

## NUUANU RESERVOIR NO. 4 DAM IMPROVEMENTS

### Weekly Progress Meeting **Minutes**

**Wednesday February 13, 2019, 2:00pm to 3:00pm**

#### Nuuanu Jobsite

#### Attendees:

SSFm – Ivan Nakasone, Dave DAvirro

Drayko Construction (DCI) – Shelly Aylward, Tyler Sato

RM Towill – Stacy Armstrong

BWS – Keith Ishinaga

#### Agenda:

- Construction Schedule:
  - **3-Week Schedule Update: See attached.** 1/2/19 Reservoir dredging continues. DCI hopes to have the area in front of the tower cleared by the end of next week. Embankment is complete. Embankment staging area cleaned and seeded. Yard area cleaned up and will start prep work for the cofferdam staging area. 1/9/19 DCI to have area in front of tower cleared by the end of the week. Request BWS to lower the water level by 1/23/19. Cofferdam installation to follow water lowering. DCI will run out of work if the cofferdam cannot start as shown on the 3 week schedule update. SSFM to follow up with BWS on status of water lowering. Access hatch waiting on subcontractor to finish project. Windows anticipated to arrive early February. DCI requests to remove meeting minutes from November. No exceptions taken. 1/16/19: DCI prepping to start cofferdam following BWS lowering water level. Per BWS, the lowering of the water level will now be delayed (originally scheduled for 1/17/19-1/18/19) as BWS communications department will be putting out a public notification based on the discussion with DLNR yesterday. This may delay the lowering of the water level by a few weeks. DCI indicated that the cofferdam materials were scheduled to be delivered and a special run of the fill sand for the cofferdam was scheduled, and delays may affect the run and delivery of the materials to site. 1/23/19: Water lower and cofferdam on hold pending update from BWS. Only work onsite is dredging. Per BWS, Communications is doing a small community outreach and going door to door to notify residents of the reservoir lowering. The notification they are providing notes the water will be lowered the week of 2/4/19. BWS to notify DCI of the exact date once it is confirmed with Ops. 1/30/19: DCI did rain out today due to heavy rains and winds in the morning. Will be back onsite tomorrow. DCI started grass cutting on the downstream end. Element Environmental will be onsite Wednesday to do visual inspection of downstream area. DCI grass cutting complete to Weir 2. Recommend SSFM inspect area. DCI noticed the subgrade is extremely wet and concerned with stabilizing subgrade for weir construction. Cofferdam materials and equipment delivered to site 1/29/19. Water lowering is tentatively scheduled for 2/6/19 at 9am. DCI would like to remove the turbidity curtain before the water level is lowered. Concerned with the curtain getting sucked into the opening. BWS asked if it will affect any of the permits. DCI does not believe so. BWS to discuss internally and will let DCI know today. Looking at cofferdam installation the week of

President's Day. Window manufacturing delayed. Request Dec meeting minutes deleted. No exceptions. 2/6/19: BWS Ops was able to crack Gate 1 open and allow water thru. DCI and BWS noticed an increase in water flow through the outlet pipe. The stem was raised about 2.5". BWS Ops to return next week to open the gate further. DCI will begin cofferdam installation pending water level dropping. Downstream clearing work has been slowed by the rainy weather. DCI to resume grass cutting and tree trimming tomorrow. Window installation anticipated to begin the later part of next week. DCI contacted RM Towill about Hirata visiting the site to look at the downstream subgrade conditions. RM Towill to follow up with Hirata on a site visit for next week. 2/13/19: BWS Ops successfully opened Gate 1 a little more (stem is about 6" extended). Water level within the reservoir is noticeably going down. Site rained out today due to heavy rains and winds. Water level noticeably came up with rain. DCI hoping to start cofferdam prep and installation at the end of the month, pending water level. Dredging work continues. DCI continues to clear the downstream area but it has been hampered by weather. Hirata is scheduled to visit the site tomorrow morning pending weather. Windows were completely damaged by shipper. They are looking at expediting replacement. SSFM to send BWS pictures of outlet from today. Flow seems good and no overflowing

