

GREAT DUNES GOLF COURSE
RESTORATION CONCEPT PLAN REPORT

GREAT DUNES



GOLF COURSE

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Introduction

PURPOSE

RussellGolf Design, LP, a Texas limited partnership (“RussellGolf”), prepared this Restoration Concept Plan Report (“Report”) for the Jekyll Island Authority (“JIA”). This Report (a) discusses how to restore the Great Dunes Golf Course (“Great Dunes”), Jekyll Island, Georgia (“Jekyll Island”) to as close to its original 1927 condition as possible and (b) makes recommendations on how best to enable the JIA to (i) operate and maintain Great Dunes in a manner that is consistent with its mission to “provide trustworthy stewardship and conservation of our natural and cultural resources, and generate appropriate revenues to sustain, enhance and develop services, programs and amenities that maximize benefits to our customers, guests and employees,” (ii) pursue placement of Great Dunes on the National Register of Historic Places, and (iii) make changes that would allow Great Dunes to, over time, become a self-sustaining portion of the golf operations on Jekyll Island. As “the standard for Jekyll Island will be continuing improvement and excellence through progressive stewardship, product and service delivery, employee career development and financial responsibility,” our goal was to describe solutions that would elevate Great Dunes to this standard with the ultimate intention of making Jekyll Island and Great Dunes to “be recognized as the choice destination among all who discover and enjoy its unique environment, services and amenities.”

This Report also organizes the materials developed by RussellGolf to provide a reference tool for on-going work, as well as to remain as a source of information and substantiation of the work, if performed, in the longer term. To accompany this Report, RussellGolf has prepared a graphic plan illustrating the changes and the recommendations described in this Report.

OVERVIEW OF THE HISTORY OF GREAT DUNES

In 1886, a group of prosperous industrialists, desiring a place to escape from the busy and hectic life of the city, created a hunting retreat on Jekyll Island. This hideaway, christened the Jekyll Island Club (“Club”), was originally created as a men’s and women’s hunt club; however, as the Club grew, other recreations became popular.

History tells us that golf took over as the Club’s dominant sport. In fact, Jekyll Island was the 36th Golf Club registered with the USGA, receiving a charter in 1894. The first course was developed in 1898 and was ready for play in early 1899. It was located just to the north of the Club compound.

In 1909, plans begin for the construction of a new course (the “Ross Course”). The Club contracted with Donald J. Ross to provide design services. However, because the property selected for use as the Ross Course was drained savanna, only 9 holes of the Ross Course may have actually been completed. Completed portions of the Ross Course were located in the general vicinity of the lakes that currently populate the Oleander Golf Course.

Club Golf Pro, Karl Keffer first designed seaside holes to connect with portions of the Ross Course, and although, Golf Illustrated reported that the Club's new links "remind those who have already played them of the Scotch seaside courses," renovations on "eight of the sixteen holes" began just two years later according to an article in the Brunswick News. "Great Dunes: A Walter Travis Masterpiece", *Gateway To The Golden Isles*, page 2, June, 2009, http://www.islandbeachscape.com/pdf/GoldenIsles_June09_Lowres_Rev.pdf.

In 1926, Walter Travis, one of the leading golf course architects of that era and Donald J. Ross' mentor, was engaged by Club members to create a new masterpiece. *Id.* While Mr. Travis died without seeing the finished product, his vision did not disappoint. Mr. Travis designed his links along Jekyll Island's Coastal Georgia beach and incorporated the sea oat swept and unique coastal terrain of the natural sand barrier of the coastal dune system into his design. *Id.*

The Great Dunes Golf Course was played throughout the remainder of the Club years. However, when the Club closed in 1942, the environment quickly began to over-take Great Dunes. By the time the State of Georgia purchased Jekyll in 1947, beach erosion and lack of maintenance had begun to take their toll.



The front-nine was re-opened briefly in 1948, but without a staff and with very few visitors to Jekyll Island, it closed shortly after its opening. The front nine was not truly re-opened again until the 1954-55 season. This time when the front nine was re-opened significant modifications had been made apparently with the intension to make the course more suitable for the average golfer. Generally, the modifications made were in the form of removing bunkers and adding tees.



These photographs illustrate the dunes aesthetic from Travis' Great Dunes

The back nine, however, was not re-opened following the Club era. While work began to restore the front nine, lack of maintenance and severe beach erosion doomed the back nine. By 1955, the back nine was bulldozed and the dune sand was used to build the Island Parkway and surrounding road network. The front nine of Great Dunes was the only golf on Jekyll until 1964.

AFRICAN AMERICANS AND GOLF ON JEKYLL ISLAND

Historic golf played by Club members is only part of the story on Jekyll Island. Bagwell, Tyler E. "The Jekyll Island Club" <http://www.jekyllislandhistory.com/jekyllclub.shtml>. Jekyll



Island was also a refuge for club workers. *Id.* Earl Hill, a 1920s golf caddy for the club, asserted, "[i]t was only three months out of the year that [the members were] there, the rest of the year, why only the employees had the use of the island. That's where I got my jump in golf,

because the million aires would use the golf course three months out of the year, the other nine months I would use it." *Id.* As a man of African-descent, Mr. Hill would eventually organize and host a professional golf tournament as well as become owner of several profitable businesses. *Id.* Photographic evidence from the same era also shows women, presumably of African-descent as well, playing golf on Jekyll Island. (See above.)

Why Restore Great Dunes

The HISTORIC SIGNIFICANCE AND ECONOMIC IMPACT OF GREAT DUNES

Great Dunes is potentially one of the most valuable historic and economic assets of Jekyll Island. However, little is being done to take advantage of that potential, and therefore, Great Dunes currently appeals to a very small segment of its potential market. The major limiting factors to reaching an expanded market, and consequently, expanded revenue for Great Dunes, are the course conditions and the loss of what is unique about Great Dunes -- historic oceanfront dunes golf.

When the golf courses on Jekyll have so many needs, why is the restoration of Great Dunes the appropriate place to start? First, it is the only course that dates back to the Club era and that meets the historic portion of Jekyll's Mission Statement. Second, the restoration of Great Dunes can be completed for a reasonable cost, especially when compared to correcting some of the infrastructure issues with its neighboring course -- Oleander. Third, Great Dunes has the greatest potential for tapping new markets and golfers, and certainly the greatest potential to expand its merchandising.

The Historical Significance of Great Dunes

Much of the historical significance of Great Dunes, not only rests in the Travis design, but also in the seaside dune topographic aspects of the course. Great Dunes is what remains of one of the few classic links style golf courses in the United States and, on top of that, one of the few that remain as it was originally laid out almost a century ago.

So why is this special. True links courses are very special and very rare. This is because they are created from a set of factors that rarely come together. A true links style golf course is built along the seaside; is sandy and drains easily; is laid out naturally, so that unusual bumps and slopes in the fairways and greens remain, rather than being smoothed over; features natural seaside grasses in the rough; has numerous, very small and very deep (to keep the seaside breezes from blowing the sand away) bunkers; has fairways that are rarely (if ever) watered and are firm and fast; have very few trees; and usually have routes that are out and back (No. 1 hole begins at the clubhouse and the front nine plays straight out so that No. 9 is farthest hole from the clubhouse; the direction turns back in at No. 10 and the course ends with No. 18 back at the clubhouse).

The Old Course at St. Andrews, Royal Birkdale and Turberry Ailsa are several famous examples of the classic links golf course. In the 1920s in the United States, Great Dunes was perhaps only one of a handful of links courses.

Walter J. Travis

Walter J. Travis is one of the game's best statesmen and architect. Despite his relatively late entry into the golf world, Travis quickly found his place in its history becoming one of the

country's top amateur golfers. Mr. Travis, who was also respectfully known as "The Old Man" won the U.S. Amateur Championship in 1900, 1901, and 1903, making him the first three-time champion in U.S. Amateur Championship history. USGA U.S. Amateur Champions. <http://www.usga.org/ChampEventContent.aspx?id=2147496327>

Mr. Travis was an prolific writer. He published two books, *Practical Golf* (New York & London: Harper & Brothers, 1901) and *The Art of Putting* (Princeton University: MacMillin, 1904). He also founded the highly acclaimed magazine, *The American Golfer Magazine*, in 1908, and served as its editor until 1920. *Id.*

Because of the breath of his written material, we have great help understanding both his philosophy as a player and as an architect. It was this philosophy and vision, which is so articulately expressed in his writings, which proved him not only to be a genius but a visionary when it came to course architecture.

