



---

Ledges Golf Club 18 Mulligan Drive South Hadley, MA 01075 (413) 532-2307

## **Maintenance Schedule for Ledges Golf Club**

**Massachusetts Wetlands Protection Act Permit ID #288-0461**

**Revised - February 18, 2020**

In this narrative, the term Environmentally Sensitive Area refers to wetlands. In the normal course of maintaining the golf course for daily play, there is maintenance that needs to be conducted in and around the buffer zone areas that abut these wetlands. Extreme care will be exercised when working in these areas.

Throughout this narrative there are frequent references to cart paths, which consist of both unimproved (gravel) and improved (paved), that will require occasional maintenance in order to keep them in a safe and useable condition.

**Hole #1**- Resource Areas on this hole are located behind the easternmost tee, and include the edge of the 100' buffer to BVW and Riverfront Area. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers; a portion of the teeing area is located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #2**- Resource Areas adjacent to this hole include the 100' Buffer to BVW beginning on the right side of the hole approximately 150 yards from the green and extends to approximately 50 yards from the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #3**- Resource Areas on this hole include the 100' Buffer to BVW, and adjacent BVW. The entire hole lies within the 100' buffer, and the BVW is adjacent to the hole near the teeing area and continues along the entire left side of the hole, around the left side of the green and behind the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that continues through the woods and Environmentally Sensitive Area to the 4<sup>th</sup> hole that will occasionally require maintenance to keep it in a safe and useable condition. Along this area of the cartpath, a small culvert runs under the cartpath to allow drainage to flow from east to west. This culvert is shallow and required yearly maintenance due to frost heaves. This culvert will be re-set and/or replaced as needed based on the amount of displacement from the frost heaves.

**Hole #4-** Resource Areas on the hole include the 100' Buffer to BVW, and adjacent BVW. The entire hole lies within the 100' buffer to BVW, with the adjacent BVW starting behind the teeing area and continues along the entire left side of the hole and along the left side of the green. This hole includes a man-made pond that extends from the front teeing ground along the left side of the fairway to the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which can be located in the buffer zone. A cart path runs along the right side of this hole and behind the green that will occasionally require maintenance to keep it in a safe and useable condition.

**Between holes #4 & #5-** There is a cart path that runs from behind the 4<sup>th</sup> green and continues through the woods and crosses White Brook on the way to the 5<sup>th</sup> hole. The cart path is located within the 100' buffer to BVW, the riverfront area of White Brook, and crosses the brook itself. The cart path will occasionally require maintenance to keep it in a safe and useable condition. Along this path is a section of wooden bridge that crosses over the White Brook and bordering wetlands to its east and west. This bridge will occasionally require maintenance and or repair in order to keep it in a safe and useable condition. No work will be done within the confines of the wetland area and precautions would be taken to ensure no foreign debris would be dropped into the wetlands. No waterproofing or decay prevention materials are proposed to be applied to the structure. (Same path used from hole #8 to hole #9)

**Hole #5-** Resource areas exist on both sides of this hole. On the left side, the buffer to BVW and Riverfront areas begin near the back teeing area and runs along the left side of the hole and continues to the left of the green and behind the green. On the right side of the hole, buffer to BVW begins just past the right side fairway bunker and continues to the right of and behind the green. Adjacent BVW existing along the north side of the tee box, and surrounding the green on the east, south and west sides. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that continues through the woods and north of the Resource Areas to the 6<sup>th</sup> hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #6-** Resource areas are present on both sides of this hole. On the right side of the hole, adjacent BVW begins approximately where the right side fairway begins, wrapping back to and around the teeing area. The left side of the fairway is located within 100' buffer to BVW running along the entire left side of the hole then continuing to the left of the green and behind the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole, away from the side of the hole that is within resource areas, continuing through the woods and north of the adjacent BVW and over to the 7<sup>th</sup> hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #7-** BVW on this hole is located behind the back teeing area, with the tee itself located within the 100' buffer to BVW. The fairway and green are located outside of any resource areas or buffers. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #8-** 100' Buffer to BVW on this hole begins left of the back teeing area and continues along the most of the left side of the hole and on the left side of the green. A small portion of the left side of the fairway at the