- Permits:
  - Status of Nationwide Permit #3 and #7 –
    -
  - 401 WQC – 2/6/19: DCI only cutting grass and underbrush. Per discussion with Element Environmental, water sampling will need to begin once DCI starts breaking ground. DCI to keep them updated on schedule.
  - NPDES Storm Water –1/2/19: DCI delivered December 2018 monthly report for signature today. 1/9/19: Monthly report signed by BWS and picked up by DCI. 1/16/19: DCI requests to remove all items prior to 2019. No issues with omitting items prior to 2019. 1/23/19: DCI updated SWPPP to reflect removing biosocks from embankment since grass is established. It will be reflected in the monthly summary. 2/13/19: DCI dropped off January monthly summary to BWS. BWS signed on 2/11/19 and is available for pick up. DCI picked it up today.
  - 1/9/19: DCI in the process of renewing grading permit since project since grading work on the downstream side has been delayed. 2/6/19: RM Towill to assist DCI with updating Erosion Control Calculations schedule. RM Towill request revised erosion calculations. LYON did not send DCI the final version. Will request a copy from DPP. 2/13/19: DCI provided the previously approved ECC to RM Towill on 2/6/19. RM Towill sent over a draft copy of the update to DCI for review on 2/8/19. DCI said draft looked ok and to please submit to Karisa Vicente at the permit counter. RM Towill emailed the update to Karisa and she said it needed to go to Steve Young at DPP. RM Towill confirmed it was sent to Steve this morning.

- Change Proposals:
  - CP-002 Operator 1 Repairs– 2/14/18 forwarded CP for repairs 2/13/18. Wanted BWS to review repair scope of work. Trying to get pricing for scaffolding to firm up number. BWS asking if repairs to operator 1 are necessary. DCI does not know if it is mandatory to repair as part of the dam permit. Need to consult with RM Towill on that question. If operator 1 does not need to be operated then there is no reason to repair it. DCI recommends BWS to test Operators 2 and 3 to verify that they work. 2/21/18 Per BWS email received on 2/20/18, Michael Matsuo stated sluice gate 1 needs to be operational per State Law. DCI recommends BWS confirm if 2 and 3 are required by law to be operational as well. If so, DCI recommends BWS test operators 2 and 3 to confirm they are working. If they are not working they would need to be fixed as well. DCI to follow up on the scaffolding quote. 2/28/18 DCI working on scaffolding quote. BWS to confirm with their Land Administrator, if operators 2 and 3 need to be functional. No update from BWS. 3/7/18 BWS confirmed all 3 operators need to be functional. BWS to discuss with RM Towill alternate methods of repairing the operators, maybe possibly replacing with newer technology. 3/14/18 No update. BWS to confirm if there are historical concerns and what can be done the design. 3/21/18 RM Towill to check internally with their planners if there is historical significance. RM Towill requesting proposed updated design for the operators. DCI will check with their sub if they have any suggestions. 3/28/18 RM Towill to discuss with BWS on what they can do in regards to the historical aspect. 4/4/18 Per PreCon Meeting with DLNR, they believe only gate 1 needs to be operational. Gate 2 and 3 could be removed. Just would need new debris screens in place. Gregg to discuss with Michael Matsuo. RM Towill and BWS arranging for conference call with SHPD to discuss historical implications. 4/11/18 BWS & SSFM has no update on meeting. 4/18/18 Per RM Towill comments, they left two additional voice messages for SHPD. Have yet to receive a response. 4/25/18 RM Towill to follow up internally on SHPD status. DCI has been in contact with gate manufacturer (Rodney Hunt) rep. Per the rep should have a complete pricing soon. BWS still trying to determine if only Gate 1 needs to be operational and replaced. BWS discussing internally (Keith with Michael Matsuo, Land Administrator). BWS to ask DLNR to provide something in writing saying only Gate 1 needs to be operational. This may help clarify requirements. 5/2/18 Per Rodney Hunt's material proposal for complete replacement of Operator 1 is \$16,776. This does not include an engineering, start up, testing, etc. Per RM Towill no update on status with SHPD. 5/9/18 RM Towill and BWS to provide update on SHPD and if operators 2 and 3 need to be replaced. DCI would like to recommend since Operator 1 is the most critical to construction as well as operations, if we could focus on resolving the design portion while we wait for a decision on operators 2 and 3. SSFM thinks the design may not be able to proceed since SHPD has not provided comment. DCI commented the exterior sluice gate looks the same as what is there. DCI can request for a cut sheet of the operator to see if it looks the same as what is existing. If it is that would make it easier to address any possible historic issues. SSFM concurs. 5/16/18 RM Towill to confirm SHPD takes no exception to replacing the equipment in the room. If this is the case, DCI would like to recommend resolving the design portion

