Jo-Carroll Depot LRA Board of Directors: Special Meeting
18901 B Street
Savanna Depot Business, Industry & Technology Park
Savanna, IL 61074
3:00 p.m., Wednesday, April 15th, 2020
Zoom Meeting ID:
https://us02web.zoom.us/rec/play/vJUIIrqu_D43H9LA4wSDAaQqW461L_6s03JIrvMFzUq0UnEBNlDzNbcXZ-FRxg91Ct20aXi5UWbNw80D?startTime=1586981002000

I. Call to Order – Chairman Steve Keeffer called the April 15th, 2020 Board of Directors Special Meeting meeting to order at 3:01 pm.

2. Roll Call – was answered as follows: Present – Don Crawford, Steve Keeffer, Bill Robinson, Kevin Reibel, Bill Wright, Paul Hartman, Ron Smith and Bill McFadden.

Staff present: Mara Roche, Rob Davies.

Consultants Present: Andris Slesers (Weston), Linda Balcom (Balcom Environmental)

Legal counsel: Phil Jensen was present.

Others present: Amiee Martelle (Riverport Railroad), Ed Britton (USFWS), Emily Legel (NWILED), Scott Lombardo (Savanna Stables), Liz Chimienti (OEA), Lisa McCarthy, Col. Hoogeboom (OEA)

3. Pledge of Allegiance was recited

4. Agenda Additions none

5. Business

A. Bills over $2,500-Bauer Agency: $14,504 for Property & Liability Insurance 4/12/20 thru 4/12/21, Broadmoor Agency: $3,273 for Professional Liability Insurance. **Bill Wright made a motion to send payment to the respective companies. Bill Robinson seconded the motion. A roll-call vote was held and the motion passed unanimously.**

6. Bathymetry and Sediment Transport Model Memoranda

A. Overview and Analysis: Mrs. Balcom started by providing a contectual overview of the information that Mr. Slesers was presenting. Mrs. Balcom stated that the process around the bathymetry and sediment transport modeling was to provide a pre-decisional document that would ascertain the possible feasibility of development or reuse of the Fish 5/Parcel 20 property.

The aim was to create reasonableness assessment: could the parcel be used, what impacts would there be, would there be access for barges, what dredging would be necessary and what maintenance would need to be done.

Mr. Slesers began with his presentation, saying that there were three components to the study carried out by Affiliated Researchers: a bathymetric survey, grain size sampling and total suspended solids sampling.

The resulting data was used to build a sediment transport model utilizing the US Army Corps of Engineers' River Analysis System Software.

Mr. Slesers said that the study area encompassed the area directly to the south of the shoreline of the Savanna Industrial Park, including Apple River island and the main channel adjacent to Apple River island, and then north as far as the southern tip of island No 256 and south as far as the southernmost tip of Apple River island.

The main area of data collection was the side channel to the north of Apple River island – ie the slough and shoreline abutting Savanna Industrial Park.

Data was also collected in the inflow area of the Apple River as it enters the Mississippi River adjacent to the Savanna Industrial Park.

Mr. Slesers said that Affiliated Researchers used two boats during the data collection program. He explained that the boats used sonar and Doppler radar to take measurements.

Mr. Slesers then moved on to a slide depicting the various water depths in the study area, explaining that the water was shallow at the inflow of

the Apple River due to sediment laid down by the flow of the river. He also added that the very northern end of the study area adjacent to Island 256 was shallow and prevented the contractors from taking readings with their multi-beam sonar, resulting in an area with no data recorded.

Mr. Slesers then moved to a slide depicting the flow rates in the side channel along Apple River Island. The average rate of flow was 10,613 cubic feet per second, compared to an average rate of flow of around 55,000 cubic feet per second.

Mr. Sleser's next slide showed the bathymetry data and also included the data points captured along the study area moving towards the southern end of the area, along with the flow of the river.

Mr. Slesers then explained that the model shows the flow rates in the side channel ranged from around 10 600 to 11 000 cubic feet per second, with the greatest sedimentation occurring in areas up- and downstream of the study area: the areas around Island 256 and the southern part of Apple River island where the Apple River enters the Mississippi.

Mr. Slesers stressed that the data captured the state of the river as "a snapshot" or a moment in time and that the results were specific only to the dates in late August when the sampling was done.

He added that the data did not reflect flood stage events or any other naturally-occurring events that annually alter the flow of the river or the composition of river sedimentation.

Negative sedimentation – scouring – occurred down the middle of the side channel. An area where the researchers collected data to understand how much dredging would need to be done in the side channel.

