Buhler Mill Site Investigation and Summary

for the

City and Borough of Wrangell

Introduction

PEAK Engineering conducted a site survey of the Wrangell Mill site originally constructed and operated by the Alaska Pulp Corporation from 1958 until 1996 at which point it was purchased by the Silver Bay Logging Corporation. Silver Bay Logging Corporation operated the mill until 2005 and subsequently shut down. The mill buildings and overall site was then scrapped except for a few buildings that are discussed within this report.

The scope of PEAK's proposal was to investigate the following:

1. Site surfacing
2. Structure surveys
3. Underground utility surveys
4. Access (water and highway).
5. Saltwater Survey
6. Environmental Concerns

Project Team

PEAK Engineering – Engineering, testing and communications with the City and Borough of Wrangell (CBW).

Site Surfacing

PEAK Engineering, hereafter PEAK, conducted an ocular estimate of the wood waste on site. This was broken down into two types. One type is chips and sawdust, and the other is bark and larger chunks of wood typically associated with log decks and not like the sawdust which is associated with sawing operations.

The quantity of sawdust and chips is estimated to be 21,700 cubic yards.
The quantity of mixed bark, rock and larger chunks of wood is estimated to be 14,200 cubic yards.

The general conditions of the drainages are overgrown with alder and needing to be mucked out. There is an estimated length of open ditch of 3100 feet. There is an estimated 650 cubic yards of material to be mucked out as well. The pictures below show the conditions of nearly all ditches and their current conditions.

There is generalized ponding in the site in two locations. There is a "pond" that exists midway between the "Shop" and the "Barge Ramp" and there is one "pond" that does not drain on the site and that is to the west of the "Planer Shed" and roughly 75' northeast of the "Parts Shed".

The quantity summary for site surfacing is as follows:

1. Sawdust and Chips - 21,700 cubic yards
2. Mixed bark, rock & wood - 14,200 cubic yards
3. Open drainage - 3,100 linear feet
4. Open drainage excavation - 650 cubic yards

Photos

The photos in Appendix A depict the different aspects of the drainages, wood waste and ponding on the site.

Structure Surveys

PEAK conducted a *Condition Assessment* of each structure and estimated their ongoing useful lifespan. Main elements to be looked at for each building included the roofing, siding, insulation, flooring, foundation and any other key structural elements. PEAK also looked at the Sheet Pile wall, Beaver Slide, Impoundment Dam and the slow sand filter beds.

Within this task, PEAK investigated the following structures:

1. Main Shop Building (Steel Structure)
2. Planer Shed (Pole Building)
3. Parts Building (Pole Building)
4. Axle Shed (Steel Container)
5. Warehouse w/Office (Steel Structure)
6. Sheet Pile Wall (Bulkhead-Steel Sheet and Concrete)
7. Beaver Slide (Steel I-Beam)
8. Slow-Sand Filter Beds (Concrete)
9. Impoundment Dam (Reinforced Concrete and Steel Spillway)

Main Shop Building

The Main Shop Building is a 75-foot long by 50-foot-wide steel frame structure clad in metal siding with metal roofing. The structure has a 4:12 pitch to the roof, with a 32-foot eave and 40-foot peak.

Siding

The siding of the structure is in fair condition with multiple penetrations for chimney support, dents due to equipment impact, rusting evident at the bottom of many panels up to 4 inches. The penetrations that are currently open and exposed to the weather, could be patched or repaired to better rainproof and insulate the structure. Other penetrations such as the chimney support could be flashed and better rainproof the structure. The main equipment sliding door is serviceable but could use minor repairs to ensure a longer life. Sheet metal that is deformed could be replaced but is not necessary at this time. The man-door to the left or north of the sliding equipment door is in poor shape and should be replaced for security purposes of the contents.

Roofing

The roofing of the structure is leaking in many places and is likely due to missing screws. Aerial images attached did not show any signs of impact or penetrations that would be causing the leaks in the structure roof. There were no large failures observed. Generally, the roof is in good, serviceable condition and needs the leak penetrations sealed or if screws are missing, replaced. Evidence of the leaks can be seen in the insulation, on the inside of the structure, at the eaves of the roof. Where the insulation is hanging, is where the roof upslope is leaking. There are other areas, minimal, that show signs of leakage that are not on the eave edges.

Insulation

The insulation is largely intact but failing in the areas where leaks in the roof exist. The insulation is typical of large steel frame structures where rolls of insulation 12 feet wide are overlayed upon the girts of the steel frame. Insulation values for the roof appear to be 4" to 6" thick which would suggest an R-value of 12 to 18. While the insulation is minimal for this structure, there have been stoves and oil burners in the structure previously that helped to heat this structure.

Areas where the leaks exist are evidenced by the discoloration and dislocation of the insulation battsAfter the leaks are fixed the failed insulation be replaced. It is not a critical need nor is it a need that affects the overall current serviceability of the structure. The sidewall insulation is intact and serviceable except for where the penetrations where made.

Flooring

The flooring on the main floor of the Shop consists of 12" to 16" reinforced concrete. This was not drilled due to its condition. The main floor remains in serviceable condition as evidenced by the absence of cracks. All types of machinery including large log shovels and yarders were serviced inside this structure. Large yarders weighing 150,000 pounds did not crack the floor. Elsewhere on the mill site, there is 12" – 16" of concrete overlain by 3 inches of asphalt. Some of the concrete has cracked in the yard, but not in the shop.

The second-floor loft consists of a steel frame overlain by wooden floor beams and planking. The steel posts supporting the second floor consist of 4"x5.5" H-Beam with 3/16" flanges that are 11.5' long. The posts are attached to the floor with a welded in steel plate and bolted to the reinforced concrete floor. The

steel girts are 6.5”x8” I-beam with 3/8” flanges. There are two steel girts running the width of the building on 12-foot centers. There are a total of 4 posts on 16-foot 4-inch centers as measured from the walls. The loft runs the full 50-foot width of the structure. The steel girts are overlain by wooden floor beams that are 4”x8”x24’ long. The wooden decking consists of 3”x12” planks of random lengths of 2-foot multiples.

The safety rail which is 1.5”x1.5” square tubing is serviceable and intact, but the removable piece allowing for parts to be placed on the second floor was not in place at the time of inspection.

Foundation

The foundation from what could be visually inspected does not appear to have any issues. The building is not undergoing any differential settlement and the floor is not cracking. Since the entirety of the foundation is below ground, no visual inspection of it could be performed. External indicators do not show any signs of degradation.

Structural Elements

The Steel support columns and all other steel members appear to be in good serviceable condition. Some steel members have lost their protective paint coating but do not appear to have any measurable corrosion.