Walter Travis and Jekyll Island Golf

While it was not until 1926 that Travis was formally engaged by the Club, Travis' era of influence over golf on Jekyll Island began as early as 1900 when he first visited the Club. "Great Dunes: A Walter Travis Masterpiece", *Gateway To The Golden Isles*, page 2, June, 2009, http://www.islandbeachscape.com/pdf/GoldenIsles_June09_Lowres_Rev.pdf. It was during this visit that Mr. Travis first suggested improvements to its first links completed by Willie Dunn, Jr. Mr. Travis had previously collaborated on work with John Duncan Dunn, Willie Dunn, Jr.'s nephew. *Id.* Travis said he also mentored Donald Ross, the revered golf course architect who built Jekyll Island's second golf course, and it is rumored that Travis recommended Ross for this design. *Id.*

When Club members, including George F. Baker, J.P. Morgan, Jr., Richard T. Crane, Cyrus McCormick, Jr., Edwin Gould, Cornelius Lee, and Dr. and Mrs. Walter James, donated funds for a new golf course, Walter J. Travis was hired for the design. Travis visited Jekyll to inspect the current course and begin the planning process on March 25, 1926, according to a report by the Brunswick News. At that time, it was stated that the plan was to "change 8" of the holes.

If this is an accurate depiction of what transpired, the Great Dunes established by Walter Travis was actually a modification of holes originally created by Karl Keffer – likely in the location of the 9 holes in existence today – and the new holes that were added were located along the beachfront between the present day restaurant and the Days Inn Motel. Knowing that the Club hired Keffer with a recommendation by Travis, it is entirely possible that Keffer and Travis could have consulted regularly in the 1910s and 1920s as the "Keffer Holes" took shape.

Archival photographs that date as early as 1920 point to a number of holes with similar features as those existing following Travis' work was complete. Also, scorecards indicate a number of holes with similar distances. All of these factors point to recycling. While course changes were made in 1926 and 1927, there was an overlap of all three designs. Regardless, Great Dunes was

ready for formal presentation at its first major tournament in January 1928, and it modeled the values Travis promoted throughout his career.

Today, the remaining nine holes of the Great Dunes contain the remnants of an authentic example of Travis' legacy. When finished, it was a tight course, built on grassed dunes and contained strategically placed hazards, traps, and bunkers. The course offered varied terrain, both rolling and flat, with ocean breezes to pose a challenge.

Economic Factors

Typically, the golfers that come to Great Dunes today are generally those driven there by price because Great Dunes rates are significantly lower than the rates at the other courses. They are also motivated to play the course because of the time factor as you can play nine holes in less than two hours. The tragedy is that for a golf course with such historic significance and potential charm from both a strategic and an aesthetic viewpoint, its current lack of appeal is very understandable.

For the last several years Great Dunes has been in a self-perpetuating cycle, and the result has been, Great Dunes' very narrow appeal. Currently, the lack of adequate infrastructure makes maintaining the course in a quality condition virtually impossible. Also the lack of adequate infrastructure speeds the evolution of Great Dunes away from its historic roots. This will continue to limit the number of players interested in coming to Great Dunes, which in turn, lowers its revenue. This again requires its expenses to be reduced, which starts the cycle over again.

In order to better achieve both its mission statement and its vision statement, the JIA is currently in the process of recreating much of Jekyll Island by redeveloping its facilities. When this current restoration process is complete, Jekyll Island will boast a convention center, new hotels and new and upgraded retail facilities. These recourses, particularly the convention center, will not reach their potential, both in revenue and in guest satisfaction, without quality amenities that match the standard of excellence that is being created. Therefore, Jekyll Island golf, in general, and specifically, Great Dunes, has reached an important decision point in its life cycle.

So how can Great Dunes expand its market to become economically viable for Jekyll Island?

Great Dunes' historical significance alone would be enough to justify its restoration. However, if restored, Great Dunes could be responsible for both expanding Jekyll Island's market share and making Jekyll Island "be recognized as the choice destination among all who discover and enjoy its unique environment, services and amenities." It is the only amenity on the island that equally fits into both the economic and the historic missions of the JIA, and just the nature of recreating a proper links golf course will draw new golfers who want to experience a different type of course that they can find except in very few places in the United States -- particularly on a public golf course.

Restoration will also allow programming to be established that meets the needs of conventioners beyond the traditional golf outing. Because of the increased economic pressures, traditional golf outings, which are increasingly taking more time and expense than conventions can spare, are being eliminated from convention programming. By offering a unique short course option, Jekyll Island could offer an increased draw and revenue opportunity that would not detract from the convention. In addition to play, additional programming options could include ideas like a historic golf mixer and cocktail party or spouse activities in re-created historic tee houses.

The golf industry today is realizing the value of eliminating the barriers to bring new golfers into the sport. The two primary barriers are time and intimidation. Great Dunes could be perfectly suited to eliminate those barriers on Jekyll Island.

A restored Great Dunes would also offer a perfect venue for junior and beginner events. These events would not only increase revenue, but also, eliminate the issues surrounding conducting those events on the 18 hole courses.

Site Analysis and Existing Conditions

THE EVOLUTION OF GREAT DUNES

All golf courses evolve over time. Generally, green areas shrink from mowing practices. Greens' surfaces change contour and elevations from continual topdressing over many years. Bunkers are reshaped from edging, and bunker lips grow and move away from greens because of sand being exploded on bunker shots. Also, bunker depths are modified by continual removal and replacement of sand. Tees crown and grow un-level from the process of divots being removed and topdressing. Fairway contours change slightly from drainage and settling. Trees grow, spread and mature affecting turf patterns and condition. Vegetation patterns change and often unwanted species encroach.

All of the processes mentioned above have taken place at Great Dunes. Even if it were just from these factors, this natural evolutionary process would cause Great Dunes to look significantly different from the way that it looked when it was finished in 1927. However, like most courses, Great Dunes has also suffered the greatest changes to its original appearance as a result of Owner initiated changes over the years.

In Great Dunes' case, the vast majority of these changes took place after the State of Georgia purchased the property and decided to make certain revisions in order to prepare Jekyll Island to be opened to the public. This can best be evidenced by comparing an aerial photograph taken in 1945, before Jekyll Island was purchased by the State of Georgia, to an aerial photographs taken in 1959.

In order to understand how Great Dunes has changed, it is critical to establish what Great Dunes looked like when it was completed in 1927. While we do not have aerial photography prior to 1945, we are blessed to have available to us an extensive collection of photographs of many of the holes. Using these photographs, along with the 1945 aerial, we have been able to determine the location, shape of the features and the style of Great Dunes.

Based on these photographs, we know that Great Dunes was appropriately named because it was a dunes course. The course was populated with sparse vegetation on many or most of the dunes and that there was a transition that took place as you approached Jekyll Island's interior and the vegetation was in keeping with more maritime forest vegetation. The dunes were a prominent feature on holes 1, 2, 3, the tee shot on 4, the approach on 5, 6, the tee shot on 7 and the last half of 9. Today, through a series of grassing projects, only remnants of these dunes appear throughout the entire course.

We can also confirm that, unfortunately, the lost back nine contained more of the larger dunes, as well as, the more spectacular ocean views. Photographs of this nine confirm the general look of the dunes and movement in the putting surfaces characteristic of Walter Travis greens.

OVERVIEW OF DESIGN CHANGES TO GREAT DUNES

A key component of the restoration of Great Dunes is to restore the “dunes” appearance...

In general, the expansion and maturing of vegetation, including turf areas, has obscured most of the natural look of the dunes. This has completely changing the visual aesthetic that was Mr. Travis’ original intent, and has produced, perhaps, the greatest effect to both the playability of the golf course and the experience of golf at Great Dunes.

Greens and the surrounding bunkers are the “face” and personality of a golf course. Unfortunately, this is where much of the changes to Great Dunes have taken place. The greens have not only evolved, but in several cases, moved or been reconstructed in a manner that bears no resemblance to the original Travis greens. The evolution of the greens have produced greens that are significantly smaller and have less contour than the original.

Approximately, twenty-one bunkers have been removed from Great Dunes. This totally changed the appearance and design strategy of the course. The bunkers that remain, thought many are in their original location, have been recently rebuilt and function properly; however, they do not possess the depressed style and rugged appearance of the Travis “pots”.

