

Golf Course Master Plan

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Introduction

After several visits to the course and meetings with club representatives to introduce the merits of a master plan, In August of 2015 I was retained by Meadow Springs Country Club to make professional recommendations for enhancements to its golf course and related club facilities. The scope has included analyzing the property and developing a "Master Plan" which, as a product, would consist of this descriptive text and plans illustrating the resulting proposed recommendations with reference to the existing course. The ultimate goal of this master plan effort is the acceptance of the recommendations as added value to a membership at Meadow Springs Country Club.

As with many Master Plan efforts this process included an extensive examination of course infrastructure as well as the strengths and weaknesses of its design. Of specific interest to the club has been determining what opportunities might exist for improvements to the other facilities on the property including practice amenities, parking, vehicle and cart traffic patterns, and the overall club entry experience. The resulting recommendations are a direct result of that analysis and reflect the conclusions drawn.

While the club has invested in several large projects in specific areas in the recent past, much of the course infrastructure has become aged well beyond its standard life expectancy. A majority of the final recommendations will be based on the necessary replacement, upgrade or renovation of those failing elements. Some elements of the course have already exceeded their anticipated life cycle and are identified so they can be addressed in a timely and responsible manner.

Of particular interest to many will be recommendations that address aspects that directly affect the quality of the golfing experience. This includes the fun process of identifying design opportunities for adjustments that will add interest and memorability to the round. Playability, shot values, scoring resistance, and aesthetics have each been carefully studied and addressed. At the core of the effort has been a dedication to the diverse skills of the golfing membership.

At the inception of the process a mission statement was developed to spell out the intent and overall goals of the Master Plan effort. Crafted by the Task Force Committee and approved by the Board of Directors, it has allowed the work to remain focused and directed. It is as follows:





Golf Course Master Plan Mission Statement

Prepare a comprehensive and responsible plan for enhancements and upgrades to our golf course and club facilities with the goal to enrich the experience of our current Meadow Springs Country Club membership and foster future sustainability and growth of the Club.

In addition, key objectives of this master plan were outlined as follows:

- 1. Assess the relationships and needs of all related Club facilities as part of the overall member experience.
- 2. Identify upgrades and timely replacement of course and facilities infrastructure.
- 3. Recommend improvements for highest priority issues.
- 4. Enhance course presentation and playability for all levels of MSCC golfers.
- 5. Identify potential enhancements to aesthetics throughout the property.
- 6. Coordinate all improvements to integrate with and complement adjacent facilities and other projects.
- 7. Ensure MSCC remains the best choice for Country Club membership in the Tri-Cities Area.
- 8. Identify an effective and responsible implementation plan for the final scope of master plan recommendations based on member determined priorities, efficient construction sequencing and fiscal responsibility.
- 9. Respect, maintain and expand upon the settings and existing character of the golf course and accompanying facilities.

<u>In addition to the identified objectives of the plan, the committee was tasked with a set of objectives:</u>

- 1. Receive and evaluate architects recommendations.
- 2. Provide recommendations to the Board of Directors.
- 3. Provide information about the process to keep the MSCC membership well informed
- 4. Seek timely input on significant proposed enhancements from the membership

Objectives of the board were also cast:

- 1. Align and incorporate the Master Plan's recommendations into the Club's Strategic Plan.
- 2. Develop recommendations for membership to approve. Dues increase or assessments required to pay for any projects will require a majority vote of the voting membership.





Satisfying these objectives can be a tall order, but with careful consideration to the wide range of possibilities this has been accomplished with the general support and enthusiasm of the committee members.

A majority of my contact with the club has been with and coordinated by Mr. Leon Lindbloom, leader of the Master Plan Task Force. Club Manager, Jeremy Simmons has been at the point for the business of the process and to facilitate communication throughout. He also provided valuable information concerning the business of the club. Head Professional Chris Peterson, PGA has provided additional insights related to the interaction between the membership and the golf course. I have spent the most time with Golf Course Superintendent Mark Dalton, CGCS as well as assistant Superintendent Charlie Jones. Mark has been very helpful and involved throughout the process, having provided research and information pertaining to various points and items related to his area of expertise. There is tremendous value in having the golf course superintendent involved with a course master planning process since it effects their work and responsibilities the most.

Throughout the process member perspective has been provided by the Golf Course Master Plan Task Force committee. It was a good size group and meeting were very well attended. The following members and staff participated:

Leon Lindbloom - Chair
Kathy Lehew - Green Committee Co-Chair
Chris Indall - Green Committee Co-Chair
Missy Cartmell
Tom Patten
Dick Cartmell
Chris Sonnichsen
Mike Long
Kim Cutsforth

Jerry White
Amy Viggiano
Aaron Karlson
Lura Powell
Mark Dalton, GC Superintendent
Chris Peterson, Head Pro
Jeremy Simmons, Club Mngr.
Charlie Jones, Assist GC Super.

The majority of the process was carried out over 3 months and required numerous meetings that went many hours. I believe most enjoyed their participation and gained insight regarding general philosophies and principals of course design and renovation. We all learned a lot while putting together this plan that will guide us into the future at Meadow Springs CC.

As each of the individuals of the Master Plan Committee can now attest, communicating the intent and reasoning behind the recommendations has been as vital to the process as the actual recommendations. This is consistent with all master plan efforts that I have had the opportunity to assist with. With this in mind, this text is intended to further support





the final recommendations and can be used as desired by the club and its leadership to help educate the membership on the importance of reinvesting in the primary material asset of the Club, the golf course.

In addition to the committee meetings, I spent considerable time at the club and on the golf course. This has allowed me to gain a comprehensive and intimate understanding of the course and the club, its weaknesses and strengths, its membership and its composition of facilities. Particularly helpful was meeting with the Ladies to hear their thoughts on how the golf course sets up for their game. I have thoroughly enjoyed my time with the people I have met during my visits and the staff has been professional, responsive, and a joy to work with.

Throughout this master plan process many details have been analyzed and researched and will be important aspects of the eventual work and implementation of the recommendations. As a result these details support the accuracy of the information contained herein. While much of the information gathered and used in the effort has been added to this document (located in the back) for reference, other details have not been included but will be the basis for future phases of work including construction.

A point that I cannot emphasize enough is that no plan of recommendations will satisfy everyone 100%. Throughout the effort it is hoped that individual opinions can remain secondary to the betterment of the course for the membership as a whole. I alone should bear responsibility for specific recommendations. This I accept by offering my professional involvement in this project.





Architects Perspective

On Solid Ground -

Meadow Springs Country Club is to be commended for its apparent success within the marketplace. Times have been difficult for many clubs around the country over the past decade. Some will agree financial pressures related to the recession between 2007 and 2012 hit the golf industry harder than the rest of the economy. Clubs throughout the country either closed their doors or reinvented themselves in the face of adversity. While most of the country's markets were recessed, some localized economies remained fairly healthy based on local industry. Meadow Springs has been a beneficiary of a good local economy and today has a full membership and money in the bank, all the while keeping dues fairly constant. A significant investment was made in 2009 to address issues at the 16th hole which illustrated the Club's commitment to providing a better product for its members.

Good Business -

In the introductory portion of this document is listed a mission statement as deemed appropriate for the effort by the club's leadership. This is the foundation for what I consider a Business Plan for the golf course. As with most successful business operations, the business plan, or in this case the Master Plan is the roadmap by which all endeavors are guided. The master plan identifies individual areas of opportunity or need while considering the entirety of the course. Similar to a good book or novel, changes to the content within one chapter, or in our case a golf hole, will have bearing on the others. The master plan takes into consideration all aspects of the course that interrelate to form the overall golfing experience. In addition, both the short term and long term cause and effect are weighed into each recommendation made.

The passing of time has had considerable impact on the playing fields of the game and it is likely it will continue into the future. The master plan for Meadow Springs Country Club combines recommendations for the responsible upkeep of the course infrastructure and features based on industry standard life cycles, along with opportunities I have identified for design adjustments that will set the course up for the future of the game. With that, proven and timeless design traits are used to enhance the golfing experience for all players.

Beyond the enhanced member experience, recommendations have been made with consideration to the business of market share. Members often forget that their club is actually a business that competes in the marketplace. As a professional Golf Course





Architect I must take into consideration that a successful master plan is one that incorporates elements and strategies meant to improve the clubs position within the market. At this time Meadow Springs is the only fully private membership golf club in the entire Tri Cities market area. It must be stated with the ongoing growth of development in the area that there remains the potential for a new facility to enter into the same market.

My first visit to the club in an official capacity was several months prior to the start of master planning. Club Manager Jeremy Simmons attended a presentation I had given earlier in the spring about Master Planning at private club. Based on what he had gleaned from that, invited me to give a similar talk to his club's leaders. Prior to the formalizing services, I visited the club a couple times to discuss the master plan process further with various groups. During one of these visits I was afforded the opportunity to spend some time with the green committee. The committee had been assembling a list of needs and wants for course improvements and the timing was good. Though the club had previously used the services of a Golf Course Architect, it was agreed that a comprehensive study and set of recommendations was a next logical step for the club. In August I was retained for master planning services which has been carried out with considerable help from staff and the committee assigned to the task.

My Observations and Impressions -

Spending time on the course both prior to our agreement as well as numerous times since I have been able to gain valuable impressions on how to enhance the course for the membership. In general, Meadow Springs Country Club is a very nice membership course of suitable length, is well maintained, and at its core, it is well designed. I am told by most that they feel it provides a pleasurable round and as observed it presents the golfer very few overly penal challenges. Like many private courses it is best suited for the middle handicap players. With the exception of a few shots it is not overly difficult for the higher handicap players, and on most days, not overly challenging for the better player. The course does pose a challenge for many that play from the Bronze and Gold markers primarily because several holes play too long. Variables such as green speed or firmness, rough height, and wind tend to dictate degree of challenge. Severely sloped green surfaces often prohibit too many low scores. A round at Meadow Springs is pleasantly fast paced.





The Property -

The varied terrain of the property is one of the courses best attributes, although the current routing and features do not always take full advantage of it within the design of the holes and features. In addition, some of the man made forms are nothing more than arbitrary which is indicative of the era the course was developed. These aspects suggest opportunity for wonderful improvements moving forward. Property with rolling and varied topography can provide excellent design opportunities but it can also force the routing, and thus limit the variety of the golf holes. When golf courses are properly routed on undulated topography they can be among the finest. But, if the course is not properly routed by a professional architect the routing may limit a potentially great course. Fortunately Meadow Springs was designed by Robert Muir Graves, a very successful designer of the era. His original design affords us a solid foundation from which to move forward with.

Yardage and Par -

Most holes on the course have adequate length from the back markers. Par 5's and Par 3's are particularly long. While additions and adjustments have been identified for the Gold and Bronze tees on specific holes, better overall tee and yardage distribution will provide considerably more interest in the round for all players. By no stretch of the imagination (or of the tees) will the course ever play at a true championship length by today's standards (7,400 yards plus), nor does it need to. Individual holes do and may with further refinement take on championship characteristics. It is also this architect's opinion that this fact is in no way detrimental to the potential quality or overall success of the course, particularly as a private membership facility. But, it is a fact that must be understood, accepted, and factored into the master plan recommendations.

As with any course assessment and master planning effort, hole length variety has been fully analyzed. As previously stated overall yardage on the property is generally fine, but a diverse range of yardages within the collection of golf holes is the ultimate goal. Much of this has been addressed with tee reconfiguration. With new and relocated tees we can insure that all demographics of the club are provided suitable yardages so their round is enjoyable and equitable. This is particularly the case with the Bronze and Gold tees that I am recommending being shortened on numerous holes thus giving those player a better chance of reaching the greens in regulation. This is also an important aspect from a marketing standpoint moving forward. Other recommendations are made to provide greater diversity within the round with new teeing area, shifts, additions or removal of bunkers, and with the minor design adjustments as determined by yardage and distances on each hole.





Game Attributes -

As a private country club, Meadow Springs has a fairly typical demographic of golfing members and associated abilities. This point has been given due consideration within all recommendations. Among the key traits of the course design where this point is applied are shot values and resistance to scoring. These are underlying traits of any good or great golf course and are comprised of many individual design nuances that have been factored into the plan. Addressing these traits also requires a balance within the recommendations. While several areas can be made more suitable to the shot making skill level of the average country club player, other aspects can be folded into the course in terms of strategy and shot selection to maintain or expand challenge for the better player. Slight repositioning of bunkers and reconfiguration of tees for a broader range of yardage options are examples of where these aspects have been addressed and improved.

As with all successful master plan efforts, playability will be at the forefront of all recommendations made. Not to be confused with "ease of play", playability is best described as the ability of all players to negotiate their way through a round without undue penalty. In making sure that a proper fairness exists throughout the course, we must be careful not to dampen the sporting spirit one experiences when playing the course. While playability is not an overriding concern with the existing course, some areas for improvement remain. Most of the greens have areas within the surfaces that are severely sloped resulting in very difficult putts and approach shots. Many areas in key locations around greens are impacted by deteriorating paths or bunkers resulting in poor or awkward bounces and lies. Within all recommendations care must be taken to do no less than maintain aspects of playability which contributes to the fast pace to a round at Meadow Springs.

