RENOVATING GOLF COURSE BUNKERS- 5 FACTORS TO CONSIDER

Much of the work which we are doing today involves renovating existing golf courses. Depending in part on the age of the course, the scope of these projects vary greatly from completely rebuilding putting greens or tees to improving fairway drainage and renovating bunkers. Since it would be impossible to adequately cover all types of renovation projects with such limited space, I've limited this particular article to identifying five important elements to consider when planning a bunker renovation project.

MAINTENANCE BUDGET. If the course is going to be a public golf course with a somewhat more limited budget, we'll try to create bunkers that are easier to maintain. We may still have elaborate capes and bays but the sand will probably be somewhat flatter in the bottom so that it can be maintained with a sand pro as opposed to requiring hand raking to pull the sand back up on the faces. Softer less rounded capes and grass faces can be maintained with more traditional rough mowers and sidewinder units. The more rounded capes and steeper grass faces may require mowing by hand or using string trimmers. If the course is private or a higher-end destination course with a more substantial maintenance budget, we might not only create more bunkers but they will likely be somewhat larger and more dramatic. This might mean the capes get more rounded, the sand gets flashed up higher and we might use a more expensive white sand such as that which is available from Ohio or Arkansas.

PLACEMENT AND VISIBILITY. In my opinion, it is critical that bunkers and, for that matter, all hazards be visible. I think that the golf holes which are the most memorable are the ones where the golfer can see everything unfold in front of them. We want the golfer to be able to see the entire hole or landing area when preparing to hit his shot so that he can make an informed decision on how to play it. For that reason, we would generally not put bunkers on the back side of a hill or behind a green where they can't be seen. However, with that said, there are times where we might propose a "catch" bunker or a "savior" bunker in that location. For instance, if there is water behind the green, we may put a bunker behind the green to gather a shot that might trickle off the green, rather than penalizing a player a full stroke for only slightly mis-clubbing.

In the fairway, we use cross bunkers, directional bunkers or framing bunkers to frame the hole, define the landing areas and to create strategy. Around the green, we use bunkers to guard the green and to create preferred angles of approach. Generally, greenside bunkers are a little deeper and a little more dramatic than fairway bunkers. How far we place the bunker from the putting surface is dependent in part upon the length of the hole, the size of the green, how difficult we want the hole to play and, again, the type of course we are working on.

DRAINAGE AND EROSION CONTROL. There are a lot of ways to build bunkers but the one thing they all must have in order to function properly is drainage. Often times, if a course is contemplating a bunker renovation project it is because their sand no longer drains properly and because the lies are inconsistent. It doesn't really matter whether you want more traditional bunkering with flat sand and grass faces or whether you want elaborate capes and bays with the sand flashed up high on the faces. They all need good drainage. This includes drainage in the bottom of the bunker to evacuate water as well as paying attention to how much water actually runs into the bunker from the surrounding area. Generally, what tends to happen over time is that bunker sand gets contaminated with silt which either washes in from the surrounding area or washes in from the exposed faces of the bunker. In time, that silt then tends to plug up the pores in the sand and the sand loses its ability to drain quickly. To minimize this, it is important that the area surrounding the bunker complex be designed so that a minimal amount of water is actually running into the bunker. In part, we do this by adding small mounds and features which help direct the water or by creating swales around the bunker.

How we finalize the grassing of the bunker complex to control erosion and to get the project back into play is again dependent on the budget and the overall character or style of the course. Generally, we would either try to sod the bunker surrounds or we would use seed and an erosion control blanket. Sod is a bit more expensive than seed but gives us an almost immediate look of completion. If the bunker faces and capes are going to be maintained at 2 or 2 ½" height then sod is probably the best solution. However, if the club is looking to maintain the capes in fescue or at a taller cutting height then seed and blanket might be the best choice so that we can be more selective about the turf grass varieties.

SAND. To some degree, which sand we choose for a bunker renovation project is a function of budget and, again, the type of course which we are working for. What is important is that the sand drains quickly and that it sets up firm enough that balls don't plug. A little bit coarser sand with some particles that are more angular rather than round is generally best. Depending on where you are in the country, there are some very good local bunker sands where you might spend only $13 to $15 a ton. You also usually have the option of bringing in a USGA sand for $30 to $40 per ton. If the club has the money, we might look at bringing in a premium white sand which usually cost somewhere in the $90 to 110 per ton range.

DISRUPTION TO PLAY. One of the most important issues to consider is how to minimize the potential for disruption to play during your renovation project. In most cases, we prepare a bunker renovation plan and then work with the Club to determine how to complete the project over a 3 to 5 year period of time. We may decide to do a few holes each year or we may decide to do all the holes at one time. Fortunately, bunker renovations are generally not so disruptive that we can't continue play during construction. In the Midwest, the best time for a bunker renovation project is usually in July and August since the chances of weather delays which might prolong the project are reduced. However, with tournament schedules and with fewer golfers in the fall, most clubs seem to opt for a September project schedule. With a well defined project scope and a good contractor, we can make the necessary changes and have the disturbed areas regrassed quite quickly and be ready for play by spring. The key is to start with an overall plan on how to complete the project and then use an experienced golf architect and an experienced golf course contractor to insure that the project is competed properly and on time.

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