



## SOUTHEAST ALASKA POWER AGENCY

### Special Board Meeting AGENDA

(To be held Electronically)

March 1, 2023 SEAPA SPECIAL BOARD MEETING		
Time	Event	For telephonic participation dial:  <b>1.888.475.4499<sup>1</sup> or 1.833.548.0276</b>  <b>Meeting ID No. 889 5879 2931</b>
3:30 PM	Meeting Starts	
5 PM (Estimated)	Meeting Adjourns	

1. Call to Order
  - A. Roll call
2. Approval of the Agenda
3. New Business:
  - A. Workshop Re CEO Discussions
  - B. Executive Session Re Agency's CEO
  - C. Consideration of Contract Re Tyee Powerhouse Station Service System & 15kV Switchgear Design Upgrade
  - D. Consideration of SEAPA Lease Amendment
  - E. Consideration of Contract Re Swan Lake Bunkhouse Replacement
4. Adjourn

<sup>1</sup> In the event of a failure with Zoom connectivity, the meeting will continue by telephonic participation by dialing 1.800.315.6338 (Code 73272#).

## **AGENDA ITEM 3A**

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**(Workshop Re CEO Discussions)**

**MEMORANDUM**  
**ATTORNEY-CLIENT COMMUNICATIONS**

TO: Chairperson  
Southeast Alaska Power Agency

FROM: Joel R. Paisner, Ascent Law Partners, LLP

DATE: February 17, 2023

RE: Suggested Motion for Executive Session

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The Board of Directors may conduct an executive session during a Special Meeting to be held on March 1, 2023 for discussions relating to the Agency's CEO.

If it is determined during the meeting that an executive session is necessary, I recommend the following motion be made:

I move to recess into Executive Session to be conducted pursuant to SEAPA's Bylaws and Alaska Statute 44,62.310 for discussions related to a subject that could prejudice the reputation and character of any person, provided that the person(s) may request a public discussion.



## SOUTHEAST ALASKA POWER AGENCY

**Date:** February 21, 2023  
**To:** Robert Siedman, Acting CEO  
**From:** Clay Hammer, Operations Manager  
**Subject:** Tyee Lake Powerhouse Station Service System & 15kV Main Generator Switchgear Design Upgrade Contract

**FISCAL NOTE:**

RR22364 (15kV Switchgear) and RR22374 (Station Service Switchgear TYL) \$2,330,400 total Project Budget for Engineering/Design, Parts/Switchgear, Construction-Install Labor, Mob/Demob, & 5% contingency. \$1,211,890 approved in SEAPA FY2023 R&R Capital Budget.

A Request for Proposals for SEAPA's Tyee Lake Powerhouse Station Service System & 15kV Main Generator Switchgear Design Upgrade Contract (RR22364 & 22374) was advertised on January 24, 2023. One (1) responsive bid was received on February 15, 2023 as follows:

Bidder	City/State	Firm-Fixed Bid Amount
Electric Power Systems, Inc.	Anchorage, Alaska	\$265,131

The proposal was primarily evaluated on price, design approach, technical design examples, qualifications of proposed design professionals, and completeness and quality of bid proposal documents. Based upon the evaluation, staff recommends award of the contract to Electric Power Systems, Inc. The Project Estimates for RR22364 & 22374 are attached.

Please consider the following suggested motion:

**SUGGESTED MOTION**

**I move to authorize staff to enter into a Contract with Electric Power Systems, Inc. for SEAPA's Tyee Lake Powerhouse Station Service System & 15kV Main Generator Switchgear Design Upgrade Contract (RR22364 & 22374) for \$265,131.**

Attachments:  
Project Estimates: R&R22364 & 22374

# 15kV Switchgear TYL

Description:	<b>15kV Switchgear - Tyee Lake</b>		
Cost Estimate:	<b>\$1,211,000</b>	Sched. Complete:	OCT 2024
		Project Mgmt:	<b>Siedman</b>
<b>PROJECT DISCUSSION</b>			
<p>The Tyee Lake main unit generator 15kV Switchgear is approaching 40 years in service and is nearing the end of its useful life. The Switchgear is the primary protective device for the main unit generators and is essential for operation of the Tyee Lake generators. SEAPA has experienced minor failures in recent years including ancillary connection failures for open/close commands and Potential Transformer (PT) signal connection failures. This project would include engineering design, procurement of new 15kV main generator switchgear and 15kV cables, and installation. The equipment is a long lead time item therefore this will be a 3-year project with engineering occurring in 2022, procurement in 2023 and installation in 2024.</p>			