Multiple tees have been added to the holes to accommodate public play of varying abilities. Although Mr. Travis wrote regarding the need for multiple tees, there seems to be no photographic evidence remaining of holes having more than one tee. Travis’ desire for multiple tees was based on conditions and set up for play (and not gender); therefore, just because we know that women historically played golf (as well as hunted and played numerous other sports on Jekyll Island) that is not a basis to believe that multiple tees would have been a part of Great Dunes. As a matter of course, having a single tee was fairly typical for that era. If Great Dunes had multiple tees, it would be unreasonable to expect that there would have been more than two originally. The look of the original tees would have probably been square cornered and would have been relatively small compared to modern tees.

For a closer explanation of the changes to each golf hole, we have provided individual changes to each hole on the Hole-by-Hole discussion provided below.

NON-ARCHITECTURAL EXISTING CONDITIONS

Drainage

By nature of its location on the earth, Great Dunes is blessed with well-drained, sandy soils. The golf course generally relies on this internal drainage through out. Over the years, the increase in organic material in the soil, settling that created isolated low points, and the addition of some poor soil material to fill in features have combined to create areas with poor surface and internal drainage scattered through out the course. These areas must be dealt with during the actual restoration process through a variety of techniques that include, creating positive surface drainage, utilizing drop inlet area drains with carry off piping, gravel sumps, and french drains as appropriate.

Irrigation System

While the original course would not have had extensive or any irrigation, over the years an irrigation system has been added. However, every component of the system is well beyond its normal life expectancy and should be replaced.

The control system is based on hydraulic control and certainly not state of the art. A major result would be excess water use if sufficient water could be supplied to the course, which it currently cannot.

The irrigation heads are large area turf heads, which are not only inefficient on windy sites but limit the ability to control where water is placed. The single row arrangement of the fairway heads limit the area of coverage and does not allow for changing widths of turf or hole strategy. When the system is replaced, smaller turf heads that have the ability for the arc of throw to be adjusted should be selected. The heads should be laid out in multiple rows designed to provide coverage of the turf areas but not throw water into the dunes or sandy areas of the course.

Besides having exceeded its life expectancy, the piping system is undersized and no attempt should be made to reuse the existing materials. This is especially true of the main supply line that comes through the Oleander course to Great Dunes. This line is not only undersized, it is Transite or asbestos-cement pipe that includes a fairly high percentage of asbestos and is considered a hazardous material. This pipe should be abandoned and not removed when a new system is installed.

The biggest irrigation issue to be resolved is the supply of water to the system. There are three irrigation wells to supply water to both Great Dunes and Oleander. Currently, only one of these wells function. The result is that only the greens of these courses have been able to be watered with irrigation for several years. All other areas of the courses have to rely on rainfall, which is obviously unreliable.

It is imperative that the water supply and pumping systems for both Great Dunes and Oleander be made reliable for the future economic success of these courses.

Turfgrass

When the course was constructed it would have been planted entirely in common bermudagrass as that was the only warm season grass available at that period. Over the years the greens have been converted to what is presumed to be Tifgreen (328) bermudagrass. 328 was the first hybrid bermudagrass bred specifically for use on golf greens.

Greens Construction

The existing greens were pushed up native sand with no internal drainage system. The years of organic material build up and topdressing have made the greens tend to stay wet and not have the firm and fast characteristics of a traditional dunes land course.

When the greens are replaced, an improved type of greens construction with a drainage system should be utilized.

Relationship to Oleander

Great Dunes is greatly affected by the Oleander course as all of the drainage on Great Dunes, which is not internal, drains to the lakes on the Oleander course. In addition, the irrigation supply to Great Dunes is routed through Oleander. This relationship makes it critical that any future changes to Oleander be consider in light of their potential effect on Great Dunes and its infrastructure.

Tee Houses and other Historic Structures

Because of the redevelopment that occurred since Great Dunes was completed, all of the historic structures related to Great Dunes have been either eliminated or redeveloped into other uses. Originally built to accompany the Ross Course were two structures -- one for men and the other for women -- that were used as "tee houses." These modern day men's and women's locker rooms, if redeveloped, could be utilized by both the golf patrons as well as the public as a whole -- including convention guests -- to allow a view into the past. They could also provide a

separate revenue stream for Jekyll Island if leased as a dining facility.



A original tee house on the Ross Course. Photo shows African American caddies.

Restoration Principles and Plan Assumptions

RESTORATION PRINCIPLES

The Restoration Principles are the conclusions of the analysis. They provide a guide for all stages of restoration and construction, as well as the basis for evaluating alternatives and proposals throughout the life of the project. The Restoration Principles are as follows:

- ☀ The Travis course is historically significant and should be returned, as near as practical, to its original design, style and strategy.
- ☀ Where it is not possible to restore the original design, make decisions in keeping with Travis' signature design principles.
- ☀ The dunes on which Great Dunes was constructed played a significant role in both its aesthetics and its strategy, and this natural appearance should be returned.
- ☀ Existing limitations on maintenance and operations must be considered and improved where it does not directly conflict with historical accuracy.
- ☀ The restoration must consider changes in golf use patterns and equipment improvements.
- ☀ The restoration must consider golfer safety.

TRAVIS' SIGNATURE DESIGN PRINCIPLES

In order to understand the genius behind Great Dunes, it is necessary to understand Travis' series of signature design principles. As the result of trips to Great Britain early in his golfing career, Travis became a student of both layout and golf course design features. In late 1901, Travis wrote an article, published in the Bulletin of the USGA, titled, "Impressions of British Golf". He observed that in "England and Scotland....you have golf--Golf in its best and highest form". (Travis, Walter J. *Impressions of British Golf*, GOLF, Vol. IX, 6, 1901) He referred to the "radical difference in their physical configurations in relation to our courses." *Id.* He was impressed with the lack of trees, the number and placement of bunkers, the natural undulations of the greens, and the quality of turf. *Id.*

He later published an article in *The American Golfer* entitled "The Constituents of a Good Course" that laid out what he believed made up a good course. (Travis, Walter J., *The Constituents of a Good Course*, THE AMERICAN GOLFER, New York, Pages 375 – 379, May, 1909.) In this article, he wrote that "[t]he beauty of a course of this kind [referring to the National Golf Links at Shinnecock Hills], topographically considered, is the infinite variety afforded for the proper execution of all sorts of shots...shots with just the right degree of elevation and shots from all kinds of hanging lies, which are wholly uncalled for on the large majority of our courses." (*Id.*, Page 375)

In the same article, he also said “[n]o two holes should be alike.” *Id.* “Diversity of play should be the aim of the architect of a first-class course, provision should be made for the proper preservation of the value of each and every hole by having tees of such latitude as to permit the lengthening or shortening of the distances from normal conditions, as the occasion demands... or the substitution of alternative tees – two, three or even four of them, in some cases. *Id.* at 375-76.

He also concluded that it was “a great mistake to suppose that a long course” equaled “a good course – or that a short one presupposes one of inferiority.” *Id.* at 376. According to Travis, “the fundamental principle is far—on the long and short-long holes—but never forget to couple with that the vitally-important word sure—far and sure.” *Id.* He said that “there yet remains more, far more, than mere distance, either from the tee or on the second shot...judgment of strength, combined with accuracy of direction, on the long game, highly intensified on the short game—approaching and, more particularly, putting.” *Id.* He said that a “good hole may be likened unto a pyramid, in that as the apex...representing the hole...is approached, the difficulties increase and less latitude for error is given. *Id.*

Mr. Travis is responsible for installing some of the first strategically-placed bunkers along fairway edges on American courses. As he put it, “the proper placing of the hazards” are what “makes or mars a hole”. *Id.* at 377. He said that “it may be laid down as a general principle that hazards should be so arranged as to catch a good shot which his not quite good enough.” *Id.* He said that his “idea of bunkering a course would be to make it easy for the short-player... easy, with regard to limitations of distance, but usually at the expense or sacrifice of a stroke on the majority of the holes.” *Id.* He thought it was important to leave a “fairly-open avenue” provided the player “shots keep the line mapped out for him, but the route so laid out would not necessarily be in a direct line to the hole.” *Id.*

He thought the old idea of “placing of hazards principally across the entire width of the fairway, just far enough to catch a good shot of the short player, either from a tee or on the second stroke...and not far enough to worry the longer player” both “extremely crude and uninteresting, from any standpoint!” *Id.* at 377-78. It was his desire to “lay out the course generally with reference to really good play” and to “feature certain shots on each hole.” *Id.* at 378. It was his objective to “make it easy for really good play, hard for indifferent play at the hands of good players, and comparatively easy for short players – the duffer class.” *Id.* He said that this was quite “within the bounds of possibility to do all this on any course, irrespective of the lengths of the holds, by the proper placing of hazards.” *Id.*

He also thought that the character of the hazard was important and stated that each pot should be of varying size and depth, and the nearer the green the deeper the pot should be. *Id.* He

emphasized that the pots “should be filled with sand to a depth of from six inches to a foot—preferably sea sand.” *Id.*

With respect to greens, he considered diversity as the “great desideratum.” *Id.* at 379. Of eighteen greens, Travis suggested the following configuration: “three fairly flat, two or three gently sloping, one or two on the punch-bowl order, two or three of the plateau type, and the rest more or less undulating -- seldom if ever flat.”

