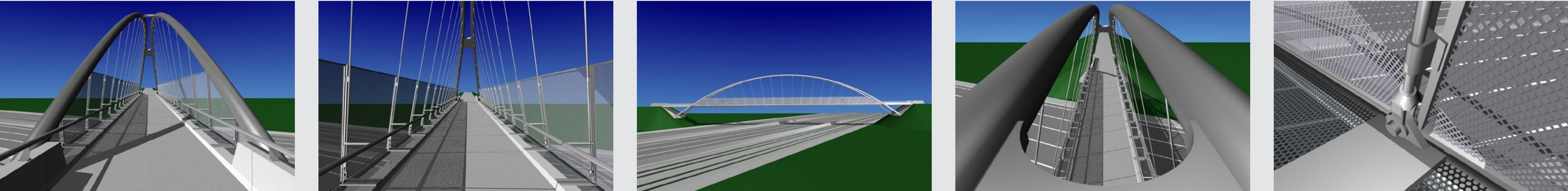
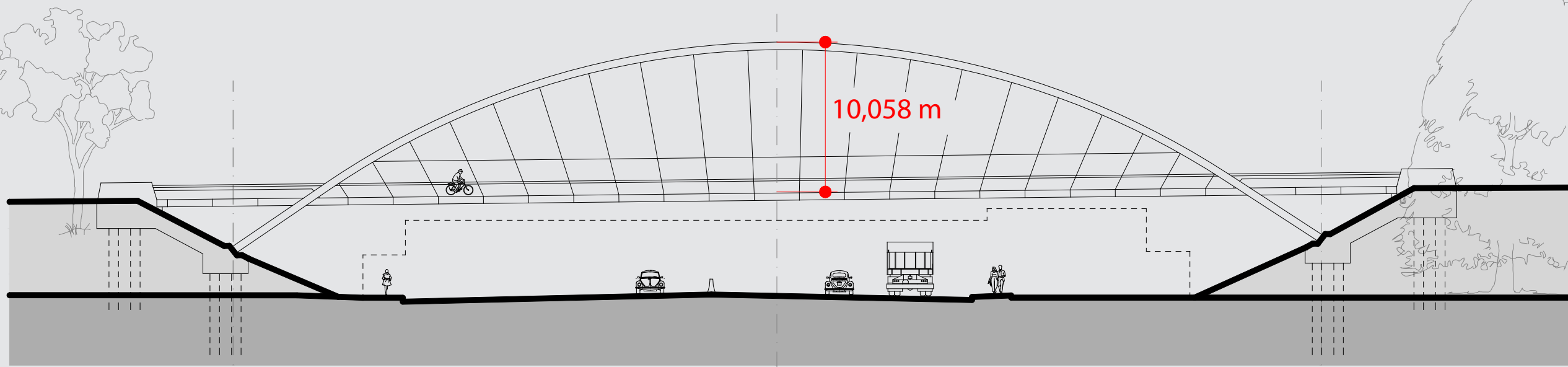


Lávka McLoughlin, Portland, Oregon

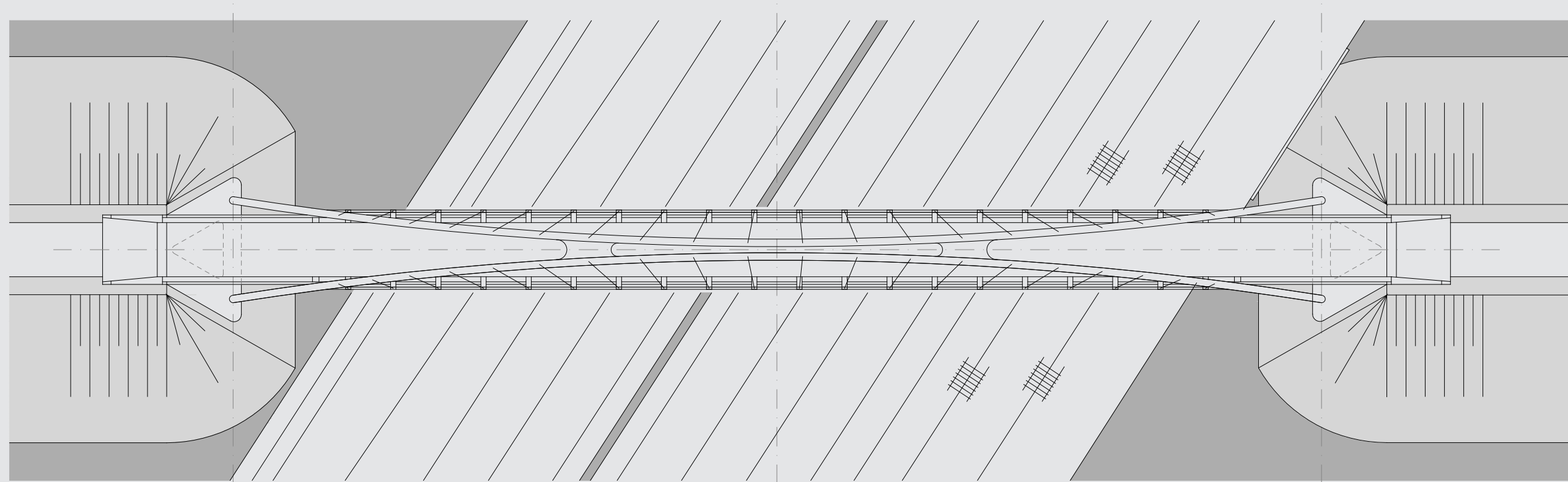
Lávka pro pěší přemostňující rychlostní komunikaci



