Pursuant to §401 of the Federal Clean Water Act (CWA), the Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ) certifies that the applicant has provided reasonable assurance that any discharges associated with the proposed project will not violate surface water quality standards or cause additional degradation in surface water not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ hereby issues this §401 Water Quality Certification provided any listed conditions are met and included in the corresponding U.S. Army Corps of Engineers (USACE) Section 404 Permit, Rivers and Harbors Act §9 and §10, or Federal Energy Regulatory Commission (FERC) License.

Applicant: GGC Member Acquisition, Inc
Mr. Michael Valiant
7600 Glenwild Drive
Park City, Utah 84098

Project: The project proposed for the Glenwild Golf Club driving range will involve the expansion of the tee box on the southern end of the driving range and the modification of the topography of the range to create a higher, flatter surface for the landing areas. At present, the driving range topography consists of rolling upland surfaces, separated by the three swales that support wetlands. To accomplish the modifications to the driving range, 6,748 cubic yards of native soil material from the existing driving range will be placed onto 0.98 acre of wet meadow wetlands within the three swales, including a cap composed of approximately 8 inches of screened topsoil that will be imported to the site. A retaining wall composed of small-boulder-sized rock will be constructed to the north of the existing retaining wall in order to support the expanded tee box. A narrowed open swale will be maintained within the southernmost wetland area along the toe of this new rock wall to allow surface flows to continue from west to east through the driving range. Groundwater discharge that currently supports the wetlands along the middle and northernmost swales will be buried under the new fill, but will continue to discharge along the eastern edge of the driving range into the undisturbed wetlands at that location. The surface of the modified driving range will be vegetated with appropriate plant species for the golf course and an irrigation system will be installed.

Location: 7600 Glenwild Drive, Park City, Utah 84098 (40.743409, -111.526598)

Watercourse(s): 0.98 Acres of PEM wet meadow and unnamed tributary to East Canyon Creek

Effective Date: October 9, 2020

Erica Brown Gaddis, PhD
Director, Division Water Quality

DWQ-2020-020507
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Appendix A: Discharge Location Map(s)
Appendix B: Project Impact Map(s)
Appendix C: Proposed Mitigation Map(s)
I. Background

A. Other Applicable Permits

1. USACE 404 Permit (LOP) : SPK-2019-00613

2. Stream Alteration Permit: Pending application.

B. Project Description/Purpose

The project proposed for the Glenwild Golf Club driving range will involve the expansion of the tee box on the southern end of the driving range and the modification of the topography of the range to create a higher, flatter surface for the landing areas. At present, the driving range topography consists of rolling upland surfaces, separated by the three swales that support wetlands. To accomplish the modifications to the driving range, 6,748 cubic yards of native soil material from the existing driving range will be placed onto 0.98 acre of wet meadow wetlands within the three swales, including a cap composed of approximately 8 inches of screened topsoil that will be imported to the site. A retaining wall composed of small-boulder-sized rock will be constructed to the north of the existing retaining wall in order to support the expanded tee box. A narrowed open swale will be maintained within the southernmost wetland area along the toe of this new rock wall to allow surface flows to continue from west to east through the driving range. Groundwater discharge that currently supports the wetlands along the middle and northernmost swales will be buried under the new fill, but will continue to discharge along the eastern edge of the driving range into the undisturbed wetlands at that location. The surface of the modified driving range will be vegetated with appropriate plant species for the golf course and an irrigation system will be installed.

The applicant has determined the purpose of and need for the project include several factors. Glenwild Golf Club opened in 2001 with the original intent of being a quaint, private golf club in Park City, Utah. Since that time, Glenwild has become known as the number one private golf course in the state with a rapidly growing membership. Private golf developments have subsequently become popular in the Park City area, such as Promontory Nicklaus and Dye courses, Victory Ranch, Talisker Club at Tuhaye, and Park Meadows. All of these courses have modern facilities and amenities that are attractive to today’s discriminating golfers. Glenwild intends to remain competitive in the market and is making improvements to its facilities to remain attractive to potential new members, while accommodating its growing membership.

C. Site Description

The driving range Project Area consists of parts of the driving range tee box and three landing areas, separated by shallow drainage swales. Groundwater discharge at or near a slope break on the alluvial fan on which the driving range is located is the apparent natural source of hydrology to all three of the drainage swales.
The southernmost drainage swale enters the Project Area from the west under a cart path bridge. Groundwater discharge to this swale appears to start approximately 450 feet upstream of the Project Area in the vicinity of the Clubhouse parking lot and the drainage gains flows in the downstream direction as it passes irrigated fairways and greens. The middle drainage swale also enters the Project Area from the west under a cart path bridge, but the head of this drainage swale appears to be less than 100 feet upstream on the east side of a fairway. The middle drainage also gains flows in the downstream direction from irrigation of adjacent landing areas and greens. The head of the northernmost drainage swale is located in the middle of one of the driving range fairways where groundwater discharges in a series of seeps. Irrigation seepage also augments the hydrology of this swale in the downstream direction. None of the wetland swales experiences enough surface flow to establish and maintain a defined channel. Surface flows are dispersed through established perennial vegetation and do not coalesce into discrete channel flows until substantially downstream of the driving range where the slope angle increases. The northernmost and middle drainage swales are tributaries to the larger, southernmost swale, which is an unnamed tributary to Kimball Creek under natural conditions.

