Landscapes Unlimited Design & Redesign – Optimize Customer Experience, Operational Efficiency & Profit

Mike Jenkins, President, Landscapes Unlimited
Steve Merkel, Director of Agronomy, Landscapes Unlimited

Presented by:
ALLIED ASSOCIATIONS
Renovation Drivers

Repair

Improve
Reasons to Renovate

What to Consider

- Technology Advancements
- Labor Efficiencies
- Competition
- Compliance
- Life Expectancy
Life Expectancy

Stuff Wears Out...
# Life Expectancy

<table>
<thead>
<tr>
<th>Item</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens (1)</td>
<td>15 – 30 years</td>
</tr>
<tr>
<td>Bunker Sand</td>
<td>5 – 7 years</td>
</tr>
<tr>
<td>Irrigation System</td>
<td>10 – 30 years</td>
</tr>
<tr>
<td><em>Irrigation Control System</em></td>
<td>10 – 15 years</td>
</tr>
<tr>
<td><em>PVC Pipe (under pressure)</em></td>
<td>10 – 30 years</td>
</tr>
<tr>
<td><em>H.D.P.E. Pipe</em></td>
<td>40 – 60 years</td>
</tr>
<tr>
<td><em>Pump Station</em></td>
<td>15 – 20 years</td>
</tr>
<tr>
<td>Cart Paths – asphalt (2)</td>
<td>5 – 10 years (or longer)</td>
</tr>
<tr>
<td>Cart Paths – concrete</td>
<td>15 – 30 years (or longer)</td>
</tr>
<tr>
<td>Practice Range Tees</td>
<td>5 – 10 years</td>
</tr>
<tr>
<td>Tees</td>
<td>15 – 20 years</td>
</tr>
<tr>
<td>Corrugated Metal Pipes</td>
<td>15 – 30 years</td>
</tr>
<tr>
<td>Bunker Drainage Pipes (3)</td>
<td>5 – 10 years</td>
</tr>
<tr>
<td>Mulch</td>
<td>1 – 3 years</td>
</tr>
<tr>
<td>Grass (4)</td>
<td>Varies</td>
</tr>
</tbody>
</table>

The materials presented on this chart have been reviewed by the following Allied Associations of Golf:
Water Conservation

- Rising cost of water
- Regulation
- Availability
- Goodwill/Public perception
Improved Playing Surfaces

- MEMBER SATISFACTION
- PACE OF PLAY
- MAINTENANCE EFFICIENCIES
- AESTHETICS
Golf Course Renovation Trends

- Greens
- Bunkers
- Drainage
- Irrigation Systems
Remodel or Renovate Greens

- Establishing new growing medium
- Improve putting surface/faster green speeds
- “Modernize” the look of the green (aesthetics)
- Enlarge the green to provide more pin placements
Repair Bunkers

- Reduce maintenance costs
- Less downtime after rain events
- Improved playability
- Attract & retain members/customers
Improve Course Drainage

- Reduce repair costs
- Get the course open sooner after rain events
- Better growing medium - establish thicker, healthier turf
- Allow cart traffic off the paths
Upgrade Irrigation

- Water conservation
- Labor & cost efficiencies
- Eliminate emergency repairs
- More uniform coverage
Rebuilding or Re-Grassing
Rebuilding or Resurfacing Greens

Common Issues
• Contamination
• Upgrade turfgrass varieties
• New species

Challenges
• How to kill existing turf
• What to do with existing turf
• To close or not to close
• Grassing method - vegetative vs. seed
Replacement/Renovation Options

• Inter-seeding (stay in play) within maintenance budget
• No-till method ($1 to $1.50/sq. ft.)
• Partial greens mix replacement ($1.75 to $2.25/sq. ft.)
• Soil & drainage replacement ($2.50 to 6.00/sq. ft.)
• Re-design greens & surrounding hazards ($10 to $14/sq. ft.)
Turfgrass Reduction and Removal

- Response to water quantity limitations
- Looking at continued long-term challenge
- Agencies pay owners to remove turfgrass
- Utilization of alternate surface cover
- Xeriscaping
Common Bunker Challenges

• Erosion
• Contamination
• Washouts
• Poor Drainage
Bunker Liners

New Products
- Fabric liners
- Bunker Solutions
- Better Billy Bunkers
- Capillary Concrete
- Many others

Advantages
- Sand stability on slopes
- Reduced labor costs
- Reduced contamination
- Better sand consistency
- Improve playability
- Extended sand life
- Aesthetics
Irrigation Upgrade and Replacement
Water Concerns

**Scarcity**
Scarcity drives efficiency in the West

**Efficiency**
Efficiency drives compliance and conditions in the East
Several Factors Influence Efficiency...

- Uniform Spacing
- Sprinkler & Nozzle Performance
- Individual Control Ability
- Adequate Pump Station
- Proper Hydraulic Design
- System Maintenance
If it breaks...
You must fix it...fast!

