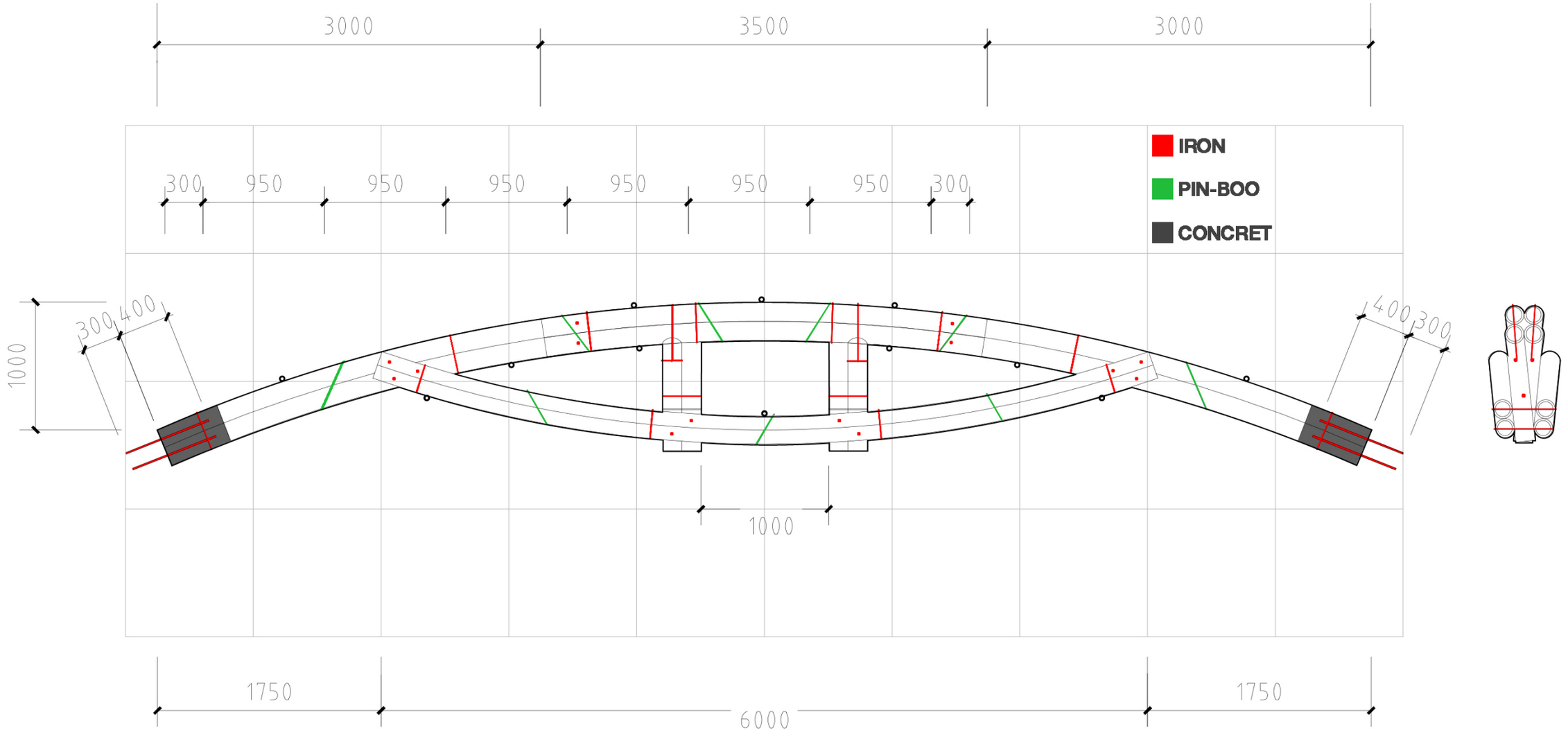
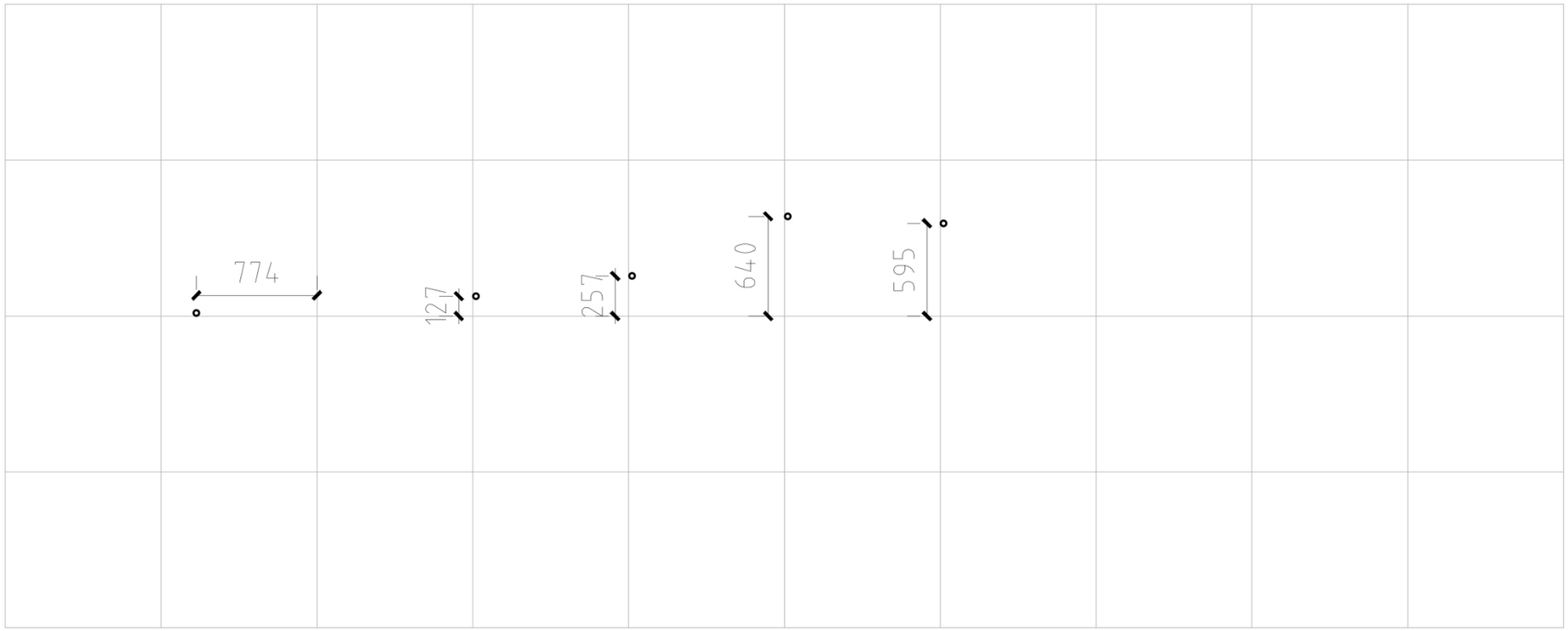
# BAM-BRIDGE

