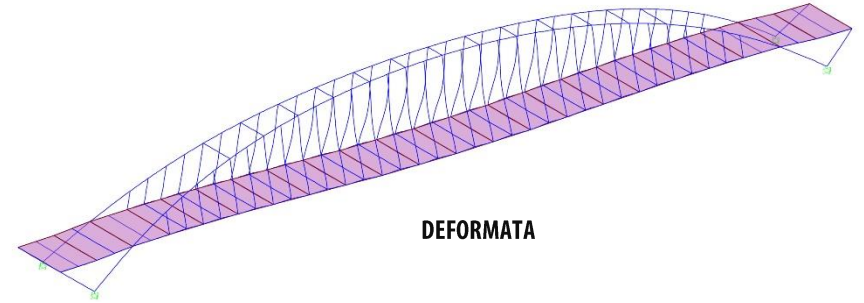
SFORZO NORMALE



SFORZO DI TAGLIO



MOMENTO FLETTENTE



DEFORMATA

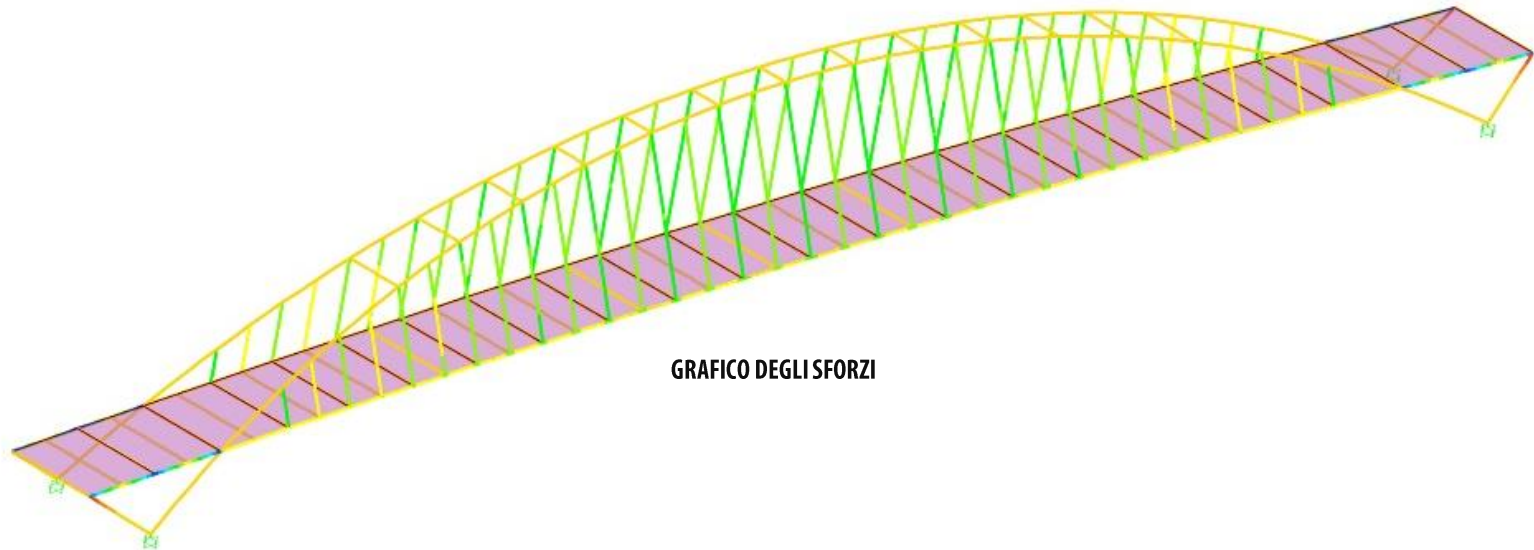
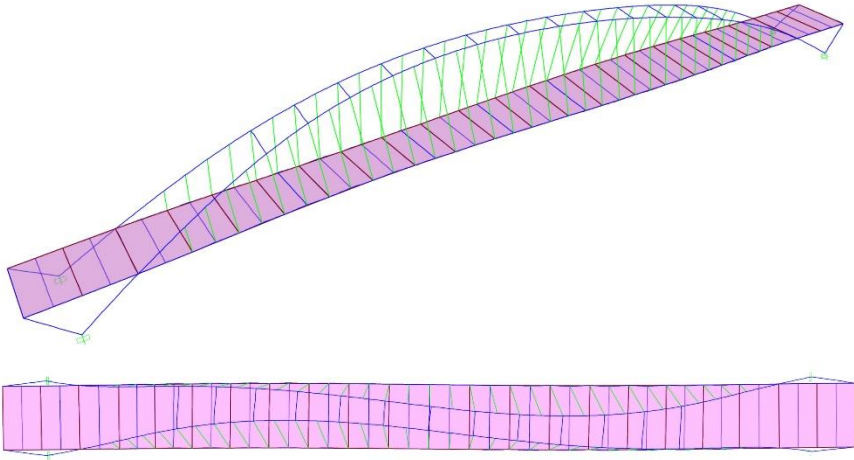


