Issue Resolution Log
As of: 2025-02-06

Item	Issue Statement	Deliverable Deadline
1	The current date is June 15, 2022. The SeaWorld team is excited for Clark to mobilize and start work on the new attraction. As you are aware, the California Costal Commission (CCC) is one of the Authorities Having Jurisdiction (AHJ) in the permit process for the ride structure. Unfortunately, the CCC has not yet approved the project, and will likely not approve our permit until their next meeting on July 22. As such, we cannot issue NTP for construction until Monday, July 25, 2022. Additionally, our review of your baseline schedule submission has revealed an insufficient duration for ride electrical. Please prepare a revised summary schedule (block or SIPS is acceptable) that includes the following changes: - NTP is now July 25, 2022. NO construction activity can start before this date. Adjust activity duration and/or sequencing accordingly to accommodate. - Building 20 houses the ride control system, and must be complete prior to ride electrical start. Add a summary schedule activity for ride electrical control installation with a duration of 36 working days, and a ride electrical commissioning activity with a 14 working day duration. Ride electrical must start after building 20 and ride erection are substantially complete. As you are aware, Clark's turnover date to ride third party testing is critical to our opening date. The April 1, 2023 ride testing start date cannot change or we will miss our May 30 opening day. If you must change activity durations and/or stack or resequence activities from the baseline schedule, please prepare a short narrative explaining your reasoning.	1PM
2	It is critical that back of house access is maintained during construction for the successful operation of the park as a whole. As we near the start of excavation for the mat foundation, please prepare a detailed site logistics plan that shows how 24 hour access will be maintained to the outer perimeter road for continuous park staff traffic. We prefer that traffic be immediately routed to the future permanent road that will wrap outside the ride restrictive area, but we understand that ot may not be possible to do so until the excavation is backfilled following mat foundation placement; identify a temporary alternate path if this is the case. Include a short narrative that describes the different access paths and dates when these will be phased in and out. Include the following in your logistics plan, at a minimum: - Ride foundation excavation footprnt - Soil stockpile location - Access road(s) for staff - Excavation ramp(s) - Shoring extent - Haul path between excavation and stockpile - Temporary toilet locations during excavation A current drone photo has been included that depicts the current cleared site as well as job perimeter fencing and the Clark office trailers. Please use this drone photo as a basis for your submission.	1PM
3	We are aware that the current lack of completeness of the structural steel connection details in the contract drawings prohibit the fabricator from progressing with shop drawings and fabrication for the mezzanine platform within Building 10. The structural engineer has informed us that connection design will be complete on September 01, 2022. We anticipate Clark and trade partners will need several months after this time to detail and fabricate structural steel in accordance with baseline schedule durations. This design oversight cannot delay the project. Per our previous conversations, your superintendent has expressed concerns that the only way to load steel and access equipment into Building 10 is down the existing ramp on the east of the building; which is why ramp demolition did not happen until after mezzanine steel is complete, per the baseline schedule. The only feasible access for large material and equipment into the basement of Building 10 is via the roll-up doors at the bottom of the existing ramp. However, if steel fabrication is delayed, it will arrive after the ramp is demolished to make way for coaster mat slab for launch 1, break run, and maintenance track. Access via truck is not feasible once the ramp concrete is demolished. Please explore other opportunities to get structural steel into the building that does not rely on the ramp down to the basement level. If no other options exist, is there an opportunity to resequence the coaster construction to maintain the ramp intact until the steel is ready? Please provide a narrative at minimum with sketches as required to summarize and explain your approach. If there is additional cost associated with this alternate means and methods and/or resequencing, prepare a formal change order for evaluation by this team.	1PM
4	The earthwork subcontractor has recently bottomed out the excavation for the coaster mat slab foundation. Unfortunately, as the earth worker attempted to complete the required over excavation and recompaction beneath the mat slab, they encountered saturated bay mud that cannot reach compaction requirements in roughly 80% of the excavation footprint. This condition was discovered with only five days remaining in the scheduled duration for pit excavation and subgrade preparation. The Geotechnical Engineer of Record (GEOR) was immediately called to site and recommended two potential courses of action: 1. Spreading the clayey material within the excavation and allowing it to dry, then recompacing in short lifts to achieve required compaction without oversaturating. This solution poses a schedule impact as the drying process takes additional time that was not accounted for in the current schedule. Equipment currently being used in the excavation has difficulty maneuvering in the clayey mud; different equipment will be required to manipulate the material. 2. Import crushed rock geotextile fabric to "bridge" the unsuitable bay mud and create a sound subgrade for the coaster mat foundation per geotechnical report recommendations. The earth worker believes if they can source enough crushed rock and have it onsite in three days, but this is not guaranteed. Prepare a short narrative that describes the selected path forward and why that selection is the correct one. Prepare a change order that includes cost and time impacts (if any) associated with the selected course of action. As always, your change order should include quantities of any new material handling, import, or export. Please ensure your proposed solution incorporates and references recommendations from the GEOR and their original geotechnical investigation report.	1PM