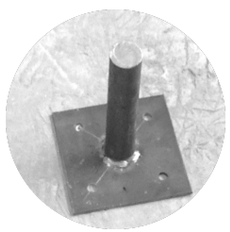
## TEN STEPS CONSTRUCTION METHOD



# 1. SCAFFOLDING

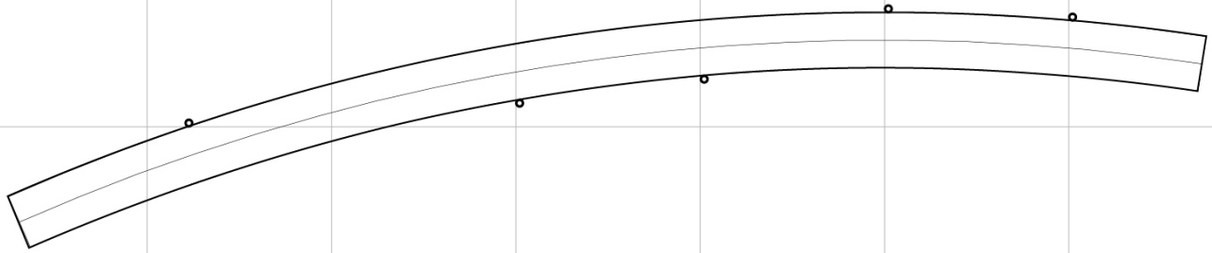
Display over the ground a 1x1 Meters modulation extended as big as the desired structure. In case there is no metallic scaffolding available, then iron bars can simply stick to the ground.