Other Equipment & Supplies

The 10-ton crane has shorted out due to a roof leak on the electrical rails that supply power to the crane. There are scattered parts and supplies throughout the structure that will remain in the building. Some will have value, and some will not. Given the quantity of parts and supplies, it is difficult to quantify the overall.. Some of the parts go with the equipment sold and will be removed prior to the close of the sale.

Overall Recommendation

This structure with minor repairs could provide serviceable use for another 30-years.

Photos

The photos in Appendix B depict the different aspects of the structure as of the 2nd week of April, 2022

Planer Shed

What remains of the Planer Shed is a 30-foot wide by 48-foot-long pole building clad in metal siding. There is no metal roofing on the structure at the time of inspection. The structure has a 4:12 pitch to the roof, with a 16-foot eave and 22-foot peak.

Siding

The siding of the structure is in fair condition with several pieces missing from the structure. The penetrations that are currently open and exposed to the weather, could be replaced to better rainproof and insulate the structure. The ends are missing on the structure as it originally was part of a longer

structure before demolition of the mill begin in 2009-2010.

Roofing

The roofing of the structure is missing and is now covered in plywood and tarps/plastic. The roofing could be replaced if compromised structural elements were replaced and/or repaired.

Insulation

There is no insulation in this structure.

Flooring

The flooring on the main floor of the Planer Shed consists of 12" to 16" reinforced concrete. This was not drilled due to its condition. The main floor remains in good serviceable condition as evidenced by the absence of cracks.

There are two elevated walkways on either side of the structure that were used to access and maintain the equipment housed within the building. The elevated access is 5 feet off the floor and is supported by 8"x6.5" I-Beam with 3/8" flanges. The elevated walkway is 8 foot wide by 24 foot long. The frame is all steel and consists of the 8"x6.5" I-beam with 3/8" flanges and 8"x2 ¼" channel beam that is ¼" thick. Housed within the frame is 3# catwalk made of metal. The elevated walkway was originally connected to other structural elements within the shed that are missing. Consequently, the walkway is sagging slightly towards the inside of the shed. It is serviceable and could be stabilized if desired.

Foundation

The foundation from what could be visually inspected does not appear to have any issues. The building is a pole building and the creosote-treated poles are embedded into the ground with concrete poured around the bases. There is no apparent subsidence of the structure, so the foundation appears to be in good condition.

Structural Elements

The building is a pole building and the 10" to 13" diameter creosote-treated poles are in serviceable condition. The poles were bored to identify any rot or hollow cores and did not show signs of degradation. The poles are on 12-foot centers with 10"x12" spruce timbers acting as purlins on top of the posts. There are cripples under each 10"x12" connection at the top of the post that are 6"x12"x36". The cripples are connected by a long steel 90 that is 6" wide and roughly 18" long along the post and 6" long along the underside of the cripple. These angles are through bolted to the post and the cripple above to provide a solid connection. Where the structure has not been taken down, these angle brackets are in excellent condition. Where the roof has been removed, the brackets and their connections are suspect and should not be counted upon for ongoing structural integrity.

Other Equipment & Supplies

The 10-ton crane has shorted out due to a roof leak on the electrical rails that conduct power to the crane. There are scattered parts and small equipment throughout the structure that will remain in the building.

Some will have value and some will not. Given the quantity of parts and supplies, it is hard to put a number to what is good and what is not. Some of the current parts (i.e., Filters, belts, brake fittings and hoses) in the building go with the equipment previously sold and will be removed prior to the close of the sale.

Overall Recommendation

This structure should be torn down. There are enough trusses compromised that the structure holds little residual value at this time.

Photos

The photos Appendix B1 depict the different aspects of the structure as of the 2nd week of April, 2022

Parts Building

The Parts Building is a 25-foot wide by 120-foot-long pole building clad in metal siding and metal roofing. The structure has a 4:12 pitch to the roof, with a 17-foot eave and 21-foot peak.

There is a small shed attached to the south side of the structure measuring 7.5 foot by 12 foot. It appears to have housed service manuals and some office equipment.

Siding

The siding of the structure is in fair condition with sections that are damaged and the end of building to the southeast having no metal cladding at all. This is due to the planer shed extending past the end of the parts shed by 24 foot where it terminated prior to its demolition. There is 30 feet of siding missing on the south side of the southeast end of the building up 6' from the ground. This also can be attributed to the demolition of the planer chain shed. The ends are missing on the structure as it originally was part of a longer structure before demolition of the mill begin in 2009-2010.

The man door on the north side of the southeast end of the building is in good serviceable condition. The man door on the northwest end of the structure is also in good serviceable condition. The overhead door on the south side of the northwest end of the building was in operable condition when inspected. There was a man door on the small addition to the south side of the structure, but that has been replaced by a metal siding plug.

Roofing

The majority of the roofing is intact and not leaking but there was observed to be missing metal roofing on a portion of the east end of the structure at the time of inspection. The portion missing is 12 feet on the north side and 32 feet on the south side. The roofing of the structure is missing and is now covered in plywood and tarps/plastic. The roofing could be replaced if compromised structural elements were replaced and/or repaired. The roof appeared to have damage 30 feet in from the southeast end on the

north side. This can be attributed to the roofing being removed for 32 feet on the south side of the structure.

Rain does continue to penetrate the roof on the east end where all of the parts have been saturated for the past 12 years. This does impact the integrity of the trusses as well.

Insulation
There is no insulation in this structure.

Flooring
The flooring on the main floor of the Planer Shed consists of 6" reinforced concrete. This was not drilled due to its condition. The main floor remains in good serviceable condition as evidenced by the absence of cracks.

There is a portion of the floor that is not surfaced with concrete and that is on the north and east end of the structure. This portion of the floor that is not concrete is 11 feet wide by 90 feet long and consists of dirt/soil. This portion of the surfacing does not appear to become saturated or muddy during heavy rain events.

Foundation
The foundation from what could be visually inspected does not appear to have any issues. The building is a pole building and the creosote-treated poles are embedded into the ground with concrete poured around the bases. There is no apparent subsidence of the structure, so the foundation appears to be in good condition.

Structural Elements
The building is a pole building and the 10" to 13" diameter creosote-treated poles are in good serviceable condition. The poles were bored to identify any rot or hollow cores. and show no signs of degradation. The poles are on 12-foot centers with 10"x12" spruce timbers acting as purlins on top of the posts. There are cripples under each 10x12 connection at the top of the post that are 6"x12"x36". The cripples are connected by a long steel 90 that is 6" wide and roughly 18" long along the post and 6" long along the underside of the cripple. These angles are through bolted to the post and the cripple above to provide a solid connection. Where the structure has not been taken down, these angle brackets are in excellent condition. Where the roof has been removed, the brackets and their connections are suspect and should not be counted upon for ongoing structural integrity.

