



golf industry show



**MAKE** *the* **TURN**

GCSAA Education Conference

*February 4-9, 2017 • Orange County Convention Center*





# Renovation to Reinvention:

## Case Studies in Transformation



GCSAA Education Conference



# **Renovation to Reinvention:**

## **Case Studies in Transformation**

**Jupiter Island Club – Hobe Sound, FL**  
**Pelican's Nest Golf Club – Bonita Springs, FL**  
**Moraine Club – Dayton, OH**

**Moderated by**  
**Jan Bel Jan, ASGCA**



# Renovation to Reinvention

- **Two For One – Repurpose When You Renovate**

Rob Kloska – Director of Golf Course, Grounds & Tennis Maintenance

Jason Zimmerman, CGCS –  
Director of Greens & Grounds

- **Renovation Lessons –**

**From Assistant to Superintendent Challenges**

Jason Mahl – Golf Course Superintendent





# LEARNING OBJECTIVES

- How to plan for a major and/or phased renovation
- How to stay on budget
- How to communicate expectations





# Planning for Renovation

- **Define the Goals of the Project**
- **Identify the Scope of Work**
- **Create a Schedule**
- **Create a Budget**
- **Identify Who Will Execute the Work**





# Planning for Renovation

## Define the Goals of the Project

- Existing & future membership
- Water or environmental concerns
- Long-term budget management
- Pace of play



# Planning for Renovation

## Identify the Scope of Work

- Course Issues and Needs
- Solutions and Meeting Member Expectations
- Building Support



# Planning for Renovation

## Create Schedules

- Schedule Planning & Permitting
- Schedule Sequence of Work
- Schedule Weekly Construction Meetings
- Schedule Grow-in Sequence/Processes
- Opening Date





# Planning for Renovation

## Create a Budget

- Expected cash flow
- Contingency
- Turf selection
- Product & materials selection
- Contractor procurement vs.  
self-purchase



# Planning for Renovation

- Contractor Procurement
  - Define “Construction Change Order” process
  - Regular site visits by golf course architect



# Planning for Renovation

- Self-purchase
  - Cost Savings, but Risk to Project Success
  - Turf-types
  - Drainage & Irrigation Materials





# Planning for Renovation

## Project Execution

- Locate and Identify Sub-surface Infrastructure
- Define Roles for Club Staff
- Provide Info or Devices to Contractor to Communicate with Club Staff



# Planning for Renovation

## Project Execution

- Communicate to Membership  
“Restricted Access” to Course
- Expect surprises!





## “Restricted Access” Signage





# Florida State Map



**GIS  
2017**

**Pelican's  
Nest GC**

**Jupiter  
Island  
Club**

# Jupiter Island Club Hobe Sound, FL



**Rob Kloska**  
**Director of Golf Course, Grounds  
& Tennis Maintenance**



## –About Jupiter Island Club –

- Club is 77 years old
- Course created turn of last century as 9 holes
- 410 members
- 16,500 rounds annually
- Course closed June 1 thru mid-October





## – About Jupiter Island Club –

- Tees – 3.1 acres
- Greens – 2.3 acres (*100,000 sq. ft.*)
- Approaches – 3.1 acres
- Fairways – 21 acres
- Roughs – 45 acres
- Bunkers – 1.4 acres (*74*)
- Fresh water – 4.5 acres (*4*)
- Brackish water – .75 acres (*2*)
- Palms – 10,000+





Atlantic

Ocean

Beach Club

7

8

1

10

15

Seawall

Marina

Intracoastal

Waterway

Google

Image Date: 1/23/2015 37°03'38.73" N 80°05'57.02" W



## – Issues –

### Identified issues with Green Committee and Club Board input (thus, buy-in)

- Greens: 18-year old TifEagle, USGA-type
- Water storage & drainage
- Fairway grasses 50 years old
- Shade issues & root intrusion
- Bunker edge revision & sand replacement
- Tees not level with poor turf coverage
- Cart Path relocation – safety & playability
- Shore erosion along Intracoastal





# Water Storage





## 50-year old fairway grass and drainage issues





## Organic Build-up





# Organic Build-up





## Bunker Edge Detail and 18 Years of Topdressing





# Jupiter Island Club

Shade on tees  
Root intrusion



## – Solutions –

- **Greens:** Remove organic layer & re-grass
- **Water storage:** Expand lake, use excavated soil to address drainage issues
- **Shade problems:** Relocate trees & root prune others
- **Fairways:** Re-grass w/contemporary grass
- **Tees:** Expand and renovate, use excavated greens mix
- **Irrigation:** Adjust as necessary  
Install seawall