<b>PROJECT COST ESTIMATE</b>			
BREAKDOWN	ESTIMATE	BUDGET – EXPENDITURES	
Engineering	\$100,000	FY2022 BUDGET	<b>\$80,000</b>
Parts/Switchgear	708,465	FY2023 BUDGET	708,465
Labor	186,000	FY2024 BUDGET	422,535
Mobilization/Demobilization	18,000		
Contingency (20%)	198,493		
Total Estimate	\$1,210,958	Total Budget	\$1,211,000
<b>Project Cost Estimate Discussion</b>			
<p>Engineering based on 400 hours to develop specifications, wiring diagrams, structural engineering analysis, drawings, refined cost estimate and commissioning. Parts and labor estimate based on Swan Lake project in 2016 with 4.5%/yr escalation. 2022 budget for design phase of \$80,000 with \$20,000 for engineering at commissioning.</p>			





# **Station Service Switchgear TYL**

Description:	<b>Station Service Switchgear at Tye Lake</b>		
Cost Estimate:	<b>\$2,330,400</b>	Sched. Complete: OCT 2024	Project Mgmt: <b>Siedman</b>
<b>PROJECT DISCUSSION</b>			
<p>The Tye Lake Station Service Switchgear is nearing 40 years of age and approaching the end of its useful life. The main station service transformers do not have differential protection or arc flash mitigation appurtenances (fiber optic sensors, ARMS switches, etc.) and were identified as "Extreme Danger" with an energy level of 65.3 Cal/cm<sup>2</sup> in the last Arc Flash hazard analysis. Auto-trip and transfer functionality, including emergency power transfers to diesel generators does not exist. All feeder and sub-feeder cables are also at the end of their useful life with increased probability of failures. This project would result in new 480V double-ended Station Service Switchgear, breakers, feeder and sub-feeder cables, fiber optic Arc Flash protected busbars, Arc Flash Reduction Maintenance Switches (ARMS), complete drawings sets, including updated powerhouse one-line and three-lines, Operations Manuals and Training. The new switchgear will be designed with redundancy and isolation in metal-clad rated gear to provide reliability, redundancy and increased safety to onsite personnel with reduced incident energy levels (Arc Flash).</p>			

<b>PROJECT COST ESTIMATE</b>			
<b>BREAKDOWN</b>	<b>ESTIMATE</b>	<b>BUDGET – EXPENDITURES</b>	
Engineering / Design	\$254,930	<b>FY2022 BUDGET</b>	\$230,000
Parts/Switchgear	1,211,863	FY2023 BUDGET	1,211,890
Construction-Install Labor	541,791	FY2024 BUDGET	888,510
Mobilization/Demobilization	210,819		
Contingency 5%	110,997		
Total Estimate	\$2,330,400	Total Budget	\$2,330,400
<b>Project Cost Estimate Discussion</b>			
<p>Engineering, construction, mobilization and labor estimates based on SWL Station Service project from 2021. Estimated 3-yr project with engineering in 2022, procurement in 2023 and install in 2024.</p>			





## SOUTHEAST ALASKA POWER AGENCY

**Date:** February 17, 2023  
**To:** SEAPA Board of Directors  
**From:** Robert Siedman, Acting CEO  
**Subject:** Amendment No. 4 to SEAPA Office Lease

A third amendment to the lease between SEAPA and the Ketchikan Gateway Borough for the two offices it is currently leasing in the Borough building allowed SEAPA to renew the lease for Suite Nos. 312 and 318 on a month-to-month basis from January 15, 2023 at a monthly rent escalation of .05/SF until SEAPA's new headquarters is ready for occupancy, which is currently estimated to be on or before May 15, 2023. The third amendment computed the base rent cost through 01/15/2023.

SEAPA provided notice to the Borough on 02/10/2023 that subject to SEAPA's Board of Director's approval, SEAPA proposes to continue the monthly rent escalation of .05/SF from January 15, 2023 through May 15, 2023 as set forth in the following table:

Year of Lease Term	Monthly Base Rent per SF	Annual Base Rent per SF	Total SF Subject to Rent		Annual Base Rent	Monthly Base Rent
Year Ending January 15, 2023	\$2.46	N/A	Suite 312	338 SF	N/A	\$5,911.38
			Suite 318	2,065 SF		
			Total	2,403 SF		
Estimated Month-to-Month Term	Monthly Base Rent Per SF		Suites	Total SF 2 Suites	Annual Base Rent	Monthly Base Rent
01/15/23 to 02/15/23	\$2.51	N/A	#312 #318	2,403	N/A	\$6,031.53
02/15/23 to 03/15/23	\$2.56	"		"	"	\$6,151.68
03/15/23 to 04/15/23	\$2.61	"		"	"	\$6,271.83
04/15/23 to 05/15/23	\$2.66	"		"	"	\$6,391.98
Total						\$24,847.02

