

Heritage Eagle Bend Golf Club 23155 E Heritage Parkway, Aurora, CO 80016

# GOLF COURSE UPDATES - SKETCH PLAN

January 11, 2024









Heritage Eagle Bend Golf Club 23155 E Heritage Parkway, Aurora, CO 80016

## GOLF COURSE UPDATES - SKETCH PLANS

January 11, 2024





5Golf STUDIO

## TABLE OF CONTENTS

Click on Page Number to Jump to the Page

PLANNING PROCESS
GOLF COURSE FEATURES EXPECTED LIFE CYCLE
PROJECT GOALS
TEE NOTES
BUNKER NOTES
PROJECT PRIORITIES
GOLF COURSE UPDATES
FRONT NINE MASTER PLAN
BACK NINE MASTER PLAN
1 - 18, DRIVING RANGE, CHIPPING GREEN
APPENDIX
USGA PLAYER PROFILE TRACKING
TEE/YARDAGE DATA
EXISTING/PROPOSED SCORECARDS
BUNKER CHARACTER
ICON GOLF STUDIO
TODD SCHOEDER, ASGCA #272, RLA CO #232

# **PLANNING PROCESS**



# TRANSPARENT PLANNING & DESIGN PROCESS - ENGAGED PARTIES

HEB Board, & Staff have fully-vetted all elements of the project for the betterment of the golf course, including maintenance - addressing the 55+ age community and outside players

Contributing Members Behind/Guiding the Project Initiatives:

- C.W. Golf Architecture (Arthur Hills Design Group)
  - HEB Master Board Golf Course Project Goals
    - USGA Player Profile Tracking, July 2023
      - PGA/USGA Yardage Data/Statistics
  - PGA "Setting Up a Golf Courses for Success"
    - PGA/USGA "Tee It Forward" Initiative
      - Longleaf Tee System
  - Golf Course Architect Site Visits & Evaluation
    - City of Aurora Planning & Development
    - ASGCA Golf Course Features Life Cycle
- HEB Master Board and GAC Golf Course Update Suggestions, June 30 2023
- HEB Staff Survey Response, Input from HEB Master Board, GM, GC Superintendent, Golf Pro, HEB Residents, September 19, 2023
  - HEB Master Board & HEB Staff Design Presentation, October 12, 2023
  - HEB Master Board & HEB Staff On-Site Design Review, October 25, 2023
    - HEB Golf Course Advisory Committee (GAC) Design Review
  - HEB Golf Course Concept Plans, Input from Terry Mahlman, GAC Member, November 17, 2023

# ASGCA, GCBAA, GCSAA GOLF COURSE FEATURES LIFE CYCLE

# **GOLF COURSE ITEMS** EXPECTED LIFE CYCLE

## 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 grasses and response to changes in the game from an architectural standpoint (like the interaction between green speed and hole locations). (2) Assumes on-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 well. (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.

Heritage Eagle Bend Opened in 2000 - 24 Years Old

## **Project Goals:**

- Plan, design & implement a new irrigation system.
- Prepare a Bunker, Tee and Turf Reduction Master Plan to aid with the design of the new irrigation system being prepared by Larry Rodgers Design Group.
- Respecting the Heritage Eagle Bend (HEB) typical player profile, outside player needs, and 55+ age community, define and establish the preferred bunker and tee look, style, character, playability, placement/location, and comprehensive strategy to convey and communicate future golf course bunker and tee enhancements and areas of maintained turf reduction to HEB golfers and community members. For detailed bunker, tee, and grassing evaluation along with concept design, see BUNKER NOTES, TEE NOTES, and MAINTAINED TURF REDUCTION.
- Bunker and Tee work and turf reduction shall be designed and planned to provide the best possible golf experience relative to HEB's playing strategies, interest and aesthetics. Other concerns, such as safety, maintenance efficiency and cost to HEB shall be addressed.
- Design a new forward tee playing strategy addressing HEB player profiles, industry guidelines and HEB player tracking data.
- Based on existing tee locations, prepare a turf reduction master plan, highlighting areas of existing turf to be removed from daily maintenance practices to reduce the costs of a future irrigation renovation and reduce water consumption and maintenance expenses.

- Several common themes emerged from the HEB Board's and project stakeholder's survey responses. These elements must be respected and incorporated into any proposed design revisions and enhancements to the golf course:
  - The golf course is for the 55+ community members, and any design revisions should first and foremost respect the community members, and then, outside player needs.
  - Reduce water consumption. Adapt to ever-increasing water restrictions.
  - Maintain a first-class golf course.
  - Address aging infrastructure repairs (bunkers and tees).
  - Maintain the character of the existing golf course "Green" and well maintained.
  - Do not make the golf course more challenging , but pay attention to outside player requests regarding feature design, character and playability.
  - Create design strategies that reduce maintenance expenses, i.e., less irrigated turf, few bunkers, less severe bunker faces/lips, etc.
  - Respect adjoining neighbors' aesthetic requirements for the golf course.

## TEE NOTES (GUIDING PRINCIPLES)

#### Setting Up a Golf Course For Success:

- The goal is to provide a course that is comfortable for women to play (based on HDCP/Swing Speed player profile to create similar playing experiences), and therefore, results in a fun and enjoyable experience. These players should be able to hit roughly the same clubs for their approach shots into greens as their male counterparts. Calculating the right yardage for these players is, at its basic level, simply a matter of math.
- Appropriately placed tees can accommodate golfers with slower swing speeds or shorter length of drive, including new golfers, seniors, youth and people with disabilities. Highly skilled players, who choose to hone their short games, Golfers recovering from physical, cognitive and/or mobility limitations, injuries or surgeries can re-engage with golf more quickly from tees with yardages suited to their abilities. Many golfers who have been away from the game could savor the beauty of the outdoors and a healthy activity if they could play golf with scoring success in a limited amount of time.
- The basis of good tee positioning is rooted in the concept of DESIGN FAIRNESS. The central idea of this philosophy is that golf course operators should provide sets of tees from which golfers with a wide spectrum of driving distances and swing speeds can reach greens in regulation and putt for pars or even birdies. Done correctly, the tees should be positioned proportionally to each other, so that players who are playing the correct set of tee markers for their driving distance and swing speed may use similar clubs for their approach shots on each hole.