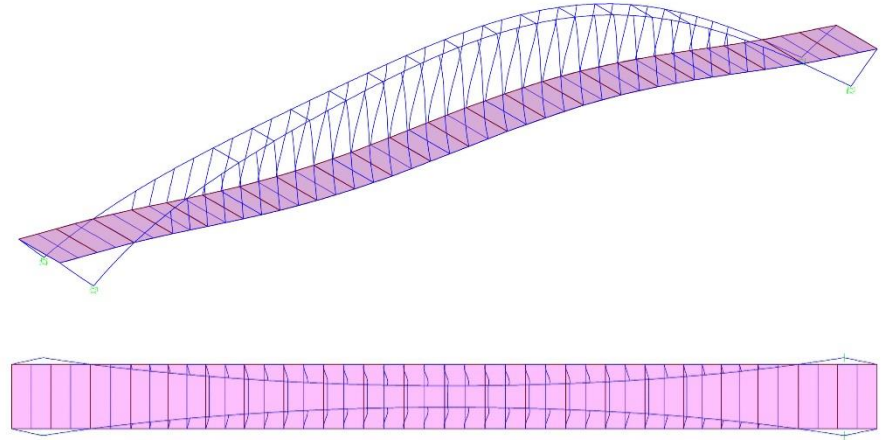
GRAFICO DEGLI SFORZI

ARCO, TRAVERSI E TIRANTI

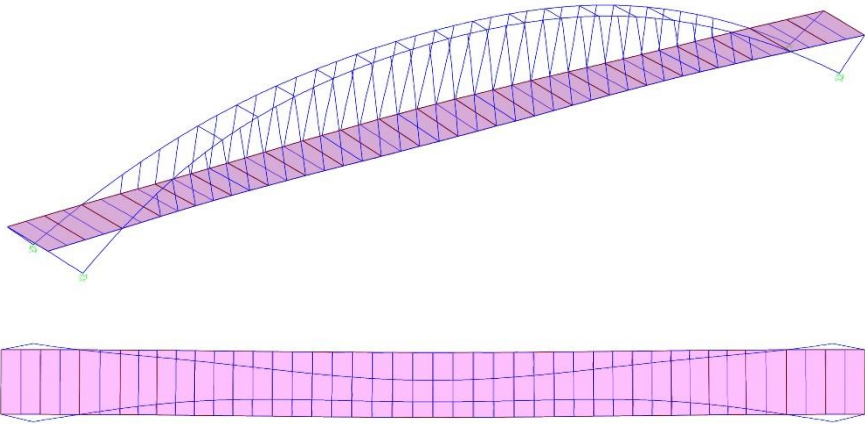
ANALISI DI STABILITA' GLOBALE



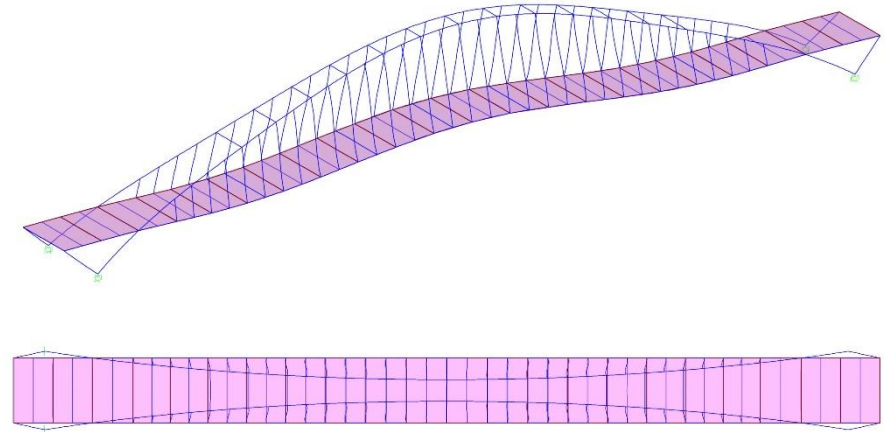
MODALITA' 1



MODALITA' 2



MODALITA' 3



MODALITA' 4