As noted in the above table, the total monthly base rents are \$24,847.02 through 05/15/23. Section 9.1 of SEAPA's Procurement Policy states:

No lease or easement to use land may be acquired by SEAPA for a payment in excess of Fifteen Thousand Dollars (\$15,000.00) without first being specifically approved by the Board.

Because total base rents will exceed \$15,000, staff seeks the Agency's authorization to enter into a fourth amendment to the Borough lease to allow SEAPA to continue its month-to-month tenancy with the Borough through 05/15/2023 for rent payments totaling \$24,847.02.

SEAPA may terminate its existing lease with the Borough with one month's written notice.

Please consider the following suggested motion:

<b>SUGGESTED MOTION</b>
<b>I move to authorize SEAPA's Acting CEO to enter into Amendment No. 4 to the existing Lease Agreement between SEAPA and the Ketchikan Gateway Borough ('KGB') for the lease of SEAPA's offices in the KGB Building on a month-to-month basis from January 16, 2023 through May 15, 2023 for the total cost of \$24,847.02.</b>





## SOUTHEAST ALASKA POWER AGENCY

**Date:** February 17, 2023  
**To:** Robert Siedman, Acting CEO  
**From:** Ed Schofield, Power System Specialist  
**Subject:** Consideration of Contract Re Swan Lake Bunkhouse Replacement Project

**FISCAL NOTE:**

RR 21350 (SWL Bunkhouse Replacement) \$1,222,240 approved in SEAPA FY2023 R&R Capital Budget for removal of 3 existing structures, modular construction, barge & crane, engineering & permitting, assembly of modular, with a contingency, and inflationary adjustment.

### **Swan Lake Bunkhouse Replacement Project Bid Summary**

The Bunkhouse Replacement Request for Proposals was issued by SEAPA on December 14, 2022, and the following three (3) responsive proposals were received on February 7, 2023:

Dawson Construction, LLC	Bellingham, Washington	\$ 1,396,500.00
H Construction, LLC	Palmer, Alaska	\$ 1,750,000.00
CCI Industrial Services, LLC	Anchorage, Alaska	\$ 1,914,445.51

Proposals were primarily evaluated on cost, experience, appropriateness of the proposed general approach to the work and materials/products proposed, construction schedule, warranties, and the contractor's safety program. The bid is \$174,260 over the \$1,222,240 approved in the FY2023 R&R Budget due to major construction cost escalations.

Based upon evaluation of the bid, staff recommends award of the project to Dawson Construction, LLC for the lump-sum bid of \$1,396,500. A contingency of 8% (\$111,720) is also recommended for unexpected delays or other project expenses for a total project cost of \$1,508,220. This would be an increase of \$285,980 to the FY2023 R&R Budget.

The following is a summary of the project's scope of work for discussion purposes during the meeting to more fully understand the project cost:

### **Swan Lake Bunkhouse Scope of Work Summary:**

The Scope of Work (SOW) required under the RFP defined the following performance requirements:

Construct and install a 2,400SF two-story duplex modular building that meets the requirements of the design drawings and material specifications. The first floor consists of a 1,200SF apartment (noted on the RFP drawings as apartment #1). The first floor apartment #1 will include 2/3rds of the Swan Lake Bunkhouse. The second story includes the remaining 1/3 of the Bunkhouse with a 600SF fully-contained employee housing unit noted as Apartment #2 on the RFP drawings.

The Bunkhouse will occupy 1,800SF and includes a full Kitchen, dining room, living room, two baths, laundry, pantry, and six bedrooms. Three bedrooms and one full bath occupy half of the

second story with the remainder of the second story consisting of Apartment #2, a 600SF one-bedroom employee housing unit.

The SOW includes decommissioning and removal of the two existing 1,200SF modular employee housing units installed in 1983, and one 3,000SF two-story modular structure (Bunkhouse) constructed in 1982.

Also included is backfilling the concrete foundation of one 1,200SF modular and the 3,000SF structure (Bunkhouse) with contractor supplied 1-½ minus crushed rock and the abandonment of both foundations' existing utilities.