Aesthetics -

Of particular interest to this architect is the opportunity to further enhance the visual character and styling of the course. In its current state Meadow Springs Country Club is very non-descript and exhibits very little in the way of distinguishable character in its styling or presentation. Expansive monochromatic turf provides minimal definition between fairways, rough, and greens. Trees are prominent and appealing in some areas, but are lacking and needed in others to help frame and screen the perimeter. All great courses are identifiable due to a commonality between quality features of the course. Beyond a consistent style of green surfaces, the golf course at Meadow Springs





Country Club is limited in uniquely identifiable features or style. Throughout the course, tee shapes and configuration is varied. Bunker styling is pedestrian and composition of the features is inconsistent. Many elements look tired and in need of refurbishment. In composition, these traits limit memorability and do not stir the senses the way an impressionable landscape can. Improving this aspect will require simple refinement of most elements, but others areas will require more significant alteration over time. When properly renovated the holes and features at Meadow Springs Country Club will be dynamic and suggest a particular spirit.

In select and specific areas of the course more significant design changes are suggested that will address what has been identified as either the weakest aspects of the course or that provide the greatest opportunity for enhancement. One of my earliest impressions of the course was that several of the course features exhibited an awkward composition or were badly positioned. The relationship between green surfaces and what should be greenside bunkers in many cases are disconnected, resulting in awkward playability. Several of the lakes don't actually come into play in a dynamic manner. In their current locations they are merely penal hazards and typically only pose a challenge to the higher handicap players. This has of course been addressed with recommendations for changes to the shapes of the lakes at holes 1 and 15. Other lakes at holes 13 and 16 are too impactful and border on penal.

Facilities -

At the onset of my relationship with the club the representatives made it clear that they had concerns about the presentation of the club upon arrival and with the areas surrounding the clubhouse. This translated to a full assessment of all other club related facilities. These challenges are ones that are faced at many private clubs. In most cases the issue is directly related to a lack of room necessary to do what is desired. As years pass clubs add and expand amenities that push the limits of the available area. My charge and objective in most cases is to identify ways to insure the golf course is not negatively impacted as changes occur around it. The issues at Meadow Springs are not much different and at the core of the challenge has been to find additional area that will allow a better configuration of the various club amenities and uses.

Meadow Springs currently has a nice assortment of practice amenities. As designed, none are exceptional. Unlike many clubs, the range has adequate area and length for 98% of golfers. Design improvements will result in a fine facility that will provide the members an expanded assortment of practice routines and play simulations. Similarly, the chipping complex is situated on ample ground, but is poorly designed. Putting





practice is broken into 2 separate greens that are both undersized and contain awkward slopes within the surfaces. Pitching practice is possible only at the range.

Upon arrival, members and guests are treated to a very pleasant drive in along the tree lined entry lane. This immediately falls apart upon approach to the clubhouse with the area dominated by intrusive parking throughout. Awkward traffic patterns exist for both automobiles and carts as this area is traversed by both in undefined manners. This also results in a disconnect in the golf at hole 10 tees and again after the 18th. Recommendations will center on creating better segregation of the uses, both physically and visually.

Bringing it All Together -

Considering the above points, this master plan document includes recommendations that will achieve the following design enhancement objectives:

- 1. Instill specific styling and character in the enhancement of the course features.
- 2. Identify and redesign the weakest of the course features.
- 3. Add more golfing interest and strategy to the round with tee adjustments and bunker improvements.
- 4. Enhance course aesthetics by; creating greater contrast and definition between the areas of play; the use of trees to screen off adjacent properties and to help frame views; and improved shorelines at each lake.
- 5. Expand yardage distribution throughout all tees for all levels of players.
- 6. Design recommendations to enhance the non-golf areas of the club as part of the overall member experience.

Important recommendations geared towards responsible asset management will focus on:

- 1. Identify timely replacement and renovation requirements of course infrastructure and components based on industry standard life-cycles.
- 2. Recommend upgrade of and changes to materials, features and components that currently do not meet the expectations of today's golfer or the standards of today's game.

With the health of the club, there is a sense of opportunity for progress at Meadow Springs Country Club. The club is in a good position to not only maintain, but strengthen its standing within the market with its ability to provide diverse and useful





club amenities that are current. With that said, after the membership the greatest and most important asset of any private club is the golf course. The membership has invested in the golf course in the recent past. They are also providing new resources to maintain the course to a higher standard. This has put us in the good position of being able to focus on refinements and enhancements to the golf course that will have direct positive impact on the golfing experience for all members. These enhancements, when implemented will not simply help Meadow Springs Country Club maintain its position in the market, they will serve to raise the bar and help the club continue to grow and strive for excellence in the future. This is an exciting time at Meadow Springs Country Club and I am proud to be part of it.





General Recommendations

Tees

Having been designed by a professional Golf Course Architect in the 70's the tees have generally served the course well. The modifications and additions that have been made through the years to provide new yardages for a broader range of players have also been well done. With that said, and with the passing of time there remains considerable room for improvement. Some tees are falling off at the edges and are in need of leveling. At several holes tees are not properly aligned or their shape is difficult to define with consideration to the surrounding grades or forms. Relationships to adjacent paths are in some areas awkward. Most apparent at many holes are the poor sight lines caused by tees that are either too high or too low.

These issues combined with opportunities that have been identified to provide greater diversity in yardage and tee set-up, suggest renovation of the teeing areas throughout the golf course. In that effort the opportunity arises to instill a more consistent style and character from hole to hole in these key features of the golf course.

Many tees are identified for expansion in order to provide a broad range of daily yardage options. Some are widened while others are elongated. With new tees of this configuration, the course will be able to be set-up up to the maximum number of yardages and at a variety of distances to par 3's as well as a range of distances to bunkers within the landing areas at par 4's and 5's. With the expanded and added tees, new yardages will also be provided at the forward distances to provide greater options for the Gold and Bronze courses that currently do not exist.

Key to tee work on this type of property is that the elevations of the tee tops be established that insure sight lines are maintained over each tee and a good view down the hole is achieved. This will also result in gentle slopes and banks surrounding the tees helping them appear fitting and natural within each area. In some areas, cart paths will require re-routing to accommodate correct tee configuration or location. All tee surfaces are laser leveled and pitched correctly for proper drainage. Per the master plan, teeing area is increased by 30% and now reaches a standard of acceptable area that is better capable of handling traffic wear.

Bunkers

While the greens are the soul of the course, the bunkers give it spirit. Three aspects of bunkering are addressed in a master plan, bunker positioning, bunker structure, and





bunker styling. Having received little work over the years, the structure of the bunkers is poor and they currently do not suggest interesting character or exhibit a particular identifiable style. Because of their state, playability also differs from bunker to bunker.

While the location of many of the bunkers on the golf course is generally sound, there remains opportunity to improve their positioning from a strategic standpoint, particularly in the fairway. With the passing of time and the introduction of new high tech clubs and balls, original fairway bunker positioning has in many situations become obsolete. Many of the fairway bunkers were originally positioned with certain distances in mind and placed primarily in locations that better players would need to navigate. That demographic of player has seen the greatest return related to yardage among golfers and therefore many bunkers are no longer positioned where they hit the ball. Bunkers meant to effect strategic choice or demand accurate play at the highest level will be adjusted to do so again at today's game. This is a key trait of a well thought out design as it allows for greater challenges posed to the longer players while maintaining visual interest for the casual and average player. Resistance to scoring is improved.

Fairway bunker position relates directly to tee configuration. With re-configuration of tees and new options provided for yardage set-up, recommendations are made for the repositioning of some bunkers. This helps maintain or improve shot values for broadest range of players. Other bunkers are introduced to provide interest in areas that currently have little. Specific recommendations related to bunker adjustments can be found on the individual hole plans contained herein.

Bunkers not only provide strategic interest in the round, they are also a key contributor to style and character. The quality of the bunkers in design directly relates to the presentation of the course and the overall impression the golfer forms of the course. Throughout the holes existing bunkers have been identified for slight adjustments for a better relationship to the green, to improve their scale, and re-orient them on a more appropriate angle to the line of play. In some instances the grades and forms surrounding the bunkers require reshaping to provide more of a view of the bunker sand from afar.

As previously identified the existing bunkers have received very little work over the years and appear worn and in many cases are deteriorating. Many of the greenside bunkers have considerable build up of sand along the top edge from years of sand blast. For all intense purposes the bunkers have exceeded their life expectancy and are in need of complete renovation. Renovating the bunkers would include reshaping their form, adjusting their position, sand replacement, repair or addition of sub-drainage lines, removal of sand blast build-up on the edges, and instilling a new attractive style





to their design. Subgrade liner material should also be added in the re-building to help protect the costly sand from contamination.

Greens

Golfers and industry professional alike will agree that greens are the most important area of a golf course. Course are weighed on the quality of their greens. The finest courses all have very good if not great greens. While that greatness starts with design, many qualify them solely based on their speed, trueness and consistency. No other area of a golf course is more scrutinized, as it should be.

Because of their importance, greens require careful and thorough analysis in a master plan effort. All aspects are studied and examined to determine their status and if recommendations for changes might be warranted. The 3 primary areas that contribute to green quality are:

- 1. Physical composition of the subgrade soil structure, drainage, USGA vs push-up.
- 2. Surface quality turf type, condition and consistency
- 3. Overall design including the surface and as a complex.

Conclusions on the first two areas of study are spelled out in the infrastructure analysis section later in this document.

As previously stated, the greens at Meadow Springs do a good job of guarding par and against the posting of low scores in many rounds. Having been designed and built in the early 70's by a qualified Golf Course Architect, many of the greens exhibit the attributes of a well thought out green design. Aspects such as size, relief, form, orientation to line of play and segregation of pin areas are all evident as purposeful in their design.

Where the greens suffer at Meadow Springs is where those aspects are too extreme or were not properly executed when constructed. Areas of many of the surfaces are excessively sloped and create awkward and unfair situations for the golfer. What would otherwise be interesting pin locations are not possible in or even near these areas. Limiting pin locations also limits actual usable area and puts a burden on the areas that remain for use. Resulting pin positions that the members experience also become routine. The severe surface slopes also impact approach shots and can create very difficult and sometimes unfair situations negatively impacting playability,





especially for the higher handicap golfer. These area have been identified on each hole and recommendation made to reduce the steepness of the slopes as possible.

At several of the greens the percentage of surface that is too steep is considerable and new designs are warranted. These include the greens at holes 12 and 18. Others with a high percentage of excessive steep surface area have also have been identified for new designs including 3, 9, 16 and 17. Each of these greens present opportunity for significant improvement with a new design that I feel is warranted in my scope of recommendations.

Similar to recapturing pinnable areas with surface slope adjustments, expansion or modification of existing surfaces to create additional interesting pin locations and new strategic interest to the hole have been identified. Expansions are located at the back right at hole 6, and along the right side at hole 15 to compliment a new adjacent lake edge.

Opportunities exist to provide superior putting conditions with the introduction of new Bentgrass varieties. Standards for green surfaces continue to be raised with the introduction of new courses within the region. Examples of what is possible can be found in nearby markets and on courses with similar levels of expectations and new or recently re-built greens. While fine putting conditions and fast speeds can be achieved at times at Meadow Springs, new surfaces could allow those occasions to become the new standard and for greater portion of the season.

In addition to green surfaces, the composition and design of the areas surrounding the green (the green complex) are identified for enhancement. At most of the green complexes the relationship of the bunkers to the greens seems disconnected and can be improved. Most are identified to be pushed in tighter to the green edges or collars. This effort would include reshaping of the areas surrounding the greens and the removal of overbuilt slopes, allowing the bunkers to appear cut in under the raised elevation of the surfaces. These adjustments will also help highlight the interesting angles that many of the greens are set on. The result will be an overall better composition with improved playability for all golfers.

Green Approaches and Collars - Many of the greens are exhibiting build-up within the collar and at the approach from topdressing practices and accumulation of excessive sand over time. These are key areas and should be held to the same standards as the surfaces. Scope is to include cutting out all collars and approaches, removal of the extra material, smoothing of the grade and the installation of a new improved turf type throughout. In the process it is recommended that all collars be reduced in width to an industry accepted width of 24" – 30", depending on the mower to be used in these





areas. Improved and tightly maintained collars and approaches will have a positive impact on playability around the greens.

Fairways

The fairways are generally accommodating on each hole. Adjustments to mowing lines are identified on the master plan where changes will improve their form or improve playability. Some are adjusted to compliment tee realignment or green relocation. Others are simplified to convey a more classic line that is easier on the eye and less distracting when viewed from the tees or in the approach.

As stated earlier, the course overall lacks definition between areas. Looking down many of the holes from the tees the fairway limits are in many cases not obvious. Throughout the Master Plan effort the club has been planning to reduce the height of cut in the rough. I suggested similar for the fairways with the intent being help create more definition with a tighter more reflective height. Many private clubs in the region are mowing fairways at about ½" with some even shorter. This height provides superior playability with more consistent lies. Players also get the benefit of extended run-out on their drives. Grass types have impact on what is possible with height of cut and will need to be taken into consideration as the heights are lowed and a comfortable number for the grass and golfer is determined. It is recommended that over time the grasses types be upgraded through a planned out inter-seeding process. Newer varieties of bluegrass have been bred for lower mowing heights.

Areas have been identified that are challenged by poor drainage. Flat areas combined with poor soils appears to be at the root of the issues in these areas. Some are compounded by awkward drainage patterns or run-off from adjacent properties. Recent sub-drainage installation efforts have alleviated some of the issues over the years, but more is warranted. Areas include the approach at hole 1, across hole 3, and the right side of hole 7 among other smaller areas of other holes.