of replacing the operator 1 while BWS determines if operator 2 and 3 need replacement. BWS meeting with Ernest Lau to discuss what needs to be done with 2 and 3. DCI to forward contact info for Rodney Hunt to RM Towill. 5/23/18 DCI sent RM Towill local rep contact info. BWS to advise if internal meeting occurred with Ernest Lau. SSFM to defer to BWS. BWS unable to attend. 6/6/18 Per BWS discussion at 6/1/18 meeting, determination still has not been reached if operators 2 and 3 need to be replaced as well. DCI recommends pushing to get the design resolved and it would be good to get in touch with the supplier for engineering. RM Towill request DCI resend contact for local rep and include quote. 6/13/18 DCI forwarded information to RM Towill 6/7/18. RM Towill to contact local rep to get information on engineering, start up, training and O&M's. Keith to follow up with Greg on Operators 2 and 3. 6/20/18 RM Towill to work on this today. DCI asks if RM Towill received meeting request from BWS to discuss this issue along with the lowering the water level in the reservoir. Is a dewatering permit needed to pump water to Gate 2? Per DCI's discussions with other environmental consultants it will be required. RM Towill checking with CWB. Meeting is tentatively set for 10am Friday. RM Towill was not sure of location. DCI to follow up with BWS. 6/26/18 RM Towill sent request to H2O process regarding operator 1 on 6/24/18. H2O did ask confirmation on scope and are working on estimate. 7/11/18 H2O Process forwarded quote to RM Towill for complete replacement of Gate 1 (including operator, stand pipe, etc.), \$34,400. Not included in the quote is site services for start-up and training. BWS to advise how they want to proceed from here. 7/18/18 BWS no update, still reviewing. 7/25/18 BWS unable to attend meeting today. SSFM defers to BWS for update. 8/1/18 RM Towill followed up with H2O Process on installation quote but have not heard back from them. DCI is concerned with the material lead time and its possible impacts to the overall schedule. Current schedule update does not reflect the procurement time for the gate. RM Towill asks if the BWS will purchase the gate. Per BWS, they cannot purchase the gate directly since it exceeds their PO threshold. It would need to be done under Drayko as a mod. DCI suggests to handle the purchasing as force account since the cost would just be the material price with DCI's markup. The installation portion can be handled separately. DCI recommends getting the shop drawings squared away and those can be used as the construction drawings. It will help with pricing the installation. BWS to discuss internally. 8/8/18 DCI submitted proposal just to purchase materials, start up and training for Operator 1. H2O Process provided a quote for installation (\$16,300). However, per DCI's discussion with them that quote is for a typical installation it does not address the site-specific needs and contractual requirements (safety, prevailing wage, etc.). H2O Process to have their installer contact DCI to schedule a site visit to produce a project specific quote. They also confirmed to expedite it would cost \$6,600. This would decrease the lead time to 14-16 weeks. DCI also requested they provide a quote for engineering including anchorage structural calculations. SSFM defers to BWS for update. 8/15/18 DCI received engineering proposal from H2O Process for anchoring. BWS to advise if they want DCI to include in their proposal or if they will procure on the Engineering side. BWS to check internally how they want to handle the engineering cost and approval for ordering operator 1 materials. 8/22/18 Harvey Brothers Construction (installers) visited site on 8/20/18 to