### **Why Replace the Bunkhouse?**

The Bunkhouse at Swan Lake was constructed in 1982 at the beginning of Swan Lake construction activities. It started out as a construction engineer's drafting office and was utilized as the housing accommodations at the site all the way through to commissioning and startup of Swan Lake in 1983-84. The structure is 41 years old.

After the plant was completed, the Bunkhouse was reconfigured with additional interior walls to accommodate contractor crews for special maintenance projects. The structure has functioned well and is a requirement of operating a remote hydro facility. The structure has undoubtedly saved millions over the years in decreased contracted maintenance costs. Throughout the structure's 41 years of service, little-to-no maintenance has occurred other than exterior painting and a roofing material replacement in 2001.

The structure is now in need of new kitchen cabinets, bathroom fixtures, exterior doors, windows, and exterior siding. In addition to the items described, the southeast exterior wall has extensive rot damage from water intrusion and carpenter ant infestation. Estimates developed to make repairs to the bunkhouse exceeded 50% percent of the structure's replacement value. The full extent of the rotted structure has yet been determined. Replacement of the structure is likely the most prudent approach. In addition, other factors such as increased staffing at Swan Lake from three (3) crewmembers prior to 2011 to 5 crewmembers in 2019 contributed to the overall housing replacement plan. Staff numbers in 2019 exceed employee-available housing by two units.

All three of the original employee housing units require extensive remodels similar to the bunkhouse. There is inadequate space to construct two additional housing units without costly land and utility development. The combination of all these factors drove the decision to pursue the construction of the four-plex employee housing unit installed in 2019 and the proposed Bunkhouse Replacement Project. With the installation of the new bunkhouse, the need for one additional employee housing unit will be resolved along with the replacement of the deteriorated bunkhouse and employee housing units.

An additional benefit to constructing the four-plex and the new bunkhouse is a decrease in overall maintenance due to a decrease in the number of structures and square footage.

### **Historical Information: Swan Lake Bunkhouse**

This project was first presented to the SEAPA Board for budgetary approval in 2020. \$895,620 was approved based on an engineer's estimate, which was developed using actual installation costs of the Swan Lake Four-Plex RR 286-18, which was \$743,434.00. Both the Four-Plex and the proposed Bunkhouse are identical in size and design; only the interior layout differs from each

project. The contractor's scope of work for the Bunkhouse Project increased due to the necessity of decommissioning and removing three existing structures instead of one structure for the Four-Plex project. Due to COVID-19's required facility lockdowns, the Bunkhouse Project was deferred in 2020 and 2021. The engineer's estimate increased 16% to \$1,040,577 for the 2021 Budget due to forecasted COVID-related inflation. The 2022 project estimate increased the budget to \$1,124,000 but the project was again deferred due to continued Covid restrictions. SEAPA's FY2023 budget estimate was \$1,222,240.

### **2023 Bid Cost Analysis**

The Bunkhouse low bid of \$1,396,500 is a 12.5% increase over the 2023 approved budget. After analyzing the costs used to develop the low bidder's proposal, it was evident that the revised engineer's estimates did not cover unprecedented escalation in building materials that occurred in the last two-year period. According to the low bidder, they experienced a >30% inflation rate for construction materials in 2022. Well-recognized analyst reports in 2022 substantiate their claims. They report inflation rates for construction materials are well above 30% for the year.

Most analysts agree that the 2023 inflation rate is not likely to see a decrease and is more likely to see an overall increase, and although it may be at a somewhat slower pace than the 2022 escalation, the general industry consensus is that inflation will continue to rise. The unprecedented escalation level of worldwide construction and the housing shortage is blamed for the inflated costs. The level at which the US Government is presently spending on infrastructure construction is not expected to decrease; just the opposite - in fact, it is expected to increase exponentially reinforcing the predictions of increased inflation for the foreseeable future.

**See Appendix A for additional supporting information Re: Construction and Forecasted Inflation**

**See Appendix B for Updated FY2023 Project Cost Estimate**

Please consider the following suggested motion:

SUGGESTED MOTION
<b>I move to authorize staff to enter into a Contract with Dawson Construction, LLC for SEAPA's Swan Lake Bunkhouse Replacement Contract for the lump-sum value of \$1,396,500. I further move to increase the FY2023 Budget for RR21350 to \$1,508,220.</b>

Attachments:

Appendix A - 2022 Construction Analytics PPI Tables and Building Cost Index

Appendix B - Updated FY2023 Project Cost Estimate



According to the latest Producer Price Index (PPI) report released by the Bureau of Labor Statistics, the prices of goods used in residential construction ex-energy (not seasonally adjusted) climbed 0.5% in April, following upwardly revised increases of 1.9% and 2.4% in March and February, respectively.