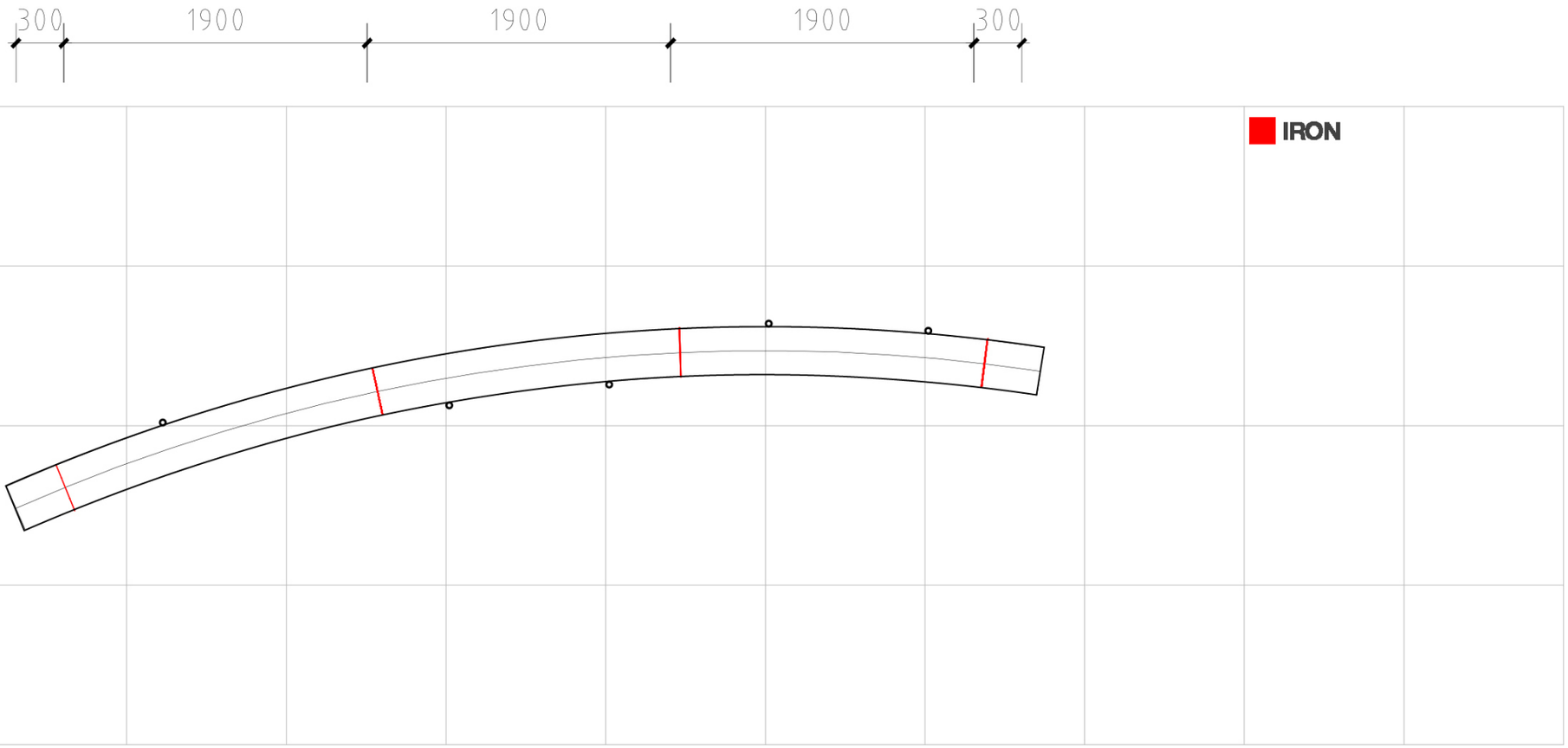
# 2. CARTESIAN MEASURES

With the CAD drawings previously executed, proceed to mark the position of iron bars that will help bamboo to make the arch in desired position.