look at the existing conditions and discuss scope of work. He is concerned with installing the slide, shutter and stem since the ground will be soft in the area. Will work on a pricing and submit to DCI. NO update from BWS on ordering. 8/29/18 Per discussion with H2O Process, Harvey Brothers Construction still working on proposal, but they believe it will be atleast \$100k. BWS to meet internally with SSFM regarding purchasing materials. BWS wants DCI to proceed with this change as a design-build. DCI request this be provided in writing. 9/5/18 Per DCI discussion with Harvey Bros, they are concerned with the condition of the cast iron sleeve and thimble. Looking at the as-builts, it appears the thimble is integral to the sleeve so if there is an issue with the thimble the entire sleeve may need to be released. However, not sure if new materials would attach seamlessly to existing pipe stand. They would like to discuss with person responsible for maintenance to know the existing condition of the pipe stand inside the tower. BWS unsure who would be able to provide that information since they are not sure if maintenance has been recently performed. SSFM unsure of schedule impacts for this work and request various scenarios be created into a fragnet. Per DCI it is difficult to say what the scenarios are applicable since the scope work could change depending on the existing conditions. SSFM asked if there was a way to verify the conditions now. Per DCI you would need to remove the sediment from Gate 1, lower the water level and install the cofferdam to be able to inspect the existing conditions both exterior and interior to the tower. DCI requests holding off providing scheduling fragnet until further direction is provided on how to proceed. SSFM asked if the work had to be completed. Per DCI, they are OK with descoping the work from the contract but do not know how that will affect BWS's Dam Permit with DLNR. DCI request meeting to discuss the issues surrounding Operator 1 in order to help BWS provide a direction moving forward. BWS to discuss internally and get back to DCI. 9/12/18 BWS to update on the result from internal discussion. BWS to discuss with Section Branch head to go over what can be done at this point. DCI recommends descoping the work from the contract in order to save cost. DCI is willing to coordinate with BWS with verifying existing conditions of the gates once the cofferdam is in place so they can determine what fix is appropriate. 9/26/18 Per BWS they know they make a decision either leave the gate open or repair it. BWS Project Manager did relay information on gate material lead times and situation to their Manager. The project was presented at 9/24/18 Board meeting and they know a response is needed. 10/3/18 BWS no update. Keith to discuss with Greg. 10/10/18 BWS tested Operator 3 and it did not move. Shaft appears to be frozen and cause the entire valve to lift when trying to move it. They did not attempt Operator 2 since it is regulating the water level within the reservoir. BWS to advise DCI if the operators are to be left as is and DCI can credit the money for the cleaning and painting. 10/24/18 Per BWS, they sent a inquiry to DLNR (Jimmy and Edwin) regarding leaving gate 1 open or if it needs to be repaired. Have not received a response yet. Per RM Towill, last conversation they had with BWS Land Administrator, Michael Matsuo, area politicians requesting the reservoir to be filled again so Gate 1 would need to be closed. BWS waiting for DLNR's response before making a decision. DCI notes that they are holding off on abatement and restoration on valves until a decision is made in order to provide a credit for the work. 10/31/18 BWS to update. No update was provided to SSFM from