There were 6 fractured trusses all on the bottom chord. These trusses appeared to be repairable and could be placed back into serviceable condition.

All trusses for the last 32 feet of the southeast end should be assessed for integrity, due to water damage, should the building be saved for future use.

Other
This shed was used to house parts for the mill and logging operations conducted by Silver Bay Logging. What is different is the shelving that extends for nearly 90 feet down each side and in the middle of this structure. There is a couple of pallets and long omni antennae used to communicate with the crews in the field. It is not known what the value of this communication equipment is worth. It is antiquated technology when compared to today's equipment but could be quite serviceable still and useful to logging companies here in southeast or in the lower 48 states.

There is significant amounts of parts, belts, bearings and service manuals both on the floor and on the shelves in this structure.

Overall Recommendation
This structure should be repaired and continue to be used. The southeast end has been compromised for roughly 32 feet but is 120 feet long. This may require modest repairs, but even if this portion of the building were to be demolished, a structure approximately 90 feet long would still be quite serviceable.

Photos
The photos in Appendix B2 depict the different aspects of the structure as of the 2nd week of April, 2022.

Axle Shed

The Axle Shed is a 40-foot-long container that has been used as a parts and equipment storage unit. It is 8 feet wide by 8 feet high and 40' long.

Siding
The siding of the structure is in poor condition with sections that are damaged on all four sides of the structure.

Roofing
The majority of the roof is intact but is leaking and failing in several locations.

Insulation
There is no insulation in this structure.

Flooring
The flooring of this shed has failed.

Foundation
The foundation of this shed is slab on grade. The slab is in good condition yet is not connected to the structure.

Structural Elements
The walls of this shed are the structural elements of the same. The walls are failing and not cost effective to repair at this time.

Other
This shed was used to house parts for the mill and logging operations conducted by Silver Bay Logging. This shed was likely permanently located here but could be moved remotely to logging operations. It has served its useful life and has been gone through by Channel Construction and removed most of the usable scrap.

Overall Recommendation
This structure should be scrapped and moved out by Channel Construction.

Photos
The photos in Appendix B3 depict the different aspects of the structure as of the 2nd week of April, 2022.

Warehouse W/Attached Office

The Warehouse Building is a 100-foot long by 50-foot-wide steel frame structure clad in metal siding with metal roofing. The structure has a 4.5:12 pitch to the roof, with a 12-foot eave and 21-foot 6-inch peak. The warehouse has several small add-on structures appurtenant to the building. There are the following:

1. Single-wide trailer office (14' x 40')
2. Ramp to deck and entrance on the west side (8' x 10')
3. Loading dock on north side (21' x 26')
4. Fire flow distribution shed on the north side (6' x 8')
5. Chlorination shed on the east side (8' x 20')

Siding
The siding will be described by the structure and/or the attachment to the structure as noted above.

The siding of the main steel building, *warehouse*, is in good condition. It has penetrations around the outside, most of which are caused by equipment impacts. The photos in Appendix By depict some of the damage noted. There are also penetrations for furnaces that have been removed and the "hole" in the wall remains. There is a bulge on the exterior backside (south) of the structure that is indicative of impact. The garage door on the northeast end of the structure is serviceable and operable at the time of inspection. The man door on the northwest corner of the structure was locked but is thought to be serviceable due to the lack of evidence of any degradation. The sliding door between the loading dock and the main steel building also appears to be in good serviceable condition. The last penetration through the metal siding is the entrance from the office trailer to the building which appears to be in reasonably good condition.

There is siding on all four sides of the *office trailer*. The siding is in good serviceable condition.

There is no siding associated with the *ramp entrance* at the northwest corner of the warehouse.

There is siding on 2 sides of the *loading dock*. The east side and the north side are sheeted and in good condition. No repairs were needed at the time of inspection.

The *fire flow distribution shed* is in good condition and needs no repairs at this time. The access to this shed from the inside was locked at the time of inspection. The Fire Department Connection (FDC) penetrating the east side of this shed looks to be in good serviceable condition.

The *chlorination shed* is a steel container that is degrading with the sides beginning to corrode and showing signs of terminal life expectancy. The siding could be repaired to extend its life.

Roofing

The roofing will be discussed in the same manner as the siding above.

The roofing of the *warehouse* structure is leaking in several places and is likely due to missing screws on the west end and one machine impact noted in the middle south side of the structure. Aerial images attached did not show any other signs of impact or penetrations that would be causing the leaks in the structure roof, so there were no large failures observed. Generally, the roof is in serviceable condition and needs the leak penetrations sealed or if screws are missing, replaced.

The *office trailer* roofing appears to be leaking as evidenced by the staining that is in the internal walls of the trailer. This is apparent on most walls. The roof is in poor condition. It could be repaired, but the cost may exceed the value of the trailer.

The *ramp entrance* to the warehouse roofing is intact and serviceable with no apparent leaks.

The *loading dock* roofing is intact and serviceable with no apparent leaks.

The *fire flow distribution shed* roofing is intact and serviceable with no apparent leaks.

The *chlorination shed* roofing is in poor shape and leaking. Repairs could be made to extend its life.

Insulation

The insulation is only within the *office structure* of the single-wide trailer. From what can be observed, there is staining about 3 feet off the floor which would indicate moisture within the walls of the structure. If there is staining, the insulation is likely saturated at most times during the year which will also indicate potential dry rot within the walls including possibly black mold. The insulation in the floor appears largely intact, but pictures of the underside of the trailer shows it in good condition with one noted penetration of the plastic under the floor beams.

The rest of the structure, excepting the internal storage in the southeast corner of the building, is absent of any insulation. The southeast corner storage has failed in this room and is likely due to moisture.

Flooring

The flooring on the main floor of the *warehouse* consists of 6" reinforced concrete. The main floor remains in good serviceable condition. Near the entrance of the garage door in the northeast corner of the structure are two cracks. It is likely that this portion of the structure has less rock backfill under the slab and therefore differentially settled. The rest of the structure's floor is in excellent condition.

The flooring in the *office trailer* appears to be in good condition with no apparent failures at this time.

The flooring in the *ramp entrance* is in good condition on the ramp but is soft in the deck right in front of the door.

The flooring of the loading dock is in excellent condition with no issues observed.

The flooring of the *fire flow distribution shed* could not be inspected but is expected to be concrete and in good condition as it is on grade.