## Calculating the right yardage for forward tees:

- Approximately 84% of HEB Women's HDCP falls between 18 36 (using 26 hdcp).
- Goal is to position forward tees to minimize grading and highlight sight-lines to preferred landing areas (elevated tees, approximately 850 SF each).
- Comprehensive USGA and Equipment Manufactures guidelines are referenced for proper tee placement.
- For reference, at 4,930 yards from the Green tees (HEB existing forward tee yardage) is equivalent to a 7,500 yard course for the average male golfer.
- Goal for HEB forward tee distance equal to approximately 4,000 yards (Silver Tee).

USGA Forward Tee Yardage Guidelines Based On Swing Speed & HDCP Index:

	Swing Speed (mph)	Average Drive (yards)	Yardage Range	HDCP Index	Mid Point Percentage
Average Swing Speed Female Golfer	65	140	4,000 - 4,200	26.5	65%
	75	165	4,800 - 5,000		78%
	85	190	5,600 - 5,800		90%
Average Swing Speed Male Golfer	90	203	6,000 - 6,100	14.5	96%
	95	215	6,200 - 6,400		100% base
	105	240	6,800 - 7,000		110%

Equipment Industry & USGA Recommended Forward Tee Yardage:

Women's Yardage (or, similar swing speeds 55+ age community)	Par 3s	Par 4s	Par 5s	Total Length
Maximum Yardage	140 yards	260 yards	380 yards	4,680 yards
Suggested Yardage	120 yards	230 yards	325 yards	4,080 yards
Heritage Eagle Bend Existing Average Yardage	109 yards	304 yards	385 yards	4,930 yards

Heritage Eagle Bend 18-hole Existing Forward Tee Yardage:

Par	Ex. Total Yards	Ex. Avg. Total Yards	Avg. Goal Yards	Proposed Yards	Avg. Proposed Yards
3	437	109	124	390	98
4	2834	283	237	2363	236
5	1659	415	335	1360	340

Forward Tee	Front Nine	Back Nine	Total
Existing (Yds.)	2458	2472	4930
Proposed (Yds.)	2086	2027	4113
Net Yards	-372	-456	-817

## BUNKER NOTES (GUIDING PRINCIPLES)

Bunker Strategies for Heritage Eagle Bend (HEB):

Proposed bunker removals and new bunker additions are based on the USGA logging data results combined with HEB's typical player profiles, player handicaps, project goals and to honor the existing golf course aesthetics, strategy and playability. The goal is to reduce maintenance costs, while at the same time making the course more playable for community members with interesting tee-to-green strategies and more strategic for lower-handicap players.

For all existing SHAPE-IN-PLACE BUNKERS:

- Correct infrastructure defects, i.e., ingress/egress, drainage, erosion, sand quality/playability, aesthetics, lip height, liner, and potential contamination.
- Improve visibility from preferred line-of-play.
- Improver overall aesthetics (shadow and reveal).
- Improve playability.
- Improve bunker ingress/egress.

For all proposed NEW BUNKERS:

- Place bunkers to create a sense of illusion or misperception as to length and distance.
- Place bunkers to provide a cue or guide to the preferred line of play for a hole.
- Place and design bunkers as a feature to setup a risk/reward playing strategy:
  - Offer the opportunity for a heroic shot.
  - Protect pin placements on greens.
  - Create perceived difficulty.
  - Test accuracy and length of carry.
  - Catch wayward shots.

- To aid with safety on a hole.
- To improve aesthetics by adding character, shadow, and reveal.
- To set up a sense of rhythm, frequency, and variation.

In addition to the above bunker design strategies, every new bunker (and existing bunker) will be analyzed and evaluated with the following criteria in mind to guide bunker removal and placement of proposed new bunkers. Does the addition of a bunker or re-shaping of an existing bunker:

- Respect the character of the original Arthur Hills design.
- Challenge the low-handicap player.
- Aid the higher handicap player.
- Add interest to the hole.
- Add variety to the hole.
- Provide a sense of scale to the hole.
- Differentiate one hole from another.
- Make the hole aesthetically more appealing.
- Provide additional safety.
- Provide acceptable maintenance.
- Fit the character of the hole.
- Make the hole too difficult for the HEB player profile.

NOTE: all existing bunkers and new bunkers constructed to same Bunker Details:

- Re-shaped to approximately existing size.
- Varying depths (minimum depth = three feet).
- Bowled bunker bottoms with varying sand flash up to four feet.
- Four-inch (4") to six-inch (6") lips.
- Grass rolled over top 1/3 of Bunker.
- Native Fine Fescue grass mix wrapping out-of-play Bunker areas
- All new liner, drainage and sand.

# GOLF COURSE PROJECT PRIORITIES - DRIVING FACTORS

## BASED ON PROJECT GOALS, GUIDING PRINCIPLES & LIFE CYCLE CHART



# **HEB GOLF COURSE UPDATES**

#### Center (CL) Legend (*Black Tee*):

Par 3's: Tee CP to Green CP Par 4's: Tee CP to FW TP FW TP to Green CP Par 5's Tee CP to FW TP FW TP to 2nd FW TP 2nd FW TP to Green CP

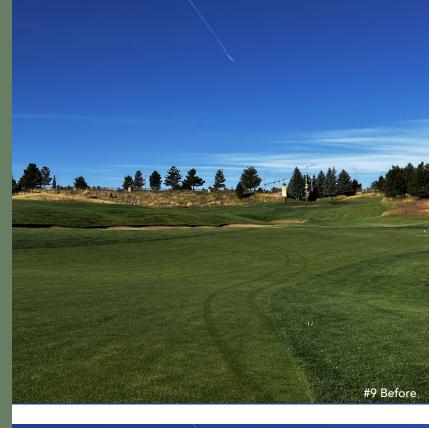
Distance Varies 275 yds. Distance Varies 275 yds. 225 yds. Distance Varies

#### Center (CL) Legend (*Silver Tee*):

Par 3's: Tee CP to Green CP Par 4's: Tee CP to FW TP FW TP to Green CP Par 5's Tee CP to FW TP FW TP to 2nd FW TP 2nd FW TP to Green CP

