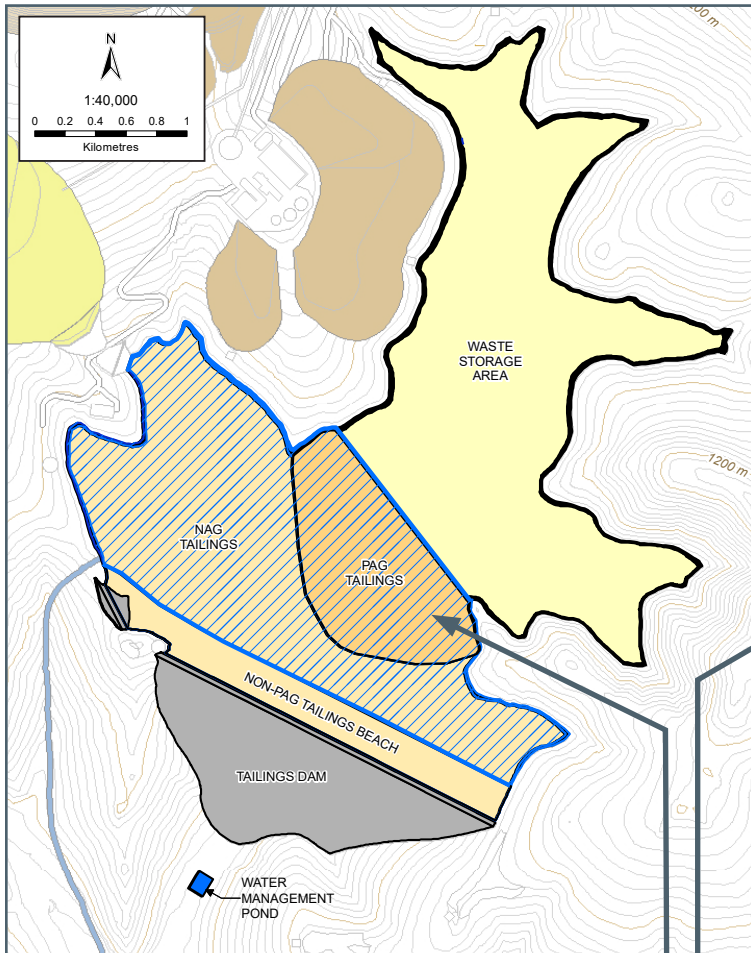


## Why Change the Design?

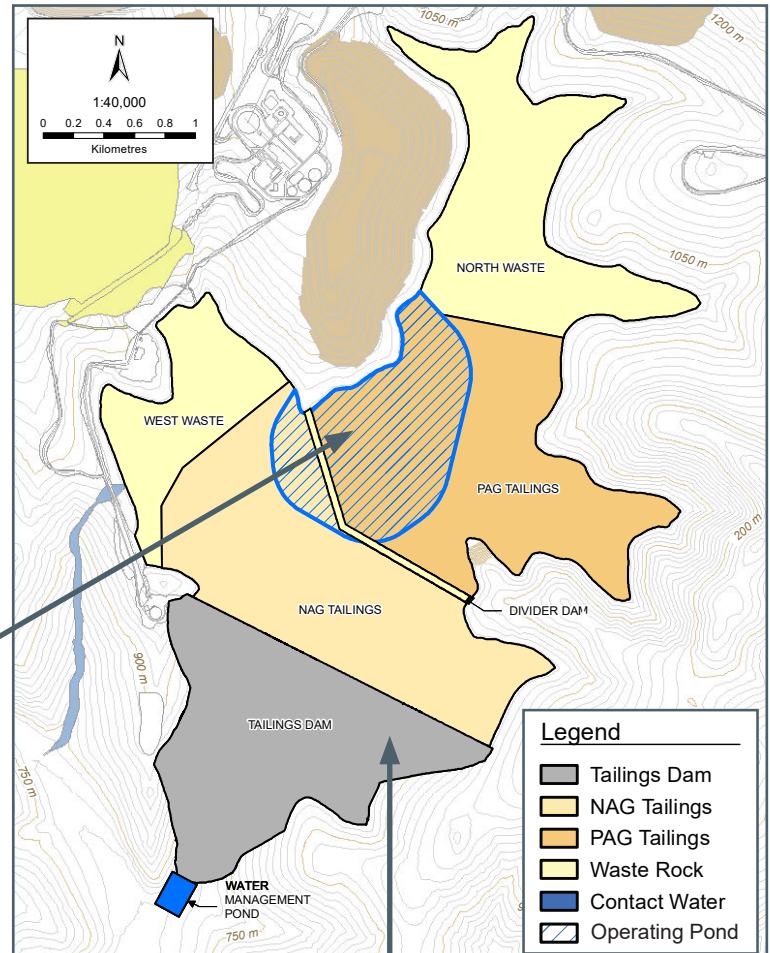
Over time, standards have changed so we want to keep up with the best available options for storing mine waste at this site. Casino planned and carried out a best available tailings technology (BATT) study. The BATT study served the purpose of collaboratively identifying the best design for the Tailings Management Facility (TMF).