This adds up to an 4.9% increase in building materials prices since the start of 2022. Building materials prices are up 19.2% year over year and have risen 35.6% since the start of the pandemic.

Specific material increases include:

- **Softwood lumber:** The PPI for softwood lumber (seasonally adjusted) declined 15.6% in April, following a downwardly revised 5.4% increase in March and a 2.5% gain in February. As a result, the index is down 8.9% over the first four months of 2022. Since reaching its most recent trough in September 2021, prices have risen 60.4%.
- **Steel products:** Steel mill products prices (not seasonally adjusted) climbed 2.4% in April — the first monthly increase since December 2021. Nonetheless, the first four months of 2022 have been positive for the cost of derivative steel products after increasing 128% in 2021.
- **Ready-mix concrete:** The PPI for ready-mix concrete (RMC) prices rose 1.3% (seasonally adjusted) in April after a small decline in March. The index has climbed 8.9% year over year and is 12.6% higher than the January 2021 reading.
- **Gypsum products:** The PPI for gypsum products (seasonally adjusted) was flat in April. The prices of gypsum products are up 17.8% year over year and have increased 23.5% since January 2021.



Construction Inflation 2023**1-18-23 Construction Analytics PPI Tables and Building Cost Index**

Construction Inputs to Nonresidential Buildings dropped for five of last six months, now down 5.2% since June, but still up 7.2% since last December. However, the average index for 2022, when compared to the average for 2021, is up 15.7%.

The average growth for the year accounts for all the peaks and valleys within each year and is the value carried forward into the index tables and charts. A glaring example of the difference between Dec/Dec tracking, or year over year, and annual average tracking, is Steel Mill Products which is down 28.7% Dec22/Dec21, but the annual average for 2022 is still up 9.0% from the average 2021. In fact, the last three years show Dec/Dec combined inflation is +71%, but the annual averages for the last three years show total inflation growth of 87%. **Annual averages should be used to report inflation.**

Residential inputs are down seven of the last eight months, down 7.1% since April, but still up 7.1% since last December. The average for 2022, when compared to the average for 2021, is up 12.7%.

Several major cost components have been on decline the last few months: Lumber/Plywood, Steel Mill Products, Fabricated Steel, Steel Pipe and Tube, Aluminum and Diesel Fuel. Of the 15 items tracked here, 10 declined in the last quarter. **Concrete is the only product that has not posted any monthly decline in 2022.** Costs are still high, but are moving in the right direction after 1st quarter 2022 costs that averaged +7% (28% annual) to +8%. Historically, most cost increases are posted in the 1st quarter and the least in the 4th quarter.