While additional sub-drainage will improve some of the areas, other areas can only be improved with grading and reshaping. To achieve proper drainage run-off on fairway and rough turf surfaces a slope percentage of 3% is required. Grading and reshaping has been identified for the approach on hole 1 and along the right of hole 7. Quality topsoil cover is also needed in those areas. Similar work had a positive impact on hole 16 when it was re-built several years ago. Small bumps and hollows within several of the fairways and surrounding greens also cut-off some of the drainage patterns and can be remedied within the work identified for those areas.





Grasses

The turfgrasses of a golf course dictate two key areas. Appearance and play. Both are primary points of consideration within this master plan. The current grasses at Meadow Springs are mostly evolved variations of the original plantings carried out when the various holes were constructed more than 40 years ago. They currently provide merely adequate playing surfaces, even when at their finest. As described under the Fairways section above, a strong impression of the course is that while it is generally green and lush throughout most of the season, there is little contrast between the fairways, roughs and greens when viewing the hole. This is a direct result of the types of grasses existing in each area. It is recommended that over a period of time, or as deemed appropriate by the club, that turf varieties be changed to help provide greater contrast at different heights that will provide better definition between areas of play.

The influence of the existing grasses on the quality of the playing surfaces is also an area of consideration. Though the Superintendent and his staff do a wonderful job of providing the members good playing conditions, "the deck is stacked" so to say with the grasses they are required to manage. New varieties of Bentgrasses used on greens can provide far superior putting conditions over a longer range of months. The ability to provide outstanding fairways is directly related to mowing height and turf type. Newer and improved varieties of bluegrasses or ryegrass are available that would be more suitable for fairways and roughs that would allow Meadow Springs to achieve standards within this region typically associated with finer clubs and courses

Turfgrass conversion and change can be a very invasive and time consuming process on an existing course when down time is unfavorable. Many clubs often choose not to upgrade their turf for this reason alone. Fortunately with each passing year new processes and materials are being brought to the market that allow for different approaches to be used that reduce the impact to play.

Level of expectation often dictates the decision to upgrade turf varieties. Currently within the local market there does not exist another private facility that establishes a higher bar with more current standards, but this may change. Wine Valley provides a glimpse of what is possible with today's newer turf types. In the coming years I will work with the golf course management on developing strategies for turf improvements that can be considered by the membership when deemed appropriate.





Lakes

Recommendations have been made for lake renovation as described in the infrastructure analysis based on their condition and age. Improvements include excavation to appropriate depths, sealing, and new attractive shorelines that do not erode over time.

Design enhancements and adjustments are also recommended for several of the lakes with the intent being to integrate them into each hole better and challenge the golfer in their strategic approach to the hole.

- 1. Hole 1 The lake expands right to extend along the inside of the fairway at the turn.
- 2. Hole 13 The right pond is reduced at the far right to allow fairway to extend around the right side. This provides more golfers more options how to play the hole. The impact of the lakes on the drive is maintained but shorter player are afforded a way to play the hole without having to carry the water.
- 3. Hole 15 The small pond is expanded over to the green and a nice stacked boulder wall is added along the green edge. This reinforces the risk reward aspect of this drivable par 4.
- 4. Hole 16 The 2nd lake is removed improve the drive by increasing options for the longer player off the tee with less of a penal result.
- 5. Hole 17 The lake form stays as it is but an improved shoreline and a stacked boulder wall at the left along the green will enhance the look of the hole significantly.
- 6. Hole 18 Requires deepening through dredging.

These enhancements will also add visual interest to and beauty to the holes

Though improvements were recently made to the 16^{th} hole that included renovation of the lake, issues related to water quality and resulting algae persist. Lake depth relates directly to water quality. Depths of 8' – 10' deep are required to maintain lower water temperatures and limit algae growth. The lakes at hole 16 is 4' – 5' deep only. A similar depth issue can be found at most of the lakes and is addressed in the infrastructure analysis.

Recommendations have been identified for adjustments at the 16th that should help improve conditions, but the eventual long term solution will be to deepen the lake. Based on information provided about the challenges encountered in the previous effort related to sub-surface conditions and hydrology of the area, this is likely a large and costly undertaking. Other practice can be employed to address the issue including





adjustments to the water flow pattern thru the lake, and the introduction of a properly designed aeration system to help turn the water. I will assist the club in determining optional solution in this regard as a specific project in the future.

While the primary purpose of the lake work is to improve the lakes and golf holes, an added benefit is the creation of fill material from the excavation process. Material is called for at several key areas of the golf course and could be provided by the lake work if carried out in conjunction with those projects requiring fill. An example is the need for fill material to improve the approach and fairway area at hole #1.

Meadow Springs Country Club									
Golf Course Areas Tally (SF)									
Hole	Te			way		kers	Green		
	Exist	Proposed	Γ΄.					ı	
1	4,792	6,134	74,739	74,740	4,458	1,200	6,063	6,063	
2	5,340	6,387	49,309	54,227	3,236	2,612	5,361	5,361	
3	3,125	4,929	51,079	56,244	1,167	4,030	4,997	5,474	
4	6,107	6,687	100,605	99,038	4,614	7,247	5,055	5,055	
5	4,390	6,166	58,147	64,053	0	0	6,460	6,460	
6	5,810	6,849	7,211	8,807	1,901	1,540	4,090	4,428	
7	7,756	6,425	60,400	65,280	1,976	6,176	5,830	5,830	
8	5,902	14,228	10,961	9,488	2,026	2,195	6,076	6,076	
9	5,795	7,710	39,101	47,322	5,072	3,742	4,843	5,464	
10	3,912	6,630	90,211	101,418	4,280	5,519	5,399	5,399	
11	4,870	5,134	61,408	70,690	4,715	5,206	4,479	4,479	
12	4,289	4,987	53,346	52,608	3,037	1,149	4,205	4,205	
13	5,228	4,979	48,318	67,245	2,164	1,679	4,380	4,380	
14	3,436	7,073	6,569	4,400	1,365	932	4,640	4,640	
15	5,969	5,850	48,988	48,379	760	1,004	5,261	5,870	
16	6,806	9,466	111,097	123,629	2,836	11,472	4,831	6,359	
17	13,621	23,807	5,729	1,256	2,710	3,938	6,546	9,159	
18	8,815	9,490	67,630	70,444	3,577	6,298	6,646	6,474	
Total	105,963	142,931	944,848	1,019,268	49,894	65,939	95,162	101,176	
Ave	5,887	7,941	52,492	56,626	2,772	3,663	5,287	5620.889	
Range Tee	ee 37768 24367								
Putt Green							5820	9000	
Chip Green							7393	14436	

[~] American Society of Golf Course Architects ~





Yardage and Par

One of the key areas of focus during the effort was the careful examination of distribution of yardage and par. The end goal of the Master Plan is to provide the greatest amount of variety as possible within the round. Many of the finest golf courses contain a wonderful assortment of hole types and lengths. While overall yardage at Meadow Springs Country Club is sufficient, there remains the opportunity to insure excellent golf holes of varied yardage. The current distribution of holes suggests a decent variety of holes within each par category with consideration to an overall par of 72. (While reference is made in the recommendations here from the back tees, all tee positions have been studied and altered as appropriate.)

The par 3's have a good distribution of yardages and trend long with 3 of them at 190 yards or greater. Direction is limited to North and East only. They are positioned well within the round. Adjustments at the associated greens will help enhance or maintain playability and if rebuilt to the recommended design, hole 17 will cement it's claim as the courses signature hole. Adjustments are made in tee configuration to improve distances from the Bronze and Gold markers at holes 6 and 14. Considerable interest is being added to hole 6, 8, and 14 by widening the tees across the available area which results in new daily set-up options with varied angles. Hole 14 benefits greatly from added teeing area.

Par 4's are also well distributed and varied. Again, tee configuration is improved to create more equitable yardages for the Bronze and Gold tees. Other slight yardage changes are recommended throughout the course with tee improvements. Most holes are improved by the simple addition of new teeing area intended to provide new distances to fairway hazards. Adjustments and additions to fairway bunker coincide with these new yardage options. The short and drivable par 4 15th hole is an asset that will be fully realized by pulling the pond over to the green and increasing the risk-reward shot values on that hole. A majority of the great and dynamic short (drivable) par 4 holes are associated with hazards that must be properly weighed and negotiated or pay the price.

The par 5's are all of adequate length and related challenge for membership play. The current hole are all at least 530 yards so variety is introduced by shortening hole #10 to just over 500 yards from the back. Shortening the hole at the tees brings the creek crossing the hole into play for the longer players. Some may be tempted to attempt a carry over the creek on their drive depending on wind and their play of the day. This change adds strategic thinking and options of how to play the hole.





In each of the remaining par 5's, strategic elements are introduced or strengthened to add interest off the tee and again on the often undervalued 2nd shot. The lake on hole #1 is brought into play off the tee and also helps set-up the 2nd shot. Bunkering is added and adjusted on hole 4 and again at he 2nd landing area on the 10th to force the player to make more purposeful decisions in the shot selections. The 16th hole becomes more strategic with the filling in of the 2nd lake and introduction of fairway bunkers, providing more options off the tee with the desired 2nd shot in mind. A new green on that hole promotes the option of cutting the corner over the creek to the green that is redesigned to be more receptive of that shot selection when properly executed.

On each, playability is maintained with a conservative route, but those players will need to be more accurate on their 3rd in approach. Aesthetics will also take a huge leap on these holes with the newly introduced bunkering and water in more prominent locations.

Card of the Course											
		Bla	ck	Copper		Silver		Bronze		Gold	
Hole	Par	Exist	Prop	Exist	Prop	Exist	Prop	Exist	Prop	Exist	Prop
1	5	531	534	516	516	451	451	433	433	389	389
2	4	399	400	377	375	345	345	297	292	231	222
3	4	390	387	378	365	351	345	328	316	290	273
4	5	545	535	535	502	454	454	443	443	425	400
5	4	437	437	408	408	365	365	339	325	295	282
6	3	190	190	170	172	149	146	130	132	115	103
7	4	408	432	396	400	377	370	354	322	304	285
8	3	215	215	195	196	160	161	133	133	108	108
9	4	327	330	302	305	287	290	250	253	225	212
Out	36	3442	3460	3277	3239	2939	2927	2707	2649	2382	2274
10	5	555	505	533	493	482	450	452	408	441	377
11	4	399	401	376	371	353	346	323	322	293	270
12	4	379	375	365	352	350	322	332	290	297	263
13	4	423	422	399	397	371	370	342	335	303	304
14	3	167	165	146	146	133	132	123	118	108	107
15	4	316	322	308	300	280	277	268	250	246	218
16	5	590	590	555	555	512	500	479	462	421	423
17	3	233	230	194	194	130	167	105	124	83	102
18	4	449	445	383	379	359	355	308	304	253	269
In	36	3511	3455	3259	3187	2970	2919	2732	2613	2445	2333
Total	72	6953	6915	6536	6426	5909	5846	5439	5262	4827	4607

[~] American Society of Golf Course Architects ~





Character, Style, and Theme

At the core of great golf design, whether it is classic courses that have withstood the test of time or with modern greats, is style, theme, and character. While native landscapes, unique locations and memorable settings have a significant influence on the character of a course, other underlying design traits such as scale, contrast, texture and line also add to the depth of the design. These all lend to a sense of place and identity specific to the course when incorporated into the design of the features and elements of all 18 holes. An underlying sense of place, the personal relationship one has with it is a primary component of a successful country club environment, one that people will want to associate with and thus become members of.

The style and character of Meadow Springs is currently undefined. From the perched Clubhouse distant views combine with fields of grass and trees amongst adjacent development to dominate ones impression. In its current form, golf does not set itself apart from overall areas of green grass. Within all recommendations made, an underlying agenda will be the incorporation of specific attributes and stylings intended to strengthen the character and aesthetics of the golf course.

To insure an overriding theme and style to the course, individual features must have specific character, yet relate to each other seamlessly. When the features and elements of a golf course are designed and used well, a properly composed presentation results. Good composition is a trait of design that is found on finer golf courses. When golf holes are put together purposely with properly scaled features, flowing and carefully considered lines, and good contrast and texture, a composition results that stimulates the golfers senses as they make their way through the round.

Currently the course bunkering conveys little in the way of a consistent theme or identifiable character. Newly crafted bunkering adjusted in their relationship to the greens and properly oriented in the fairway will dramatically enhance the look of many of the holes. When tees are reconstructed throughout the course with a consistent form and configuration, golfers will experience a sense of timeless formality and old world charm as they step onto the tees. Adjusting the fairway cut shapes and lines to a simpler form will provide better definition while accentuating the direction of play and dog-legs. With these adjustments, the current style and character of the course will become more prevalent and the golf course of Meadow Springs Country Club more uniquely identifiable.

In many cases simplification of or paying greater attention to details of other aspects of the course will help strengthen character and style. A simple small palette of tree varieties is better than a busy combination. Signage at country clubs is typically over-





done where in many instances it really may not even be needed. Understated elegance is timeless and far more appealing in the country club environment than busy and loud attention grabbing ornamentation or accessorizing. Accessories such as benches, flags, ball washers, tee markers and similar should whenever possible be unique to the property.

Trees

With a strong impact on style and character, trees are key contributors to the golfing experience. Their existence or lack thereof determines play as well as aesthetics of the golf holes. Golf courses in general either have no trees, were routed through or among existing trees, or have had trees planted throughout. With the exception of a few native areas remaining, Meadow Springs contains planted trees. After 40 years many of those trees have matured and some no longer exist. Trees have also been planted at various times and their impact has yet to be fully realized. As with most planted courses, some trees are simply not worthy.