The flooring of the chlorination shed has failed. It could be repaired if needed to bring this structure back into serviceability.

The second-floor loft likely consists of 3"x12" planking found in other structures around the property. The floor beams were finished on the ceiling below thereby deterring investigation of this portion of the structure. There is a soft spot in the floor in the north central side of the loft floor. The loft extends from the west end to the east end along the entire length of the structure with a width of 25 feet for the first 20 feet and then tapers back to a 20 feet width over a 5-foot transition. From the end of the transition, the loft extends to the west for another 51 feet where it intersects the mezzanine/loft on the west end of the structure. On the west end of the structure, the loft extends for the entire width to the east for 24 feet.

The safety rail which is wood 2x4s is serviceable and intact, but two sections of removable pieces allowing for parts to be placed on the second floor was not in place at the time of inspection. This can be seen in the photos below.

Foundation

The foundation for the main warehouse and all other appurtenant structures does not appear to have any issues. The building is not undergoing any differential settlement and the floor cracking confined to the northeast corner of the building is likely due to not enough subgrade rock placed in an adequate depth or the compaction of this corner. The southwest corner is roughly 5 feet deep and shows no signs of degradation.

The footing exposed along with the stemwall in the south and west sides appear to be in excellent condition.

Structural Elements

In the *warehouse*, the Steel support columns and all other steel members appear to be in good serviceable condition. Some steel members have lost their protective paint coating but do not appear to have any measurable corrosion (rust).

In the *office trailer*, the walls appear to be suspect due to the staining in the walls. The floor beams of the trailer are in good serviceable condition.

The *ramp entrance* structure floor is intact, but the support structure to the roof is failing.

The *loading dock* structure is in excellent condition.

The *fire flow distribution shed* appears to be in good serviceable condition.

The *Chlorination shed* is in disrepair and the structural elements are failing.

The internal wooden structure of the *mezzanine/loft* appears to be in good serviceable condition, but the flooring indicates a further look would be necessary when replacing the degraded flooring of the loft.

Other Equipment & Supplies

There are insulation and filtration supplies along with some office furniture within the building. These supplies should be removed and disposed of.

Overall Recommendation

The *warehouse* structure with minor repairs could provide serviceable use for another 30-years.

The *office trailer* structure has reached its serviceable life and should be retired due to possible roofing and structural element decay.

The *ramp entrance* can be repaired and should be to maintain this access.

The *loading dock* is in excellent condition and should be maintained as is.

The *fire flow distribution shed* should be maintained as is.

The c*hlorination shed* should be emptied out and disposed of. A new shed should it be needed could be constructed on this side.

The *fire flow distribution piping* in this structure is intact and requires no apparent repairs.

Photos
The photos in Appendix B4 depict the different aspects of the structure as of the 2nd week of April 2022

Bulkhead Wall

The Bulkhead Wall is a mix of three types along the western waterfront of the mill site. One part consists of interlocking sheet piles, the second is railcars with vertical H-piles driven in front of the railcars and the third is vertical I-Beam construction on 20-foot centers backed by 42" concrete panels stacked horizontally. All three types of walls are backfilled with quarry shot rock. All three types can be seen in the photos in Appendix B5.

Foundation
The foundation of the bulkhead wall is driven to refusal along the west side of the mill grounds. The entirety of the bulkhead wall is on City and Borough of Wrangell property.

Structural Elements
The *Bulkhead walls* consisting of sheet pile are driven-interlocking sheet piles. There was a total of 770 linear feet of bulkhead wall of which 80 feet is driven sheet pile, 80 feet is concrete panel, and 610 feet is rail car. Sheet pile exists at the ramp to the dock location on the north end and also at the location of the Berger Crane near the south end of the Buhler mill property. Concrete panel wall exists for 80 feet to the north of the access ramp near the south end of the property. There is then 490 feet of rail car wall with 40 feet of sheet pile between the next 160 feet of rail car wall that has also failed.

The bulkhead wall consisting of the driven H-Pile backed by rail cars extended for a total of 610 feet. This portion of the wall consisted of 3 panels of 8-foot-wide rail cars stacked vertically on their width. The H-pile was held back by 2 ¼" rebar that were spaced 8-feet vertically and 15' horizontally across the entire length of the longest, 490-foot wall. Penetrations between the rail car wall were made as the backfill came up. The collars between the rail cars used at the face failed first, resulting in the wall failing west into the bay. Those portions still intact should have the collars at the face reinforced. Those portions that have failed could be repaired by trimming the tiebacks back, replacing the missing railcars and then reconnecting the tie-backs through the wall. Approximately 290 feet is still intact and should be

repaired immediately if the desire to save the wall is to be performed. There is approximately 320 feet of wall that has failed and could be reinstalled following the original installation plan outlined above.

The Concrete Panel walls which extend for 80 feet to the north from the end of the access ramp is in fair condition but appears to have undergone recent damage to the south end of the wall during the recent scrapping of the barges which enlarged the width of the ramp to the water (see picture below). The concrete panels consist of 16" wide by 42" deep by 20' long panels. There are 6 visible panels vertically and it is assumed that there is at least one more panel below the water that would be consistent with the rail car walls adjacent to the concrete panels.

Other

The foundation for the Berger Crane on the south end of the property is supported by 18 wooden piles on each side of the ramp to the crane. This crane was used to pick log bundles from the water and also to place bundles into the water. The foundation is on the Buhler property and appears to be in good working condition. Pilings were bored on both sides and sounded as well. Three piling were found to be hollow but the remaining 33 were found to be in serviceable condition.

Overall Recommendation

This bulkhead wall is in varying stages of degradation. The bulk of the wall was constructed in 1993 which would have been during the Alaska Pulp Corporation's, APC, ownership. Three years later, APC sold the property to Silver Bay Logging. Who then ran the site until roughly 2005-2006 when the bulkhead began to fail. Failure can largely be attributed to the lack of cathodic protection of the wall. If the wall is to remain, cathodic protection installation is recommended. The mill was subsequently scrapped in 2009-2010. Given the relatively short life of the wall, it is recommended to repair the existing portions that are still standing and reconstruct the portions that are missing. Should the CBW wish to construct the wall out further and create a deeper water bulkhead, the existing bulkhead could be removed with no negative impacts.

Photos

The photos Appendix B5 depict the different aspects of the structure as of the 2nd week of April, 2022.

Beaver Slide

The Beaver Slide is a metal structure that is 19'5" wide x 165' long. The structure is in excellent shape. The Beaver Slide was used to place log bundles into the water where it was then placed into a log raft. The ramp was constructed at 13 percent grade.