Casino also engaged an Independent Engineering Review Panel (IERP) to provide expert guidance and make recommendations about the design and operation of the TMF.

## 2014 Design



## 2022 Design



### Reduced Water Stored in Operating Ponds

The 2022 design has a substantially smaller operating pond within the TMF. Tailings undergo additional processing (tailings thickener) in order to remove water before being stored in the TMF. This greatly reduces the amount of water within the TMF. As a result, there is a smaller operating pond and a larger non-acid generating (NAG) tailings beach in the 2022 design. While the TMF has the same capacity between the 2014 and the 2022 designs, storing less water means that the tailings wouldn't go as far if there was a dam breach.

### Increased Production of Embankment Material from NAG Tailings

Embankment material is finely crushed rock from NAG tailings. With the addition of a dewatering system, NAG tailings can now be processed during the winter months. This additional material will be stockpiled over the winter and used for construction of the tailings dam (the main embankment and buttress) during warmer months. This strategy ultimately reduces the amount of tailings that would otherwise need to be stored in the TMF.

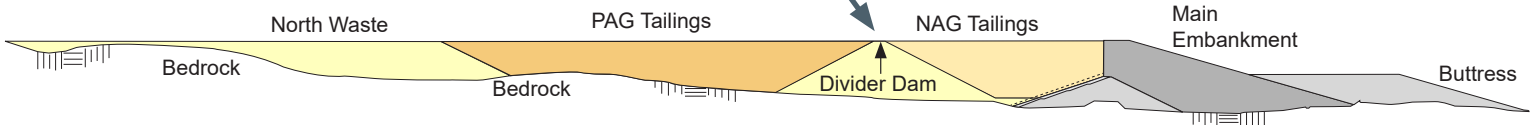
## Added a Divider Dam to Separate NAG and PAG Tailings

The 2022 design adds a divider dam within the TMF. The divider dam is made of waste rock, and it creates two individual tailings cells. Potentially-acid generating (PAG) tailings are now largely separated from the NAG tailings and from the tailings dam. By separating the PAG tailings, upstream of the NAG tailings cell, the divider dam acts as a second physical barrier to keep the PAG material from entering the surrounding environment if there were a dam breach.

### 2014 Design



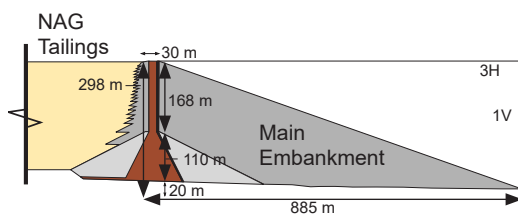
### 2022 Design



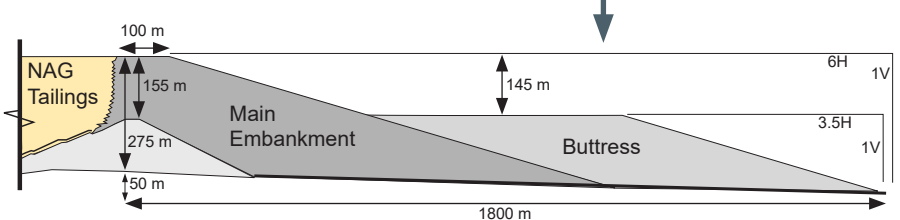
## Added a Butress and Decreased the Slope of the Tailings Dam

The tailings dam now consists of two structures: the main embankment and the butress. The butress is located downstream of the main embankment. The main embankment and butress are made of sand produced from NAG tailings. This reduces the volume of tailings that need to be stored in the tailings cells. The butress will have a slope of 3.5:1. With the addition of the butress, the overall slope of the tailings dam becomes 6:1. This means the tailings dam is less steep than originally proposed in 2014. While these design changes make the mine footprint larger, they improve the overall stability of the tailings dam.

### 2014 Design



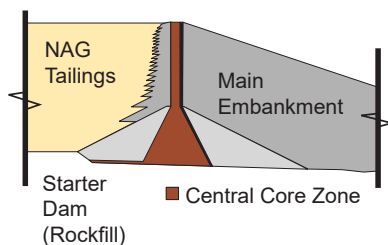
### 2022 Design



## Changed the Design of the Starter Dam

The starter dam is now constructed with rockfill and an upstream plastic liner. The liner replaces the need for the central core zone of the 2014 design. This change provides more flexibility in construction methods as the tailings dam is built up over the years of the mine's life. This also removes the need for fine-grained material that is in limited supply at the start of construction.

### 2014 Design



### 2022 Design