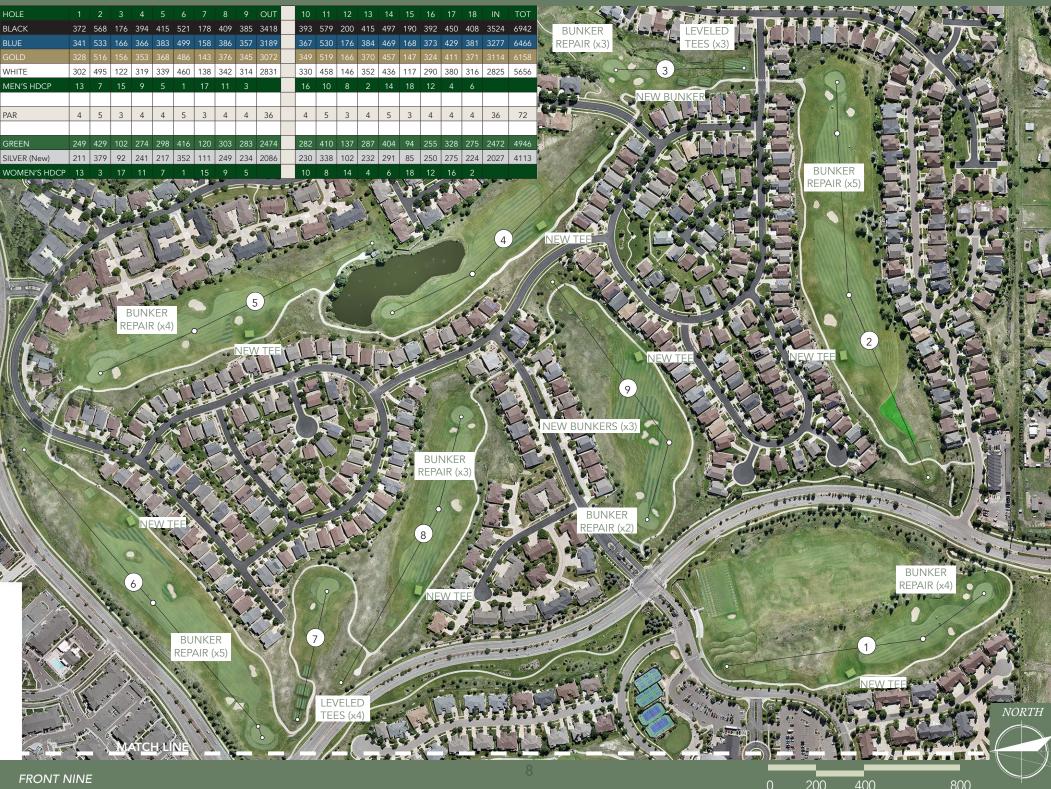
Distance Varies 145 yds. Distance Varies 145 yds. 125 yds. Distance Varies

7





#### PROPOSED SCORECARD









Direction:DogElevation Change:UphiLanding Area Width:110'Entrance to Green:FromGreen Size:5,098FW Bunkers:Two:Green Bunkers:Two:

Dog-leg left: South | Southeast Uphill 16' 110' From the right 5,098  $\not \square$ Two: 2,193  $\not \square$ Two: 1,103  $\not \square$ 

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
- Infrastructure Repair (outdated golf course features):
  - Existing four bunkers repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - New, non-maintained naturalized turf area behind green (out-of-play) to reduce maintenance expense and water use.
  - Existing three bunkers along right side of fairway are out-of-play and due to their proximity to trees they create set-up a "double hazard" and are removed to reduce maintenance expenses & enhance playability. NOTE: none of these three bunkers in the original 1998 Plans.
- Infrastructure Repair (outdated golf course features):
  - Existing five bunkers repaired (stripped, shaped, new drainage, liner & sand).



Direction:Dog-leg riElevation Change:Downhill &Landing Area Width:138' | 156'Entrance to Green:From the dGreen Size:5,218 ∅FW Bunkers:Four: 5,18Green Bunkers:One: 1,000

Dog-leg right: Northeast | East Downhill 86' 138' | 156' From the center 5,218  $\not \square$ Four: 5,182  $\not \square$  (removed 1,299  $\not \square$ ) One: 1,006  $\not \square$ 



# HOLE 3



Direction:StraightElevation Change:DownhLanding Area Width:GreenEntrance to Green:From tGreen Size:5,650 fFW Bunkers:ZeroGreen Bunkers:Four: 2

Par 3

Straight: North Downhill 15' Green From the left 5,650 ⊄ Zero Four: 2,603 ⊄

- New Golf Course Features:
  - Existing Green tee laser-leveled and lengthened, provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - One new left "savior" greenside bunker provides a catchers mitt for tee-shots bounding over the green into the native grass.
  - Expanded fairway run-in to green (wider approach) to provide alternative types of approach shots.
- Infrastructure Repair (outdated golf course features):
  - All tees laser-leveled and re-aligned (stripped, sand plated, laserleveled, & sodded): 5,156 SF + 1,384, SF + 933 SF (+ 420 SF) = 7,893 SF.
  - Existing three bunkers repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Expanded fairway along left side of existing fairway increases landing area width providing more room between pond and rough.



Direction:DoElevation Change:DoLanding Area Width:70'Entrance to Green:FroGreen Size:4,70FW Bunkers:ZerGreen Bunkers:Zer

Dog-leg right: Northw Downhill 28' 70' From the left 4,762 ∅ Zero Zero



# HOLE 5



Direction:StraitElevation Change:DowLanding Area Width:140'Entrance to Green:FromGreen Size:6,69FW Bunkers:ThreeGreen Bunkers:One

Straight: Northwest Downhill 12' 140' From the right 6,695 ∯ Three: 2,046 ∯ One: 1,300 ∯ (removed 463 ∯)

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Expanded fairway at new forward tee increases landing area width left of fairway bunker making the hole more playable.
  - Removed out-of-play bunker at back of green reduces maintenance expenses.
  - Expanded fairway roll-off at back of green provides flexible playing conditions for the low- and high-handicap players.
- Infrastructure Repair (outdated golf course features):
  - Existing four bunkers repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Second fairway bunker remodeled/realigned to provide more room for the forward tee, tee-shot.
  - Expanded fairway at new forward tee increases landing area width left of fairway bunker making the hole more playable.
  - Existing left green fore-bunker removed provides space to expand the fairway run-in to green, which then offers players with a variety of skill levels multiple playing options to reach the green increasing playability and enjoyability.
- Infrastructure Repair (outdated golf course features):
  - Existing five bunkers repaired (stripped, shaped, new drainage, liner & sand).