Foundation

The foundation of the Beaver Slide is 15 ¾" x 36" I-Beam with 1" thick flanges on 22' 7" centers. These crossties were cut in and welded to the primary linear elements. The foundation crossties were in very good condition.

Structural Elements
The primary linear elements consisted of 15 ¾" x 36" I-Beam with 1" thick flanges on 19' 5" centers. On top of the linear elements was welded 6" angle iron with a 3/8" thickness. This angle iron extended for 140' down the length of the linear elements. On the first 40' of the linear elements were circular pipe that was split on the side and welded to the I-Beam to protect the tires of the front-end loaders (966 & 980 Wheel loaders) placing bundles on the Beaver Slide to slide into the water. The flanges were cut and welded into the 6"circular pipe.

Other
The Beaver Slide serve a dual purpose as a boat launch should rock material be placed in-between the rails and over the top of the foundation cross-ties. It appears that the bottom of the Beaver Slide is at elevation -3.0.

Overall Recommendation
This structure should be saved and continue use as needed in the future.

Photos
The photos in Appendix B6 depict the different aspects of the structure as of the 2nd week of April, 2022.

Slow Sand Filter Beds

The Slow Sand Filter Beds were originally constructed to filter the water at the mill site constructed in the 1950s. Back when the mill was originally constructed the mill was not connected to city water. With 250-280 employees working at the mill, drinking water/potable water was a necessity. Filtered water was being used to feed the boilers, used to power the mill, flush toilets or for drinking. The filter beds next to the impoundment were used to perform secondary treatment of the water to clarify it prior to consumption. It is unknown whether flocculants were used in the late 1950s but would most certainly have been used in the 1960s. Raised filter beds may also have existed after primary and secondary clarification, but these structures that exist are currently in-ground and their tops are at grade.

Foundation
The foundation of these beds are essentially poured in place and then backfilled once in place. Since they are essentially open-top tanks, it is assumed that structures were built over these beds to keep airborne media (leaves & debris) from the clarifiers. Being cast-in-place, there really is no way to know if they clarifier bases have failed unless a water test was done to check for leaks. The parts that are exposed appear to be in good condition.

The foundation walls of the pond north of the concrete clarifier appears to be failing as those wooden elements are decaying.

Structural Elements
The structural elements are generally in good condition.

The concrete clarifier is 155 feet long with 125 feet being 7 feet wide with an 18-inch parapet around the 6-inch-thick reinforced concrete walls. The last 30 feet of the clarifier is 9.5 feet wide with a 24-inch parapet around it. The pond to the north is 22 feet wide by 40 feet long.

The pond has two inlet pipes from the impoundment that are 8 “and 10”, respectively. The impoundment is fenced on the north side from what was likely the only exposed side when it was originally housed. Like the concrete clarifier, it would be recommended to fill in the pond to the north of the concrete clarifier with quarry rock.

Other
The slow sand filter/clarifiers are part of a bigger complex and represent a feature that would take some effort to resurrect if needed in the future. This is part of the original mill complex and does still have some value. There are other signs of structures that were present in this general area that likely had something to do with the steam plant which powered the mill. In the absence of the original mill design plans, we can only speculate on the structure locations and their functions. Additionally, underground piping in this area would be difficult to depict.

Overall Recommendation
There is no need to break out the bottom of the concrete clarifier or the pond but merely need to be backfilled and will remain in stasis for the duration.

Photos
The photos in Appendix B7 depict the different aspects of the structure as of the 2nd week of April, 2022.

Impoundment Dam

The Impoundment Dam is a 12-inch-thick 53-foot-wide concrete dam, exposed for 15 feet on the downstream face with a 10.5 foot wide by 3-foot-high spillway. The spillway has a 3-inch-thick by 12-foot-wide steel gate which slides up and down the spillway which is run by a wheel and wire rope to raise and lower the gate. The steel face of the spillway is 12-feet wide with an additional 8 feet on either side of the spillway up to another 16 inches before the native gravels would be potentially overtopped. There is another 12.5 feet of concrete dam that extends beyond this steel/concrete overtopping weir before it truncates within the earthen dam.

Foundation
The foundation of the impoundment dam could not be seen at the time of inspection. Given the lifespan of the structure, it is believed that the foundation is still in good structural condition.

Structural Elements

The structural elements consist of 4 pieces. These include:

1. Concrete dam
2. Steel spillway
3. Steel walkway, and the
4. Earthen Dam.

The concrete dam does not appear to have any degradation except for some moderate loss of material in the concrete portion of the spillway which is directly behind the steel spillway gate.

The steel spillway gate has failed and fallen down due to the failure of the wire rope used to raise and lower it.

The steel walkway is in good serviceable condition.

The earthen dam consists primarily of sands and gravels. It is unknown how permeable the earthen dam would have been when filled. The earthen dam has failed. According to the caretaker, the structure had failed due to a falling tree near the north end of the concrete dam.

Other

Further investigation of the dam failure has led to the observation that there was significant beaver activity in the area around the top of the impoundment. There is ample evidence suggesting that the beaver activity dammed up the spillway and continued to plug the next level up. The photos show beaver chewed material at the top of the dam and indications of where the dam was starting to fail on the south side as well. The width of the failure on the north side is 14 feet at the top of the dam and 8 feet at the bottom.

The impoundment was 180 feet long averaged 80 feet wide and was believed to average 8 feet in depth yielding approximately 2.65-acre feet impounded.

Overall Recommendation

This structure could be resurrected with some moderate effort. The spillway could be modified to eliminate demolition by beaver in the future.

Photos

The photos Appendix B8 depict the different aspects of the structure as of the 3rd week of April, 2022.

Structure Summary

The Structure Summary is a short narrative discussing the overall site and structures found on the Wrangell Mill Site. Here are our findings.

There are three buildings worth keeping in service on the site with minimal to modest repairs. These

include the Main Shop, the Parts Shed and the Warehouse. The Main Shop and the Warehouse are both steel frame structures. The Parts Shed is a pole building structure. The two buildings that should likely be demolished include the Planer Shed and the Axle Shed. Both structures have lost enough integrity that demolition is likely less costly and a better use of funds that restoration.

The Bulkhead across the western face of the site which is nearly 95 percent on CBW lands has roughly failed for approximately 50 percent of its length. The remaining length could be stabilized and saved if recommended procedures are followed. New tie-back collars along the rail car sections should be replaced and/or repaired as soon as possible to ensure a much longer life span of these bulkhead sections. Cathodic protection is recommended which will also extend the life of this bulkhead as well. The sheet pile wall sections appear to be in good condition and would also be recommended to have cathodic protection. The concrete panel sections are largely intact but have some degradation issues. Cathodic protection here is also recommended. The south end of the wall should be repaired to maintain its usable condition.

