



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
HUNTINGTON DISTRICT, CORPS OF ENGINEERS  
502 EIGHTH STREET  
HUNTINGTON, WEST VIRGINIA 25701-2070

May 3, 2019

Zoar Public Meeting Minutes

Meeting Date: April 24, 2019

Meeting Time: 6:00pm-7:00pm (Approximate)

Meeting Location: Zoar School House

Attendees included those listed in Appendix A

- Rebecca Bennett (Project Manager) opened with introductions of USACE staff present, followed by a discussion of flood risk and the most current project schedule (see Gantt chart in Appendix B (REBECCA, PLEASE REVIEW))
- Seth Lyle (Lead Engineer/Geotechnical Engineer) briefly discussed the seepage history and levee safety concerns that are being addressed by the current Dam Safety Modification (DSM) project, as well as current design status of the two primary remedial features to address the potential failure mode of backward erosion piping (BEP). He indicated that preparation of a design documentation report and construction plans is nearing completion for the proposed two-stage filter with stone armoring to blanket the base of the pump station ponding area. Seth also stated that design is progressing on the proposed internal erosion interception trench (or IEIT) following recent completion of exploratory borings (40 foot depth on average) on Government property along the interior of levee.
- Seth discussed how the contract for ponding area work is scheduled for award sometime before the end of this calendar year. He also indicated that the work in the ponding area is very similar to the periodic demucking operations performed by USACE Dover Dam operation and maintenance staff, but will go a few feet deeper, followed by backfill with two layers of natural stone (pea gravel and typical driveway sized gravel) followed by a layer of larger sized limestone riprap, which will protect the underlying two-stage (or two-layered) granular filter.
- Seth was asked about the proposed addition of a replacement relief well this year and the capacity of the existing relief well collector system/toe drain. Seth indicated that relief well replacement is a separate levee maintenance project, and that new well would not be connected to the collector system, similar to the replacement well installed last year. Like the collector system, this water would still be routed to the pump station for removal during high water events when the wells are flowing. Seth stated that the replacement wells are necessary as many of the originals, installed in 1948, have deteriorated over

time and/or are not functioning at the desired effective, compared to modern stainless steel wire-wrapped well screens.

- Seth was asked if seepage/piping was the only issue with the levee and answered that there are no other issues identified at this time. He went on to say that the levee embankment itself was well-constructed – the issue with the project is the foundation soils comprised of pervious, glacial outwash sands and gravels.
- Seth was asked if there would be any drilling related to the project and answered that the most current plans do not involve drilling/pile driving, but that all work would be subject to the limitations and procedures outlined in the Vibration Assessment.
- Seth was asked about the timing of the ponding area contract and answered that it is scheduled for award in 2019, and things are progressing well. However, it's possible that it may not be awarded or constructed until 2020.
- Nathan White conducted a discussion of the Section 106 process and developments, including the following:
  - A project schedule and implementation plan will be circulated to Section 106 Consulting Parties in the near future
  - Mayor Gordon requested that project information be made available on a website, to reduce the burden of printing/paper cost to the Village of Zoar and Nathan answered that a website for Section 106 communication is in the works and that this could be used to provide information to a wide range of parties without placing the burden on Zoar. The Corps hopes to have this online in the near future.
  - The Vibration and Structural Stability Assessments
    - Nathan was asked about the difference between the two assessments and answered that the Vibration Assessment was conducted to determine expected vibration levels at historic structures from potential construction equipment, safe levels of construction vibration, how to monitor vibration during construction, and how the levels were determined. In addition, the Vibration Assessment included assessment of risk to structures beyond the Zoar Separatist period, to include plaster and lathe structures, which tend to be more sensitive to vibration.
    - Vibration limits were set below what is considered safe for structures at Zoar, to further reduce risk to structures.
    - The draft Vibration Assessment will be circulated to Section 106 Consulting Parties in the near future for review and comment.
    - Seth Lyle assisted Nathan in describing how expected and safe vibration levels were determined and how seismographs will be used to monitor vibration during construction.
    - Section 106 Consulting Parties are welcome to share the draft report with engineering/scientific personnel for evaluation.