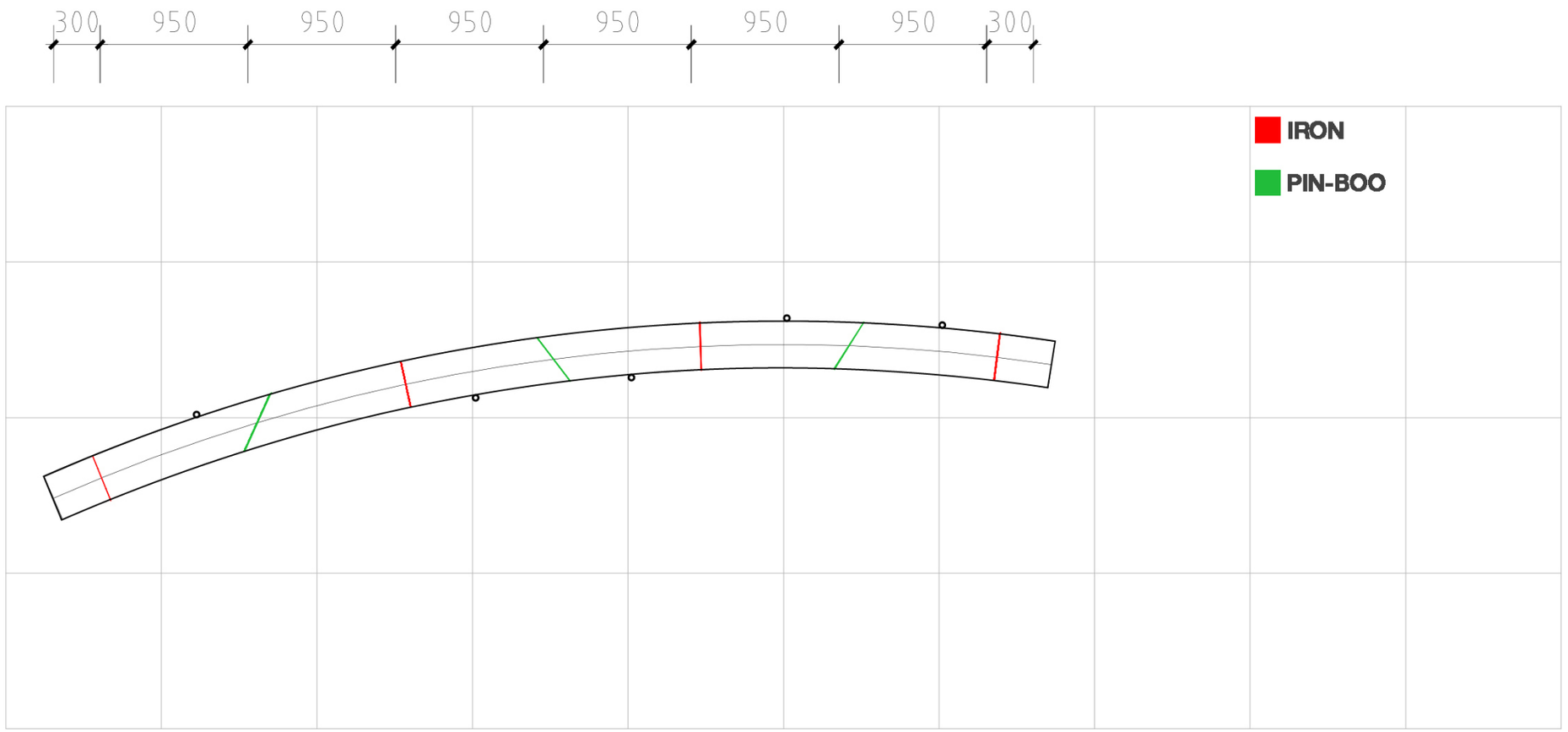
# 3. ARCH PLACEMENT

To make an arch, at least two bamboos must work together. Both bamboos help each other to keep position.