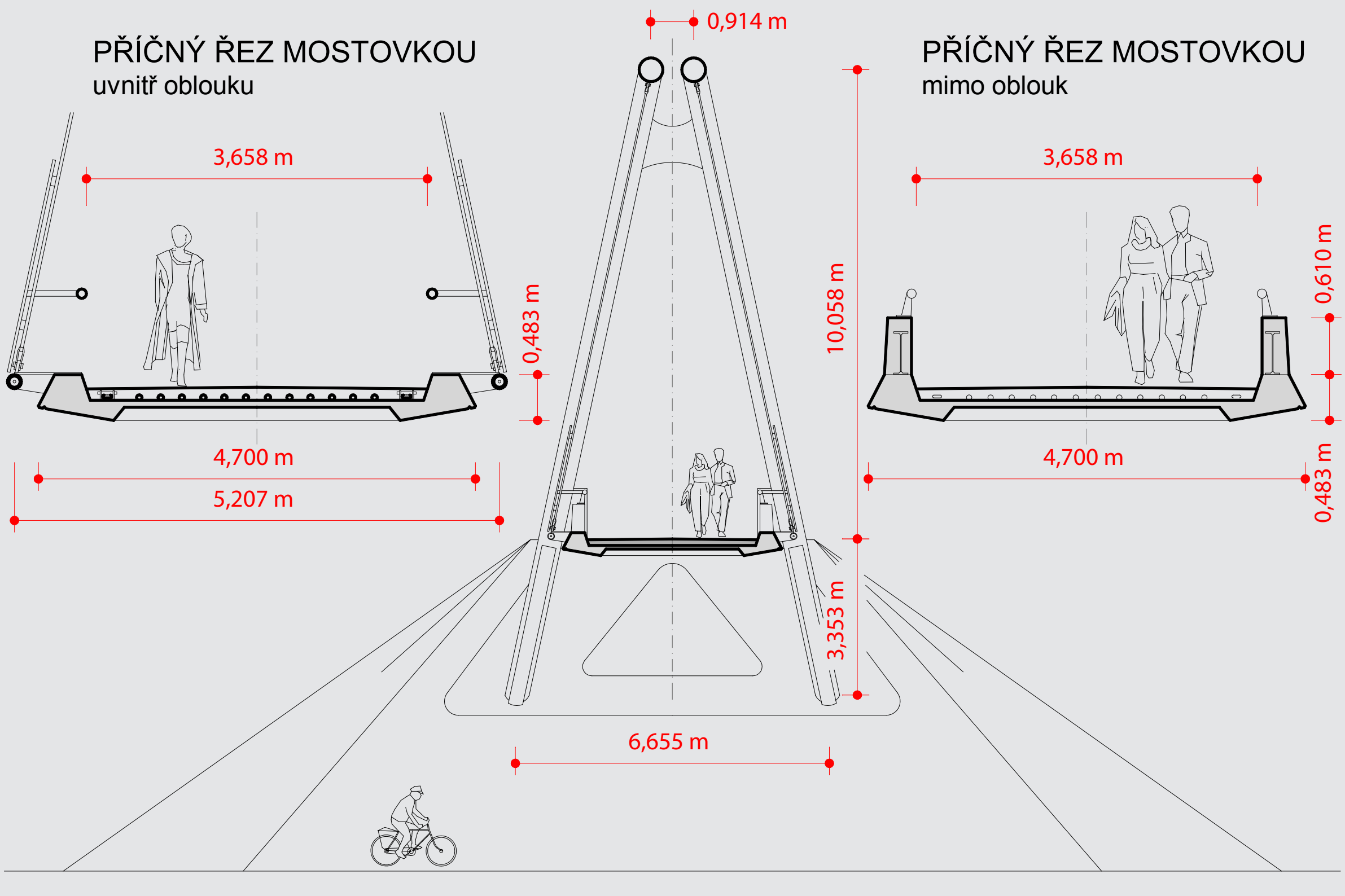
POHLED



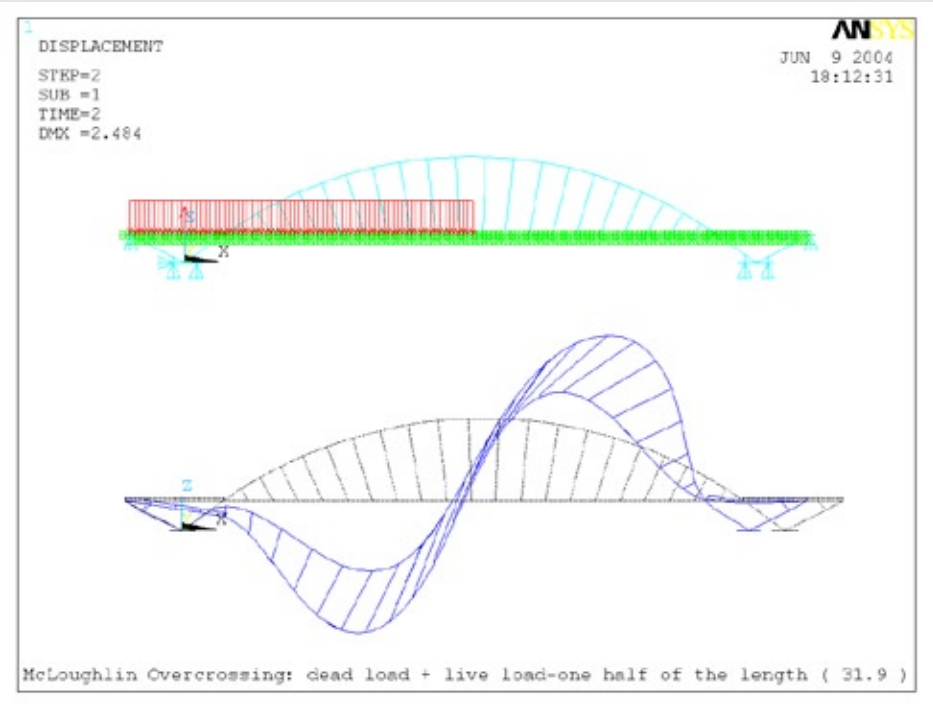
PŮDORYS



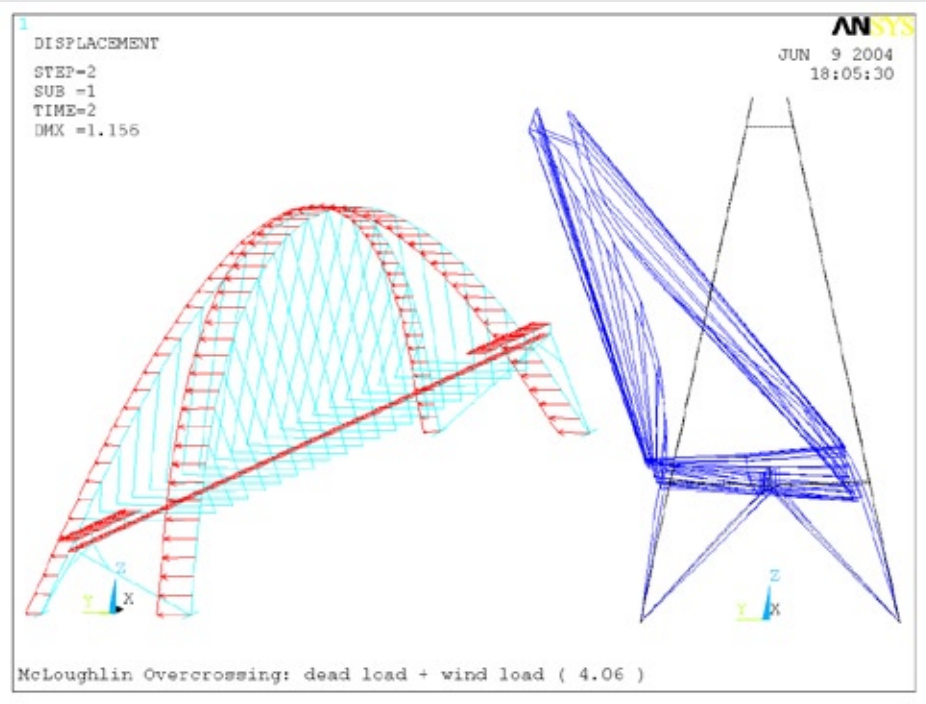
PŘÍČNÝ ŘEZ - v ose mostu