The Beaver Slide is in remarkably good condition with very little section loss except at the terminal end to the north. Other than Cathodic protection, no other immediate needs are evident.

The Slow Sand Filter Beds are in good stable condition and the best way to stabilize their condition without complete removal would be to backfill the pond on the north side of the concrete clarifier which is exactly what was done with the clarifier.

The Impoundment Dam has failed in the earthen dam on the north side of the structure. This structure could be reconstructed, and beaver dam mitigation measures could be implemented with relative ease. Beavers did plug the spillway and caused an overtopping event of the earthen dam which resulted in its failure.

Underground Utilities

PEAK conducted a *Condition Assessment* of the Underground Utilities on the site. These utilities included:

Within this task, PEAK investigated the following structures:

1. Storm Sewer
2. Sanitary Sewer
3. Septic Tanks
4. Manholes
5. TV of CSO tanks
6. Storm Pipe on Southern Stream
7. Underground Utility Summary

Storm Sewer

The inspection of the underground storm sewer appears to be a combination of corrugated metal pipe (CMP) and piling. The largest CMP observed was roughly 52" and the largest piling used for storm sewer transmission observed was 17" in diameter. Piling was used in equipment crossings of major routes within the mill site. The storm sewer is a series of interconnected pipes with CMP manholes that are in evidence by the large front-end loader tires scattered around the site. See the picture of one below. The one directly west and downhill of the main office, located up next to the highway, is a combined sewer outfall connection. This is one place where the storm sewer and sanitary sewer converge. The attached map depicts the Storm and Sanitary lines and connections to the best of our interpretation of the site. Onsite walk-throughs with the caretaker identified the restroom locations and where he thought the sewer tanks would be on the site.

Sanitary Sewer

The inspection of the underground sanitary sewer was limited to the investigation and identification of the restrooms in the facilities and then looking for evidence of sanitary sewer tank and/or lids. Three fixtures were identified in the building located adjacent to the west of the Planer shed. From this restroom location, a septic tank with the lids broken in and no longer functional was shown just to the south of the restroom. This tank is shown on the map just south and west of the Planer Shed. A septic tank that was likely used in much the same size is located near the southerly access. PEAK painted "Septic Tank" on the side. This is a dual compartment tank that is also a two-piece tank. These tanks were known for leakage due to the horizontal gasket that was prone to failure with most installations that might undergo differential settlement.

There is a septic tank that was located just west of the old office at the top of the hill near the central access that was permitted through the State DOT for an ingress only. This tank is on private property and is under the ownership of the Mill site caretaker.

There is likely a septic tank that fed the single-wide trailer toilet that PEAK believes also connects to the toilets found within the main mill building. There were two fixtures (toilet and sink) within the single-wide and three fixtures (one sink, one urinal, and one toilet) within the mill building. PEAK believes that these all came to one location in front of the warehouse. Sewer line coming out of the single wide heads north and then we believe west to the tank. This location would correspond with the tank located near a depression in front of the Single-wide trailer.

Septic Tanks

As discussed above, PEAK believes there are two septic tanks on site and one off-site that used to service the entire mill. Considering the number of employees at the mill, it is surprising how few fixtures there really were.

One septic tank is located south and west of the Planer shed and it open at the ground surface, one is located just west of the warehouse 1/3 of the way between the warehouse and the main mill building housing the saws, and the third is located west of the main office on private property to the east of the

mill site under the current purchase agreement.

Manholes

As discussed above, there are manholes scattered across the site, primarily along the northern half of the mill site. The across much of the northern half of the site collect flows and pipe them to the oil/water separator pond located in the west third of the site midway between the north and south property lines. This facility can be found out the attached map of the site. It is believed that the combined sewer flows bypass the oil/water separator as evidenced by the photo attached below. All manholes on the site can be found by locating the large front end loader tires placed over them.

TV of CSO Tanks

PEAK obtained a sewer camera from the CBW Public Works Department to aid in the investigation of the tanks on site. The only tank worthy of using the camera was the Oil/Water Separator Tank. This tank had oil to within 1 foot of the bottom of the riser with a ladder in it. Both Risers were approximately 22" in diameter and had a ladder attached to the western wall. Investigation of this facility is further discussed in the environmental section. The only other tank identified was the one located near the Planer shed with the lids caved in and could be inspected visually without the aid of the camera.

Storm Pipe on Southern Border

The inspection of the storm pipe along the southern boundary revealed a failing culvert both at the inlet and outlet of this culvert. This culvert is estimated to be 750 feet long and was planned for removal to restore fish passage to this stream in the plan set developed for the site on behalf of Betty Buhler when developing the planned industrial subdivision. This culvert is plugged by approximately 50 percent at the inlet by woody debris and rock. At the outlet, the pipe has collapse at the riprap protection of the shoreline. On neither end was an accurate assessment of the pipe able to be made. It is estimated that this pipe is approximately 52-60 inches in diameter. It could be as much as 72 inches if it were to reflect the pipe size under the highway upstream of the pond. The invert of the pipe is estimated to be roughly 10 feet below the site surface except at the inlet where material has been "bailed out" and placed above it and also at the outfall where mixed woody debris and rock is roughly 24 feet deep at the berm located near the shoreline.

In the plan set previously submitted to the CBW, this pipe was to be removed and an open ditch was to take its place. This could take the place of some environmental mitigation should it be necessary for the overall site.

Underground Utility Summary

The general overview of the buried piping, both sanitary and storm, is that it largely consists of corrugated metal pipe. The balance of the buried pipe is hollow piling used to convey flows through high-heavy traffic areas. Lines that contain corrugated metal pipes would be recommended for future

slip-lining or replacement. There is not an immediate need to do so, but should the site be used for another 30 years, it would be highly recommended. Those pipes consisting of piling will not need to be slip-lined and have at least another 30 years of life left in them.

Septic tanks onsite are no longer in use, but the one on private property to the east is still in use and is tied into the overall system. Should new buildings be constructed, the existing onsite tanks will be of no value and should not be considered for reuse or reconnection.

The manholes appear to be in good serviceable condition and do not need any improvement other than casting a new lid for each structure with grating as is appropriate.

TV of the tanks onsite proved to be unnecessary due to the condition of the tanks. Both tanks definitively found were visually inspected. It is believed that the tank nearest the warehouse on the northeast corner of the property has been broken in and backfilled.

The Stream pipe on the southern border should be removed and/or replaced due to its deteriorated condition.