BWS. DCI discussed with SSFM the urgency as no stop work has been issued and DCI has been assisting with the situation, however, the delay may affect DCI's subcontractors who will be performing the work to the operators on the interior of the tower. 11/7/18 Given how long the issue has been open, DCI sent letter to BWS requesting response on Operators be provided by COB Friday 11/9/18. If no response is received, DCI will proceed with contract work on Operators and the credit for the work will not be available. Per BWS 11/7/18 email, no update on response. 11/14/18 BWS and DCI agreed to a week extension on the response. DCI request response provided by noon Friday 11/19/18 in order to allow time to cancel Unitek for Monday. No update. Keith is working with Greg. Trying to get response by deadline. 11/20/18 BWS notified DCI to proceed with contract work on the operators on 11/16/18. BWS to update if Operator 1 will be replaced. Keith did call DCI to let them know Michael Matsuo and other BWS people will be onsite visiting. Not sure what was the intention for the visit. Per Keith, Greg's side will have meeting with Manager on Monday. Keith received further direction. BWS want all 3 gates working. BWS requesting two separate quotes, 1ea – for the Gate 1 and 1ea – for Gate 2 and 3. BWS requesting to stop any further work on the operators. DCI request BWS provide an email noting the pricing request along with the directive to stop work. 11/28/18 DCI contacted H2O Process for revised quotes and with questions from RM Towill. H2O discussing with manufacturer. BWS scheduled the meeting for Friday 11/30/18. 12/5/18 Per the 11/30/18, BWS to have RM Towill pursue the design elements of replacing Operator 1 with 2 and 3 as options. DCI provided RM Towill contact information for Hydro Gate supplier and manufacturer. They seem to be much more responsive than Rodney Hunt. DCI will price the change once the design is finalized. RM Towill is pursuing the design change. SSFM requested scheduling impacts, however, as previous noted, these cannot be assessed until there is an approved design. 12/12/18 RM Towill working with another supplier (Promark) to supply the gates. DCI sent questions to Promark regarding installation of gates. Waiting for their response. 12/19/18 DCI received responses from Promark to their questions. Will need to measure diameter of existing flange, bolt pattern and diameter of existing stud. Manufacturer will try to match up the gate to the existing conditions. DCI to forward information received from Promark and Whipps. RM Towill to discuss what they need to get the shop drawings started. BWS has no objections to using stainless steel. RM Towill requested DCI price the installation so BWS can make their decision on whether to replace only 1 gate or all 3. Per DCI, request the design completed and defined scope of work provided so they can price the install as requested at the 11/30/18 meeting. 1/2/19 Per DCI's discussion with RM Towill, shop drawings provided were not site specific and raised more questions on how the gate should be installed. Ex – shows W8 supports for the stem guide, base of the operator is slightly smaller than the floor opening size indicated on the as-builts. RM Towill request BWS decisions on procuring shop drawings since manufacturers probably want payment if a site specific shop drawings need to be generated. BWS to discuss internally on procuring shop drawings. RM Towill asked BWS if stainless steel will be the required material. BWS has no preference between cast iron and stainless steel. DCI will contact the Hydrogate again if they can provide a stainless steel gate and if they can answer more questions on

the installation. RM Towill to contact Promark/Whipps to schedule a conference call with the manufacturer to discuss the proposed questions from DCI. 1/9/19: DCI contacted Hydro-Gate and they will provide a quote for stainless steel gate. However, they still recommend cast iron because of the following reasons:

- Cast iron has a life span of 40-50 years. Stainless steel only has 20 years.
- Cast iron is going to be more corrosion resistant in most cases. However in a chlorine environment, stainless would provide better corrosive protection.
- Seat faces on cast iron are self-cleaning, so they do not require cycling as frequently as stainless steel.
- Design head for the lower gate would require a heavier duty stainless steel gate i.e. cost more.

DCI exploring option of using a composite gate in lieu of cast iron or stainless steel. Composite would be better at dealing with the corrosion concern. DCI has reached out to local Plasti-Fab rep to see if they can provide a quote for the gates. DCI to run this suggestion by RM Towill. 1/16/19: No confirmation has been received if composite gates could be used. BWS directed RM Towill and DCI to proceed with using cast iron gates. DCI mentioned concerns if only 1 supplier (Hydro-Gate) was responsive and if there would be any issues if only 1 supplier was provided. SSFM and BWS did not think it would be an issue as it is known that the other suppliers have been not very responsive. DCI will resume discussions with subcontractor Harvey Bros for an installation proposal. 1/23/19: Per email received from RM Towill, DCI requested Harvey Bros review information on both Hydro-Gate and Whipps and provide an installation price. Harvey Bros reviewing the information and will get back to DCI hopefully early next week. 1/30/19: DCI followed up with Harvey Bros. Waiting for response. 2/6/19: Per DCI's discussion with Harvey Bros. last week, they will review the information for both Hydro-Gate and Whipps. They ask what size bolts will be utilized to install the gate. They need to know what size hole to tap into the existing flange. DCI sent request to Hydro-Gate. RM Towill sent request to Whipps. 2/13/19: DCI sent Harvey Bros information for both Hydrogate and Whipps anchors. Both are saying 5/8". Harvey Bros to update DCI on when they can submit the proposal. DCI asked BWS if they still want to pursue this change since Gate 1 operator seems to be working. BWS did have an internal discussion but will need to discuss with higher ups.