What is clear is that Travis was a firm believer in “thinking” golf. He implied that the game of golf was as much about skill as it was about “thinking.” Travis was a proponent of offering the golfer an opportunity to avoid difficulty with well-considered and executed shots. He was also a proponent of helping the members of the “duffer” class. *Id.*

GLOBAL RESTORATION CONCEPTS

From understanding Travis’ Signature Design Principles and from the photographic evidence available for Great Dunes, we have established certain global restoration concepts that will provide the overarching themes for the restoration. For any restoration to be successful, we must restore the vegetation, bunkering style and patterns and greens design as these are the areas that set Great Dunes apart both as a links course and as a Travis design. These areas have all but lost the elements that make them recognizable as a links course and as a Travis design. The remainder of the areas discussed below -- tees, fairways, drainage, turfgrass, irrigation and cart paths -- are all important to the restoration for various reasons; the most important of which are the modern playability and maintenance of Great Dunes.

Vegetation

The true type of links is to be found only by the seaside, in their highest excellence, having as their basis nothing but pure, white sea sand with a comparatively thin coating of alluvium, on which only a very fine quality of various kinds of dwarf grasses can subsist.

-- Walter Travis

Most of the site was sand dunes with typical dune grass type vegetation. Therefore, a key component of the restoration of Great Dunes is to return and to restore the “dunes” appearance that has been grassed over. It is this look and the proximity to the ocean that gives the course much of its uniqueness.

Also according to Walter Travis, on a links course “trees of any kind are nonexistent— as they should be.” So while there were trees on Great Dunes when it was created, they were generally small and mostly confined to areas between holes as the course transitioned into the Maritime Forest vegetation of the center of the island.

The Jekyll Island Tree Protection Ordinance and other similar ordinances protect the line of vegetation that runs down the dunes along

Beachview Road. However, after discussion with the required officials, there is some flexibility that allows us to remove vegetation that is on the golf course side of the dunes. In order to achieve the look of the original dunes, we must remove as much under-story as possible to expose the dunes from the golf course side.

Generally, vegetation should be removed around all of the holes to expose native sandy areas. This will again allow us to regain the appearance of the course upon completion of grassing in 1927.

Bunkers

The aerial photograph taken of Jekyll Island in 1945, prior to any extensive changes to the course, allows for a fairly accurate determination of the location, size and shape of the original bunkers. When this aerial is combined with the photographic record, a clear picture of the bunkering can be developed. Because we have all of this evidence of the nature of the original pots, as Travis would have called them, they should be restored to their original location, size and appearance.

Generally, his pots were of varying size and depth; however, as a generally rule, the nearer the green the deeper the pot. Travis preferred pots that were filled with sea sand, if possible, to a depth that ranged from six inches to a foot.

Greens

Walter Travis widely varied the green style at Great Dunes; however, over time, this variety has melded into a more uniform style. In order to restore Great Dunes, we must restore the Travis greens so that they redevelop the character that Travis was known to create.

Travis would have used creases, wild undulations, sharp pitch, bowls, false fronts, and ridge-lines to create greens that made putting complicated, especially when putting from one pin position to another. We can see remnants of the genius of Travis's greens on Great Dunes especially on holes number one, three and the putting green. Further field exploration and use of existing photographs will allow the greens to be restored as close as possible to their original location, size and contour.

Tees

Even though there is little evidence of multiple tees on the original Travis course, including alternative tees in the restoration is entirely in keeping with his design philosophy. Each hole will have new tees constructed, one of which must be in the location of the original tees. This tee will be the back tee on most of the holes. Forward tees will be added of sufficient size and variety to accommodate current levels and types of play. While these tees are generally indicated on the Restoration Concept Plan, the final locations and configurations should be determined in the actual design phase of the project.

Fairways

The fairways contain numerous low “bird bath” areas that should be removed during the restoration process. Vegetation should be removed from all the existing turf areas and only the fairway areas replanted. This will leave a sandy waste effect around holes that are not in the dunes providing a cohesive look that would have been present upon completion of the Travis course.

Drainage

Low areas of the course should have area drains and sub-surface runoff pipe to an appropriate outlet, presumably the lakes on Oleander. Where areas are too low to achieve positive outfalls, sand covered gravel sumps should be created to handle those small drainage areas.

Turfgrass

When the course was constructed it would have been planted entirely in common bermudagrass as that was the only warm season grass available at that period. It would be historically accurate, but not practical, to replant with the same grass as it would not be readily accepted by a broad range of today’s golfers. However, it would be appropriate to consider a one grass type planting, probably paspalum, to achieve a similar look to the original. While some of the newest hybrid bermudagrasses would accomplish a similar appearance, paspalum will reduce inputs and be more environmentally sound and sustainable.

And as the wind should always be an ever-present factor on such a course, provision should be made for the proper preservation of the value of each and every hole by having tees of such latitude as to permit the lengthening or shortening of the distances from normal conditions, as occasion demands . . . or the substitution of alternative tees—two, three or even four of them, in some cases.

-- Walter Travis

Irrigation

While the original course would not have had extensive or any irrigation, a total irrigation system should be added for the maintenance and economic viability of the course. It is imperative that the system be designed to minimize or eliminate irrigation of the dunes and sandy areas of the course this will minimize weed intrusion into these areas.

There is no place on the course for the creation of an irrigation pond for the creation of an independent irrigation system. Irrigation should continue to be provided from Oleander.

Cart Paths

Hard surface cart paths are inappropriate for an authentic restoration, but it is critical to make provision for cart traffic. This should be done through compacted sand trails and soil stabilization.

Ponds

The pond on number two and the pond added between number four and five should be eliminated and the areas drained with drop inlets and carry off lines. The pond on number seven should be reshaped as near to original as possible.

PLAN ASSUMPTIONS

This Restoration Concept Plan described in this Report is illustrative and has been designed to take into account the following factors.

Changes in the Game

In the years since the Club era, the game of golf has undergone significant change that puts increased pressure on “classic” courses to stay current. The golf ball has improved along with improvements in clubs resulting in increased length from most levels of players. This has affected positioning of hazards and made many hazards obsolete.

The expansion of the game beyond the “rich” has increased the number of golfers participating and placed more pressure on all features on a course. Because of the increased number of players on a course at a given time, some of the things considered suitable when Great Dunes was created would no longer be acceptable today.

The proliferation of golf cars has aided in increasing the spectrum of golfers that can play the game. This also has placed a great deal of wear pressure on golf course turfgrass.

Management

Currently Great Dunes is managed as a stand-alone nine holes that operates relatively independently from the other 54 holes of golf on Jekyll Island. The course has its own small operation center and a separate cart facility. The focus of this plan, the historical restoration of

the course, has to assume that the facility will be operated to maximize the impact of its historical significance. This presumes an operational, marketing and programming plan that capitalizes on or improves the historical aspects of the course.

Relationship to Oleander

Great Dunes is greatly affected by the Oleander course; however, plans do not include options that take into consideration renovations on the Oleander course.

Financial

The restoration must take into consideration future maintenance costs and create minimal strain on the economics of the JIA.

Safety

Safety of golfers has to be of primary importance. While it is impossible to make any golf course “safe”, care must be taken to minimize risks both on and adjacent to the course.

