

1. GENERAL AGENDA

Mayor Dean Katerndahl opened the work session at 6:33 p.m. on November 21, 2023, at City Hall, 8880 Clark Avenue, Parkville, Missouri. In attendance were aldermen Philip Wassmer, Brian T. Whitley, Michael Lee, Stephen Melton, Douglas Wylie, Bob Bennett and Allyson R. Berberich.

The following staff was also present:

Alexa Barton, City Administrator
Bryan Kidney, Deputy City Administrator/Finance Director
Jeffery Rhodes, Assistant City Administrator (*via videoconference*)
Kevin Chrisman, Police Chief
Dan Harper, Public Works Director
Stephen Lachky, Community Development Director
Brittanie Propes, Parks & Recreation Director
John Mautino, City Attorney

A. US Army Corps of Engineers Wetlands Update and Water Source

Leigh Mitchell, U.S. Army Corps of Engineers, provided an update on the wetlands project; presentation attached as Exhibit A. In regards to the water source, Mitchell said the Board would need to determine a location for the pump and which pump to use. Options included a solar pump with a solar panel or a windmill pump. He added that security, such as fencing, could be placed around the pump.

B. Clarifications of 2024 Proposed to Adopted Budget

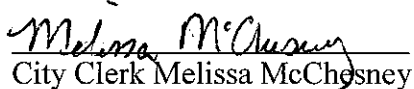
City Administrator Alexa Barton addressed questions that were raised at the budget work session on November 7.

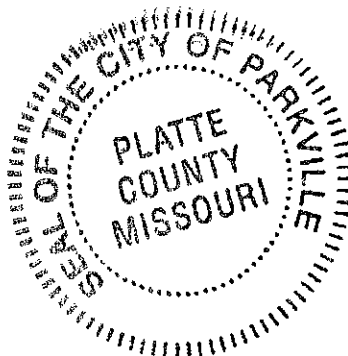
2. ADJOURN

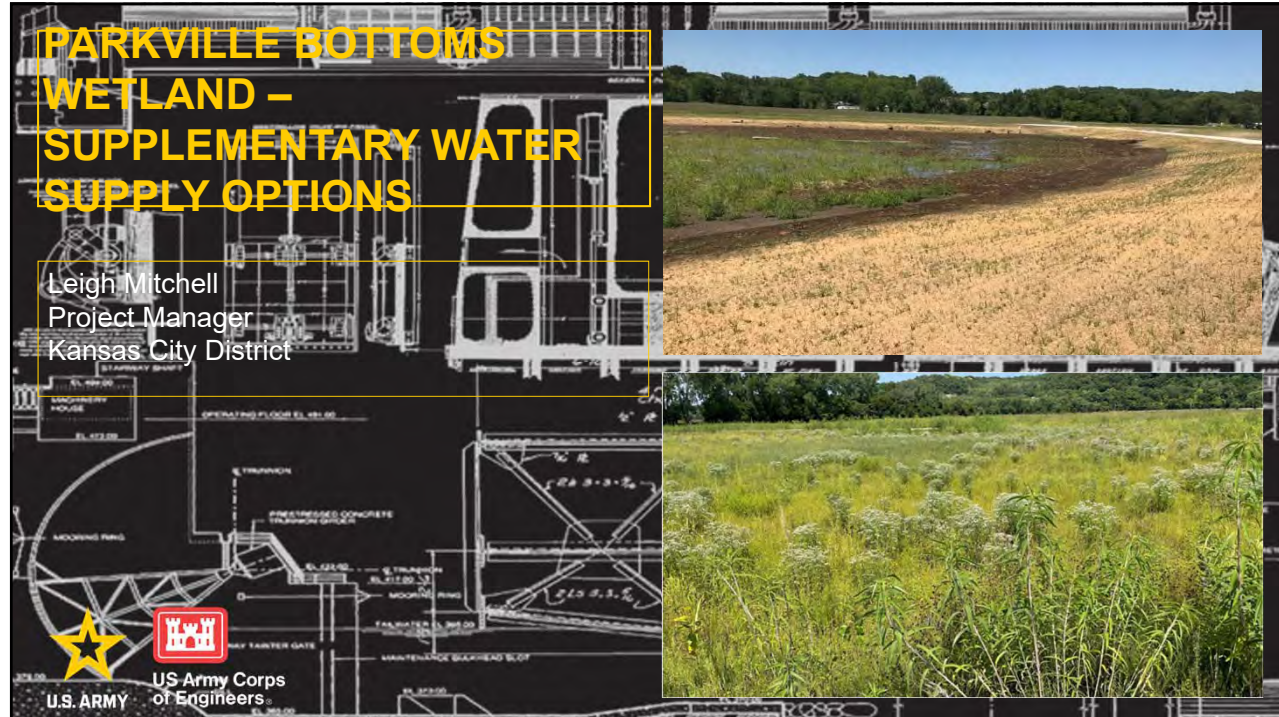
The work session ended at 7:01 p.m.