Other

From the onsite caretaker, he identified a 12-inch pipe, like that on the dock that was recently removed, that was removed during soil remediation efforts on the north end of the property. An outfall approximately 150 feet north of the pipe on the dock, was identified coming out of the shoreline riprap and is noted on the attached map.

Photos

The photos in Appendix C depict the different aspects of the underground utilities as of the 3rd week of April 2022.

Site Access

PEAK conducted a visual reconnaissance of the site and observed 5 "formal" access points to the site. Three of these access points are located at the highway Right-of- Way (ROW) and two of these access points are located at the water's edge.

The three highway access points are shown on the attached map. The first from the north is at the end of the guardrail closest to the warehouse on the plan sheet. The second access point is at the old office and due to the easement width through the private property has been permitted as an *ingress only access*. The third access point is further to the south near the property line and is permitted as an *ingress/egress access*.

Currently there are no permits in place to use the first/northernmost access closest to the warehouse. The access is in good serviceable condition and could easily be reopened if it were brushed out. Sight distance would be limiting and would require tree removal along

The middle or second access will require no improvements to be used to access the site as it is an ingress only location. CBW standards would not have allowed for this access to be 2-way due to the constraints of the easement and the topography.

The third access point will need to be improved per the plans previously submitted to the CBW Planning and Zoning Department. The improvements required include raising the grade of the access road to no more than 6-percent adverse grade coming out of the site, removing the berm to the northeast along the highway to improve sight distance at this intersection. 475 feet of sight distance can be maintained to the north while over an 800 feet of sight distance can be maintained to the south. With the future improvements to the south on the highway scheduled for later this year, sight distance to the south will increase. Managing the vegetation and lowering the berm will significantly improve sight distance to the north. There are also 2 large boulders currently inside and outside the highway right of way that should be removed during blasting activities by the DOT later this fall.

The two water access points are both on CBW property and their conditions are significantly different. The first is the Beaver Slide to the north which has been discussed at length previously within this report. The second is the barge access point.

The barge access point has been changed due to excavation activities performed by Channel Construction while scrapping several barges. This access point should the CBW choose to maintain its location on the site will need to be reconstructed with the material (several hundred yards) that was removed and placed on the uplands within the past several months.

Photos

The photos below in Appendix D, depict the different aspects of the structure as of the 3rd week of April, 2022.

Saltwater Survey

PEAK conducted a *Saltwater Survey* of the tidelands out in front of the property and to the north. This survey was to identify what sunken vessels exist, the conditions of the piling and generally map the structures and vessels that need addressing soon. PEAK was also to identify which pilings were still serviceable and could be used for tying up barges, boats and log rafts. Piling and dolphins that were still in good visually serviceable condition were bored to determine their soundness.

Piling and Dolphins

There are dolphins to the north and south of the mill property. Only one dolphin is located on the mill site proper. The dolphins to the south have several hollow pilings within them. The southern dolphins

are sounder than the ones to the North, with just a few pilings in poor condition. The dolphins to the north are in very poor condition and have noticeable section loss below the low-low waterline. These dolphins were in such poor condition, that they didn't warrant boring. Our recommendation if the CBW wanted to use the dolphins to the north and south would be to obtain an Army Corps of Engineers, ACOE, permit and replace them.

Sunken Vessels

There are three known sunken vessels on the CBW tidelands. The first vessel is Silver Bay II, which was a 65' tug, that sank at the northwest end of the now removed dock on January 14, 2015. The second is a large barge that can be seen bottom side up at low tides. And the third is another barge in about 30 feet of water and is approximately 75-100' west of the northernmost dolphins on CBW tidelands. Both barge lengths were unknown at the time of this report.

The Silver Bay II, sank in 90 feet of water and currently rests on the bottom on its bottom. It has a 20' high mast and a single-story pilot house. The Coast Guard has deemed this vessel to not be an obstruction and no fuel remains on board.

The barges have both sunk on CBW tidelands to the west of privately owned tidelands. Unlike the Silver Bay II, both barges represent some form of obstruction to marine traffic. One of the barges is upside down closest to the beach and the other is thought to be right side up further out.

Other

The failed bulkheads along the western edge of the CBW property have deposited several railcars along the toe of the fill slope of the backfill that trail into the bay to the west. It should be noted that while these rail cars do not present any danger to marine traffic, they are metal that could be salvaged from the bay if desired.

Saltwater Summary

The dolphins should not be considered a durable tie-up and should be replaced if the desire of the CBW is to have viable tie-ups moving forward. Vessels would not be recommended to tie-up to these structures in their current condition.

The sunken vessels specifically the barges may need to be removed at some time in the future. The Silver Bay II is in deep water and poses no risk to any vessel.

The failed bulkhead material isa matter of scrap cleanup should the CBW wish to pursue it. No action is needed at this time to extract it.

The dock and its associated piling, both wood and steel, except for 8 steel piling have all been removed. These steel pilings are scheduled to be removed. Much of the woody material, including piling, beams

and decking is on the shore at this time and the remainder has been hauled away by Heller Construction.

Photos

The photos in Appendix E depict the different aspects of the saltwater structures and vessels as of the 3rd week of April, 2022.

Oil/Water Separator

The Oil/Water Separator located in the central part of the mill site collected flows from all over specifically the northern 2/3 of the site. There are multiple manholes that function as area drains that collected flows from the hardscape and convey them to the pond just east of the Oil/Water Separator. The Oil/Water Separator appears to be functioning correctly, but PEAK believes that the facility should be service and maintained. An Oil/Water Separator functions by passing water out of a tank and retaining the oil within. Typically, an Oil/Water Separator will utilize a pollution control elbow to allow the oil to float above the water and only the water be able to make it out of the tank. Since there are two risers on the facility, and in the absence of drawings, it is assumed that this is a two-compartment tank that likely has a pollution control elbow in each compartment for added redundancy should there be a spill. There was oil on the surface when each lid was pulled and without knowing the actual depth of oil over water, it would be prudent to pump it prior to commencing operations that may include new oil spills on the site.

The access points to each compartment were 6'2" and 6'6" above the top of tank. Both access shafts were 22" in diameter and had ladders affixed to the sides. Both facilities had oil floating on the surface within 1' of the bottom of the access shaft.

The inlet of the Oil/Water Separator was partially clogged with debris and should be maintained to remove that material. This material does not affect the overall function of the Oil/Water Separator but it is necessary to maintain a clean system.