Hole - by - Hole

HOLE #1

The 1927 Hole

Travis endeavored to have “the first hole a good one—not too long—but one that demands good play.” He accomplished this principle here by creating a hole that played from an elevated tee in the dunes to both an upper fairway and a lower fairway separated by a parallel line of dunes and a green surround by bunkers.

His strategy required the player to make a decision whether they could carry the lines of dunes to the upper fairway for a shorter more open shot to the green or chose to take the safer lay up to the low fairway and require a longer shot over bunkers. His green was surrounded by three bunkers left and two bunkers right.

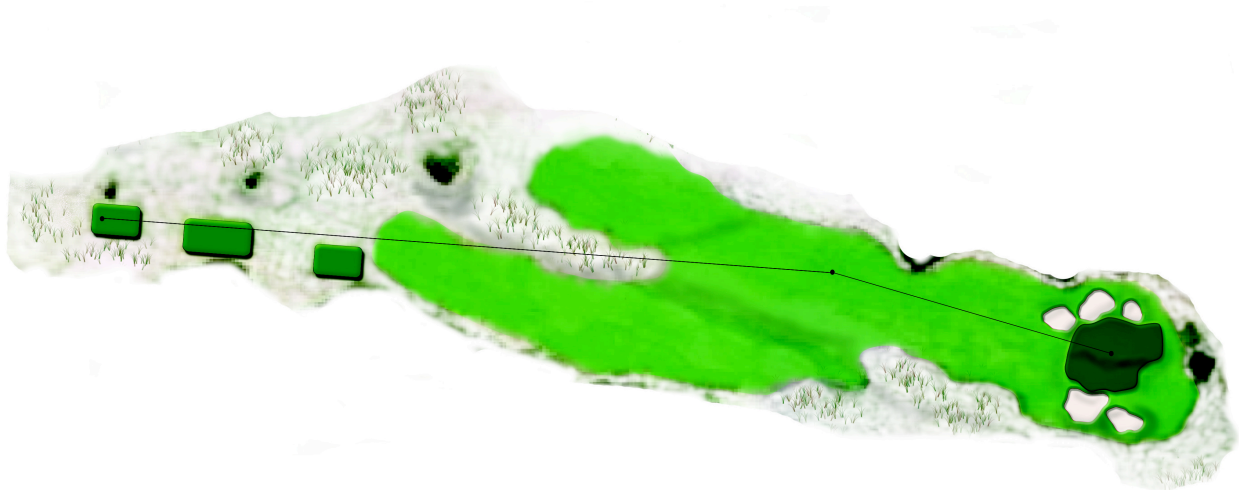
Some or all of the dunes in the rows that separated the fairways would have undoubtedly been unfurfed originally.

Changes to the 1927 Hole

The tee was relocated approximately 50 yards to the West. This took away the lower fairway option and completely changed the strategy, look and playing characteristics of the hole. This change left the player with only one way to play this hole and made the grassed dunes located to the right a hazard on the hole.

The above described strategy change was compounded by the removal of the greenside bunkers. Also the dune on the right of original tee was mostly destroyed when the road and bike trail was created.

Restoration



Because moving the tee to its original location would create a safety problem, the restoration will return the tee to approximately its original alignment. The tee will be moved forward to move it out of proximity to the existing putting green, which is the original ninth green. To minimize the potential of balls going into Beachview Road, the original dune (right of the first tee) should be recreated. This dune should be made as large as reasonably possible, and the first tee kept as low as possible.

The relocation of the tee will result in shortening of the hole. Therefore, because of this reduction in yardage combined with increases in shot length brought on by better equipment, a modification of the 1927 hole strategy. However, this proposed modification holds true to Travis design principles.

The proposed modification will be accomplished by exposing the dunes line on both sides of a recreated fairway through the dunes complex. The exposed dunes on the right side of the fairway will reestablish a decision-making

strategy requirement off the tee. It will force players to decide whether to play safely to the left or to challenge the dunes features to the right. Further, restoration of the greenside bunkers will reinforce that strategy. Also by enlarging the front left bunker very slightly, we will also emphasize these principles and affect a safer tee shot.

The green restoration recommended will restore the strong ridge running from back to front through the center of the green.

HOLE #2

The 1927 Hole

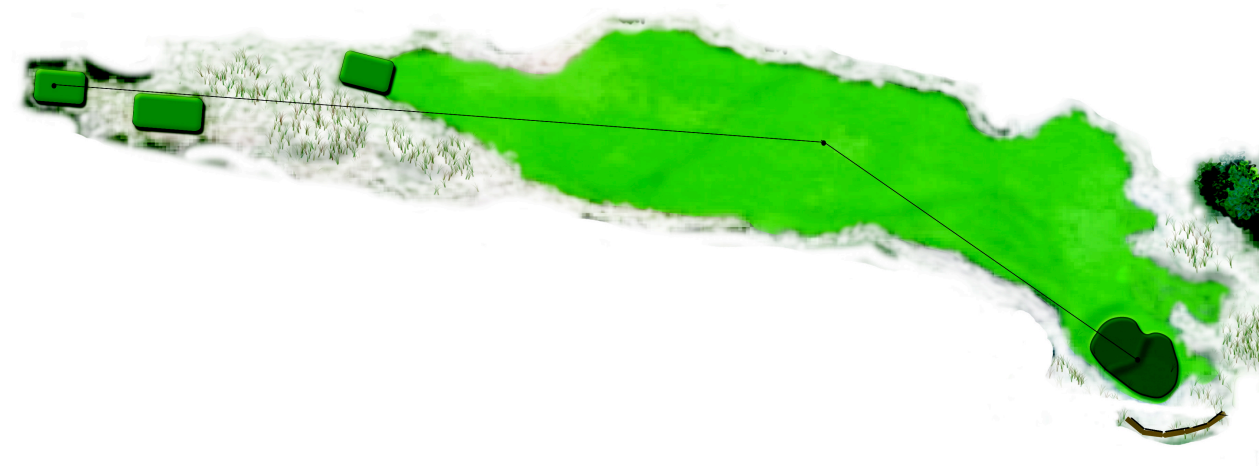
The second hole is unique among the holes on Great Dunes in that it contained no artificial hazards. Its strategy is very subtle where the proper positioning of the tee shot is dependent on understanding the best line of approach to the green created by its contour and angle to the approach shot.

Changes to the 1927 Hole

While the second hole remains in essentially its original location, the major change is the loss of the aesthetic of the prominent dunes feature both behind and on both sides of the green location. The other major departures from the 1927 hole is the blind water hazard on the right side of the landing area, which was presumably added to improve drainage, and the total grassing over of the dunes features in front of the tee and to the left of the green.

Also the green has moved back closer to the dunes. It has been shortened from a more elongated shape.

Restoration



The pond will be filled in and the drainage handled through area drains connected to the main carry off line to a positive outlet. This will allow for a broader choice of lines for the tee shot.

The main restoration feature will involve restoration of the green and its surrounds. The green will be moved slightly forward, elongated and angled slightly left to create the most receptive approach from the left portion of the fairway.

The dunes will be restored to their sparse vegetative appearance both behind and beside the green and along the left side of the fairway. This will allow the dunes to become an integral part of the hole, long a feature of links land golf.

HOLE #3

The 1927 Hole

According to Travis, there should be “two or three of the holes of this type, preferably the drive and pitch kind



Original Tee Shot on #3.

should be well guarded in front of the green, necessitating a lofted approach, with more or less cut.” The third hole is the only two shot hole on the course that requires the golfer to loft their approach, and we must presume that the other one or two holes of this type would have been present on what was the back nine holes.

This green is the most heavily contoured green on the course. Because of its steep contours, it required differing lines of play off the tee to reach the optimum approach angle required for each hole location.

An unusual feature, by today’s standards, of the third hole is the location of the tee. It was originally located to the right of the second green on the top of the dune. The tee shot played on a line barely right of the back of the second green.

When it was finished, the third hole would have been one of the best examples of the brilliant, dunes architecture of Walter Travis. This is now evidenced in the shapes of the green contours and the relatively original bunker.