- The Structural Stability Assessments (pre and post) will be conducted as close to the beginning and end of construction as possible, to eliminate capturing damages not related to construction.
  - The Structural Stability Assessment will be the responsibility of the Contractor, which will ensure that the Contractor maintains safe vibration levels, as they will be liable for any damages related to construction. This will also ensure that the Contractor is vigilant in assessing structural stability before and after.
  - Nathan was asked about who to contact during construction if property owners have any concerns and he answered that all concerns should be directed to the USACE Resident Engineer, who will be on-site and serve as the conduit for information between citizens and the Contractor.
  - Nathan was asked if the Structural Stability Assessment was mandatory and answered that it is not, but property owners are encouraged to allow the assessment in case of issues related to construction.
  - Nathan was asked if the Structural Stability Assessment would be interior or external only and answered that both are necessary for full assessment
  - Nathan was asked by Kristen Koehlinger (Ohio History Connection) if work is limited to the village side of the levee and answered that the required relocation of a natural gas pipeline will probably take place on the opposite side of the levee and that Section 106 compliance (including review and comment from all Consulting Parties) will be initiated under the PA as soon as the route is finalized.
  - Nathan was asked if construction vibration would be of the same severity as the Civil War re-enactor cannons, which rattled nearby windows, and he answered that thankfully we would not be shooting off any cannons during the work.
- Upcoming archaeological investigations, including shovel testing, trenching and geophysical testing (likely ground-penetrating radar and/or magnetometry)
  - Nathan will coordinate visits during archaeological work with Tammi Shrum (Zoar Site Director) and will conduct docent training regarding Section 106.
  - Nathan was asked when archaeology would commence and answered Early to mid-May.
  - Nathan was asked about trenching and how that is used to locate sub-surface archaeological resources and he answered that document searches, map and literature review, supplemented by shovel testing and geophysical data will inform how and where to place trenches.
  - Nathan was asked who qualifies to serve as a Section 106 consulting party and he answered that ANYONE who is concerned with impacts to Zoar Village is welcome to serve in that capacity. The door is open at any time during the process.

- Nathan was asked about parking restrictions and noise related disruptions to weddings scheduled at Zoar (garden weddings are frequent May-October) and answered that he would work closely with Tracy Britton and Tammi Shrum, in order to de-conflict these events. As weddings are (typically) scheduled on the weekends, the outlook is good.
- Zoar will remain open during this entire process. Work will be scheduled around annual events, webpage, signs, flyers, interpretive exhibits, and videos will be available. Booths will be staffed at annual events, and regular updates, press releases, and public meetings will be held.

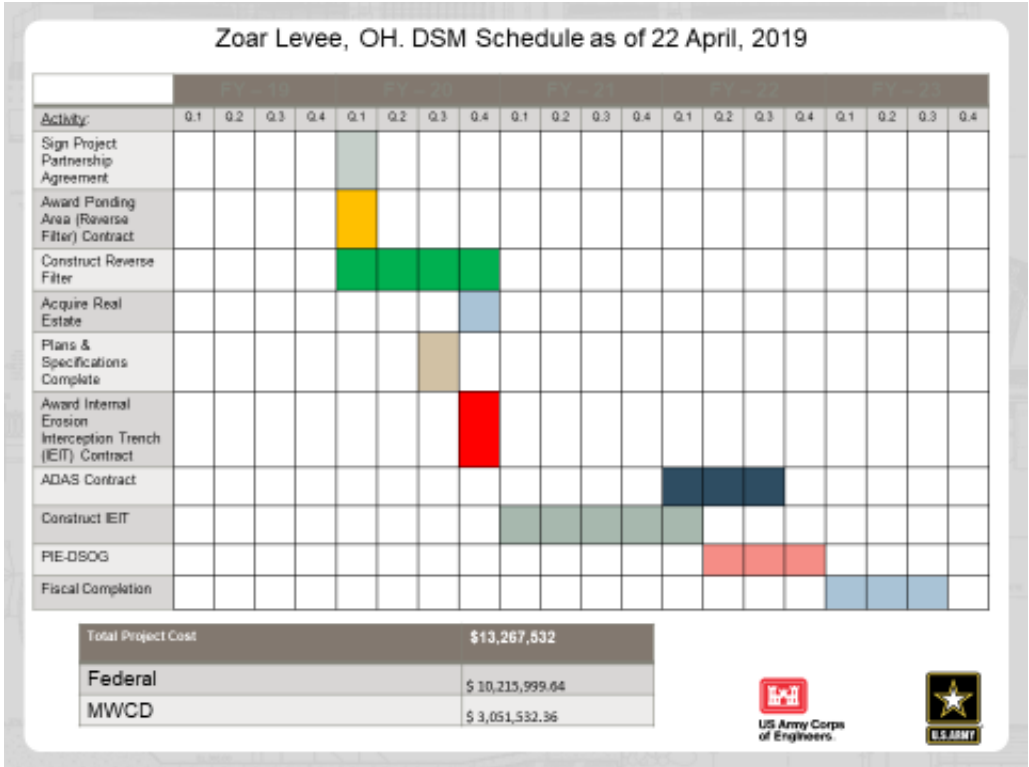
Stakeholders will be consulted in order to schedule subsequent public meetings.