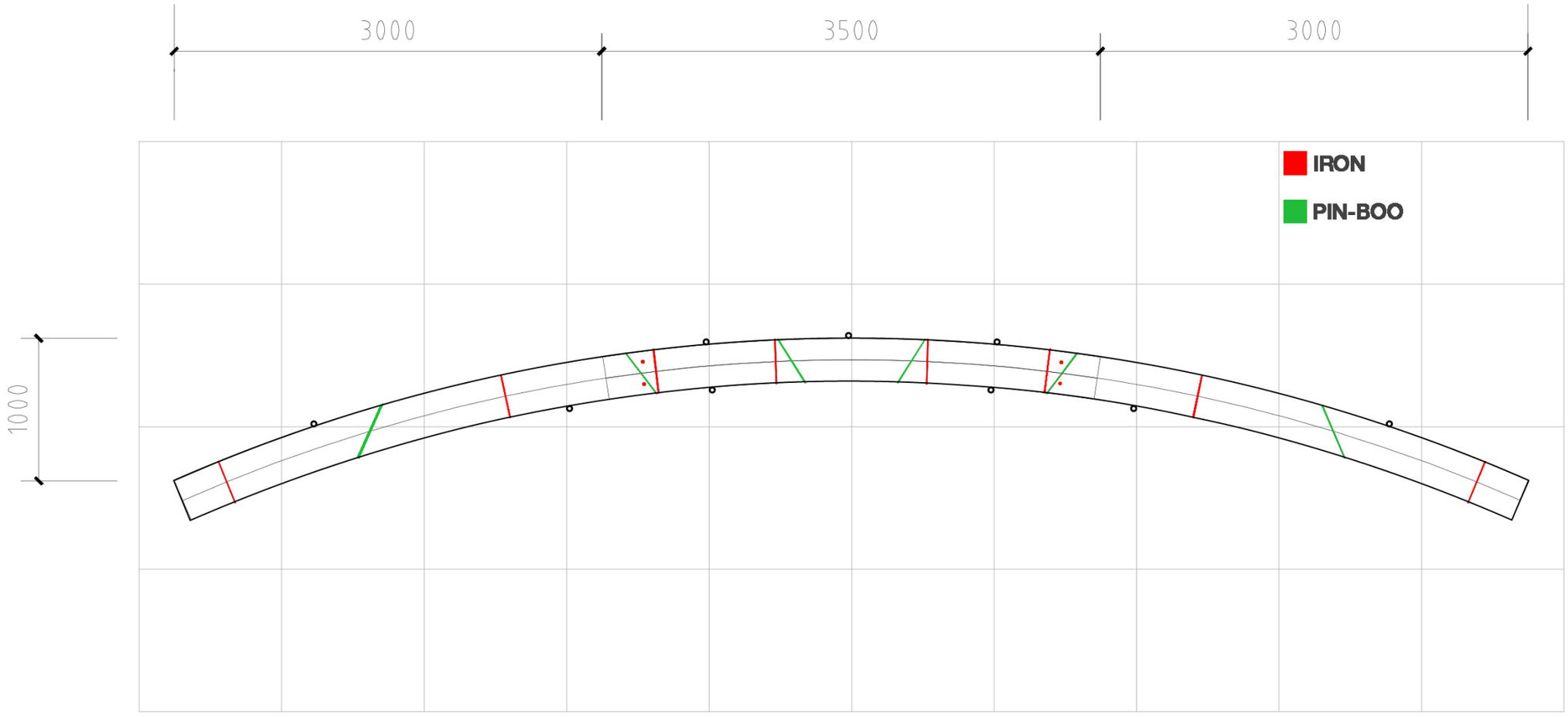

# 4. IRON DRILL

To make an arch, at least two bamboos must work together. Both bamboos help each other to keep position.