The wetlands within the Project Area consist of wet meadows located along the three shallow drainage swales that separate the landing areas of the driving range. The wetlands are dominated by Baltic rush or wiregrass (Juncus arcticus), creeping meadow-foxtail (Alopecurus pratensis) , redtop (Agrostis stolonifera), and patches of cattails (Typha latifolia) in the southernmost swale. The wet meadow wetlands in the swales continue downslope of the driving range and coalesce into a broader wetland area, before separating into two channels on the north and south sides of a shallow ridge. Those two channels combine to form an unnamed tributary to Kimball Creek, which flows out into the Parleys Park basin.

D. Proposed Mitigation

The project proposed for the Wetland Mitigation Area is the construction of two fish-friendly, fixed crest instream rock structures across the channel of an unnamed tributary to Kimball Creek. The instream rock structure will be tied into compacted fill, step-down berms with rock cores extending across the floodplain of the tributary. The objective of this construction is to raise the surface elevation of flows in the incised channel. Restoring natural bankfull elevations in the channel is expected to restore at least seasonal floodplain inundation/saturation, as well as shallow alluvial water table conditions beneath the meadow adjacent to the stream.

Fill material to construct the berms will consist of angular rocks and soil material obtained from an approved source. The fill to be discharged into the stream channel will consist of only the rocks, which will be large enough to withstand flood flows, based on flow calculations for East Canyon Creek, to which Kimball Creek is a tributary.
II. Certification Conditions

A. Project Specific Conditions

1. Wetland Fill

   a. Wetlands outside of the permitted impact area shall be clearly marked to prevent unintentional/additional impacts to water features.

   b. Clearing, grubbing, and other disturbances to riparian and wetland vegetation shall be kept to the minimum required for proposed work and native riparian and wetland vegetation should be reestablished after work is complete.

2. Mitigation Project

   a. In channel construction shall be conducted in the “dry” to the maximum extent practicable, by diverting flow utilizing cofferdams, berms constructed of sandbags, clean rock (containing no fine sediment) or other non-erodible, non-toxic material. All diversion materials shall be removed at the completion of the work.

   b. In channel structures shall not result in a disruption or cause a barrier to the movement of fish or other aquatic life on the downstream side.

   c. Construction machinery used should be clean to prevent the possible transfer of Aquatic Invasive Species.

B. General Conditions

1. Good Housekeeping

   a. Applicant and their subcontractors shall ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the construction period.

   b. Retain a copy of this §401 Certification and its affiliated USACE 404 Permit onsite.

2. Stormwater and BMPs

   a. Water quality standards in associated water resources could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the erosion-sediment and nutrient load to any adjacent waters during project construction. The applicant shall not use any fill material which may leach organic chemicals (e.g., discarded asphalt), noxious weeds/seeds, or nutrients (e.g., phosphate rock) into waters of the State.

   b. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Stormwater General Permit for Construction Activities
(Permit No. UTR300000\textsuperscript{1}). The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not be limited to, final site maps and legible plans, location of stormwater outfalls/discharges, and information pertaining to any stormwater retention requirements.

c. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering (Permit No. UTG070000\textsuperscript{2}). The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations unless water is contained onsite.

d. A project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.

e. Utah Administrative Code R317-2 requires that the Applicant cannot increase water turbidity by 10 NTUs. If violated, Applicant shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality’s (DEQ) recommended environmental BMPs for construction sites is located on our web site\textsuperscript{3}.

3. Spills

a. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest waterbody (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.

b. Utah Annotated Code 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to waters of the State, including wetlands, must be immediately reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number.

\textsuperscript{1} Link: https://documents.deq.utah.gov/water-quality/permits/updes/DWQ-2017-003485.pdf
\textsuperscript{2} Link: https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/docs/utg070000.pdf
\textsuperscript{3} Link: https://deq.utah.gov/legacy/businesses/business-assistance/construction/index.htm
III. Aquatic Resource Impacts

All Waters of the State of Utah (defined in Administrative Code (UAC) R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (see UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects or aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated (beneficial) uses of that water body. Listed below are the water features within the project area and their associated designated beneficial uses (see UAC R317-2-6):

A. Linear Water Features

1. Unnamed Tributary to East Canyon Creek

   a. Class 1C: Protected for use as a raw water source for domestic water systems.

   b. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

   c. Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.

   d. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

B. Wetlands

1. Palestine Emergent Wetlands (PEM) Wet Meadow

   a. Class 2B: as described above;

   b. Class 3D: Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Classifications are based on UAC R317-2-13.13, where it states that “all waters not specifically classified are presumptively classified: 2B, 3D.”
C. Impairments

Results from the current water quality assessment, as documented in Utah’s 2016 Integrated Report\(^4\), indicate that the water quality of East Canyon Creek and its tributaries are considered to be impaired (Assessment Category 5). These waterbodies are impaired for OE Bioassessment, Temperature, and Phosphorus which impacts cold water fishery/aquatic life (Class 3A) beneficial use. It is also impaired for Total Dissolved Solids (TDS) which impacts agriculture (Class 4) beneficial use.