výpočetní model: stabilita oblouku

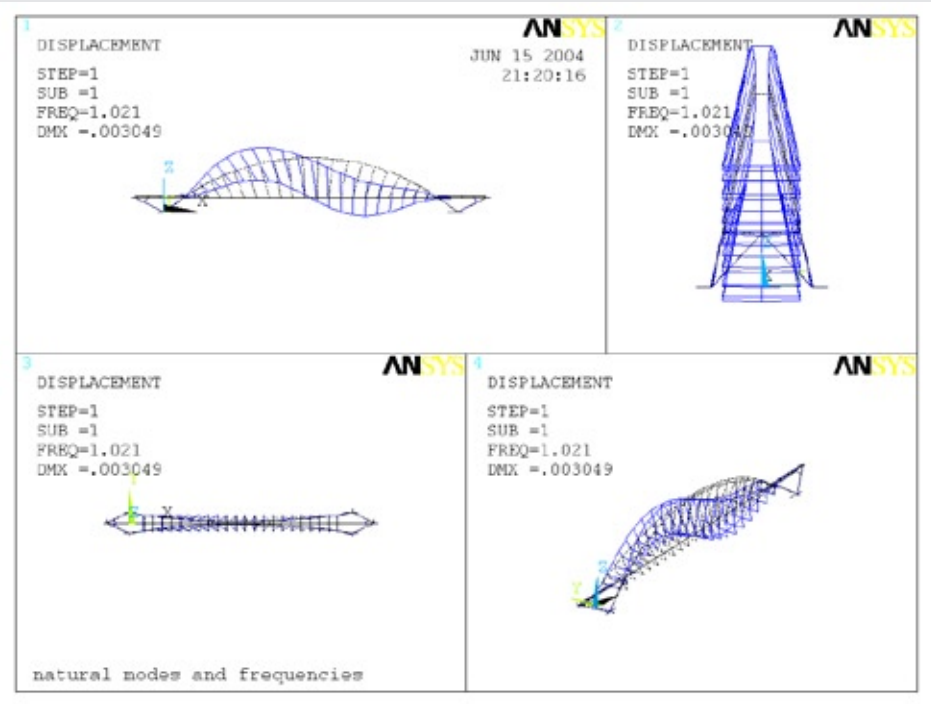


pro svislé zatížení 31.9

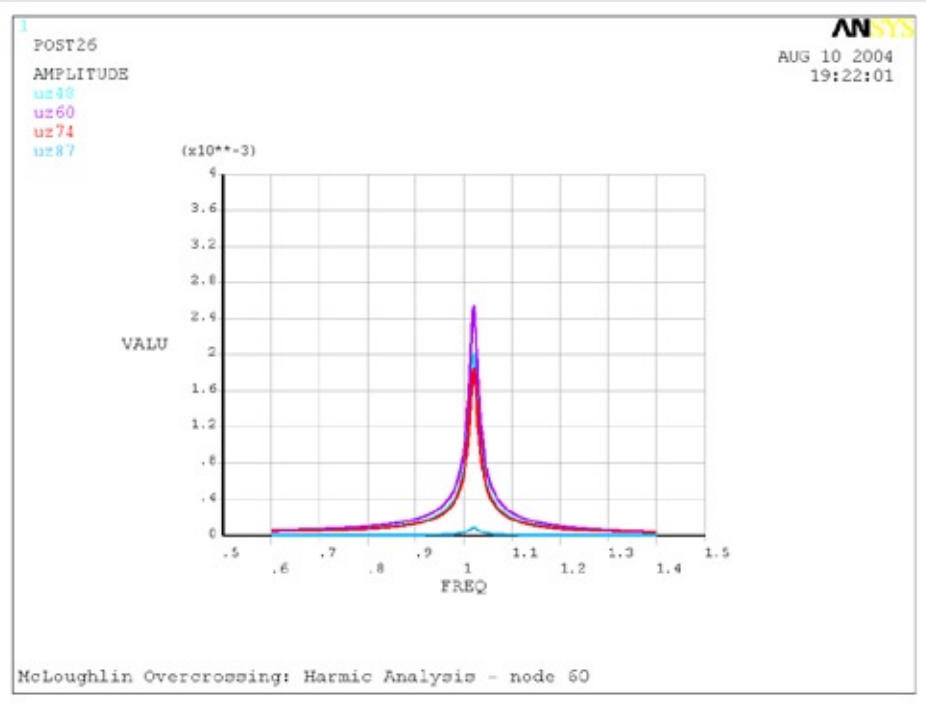


pro zatížení větrem 4.06

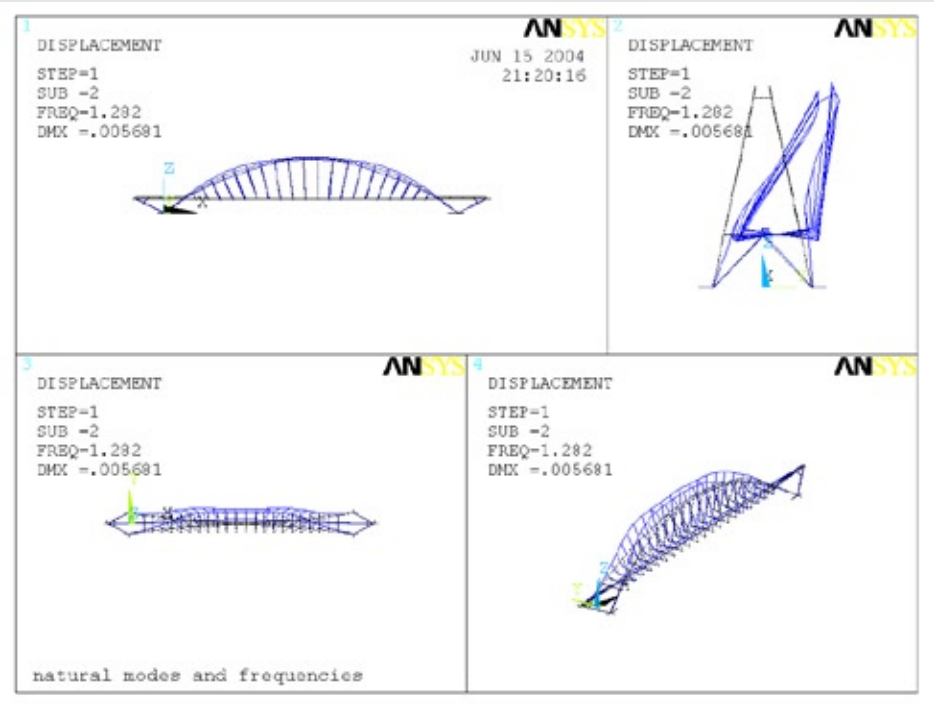
výpočetní model: dynamické chování konstrukce



Vlastní tvary a frekvence:
 $f_0 = f_{(1)} = 1.021 \text{ Hz}$
 $a_{\text{lim}} = 0.5(f_0)^{0.5} = 0.505 \text{ m/s}^2$