CONSTRUCTION ANALYTICS INDEX BASE YR SET TO 2019 = 100	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>CA NONRESIDENTIAL BLDGS</b>	<b>84.1</b>	<b>87.1</b>	<b>90.6</b>	<b>95.5</b>	<b>100.0</b>	<b>102.4</b>	<b>110.2</b>	<b>123.7</b>	<b>128.9</b>	<b>133.7</b>
Turner Index actual cost	81.6	85.5	89.8	94.9	100.0	101.8	103.7	111.9	116.4	121.1
Rider Levett Bucknall Index Actual Cost	82.2	86.7	90.6	94.8	100.0	103.5	108.5	116.8	121.4	126.3
Mortenson avg 6 cities nonres bldg	85.1	88.1	91.1	97.8	100.0	101.9	117.2	131.9	137.2	142.7
PPI Industrial Bldg actual cost	87.5	88.0	90.4	94.6	100.0	103.0	108.4	132.6	141.9	145.5
PPI Warehouse Bldg actual cost	88.0	89.4	92.0	95.2	100.0	101.6	109.2	139.8	148.2	152.6
PPI School Bldg actual cost	88.0	88.8	90.6	94.5	100.0	102.6	106.3	123.7	131.1	135.1
PPI Office Bldg actual cost	88.5	89.9	91.9	95.7	100.0	102.3	108.5	131.0	138.9	144.4
PPI Health Care Bldg actual cost	90.3	90.8	92.1	96.0	100.0	102.4	107.3	125.8	134.6	138.6
PPI Concrete Contractor actual cost	83.2	86.7	89.8	94.0	100.0	102.1	109.0	128.2	133.4	136.7
PPI Roofing Contractor actual cost	93.1	94.4	96.6	97.5	100.0	103.2	109.5	130.0	137.8	141.2
PPI Electrical Contractor actual cost	88.3	90.2	91.5	95.6	100.0	102.7	107.3	122.0	126.9	130.1
PPI Plumb/HVAC Contractor actual cost	90.7	89.6	91.3	95.2	100.0	101.1	105.0	119.0	125.0	127.5
RS Means Index Inputs	88.8	89.3	92.0	96.0	100.0	101.6	108.7	125.1	128.9	132.7
ENR BCI Index Inputs	89.9	92.0	95.0	98.1	100.0	102.4	112.7	127.0	130.2	133.4
PPI Inputs to NONRES BLDGS	87.9	86.4	89.8	96.0	100.0	100.2	118.7	137.4	141.5	146.5
<b>CA INFRASTRUCTURE composite</b>	<b>91.6</b>	<b>89.8</b>	<b>91.4</b>	<b>96.1</b>	<b>100.0</b>	<b>99.7</b>	<b>107.5</b>	<b>122.4</b>	<b>127.7</b>	<b>132.1</b>
FHWA Hiway Index NHCCI	88.3	86.4	87.1	93.3	100.0	99.9	107.2	129.3	135.8	140.5
I H S UCCI Pipeline, LNG	112.1	96.2	95.6	98.9	100.0	96.2	103.0	113.3	117.9	122.6
I H S DCCI Refinery, Petrochemical	93.6	89.6	93.1	98.0	100.0	98.0	105.4	116.0	120.6	125.5
BurRec Roads & Bridges	90.7	91.4	94.1	97.5	100.0	100.7	107.8	120.1	124.9	128.6
BurRec Dams & Pumping Plants	90.6	91.8	94.0	97.0	100.0	100.7	106.0	117.1	121.8	125.5
BurRec Distribution Pipelines STEEL	93.0	94.2	96.0	97.9	100.0	100.2	106.0	118.7	123.4	127.1
<b>CA RESIDENTIAL</b>	<b>83.5</b>	<b>87.4</b>	<b>92.2</b>	<b>96.6</b>	<b>100.0</b>	<b>104.5</b>	<b>119.0</b>	<b>137.8</b>	<b>140.9</b>	<b>146.6</b>
US Cen Bur NEW Homes Lasperyes	84.8	89.1	93.7	96.9	100.0	104.0	116.1	135.6	141.0	146.6
S&P/Case Shiller HomePrice NATIONAL	82.0	86.3	91.8	96.5	100.0	105.9	123.7	142.2	142.2	147.9
PPI Residential Inputs +Labor	88.7	87.6	90.6	97.7	100.0	102.4	121.1	136.5	132.4	136.4
All data updated to Q4*2022 where av										
edzarenski.com										

In the table above, dividing the current year by the previous year will give the current year inflation rate. All indices are the average rate for the year.

[CBRE's Construction Cost Index](#) says the price paid for goods and services on new nonresidential construction jumped 42% between March 2020 and March 2022. That doesn't include labor costs, which have also increased. Since the pandemic began, various steel products, plastic piping and wood costs have more than doubled.

In 2023 and 2024, CBRE expects annual increases will return to historical averages between 2% and 4%. The report says:

"Overall cost inflation for materials is expected to begin cooling by the end of 2022 and largely return to typical levels by mid-2023. However, given the large number of construction inputs—many of which are often subject to geopolitical risks such as tariffs and sanctions—costs for some materials may remain volatile."

The report says supply-chain disruptions should begin to ease but ongoing global labor shortages will hamper production and logistics.

CBRE Construction Cost Index highlights:

- A confluence of events — including soaring construction demand, inflation, pandemic-related restrictions, supply chain disruptions, labor shortages and the war in Ukraine — are spurring rising costs and uncertainty across the construction industry.
- The construction industry faces numerous labor challenges, including a smaller talent pool in the aftermath of the Great Recession, an aging workforce — one in five workers is currently older than 55 — and strong competition from other industries like logistics.
- Labor shortages are expected to persist for the near term, increasing wage pressure. Because construction wage growth has lagged the national average through the pandemic, construction labor escalation is likely to be higher in 2022.
- As demand for new construction projects increases, contractors may be able to pass along higher input costs. The extent to which this happens will depend on how many builders delay or cancel projects due to concerns over input prices, rising interest rates and economic uncertainty.
- Despite headwinds, construction demand is expected to remain strong for the near term. Although the possibility of an economic downturn should be taken seriously, considerable pent-up demand for new construction — including a nationwide housing shortage — and government infrastructure projects should largely sustain activity. As contractor backlogs grow, margins should increase, pushing up total construction costs.





