Our EER diagram models the information related to a museum's art objects. The design incorporates nine entities: ART_OBJECT, EXHIBITION, ARTIST, sculpture, painting, other, permanent_collection, borrowed, and collection. Each entity is defined by various attributes, and some are involved in specific relationship types.

We made several assumptions about relationships in the diagram. The relationship between ARTIST and ART_OBJECT is a 1:N relationship, as a single artist can create multiple pieces. Additionally, every ART_OBJECT must be associated with an artist, leading to full participation for ART_OBJECT in this relationship. The relationship between EXHIBITION and ART_OBJECT is also 1:N, as one exhibition can feature multiple art pieces. Similarly, in the relationship between collection and borrowed items, a single collection can include many borrowed pieces, forming another 1:N relationship.

Another assumption was that statues and sculptures are considered the same, so only "sculpture" was included as an entity. We also implemented two disjoint constraints: one distinguishing between borrowed art objects and those in the permanent collection, and another categorizing art objects as sculptures, paintings, or other types.