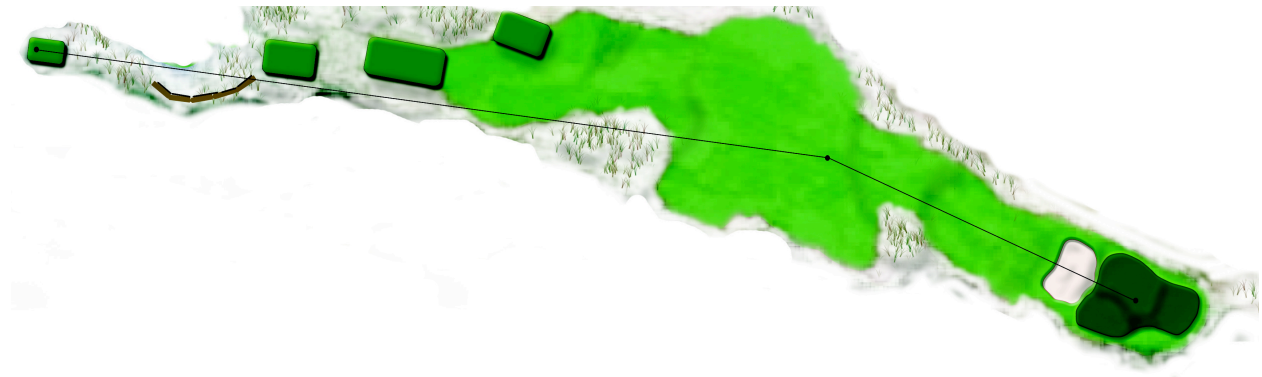
Changes to the 1927 Hole

Tee has been relocated from back and right of #2 green to left of #2. This hole had the most exposed dunes of any on the course and this look has all but disappeared. Large dune right front of green has been mostly destroyed, presumably when Beachview Road was built.

The greenside bunker is reduced in size and has moved away from green slightly.

Original green was heavily contoured. Evidence still exists of that contouring, but reduction in green size masks the effect.

Restoration

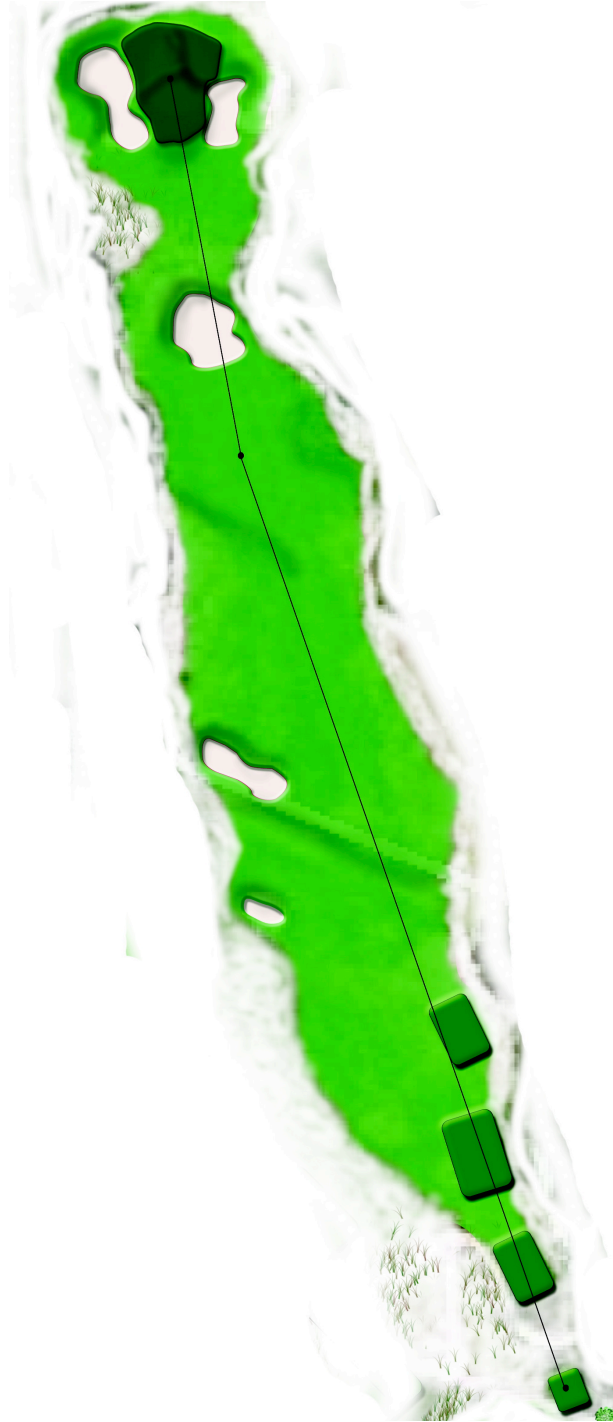


For historic preservation, it is imperative that the tee be restored in its original position. However, use of the tee should be greatly restricted. Also an interesting feature that should be restored is the wooden walkway that ran across the dunes to connect the tee to the fairway.

HOLE #4

The 1927 Hole

The bunker placed by Travis in the center of the fairway required a long hitter to consider his options of playing short of the bunker and having a longer more difficult short or playing to a thin fairway area that originally had enough room right between the tree on the right to consider risking a shorter approach with a better angle. The duffer would not be able to reach the bunker and would have a reasonable approach unless he “topped” his second. A unique feature of this hole was a small dunes remnant that intruded into the fairway from the left.



The original green was lower than the current green with bunkers both right and left. The three ponds right and back of the green are original.

The original tee for this hole would have been immediately behind the 3rd green causing the tee shot to play “across” the tee shot on #7. This tee would also have made the left fairway bunkers more of a factor.

Changes to the 1927 Hole

The tees have been relocated to below the dunes and to the right of the sixth green.

Cart paths have been added to the tee.

The fairway bunker in the center of the fairway has been removed, as well as, a dune remnant between the fairway bunker and the green. The green has been significantly changed in elevation. While there were originally two greenside bunkers in the general area of the existing bunkers, they have been greatly modified.

The first pond on the right, as you play the hole, is not original.

Restoration

By restoring the greens complex, the fairway bunker, small dunes area and by judicious limbing up the large oak to the right of the fairway, the hole can be returned close to original.

To complete the restoration of this hole, the first pond on the right should be filled in and the area drained with drop inlets and the treed area to the left and back of the green should be underbrushed at least 30 feet back into

the trees to make the hole more duffer friendly.

However, one aspect of the original hole that should not be restored is playing from the original back tee. While this tee should be restored, it is the tee closest to the third green, playing from it would require playing the tee shot across the tee shot on number seven which was the original configuration. When complete, the original tee on number four should be used as the back tee on number seven.

“Pots should be so placed as to make it imperative for the good player to place his shot in a certain desired position, with reference to the next shot. If the desired position is secured from the tee, a fairly-easy second shot is the reward, and so on.”

--Walter Travis

HOLE #5

The 1927 Hole

Punch bowl greens exist where most of all of the surrounds of the green are higher than the green itself. This was an architectural device that evolved from when most greens utilized existing contours. They had the advantage of containing shots but making wayward approaches more difficult to recover.

This hole was also an excellent example of Travis's strategic philosophy that is to affect the better player more than the duffer. As he said that it is his "idea of bunkering a course would be to make it easy for the short-player . . . easy, with regard to limitations of distance, but usually at the expense or sacrifice of a stroke on the majority of the holes. Leave him a fairly-open avenue provided his shots keep the line mapped out for him." The better player must consider the right fairway bunker on his tee shot, but if accomplished successfully, has only minimal concern with the second bunker left. The duffer can successfully navigate his way through the bunkers by matching his route to his capabilities.

The outstanding feature of the hole is the approach shot. The green is located behind two large "Mae West" dunes and is barely visible through the gap in the dunes.

Changes to the 1927 Hole

This hole was originally called "Mae West" for the large exposed dunes protruding above and on both sides of the approach. The effect has been mostly lost due to expanded turf and volunteer vegetation.

There appears to have been an attempt to add a new back tee to lengthen the hole. It is no longer being maintained. The right fairway bunker has been expanded to increase its size and a nose added that would not have been original. A fairway bunker has been removed from the left side of the fairway approximately 50 yards beyond the existing bunker.

Green was originally a slight punchbowl type, with a raised edge to rear and surface drainage out the front. Material has been removed from back of green where palms were planted presumably to avoid safety conflicts when back tee on 6th hole was built. When this is combined with years of topdressing, the green now gives a crowned appearance.

Cart path has been added through trees left of green.

Out of the eighteen greens, I would suggest three fairly flat, two or three gently sloping, one or two on the punch-bowl order, two or three of the plateau type, and the rest more or less undulating.