With the golf holes routed through adjacent housing, trees are an integral part of the course. Along many of the holes the trees screen the adjacent property from view and help contain or frame the golf. They can also help identify the direction a hole turns and suggest the limits of fairways. Where trees are missing but otherwise would help enhance the golf hole, new trees are recommended. An example includes the outside of hole 3 to screen the condos that far too prominent in the backdrop of the dogleg. Another is behind the 4th green where screening the condo's across the street with a backdrop of trees beyond the green would greatly enhance the beauty of the hole.

In addition to tree location it is important to identify a tree palette to be used for future planting. After 40 years it should be easy to identify trees that do well at Meadow Springs and that compliment golf. Not all trees work well on a golf course so the palette should be carefully considered and consist of several varieties considered "foundation" or "core" trees. Other trees on the list can be used in accent and or for specific purposes. Some being evergreen where appropriate and other being deciduous where winter sun is preferred.

Cart Paths

Cart paths are an unfortunate reality in today's game. Many courses that were originally designed without carts as a consideration are now greatly affected by the





existence of the paths. Playability and visual character are often affected the most with maintenance requirements increasing as paths fall into a state of deterioration.

Fortunately the design of Meadow Springs is new enough that paths were apparently incorporated at tees and greens from the onset. With that said, many sections of the existing paths are too close to features and impact play. The paths throughout the course are far too close to the greens and associated areas of play, resulting in traffic wear on the turf and potentially bad bounces in these key areas. At several teeing areas paths run directly ahead of the tees and have a negative impact on the view up or down the hole. At others the proximity to the intended tee is poor. In all of these cases playability and visual concerns have been addressed by re-routing sections of the paths to more appropriate alignments.

In some instances path are re-routed in entirely new locations. Path are flipped to the opposite side of the hole at 3, 6, 10, 11, 12, and 18. A new path is introduced at the right tees on hole 18 which should help promote the use of those tees on a more routine basis.

The existing asphalt paths are at the end of their life cycle and new paving is needed throughout. It is recommended that all new paths be concrete and contain curbing where appropriate for traffic control at tees and greens. Concrete paths are the current industry standard and suggest quality. They are more permanent and will require considerably less maintenance throughout the future. In several areas concrete paths can also be used to catch and divert run-off from the slopes above, keeping the water off the course and improving conditions in these generally high traffic areas of tees and greens.

Club Related Facilities

Of particular interest to the club was to determine what might be possible to enhance the areas surrounding the clubhouse and the club entry experience. These areas are often overlooked and undervalued when master planning course improvements, but are as important to the overall member experience as are the golf holes. Practice amenities, outside services, cart traffic patterns, parking and vehicle access, the club entry, and all other uses or amenities of the club are considered in the analysis and resulting recommendations.

In addition to the various club related amenities this effort includes improving the clubhouse interface. By definition, the interface is the area adjacent to the clubhouse that ties into the golf. Golf elements within the interface typically include the 1st and 10th tees, 9th and 18th green, practice putting greens, outside services and all related





pathways and access. Additional areas might include the practice range and other similar practice amenities when possible. Every golfer, customer, or in this case member experiences or views this interface area and therefore it should always be considered a high priority for enhancement.

When members and guests of the club enter the club property at Bellerive and drive down the attractive tree lined lane the hope is that they realize they have entered a very specific place – a sense of arrival. Traffic patterns should be logical and not confusing. Views along the route should be attractive and provide glimpses of what is to come. The next experience should be of leaving the car behind (parking it) and entering the experience on foot as you transition into the club facilities and interface area to join in on those activities.

In the planning of the area the intention is to reduce the conflicts between automobiles and the users. In its current configuration there is far too much interaction between the two users. Cars are parked all over the place, along the entry road and adjacent to the practice facilities resulting in a busy, distracting center of activity. The overall area is tight and in general there are too many things trying to take place in close proximity to the clubhouse.

Recommendations for improving these areas are based on the availability of new area. The shortening of the 10th hole at the tees provides good space in close proximity to the clubhouse. Addition area can also be gained by removing the underutilized tennis courts. The creation of more area adjacent to the clubhouse serves to reconfigure the practice amenities that are currently undersized and poorly distributed. These are also aesthetically pleasing features that enhance the grounds when well-conceived.

Other improvements that are possible when the area is reconfigured include an enhanced and dedicated clubhouse drop-off entry area, expanded cart staging areas that can serve large events more effectively, and enhanced landscape throughout. Outside services for golfers and a bag drop are also possible. In each concept parking areas are more segregated from the "post parking" activities and hidden better from view from the clubhouse and golf areas. The additional goal of increasing parking spaces has also been achieved.

Note: Recommendations for clubhouse facilities and area improvement includes the removal of the existing Tennis Courts from the offerings at Meadow Springs. This recommendation is made with the belief that it is better to do a select few things better than many things poorly when space is in question. Any decision to remove tennis must be made by club leadership solely based on their business model programming plan for the club.





Practice Amenities

Among the more fortunate situations at Meadow Springs Country Club is the existence of suitable area for the practice range. More often than not this is not the case at many private clubs and drastic measures are often needed to find suitable area. With less and less time available for the game more golfers are turning to these practice facilities for their golf experience. This puts greater value on the range area as an amenity of a club membership.

Recommendations have been made for enhancements within the range including the addition of several realistic target greens and fairway area to simulate on course conditions and scenarios. The range area is regraded to focus the shots into the middle of the facility. Additional small target are also incorporated for accuracy and distance control practice routines and feedback.

The existing range tee is of good size but much of it is not useful or efficient. The artificial turf area at the rear of the tee is undersized. The new design reduces the overall tee area but provide a more efficient design to maximize the entire tee. To provide a maximum number of permanent tee stations across the rear of the tee, the back edge is moved forward to where the width is greater. 25 artificial turf hitting stations result.

The existing chipping complex adjacent to Hole 1 tees outside the pro shop is poorly designed and a good portion of the green is not useful for quality practice. A new design expands the green and provides additional and varied chipping options surrounding the surface. A putting course can also be incorporated into the design of the green to be used for fun events when desired at the club.

Putting practice is currently spread out between 2 undersized and poorly contoured greens. These are removed in favor of a new 9,000 square foot practice green located at the front of the clubhouse across from the chipping complex. In the event the additional area is not made available, other opportunities do exist for improvements to the putting greens. A new single green that would be of size to accommodate the needs of the club could be constructed adjacent to the chipping complex. The chipping complex would be reduced to provide suitable area for putting green use.

A new practice amenity is added in the form of a pitching practice complex. Suitable area was identified in the open space along the route between the 3rd green and hole 4 tees. This facility is removed from the clubhouse, but as a private club and many members having their own personal carts, traversing the course down the 9th or 8th hole





is easily done by those looking to spend some time working on their short game. The area includes a sprawling green with multiple designated pin areas. Shots of up to 100 yards can be played into the green from the south and up to 60 yards from the west side. Several practice bunkers are incorporated including one 65 yards from the green allowing members to practice one of the hardest shots in the game.

Miscellaneous

Street Crossings – Golfers cross the busy Leslie Rd twice in the round. When the course first opened, Leslie was no more than an afterthought. Over time with new surrounding development Leslie has become a main feeder to a considerable area and traffic is at times very heavy and fast paced. This has created a safety conflict between members and vehicles at the crossing locations.

Concepts for an underpass or overpass to help the situation appear to be beyond practical. While not professionally qualified to make recommendations for solutions based on street and traffic engineering, I can make recommendations that might put the golfer in better position prior to the crossing. At each crossing a new path routing is identified that takes carts and golfer along Leslie Road for a distance prior to turning and crossing. This will give drivers of autos and cart the opportunity to see each other before the cart turns to cross the street. In addition it is recommended that the club continue to work with City Traffic engineers on solution to further mitigate the conflict.

Maintenance Area – The maintenance Area was rebuilt in 2005 and should serve the department for years to come. Deficiencies are apparent in the yard and the facility is not fully fenced. Fencing would provide additional safety, security and screening. In addition to fencing to screen the activity and unattractive materials and equipment, trees and shrubs should be added on both the north side along hole 8 green and on the South for Hole 10.

Pool - Plans have been in the works for some time now for a project at the Pool. I have reviewed the plans and they seem to make sense for the club. Many clubs are investing in their pool areas and have gotten great returns. Pools provide an activity that most members can take advantage of and compliments food and beverage operations better than other activities such as Tennis.





Entry Monument/Branding – The entry sign at Bellerive should be upgraded. Materials and composition speak to a time past and are not commensurate with a private club such as Meadow Springs. An understated monument built with quality materials and professionally designed would best compliment the entry experience.

In addition, the club logo is in need of updating.





Golf Course Assets, Infrastructure and Components Life Cycle Analysis and Description

The second area of analysis within the master plan is the assessment of the existing course infrastructure and components. As the club's primary asset, the golf course requires timely upgrades, replacement and repairs beyond standard maintenance over a period of time. A golf course can't simply be maintained and played, though many are and eventually conditions start deteriorating. Similar to asset management of other business facilities or holdings, a golf course is comprised of various structures, components and technology that have a specific life cycle. These cycles can and should be mapped and projected to be used within an overall asset management plan for the club.

General Description

Golf courses are composed of features, structures, components and materials that over time may become worn out and or obsolete. While few of the things that make up a golf course are mechanical in nature, the parts and pieces they do have are both used frequently by golfers and subjected to Mother Nature and all she brings to bear over time. Golf courses are a sensitive and at times a fragile landscape that are tread upon, even when they probably shouldn't be. Maintenance routines are practiced routinely in an effort to keep up, but also cause stresses that eventually add up. Sometimes worn out and aged areas or features are not obvious because the deterioration occurs slowly over long periods of time. Because they are not mechanical, failure is not always obvious. Sometimes in their aged state, areas do suddenly give out and with it comes the harsh reality that the signs and evidence were actually there, but maybe brushed aside in favor of not disturbing the golfer of the day.

In general the golf industry has done a poor job of maintaining assets, starting with the golf courses. Operations around the country wait far too long before addressing issues and the golf course often falls into a state of disrepair. The proverbial can is often kicked, and kicked again. Because of their large scale, golf course repairs and renovation are most often costly, both financially and to play. In many cases, facilities just don't have the capital and resources necessary to make the improvements necessary to stay viable within the marketplace. Nor can they close down their business for extended periods of time.

Many challenges can be met and most often headed off before things get too far. All components or features of a golf course have designated life spans that can be mapped





and calculated for each facility. Life spans differ between each facility depending on location and to some extent numbers of rounds. Courses in climates that allow golf nearly year round have areas that will age much quicker than seasonal courses. Extreme climates also take a toll on aspects of the golf course. High heat, wind, and extreme cold have significant influence on the date range of the life cycles.

Meadow Springs CC

Meadow Springs falls into the middle of most life cycle categories. The weather is not too extreme in either direction, but there is freezing and weeks of temperatures above 100° . The course receives a high number of rounds and stays open during some of the colder and hotter days when stresses from play, carts and maintenance is greater.

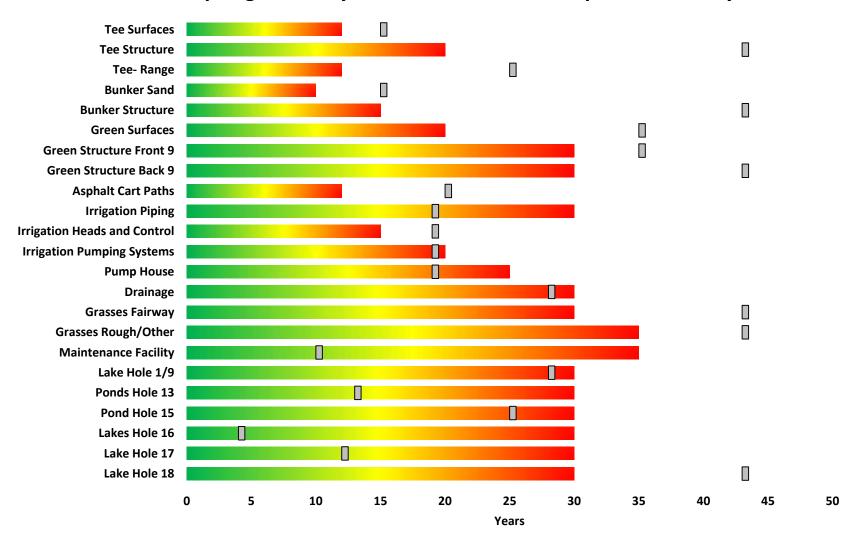
As illustrated in the chart on the next page, many of the features and components of the golf course at the Club are aged and near or beyond anticipated life spans. Many spans can be extended through maintenance practices and initial problems that arise can be addressed with smaller more manageable projects. Small projects of tee leveling, drainage and addition of new bunker sand that the club has undertaken in recent years have taken care of obvious and pressing issues, but have also falsely extended the life cycles of those elements in the eyes of too many.

The chart on the following page illustrates the life cycle status of each of Meadow Springs Country Club's course components. The small gray indicator represents the current age of the specific component. The color bars representing the typical lifecycle duration go from green - representing best condition, to red - representing deteriorating condition.





Meadow Springs Country Club - Golf Course Components Life Cycle



[~] American Society of Golf Course Architects ~





Area-by-Area Analysis and Descriptions

Tees

Tees on the golf course age in numerous ways. In the short term, tee surfaces become unlevel and inconsistent from the physical impact of play and maintenance as well as the symptoms of winter freeze and thaw or similar environmental impacts over time. Leveling of surfaces is often done routinely at par 3's or other holes where irons are more often used being done every 5 to 7 years.