## – Planning –

### Create Professional Team

- **Golf Course Architect/Landscape Architect**

*Jan Bel Jan, ASGCA, RLA to fill both rolls*

- **Engineer**
- **Agronomist**
- **Water Consultant**





## – Planning –

### **Set Achievable Time Frame for:**

- **Creation of Scope of Work**
- **Project Design**
- **Design Approval by Club Governors**
- **Permitting**
- **Preliminary Budgeting**
- **Product Research & Vetting**





## – Planning –

### Set Achievable Time Frame for:

- Specifications and Bid Packages
- Contractor Search & Vetting
- Product Choices & Supply Contracts
- Pre-Bid & Bid Meetings
- Bid Review & Contract Award
- Pre-Construction Meeting(s)



## – Planning –

### Set Achievable Time Frame for:

- **Planned Committee Communication**
- **Project Commencement**
- **Project Completion**
- **Grow-in**
- **Opening Date**



## – Planning: In-house Staff –

- **Director of Golf Course, Grounds and Tennis Maintenance**  
Project Manager; Responsible for Ordering
- **Golf Course Superintendent** (*Hired April 1*)  
Organization and Grow-In Activities
- **First Assistant Superintendent**  
Staff Management & All No-Till Prep Activities



## – Planning: In-house Staff –

- **Second Assistant Superintendent**

Partner w/Contractor for Infrastructure ID

Install Some Irrigation & Drainage

- **Golf Course Specialist, IPM Tech & Intern**

Irrigation & Drainage Install and Grow-In

- **Line Staff**

Prune All Palms Ahead of Construction

No-Till Prep

Grow-In Activities



## In- House Schedule

START	FROM	11-Apr	25-Apr	9-May	23-May	6-Jun	20-Jun	4-Jul	18-Jul
FINISH	TO	24-Apr	8-May	22-May	5-Jun	19-Jun	3-Jul	17-Jul	31-Jul
ACTIVITY									
ROUNDUP APPLICATION		12-Apr	4/26/16?	5/10/16?	5/26/16?	6/8/16?			
LANDSCAPE #6									
NO-TILL ACTIVITY									
TREE WORK									
COLOR LEGEND		ROUNDUP APPLICATION							
		LANDSCAPE #6							
		NO-TILL ACTIVITY							