dogleg, as well as the back of the green, is within the 50' Buffer to BVW. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Between holes #8 & #9-** There is a cart path that runs from the 8<sup>th</sup> green and continues through the woods and through the Riverfront area of White Brook, adjacent to BVW, and over White Brook itself, to the 9<sup>th</sup> hole teeing area. The cart path will occasionally require maintenance to keep it in a safe and useable condition. Along this path is a section of wooden bridge that crosses over the White Brook and bordering wetlands to its east and west. This bridge will occasionally require maintenance and/ or repair in order to keep it in a safe and useable condition. Maintenance is limited to repair of the railings and decking of the bridge, and will not involve direct work within the resource area. No work will be done within the confines of the wetland area and precautions would be taken to ensure no foreign debris would be dropped into the wetlands. No waterproofing or decay prevention materials are proposed to be applied to the structure. (Same path used from hole #4 to hole #5)

**Hole #9-** Adjacent resource areas and buffer areas on this hole exists in multiple locations. The first location is behind the back teeing area, where the tee is located within the 100' and 50' buffer to BVW. A second area of IVW is located at the beginning of the fairway along the edge of its left side, with the fairway within the 50' buffer. The third area of adjacent IVW begins on the left side and continues along the left side of the hole. In this location, the 50' buffer to IVW does not reach the fairway, but is located within the wooded area to the left of the fairway. Around all sides of the green and buffer to BVW associated with a watercourse and associated BVW. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #10-** There are no Resource Areas on this hole. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, none of which is located in the buffer zone. A cart path runs along the left side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #11-** Adjacent resource areas and buffer areas exist in multiple locations. The first location is an area of IVW located in front of the forward tee. This area will require selective thinning and periodic cutting performed to maintain playability from the forward tees. Any work in this area would be done by hand with minimal or no effect on the wetland area. No plantings would be removed from this area at any time. A second area of IVW exists on the right side which starts approximately 200 yards out and continues the entire right side through the right side of the green. The right edge of the fairway is along the 50' buffer to IVW. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that continues through the woods and area of IVW to the 12<sup>th</sup> hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #12-** Adjacent IVW and 50' buffer to IVW begins right of the back teeing area and continues along the entire right side of the hole extending through the right side of the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which

may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #13-** Adjacent BVW and 100' buffer to BVW on this hole begins from the back teeing area and continues along the entire right side of the hole extending through the right side of the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #14-** The back teeing area and the entire left side of the hole are located within the 100' buffer to BVW, and with the buffer area continuing to the left side of the green and behind the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that continues to the 15<sup>th</sup> teeing area that does run through the 100' BVW buffer zone and will occasionally require maintenance to keep it in a safe and useable condition.

**Between holes #14 & #15-**A portable toilet (e.g. Porta-Potty or other) is located between the green at Hole #14 and the tee at Hole #15. The portable toilet is located in the buffer zone. Extreme care will be taken when maintaining this toilet.

**Hole #15-** 100' buffer to BVW on this hole starts approximately 100 yards from the tee and continues along the entire left side of the hole, around the left side of the green and behind the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the left side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Between holes #15 & #16-** There is a cart path that runs from the 15<sup>th</sup> green and continues through an area of BVW to the 16<sup>th</sup> hole. Along this path is a section of wooden boardwalk style bridge that crosses over the wetlands. This bridge will occasionally require maintenance and or repair in order to keep it in a safe and useable condition. No work will be done within the confines of the wetland area and precautions would be taken to ensure no foreign debris would be dropped into the wetlands. No waterproofing or decay prevention materials are proposed to be applied to the structure.

**Hole #16-** Environmentally Sensitive Areas on this hole are located behind the back teeing area and behind the green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. A cart path runs along the right side of this hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #17-** There is one area of adjacent IVW on this hole beginning to the left of the fairway and following the tree line to behind the 11<sup>th</sup> green. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. Two small sections of cart path exist on this hole. The first section is located near the teeing area and the second cart path area is located near the right side of the green which continues around the right side of the green and then through the woods and east of the Area of IVW over to the 18<sup>th</sup> hole that will occasionally require maintenance to keep it in a safe and useable condition.

