Corp Corp

Somewhere

Burbank, CA 91504

To:

CSM Engineers

1600 Illinois St

Golden, CO 80401

Re: Response to RFI, Yellow Submarine Interactive Ride RFP Dated 9/10/16

Thank you very much for your interest in our project. In an attempt to ensure full information transfer to potential firms, the following responses are provided to your questions:

* May we increase the distributed load allowance within the base building beyond that specified in the Tech Spec?
  + No, the base building max allowable and distributed load values are set
* May we load the building in any way other than through the base building floor? Specifically, can we load the ceiling of the base building?
  + You may load the floor or ceiling of the base building. You may not load the walls in any way. You may assume that the floor and ceiling slabs are sufficiently thick as to handle any reasonable anchoring system found in the HILTI product line. You must assume that loading allowances (max and distributed) are identical for both the floor and ceiling of the base building. Keep in mind that the max dead load provided in the Tech Spec is a firm maximum, regardless of installation routine.
* What quantity of fluid may we use in our final implementation?
  + 1 gallon
* What is the required acceleration for the Yellow Submarine during operation/show?
  + The riders will need to experience 1g acceleration during ride operation.
* What is the required positioning tolerance during the “show” and “docking?”
  + Show positioning is +/-1” at the corners
  + Docking/home positioning must be repeatable within +/-0.25”
* Are the gangways permanently attached to the yellow submarine?
  + Yes, but they will not impart significant loads to the yellow submarine during the show. They will, however, transfer passenger loads to the submarine during ingress/egress.
* May the room, within which the yellow submarine resides, be expanded or modified in any way?
  + no
* Is the yellow submarine required to “dock” back at “home” position after each ride?
  + yes
* The Tech Spec provides a requirement that static loading be performed by use of 3g lateral loads in all directions? Must these loads be applied simultaneously?
  + No. Create a minimum of three analysis in the worst case geometry BC with the following LC’s: (1) 1g down combined with 3g directed from front/rear, (2) 1g down combined with 3g directed from side, (3) 1g down combined with 3g directed from any angle between front/side that provides worst case scenario,
* The static safety factor in the Tech Spec is greater than that required in the DIN spec. May we use the DIN spec FoS given that the DIN spec was found to be the most conservative and appropriate specification for the two locations of final installation?
  + You may use the DIN FoS
* The Tech Spec requires that analysis must be performed to ensure deflections are reasonable. What is the required deflection specification?
  + Maximum deflections must be less than L/180
* The Tech Spec indicates that there are projector screens outboard of the yellow submarine. Are these screens supported by the yellow submarine, or are they affixed to the base building? If affixed to the base building, must the portals extend beyond the cabin as indicated in the Tech Spec?
  + You may attach the side screens to the submarine super structure. You may also assume that the portals are flush with the outside of the superstructure.
* The Tech Spec does not indicate the existence or location of a front screen. Please provide information on the front screens existence and location.
  + The front screen portal on the ride superstructure may be scaled from the drawings provided. THe front screen will be placed in the building sufficiently far away from the ride as to not be of concern.
* How flexible is Corp Corp with respect to modifying the gimbal system indicated in the Tech Spec?
  + You may drive the ride in any way that you find is reasonable, manufacturable, and cost effective. Sufficient Power from the base building will be provided to run up to three 20 HP AC motors.
* Please provide detailed dimensions of the cabin, base building and cabin-building interface.
  + The only drawings in existence are in the Tech Spec. In which case you must scale from those provided
* How many “jacking points” (per Tech Spec) are required and in what locations are they preferred?
  + Four, one located at each corner of the ride
* What is the natural frequency-input frequency FoS desired?
  + ωn ≥ 3ωf
* As the guests enter and exit the ride, are they exposed to the ride sub and super structure?
  + No, in which case your structure may fill the entire base building room as long as it is not visible through the port holes
* May we penetrate the floor or ceiling of the base building?
  + You may penetrate the floor and ceiling for anchoring purposes only
* Given the requirements for onboard mechanical systems (electrical, audio, HVAC, etc.) what are your requirements for attachment to the sub and/or super structure?
  + You may assume that the subcontractors in charge of this wil work with your structure as you provide it
* Are the dB requirements specified in the Tech Spec after sound transmission through the cabin superstructure, or is the requirement intended to be applied to non-muffled sound?
  + The audible noise requirements in the Tech Spec are for the passenger within the ride during operation. You may not use any other room for drive control. In which case all components will be located in the base building room shown in the Tech Spec along with the ride itself.

We look forward to receiving your proposal and providing feedback.

Sincerely

Dr. Amaro