Straight: Southwest Uphill 48' 100' | 132' From the left 5,604  $\not \square$ Five: 5,706  $\not \square$  (removed 633  $\not \square$ ) Zero



	HOLE 7	
Par 3 <ul> <li>178</li> <li>158</li> <li>143</li> </ul>	138 120 (New Distance) 111 (Expanded) –	NORTH
0 80 160 Direction: Elevation Change: Landing Area Width:	320 Straight: Southeast Downhill 20' Green	

From the center

Zero (removed 699  $\square$ )

One: 440  $\square$  (removed 393  $\square$ )

6.166 🗹

Entrance to Green:

Green Size: FW Bunkers:

Green Bunkers:

- New Golf Course Features:
  - Existing Green tee laser-leveled and lengthened, provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - One out-of-play right side fairway bunker removed to help the higher handicap player and reduce maintenance expenses NOTE: this bunker was not included in the original 1998 Plans.
  - One out-of-play left greenside bunker removed to help the higher handicap player and reduce maintenance expenses. NOTE: this bunker was not included in the original 1998 Plans.
  - Expanded fairway neck in front of the green provides a wider run-in offering more shot variety (aerial, bump-n-run) into the green making the hole more enjoyable.
- Infrastructure Repair (outdated golf course features):
  - All tees laser-leveled and re-aligned (stripped, sand plated, laser-leveled, & sodded): 1,066 SF + 1,629 SF + 2,086 SF + 1,310 SF + (420 SF) = 6,511 SF.
  - Existing left greenside bunker repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Expanded fairway at new forward tee eliminates forced-carry with tee-shot to fairway.
- Infrastructure Repair (outdated golf course features):
  - Existing two left greenside bunkers repaired (stripped, shaped, new drainage, liner & sand) and combined into one new bunker, which also reduces maintenance expenses.



Direction:DogElevation Change:DowLanding Area Width:110'Entrance to Green:FronGreen Size:4,90'FW Bunkers:OneGreen Bunkers:Two:

Dog-leg left: Southe Downhill 69' 110' From the right 4,907 Ø One: 1,840 Ø Two: 1,282 Ø



	HOLE 9	
Par 4		
385	314	NORTH
357	283	
345	🔵 234 (New)	
<b></b> _		
0 80	160 320	

Direction:DogElevation Change:UphLanding Area Width:115'Entrance to Green:FronGreen Size:6,72FW Bunkers:ThreeGreen Bunkers:Two

Dog-leg right: Southwest | Northwest Uphill 39' 115' From the center  $6,720 \not \square$ Three: 3,579  $\not \square$  (removed 3,690  $\not \square$ ) Two: 2,090  $\not \square$  (removed 1,235  $\not \square$ )

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Existing two fairway bunkers removed (stripped, shaped and new drainage, liner & sand) and re-shaped into three new bunkers to offer risk/reward strategy with tee-shot.
  - Existing out-of-play left and right greenside bunkers removed to enhance playability and reduce maintenance expenses (left greenside bunker moved left to widen approach). NOTE: the outer right greenside bunker was not included in the original 1998 Plans.
  - Expanded fairway increases fairway landing area widths making the hole more playable.
  - Expanded fairway run-in to green provides more shot variety (aerial, bump-n-run) into the green making the hole more interesting and playable for players of all abilities.
- Infrastructure Repair (outdated golf course features):
  - Existing left and right greenside bunker repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Expanded fairway at new forward tee eliminates forced-carry with tee-shot to fairway.
  - Expanded, wider fairway at landing areas provides more room next to the fairway bunkers for the best angle of approach to the green and room to the right for tee-shots.
- Infrastructure Repair (outdated golf course features):
  - Existing two fairway bunkers repaired (stripped, shaped, new drainage, liner & sand).



Direction: Elevation Change: Landing Area Width: New, 128' from 84' Entrance to Green: Green Size: FW Bunkers: Green Bunkers:

Dog-leg left: West | Northwest Downhill 58' From the left 5.041 🖾 Two: 2,724 🖾 Zero



			HOLE 11	
Par	· 5			
	579	ightarrow	458	NORTH
	530	$\bigcirc$	410	
	519		338 (New)	<
		_	_	
0	80	160	320	

Direction:Dog-leg rightElevation Change:Downhill 61'Landing Area Width:172' | 88'Entrance to Green:From the leftGreen Size:4,378 ∅FW Bunkers:Two: 1,337 ∅Green Bunkers:One: 845 ∅

Dog-leg right: Southwest | Northwest Downhill 61' 172' | 88' From the left 4,378  $\not\square$ Two: 1,337  $\not\square$  (removed 1,514  $\not\square$ ) One: 845  $\not\square$ 

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Existing out-of-play, left fairway bunker removed to enhance playability and reduce maintenance costs.
  - Existing left green fore-bunker removed to enhance playability, reduce maintenance costs and widen the fairway green approach.
  - One new back "savior" greenside bunker provides a catchers mitt for teeshots bounding over the green into the native grass.
  - Expanded fairway run-in to green provides more shot variety (aerial, bump-nrun) into the green making the hole more enjoyable.
- Infrastructure Repair (outdated golf course features):
  - Existing two bunkers repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - Existing Green tee laser-leveled and lengthened, provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences)
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences) and eliminates forced-carry over ravine
  - "Blind" existing right greenside bunker removed to offer an expanded bailout area to provided playing options for a variety of skill levels and to reduce maintenance expenses
  - Expanded fairway run-in to green and roll-off at right-side of green provides multiple playing options for a variety of skill levels increasing playability and enjoyability
- Infrastructure Repair (outdated golf course features):
  - All tees laser-leveled and re-aligned (stripped, sand plated, laser-leveled, & sodded): 1,797 SF + 2,421 SF + 1,363 SF + (525 SF) = 6,106 SF
  - One existing bunker repaired (stripped, shaped, new drainage, liner & sand)