**RR21350**

## Bunkhouse SWL

Description:	<b>Bunkhouse Replacement at Swan Lake</b>		
Cost Estimate:	<b>\$1,508,220</b>	Sched. Complete:	<b>DEC 2023</b>
		Project Mgmt:	<b>Schofield</b>
<b>PROJECT DISCUSSION</b>			
<p>This project when complete would replace the existing Swan Lake Bunkhouse, and the remaining two employee single-occupancy housing units with a new two-story modular constructed facility. The new two-story structure would incorporate one 600-square-foot employee single-occupancy unit and one 1,800-square-foot contractor bunkhouse. The new housing structure would mimic in size and appearance the Four-Plex employee housing unit constructed at Swan Lake in 2020. The construction of this new housing structure would accommodate all employee and contractor housing needs and would remove the existing 3 forty-year-old housing structures. The new structure would utilize an existing single-story housing unit's foundation and the existing installed utilities. The new facility would decrease annual maintenance requirements by decreasing the overall square footage from 8,400 under three roofs to one structure of 2,400. The alternative to new construction would be refurbishment of three 40-year-old housing units, which would include at a minimum, replacement of all windows, doors, exterior siding, cabinetry, bathroom fixtures, and flooring. The existing bunkhouse would also require replacement of the south-facing exterior wall studs due to a combination of long-term water intrusion and carpenter ants (see attached photos). All three original structures will have some degree of interwall rot due to age and condensation issues from aluminum framed window construction. Facility design, permitting and development of a Request for Proposal document would take place in 2022. Installation of the facility would occur in the summer of 2023.</p> <p><b>History and Specifications:</b> The existing bunkhouse is 3,000 sq. ft., modular-constructed, two-story, six-bedroom, designed originally as a single-family home. The existing two employee-housing units are single-story 1,200 square-foot modular constructed homes. The bunkhouse was the first permanent structure constructed at Swan Lake Hydro Generation Facility. The bunkhouse was first used as the project's engineering office and housing during construction. After final commissioning of the plant, the bunkhouse was refitted to accommodate the project as a special project contractors bunkhouse.</p> <p><b>FY2022:</b> Schematics and construction documents completed.</p>			

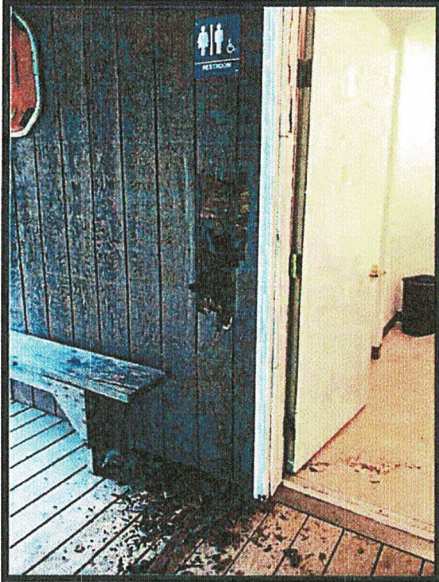
<b>PROJECT COST ESTIMATE</b>			
<b>BREAKDOWN</b>	<b>ESTIMATE</b>	<b>BUDGET – EXPENDITURES</b>	
Removal, barge, permitting, assembly	\$ 372,500	FY2022 Expenditures	\$8,805
Modular Construction	750,000	FY2023 Requested Budget	\$1,499,415
Mobe-Demobe-Shipping	200,000		
8% Contingency	111,720		
Inflationary adjustment	74,000		
Total Estimate	\$1,508,220	Total Budget	\$1,508,220



# RR21350 Bunkhouse SWL

## Project Cost Estimate Discussion

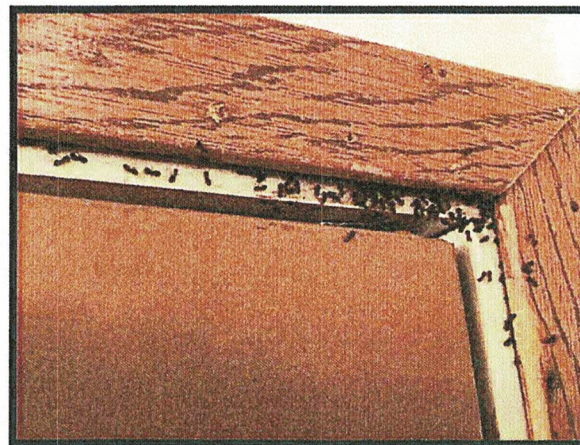
2023 budget-request figures are based upon actual bids.