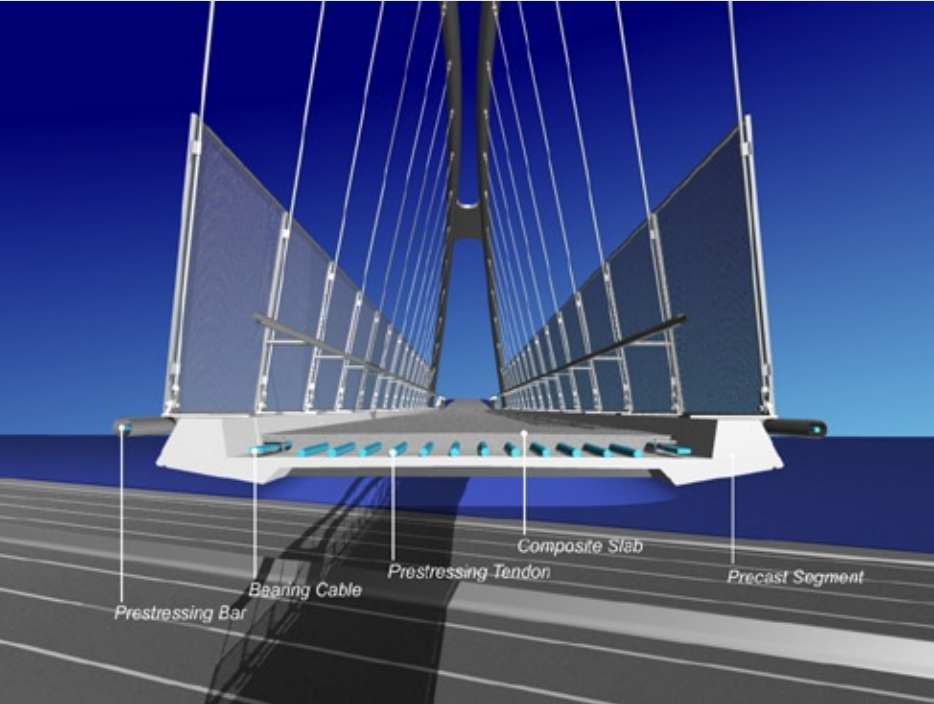
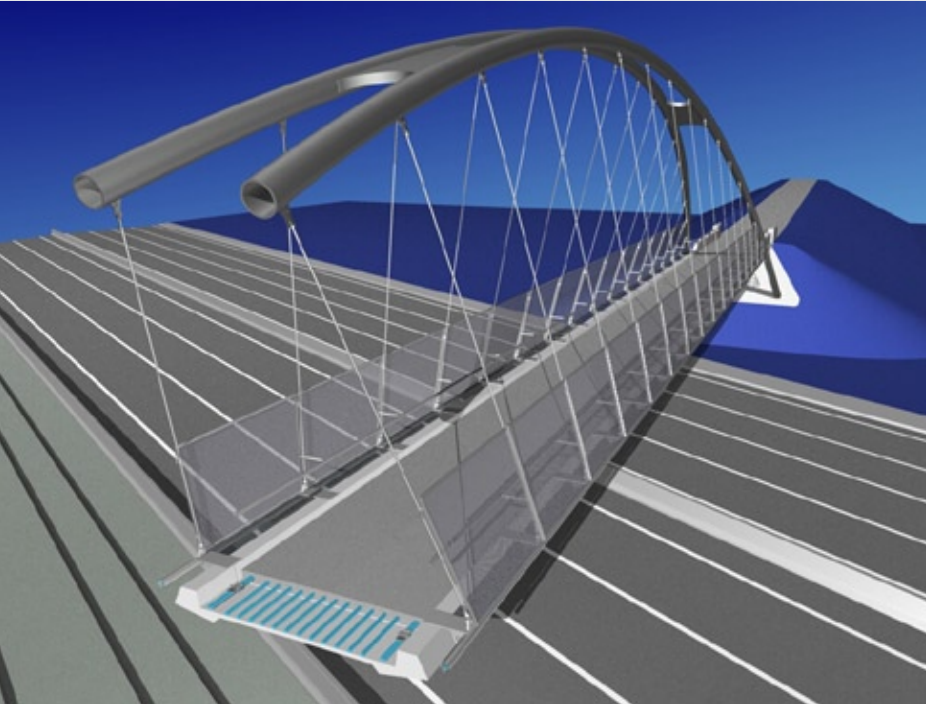
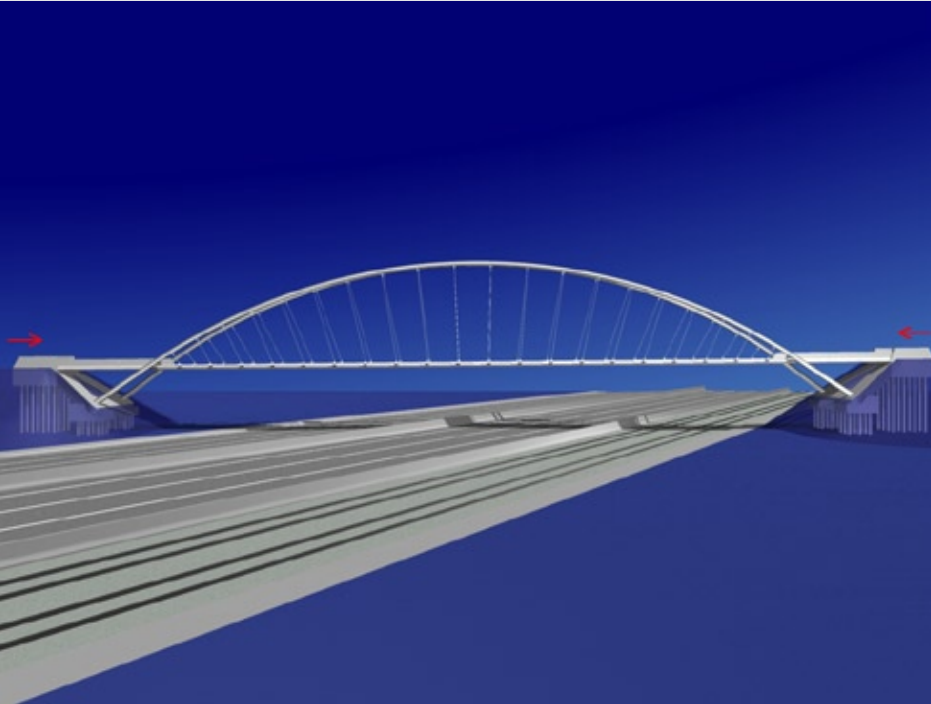