**They do it all!**



PROPOSED DETAILED SCHEDULE															
QSG DEVELOPMENT, INC.															
	DATE	WEEK END													
START		25-Apr	2-May	9-May	16-May	23-May	30-May	6-Jun	13-Jun	20-Jun	27-Jun	4-Jul	11-Jul	18-Jul	25-Jul
FINISH		30-Apr	7-May	14-May	21-May	28-May	4-Jun	11-Jun	18-Jun	25-Jun	2-Jul	9-Jul	16-Jul	23-Jul	30-Jul
TOTAL WORK DAYS		6	6	6	6	6	6	6	6	6	6	6	6	6	6
TASK															
MOBILIZATION															
GREENS SURVEY/MAPPING															
TREE PROTECTION/SILT FENCE															
DESILT POND/DISPOSE LINER															
LAKE EXCAVATION/FILL TO AREAS REQUIRED															
LAKE INTERCONNECT PIPING/AERATORS, ETC.															
SEAWALL CONSTRUCTION															
LINER INSTALLATION															
HOLES #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22, #23, #24, #25, #26, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39, #40, #41, #42, #43, #44, #45, #46, #47, #48, #49, #50, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61, #62, #63, #64, #65, #66, #67, #68, #69, #70, #71, #72, #73, #74, #75, #76, #77, #78, #79, #80, #81, #82, #83, #84, #85, #86, #87, #88, #89, #90, #91, #92, #93, #94, #95, #96, #97, #98, #99, #100, #101, #102, #103, #104, #105, #106, #107, #108, #109, #110, #111, #112, #113, #114, #115, #116, #117, #118, #119, #120, #121, #122, #123, #124, #125, #126, #127, #128, #129, #130, #131, #132, #133, #134, #135, #136, #137, #138, #139, #140, #141, #142, #143, #144, #145, #146, #147, #148, #149, #150, #151, #152, #153, #154, #155, #156, #157, #158, #159, #160, #161, #162, #163, #164, #165, #166, #167, #168, #169, #170, #171, #172, #173, #174, #175, #176, #177, #178, #179, #180, #181, #182, #183, #184, #185, #186, #187, #188, #189, #190, #191, #192, #193, #194, #195, #196, #197, #198, #199, #200, #201, #202, #203, #204, #205, #206, #207, #208, #209, #210, #211, #212, #213, #214, #215, #216, #217, #218, #219, #220, #221, #222, #223, #224, #225, #226, #227, #228, #229, #230, #231, #232, #233, #234, #235, #236, #237, #238, #239, #240, #241, #242, #243, #244, #245, #246, #247, #248, #249, #250, #251, #252, #253, #254, #255, #256, #257, #258, #259, #260, #261, #262, #263, #264, #265, #266, #267, #268, #269, #270, #271, #272, #273, #274, #275, #276, #277, #278, #279, #280, #281, #282, #283, #284, #285, #286, #287, #288, #289, #290, #291, #292, #293, #294, #295, #296, #297, #298, #299, #300, #301, #302, #303, #304, #305, #306, #307, #308, #309, #310, #311, #312, #313, #314, #315, #316, #317, #318, #319, #320, #321, #322, #323, #324, #325, #326, #327, #328, #329, #330, #331, #332, #333, #334, #335, #336, #337, #338, #339, #340, #341, #342, #343, #344, #345, #346, #347, #348, #349, #350, #351, #352, #353, #354, #355, #356, #357, #358, #359, #360, #361, #362, #363, #364, #365, #366, #367, #368, #369, #370, #371, #372, #373, #374, #375, #376, #377, #378, #379, #380, #381, #382, #383, #384, #385, #386, #387, #388, #389, #390, #391, #392, #393, #394, #395, #396, #397, #398, #399, #400, #401, #402, #403, #404, #405, #406, #407, #408, #409, #410, #411, #412, #413, #414, #415, #416, #417, #418, #419, #420, #421, #422, #423, #424, #425, #426, #427, #428, #429, #430, #431, #432, #433, #434, #435, #436, #437, #438, #439, #440, #441, #442, #443, #444, #445, #446, #447, #448, #449, #450, #451, #452, #453, #454, #455, #456, #457, #458, #459, #460, #461, #462, #463, #464, #465, #466, #467, #468, #469, #470, #471, #472, #473, #474, #475, #476, #477, #478, #479, #480, #481, #482, #483, #484, #485, #486, #487, #488, #489, #490, #491, #492, #493, #494, #495, #496, #497, #498, #499, #500, #501, #502, #503, #504, #505, #506, #507, #508, #509, #510, #511, #512, #513, #514, #515, #516, #517, #518, #519, #520, #521, #522, #523, #524, #525, #526, #527, #528, #529, #530, #531, #532, #533, #534, #535, #536, #537, #538, #539, #540, #541, #542, #543, #544, #545, #546, #547, #548, #549, #550, #551, #552, #553, #554, #555, #556, #557, #558, #559, #560, #561, #562, #563, #564, #565, #566, #567, #568, #569, #570, #571, #572, #573, #574, #575, #576, #577, #578, #579, #580, #581, #582, #583, #584, #585, #586, #587, #588, #589, #590, #591, #592, #593, #594, #595, #596, #597, #598, #599, #600, #601, #602, #603, #604, #605, #606, #607, #608, #609, #610, #611, #612, #613, #614, #615, #616, #617, #618, #619, #620, #621, #622, #623, #624, #625, #626, #627, #628, #629, #630, #631, #632, #633, #634, #635, #636, #637, #638, #639, #640, #641, #642, #643, #644, #645, #646, #647, #648, #649, #650, #651, #652, #653, #654, #655, #656, #657, #658, #659, #660, #661, #662, #663