Bunkhouse South Exterior Wall Damage



Bunkhouse South Wall

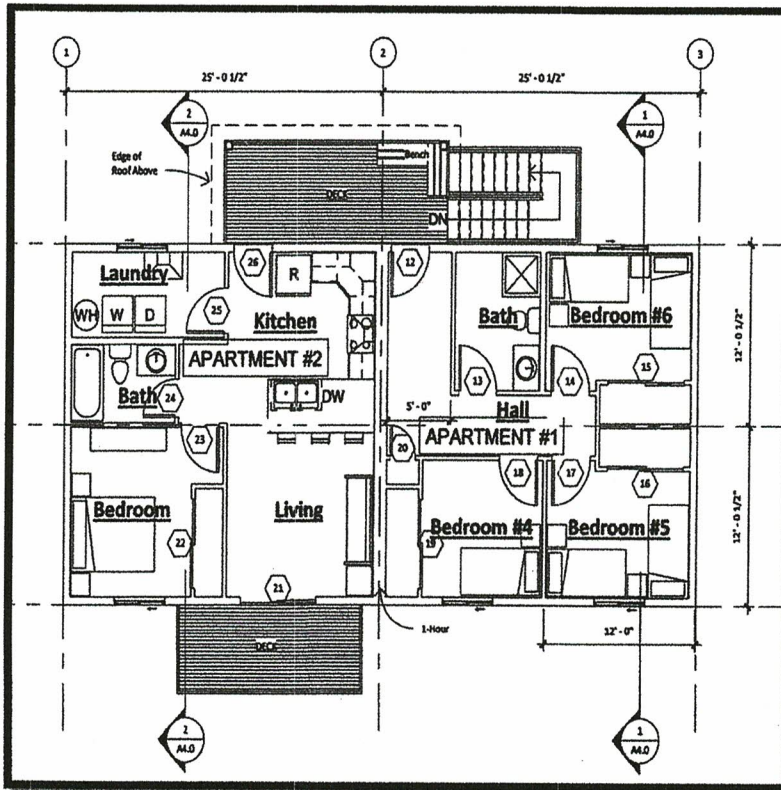
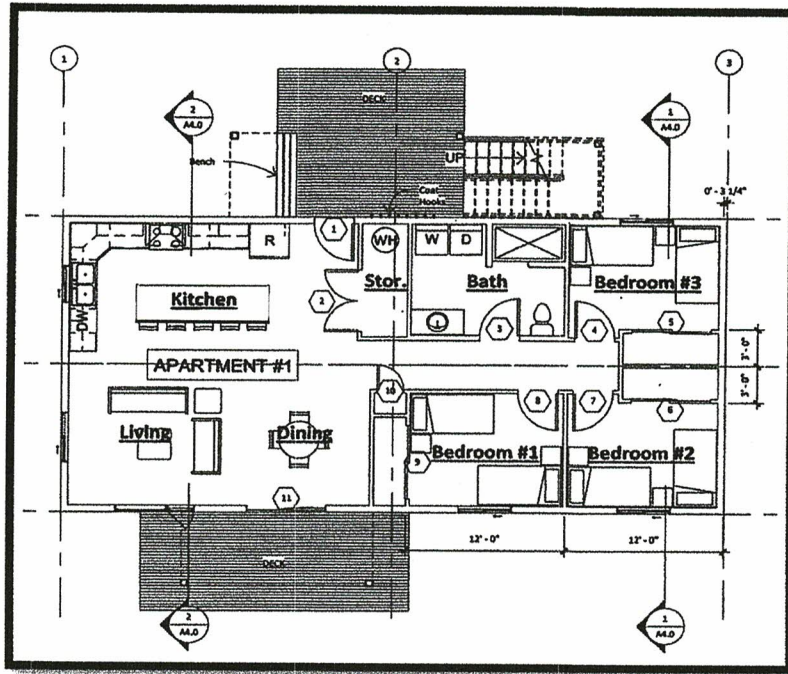


Carpenter Ants Bunkhouse South Wall



**RR21350**

**Bunkhouse SWL**



**RR21350**

# **Bunkhouse SWL**