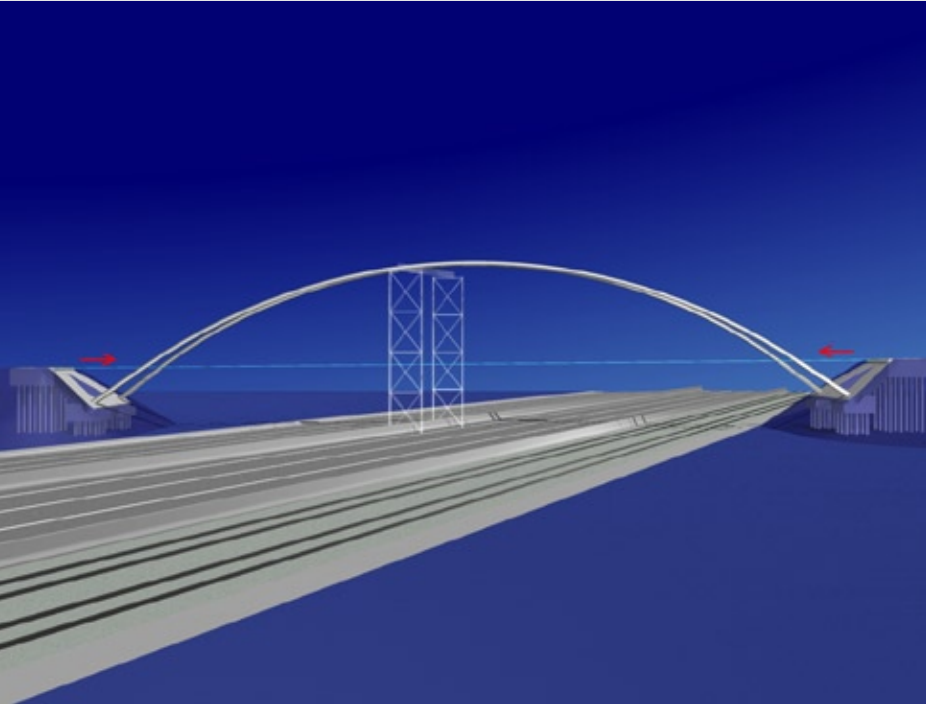
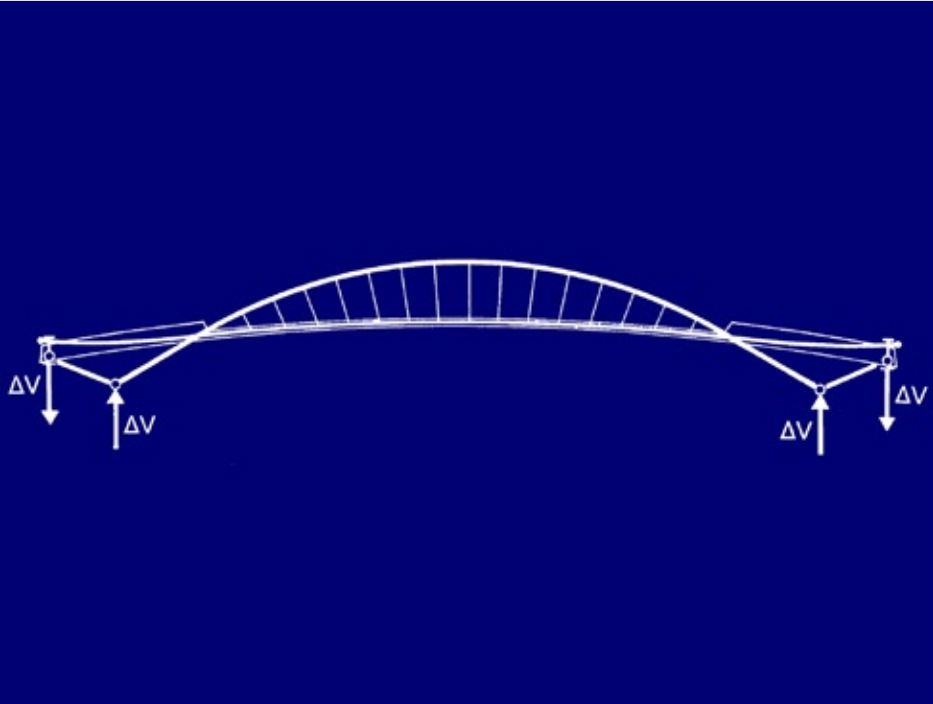