In the long term tee slopes and banks can settle, erode down or become compacted and uneven from long term use. Combined with the short term effects, the result can be "hilltop" tees with reduced overall area and improper alignment. When at this state, simple re-leveling efforts are not adequate.

In addition, superior construction techniques, newer construction materials and higher expectations have raised current standards. Grasses that allow lowering mowing heights and laser leveling of surfaces are an example of this.

While numerous tees would be improved with leveling there are more that are simply misaligned. Overall there is adequate surface area on most holes. Hole 14 suffers the most as a short par 3 with shaded tees.

Tee configuration and Yardage Distribution -

Over the past 30 years the variety and number of golfers playing the game has greatly increased. For many older courses this results in the need for more teeing area that is properly distributed at a greater range of yardages. Proper tee distribution provides appropriate playability for all members and improved speed of play. In addition, advances in club and ball technology have resulted in the need for additional yardage to be added to the back tee positions in an effort to maintain the intended challenge. Because of this change in golf demographics and numbers, average tee size that is recommended to best distribute wear and tear has increased by approximately 30%.

New in 1972, Meadow Springs was on the cutting edge of golf design, at the time when professional golf course architects were including more tees for more types of golfers within their designs. Therefore most holes have numerous tees already that are well thought out. Where previously lacking, tees have been added over time, especially at the forward yardages over the last 6 years. By no means do all the holes have correct tee





distribution, or adequate area, but compared to other courses, Meadow Springs is not too far off. A new scorecard will be provided with the masterplan that identifies where additional tees are suggested to provide more hole yardage set-up options with new or expanded tees.

Typical Tee Surface Life Cycle - 7 - 12 years

Current Tee Surface Age – Varied – 43 years (Some individual tees rebuilt in the last 5 to 7 years.)

Current Tee Average Size – 5,430 Recommended Average Tee Size – 5,800 sf

Typical Tee structural Life cycle – 20 years Current Age = 43 years

Bunkers

Because of their nature, bunkers can age swiftly and show wear that makes them nearly impossible to prepare and present for play. Maintenance levels and practices as well as style have an influence on bunker life cycle. Over a period of time sand quality is diminished from dirt contamination from the subgrade and along eroding edges. Debris and dust blows in over time also degrading the sand quality. Greenside bunkers also suffer from sand blast build-up on the green side that then impacts the tie-in and green surface grades. Higher and steeper sand faces result. In some cases bunkers may contain too much sand that has built up through sand addition or "sweetening" efforts. Excessive sand depth raises bunker floor heights and makes it difficult to provide consistent conditions with fried egg lies more prevalent. Sub-drainage pipes may require cleaning to again properly convey drainage from within the bunkers. All these items impact playability and make it difficult to maintain bunkers to a consistent condition over time.

As with other elements, new construction practices and materials provide upgrade opportunities at older bunkers. Current design standards include subgrade lining materials that have evolved to a point that can now be used. Liners will help preserve new sand for a longer period of time and will greatly reduce erosion and related repair and labor. A longer life span results.





Similar to most clubs that have identified bunkers as a problem area, concerns at Meadow Springs center on inconsistency. As with all course maintenance practices, consistency is what is strived for with bunkers. Reality is, even when rebuilt to consistent standards and specification, bunkers will never be consistent from bunker to bunker or hole to hole. Sun angles, shade, and irrigation create differing conditions throughout a golf course (and differ throughout the year) and nowhere more than bunkers is this evidenced. Fortunately, this condition is at the roots of the game as golfers need to be able to weigh conditions, seasons and time of day in their approach to their round. Improvements should be made to allow golfers the ability to adapt reliably to these types of impacts as experienced in their round. Consistencies must center on sand depth, quality and age, floor shape and slope, and grade relationships to adjacent features. With proper drainage, members will be confident bunkers will dry in an appropriate time frame and not remain too wet.

The impact of Time on Bunker Positioning -

In addition to the deterioration of bunkers over time, the original intent of bunker positioning has been challenged with the passing of time. Where bunkers were placed to impact play strategically, those positions may no longer be valid. Ball and club design has changed significantly since 1972 and different golfers now hit the ball different yardages, thus rendering many bunkers obsolete.

Typical Bunker Sand Life Cycle - 5 - 10 years

Current Sand Age - Old, with new sand added at several holes in the last 8 years.

Typical Bunker Structure Life Cycle - 10 – 15 years Current Bunker Age - 43 years

Greens

The effect of green age is assessed in several ways. Today's green speeds have greatly impacted standards for greens in turf type and surface slope percentages within the surface. New and improved grass types have been introduced over time with multiple generations of grasses now having occurred. Older courses that contain original grass varieties are at a disadvantage with many being contaminated with undesirable grasses that are difficult and inefficient to maintain (Poa). While suitable in some specific





locations and instances, these conditions result in inconsistent and lesser quality putting conditions on most courses.

Older greens were designed with consideration to the slower green speeds of the day. Many therefore now have large portions of their surfaces that are too steep for fair and proper pin positions. In addition, over time excessive build-up and layering of topdressing or from adjacent bunker blasts can negatively impact the ability of greens to properly drain or provide a suitable growing profile. As with bunkers, the sub-drainage piping (if there is sub-drainage) can become blocked. The USGA has established recommended specifications for putting green construction that most current construction follows to insure proper and consistent green structure. In many cases, rebuilding the greens to these recommended specifications will be an improvement over what currently exists.

The greens at Meadow Springs are general considered of fine quality and overall the members like what they have. Current maintenance practices are resulting in excellent condition surfaces with consideration to the grass types which is dominated by Poa. The climate of Richland is excellent for Poa and more so for Bentgrass and excellent conditions should be the norm. The high percentage of Poa does expose the club to potential issues and inconsistencies in putting conditions and speeds depending on the environmental influences at any given time. While there should be no urgency to upgrade to current higher quality grass types (Bentgrass), re-surfacing should be on the radar.

Of greater negative impact to play at the greens at Meadow Springs is the high percentage of unusable areas within each surface due to excessive slope. Good portions of many greens have slopes that do not allow pins to be placed in those areas. Many of those areas would otherwise provide very good and interesting pin locations. Several greens go beyond that and are mostly too sloped including those at holes 12 and 18.

Typical Green Life Cycle - 15 – 30 years

Current Green Age - 35 – 43 years





Cart Paths

Because of their intended use, cart paths wear at standard rates that are then compounded by the frequent irrigating of the course. Asphalt has a much shorter life expectancy than concrete but can typically be re-surfaced once to acceptable condition. With the overall increase in rounds and broader golfer types, cart use has dramatically increased over time. Older course are often challenged with the need to add or extend older paths to properly carry this additional traffic. Asphalt paths are difficult to maintain at a high level of expectation adjacent to Tees and Greens and generally are not conducive to carrying drainage away from high traffic use areas in the way concrete can when properly designed. Proper location, relationships and routing is paramount to successful path installation. Keep in mind that paths are also provided for maintenance vehicle access.

Meadow Spring's paths are among its weakest features and require attention. Many are deteriorating and have already been overlaid over the years. Many are improperly positioned and are either causing undue wear patterns in areas or are too visible from tees and other key vantage points. Some do not extend out enough towards the fairways as they exit tees and many start too late at the greens. Some are far too close to greens. While provided for convenience sake, paths should not be routed such that they impact the visual quality or playability of the golf course whenever possible. In addition, where traffic containment has been deemed necessary (along tees and turn-arounds etc) other inconsistent materials have been used for curbing that have resulted in inconsistent appearance and is difficult to maintain. Many paths, when properly constructed could help drainage issues in the area.

New concrete paths from green through tees are recommended moving forward. Some paths will be provided to help facilitate the high percentage of private cart access through the course from adjacent homes in the surrounding neighborhood.

Typical Asphalt Path Life Cycle - 10 years

Current Asphalt - 20+ varied

Irrigation System

The life cycle of an irrigation system can vary depending on the region, climate, water quality, irrigation practices and quality of original design and install. Typically in the



years



northwest we see the average life cycle of an irrigation system to be between 25 - 35 years. Within that timeframe, mechanical and electrical components, such as heads and control systems will need replaced once with computers used by the control system more frequently. If properly installed and designed, buried PVC pipe will last 25-35 years.

Generally over the last 15 years irrigation practices have changed to meet the demand for better course playability. A 10 to 12 hour water window (the duration of time that is required to get through the watering of the entire course each day) used to be acceptable where today the standard is now 6 to 8 hours. A shorter water window allows for better maintenance practices and a reduction in wet conditions in the morning that golfers appreciate. Shorter water windows increase irrigation demand on the golf course at any one time and require larger mainline pipe and pumping systems to distribute that additional higher volume of flow.

The spacing between adjacent sprinkler heads has a direct correlation to consistent turf conditions. 75′ wide spacing that was an acceptable standard in the region 25 years ago is no longer standard, particularly with the finer facilities. Current systems are designed with sprinklers at 60′ – 65′ apart. This also reduces water waste with improved irrigation water distribution uniformity. As water regulations tighten, systems with tighter spacing will be best suited to meet restrictions and reduce water costs. New pumping systems are more efficient users of power than older systems and financial returns on those efficiencies can be significant. Shorter watering windows may also allow a facility to contract a power use agreement with the local power providers in a shorter window and at the times they provide credit for.

With the irrigation system at Meadow Springs having been replaced in 1996 the engineering and design of the system is generally of better quality. Being nearly 20 years old though the exposed and mechanical components often associated with the midlifecycle replacement and upgrade are in need of attention in order to maintain the system at full intended operating standards. The club has already begun replacing and upgrading the controllers and related computer systems. Sprinklers heads should also be on the horizon.

Typical Irrigation Control and Head Life Cycle - 15 years Current Age - 19 years

Typical PVC Pipe Life Cycle - 30 years Current Age - 19





Typical Pump Station Life Cycle -

15 years w/ intermediate pump and motor replacements

Current Pumping Age replacement

19 years with recent VFD

Drainage Components

Drainage components life cycle varies greatly. While HDPE and PVC pipes that have been properly installed may simply need occasional cleaning or clearing through a long term life, corrugated metal pipes that were used most frequently in the past require replacement earlier. Grate inlets used on the surface within turf also require replacement or renovation sooner due to their exposure. Areas that are improperly drained result in wet and poor turf conditions that when left unaddressed can become larger problems. On many courses, adjacent property uses and development require additional on-course drainage to be installed where previously not necessary.

Other drainage issues are also related to inadequate surface slope. In rain or heavy irrigation events, excessive water moves across the surface to low points. For effective run-off of water in turf a minimum slope percentage of 3% is required. Proper golf area grading and shaping typically insures those percentages are achieved in all turf areas. Low areas and basins are created where surface water is then collected and pick-up by a drain inlet and pipe. Most drainage projects on golf courses are centered on the addition of drainage to improve playing conditions, but in many cases the surface slope must be improved to help direct run-off.

Meadow Springs has several key areas that are challenged by drainage. Original grading of the property by the developer has left several areas on the course with either poorly draining soils or inadequate surface slopes that can't properly convey drainage over turf to proper collection points. Turf surfaces must slope at a minimum of 3% for adequate runoff to occur. These types of challenges can be very complex and expensive to solve because they typically require re-grading of areas or the installation of extensive sub-drainage. Where these areas have significant impact on playability, those investments will prove to be beneficial and in most cases necessary to remedy the problem. The final leg of hole #1, right of hole 3 and hole 7 appear to have the most issues. Drainage entering the golf course from adjacent housing compounds these issues and in the case of hole 3 there are plans to address this to some extent.

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Otherwise, with limited precipitation, drainage requirements should be minimal. Small aspects such as standing water or slow moving surface patterns near high traffic areas can most often be addressed with cart path work. When rebuilt, bunkers will need to be drained. Throughout the course I have witnessed old and or damaged drainage inlets and structures that should be addressed over time with new and upgraded materials.

Typical Drainage Life Cycle -

Metal Pipes - 15 – 30 years

Surface inlets and grates - 10 – 15 years

Current Drainage Systems Age - Various

Grass Types

With the passing of time new grass types and varieties have been introduced for golf course applications. These new grasses have been developed to provide superior playing conditions often with reduced maintenance requirements and suited for specific regions and climates. Other advances in maintenance practices now allow in some cases the use of grasses previously not suited for certain applications. Grass types can also dictate play depending on its texture, need for irrigation and potential height of cut. Older courses typically contain a high percentage of the grasses originally planted with a varied amount of invasive species that have come in over a period of time. These invaders often create poor playing conditions and are difficult to eradicate without significant impact to play during removal. Selective herbicides are now being developed that can be considered.

Meadow Springs' grass types consist of varieties and types typically associated with course in the region with the associated dry and temperate climate. The combination of low humidity and moderate temperatures allows for the use of turf types that are conducive to quality golfing conditions including bentgrasses, bluegrass and ryegrass. Fescue grasses in specific applications for effect. These are only challenged by high winds that occur seasonally, water quality and poor soils in specific areas of the course.

From a course design and presentation standpoint the existing blend of ryegrass, bluegrass and poas do not lend to good definition between fairway and rough. New mowing heights currently being considered may prove to help provide greater definition, but





interseeding of newer and different varieties may also help over time. Green surface grasses were identified in the Section pertaining to greens above.