Maintenance records should include:

- Water cost
- Electricity cost for pumping
- Time spent adjusting system
- Labor/Materials for repairs
- Time and labor for hand watering
There have been at least 5 generations of advancement since the ‘state-of-the-art irrigation systems were installed 40 years ago...

- Valve-in-head sprinklers
- Adjustable sprinkler nozzles
- Variable-frequency-drive pumping systems
- On-site weather stations
- Wired and wireless in-ground moisture sensing
- Systems integration capabilities
Turf Reduction Programs
California

Before

Scope of Work
• Identify areas to be removed & transitioned
• Replace with new eco-friendly landscape
• Features that save water or are a permeable walkable surface

Goal/Objectives
• Lower maintenance costs
• Use less water
• Greater sustainability

Quantifiable Results
• Water districts paying up to $2/sq. ft. for eligible projects
• Lower water cost
• Reduced maintenance costs (mowing & chemicals)

After
Olympic Hills Golf Club
Eden Prairie, MN

Scope of Work
• Renovate greens, tees & bunkers
• Replace 30 year old irrigation system
• Remove trees
• Improve drainage

Goals/Objectives
• Create new image
• Reverse trend of declining membership
• Attract younger generation of members
• Fix drainage & irrigation issues

Quantifiable Results
• Added 50 new members (net after attrition)
• $1.5 million in initiation fees
• 20% increase in revenues
• Attracted new younger members
Scope of Work
• Improve practice area
• New short course for beginners
• Rebuild practice putting green
• Donated design, materials & volunteer labor

Goals/Objectives
• Reverse trend of declining membership
• Engage youth & develop junior golfers
• Fund with contributions

Quantifiable Results
• More youth engagement (clinics, leagues, junior programs)
• Started community outreach program
• Growing membership & revenue
• No cost to the club
Scope of Work
• Lengthened range & added tee space
• Range targets & short game center
• Combined with pool, fitness & tennis enhancements

Goals/Objectives
• Add & enhance family amenities
• Make project appealing to both golf and social members
• Attract younger generation of members
• Improve driving range

Quantifiable Results
• Enrolled 47 new members before completion
• 40% of investment paid for with initiation fees in 1st year
Columbine Country Club
Littleton, CO

Scope of Work
- Replace irrigation system which was nearly 40 yrs old
- HDPE pipe
- 3 New pump stations
- Weather station

Goal\Objectives
- Attain better playing conditions
- Conserve water
- Protect water rights

Quantifiable Results
- Reduced power costs
- More efficient control of disbursing water
- Reduced labor costs
- $3.4 million cost will be entirely recovered in 15 years through sale of water to 176 neighboring homes
Scope of Work
• Rebuild greens
• Reroute a few holes
• Fix bunkers
• Eliminate drainage problems

Goals/Objectives
• Restore to former glory
• Host a US Open
• Solve drainage issues
• Reduce maintenance costs

Quantifiable Results
• Hosted 2008 US Open
• Gained competitive advantages in market
• Raised rates for both residents & non-residents
Country Club of Lincoln
Lincoln, NE

Scope of Work
• Replace 40 year old irrigation system
• Short game practice area
• Increased practice tee area
• Also a new swimming pool & patio dining

Goals/Objectives
• Attract younger members
• Create family amenities
• Remedy a small short driving range
• Irrigation efficiency & improve turf conditions

Quantifiable Results
• Assessed all members $4,800 each – lump sum or installments
• Next 4 years- added 233 new members (88 golf & 145 social)
• Net after attrition – plus 150
• Loan will be paid off in 8 years (vs. 15 yr. amort. planned)
Oak Hills Country Club
Omaha, NE

Scope of Work
• Master plan for complete 18 hole renovation (greens, tees, bunkers, irrigation)
• Completed front nine in 2009
• Cost – approximately $2.5 million

Goals/Objectives
• Create new image
• Keep up with the competition (club was built in the 60s)
• Better turf conditions
• Attract new members

Quantifiable Results
• Added 103 new members (net after attrition)
• 58 additional golf members
• 24% increase in revenues (year 5 vs. year 1)
• $430,000 improvement in NOI
Public Course Renovation Study
2014 – NGF, Sirius Golf Advisors & Jeff Brauer

Scope of Study
• 20 public course renovations in the Dallas/Fort Worth metro area since 2000
• 9 were “major” renovations costing more than $5 million
• 4 “minor” renovations – mainly turf, green & tee improvements (ave. cost = $445,000)

Results
• 9 “major” renovations – increased revenues by an average of 64% with increases ranging from $73,000 to $730,000 in year 1
• 4 “minor” renovations - increased revenues by 23% in year 1
• ROI after 1st two years – 12% and 74% respectively