The work session minutes for November 21, 2023, having been read and considered by the Board of Aldermen, and having been found to be correct as written, were approved on this the fifth day of November 2023.

Submitted by:


City Clerk Melissa McClesney





WELL PLACEMENT

2

Must be at least 50 feet from existing Missouri American Water wells

Preference is to locate the well on the northern side of the wetland (slightly shallower groundwater table)

Well could also be placed between Wetland A and Wetland B

What type of well?

- 5 inch well casing (either iron or PVC depending on pump option chosen)
- Approximately 25 feet deep (depends on the final location chosen and requirements for the pump system – ground water is 17-20 feet).



3



SOLAR PUMP

Cost: approximately \$8k

Installation: USACE - \$1-5K

Yield: up to 470GPH, but only operates during the day and much lower yield during overcast weather

Lifespan: approx. 5 years

Maintenance: low - would require specialist input.

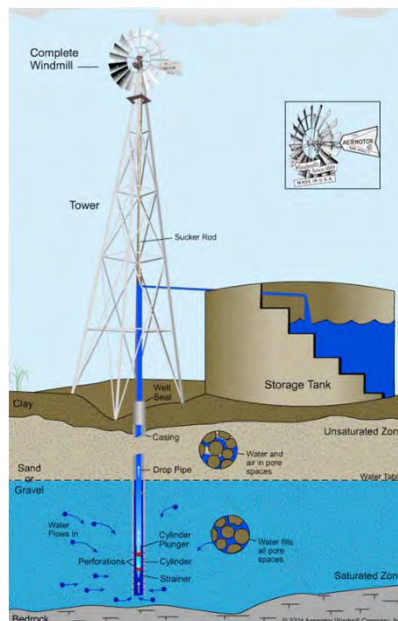
Other benefits: low footprint, no tower, quiet.



4



WINDMILL



Cost: approximately \$10-12k (8' wheel diameter, 27' tower and 3" pump cylinder)

Installation: USACE - \$5-7K

Yield: up to 370GPH – will be less during low wind, but will operate night and day (as long as there is wind!) –

Lifespan: over 20 years

Maintenance: low – annual input and replacement of 'leathers' – City may be able to conduct own maintenance (farmers do!)

Other benefits: low footprint, easy operation/maintenance, visual feature, simple mechanical operation, American made.

Considerations: very low chance of bird injury, but not zero; some noise; climbing hazard?



USACE REQUEST

5

1. Direction on well location – what outcome is the City most wanting?
2. City preference on pump type – wind or solar?
3. Security requirements – is fencing required? What type and how high?



6

Whole wetland

Evaporation rate: 36inches from May-Oct (3')
 Area of wetland: 16 acres
 Volume evaporated: 48 acre/feet
 Gallons: 15,630,000 gallons
 Adjusted for lake conditions: 10,941,000 gallons

Small section south of path

Evaporation rate: 36inches from May-Oct (3')
 Area of wetland: 1.62 acres
 Volume evaporated: 4.86 acre/feet
 Gallons: 1,583,636 gallons
 Adjusted for lake conditions: 1,108,545 gallons

Windmill production

Production rate: average 400GPH
 Overall production May - Oct: 1,728,000 - gallons