There is a 24" diameter bypass pipe that PEAK believes carries CSO flows from upstream but is also the believed to be the pipe that the Oil/Water Separator delivers its separated water to. With no drawings, it will be hard to diagram without digging it up. Since no oil slicks are present at the outfall sites, it is believed to be in good working order. Both access hatches were functional and two standpipes for ventilation of each compartment appeared to be functional as well (See photos below).

The electronic alarms have not been hooked up to power for some time, so there is no way to know if the high oil alarms are operational. It is suspected that they would though given the elevation of the top of oil in each compartment. Since the oil floats on top of the water and is separated by weight, there is not anyway for PEAK to determine if the height of oil has exceeded the design.

Overall, the pond leading to the Oil/Water Separator and the Oil/Water Separator itself appear to be in working condition.

Outfall Pipes

There are three known outfall locations on the site. Starting from south to north, there is one that is flowing through the Rail Car Bulkhead approximately 100' north of the south end of the wall near the access ramp, there is a second roughly 150' from the access ramp to the now-removed dock, and a third that is 150' from the 12" pipe that came out of the fire flow valve/pump house that was also on the now-removed dock. Both of the last two are not visible due to failed retaining walls. Even with the outfalls not being visible on the northern two, there is no indication of back up flows on the site due to plugged outfalls. The outfall to the south is free flowing and is shown in the pictures below. The outfall in the center is estimated based upon pipe direction and continuity. The outfall furthest north is evident at low flows and a picture has also been taken of that.

It should be noted that there are two localized ponds on the site that are no longer hydraulically connected to any of the drainage ditches. Regrading and paving will need to be performed to eliminate any ponding on the site. Pictures of both "ponds" can be seen in Appendix E.

Wood Waste

There are two types of wood waste on the site. The first is sawdust and chips from the sawing operation in the mill proper and the second is mixed bark, wood chunks and rock from the site. Much of the bark came from the debarker and some came from the sort yard where logs were sorted by species and size. There is a significant amount of mixed bark, wood chunks and rock that came from the sort yard portion of the old mill and this material is confined primarily in the south end of the property in two large long mounds on either side of the southernmost access road.

The wood waste has been quantified and the volumes are:

1. Sawdust and chips – 21,700 cubic yards
2. Bark, wood chunks and rock - 14,200 cubic yards

The wood waste can be dealt with in a couple of ways. The clean chips and bark could potentially be hauled away for mulching operations or if dried as potential fuel. The combined bark, wood chunks and rock mix could be used in a semi-structural fill depending upon the quantity of each in the fill and then capped by 24" of rock and dirt to encapsulate and place the wood waste in an anaerobic environment where it could not decompose. Thereby making a stable fill.

Landfill Material/Garbage

During the demolition of the last floating Silver Bay Float Camp, Channel construction piled what was not allowed to burn by the CBW to the side. In the subsequent demolition of another 2 barges, more material was piled on top of the original stack and that stack remains. There is scattered debris throughout the site and in the buildings. This can be seen in many photos of the site. There is foam scattered along the ramp area coinciding with the high tide lines and closed cell foam now piled on

CBW property to the south of the Wrangell Mill Property. The volume of each type of landfill material was calculated and/or estimated for budget purposes. The volumes for each are:

1. Barge(s) demolition material - 1,400 cubic yards
2. Site wide landfill material - 150 cubic yards
3. Closed-Cell foam - 60 cubic yards

This amounts to a total of 1,610 cubic yards of landfill material that should be removed from the site. It is unknown at this time if Channel Construction plans on hauling this material away prior to the close of sale on the property.

Waste Oil/Fuel Tanks

There are a minimum of 5 metal reinforced totes with varying amounts of waste oil in them. In total the waste oil is not expected to exceed 500 gallons.

There is believed to be only one diesel fuel tank to be left on site at the close of sale. Condition for reuse is unknown. PEAK recommends scrapping it if empty.

There are an estimated 21 oxygen, Acetylene, and propane tanks on the south side of the main shop that were used for cutting metal. There are two large propane tanks next to the warehouse as well. One is approximately 200 gallons, and the other is 500. Both will remain onsite. It is unknown if they contain fuel currently.

Pictures of the totes, fuel tank and pressure cylinders can be seen in Appendix F.

Tires

There are quite a few tires on site, and they include passenger car/light truck tires, semi-truck tires and large equipment tires. They were tabulated as follows:

1. Passenger Car/Light Truck - 63
2. Semi-truck - 38
3. Heavy equipment - 10

The tires are scattered over the site but would take very little effort to consolidate. These could be added to the material going to the landfill. All of the tires should fit into one 20’ container if they need to be shipped out or cannot be repurposed as fenders for boats or barges.

Scrap Metal

There are significant quantities of scrap metal scattered around the site some of which is in the area

where channel construction is working and the rest is in and around the vicinity of the shop, planer shed and parts shed. It is difficult to estimate the tonnage of each but pictures show what is there to be removed. Much of what is outside on the racks is usable salvage the rest that is in the parts shed and the planer shed is not. The material scattered throughout Channel construction's site could be easily picked up with a magnet if the contractor comes back with one. There is a pile of mixed rock and metal shards/scrap that looks to be roughly 40-60 cubic yards just to the east of Channel Construction's operation. Estimated tonnages are as follows:

1. Racked steel and scrap metal between the Warehouse and Planer shed – 15 tons
2. Rusted and unusable parts in the Parts shed - 1 ton
3. Scrap metal scattered at Channel Construction's site - excludes set aside 5 tons
4. Random scrap throughout the site including container buildings - 20 tons

If buildings were to be scrapped, there is additional metal that is not quantified here. Pictures below show the location and appearance of the scrap that could be sold.

Environmental Summary

In general, the site is stable but has significant quantities of material scattered across it that could be consolidated and hauled away to improve the overall appearance of the site. Items of note include:

1. There is a large quantity of treated wood along the shoreline uplands as Heller Construction finishes removing the dock.
2. There is significant scattered metal debris below the tideline in Channel Construction's operation.
3. There are tires scattered across the entire site but could easily be consolidated into 1-20' container.
4. The Oil/Water Separator is functioning but should be pumped out for oil
5. There are a significant number of compressed air/gas cylinders needing disposal.
6. There is a little over 1600 cubic yards of landfill material to be removed.
7. Combined wood waste is approaching 36,000 yards.
8. Outfall pipes are functioning, but two of them on the north end of the property are not visible at the outfall location.

Photos

The photos in Appendix F depict the different topics above as of the 3rd week of April, 2022.

Thank you for the opportunity to submit this Condition Assessment. If you have any questions, please contact me at (907) 401.0777.

Sincerely,

Brett C. Martin
President
***PEAK* ENGINEERING, LLC**