Direction.StraigElevation Change:Uphill 1Landing Area Width:GreenEntrance to Green:From tGreen Size:5,971 ØFW Bunkers:ZeroGreen Bunkers:One: 1

Uphill 7′ Green From the center 5,971⊄ Zero One: 1,210 ⊄ (removed 221⊄)



# HOLE 13 Par 4 • 415 • 352 • 384 • 287 • 370 • 232 (New) • 40 • 320

Direction:DogElevation Change:UphLanding Area Width:124'Entrance to Green:FromGreen Size:5,27'FW Bunkers:Two:Green Bunkers:Zero

Dog-leg left: Northwest | West Uphill 48' 124' From the left 5,274 ∯ Two: 2,958 ∯ (removed 2,587 ∯) Zero

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Remove Three out-of-play existing fairway bunkers to reduce to aid the higher handicap player and to reduce maintenance expenses.
  - Two new fairway bunkers one each on the left- and right-side of the fairway landing area (brackets the beginning and end of preferred fairway landing area) challenges the lower handicap player, while not affecting the higher handicap player providing additional strategy for tee-shots.
  - Expanded fairway at new forward tee provides a wider landing area from the tee, albeit not the prime position to reach the green (the left side of the fairway provides the best vantage point to the green but requires a risk/reward tee-shot.
  - Expanded fairway roll-off at front-right-side of green provides multiple playing options for a variety of skill levels increasing playability and enjoyability.



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences)
  - Existing out-of-play left fairway bunker removed to provide space for the new forward tee and to reduce maintenance costs.
  - Existing right greenside bunker is out-of-play and removed to reduce maintenance costs.
  - Expanded fairway at new forward tee and in the swale fronting the green provides wider landing areas making the hole more playable for higher handicap players.
  - Expanded fairway run-in to green provides multiple playing options for a variety of skill levels increasing playability and enjoyability.
- Infrastructure Repair (outdated golf course features):
  - Existing two bunkers repaired (stripped, shaped, new drainage, liner & sand). 23



Direction: Elevation Change: Entrance to Green: Green Size: FW Bunkers: Green Bunkers:

Straight: Southeast Downhill 42' Landing Area Width: New, 132' from 94' | 80' From the left 5.410 🖾 Zero (removed 1,066 # ) Two: 1,281 ∅ (removed 417 ∅)



_				
			HOLE 15	
Pa	r 3			
$\bigcirc$	190	$\bigcirc$	117	NORTH
$\bigcirc$	168	$\bigcirc$	94	
	147		85 (Expanded)	<
-		_		
0	80	160	320	
	ection: ation Ch	ange:	Straight: Northwest Downhill 17'	

- New Golf Course Features:
  - Existing Green tee laser-leveled and lengthened, provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approachshots to the green (similar playing experiences).
  - Lower the existing rolls on fairway to allow for unobstructed views into the green complex from existing green tee and also helps prevents tee-shots from bounding into the first bunker or pond.
- Infrastructure Repair (outdated golf course features):
  - All tees laser-leveled and re-aligned (stripped, sand plated, laserleveled, & sodded): 1,137 SF + 1,485 SF + 1,661 SF + 1,031 SF + 836 SF + (420 SF) = 6,570 SF.
  - Existing three bunkers repaired (stripped, shaped, new drainage, liner & sand).

From the right 6,088 🗘 Zero ⋔ Three: 1,766



- New Golf Course Features:
  - Removing the existing left green fore-bunker provides space to expand the fairway run-in to green, which then offers players with a variety of skill levels multiple playing options to reach the green increasing playability and enjoyability.
- Infrastructure Repair (outdated golf course features):
  - Existing three bunkers repaired (stripped, shaped, new drainage, liner & sand).



Direction:DogElevation Change:UphLanding Area Width:103'Entrance to Green:FronGreen Size:4,61.FW Bunkers:Two:Green Bunkers:One

Dog-leg right: Southeast | South Uphill 20' 103' From the left 4,615  $\not\square$ Two: 538  $\not\square$ One: 769  $\not\square$  (removed 825  $\not\square$ )



			HOLE 17	
Pa	ır 4			
$\bigcirc$	450	$\bigcirc$	380	
$\bigcirc$	429	$\bigcirc$	328	
	411		275 (New)	
-			_	
0	80	160	320	

Direction:StraitElevation Change:DowLanding Area Width:116'Entrance to Green:FromGreen Size:5,61'FW Bunkers:OneGreen Bunkers:One

Straight: Northeast Downhill 90' 116' From the left 5,619 ∅ One: 1,947 ∅ One: 1,234 ∅

## Course Updates:

NORTH

- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Removing the existing left green fore-bunker provides space to expand the fairway run-in to green, which then offers players with a variety of skill levels multiple playing options to reach the green increasing playability and enjoyability.
  - Existing two left greenside bunkers repaired (stripped, shaped; new drainage, liner & sand) and combined into one new bunker, which also reduces maintenance expenses.
  - Expanded fairway at new forward tee provides wider landing area and reduces the forced-carry to the fairway from the forward tee.
- Infrastructure Repair (outdated golf course features):
  - Existing fairway bunker repaired (stripped, shaped, new drainage, liner & sand).



- New Golf Course Features:
  - New forward tee provides the correct hole distance to accommodate players with slower swing speeds to provide them the opportunity to hit lofted approach-shots to the green (similar playing experiences).
  - Four existing and out-of-play fairway bunkers removed (two left & two right) and re-shaping creates a wider and lengthened fairway landing area with unobstructed views to aid higher handicap players on a difficult uphill hole making it more playable and enjoyable.
  - Moving the existing left greenside bunker to the right provides space to expand the fairway run-in to green, which then offers players with a variety of skill levels multiple playing options to reach the green increasing playability and enjoyability.
- Infrastructure Repair (outdated golf course features):
  - Two existing fairway bunkers and two existing greenside bunker repaired/moved (stripped, shaped, new drainage, liner & sand).