--Walter Travis

Restoration

The restoration process, beside new tees that will be added on all the holes, requires that the right bunker be reduced to its original size and the left bunker replaced in its original location, which is still evident.

Obviously, the key piece of this hole is to restore the natural dunes appearance of "Mae West". There are no formal greenside bunkers on this hole, however, the dunes function in that capacity. The green should be returned to its punch bowl aspects.

The left side of the hole should be underbrushed.



HOLE #6

The 1927 Hole

According to Travis, “[s]hort holes should be so guarded as to prevent a topped ball from getting the green.” He also thought that the greens on short holes “should be comparatively small, and with a plentiful supply of traps all around.” In order to achieve this effect on hole #6, Travis’s utilized two bunkers and the native dunes to achieve not only his ideal short hole but expansive views of the Atlantic Ocean.

Changes to the 1927 Hole

A back tee has been added, and the green has greatly reduced in size over time.

The front bunker was part of the original design; however, it was larger. There was not a significant mound between bunker and green. Originally, there was a bunker right of green that has been removed.

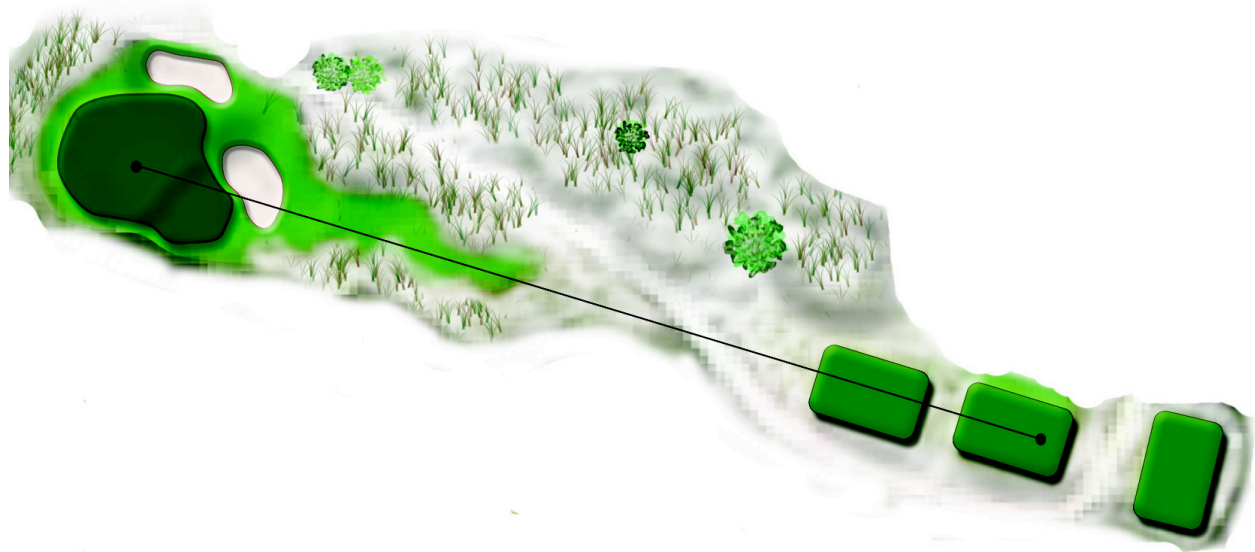
The dunes behind green have grassed over and the dunes right of hole are completely covered in vegetation.



#6 during the Club era.

Concrete cart path added along entire hole and down dune on next hole.

Restoration



The first priority is to restore the dunes look of the hole. This can be re-established by rebuilding the front bunker in its original style, adding back the right bunker and removing vegetation.

Also for the restoration to be complete, the green must be expanded, and the size and shape re-created.

HOLE #7

The 1927 Hole

The original back tee for this hole was located on the crest of the dune just to the right of the #6 green. The tee shot crossed the tee shot from #4. The hole played around the small pond as a dogleg left, which both decreased the dogleg and increased the alignment options off the tee. The pond left added an extra dimension to be considered by the aggressive player.

The bunkering of this hole revisits the center bunker positioning found on #4. However, the additional bunkers on the hole create many lines of play for the shorter hitter. The green had two bunkers, one on each side of the green, with an open approach.

Changes to the 1927 Hole

The tee currently being used for the back tee on this hole was the original tee for #4. The tee for #7 would have been adjacent to the #6 green on the right. This would have caused the tee shots to cross each other, but given the era and the amount of play on the course that would have been acceptable. However, it would not be something that is done today.

Two fairway bunkers have been removed from center of fairway. The fairway bunker on short right of the fairway is not original.

Pond has reduced slightly in size and has been reshaped.

A greenside bunker has been removed from both the left and right sides of the green. Green shape has been changed.

“Leave him a fairly-open avenue provided his shots keep the line mapped out for him, but the route so laid out would not necessarily be in a direct line to the hole. The comparative freedom from trouble would have to be paid for by the negotiation of accurately-placed shots along a narrow line of greater aggregate length than that offered the good player. Such alternative line should not permit a short player to reach a green in the same number of strokes as the long player, except by masterful play . . . the execution of some particular stroke involving a heavy risk in case of failure.”

--Walter Travis

Restoration



Restore the original tee because of its historic value. For safety reasons, it is impractical to play this tee on a regular basis for either number four or number seven, but its judicial use under controlled conditions could be used for special events.

There are two bunkers to be restored in the center of the fairway, and one on the far right of the fairway short of the green generally in the location of the existing bunker. The existing bunker on the right of the fairway off the tee will be eliminated.

There were a few trees in the open area left of the first part of the fairway. This area should be replanted with a few specimen trees. Care should be taken to avoid blocking any lines of play.

HOLE #8

The 1927 Hole

This hole, which has been played as a par 3 since Jekyll was acquired by the State of Georgia, is one of the more interesting holes. Based on the bunkering design, it was possibly a par 4 originally. However, the hole also fits his description of what he called a long-short hole. Travis described long-short holes as follows:

Long-short holes should have hazards necessitating a longish carry, with hazards all around the green. On holes of this kind the ordinary, every-day player should have the chance of playing safe by opening up a fairway to the right or left of the direct line—letting the center go as rough for the more ambitious until within twenty yards or so of the intervening bunker, forming a sort of oasis. This would give the duffer the opportunity of escaping trouble . . . at the loss of a stroke . . . on the tee-shot, but a sort of moral hazard—a picayune affair—should be put in for his second. Or, he could play direct at the hole, within certain limitations.

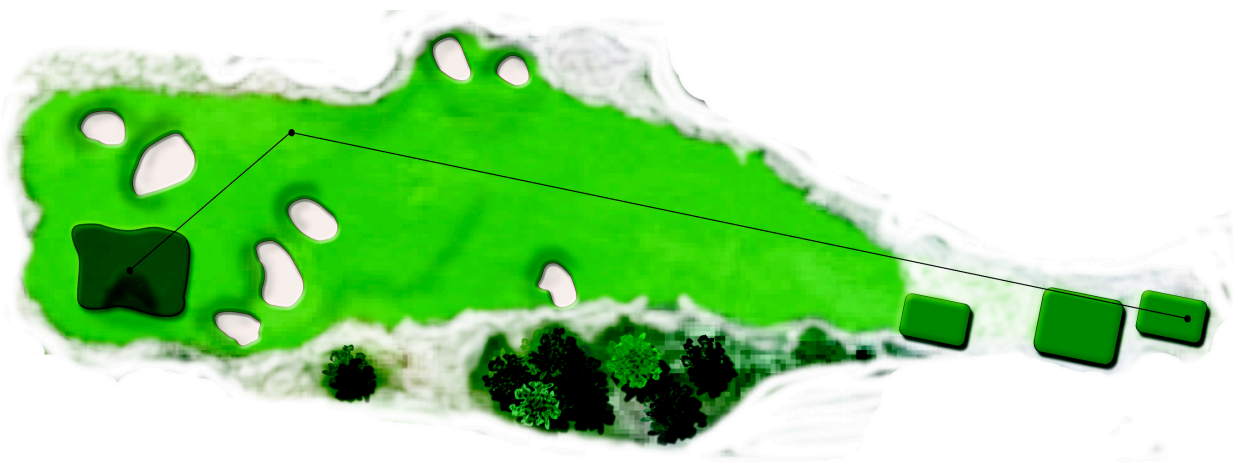
Travis designed this hole so that the golfer, no matter whether the hole is called a par 3 or par 4, had numerous strategic decisions to make on the tee shot. The first being whether to take the direct line to the green or not. If not, they then had to decide what line of play allowed the best opportunity for success. Each of the decisions required a player to not only control their direction but hit the ball the proper distance to execute their plan.