Mr. Slesers then moved to a slide showing a hypothetical dredge scenario where the goal would be to have 10 feet of draft to accommodate barge traffic. The scenario postulated that over 400 000 tons of sediment enters the study area, most of which flows through. The hypothetical total amount of sediment that would have to be dredged amounted to 160 000 tons.

Again the data showed that the most sedimentation occurred in the

northern and southern parts of the study area – the area to the south of Island 256 and the area where the Apple River flows into the Mississippi.

Mr. Slesers said that the models showed that 1.4 feet of sediment was deposited over a 10 month period and that the data was positive in that 160 000 tons of sediment would have to be removed. He again stressed that the data did not take any flooding or flow events into consideration and that such events may positively impact the amount of sediment that would have to be removed.

Before going to questions, Mr. Slesers asked Mrs. Balcom for any additional input. She noted that the numbers in the dataset were very conservative and that the actual numbers could be far lower if external flow changes were taken into account.

The floor was opened to questions.

Bill Wright wanted to know what the 1.4 feet of sediment accumulation over 10 months would equate to in tons. Mr. Slesers said he would surmise – in the absence of real data – that the number would be five digits – anywhere between 10 000 and 90 000 tons.

Paul Hartman then wanted to know what the maintenance load would be. Mr. Slesers said that the river naturally scours the side channel through flood events and the like. Mr. Slesers noted that initially there would have to be dredging, but that the river would maintain the channel naturally through its flow cycles and current.

Bill Robinson asked whether the river would maintain the channel to greater or lesser extent through current and scouring by barge traffic, as well as prop wash from tugboats. Mr. Slesers answered in the affirmative.

Mara Roche asked whether there was an indication of how much material would have to be dredged each year. Mr. Slesers said that initially there would have to be significant dredging done, but after the initial work, maintenance dredging would be significantly less.

Mr. Slesers added that he was aware of certain structures that could increase water flow and assist in naturally keeping the side channel free of excess sediment.

Bill Robinson asked whether the wing dams would have to be removed

from the study area, as he believed there were wing dams present.

Capt. Kevin Stier of the Upper Mississippi River International Port District answered, saying that once a cut is made into the main channel from the slough to the south of Island 256 (the shallowest part of the study area) the resulting flow will wash the sediment into the main channel and keep it open.

Capt. Stier said that August is a low flow month for the river and that the figure of 55 000 cubic feet per second in the main channel during the study period pales when compared to the flow on April 15th, 2020 when – during light flood stage – the river flowed at 130 000 to 140 000 cubic feet per second.

This, Capt. Stier added, would mean that the flow would scour the channel naturally.

Capt. Stier answered Mr. Robinson's question by saying that a hole could be punched through the one wing dan present at the site. Once the hole is punched through, another dam is either build or manipulated by a barge to create a chevron – a structure that funnels water in a certain direction to scour or clean a section of the waterway. Capt. Stier indicated that chevrons are used successfully in St. Louis Harbor to manage flow.

Capt. Stier added that he couldn't see the 1.4 feet of sediment deposition being a factor if the waterway was being used by barges and tows, since the activity would keep the channel open and induce flow and scouring.

The next question came from Paul Hartman who wanted to know who would carry the cost of removing the sediment through dredging. Bill Jahnke – a UMRIPD board member – said that he believed it would be the port operator.

Capt. Stier concurred, saying that the port operator would likely be responsible, but that there are – and will be – dredging programs sponsored by the government and MARAD available in future.

Steve Keeffer then asked Mr. Slesers whether the results were what were expected. Mr. Slesers answered in the affirmative, saying that he had assumed the results would be positive.

Capt. Stier concurred that the results were positive and that the dredge

material would be able to stored on the Savanna Industrial Park property or the Fish 5/Parcel 20 property. Capt. Stier added that the dredging work would be uncomplicated.

No further questions were forthcoming.

Mr. Keeffer asked whether a motion could be made. Mr. Wright responded by making a motion to accept the findings of the bathymetry and sediment transport memoranda as presented and to move forward with the reuse planning process for Fish 5/Parcel 20.

The motion was seconded by Bill Robinson. The motion passed unanimously by roll-call vote.

7. Public Comments – Ms. Lisa McCarthy wanted to know what the next steps were. Mrs. Balcom said that Mrs. Roche and Mr. Davies would now start the process of pursuing a grant from the Office of Economic Adjustment to fund the re-use planning for the parcel.

No further public comments were forthcoming.

8. Adjournment

Mr. Keeffer noted that - in the absence of questions or comments - the meeting could be moved to adjourn. Mr. Hartman made the motion which was seconded by Mr. McFadden. The motion passed by voice vote. The meeting adjourned at 3:40 p.m.