Direction:StraigElevation Change:UphillLanding Area Width:115'Entrance to Green:FromGreen Size:5,929FW Bunkers:Two: 2Green Bunkers:Two: 2

Straight: Southeast | Northeast Uphill 72' 115' From the left 5,929  $\not\square$ Two: 2,546  $\not\square$  (removed 4,641  $\not\square$  ) Two: 1,374  $\not\square$ 



# DRIVING RANGE/PRACTICE

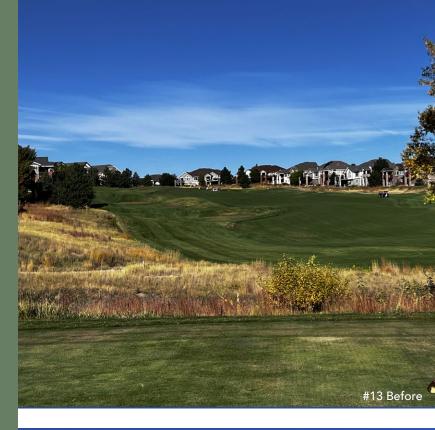


Direction:StraiElevation Change:UphLanding Area Width:350'FW Bunkers:OneGreen Bunkers:One

Straight: Southeast Uphill 20' 350' One: 780 ⊄ One: 941⊄ (removed 1,605 ⊄)

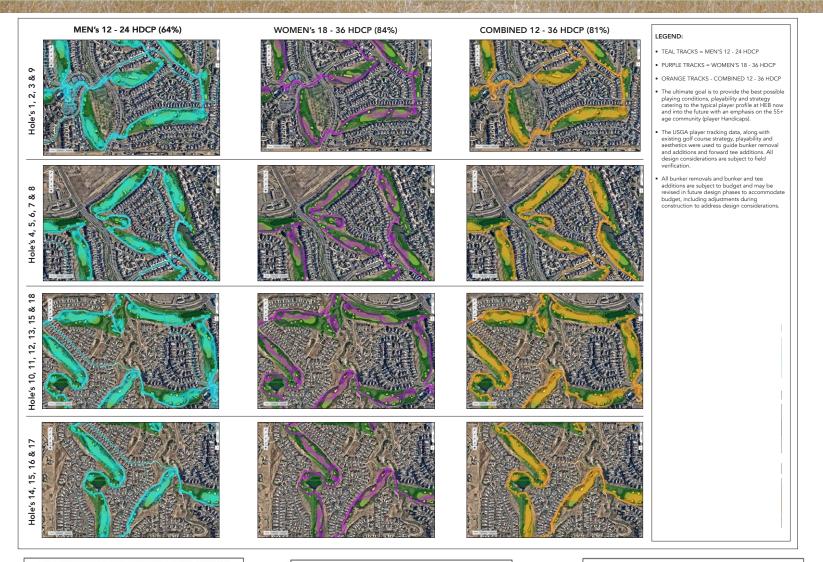
- New Golf Course Features:
  - One new practice bunker at driving range tee provides practice opportunities for bunker shots of varying distances.
  - Remove the four Driving Range target bunkers to reduce maintenance expenses (the new grassy-hollow shapes offer the same shadow/reveal as existing bunker targets.
- Infrastructure Repair (outdated golf course features):
  - Existing tee leveled and re-aligned to driving range center line (stripped, sand plated, laser-leveled, & sodded), One existing practice bunker repaired (stripped, shaped and new drainage, liner & sand).

# APPENDIX





# USGA PLAYER PROFILE TRACKING



USGA Men Logging Data Summary (8/2/23 - 8/4/2023)

Total	150	10	0%
24+	22	15%	
18 - 24	34	23%	
12 - 18	62	41%	64%
0 - 12	32	21%	

USGA Women Logging Data Summary (8/2/23 - 8/4/2023)

Total	50	10	00%
36+	3	6%	
24 - 36	27	54%	0.78
18 - 24	15	30%	84%
12 - 18	5	10%	
0 - 12	0	0%	

#### USGA COMBINED Logging Data Summary (8/2/23 - 8/4/2023)

Total	200	10	00%		
36+	6	6%			
24 - 36	46	54%			
18 - 24	49	30%	81%		
12 - 18	67	10%			
0 - 12	32	0%			

# PGA/USGA "TEE IT FORWARD" REFERENCE DATA

<u>Maximum</u> recommended hole distances for average female and male golfers												
	Hdcp	Par 3	Par 4	Par 5	Tot							
Female	26	140	260	380	4680							
Male	15	210	400	590	7200							

<u>Maximun</u>	<u>Maximum</u> recommended course yardage by par for average female and male golfers												
	Par	3	4	5									
	# of holes	4	10	4	Max. Yds.								
Female	26	560	2600	1520	4680								
Male	15	840	4000	2360	7200								

		HEB (Green Tee)
4930	105%	over recommended maximum yardage
Equivalent	<u>t to 7585 yd</u> .	golf course for average male golfer
(643 yds.	longer than I	Black tees)

PGA/USGA "TEE IT FORWARD" Guidelines for Selecting Tees												
Driver Distance	Driver Distance Recommended 18-hc											
275	6	,700 - 6,90	00									
250	6	,200 - 6,40	0									
225	5,800 - 6,000											
200	5,200 - 5,400											
175	4	,400 - 4,60	00									
150	3,500	-	3,700									
125	2	,800 - 3,00	0									
100	2	,100 - 2,30	00									
	107%											
Elevation G	ain Approx	к. 107%										
HEB Target Yards	3745	to	3959									

Approximate club di	stances for average female and ma	le golfers
	Female Goler	Male Golfer
	(26 hdcp)	(15 hdcp)
Driver	140	210
Fairway Wood	120	190
Long Iron/Hybrid	105	170
Mid-Iron	100	140
Short Iron	80	120
Wedge	60	100