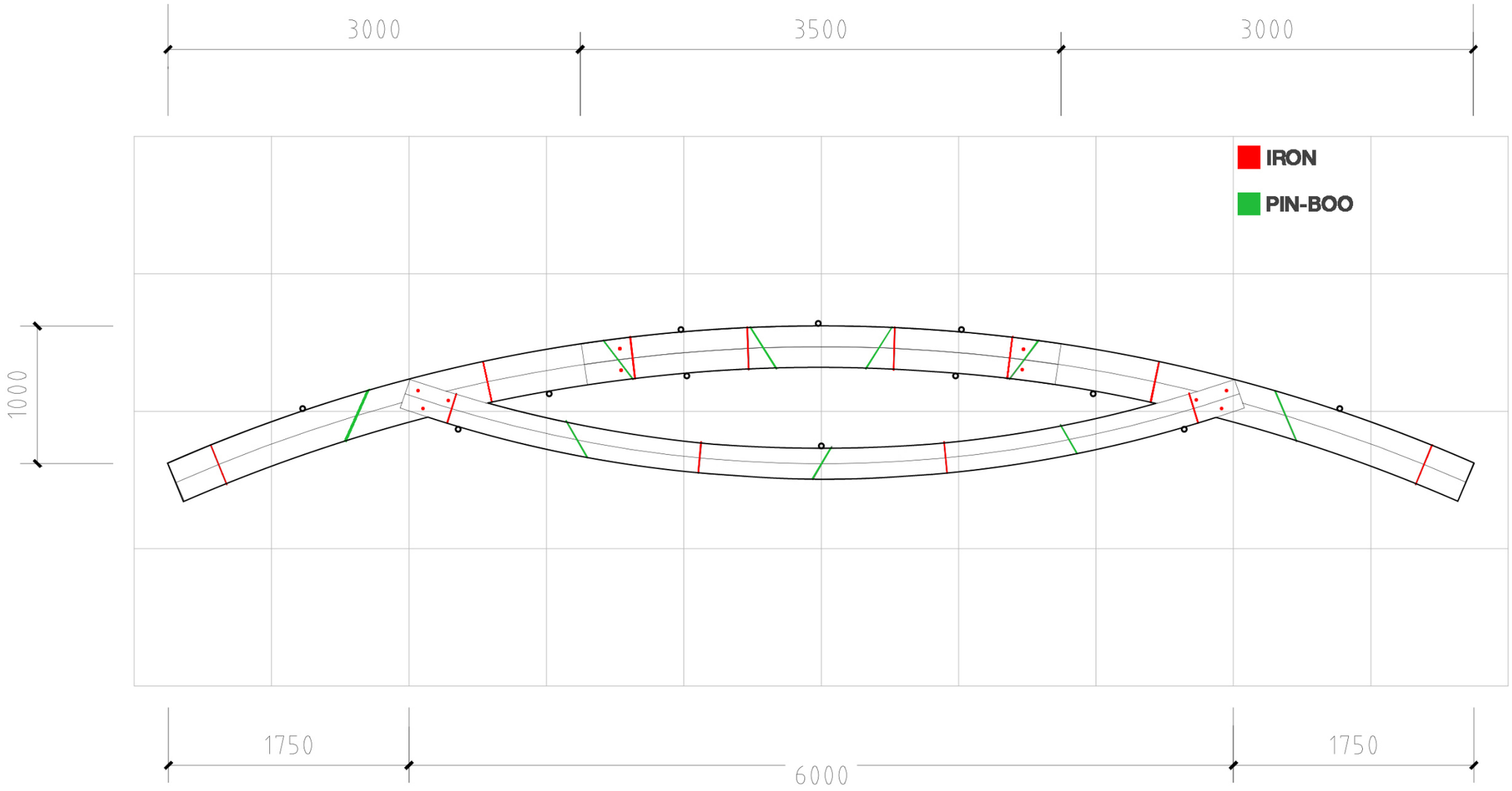

# 5. PIN-BOO REINFORCEMENT

From the 12-15 meters long of bamboo, only the first six meters is useful for structures. However, the rest “useless” bamboo, can serve for many different purposes, including sticks penetrating in diagonal to ensure arch position.



