

MEETING AGENDA AND MINUTES

Meeting Date: September 25, 2017
Meeting Time: 1:30p-2:30p
Written By: Shawn Arden
Client: M/I Homes, Village of Minerva Park

Location of Meeting: Village Community Building

Purpose of Meeting: Minerva Park Dam Improvements – Construction Progress Meeting

Attendees: Mayor Lynn Eisentrout, Kim Pulley (Village); Ron Tope (M/I Homes); Rick Warwick, Marty Smith (ERC); Mike McGannon (GCI); Shawn Arden (EMH&T); Keith Libben (ODNR Dam Safety)

Copies:

Listed below are general discussion topics. Below each topic is a brief summary of the meeting discussion.

1. Introductions / Sign-In Sheet
2. Minutes from September 11 Progress Meeting Approved
3. Construction 2 Week Look Back / Look Ahead
 - a. Final concrete pour for the spillway walls has been completed.
 - b. Work in the next 2 weeks will include: additional work at the spillway structure and installation of the lake drain system.
4. Project Schedule
 - a. The project continues approximately 1 to 2 weeks behind schedule.
5. Submittals
 - a. Shawn previously provided Rick with a list of remaining submittals (by email).
 - b. Mayor Eisentrout to select color choice for the floating debris barrier.
6. Conflicts / Questions
 - a. ERC will have a subcontractor provide a quote to saw cut a notch in both existing cutoff walls of the spillway structure to accommodate the proposed pedestrian bridge foundations.
 - b. Shawn will view the proposed fence layout at the site following the meeting.

7. SWPPP Inspection Log

- a. ERC to keep BMP's maintained.

8. Construction Safety

- a. No issues.

9. Inspection and Testing

- a. On September 20 through 22, Mike performed non-destructive testing on the placed concrete work at the spillway structure to estimate current compressive strength of the concrete material. Testing was performed using a rebound hammer. Mike distributed a sheet depicting the reported values at various locations on the spillway. Areas of concern to be monitored include:

- i. Northwest corner of the inlet box slab (3,500 psi). Mike noted additional concrete material was added in this location to bring the box up to grade.
- ii. Chute block patching (generally 3,800 to 4,000 psi). This material was placed using a field mix to repair voids due to inadequate consolidation of the concrete during placement.

- b. Shawn discussed additional work items at the spillway structure.

- i. Patch on one chute block to be replaced where rebar was exposed. Shawn will provide ERC with the name of the desired patch product (SikaQuick VOH).
- ii. ERC to install non-epoxy sealer on all new concrete at the spillway.
- iii. North spillway wall form shifted during construction. Displacement to be corrected. It was unclear at the time of the progress meeting if the displaced concrete could be grinded into plane, or if a section of the wall would require removal and replacement. All to discuss at the site following the meeting.

10. Other Items

- a. Next Meeting: October 9, 1:30pm.

Discussion Items from the Site Visit Following the Progress Meeting:

1. Chute blocks: ERC to replace the patch on one block where rebar was exposed following form removal. Patch repair to be performed using SikaQuick VOH material.
2. Spillway north wall: Marty and Mike confirmed that the form for the north wall shifted during placement and vibration of the concrete material, and not overnight after concrete placement. Further, the displacement is approximately 1 inch out of plane, which is less than previously thought. ERC shall have a small diameter core sample taken from the wall to verify concrete consolidation. If the core sample indicates the concrete material is fully consolidated without voids, ERC can grind the displaced concrete to bring the wall surface into vertical plane. The void created by the coring work shall be filled with grout by the coring subcontractor.
3. Spillway south wall: Keith noted the spillway south wall was also out of vertical plane, but to a much lesser degree than the north wall. No corrective action is required.
4. Inlet box perimeter walls: ERC to patch voids and corner chips with SikaQuick VOH material.
5. Spillway structure: ERC to install non-epoxy sealer on all new concrete. The same product shall be used as previously approved for the existing spillway concrete.
6. Embankment backfill under pedestrian bridge foundation on lake side: ERC to install Type D rock with mud mat at the bottom of footer elevation (similar to the spillway inlet box). Although not discussed, CDF, Type 2 would also be acceptable for backfill at this location.
7. Pedestrian bridge footer separation from existing cutoff wall: Shawn noted that 2 inches of polystyrene (foam board insulation) shall be placed between new concrete and the existing concrete cutoff wall. The polystyrene will act as a bond breaker and prevent load transfer to the cutoff wall.

8. Lake drain inlet location: Shawn advised ERC the lake drain inlet structure could be shifted 5 feet closer to the embankment to improve stability of the structure.
9. Lake drain embankment backfill: Shawn, Keith, and Rick discussed the proposed closure and backfill of the lake drain embankment breach. The embankment will be constructed using soil lifts on the inboard and outboard sides, while the center (core) will be backfilled with CDF, Type 2. This process will be constructed in lifts to the proposed trail subgrade at the dam crest. The CDF core section shall be approximately 10 feet in width measured upstream to downstream, and span the full length of the embankment breach. ERC shall roughen the surface of the cured CDF (rake using excavator bucket) prior to placement of the next lift. CDF lifts shall not terminate within 12 inches of a horizontal joint in the lake drain valve vault structure. Immediately prior to placing material to close the embankment breach, ERC shall remove all stone, vegetation, and top 2 inches of soil to expose adjacent embankment subsoil material. Sand chimney drain to extend across embankment closure section on the outboard side of the embankment as shown on the plans.
10. Lake drain pipe encasement: The lake drain pipe can be encased in CDF, Type 2 in lieu of concrete encasement.
11. Fence line: Shawn stated the fence line layout was acceptable. The fence shall be installed just outside of the RCP limits on the outboard embankment slope.
12. Schedule: Shawn advised ERC to evaluate the schedule for the remaining work at the spillway structure to coordinate timing of the lake drain closure. Several items at the spillway require minimum cure times before the subsequent action and ultimate exposure to water. Once the lake drain embankment breach is closed, ERC will not be able to keep water out of the spillway should a significant rain event occur.