PGA/USGA "SETTING UP GOLF COURSES FOR SUCCESS" Yardage Guidelines											
	Swing Speed (mph)	ring Speed (mph) Avg. Drive (yds.)									
Avg. Swing Speed Female Golfer (26 hdcp)	65	140	4,000 - 4,200								
	75	165	4,800 - 5,000								
	85	190	5,600 - 5,800								
Avg. Swing Speed Male Golfer (15 hdcp)	90	202.5	6,000 - 6,100								
	95	215	6,200 - 6,400								
	105	240	6,800 - 7,000								

PROPOSED 4,113

# PGA/USGA "TEE IT FORWARD" SCORECARD DATA

HOLE	1	2	3	4	5	6	7	8	9	OUT	10	11	12	13	14	15	16	17	18	IN	ТОТ
BLACK	372	568	176	394	415	521	178	409	385	3418	393	579	200	415	497	190	392	450	408	3524	6942
BLUE	341	533	166	366	383	499	158	386	357	3189	367	530	176	384	469	168	373	429	381	3277	6466
GOLD	328	516	156	353	368	486	143	376	345	3072	349	519	166	370	457	147	324	411	371	3114	6158
WHITE	302	495	122	319	339	460	138	342	314	2831	330	458	146	352	436	117	290	380	316	2825	5656
MEN'S HDCP	13	7	15	9	5	1	17	11	3		16	10	8	2	14	18	12	4	6		
PAR	4	5	3	4	4	5	3	4	4	36	4	5	3	4	5	3	4	4	4	36	72
GREEN	249	429	92	274	298	416	114	303	283	2458	282	410	137	287	404	94	255	328	275	2472	4930
WOMEN'S HDCP	13	3	17	11	7	1	15	9	5		10	8	14	4	6	18	12	16	2		

# EXISTING SCORECARD

# PROPOSED SCORECARD

HOLE	1	2	3	4	5	6	7	8	9	OUT	10	11	12	13	14	15	16	17	18	IN	ТОТ
BLACK	372	568	176	394	415	521	178	409	385	3418	393	579	200	415	497	190	392	450	408	3524	6942
BLUE	341	533	166	366	383	499	158	386	357	3189	367	530	176	384	469	168	373	429	381	3277	6466
GOLD	328	516	156	353	368	486	143	376	345	3072	349	519	166	370	457	147	324	411	371	3114	6158
WHITE	302	495	122	319	339	460	138	342	314	2831	330	458	146	352	436	117	290	380	316	2825	5656
MEN'S HDCP	13	7	15	9	5	1	17	11	3		16	10	8	2	14	18	12	4	6		
PAR	4	5	3	4	4	5	3	4	4	36	4	5	3	4	5	3	4	4	4	36	72
GREEN	249	429	102	274	298	416	120	303	283	2474	282	410	137	287	404	94	255	328	275	2472	4946
SILVER (New)	211	379	92	241	217	352	111	249	234	2086	230	338	102	232	291	85	250	275	224	2027	4113
WOMEN'S HDCP	13	3	17	11	7	1	15	9	5		10	8	14	4	6	18	12	16	2		

# BUNKER CHARACTER IMAGES



# GRASS-DOWN TO CONCAVE BOTTOM (SIMPLE SHAPES)





# ICON GOLF STUDIO





**ICONGOIF** STUDIO STUDIO architecture firm established in 2009 with roots in design, maintenance, and construction dating back to 1996. The firm's work has included numerous daily-fee golf facilities, including new courses, remodels, and reconfigurations.

Founder and principal architect Todd Schoeder, ASGCA, operates under the notion that golf course planning, design, and implementation, when guided by strict environmental stewardship with the needs of the player and rich history of the sport in mind, results in golf courses that are playable, enjoyable, and strategic, in other words, fun - a return to the ROOTS of the game for the enjoyment of all who play!

Our experience in the capacity of the lead project golf course architect has included direct work and oversight of the other areas of golf course design critical to a successful project. We have extensive experience with traditional design-bid-build, design-build and CM/GC project delivery systems that include master planning. complete, and comprehensive golf course design services civil engineering, agronomic analyses, irrigation design, safety analysis, and golf course ADA compliance. Our firm has completed numerous projects for private developers, municipalities, parks departments and cities, and counties across the U.S.

Our work developing plans extends from initial assessment to comprehensive design documents, including design and phased implementation of varying scales from new designs to minor renovation work to complete overhauls.

There are no boilerplate solutions, bottom line — we propose digging into the details, creating solutions, and maximizing assets.

Our process involves detailed site evaluation, stakeholder and community workshops coordination, site survey mapping, features evaluation, agronomic assessment and inspections, safety analysis, playability, pace-of-play analysis, and detailed cost estimation.

iCon Golf Studio has planned and designed over 50 golf course projects across the country and the western U.S. and have earned a reputation for solving complex

problems in various challenging environments. Our projects have consistently demonstrated a successful track record of design excellence and environmental sensitivity.

We are influential designers and negotiators capable of reconciling diverse priorities, achieving timely approvals, and setting standards for long-term land stewardship. We specialize in creating memorable golf courses with distinctive characters and styles tailored to each project site

COMPANY CULTURE:

+ INNOVATIVE

Our mission is simple — to integrate practical design strategies and solutions that make your golf course player-friendly, artfully positioned, strategic, enjoyable, efficient, playable, and profitable.

+ WE SPEAK THE "TRUTH"

We are confident in our knowledge, skills, and abilities and utilize our experiences to enhance the projects we work on to benefit the environment, community, and project ROI.

+ BUILT ON TRUST

We value relationships and work with developers, cities, municipalities, and clubs to educate them on the opportunities available on their projects.

+ CLIENT-FOCUSED

We listen to clients and create plans and strategies that are realistic and achievable, as well as attractive, functional, and profitable.

+ BUDGET-MINDED

Our planning and design approach reconciles diverse project priorities with current practices, means, and construction methods. Our experience in construction and maintenance informs our planning and design and vice-versa to establish accurate budgets that are realistic and attainable.

#### ICON GOLF STUDIO SERVICES:

#### + iCon planning & design approach:

A planning and design process applied to every project that establishes a set of measurable outcomes to deliver the highest-quality golf course:



#### The results achieved on behalf of our clients are a testimony to the value of our expertise.

#### + master planning

Preparation of improvement plans emphasizes reducing maintenance expenses, increasing revenue, and improving environmental stewardship, community connections, infrastructure, enhanced golf course conditions, playability, strategy, and overall enjoyment.