Harmonická odezva:
 $u_{\text{peak}} = 2.540 \text{ mm}$
 $v_{\text{max}} = 0.016 \text{ m/s}$
 $a_{\text{max}} = 0.104 \text{ m/s}^2$

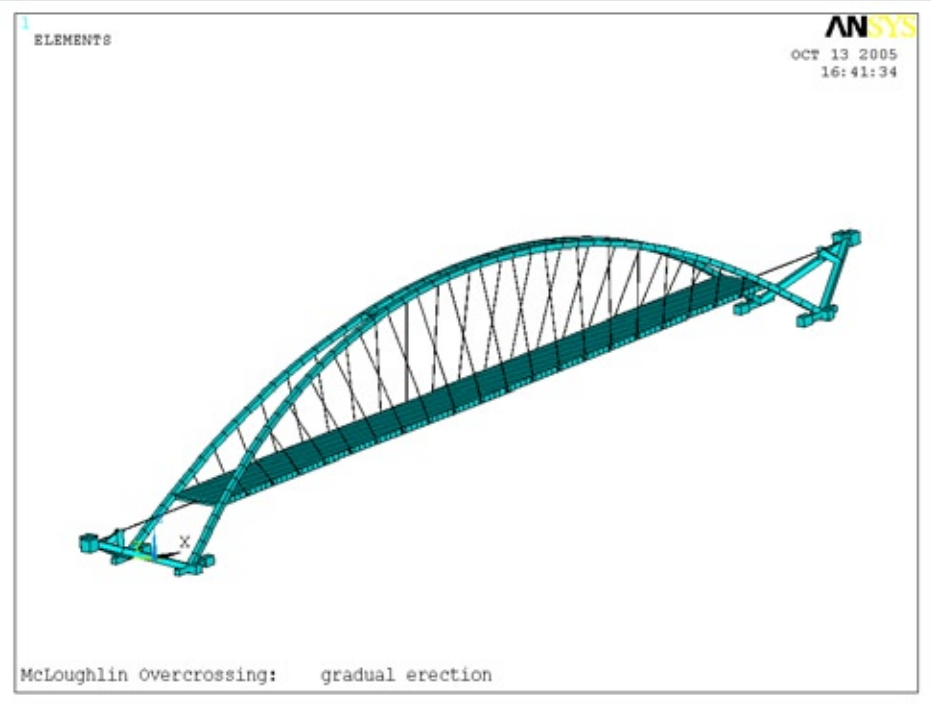
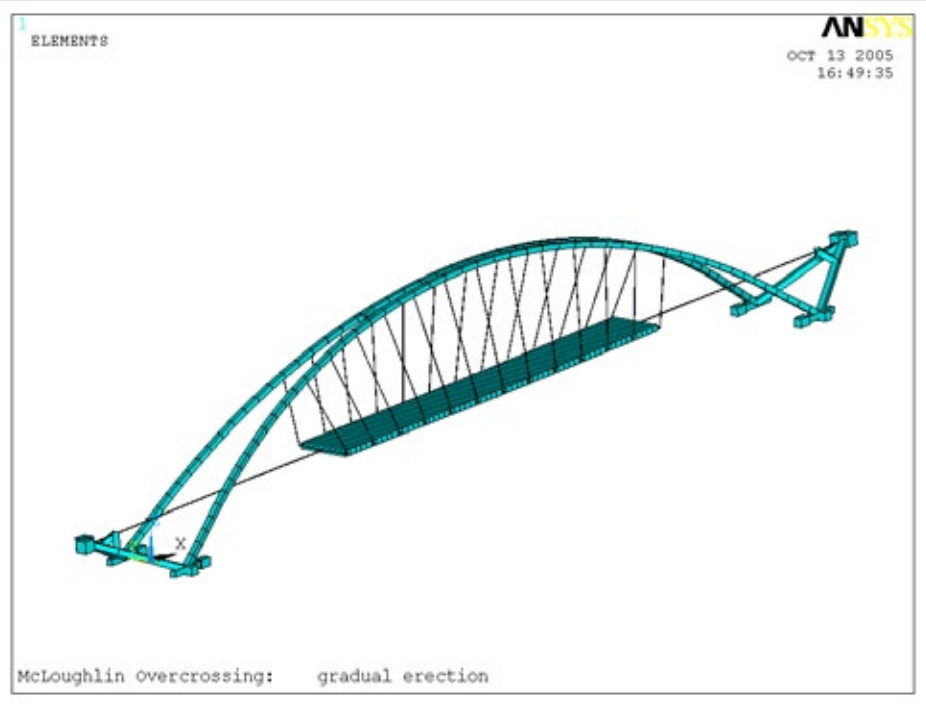
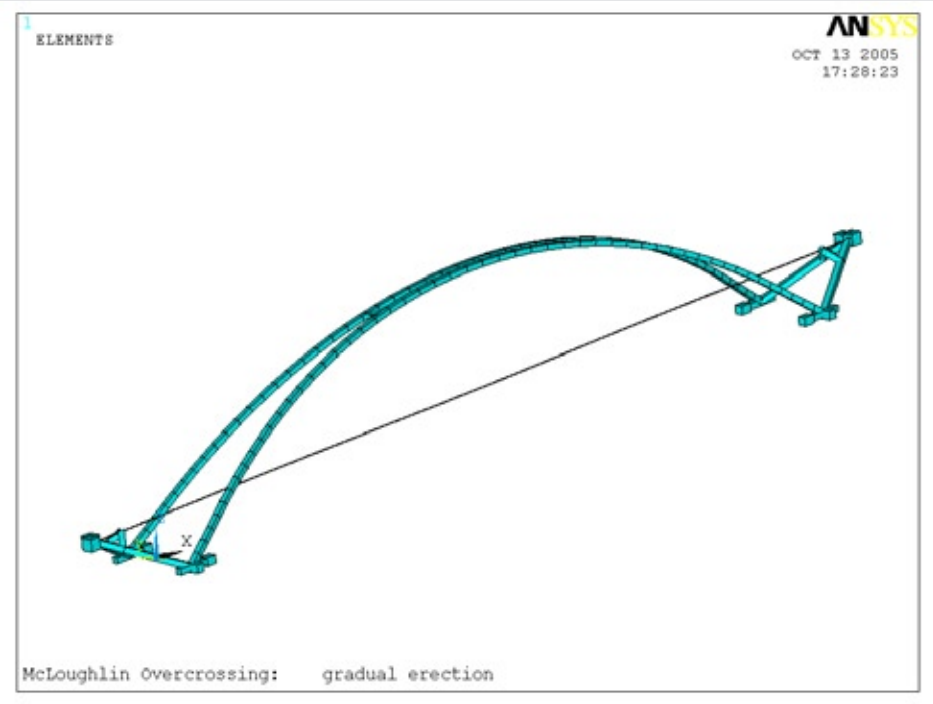


Lock-in effect:
Vertical $f_v = f_{(1)} = 1.021 \text{ Hz}$
Horizontal $f_h = f_{(2)} = 1.282 \text{ Hz}$
 $f_v = 1.021 \text{ Hz} < 2 f_h = 2.564 \text{ Hz}$

samokotvený systém



fáze výstavby



Návrh konstrukce: Jiří Stráský, Radim Nečas