

LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT

MEMORANDUM

DATE: FEBRUARY 27, 2018

TO: BOARD OF DIRECTORS
Lake Arrowhead Community Services District

FROM: 
AIDA HERCULES-DODARO, District Engineer


CATHERINE CERRI, General Manager

SUBJECT: ENGINEER'S PROGRESS REPORT – NORTH BAY INTAKE
PUMP STATION REPLACEMENT PROJECT NO. 072

A. RECOMMENDATION

This is an information item only.

B. REASON FOR RECOMMENDATION

This is an information item only.

C. BACKGROUND INFORMATION

This report is an executive summary of the progress occurred at the North Bay Intakes Pump Station Replacement Project (NBPS) from January 17, 2018, to February 20, 2018.

The week of January 17th, the contractor completed the shoring and started to place the “outer” forms. The photo depicts the crane lowering a panel which is part of the outer forms.



Outer form assembly near completion

The week of January 22nd, the contractor had his steel crew placing the rebar closest to the outer face of the wall. The 3 workers standing at different levels gives a perspective of the depth of the pump station structure.



The grading for the restroom started and the foundation was surveyed at the end of the week.

The week of January 29th, trenching for electric work started, steel crew started placing the rebar closest to the inner face of the wall, the forms, rebar and plumbing for the restroom footing were in place.



The contractor also started the trenching and installation of the manhole located in front of the pump station, which will be collecting washed water from the pump room and sewage from the restroom.





The force main horizontal alignment was painted on the asphalt for the saw cutting crew.

The pipes penetrating the structure were installed and rebar reinforcement placed at each pipe penetration.



The week of February 5th, the rebar for the walls was completed and the contractor started placing the “inner” forms.



The picture on the right shows a close-up of the steel reinforcement placed for a pipe penetration.



A close-up detail of the rebar for the wall.

Precast vaults for electric conduits and conduits were installed in coordination with SCE.



Force main was installed and backfilled.



The week of February 12th, the inner forms work continued. During this week, the site was impacted by weather conditions for a day. The pump building structure was protected from rain/snow;



however, on Wednesday 14th work continued in preparation for the scheduled concrete pour for Friday 16th.

On Wednesday 14th the site work resumed and the footings and floor of the former electric building were demolished and removed in preparation for the installation of the electric conduits coming from the concrete vault installed the previous week.





The placement of the rebar was closely monitored for compliance with the project plans and specifications

The placement of the inner forms was completed and ready for the concrete pour scheduled for the end of the week.



Concrete pour started at 8:00 AM as scheduled and was completed at 3:00 PM. The concrete pour consisted of 16 concrete trucks and a total of 136 cubic yards (CY). No trucks were returned to the plant during this concrete pour. There was close monitoring for this pour, the same as the foundation pour. A geotechnical technician was at the batch plant and another at the project site. The

concrete quality was closely monitored and tested for compliance.

The footing for the restroom was also poured during this operation. The footings and floor for the electric building was not included in this concrete pour as SCE hasn't provided an approved set of plans showing the exact layout. LACSD, the engineer and SCE are working closely on the development of the plans.



The site was prepared for the long weekend and for the storm forecasted for Monday 19th. Heaters were placed to keep the temperature warm for concrete curing purposes.



The site was monitored during the 3-day holiday weekend with an assigned worker taking temperature readings 3 times a day. The environment was kept within the acceptable range.

On February 20th work resumed at the project site. The work environment was assessed for safety. The protection placed at the project site held up through the storm.



Due to icy conditions the crew was called to work at 9:00 AM and they started stripping the forms placed for the concrete pour.

D. FISCAL INFORMATION

This is an information item only. To date, the information presented to the Board on November 14, 2017, has not changed. A summary table representing the change orders is included below for reference. Staff has received preliminary paperwork from the contractor's work related to the additional underwater shoring, which was authorized on a time and material basis with pre-approved rates. Staff is working with the engineer of record and negotiating with the contractor. Once all the parties are in agreement, the change order will be reflected on the table below at a future date.

Time and material was authorized due to the unknown circumstances under water and availability of divers, crane and crane operators. District has reviewed videos provided by the diving company showing what work has been done under water.

CO #	Description	Date	Amount
1	Removal of two 90 feet tall cedar trees	9/5/17	\$ 10,518.95
2	Pipe material changed due to hurricane Harvey	9/22/17	\$ 14,368.77
3	Temporary ramp at HPOA beach area	10/23/17	\$ 82,883.42
4	ALA barges and fees	10/27/17	\$ 49,831.68
5	Crane and main barge related charges	10/27/17	<u>\$ 245,196.59</u>
	<i>10% of original contract price</i>		\$ 402,799.41