- CP-007 Spalling and Handrail Connection Plate Repairs – DCI to work on change proposal for RFI-022 and RFI-024 handrail repairs. 7/18/18 DCI propose two methods for repair – weld or bolt on new splice piece. Recommend doing a bolt connection to eliminate possible safety hazards and needing to bring a subcontractor. BWS want to see onsite so they can understand the difference. DCI to make a sketch of what they are proposing. DCI notes that there will be a color difference between the splice and the existing handrails. Plans and specifications do not call out the handrails to be painted. It notes only the structural members. The handrails are for safety, not structural members. 7/25/18 DCI forwarded sketch to BWS for recommended repair method. Proposed bolt on method minimize extent of repair which will save on cost and maintenance. DCI to

follow up with BWS if proposed method is acceptable. 8/1/18 BWS to advise if proposed fix is acceptable. 5 locations would need this repair. RM Towill conferenced in KSF for their opinion on the bolted fix. KSF is concerned with using the bolt connection since it is a round surface and the bolt may not sit flush. They are also concerned with corrosion and maintenance. DCI will price the change for a welded connection. 8/8/18 DCI working on pricing change. 8/15/18 DCI working on getting a subcontractor to provide a price for the handrail replacement. 8/22/18 David's Fencing visited the site on 8/21/18 to price change. 8/29/18 DCI confirmed with KSF, all 8 locations shown in RFI-022 need to have the plate connection replaced. Concrete repairs only need to be done at locations where concrete is damaged. DCI waiting for David's Fencing pricing. 9/5/18 DCI followed up with David's Fencing. Waiting for response. 9/12/18 DCI followed up David's Fencing. Still waiting for a response from David. 9/26/18 DCI contacted David's Fencing multiple times requesting the quote. Per discussion with the estimator's admin, they will submit the proposal ASAP. DCI to follow up again. DCI has requested another sub to look at the work and price as a back-up. 10/3/18 DCI received pricing from David's Fencing but it seemed rather high. Sent David's questions on price and scope. 10/10/18 DCI submitted proposal 10/5/18. SSFM request DCI provide breakdown of hours for their mason and carpenter. Mikami to provide CP on Form F. 10/24/18 DCI still has not received the breakdown from Mikami on Form F. Since Mikami does take a while to respond, DCI requests to use the second subcontractor quote as a price check . Noted second subcontractor informed DCI they cannot perform the work because they are so busy and their cost was almost 3 times what Mikami had quoted. BWS will review with SSFM. DCI sent their labor breakdown to SSFM on 10/23/18. SSFM reviewing labor breakdown. 10/31/18 SSFM takes no exception to the DCI's hours. Still need Mikami's proposal on Form F. DCI followed up with Mikami. Still waiting for form F completion. 11/7/18 DCI followed up with Mikami regarding Form F. He should have it submitted today. 11/14/18 DCI received completed Form F from Mikami and submitted the proposal to SSFM today. 11/21/18 SSFM no exemptions. Uploaded to MANAO 11/21/18. Will be mod-06. 11/28/18 DCI would like to schedule this work while the MOD is being routed, since they are running out of work onsite. BWS could not give the OK to proceed since there is guarantee the MOD will be issued. DCI to hold off work until MOD is issued. 12/5/18 BWS to update on status. No update provided by SSFM. 12/12/18 BWS not present to provide status update. 12/19/18 BWS check where in the routing process the modification is. 1/2/19 Mod went to court council on 12/28/18. 1/9/19: SSFM defers to BWS. 1/16/19: Keith to follow up and email an update. 1/23/19: DCI received MOD and returned it signed to BWS. **2/13/19: DCI received fully executed mod 2/4/19. Item is closed.**

- CP-009 Downstream Change – DCI to submit change proposal for the added work due to the NWP. DCI asks BWS how soon can they review and approve. DCI is concerned with timeliness of executing the mod, ordering materials, etc to avoid further delay to the project. BWS will try to expedite as soon as possible but normally period is at least 70 days. 1/30/19: DCI working on downstream change proposal. 2/6/19: DCI still investigating the existing conditions for downstream. Clearing work has been slowed



down by the rain. 2/13/19: DCI continue to evaluate existing conditions as they clear the area.