5	The design team has notified us that Clark and the structural concrete trade partner seek to break up the ride mat foundation placement into multiple pours. Please prepare a submittal that outlines your pour sequence and submit to SeaWorld and the design team for approval. The following should be included in your submittal: - Visual depiction of the extents of each pour (include the mat foundation east of the maintenance track ramp, structure on and west of the ramp can be excluded as we understand this work will be completed out of sequence due to structural steel design delay) - Square footage of mat to be placed in each pour - Concrete quantity to be placed in each pour (cyd) - Precise location of pour joints. Per the SEOR, these joints need to be evenly spaced between column piers and cannot fall beneath a column pier. - Short narrative describing any special considerations with your proposed pour sequence. We recommend using sheet S02.301 as the template for this submittal.	1PM
6	The roller coaster track support columns are all mounted to a continuous reinforced concrete mat foundation. It is critical for seismic stability of the ride structure that the mat foundation is continuous, as depicted on S02.301. During bid, the structural engineer designed the mat foundation to pass under an existing high voltage duct bank that serves as the primary electrical loop for the entire park. At bid time, Clark presented a plan to temporarily suspend the duct bank via a system of wide flange beams and shoring that would allow physical work under the duct bank so that the mat foundation could be formed and placed. During our field walk last week, the Clark superintendent showed us that when excavation around the duct bank began, it was discovered that the actual size of the duct bank was much larger than anticipated, and that its low elevation will not leave enough room for temporary shoring over the mat foundation. This issue is unforeseen and poses huge potential schedule risks. As such, we are looking to the integrated team's construction and engineering expertise to resolve the issue. Please draft a formal RFI describing your proposed solution that would maintain mat slab continuity while considering the actual duct bank location. If you propose design changes, include sketches as necessary. If at all possible, we would like to avoid any work with the electrical duct bank, as any potential power disruptions to the park are undesirable. When determining your proposed alternate solution, please comment on how your solution will help recuperate schedule losses that have already been incurred due to stoppage of work in this area.	10PM

7	Our design team has informed us of an issue with the origin points used to prepare the drawings. While preparing responses to RFI's generated by the concrete formwork detailer, it was discovered that Intamin used a different monument as an origin point for detailing their ride than the design team used to prepare the contract documents. As such, there is a model misalignment between the contract drawings prepared by the design team and the Intamin drawings. The concrete detailer noticed this because the mat foundation and subsequent column piers align in the station area, but gradually become misaligned moving east, culminating in a misalignment of nearly a foot on the far east side of the mat foundation. We need to rely on Clark and the trade partners to recommend a path forward. Draft a formal RFI that includes the following: - Clark's recommended path forward; which should be the correction of either the contract drawing model or the Intamin model - At this point, assume all material is released and in fabrication. Advise on any downstream effects that the model correction will have. - Describe schedule delay mitigation efforts that will be required.	10PM
8	Intamin has very particular requirements and tight tolerances for how the roller coaster track should be erected. Intamin prefers the ride track to be erected continuously along the intended train path of travel. However, we have been notified by your team that because the proposed track often intersects itself at different elevations, continuous erection cannot feasibly be accomplished. Prepare a column and track erection sequence plan for submission to Intamin and SeaWorld that depicts the following: - Color coded erection sequences, clearly showing where different sequences start and stop. - Piece count for each sequence (column and track pieces) - Crane placement, including crane centerpoint(s) and pick radius(es) - Crane type selection, including a brief narrative justifying your selection Ensure your plan takes into account any specific requirements for track erection contained in the Intamin ride manual. Our team has prepared a mark-up of track piece numbers; use this as a basis for your plan.	10PM
9	Great News! It is March 05 2023, and our board of directors has recently released funding to include a package of themed props within the ride foot print that will set the theme of an arctic outpost and provide an immersive and exhilarating experience for our guests. We have attached a site plan (building theming will be addressed separately) that provides a layout of props from the creative designers. Please prepare the following: - Scope Matrix: A spreadsheet with description and quantities of each theming prop (include footings as required), the trade partner that will procure and install each item, rough order of magnitude purchase pricing (including shipping) and rough order of magnitude installation pricing. Clark carpenters can self-perform procurement and install of certain theming props within reason. - Formal Change Order for the added work using your rough order of magnitude pricing and scope matrix. - Narrative of schedule considerations. We assume this added work can be performed without affecting overall project duration; please summarize your approach to achieve this. Please also note that ride testing per the baseline schedule must start April 01 and requires 12 hours per day of ride cycling, during which the ride area must be empty of workers.	10PM