Changes to the 1927 Hole

A number of bunkers have been removed. There were originally two fairway bunkers right by the oak trees and probably another fairway bunker on the left approximately 50 yards short of the existing bunkers. The two bunkers short of the green were original, although their shape and size have changed slightly. There was a third bunker immediately to their right. There were two bunkers right of the green, but they were located approximately 50 feet from the greens surface. Interestingly, remnants of all of the removed bunkers can be identified on the ground.

As in all other holes, the green does not have its original shape or contour.

Restoration



The hole will be returned to its original design. This leaves the two existing bunkers short of the green and adds a third bunker to their right. The two bunkers on the right of the hole will be recreated; these are located close to the oak trees. An additional fairway bunker was short and left off the tee. While there are technically no greenside

bunkers there are two bunkers approximately 50 feet right of the green to catch wayward shots and create a difficult recovery.

The green tilted from right to left to make the approach of those playing the hole like a two shot hole more difficult. Adding an additional tee that did not exist during the Travis era would allow management the option of playing the hole as a drivable par 4 if they desired.

HOLE #9

The 1927 Hole

True, the fundamental principle is far—on the long and short-long holes —but never forget to couple with that the vitally-important word sure—far and sure. They should go hand in hand.

--Walter Travis

After playing the majority of the last two holes on flat, maritime forest terrain, Travis deftly leads the golfer back to the dunes with a brilliantly bunkered par 5 to epitomize his far and sure principles, with sure taking precedence. Decision after decision faces the golfer as they proceed down the hole. They must decide how to avoid the bunkers on the tee shot. Also they need to ask question like can I play directly at the green on the second, and if I do, how do I negotiate the dunes that intrude from both sides?

The approach shot must be “surely” placed to avoid the dunes that surround the green.

Changes to the 1927 Hole

Three fairway bunkers left are basically original, but four fairway bunkers adjacent to the oak trees have on right of hole have been removed. Bunker removed in second landing area at end of second shot.

The dunes that run along the left side of fairway are turfed over.

The green has been relocated approximately 50 yards to west from original location, old green currently used as putting green. Putting green probably fairly close to original contours. Area where existing green for #9 is located was treed in what appears to have been oak trees.

Restoration



The green can now be restored to its original position and contour with the relocation of the first tee. A recreated dune should be added right of the green not only to complete the dune aesthetics but to diminish the view of the miniature golf course and pizza restaurant.

The dunes line that runs though the current first tee should be re-established and even expanded to encourage separation from the first hole. A thin band of fairway will wind through the dune to the green.

The bunkering scheme of the hole will be restored. This includes rebuilding the existing three fairway bunkers to make them more visible from the tee, adding the four bunker complex opposite the oak trees on the right of the landing area and the single bunker at the end of the second shot to visually enhance the dogleg.

The area of the existing green should be replanted in live oak trees not only for historical accuracy but as a mitigation area required by the Jekyll Island Tree Protection Ordinance and other similar ordinances.

Planning Scenarios and Cost Estimates

BASIS OF COST ESTIMATES

Several planning scenarios were developed and analyzed for their ability to fulfill the objectives set out in this Report while maintaining financial sustainability. Two preliminary options were developed to provide a range of costs that will give the JIA an ability to understand the lower end and upper end implementation of the full restoration plan. Both the Low and High estimates include a full restoration of Great Dunes; however, the levels represent different selections in the quality of materials and construction methods. Owner selections will potentially affect future maintenance and operations costs.

Task	Low	High
Mobilization and Administration	\$30,000.00	\$50,000.00
Tree Removal (unless performed in-house)	\$12,000.00	\$20,500.00
Understory Removal & Clean-up (unless performed in-house)	\$10,000.00	\$16,000.00
Existing Turf Removal	\$102,000.00	\$142,800.00
Restoration of Dunes & Plantings	\$31,225.00	\$31,225.00
Re-creation of Dunes	\$125,000.00	\$500,000.00
Rebuilding Greens	\$315,000.00	\$405,000.00
Rebuilding & Adding Tees	\$142,659.00	\$142,659.00
Rebuilding & Adding Bunkers	\$144,000.00	\$162,000.00
Shaping	\$58,500.00	\$65,000.00
Site Drainage	\$30,000.00	\$50,000.00
Cart Path Removal	\$2,700.00	\$2,700.00
Cart Trail Creation	\$96,000.00	\$288,000.00
Grassing	\$52,000.00	\$65,000.00
Sod	\$30,492.00	\$87,120.00
Irrigation System	\$375,000.00	\$450,000.00
Pump Station (off site)	\$120,000.00	\$120,000.00
Tree Ordinance Mitigation	\$25,000.00	\$50,000.00
	\$1,702,076.00	\$2,647,504.00

Limitations

Every construction project presents unique conditions with respect to location, site constraints, and soil or geotechnical considerations. Also, construction industry market conditions can greatly affect project costing. By considering both historical costs, as well as, current cost estimating methods, an attempt was made to account for the range of potential costs. However, no estimates can be considered final until complete construction plans and specifications have been prepared. At this state, these unit costs, as well project costs derived from them, need to be evaluated appropriately. Thus, these generalized costs are appropriate for comparison of alternative approaches to providing service, but additional detail should be provided for specific construction estimates.

Allowances and Contingencies

At every stage of construction cost estimating, certain unknown factors need to be accounted for in the development of estimated costs. This is even true at the time final plans and specifications are completed for a specific project. It is especially critical at the planning stage. The unit costs presented throughout this technical memorandum are base construction costs, for the most part. This means that, in most cases, no allowances or contingencies of any type have been applied. Contingencies need to be added to cost estimates prior to inclusion in the budgets. The following cost categories need to be considered in the development of complete cost estimates: contractor overhead and profit; contingency; architectural; engineering, legal, administrative, and management.

Recommendations

Based on review of the existing conditions and the historic and economic aspects of Great Dunes, we recommend the following:

1. Initiate work to remove as much understory vegetation on the dunes as possible and stay in compliance with the Jekyll Island Tree Protection Ordinance and other related ordinances as possible; this can be completed by existing staff prior to restoration process.
2. Start the dunes restoration process on hole #6 by removing existing turfgrass and organic matter exposing dune remnants; reconstruction of dunes to be completed during restoration process.
3. The Travis course is historically significant and should be restored, as near as practical, to its 1927 layout, style and configuration. Great Dunes' is the only amenity on Jekyll Island that equally fits into both the economic and the historic missions of the JIA, and therefore while its historical significance alone would be enough to justify its restoration, its potential economic should make it a priority for the JIA.
4. The dune aesthetic along with the other features that make Great Dunes a classic links course should be restored. These features were an integral part of the original design and have historical importance.
5. JIA should take this opportunity to review the entire golf operation in order to develop a overall plan that will allow golf on Jekyll Island to be a economically viable entity. Because of the relationships between Great Dunes and Oleander, a careful study of the integration of these two courses should be undertaken.
6. Great Dunes programming should be reviewed and modified to maximum the positive effects of its restoration. Once the restoration is underway, Jekyll Island will be able to increase its market share related to increased publicity from this historic undertaking, revitalized programming with the convention center and other hotel groups as well as new opportunities for merchandizing, weddings and themed outings.
7. The tea houses that were constructed along with the Ross Course should be recreated and utilized as amenities for Great Dunes and Jekyll Island, including but not limited to convention services and events, such as high teas, weddings and other events that would have been appropriate for the Club era. This will create additional revenue streams for the JIA.
8. JIA should re-evaluate interface between Great Dunes and Convention planning staff.
9. JIA should re-evaluate its staffing of Great Dunes. Qualified, highly motivated people must be selected with both the energy and expertise to carry out programming concepts described above.

10. Hard surface cart paths should be removed from the course and replaced, where necessary, with compacted sand trails, stabilized sand or stabilized natural materials.
11. Maintenance issues, such as drainage, irrigation, greens construction, etc., should be corrected during the restoration process. During the restoration process, provision for junior events should be incorporated into the design.
12. JIA should evaluate using hickory shaft clubs in its collection for special events at Great Dunes.