#### + feasibility studies & market analyses

Providing data-driven insight with comprehensive, indepth and sophisticated research, and analytic services specifically tailored to the golf course industry

#### + design, remodel & renovation

Providing innovative golf designs suited to the site's opportunities based on your objectives and market realities.

#### + practice & alternative facility design

Alternative facilities take many shapes and forms. Our work has included innovative par-3 courses, practice venues and teaching areas. Such facility types and areas are returning to golf as a way to involve more people in the game and keep them interested when there may not be time for a traditional 18-hole round.

#### + feasibility consulting:

We work with a variety of consulting organizations, professionals and appraisers to develop comprehensive reports and studies in the following areas relative to golf developmentthe highest-quality golf course:

#### + design-build and CM/GC project delivery systems

Design-build and CM/GC Project Delivery Systems, including comprehensive project management and In-field design direction from Principal Architect, Todd Schoeder, ASGCA with our own Project Managers and Shapers, or working directly with the Owner's construction team.

#### + golfscape architecture (CO, NM, OR, WA Registered Landscape Architect)

Most call this Landscape Architecture but we prefer Golfscape Architecture - Providing detailed landscape architecture services tailored to the unique and specific needs of golf courses, including irrigation design and agronomic evaluations specifically tailored to golf course landscape, emphasizing aesthetics, and playability and sustainable maintenance practices

#### + golf course American With Disabilities Act evaluation

A comprehensive analyses of the golf course landscape to ensure all ADA guidelines are met during the remodel and renovation process

#### + construction/ermitting documents

Preparing accurate construction documents for budgeting and bidding and then implementation

#### + bidding and contractor selection

Preparing comprehensive bid packages, including project cost estimates; CD's, Details and Specifications for contractor bidding; contractor qualifications and pricing analyses; and contractor selection.



# TODD SCHOEDER, GOLF COURSE ARCHITECT



#### Education -

Masters of Landscape Architecture, University of Minnesota

Bachelor of Arts, Mathematics, University of Minnesota

ASGCA, GCBAA, GCSAA Education -

#### Golf Course Planning & Design:

- Master Planning
- New Design, Remodel & Restoration
- Golf Construction Methods
- Drainage and Irrigation
- Golf Safety
- ADA Compliance
- Environmental Protection
- Project Management/Value Engineering
- Construction Phasing/Scheduling
- Turfgrass Science

#### On-Site:

- Feature Layout/Installation
- Shaping/Finishing
- Construction Management
- Drainage & Irrigation Installation
- Planting & Grassing

#### Registrations -

- Registered Landscape Architect CO #232, OR #429, WA #1524

#### Professional Memberships/Affiliations -

- American Society of Golf Course Architects (ASGCA), Board of Governors
- Golf Course Superintendents Association of America (GCSAA)
- Golf Course Builders Association (GCBAA)
- Donald Ross Society
- American Society of Landscape Architects
- Urban Land Institute (ULI)
- The Walking Golfers Society
- USGA

#### Recent Presentations/Articles -

- Golf Course Architecture, August 2020, City Park Redesign/Build
- Colorado Avid Golfer, July 2020, City Park's Watershed Moment
- Golf Industry Show, 2020 Case Study in Municipal Golf Course Renovation & Community Success
- Golf Course Industry, June 2020, Tartan Talks No. 48 - Todd Schoeder
- Colorado Biz, April 2019, Designer Charts New Course for Historic Denver Muni
- Colorado Avid Golfer, July 2018, A Man With A Plan
- Golf Course Architecture, July 2018, Legion Memorial Renovates for Stormwater Management
- Colorado Avid Golfer, August, 2010 Changing Their Course
- ASLA Alternative Golf Courses, Future of Golf in America
- Urban Land Institute (ULI) Repositioning Golf Courses

#### Skills/Qualifications

- Principal/Owner of iCon Golf Studio.
- 30+ years experience with master planning, design and renovation of new and existing golf courses.
- Expert in golf planning, design, construction, maintenance and operations for public, private, resort and community golf courses.
- Managed design & construction of two dozen golf course projects representing over \$250M in construction.
- Recent awards include 2018 ASGCA Design Excellence Award and 2019 ASGCA Environmental Excellence Award for City Park Golf Course, Denver, CO.
- Five years as a Construction Manager/ Shaper with Wadsworth Golf Construction Company.
- Seven years golf course maintenance at Minnesota Valley Country Club.
- Design, remodel and construction implementation of Top-100 Golf Courses by Tom Bendelow, Donald Ross, Robert Bruce Harris, William Tucker and H. and Chandler Egan.
- Expert on alternative golf course types -Par 3, Reversible Routings, Practice Parks, 12-Hole Layouts, etc.
- Shaped/Finished over 200 green and bunker complexes.

# ICON GOLF STUDIO SELECT PROJECT LIST





Durango, CO



WASHINGTON NATIONAL

Auburn, WA



McHenry, MD



Maple Grove, MN



Port Orchard, WA



Henderson, NV



Palm Springs, CA

McHenry, MD

Everett, WA

cWc



Marana, AZ



Durango, CO





Sunriver, OR



Nisswa, MN



Aloha, OR



Aurora, OR





Telluride, CO









Prior Lake, MN

Lakewood, CO

- Temixcp, MX
- Rancho Santa Fe, CA

Fairview, OR



Broomfield, CO

Wayzata, MN

# SELECT PROJECT LIST CONTINUED



Franklin, TN



Niwot, CO



Pistol River, OR



Tacoma, WA





Cashiers, NC



Denver Metro, CO

efferson Park

Seattle, WA



GOLF COURSE Seattle, WA



YARBROUGH

Crown Point, NM



Yakima, WA

Park Hill

Denver, CO





Camarillo Springs, CA

Nashville, TN



Casa Grande, AZ



Lake Okoboji, IA



Seattle, WA



Jilin City, China



Springfield, IL



GLENDOVEER

Portland, OR

Golf • Tennis



Arvada, CO



Parker, CO

Snoqualmie, WA

Sacramento, CA