The CWA directs states to prepare a plan to restore water quality to impaired waters, otherwise known as a total maximum daily load (TMDL) study. A TMDL is required for each parameter and water body to define pollutant reduction requirements necessary for the water body to meet water quality standards. At present, a TMDL has been finalized for the East Canyon Creek Watershed\(^5\).


IV. Antidegradation

East Canyon Creek and its tributaries are considered Category 3 waters for antidegradation purposes. Category 3 waters in Utah are waters where “point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5”, as described in Utah Administrative code R317-2-3.4. The antidegradation policy allows for discharges where the water quality effects of the proposed project are determined to be temporary and limited after consideration of the factors identified in Utah Administrative Code R317-2-3.5.b.4., and where best management practices will be employed to minimize pollution effects.

Based on the information provided, an antidegradation level II review will not be required for this project because the effects on water quality of the proposed activity are expected to be temporary and limited, which meets the requirements outlined in UAC R317-2-3.5b. The proposed activities will likely only impact the stream during the proposed work, and the impacts should only be related to sediment and turbidity.
V. Modifications

A. Without limiting DWQ’s discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:

1. Adverse or potential adverse project effects on water quality of designated beneficial uses that did not exist or were not reasonably apparent when this certification was issued;

2. Total Maximum Daily Loads (TMDLs);

3. Changes in water quality standards;

4. Any failure of Certification conditions to protect water quality or designated uses when the Certification was issued; or

5. Any change in the Project or its operations that will adversely affect water quality of designated beneficial uses when this Certification was issued.
VI. Other Information

A. Fees

1. The legislatively-mandated fee for the 2020 fiscal year is $100.00/hour for review and issuance of the §401 Water Quality Certification. A quarterly invoice will be sent once plans have been approved. Your payment is due within 30 days.

B. Liabilities

1. Applicant must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the project. This §401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.

2. This §401 Certification does not preclude the applicant’s responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the applicant from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

6 Link: https://documents.deq.utah.gov/admin/2021-fee-schedule.pdf
VII. Public Notice and Comments

A. Public Notice Dates

1. USACE 404 Permit No. SPK-2019-00613: Letter of Permission (No Public Notice)

2. Utah DEQ Certification No.: DWQ-2020-08001:

B. Public Notice Comments/Response

1.

C. Changes Made to the Certification after Public Notice

1. During finalization of the Certification certain dates, spelling edits, and minor language or formatting corrections may have been completed. Due to the nature of these changes they were not considered major and the Certification will not be Public Noticed again.
Appendix A: Project Location Map
Appendix B: Project Impact Map(s)
Map 6-1. Plan View of Proposed Glenwild Golf Club Driving Range Modifications
Summit County, Utah, T1S, R4E, Sections 7, 8, 17, and 18

Wetland Impacts in Pink (0.98 acre PEM wet meadow)

Imagery Source: EPIC Engineering, Heber City, UT
Prepared By: Natural Resources Consulting, River Heights, UT
WETLAND CELL ALPHA

INCLUDES AREA BELOW AND ABOVE EXISTING RCP PIPE CROSSING

ZONE P5B - EXISTING BANKFULL - PERMANENT INUNDATION
TOTAL AREA 2,294 SQFT (0.198 ACRES)

ZONE P51 - WETLAND RE-ESTABLISHMENT - SEASONAL INUNDATION
TOTAL AREA 2,812 SQFT (0.260 ACRES)

ZONE P55 - WETLAND CREATION - SEASONAL SATURATION
TOTAL AREA 7,687 SQFT (0.174 ACRES)

TOTAL WETLAND CREATION (P5B + P51 + P55) = 12,793 SQFT (0.446 ACRES)

INLINE WEIR ALPHA
SEE SHEET PV W1 FOR PLAN VIEW AND DETAIL CALLOUTS
WETLAND CELL BRAND

ZONE P55 - EXISTING BANKFULL - PERMANENT INUNDATION TOTAL AREA = 42,651 SQFT (0.990 ACRES)

ZONE P33 - WETLAND RE-ESTABLISHMENT - SEASONAL INUNDATION = 17,424 SQFT (0.400 ACRES)

ZONE P31 - WETLAND CREATION - SEASONAL SATURATION = 27,781 SQFT (0.627 ACRES)

TOTAL WETLAND CREATION (P35 + P33 + P31) = 98,126 SQFT (2.282 ACRES)