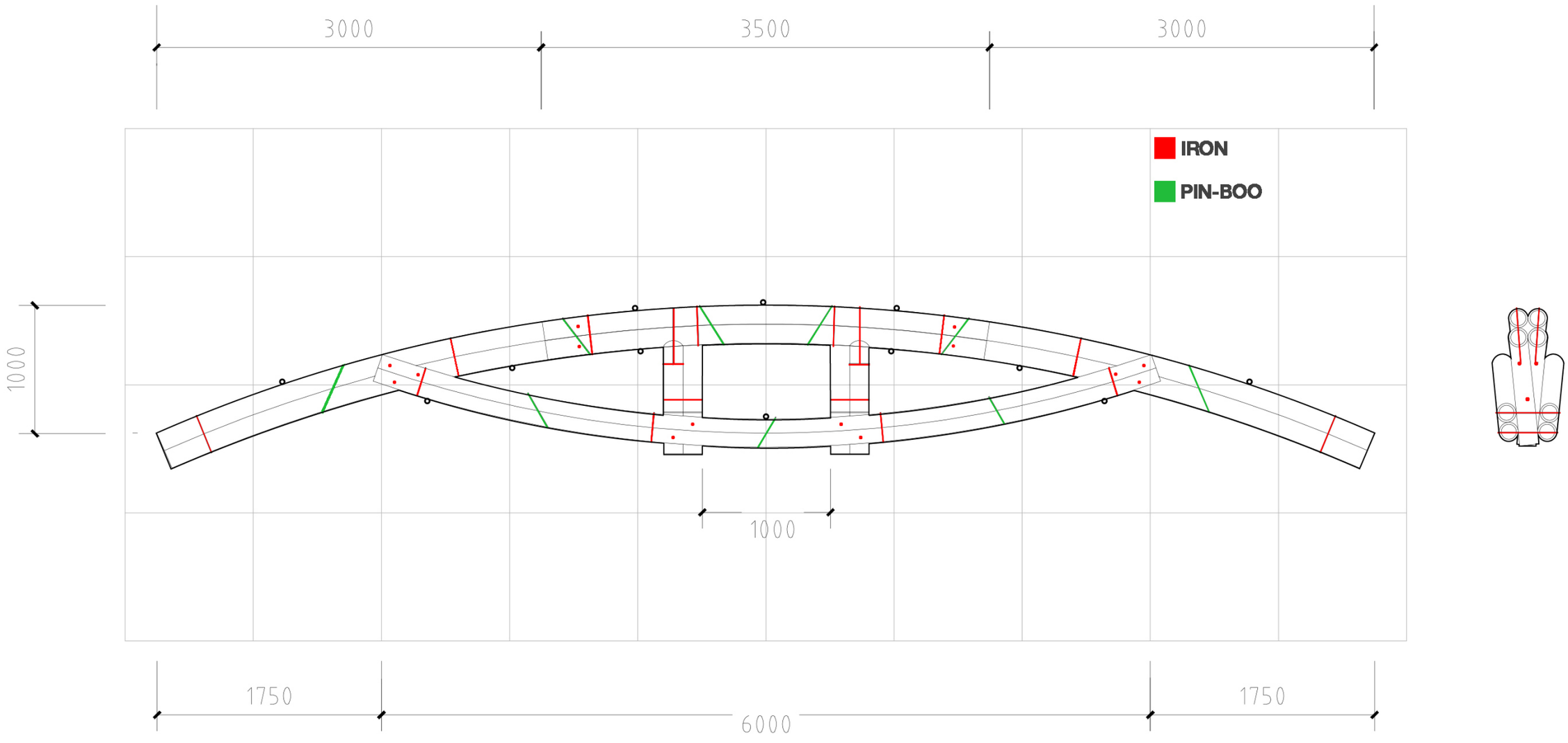

# 6. MIRROR ARCH

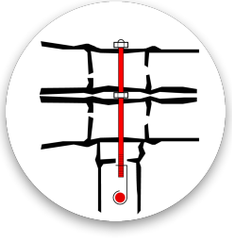
To complete the 9.5 meters span, the arch must be composed by two composed elements of two bamboos each.




# 7. TENSORS (2x)

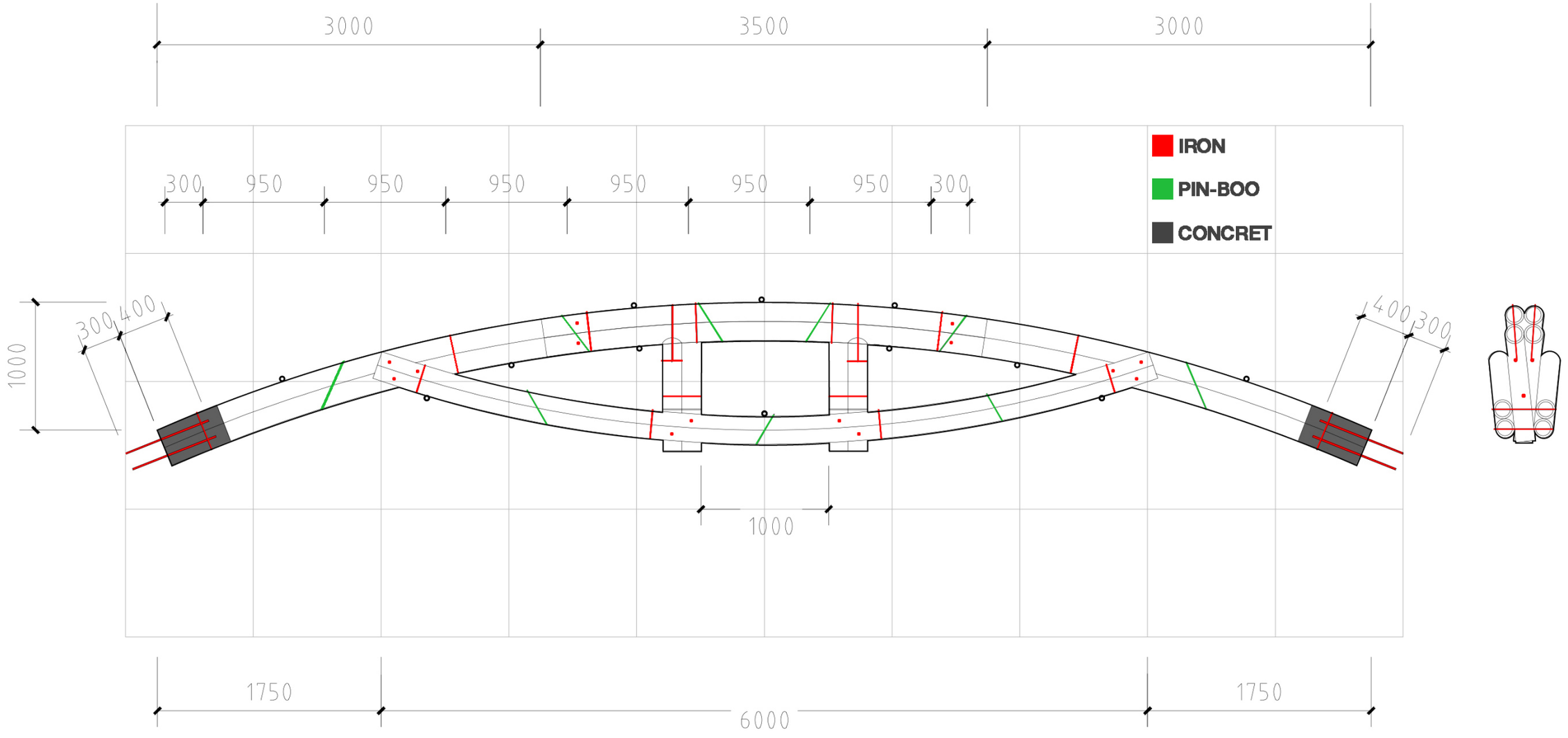
The function of the tensors can also be performed by a steel cable.