10	We are aware your team responded to an incident on site this morning following notification from the Concrete Reinforcing subcontractor. One of the workers was walking back to the bottom of the mat slab excavation from the break area when they slipped on the excavation embankment and sprained their ankle. The employee was transported to urgent care where they received medical attention. The employee's ankle was bandaged and they left the clinic with a follow-up appointment and medication. It is noteworthy that weather this morning during the incident was less than ideal, as we are on our third straight day of rain. We pride ourselves on being a collaborative team that builds safely. Please provide a narrative of the root cause analysis of this incident, including at least (4) contributing factors and root causes. Please also provide corrective measures so that slips at the embankment do not occur again. If there are added costs associated with these corrective measures, please justify them.	10PM
11	SeaWorld prides itself on being conscious stewards of the environment. The current roller coaster addition is being constructed close to an ocean watershed, and thus far Clark's efforts to maintain SWPPP measures have been commendable. A large portion of this effort is led by the Clark contracted onsite SWPPP professional. Our internal SeaWorld environmental team has a long history with this professional and rely on him to provide excellent service at many of our park additions; they maintain that construction this close to the ocean could not be completed without him. However, our Human Resources department has been made aware of a few instances in which this professional has made inappropriate comments to SeaWorld employees as they walk past the construction site. We are aware of a few instances of this behavior on the jobsite as well, and that Clark site supervision has on several occasions contacted the professional's employer (SWPPP Pros) to see that it is corrected. Although this professional regularly works on SeaWorld projects, he is contracted directly to Clark on this job. As such, we are requesting that Clark prepare an action plan to address this professional's repeated behavior. Please prepare a narrative for submission that outlines actions that will be taken to correct the situation.	10PM
12	We are aware the latest version of the Intamin ride drawings contain electrical sheets that have conflicting information when compared to the contract electrical drawings prepared by EXP. As you know, Intamin manufactures the ride and its components. For each ride, Intamin produces bespoke installation manuals and drawings that take absolute precedence when assembling and wiring up the ride. However, due to Intamin's backlog, the ride electrical manual and drawings were not issued at bid time and have only just been received, well into December 2022. Our design team anticipated this, and recreated the electrical one lines for the ride (to the best of their knowledge) ahead of the Intamin drawings. We are aware that your team has submitted on and released material for ride cabling, specifically motor control (VFD) cabling, based on the EXP cable list from the contract drawings made available at bid time. Intamin has alerted us to the fact that differences exist between the EXP cable list and the recently issued Intamin cable list, the latter of which must be adhered to. Our primary concern is the motor control (VFD) cabling. Analyse the product data sheets for VFD Types A, B and C and prepare a concise summary (spreadsheet or otherwise) that identifies the differences between the EXP specified cables and the Intamin required cables. Understanding that material has already been ordered according to the EXP specified product, ensure your summary identifies if any of these three cable types are non-compliant and will need to be reordered. Furthermore, the electrical trade partner has made us aware of considerable lead times (15 weeks) for the motor control cables specified by Intamin, as most of the cables are not stocked domestically, but abroad in Germany. If any cables need to be replaced, we anticipate your revised submittal will be approved by January 15 2023. Does this anticipated approval date have any schedule impacts? Do we need to expedite these cable replacements? How can we expedite the shipment if necessary? Who should cover the added cost for the expediting (if required)? Prepare a short narrative explaining your proposed solution.	10PM

13	While the roller coaster project is still underway, we introduced your team to a new series of renovation projects within the park. While Clark will need to competitively bid these projects, we anticipate shared resources with the roller coaster team will make your bid very competitive. The upcoming projects (Blitz Project) will be bid as a package and include updating the Shipwreck Café, retheming of the kids' area including a new splash pad, installing several new icons (statues) at seven different locations across the park, and renovating five restrooms. Below is a brief summary and scope of work for these upcoming projects: Junior Rescue: The Junior Rescue project will be a retheme of the existing Bay of Play area. This area currently includes three themed rides, a network of climbing structures and playground equipment, a performance stage, a stylized climbable ship (not currently accessible to guests), a splash pad area (supported by a pump and filtration room inside the ship), a dry play area and includes themed lighting, signage, and other graphics throughout. Restrooms: The Restroom Renovation project will be an interior remodel of existing facilities (noted above in order of priority). Projects that are not in close proximity can overlap in schedule. Demo of existing finishes on the interior with