**Hole #18**- An area of IVW is located in front of the forward tee. This area will require selective thinning and periodic cutting performed to maintain playability from the forward tees. Any work in this area would be done by hand with minimal or no effect on the wetland area. No plantings would be removed from this area at any time. Maintenance on this hole involves routine mowing of the fairway, tees, green and rough areas along with maintenance of bunkers, some of which may be located in the buffer zone. Two small sections of cart path exist on this hole. The first section is located near the teeing area and the second cart path area is located near the right side of the green which continues around the right side of the green that will occasionally require maintenance to keep it in a safe and useable condition.

**Driving Range** - A driving range is located to the East of the Pioneer Valley Performing Arts High School. A wetland finger is located on the left (north) side of the driving range, and additional BVW is located near the eastern corners and boundary of the mowed driving range area; at the range's northeast corner, the edge of the BVW extends into the maintained area. Maintenance of the driving range and parking lot area will include mowing of the grass and possible parking area repairs, some of which could include areas within the buffer zone. Extreme care will be taken when maintaining this area.

**Additional**- A practice putting green is located adjacent to the 1<sup>st</sup> tee with Buffer to BVW located to the north, northeast, and east. This area of BVW extends from the 9<sup>th</sup> green and continues near the clubhouse, along the cart path to the parking lot and along the entire West side of the parking lot ending near the maintenance area. The parking lot is a stone base and will occasionally be in need repair. Brush hanging over the parking lot will periodically be trimmed. This work may include work being done in the buffer zone. Extreme care will be taken when making repairs in this area. No expansion or paving of the parking lot is projected in the foreseeable future.

The area around the clubhouse including the lawn and flower beds are maintained as needed. Maintenance of the clubhouse area will include mowing of the grass and some of these areas are within the buffer zone. Extreme care will be taken when maintaining this area.

The entrance to the Ledges which includes Mulligan Drive is maintained as needed. Maintenance of the entrance will include mowing of the grass and could possibly include areas within the buffer zone.

Located throughout the golf course are drainage areas, drainage lines, and drainage ditches. Some of these drainage areas may be located within the buffer zone. These areas will occasionally require maintenance to keep them performing properly. Maintenance will mainly consist of cleaning catch basins and repair of existing drain lines and other components of those drains. Extreme care will be taken when maintaining this area.

The golf course has an automatic irrigation system located throughout the property. Some sections of the irrigation system are located within the buffer zone. The irrigation system will occasionally require maintenance to keep them performing properly. Maintenance in these areas will mainly consist of repairing leaks and electrical repairs. Extreme care will be taken when maintaining this area.

Periodically throughout the year it is necessary to perform aerification of the tees, fairways and greens using specialized machinery to promote healthy turf growth. Some of these areas may be located within the buffer zone. Extreme care will be taken when performing aeration in these areas.

Various signs are positioned throughout the course such as directional signs, environmental area signs and hole number signs. Some of these signs may be located within a buffer zone. Routine maintenance and repair of these signs may be needed. Extreme care will be taken when working in these areas.

The course has two shelters located on holes #5 and #18. These shelters may be located within the buffer zone. These shelters will occasionally be in need of repair. Extreme care will be taken when making any necessary repairs in this area.

There is a portable toilet located on the cart path from the 14<sup>th</sup> green to the 15<sup>th</sup> hole. This unit may be located within the buffer zone. The unit is delivered and removed each year by flatbed truck and serviced by a sanitary disposal truck throughout the season. Extreme care will be taken when delivering, removing and the servicing this unit.

During the season throughout the property there are regular applications of fertilizers, fungicides, insecticides, herbicides and growth regulators which are completed as needed according to an Integrated Pest Management program. Applications are made only by licensed and trained personnel by manual and mechanical methods and comply with all applicable laws, regulations and manufacturer specifications. These applications are done only when necessary and organic based fertilizers are used whenever possible. No fertilization is done within the riverfront area or wetlands.