- RFI Status:
  - Open Submitted RFI's:
  - Upcoming RFI's –

Submittals:

- Submitted:
  - Schedule Update (01-19) – Submitted to Newforma 2/1/19. SSFM uploaded to MANAO. 2/13/19: Status update. BWS to check.
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- Upcoming:
  -

Pay Request:

- Invoice 12 (1/1/19 thru 1/31/19) – 2/6/19: Submitted to SSFM for review 2/1/19. SSFM no exceptions taken to request 2/5/19. DCI dropped off hard copies to SSFM office 2/5/19. SSFM delivered to BWS today. 2/13/19: Pay request is being routed within BWS.

- Impacts / Delays:
  - Potential Delay Claim – Due to the open items listed above, we are concerned that the project will be delayed further thus resulting in both time and cost impacts. Further extending the contract completion will be considered a change condition and result in a claim for cost increases to labor, materials, etc. 1/31/18 With delay to the work on the VE and resolution to the QA Plan, there will be a delay in starting work per schedule. 2/7/18 DCI has experienced delays due weather. 2/21/18 Delay coming up with waiting for the QA Plan and Precon Meeting to take place. 2/28/18 Please see attached updated rain log. Project has experienced 11 rain out days. Still need QA Plan and Precon Meeting with DLNR resolved. 3/7/18 Project experienced 2 more rain days last week. DCI will need to issue delay letter if no movement is done on the QA Plan this week. There will be a delay due to the 404 permit because it affects the critical path.
    - Nationwide 404 Permit Expires 3/18/18 – Nationwide permit will expire on Sunday. Per General Conditions 5.3.D Force Majeure we need to immediately notify the OIC in writing within ten (10) days from the commencement of the delay. DCI will need to provide a delay letter for this item since it affects the critical path. 3/21/18 DCI sent NWP delay letter to BWS on 3/19/18. Hard copy delivered 3/20/18. 5/2/18 DCI will need to update delay letter to reflect inclusion of Weirs 1 and 2 due to adjusted OHWM.

- Nationwide 404 Permit Follow Up – 5/9/18 DCI submitted follow up letter detailing additional impact due to the revised downstream OHWM. Letter sent to BWS on 5/8/18. BWS open to discussing time extension for delays since contract expires in 2/7/19. 9/14/18 DCI requests to start discussion on time extension since it takes at least 70 days to execute a mod and we are getting closer to the completion date. Contract completion date is 2/7/19. DCI would like to avoid LD's occurring on the project. BWS is open to discussion. RM Towill asked if there would be any cost associated with the time extension. DCI responded that at this time, the cost could not be determined until the permit was received as it affects the sequencing of the items affected by the NWP #3 and #43.
- Nationwide 404 Permit Follow Up – 9/26/18 DCI sent BWS a follow up noting dredging NTP and the items of work still affected by the NWP on 9/20/18.
- Time Extension Discussion – 9/26/18 DCI sent to BWS a request letter to discuss the time extension for the project. BWS to advise when meeting can occur. Per BWS, they feel a meeting at this time is too soon since the permits are still outstanding. They do realize a time extension is needed and has no problem providing it. DCI is just concerned with unwarranted LD's being possibly assessed. Per BWS, DCI should not worry. 12/5/18 DCI requesting to have discussion on time extension since it is December since the contract completion is 2/7/19. Mods have taken 70 days to process. DCI currently only looking for only rain days. Not the delays due to the NWP. SSFM to discuss with BWS. It does affect DCI's bonding. DCI to forward rain out log to SSFM. 12/12/18 SSFM sent email request to Keith and Sandy regarding time extension. No response yet. SSFM did look at contract general conditions and it says extension could be allowed if weather is out of the ordinary. Request DCI submit their rain out log and any supporting historical data to help with justification. 12/19/18 DCI asks BWS what will occur if the contract duration expires without an executed modification. Per BWS, they have processed CO's after the fact so there should be no issues with LD's. DCI reviewed their rain out log and it impacted approximately 2 months of work. This does not provide much of a time extension. DCI asks if BWS would be open to start discussion on time extension on the NWP delays. BWS said they are open. Will schedule a meeting after the New Year to discuss. 1/2/19: Per BWS will coordinate with SSFM and let DCI know a proposed date. 1/9/19: DCI submitted letter requesting time extension meeting on 1/7/19. SSFM wants the meeting be productive and asked how the critical path was affected by the NWP #3. Per DCI, as there is no phasing built into the project and the Nationwide Permits (NWP) are the Board of Water Supply's responsibility. The delay in executing a replacement permit prevented DCI from the ability to access all the work areas therefore limited our ability to perform work. In regards to time, DCI is owed any time between when the original NWP expired to when a replacement was executed. This meeting will only be to discuss time. The cost will be based on the true delay and that will need to be addressed separately since it is intertwined with other issues i.e.