new sinks, fixtures, some partitions, tile, some lighting, and other finishes will be included in the scope. Shipwreck Cafe: The Shipwreck Restaurant renovation will be an interior remodel of existing facility. Removal of the existing service lines and reconfiguration for modified service style. Including mobile pick-up window. Work will include construction of new register stands and pick up windows including all power and data to the new locations. Mechanical system and ductwork modifications. Beverage station relocation to the exterior of the existing building. Work will also include procurement and installation of culinary equipment as noted on equipment schedule including all shop drawings and mechanical, electrical, and plumbing modifications necessary to accommodate the new equipment. Realm Icons: There are several new statues going up around the park that require concrete footings and slabs to support them. There's also miscellaneous curb work, along with some utility/irrigation relocation and landscaping. We will award this work based on costs for general conditions and general requirements. A formal GMP process will follow general contractor selection. We anticipate the Cost of Work for these projects not to exceed $5.6M. Use the provided GC/GR template to develop your estimate and staffing plan for this new project. Provide a short Narrative to summarize the staffing plan and GC/GRs for the project. We expect your proposal to utilize shared resources with the roller coaster team, but not rely entirely on them for project management and supervision. Include a narrative that describes how resources (personnel and other) will be shared to maximize value without sacrificing coverage and quality on the coaster project. For reference, the Clark coaster team currently consists of two trade managers (engineers), one safety professional, one senior project manager, one superintendent, and one project compliance analyst. We are aware that one trade manager on the coaster team was dedicated entirely to structure and ride erection, while the other is focused on MEPFS and ride controls.	10PM
14	The Shipwreck cafe has an NTP of 1.23.2023 with an expected completion date (ready to open) of 5.25.2023. The Shipwreck Restaurant renovation will be an interior remodel of the existing facility. Work will include construction of new register stands, pick up windows, new mechanical system and duct work modifications, new culinary equipment, and modifications to the mechanical, plumbing, electrical, and fire protection as necessary for the modified building. Since awarding this additional work to Clark, we have been informed of a few issues that need to be resolved: 1)The building department had expected to issue the Shipwreck permit on 3.15.23, but has just informed our expeditor that it will not be issued until 5.5.23. Wall close-up inspections cannot be performed without an approved building permit. In addition, Fire Sprinkler and Fire Alarm deferred permits cannot be submitted for review until the building permit has been issued. In the past, we have experienced a 4 week city review for deferred permits. Create a summary schedule (SIPS or block) for Shipwreck that accounts for the permit delay and produce a narrative describing if or why the completion date must be delayed. What mitigation efforts can you implement in order to minimize the impact of the permit delay? The summary schedule should layout any phasing, start and durations of scope elements, and milestones. The milestones should include, but are not limited to, start of construction, demo complete, underground complete, start of interiors, overhead complete, start of finishes, various permit tracking, substantial completion/TCO, commissioning, and final completion. 2) In addition to the permit delay, we have been informed that your mechanical subcontractor has notified that the AHUs have a 50 week lead time. They have presented a solution to use an alternate manufacturer which can produce the AHUs in 25 weeks. We cannot release the AHU until we issue NTP for the project. Does this information change the delayed completion date from item 1)? Is there a temporary solution that will allow us to open before the AHU is delivered and commissioned? Put together a narrative describing your solution, and edit the summary schedule from 1) if the end date must push to accommodate the AHU. As with most things at SeaWorld, opening dates are paramount. Your solutions to these issued should seek to delay Shipwreck opening as little as possible.	10PM
15	During construction, safety of the public is paramount. The Blitz projects present the unique challenge of operating inside an active theme park and zoo. Therefore, the risk to both people and animals is elevated. Review the documents in the IRL back-up. 1) Put together an access and safety plan for the various projects. Summarize general requirement considerations that should be made for the plan and ensure costs for these items are covered in your estimate for the change order from IRL 13. 2) Include a narrative on how you will ensure the public and animals will be kept safe during construction. Please note the below parameters: - The plan must show where construction perimeter barricades will be erected inside the park. How will access be controlled in and out of the barricades? - Workers cannot use park restrooms or food vendors. Show temporary restroom placement inside work areas. - Work vehicles must be out of the park one hour before park opening. What considerations need to be made for working inside the park during park operating hours? - No more than 3 restrooms can be taken over at a single time for retrofit. If there are two restrooms with in 200' of each other, they cannot be taken over at the same time. Include a sequencing plan for restroom renovation in your narrative. - Icons with in 200' cannot be worked on at the same time. Include a sequencing plan for Icons work in your narrative. - Dust can kill the animals. Include in your narrative your plan to mitigate dust from your work. - Noise and vibrations are harmful to the animals. Work times must ensure an 8 hour quiet time within 24 hours.	10PM