Typical Grass life Cycle - Varies

Current Grass Age - 43 years +/-

Lakes and Streams

Lake and stream banks erode over a period of time. In some natural settings instances this is acceptable. When these elements border maintained turf edges they need to be maintained and eventually re-established to insure a suitable appearance and integrity. Where required, lake sealing eventually requires re-sealing to insure water is not lost and proper water levels can be maintained. Lake filling requires pumping and water costs and should be done only as needed to keep those costs minimal. Shallow lakes need to be deepened to insure proper water temperatures which translates to cleaner and healthier water and reduced algae. Related lake engineered components and infrastructure require replacement as they age and lose function or to adapt to changing conditions or governing agency requirements.

Lakes at Meadow Springs are in need of improvement to make more presentable.

The lakes at hole 1 and 9 are too shallow, but are challenged by a high water table in the area. The rail tie bulkheads are in a state of disrepair and will need to be changed out soon.

The ponds on Hole 13 are generally deep enough but the shoreline is very unattractive and difficult to maintain and define in their eroded condition.

The Greenside pond at hole 15 also has aged bulkheads and should be deeper. A better relationship to the green edge would be suggested.

The large lake at hole 16 fairway recently underwent a major renovation in an effort to improve the golf hole it borders. Unfortunately the lake still poses challenges with extensive algae infestation primarily due to its lack of depth. A better upgraded shoreline would also be recommended. Water flow through the lake is too direct and stagnant areas are worsened. The 2nd lake on Hole 16 fairway has similar issues.





The lake on hole 17 would benefit from an improved shoreline treatment and surrounding transitional grades.

The large irrigation reservoir on hole 18 is very shallow and is often full of algae.

The issues with the lakes at Meadow Springs are significant issues that will need specific study and programs to address and to improve. At that time enhancements to their relationship to the golf holes can be made part of the process.

Typical Lake Life Cycle – 15 – 20 years

Current Lake Ages

Hole 1/9 - 28 years dredged and bulk heads added

Hole 13 - 13 years ago deepened

Hole 15 - 25 years bulkhead added

Hole 16 - 4 years

Hole 17 - 12 years ago expanded

Hole 18 - 43 years original with repaired areas

Course Accessories

An often overlooked component, course accessories including ball washers, benches, signage, drinking water stations and trash containers can have a significant impact on the presentation of the golf course. These elements should be assessed on a routine basis to insure they are in quality condition and are consistent throughout the course. These elements eventually wear out and should be replaced. Flagsticks, flags, practice green hole pins and range distance or target markers and flags also fall into this category as they also convey theme, and character while suggesting brand.

The accessories at Meadow Spring are generally okay but in some ways are too busy with too much "accessorizing". It is best to keep these thing minimal and understated at private clubs where often less is more. Tee hole informational signage is unnecessary at a





private club where members are aware of the details of their golf holes. These elements often simply add to maintenance.

Typical Life Cycle – Varies.

Maintenance Facility

Maintenance efficiency and levels are directly related to the quality of the facilities. An often forgotten asset, the maintenance facility is the center of control and activity from which the care and upkeep of the clubs single largest asset is conducted from. A dedication to those facilities typically suggests a similar dedication to the course. Labor cost and equipment maintenance and upkeep is effected by the effectiveness and efficiency of the facility. In some instances the facility is highly visible and should be enhanced accordingly. Most municipalities have increased regulatory requirements on these facilities and upgrades for safety and environmental requirements should be kept up with.

The maintenance building is fairly new at Meadow Springs having been built in 2005. Unfortunately it is too easily seen and needs screening with fencing and vegetation.

Typical Maintenance Facility Life Cycle - 40 years

Current Facility Age - 10 years

The time frames for the assets identified above are provided as generalizations. Many have smaller components or portions within their overall itemization that require intermediate attention or replacement. A complete line item breakdown of the course assets and their individual components is recommended for long term budget planning and forecasting.





Individual Hole and Facilities Recommendations Plans

(Print Version Only)





Implementation and Budget

The following is provided as a categorical breakdown of costs associated with the recommended scope of enhancements and asset management projects. Identified amounts are based solely on conceptual level detail and should not be used for actual construction projection and financial allocations or planning. They are simply meant to identify scales of costs for anticipated work. Industry standard and recent bid data pricing was used to generalize this estimate.

For purposes of this master plan effort, recommendations have been broken into several categories based on scale and priorities as suggested by the committee. They are as follows:

Small Scale Phased Projects -

Work to be carried out at specific features and areas of the golf course that can be completed in phases with consideration to available funds. It is anticipated these projects can be addressed over a period of time based on designated priority, desire or financial commitment. These projects are targeted with a long term goal of completion and related financial commitment over several years.

Example -	Year 1 -	Bunkers and Greens Holes 1-6	\$225,000
	Year 2 -	Bunkers and Greens Holes 7-12	\$284,000
	Year 3 -	Bunkers and Greens Holes 13-18	\$339,000
	Year 4 -	Cart Paths Holes 1-6	\$265,000
	Year 5 -	Cart Paths Holes 7-12	\$265,000
	Year 6 -	Cart Paths Holes 13-18	\$300,000
	Year 7 -	Practice Range Tee	\$69,000

Medium Scale Projects -





These projects are specific enhancement projects that require larger individual costs to complete and are unrelated to other work. These are primarily design oriented enhancements that can be addressed when desired and have little influence on other areas of work. They can be completed individually or, for better pricing, while other projects are occurring. These will have a temporary impact on play or use in their respective areas only. These are items that can be considered for yearly capital improvements without additional financial commitments from the members, or at a faster rate with a small temporary capital project monthly dues assessment. All work can also be completed with minimal disturbance to play.

Practice Range - \$395,000

Lakes at Holes 1, 13, 15 - \$365,000

Lake at Hole 17 - \$395,000

Pitching and Chipping Complexes - \$285,000

Large Scale Projects -

Projects that require a much larger financial commitment likely including assessments, loans and dues increases. They can be completed at any time as might be desired by the membership, but will have a larger impact on play when constructed including course closure for periods of time.

Clubhouse Entry and surrounding facilities - \$895,000

Renovation of tees, bunkers, paths and greens -

Front Nine - \$1.350,000

Back Nine - \$1,550,000

Remaining Projects - \$1,450,000 (Incl. Lakes, Range, Other Practice Areas)





Other Future Capital Projects -

Beyond the projects identified in the categories above, several important projects targeting course infrastructure and upgrades (asset management) need to be planned for. The irrigation system and related pump station are the largest pending capital assets that have a specific expiring life cycle that can be projected and budgeted for. Because of the scale and anticipated cost of these projects, funding sources are typically necessary.

Irrigation System Replacement 2030 -

\$2,350,000 (today's money)





Conclusion

At the core of each and every recommendation contained herein is the belief that Meadow Springs Country Club is to remain the members' club. By enlisting the services of a professional golf course architect club leadership has taken the first step towards securing the future of the club. Recent increases to the maintenance budget and procurement of new equipment also suggest a desire to raise the bar at Meadow Springs and to provide the members a better product. As with any asset, results are directly related to the condition and quality of the pieces that compose the product.

For the last 43 years the golf course has stood the test of time, primarily through the diligence and commitment of the membership and staff. This planning effort is a natural extension of that commitment as the opportunity arises to take things to the next level through timely replacement, renovation and upgrade to aged features and infrastructure. Combined with carefully planned and considered design enhancements, great value will be added to a membership at Meadow Springs Country Club. While some may look at any recommendations to alter the existing golf course to be subjective, the key is that each of the suggested enhancements have been thoroughly planned and mapped out by a professional Golf Course Architect in a manner conducive to a quality effort that will stand the test of time.

I am fortunate to have had the opportunity to assist the membership with this exciting next step in their commitment to the betterment of their club. With the carefully considered enhancements and improvements that have been recommended herein, Meadow Springs Country Club will not only cement its place in the marketplace, it will continue to be a special place for its membership for years and generations to come.





Attachments and Support Documents

Committee Master Plan Questionnaire Answers Summary

The following are the results from the committee member survey that was used to provide the golf course architect a general idea of how the golf course is viewed by the members. Results will not directly determine master plan components, but will help establish areas of specific interest for the effort. You may find the answers in some instances interesting.

Hole Rankings

The following charts identify the Master Plan committee member's ranking of the golf holes. Committee members were asked to provide their ranking of the golf holes from best to worst without consideration to condition or potential.

Color coding: Green = Good Yellow = Neutral Red = Bad

	Meadow Springs Country Club Committee Hole Ranking														
	Participant														
Hole	Α	В	С	D	Е	F	G	Н	1	J	K	L	М	Tot	Rank
1	6	5	2	4	8	2	5	2	1	1	1	14	14	65	1
2	8	15	12	13	9	4	13	8	18	15	10	13	16	154	16
3	18	17	7	8	13	15	15	9	17	2	11	12	3	147	14
4	12	11	17	14	12	8	11	10	16	5	4	15	17	152	15
5	4	2	18	3	2	3	4	1	2	8	13	1	7	68	2
6	10	10	11	11	15	16	17	17	13	18	7	9	12	166	18
7	16	16	8	18	5	5	2	4	4	5	4	15	18	120	7
8	2	8	16	9	10	14	14	12	6	9	6	4	13	123	9
9	14	18	3	2	14	18	10	13	8	10	3	17	1	131	11
10	9	9	14	5	11	10	6	3	15	4	17	18	11	132	12
11	3	1	13	12	3	7	16	6	11	12	14	2	15	115	6
12	11	4	4	15	4	12	3	7	12	3	15	5	9	104	4
13	5	3	10	16	6	6	8	18	10	13	16	6	6	123	8
14	7	6	15	9	18	17	18	16	14	17	8	10	2	157	17
15	15	14	5	10	16	9	12	15	9	14	2	8	4	133	13
16	1	12	6	1	1	1	1	14	3	6	12	7	5	70	3
17	17	7	1	6	17	13	7	11	5	16	18	3	8	129	10
18	13	13	9	7	7	11	9	5	7	7	5	9	10	112	5





	Hole Ranking - Best to Worst																
1	5	16	12	18	11	7	13	8	17	9	10	15	3	4	2	14	6

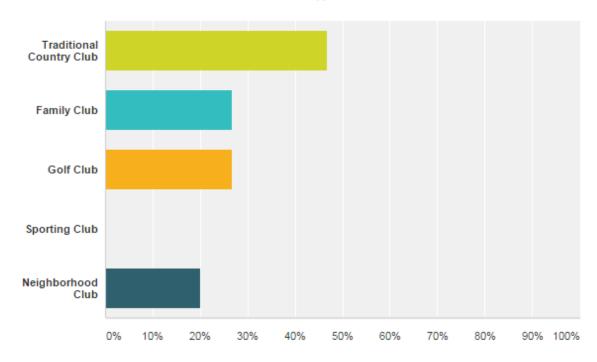
		Pa	ar 3's							Par 4	's						Par 5's	
Hole	6	8	14	17	2	3	5	7	9	11	12	13	15	18	1	4	10	16
Rank	18	9	17	10	16	14	2	7	11	6	4	8	13	5	1	15	12	3
Ave		1	3.50							7.91	-						10.00	





What type of Club is Meadow Springs Country Club to you?

Answered: 15 Skipped: 0



Answer Choices	Responses	~
▼ Traditional Country Club	46.67%	7
▼ Family Club	26.67%	4
▼ Golf Club	26.67%	4
▼ Sporting Club	0.00%	0
■ Neighborhood Club	20.00%	3
Total Respondents: 15		

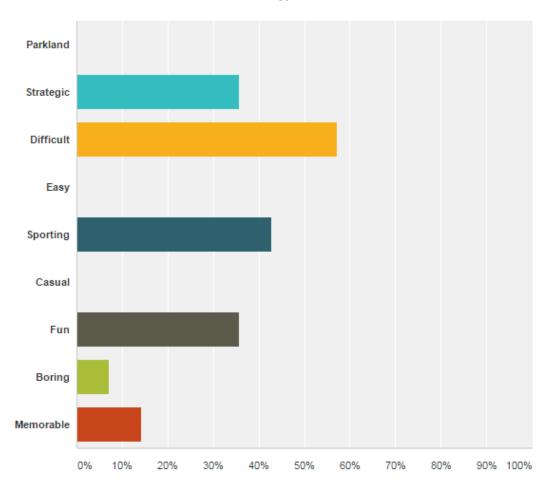
Comments (1)





Which of the following traits best describe the golf course?

Answered: 14 Skipped: 1



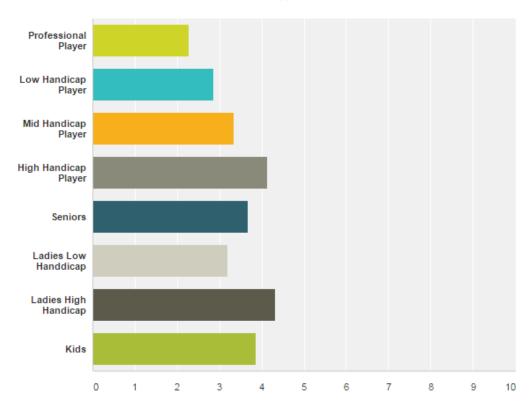
Answer Choices	Responses	~
Parkland	0.00%	0
▼ Strategic	35.71%	5
Difficult	57.14%	8
Easy	0.00%	0
Sporting	42.86%	6
Casual	0.00%	0
Fun	35.71%	5
Boring	7.14%	1
Memorable	14.29%	2





What is your impression of how the course plays for each golfer classification?