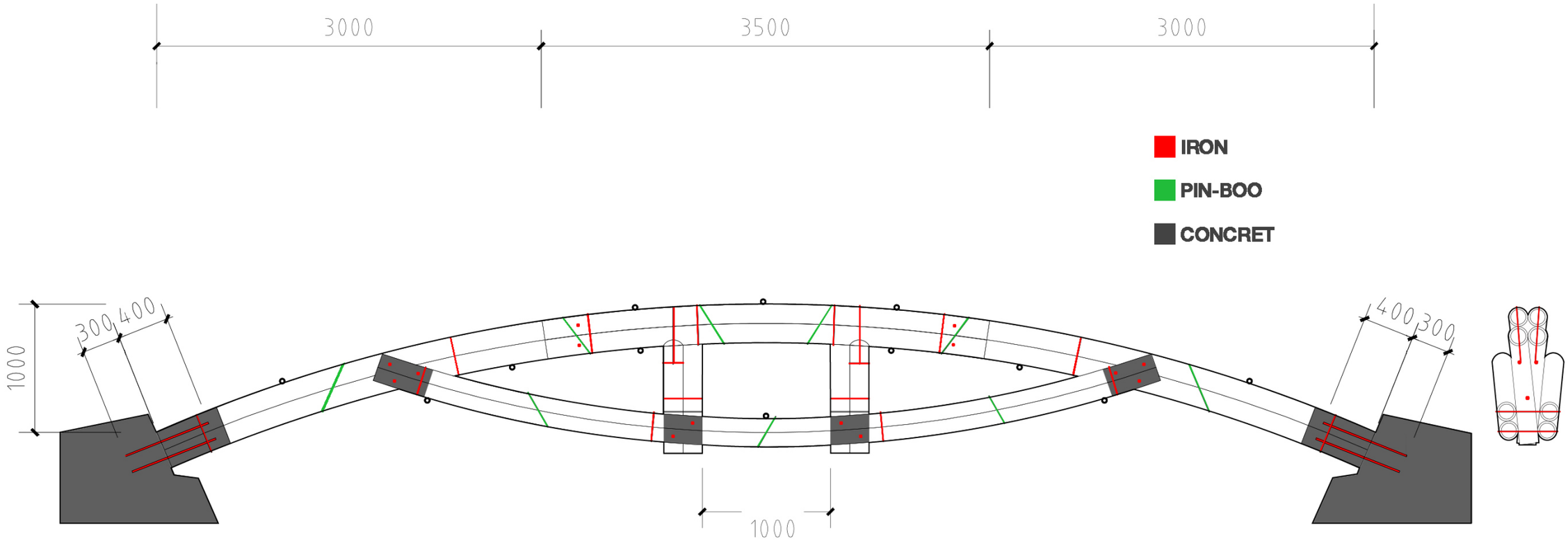
# 8. VERTICALS

Using Guadua one vertical is enough, but using Moso, is necessary to cross two pieces, one directed to each upper bamboo working on compression




# 9. PRE-FOUNDATION

A bamboo node drilled with iron and filled with concert increases its capacity from 300 kilograms to 3 tons. For the foundation, the structure should have the extremes ready with dried concert inside before installation in site.




# 10. IN-SITE REINFORCEMENT

For a bridge, the weight is less important than then lateral push force. After some days that the foundation joints are dried and the bridge sat down in permanent position, then reinforce with concert in key joints.