For further information regarding the Programmatic Agreement, archaeology and historic preservation, please contact Nathan White via email: [nathan.m.white@usace.army.mil](mailto:nathan.m.white@usace.army.mil) or via telephone, at 304-399-5729

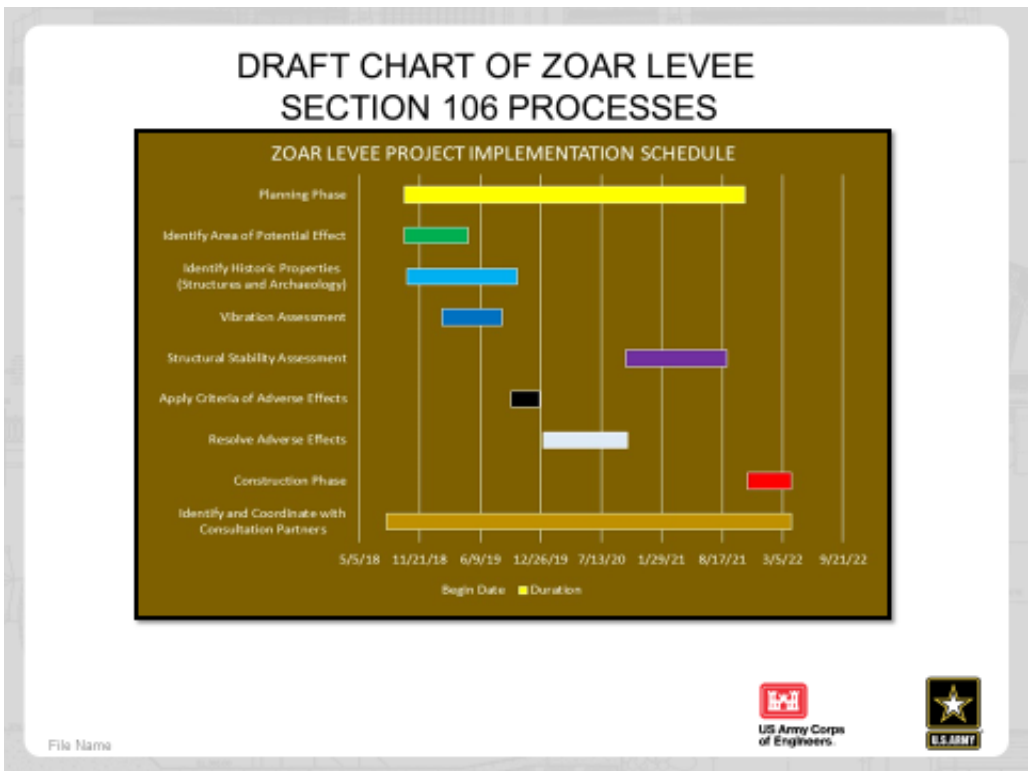
## APPENDIX A

<b>NAME</b>	<b>AFFILIATION</b>
Britton, Tracy	Zoar Community Association
Stein, Teri	Reporter, Tuscarawas Bargain Hunter
Irwin, David	Zoar Community Association
Fischer, Hans	Zoar Community Association
Gordon, Scott	Mayor of Zoar
Meiser, Charles	Zoar Community Association
Shrum, Tammi	Site Director, Historic Zoar Village
Thouvenin, Holly	Zoar Community Association
Simmons, David	Ohio History Connection
Koehlinger, Kristen	Ohio History Connection
Bennett, Rebecca	USACE, Project Manager (outgoing)
Lyle, Seth	USACE, Lead Engineer
White, Nathan	USACE, Archaeologist
Carter, Sean	USACE, Engineer
Jones, Greg	USACE, Project Manager (incoming)
Humphreys, Dave	USACE, Relocations Engineer

## APPENDIX B



GANTT CHART/CONSTRUCTION SCHEDULE



File Name