Answered: 15 Skipped: 0



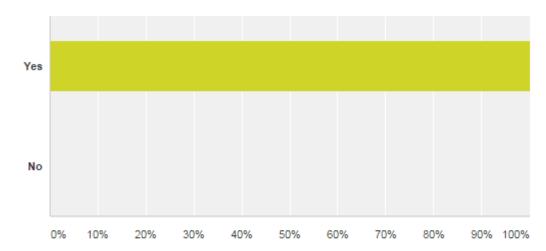
	~	Too Easy	A Bit Easy	Suitable Challenge	A Bit Difficult	Too Difficult	Total -	Weighted Average
~	Professional Player	26.67% 4	20.00% 3	53.33% 8	0.00% 0	0.00% 0	15	2.27
~	Low Handicap Player	0.00% O	13.33% 2	86.67% 13	0.00% 0	0.00% 0	15	2.87
~	Mid Handicap Player	0.00% O	0.00% O	66.67% 10	33.33% 5	0.00% 0	15	3.33
~	High Handicap Player	0.00% O	0.00% 0	7.14 % 1	71.43% 10	21.43 % 3	14	4.14
~	Seniors	0.00% 0	0.00% 0	33.33% 5	66.67% 10	0.00% 0	15	3.67
~	Ladies Low Handdicap	0.00% 0	0.00% 0	86.67% 13	6.67% 1	6.67% 1	15	3.20
~	Ladies High Handicap	0.00% 0	0.00% 0	6.67% 1	53.33% 8	40.00% 6	15	4.33
~	Kids	0.00% 0	0.00% 0	35.71% 5	42.86 % 6	21.43 % 3	14	3.86





Is speed of play favorable?

Answered: 15 Skipped: 0



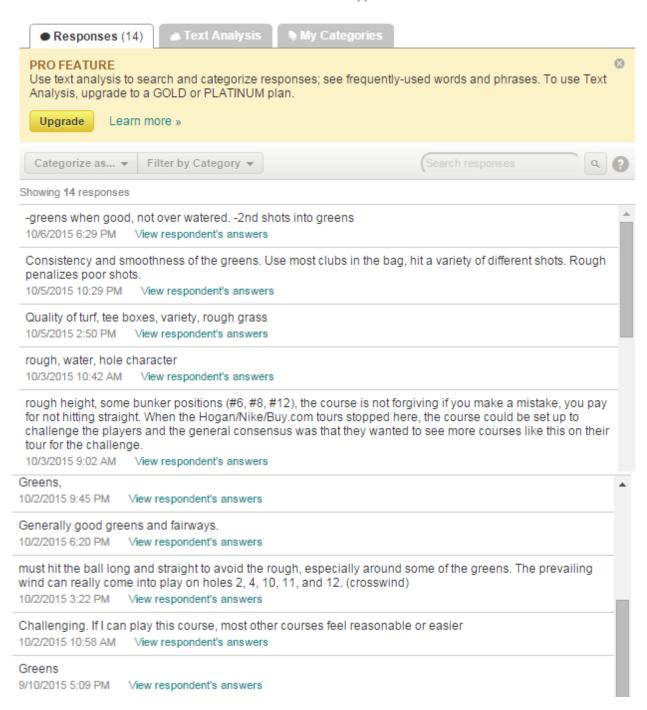
Answer Choices	Responses
→ Yes	100.00% 15
₩ No	0.00%
Total	15





What are the current strengths of the golf course.

Answered: 14 Skipped: 1







Have to hit the ball long and straight to avoid the rough. Good chipping ang putting skills are required.

9/9/2015 5:06 PM View respondent's answers

Challenging greens, park-like setting, layout flows well.

9/9/2015 4:35 PM View respondent's answers

Greens and tees

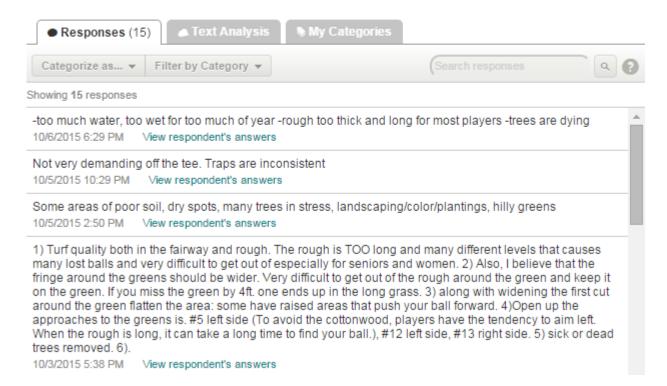
9/9/2015 4:29 PM View respondent's answers

Challenging course that requires strategic planning and accuracy to score well. Good speed of play and great greens when properly maintained.

9/9/2015 3:00 PM View respondent's answers

What are the current weaknesses of the golf course.

Answered: 15 Skipped: 0







placemetn of pins

10/3/2015 10:42 AM View respondent's answers

Condition of #3

10/3/2015 9:02 AM View respondent's answers

The large view blocking tree on the right side of 13!!

10/2/2015 9:45 PM View respondent's answers

Inconsistent sand traps; poor collars; 3rd fairway; pond scum

10/2/2015 6:20 PM View respondent's answers

sloped greens that limit fair placement of pins. the hump in front of the green on 13. lack of realistic chipping greens. lack of targets on driving range at spaced intervals.

10/2/2015 3:22 PM View respondent's answers

Some of the greens have so much slope as to be non fun or not very playable. Fairway issues during hot weather.

10/2/2015 10:58 AM View respondent's answers

Bunkers

9/10/2015 5:09 PM View respondent's answers

Some greens are too sloped for fair pin placement when green speeds are fast. Greens staff is not adequately trained regarding pin placement, and may not be in the future.

9/9/2015 5:06 PM View respondent's answers

Needs more tees to mix up the course, leveling of tees, need more weather resistant grass, aging trees needing replacement

9/9/2015 4:35 PM View respondent's answers

Definition of the fairways just a sea of green. Need fairway bunkers, green side bunkers not in play so much.

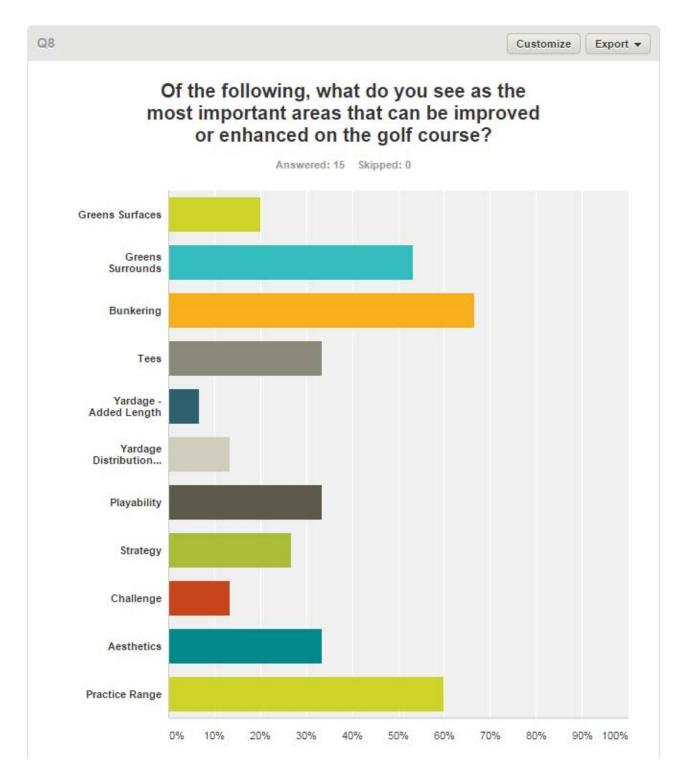
9/9/2015 4:29 PM View respondent's answers

Inconsistent speed of greens, spots on several holes that seem to be constant problem areas.

9/9/2015 3:00 PM View respondent's answers







[~] American Society of Golf Course Architects ~



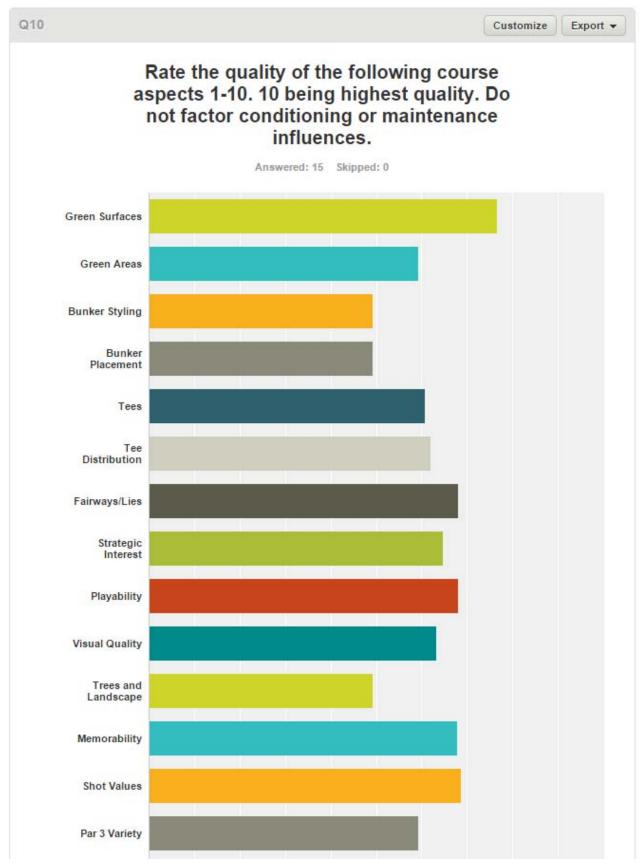




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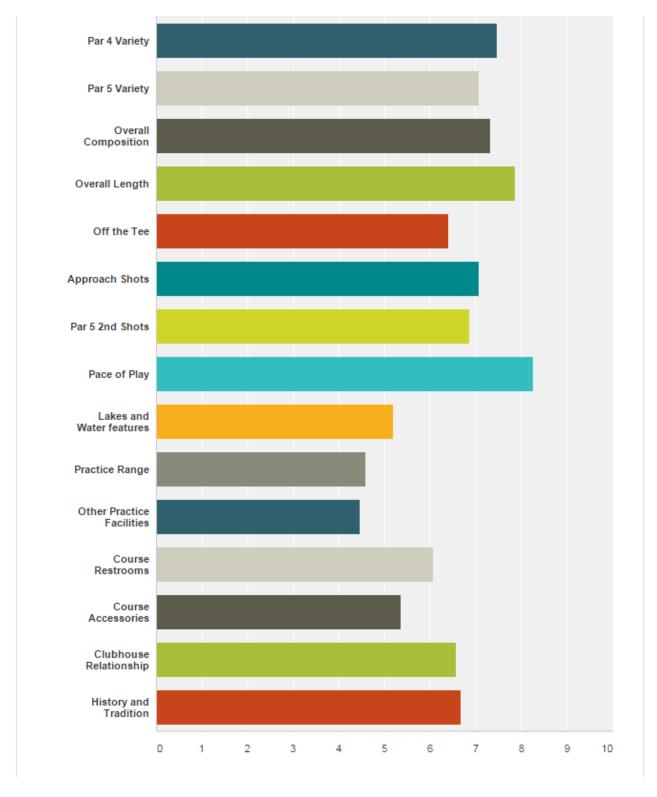






