LDAC asked for additional technical data from the SEH Coastal Engineer regarding the following. Their responses are shown in red/numbers 1-5. County Parks provided the response to item 6.

1. Project longevity. What is the life expectancy? 50 years? 100 years?
    a. The stone specifications are written to ensure a long-lasting stone that doesn't crack apart due to freeze/thaw cycles. The design could last 100 years or more.

2. Will this revetment hold up to historic high-water levels and historic storms, such as the January 2020 storm.
    a. The design considers the conditions during the January, 2020 storm as well as a higher water level scenario.
    b. As a practicality check, the design was compared to the existing stone revetment south of Northpoint Parking Lot, which remained intact during the January, 2020 storm. The design armor stone for the Northpoint Parking Lot project will be similar in size and weight to the revetment to the south.

3. Will this revetment have negative or neutral effects to Bradford Beach or other nearby areas?
    a. It is possible that some aggradation (build-up) of sand could be experienced at Bradford Beach near the proposed revetment, which could result in additional beach area.

4. Are we going to be surprised by a single storm creating damage again? Similar to the January 2020 storm.
    a. The design took into consideration the January, 2020 storm. It is still possible that an event could occur outside of the design assumptions. The most likely scenario for a storm that could damage the revetment would be a major storm occurring while the lake levels are over two feet higher than the historic record high lake level.

5. Provide assumptions used in determining design plans.

    a. High Water levels
        i. The design high water level is two feet higher than the record high water level. This is the scenario where the revetment would experience the highest waves. The revetment and armor stone was designed for this scenario.

    b. Low Water levels
        i. The record low water level was evaluated and used to design the revetment toe scour protection. This is the most critical case for scour protection. As the water depth increases, the toe of the revetment is less susceptible to scour.

    c. Scour Details
        i. The scour protection was designed in accordance with the USACE Coastal Engineering Manual, which prescribes providing scour protection below the lakebed to a depth of 1.5 times the design scour depth.

6. Receipt of information from the Historic Preservation Office.
    a. Milwaukee County Parks is working with the City of Milwaukee Historic Preservation Office on the plan approvals.