NWP #43 (downstream) and the operator 1. DCI recommends still having the meeting so we can discuss how best to approach presenting the time extension for approval. SSFM to discuss with BWS. DCI will look at what they can show with the schedule. 1/23/19: NWP permits have been executed. DCI to evaluate impacts to schedule and submit delay claim. SSFM asks if delay would include the rain days. DCI prefers to keep rain days separate from permit delays. BWS is willing to accept the requested rain days. 2/6/19: For rain delay time extension, will BWS just provide a mod for the days or will they need DCI's rain log as back up? SSFM recommends submitting as much back up as possible for the extension and discuss with BWS what they need for the mod. DCI to discuss with BWS. 2/13/19: BWS requested DCI provide the rain out log, daily reports, request letter and Schedule for rain time extension. BWS understands schedule will not be clear cut since there were other factors (permit delays) that affected the schedule.

- Other Items of Discussion:
  - Vacation/Leave –
    - Tyler will be on a work trip 1/20/19 thru 1/25/19
    - Shelly will be on vacation 2/15/19 thru 2/24/19
    - Keith will be on vacation 2/19/19, 2/21/19 and 2/22/19
    - Ivan will be at a conference 2/20/19 – 2/21/19
    - Tyler will be on vacation 3/1/19 thru 3/17/19
  - 1/23/19: SSFM requesting DCI repair big potholes on access road. DCI is willing to do so as long as material onsite i.e select borrow can be used and remain in place. No exceptions taken. 1/30/19: DCI ok to patch but does not want it to become a maintenance issue. 2/13/19: SSFM asked if when potholes will be repaired. DCI will conduct repairs once weather is better and there is time. Priority work is the contract work.
  - 1/30/19: BWS forwarded copy of the flyers sent to resident's in the area to project team. 2/6/19: Confirmation email on water lowering sent by BWS on 2/5/19.

# Nuuanu Reservoir No. 4 Dam Improvements

## 3-Week Schedule

DKO Job # 1701		February 13, 2019		2/11	2/12	2/13	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27	2/28	3/1	3/2	3/3	3/4	3/5	3/6	3/7	3/8	REMARKS	
ACT ID	RESP	ACTIVITY DESCRIPTION		MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI		
<b>MOBILIZATION</b>																															
		RAINOUT/MUD OUT																													
<b>DREDGING</b>																															
108, 111		Dredge reservoir		X	X	X	X	X				X	X	X	X		X	X	X	X	X				X	X	X	X	X		
<b>WEIRS &amp; DRAIN EXTENSION</b>																															
		Clear & grub downstream areas		X		X	X	X																							
		Layout Weir & temp road locations																				X	X								
<b>COFFERDAM &amp; TOWER EXTERIOR</b>																															
109	BWS	Lower Water Level (BWS)		X	X	X	X	X				X	X	X	X																
		Staging/prep for cofferdam															X	X													
110		Install Cofferdam (delayed by lowering water level)																			X	X	X			X	X	X	X		
		Setup for tower exterior work																													
	HICCI	Paint water level markings																													
		Install debris screens																													
		Install ladders																													
	DYM	CO-06: Handrail Repairs																													
<b>INTERIOR TOWER</b>																															
121	CCIW	Procure windows																													
121	CCIW	Install Windows																													
	PCC	CO-04: Access Hatch (Shop fabrication & install)																													

HOLIDAY - PRESIDENTS DAY

NOTES: \*Schedule has shifted due to rain/thunderstorms and muddy conditions experienced from the start of mobilization

Contractor: Drayko Construction, Inc.  
Job Number: 17-040