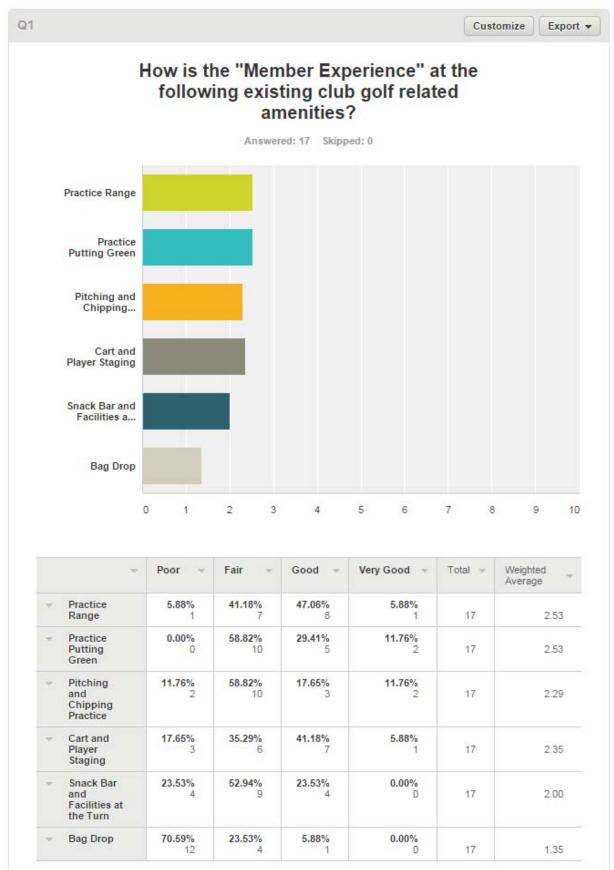






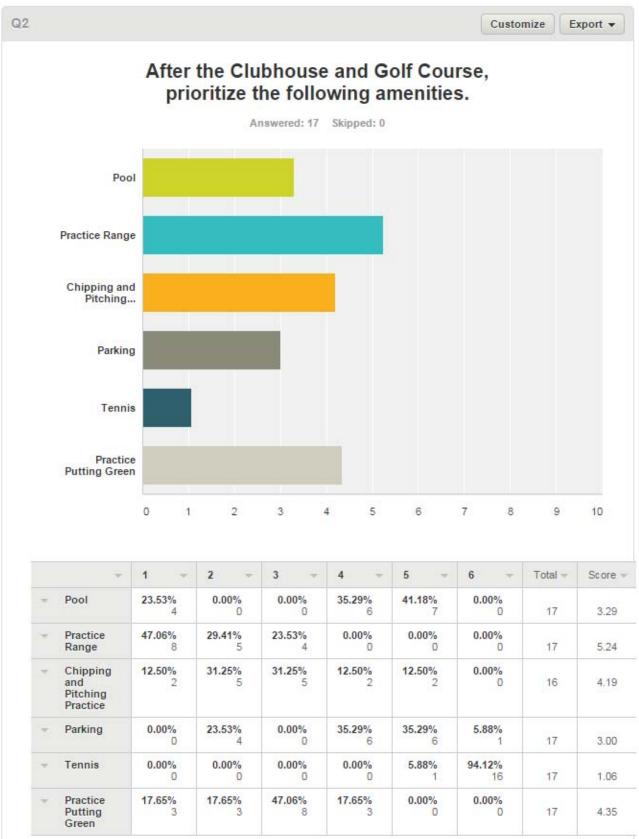








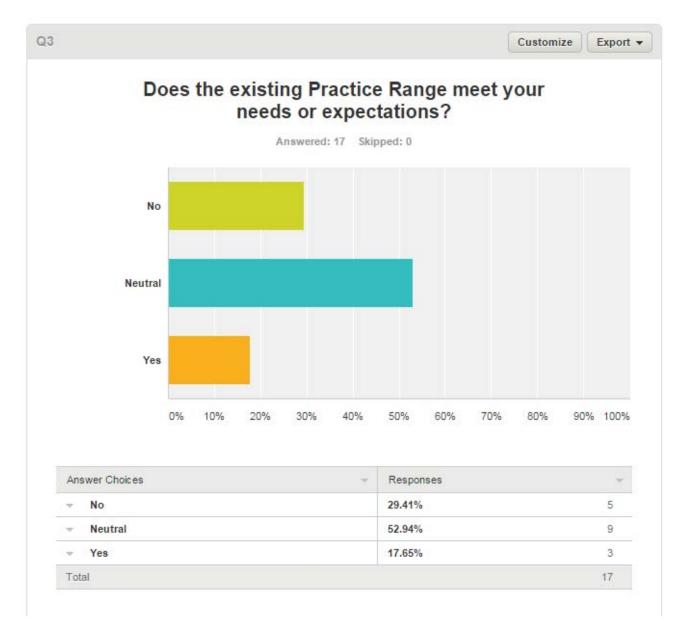




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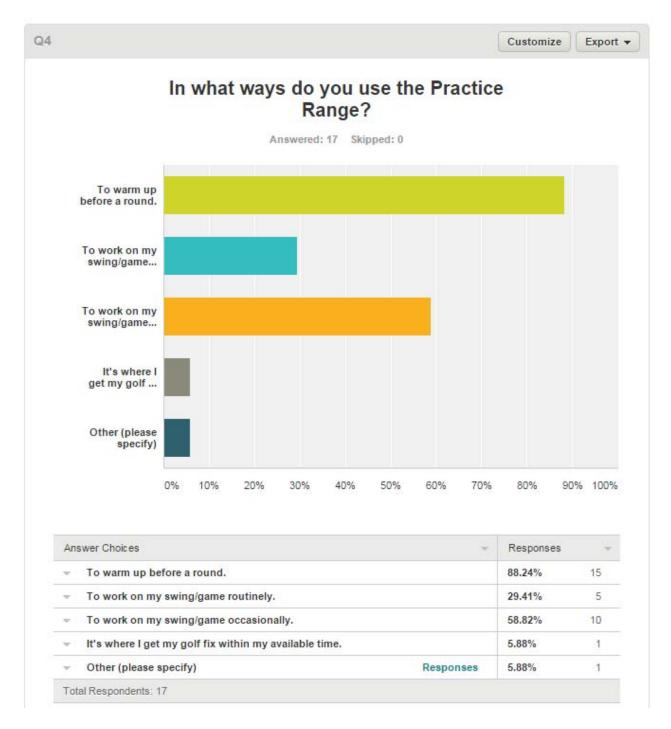






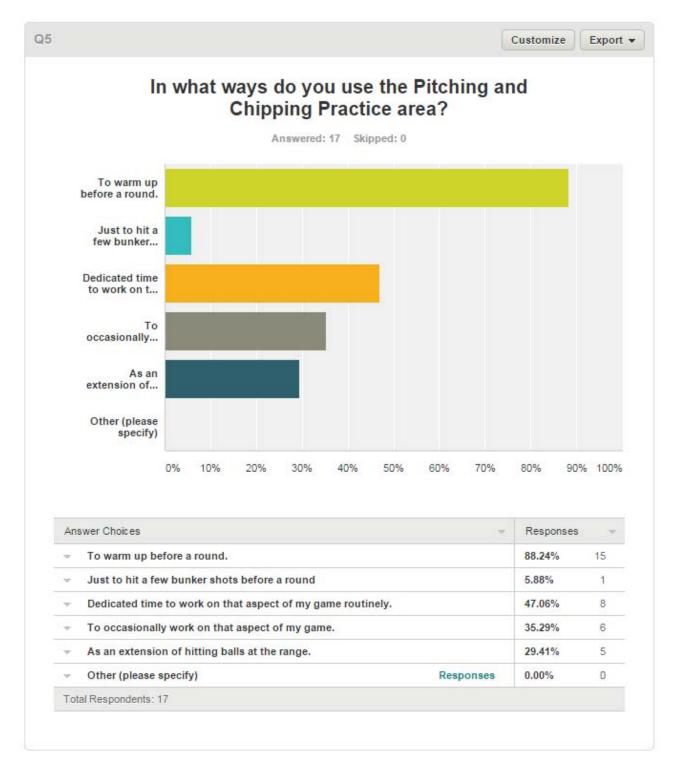








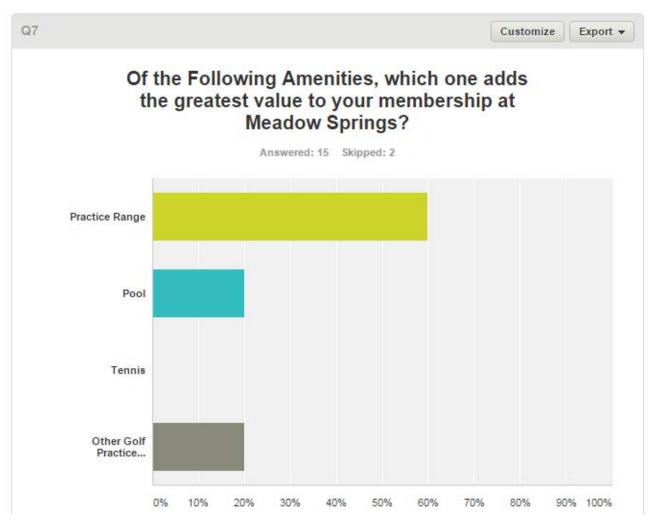








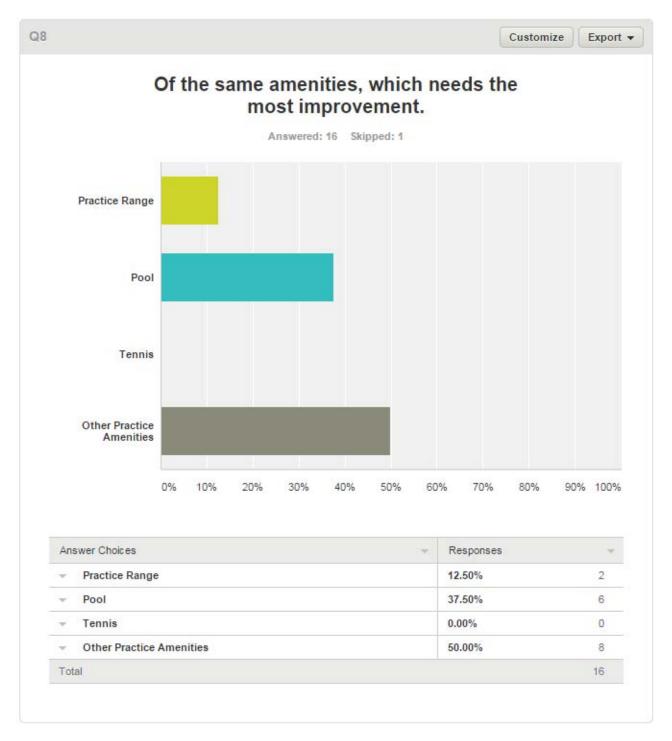




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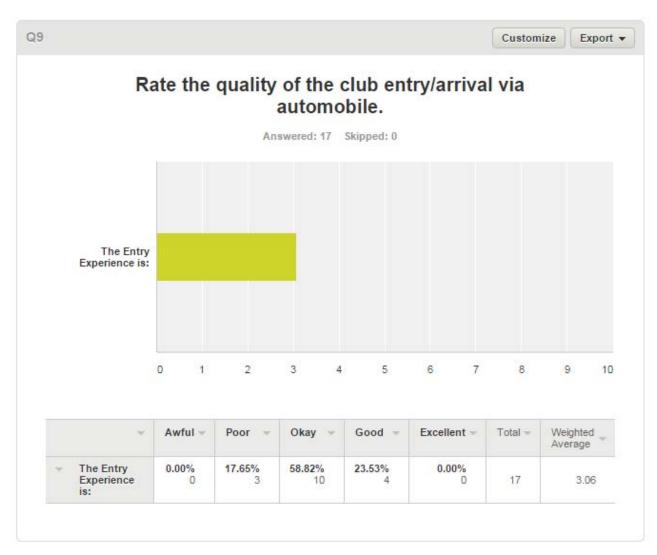






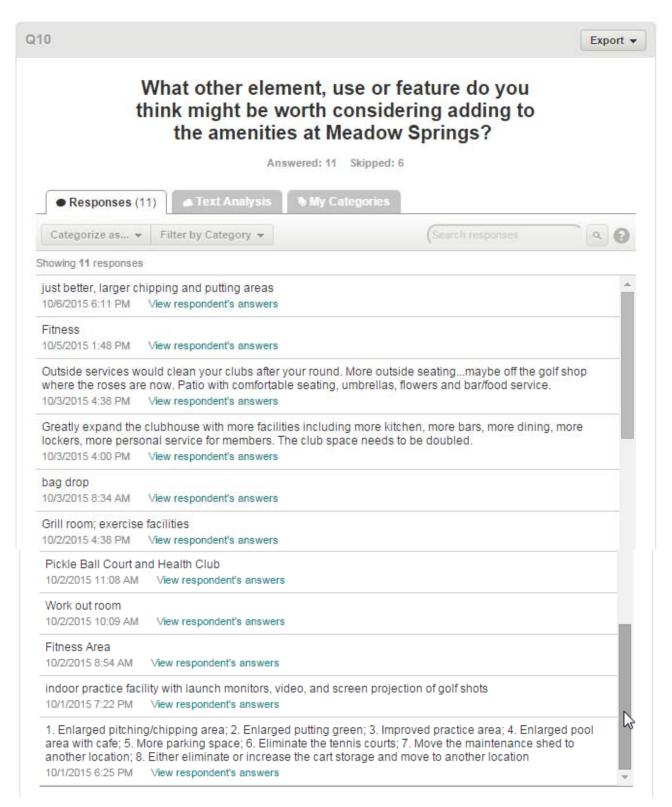
















GOLF COURSE ITEMS

HOW LONG SHOULD PARTS OF THE GOLF COURSE LAST?

ITEM	YEARS	ITEM	YEARS
Greens (1)	15 – 30 years	Cart Paths - concrete	15 – 30 years
Bunker Sand	5 – 7 years	Practice Range Tees	5 - 10 years
Irrigation System	10 – 30 years	Tees	15 – 20 years
Irrigation Control System	10 – 15 years	Corrugated Metal Pipes	15 – 30 years
PVC Pipe (under pressure)	10 - 30 years	Bunker Drainage Pipes (3)	5 – 10 years
Pump Station	15 – 20 years	Mulch	1 – 3 years
Cart Paths – asphalt (2)	5 – 10 years (or longer)	Grass (4)	Varies

NOTES: (1) Several factors can weigh into the decision to replace greens: accumulation of layers on the surface of the original construction, the desire to convert to new greeses and response to changes in the game from an architectural standpoint (like the interaction between green speed and hale locations). (2) Assumes an going maintenance beginning 1 – 2 years after installation (3) Typically replaced because the sand is being changed — while the machinery is there to change sand, it's often a good time to replace the drainage pipes as use). (4) As new grasses enter the marketplace — for example, those that are more drought and disease tolerant — replanting may be appropriate, depending upon the site.

Component life spans can vary depending upon location of the golf course, quality of materials, original installation and past maintenance practices. We encourage golf course leaders to work with their golf course architect, superintendents and others to assess the longevity of their particular course's components.

The American Society of Golf Course Architects (ASGCA) thanks those at the USGA Green Section, Golf Course Builders Association of America, Golf Course Superintendents Association of America and various suppliers for their assistance in compiling this information.

The materials presented on this chart have been reviewed by the following Allied Associations of Golf: For more information, contact ASGCA at 262-786-5960 or www.asgca.org

















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