, #664, #665, #666, #667, #668, #669, #670, #671, #672, #673, #674, #675, #676, #677, #678, #679, #680, #681, #682, #683, #684, #685, #686, #687, #688, #689, #690, #691, #692, #693, #694, #695, #696, #697, #698, #699, #700, #701, #702, #703, #704, #705, #706, #707, #708, #709, #710, #711, #712, #713, #714, #715, #716, #717, #718, #719, #720, #721, #722, #723, #724, #725, #726, #727, #728, #729, #730, #731, #732, #733, #734, #735, #736, #737, #738, #739, #740, #741, #742, #743, #744, #745, #746, #747, #748, #749, #750, #751, #752, #753, #754, #755, #756, #757, #758, #759, #760, #761, #762, #763, #764, #765, #766, #767, #768, #769, #770, #771, #772, #773, #774, #775, #776, #777, #778, #779, #780, #781, #782, #783, #784, #785, #786, #787, #788, #789, #790, #791, #792, #793, #794, #795, #796, #797, #798, #799, #800, #801, #802, #803, #804, #805, #806, #807, #808, #809, #810, #811, #812, #813, #814, #815, #816, #817, #818, #819, #820, #821, #822, #823, #824, #825, #826, #827, #828, #829, #830, #831, #832, #833, #834, #835, #836, #837, #838, #839, #840, #841, #842, #843, #844, #845, #846, #847, #848, #849, #850, #851, #852, #853, #854, #855, #856, #857, #858, #859, #860, #861, #862, #863, #864, #865, #866, #867, #868, #869, #870, #871, #872, #873, #874, #875, #876, #877, #878, #879, #880, #881, #882, #883, #884, #885, #886, #887, #888, #889, #890, #891, #892, #893, #894, #895, #896, #897, #898, #899, #900, #901, #902, #903, #904, #905, #906, #907, #908, #909, #910, #911, #912, #913, #914, #915, #916, #917, #918, #919, #920, #921, #922, #923, #924, #925, #926, #927, #928, #929, #930, #931, #932, #933, #934, #935, #936, #937, #938, #939, #940, #941, #942, #943, #944, #945, #946, #947, #948, #949, #950, #951, #952, #953, #954, #955, #956, #957, #958, #959, #960, #961, #962, #963, #964, #965, #966, #967, #968, #969, #970, #971, #972, #973, #974, #975, #976, #977, #978, #979, #980, #981, #982, #983, #984, #985, #986, #987, #988, #989, #990, #991, #992, #993, #994, #995, #996, #997, #998, #999, #1000, #1001, #1002, #1003, #1004, #1005, #1006, #1007, #1008, #1009, #1010, #1011, #1012, #1013, #1014, #1015, #1016, #1017, #1018, #1019, #1020, #1021, #1022, #1023, #1024, #1025, #1026, #1027, #1028, #1029, #1030, #1031, #1032, #1033, #1034, #1035, #1036, #1037, #1038, #1039, #1040, #1041, #1042, #1043, #1044, #1045, #1046, #1047, #1048, #1049, #1050, #1051, #1052, #1053, #1054, #1055, #1056, #1057, #1058, #1059, #1060, #1061, #1062, #1063, #1064, #1065, #1066, #1067, #1068, #1069, #1070, #1071, #1072, #1073, #1074, #1075, #1076, #1077, #1078, #1079, #1080, #1081, #1082, #1083, #1084, #1085, #1086, #1087, #1088, #1089, #1090, #1091, #1092, #1093, #1094, #1095, #1096, #1097, #1098, #1099, #1100, #1101, #1102, #1103, #1104, #1105, #1106, #1107, #1108, #1109, #1110, #1111, #1112, #1113, #1114, #1115, #1116, #1117, #1118, #1119, #1120, #1121, #1122, #1123, #1124, #1125, #1126, #1127, #1128, #1129, #1130, #1131, #1132, #1133, #1134, #1135, #1136, #1137, #1138, #1139, #1140, #1141, #1142, #1143, #1144, #1145, #1146, #1147, #1148, #1149, #1150, #1151, #1152, #1153, #1154, #1155, #1156, #1157, #1158, #1159, #1160, #1161, #1162, #1163, #1164, #1165, #1166, #1167, #1168, #1169, #1170, #1171, #1172, #1173, #1174, #1175, #1176, #1177, #1178, #1179, #1180, #1181, #1182, #1183, #1184, #1185, #1186, #1187, #1188, #1189, #1190, #1191, #1192, #1193, #1194, #1195, #1196, #1197, #1198, #1199, #1200, #1201, #1202, #1203, #1204, #1205, #1206, #1207, #1208, #1209, #1210, #1211, #1212, #1213, #1214, #1215, #1216, #1217, #1218, #1219, #1220, #1221, #1222, #1223, #1224, #1225, #1226, #1227, #1228, #1229, #1230, #1231, #1232, #1233, #1234, #1235, #1236, #1237, #1238, #1239, #1240, #1241, #1242, #1243, #1244, #1245, #1246, #1247, #1248, #1249, #1250, #1251, #1252, #1253, #1254, #1255, #1256, #1257, #1258, #1259, #1260, #1261, #1262, #1263, #1264, #1265, #1266, #1267, #1268, #1269, #1270, #1271, #1272, #1273, #1274, #1275, #1276, #1277, #1278, #1279, #1280, #1281, #1282, #1283, #1284, #1285, #1286, #1287, #1288, #1289, #1290, #1291, #1292, #1293, #1294, #1295, #1296, #1297, #1298, #1299, #1300, #1301, #1302, #1303, #1304, #1305, #1306, #1307, #1308, #1309, #1310, #1311, #1312, #1313, #1314, #1315, #1316, #1317, #1318, #1319, #1320, #1321, #1322, #1323, #1324, #1325, #1326, #1327, #1328, #1329, #1330, #1331, #1332, #1333, #1334, #1335, #1336, #1337, #1338, #1339, #1340, #1341, #1342, #1343, #1344, #1345, #1346, #1347, #1348, #1349, #1350, #1351, #1352, #1353, #1354, #1355, #1356, #1357, #1358, #1359, #1360, #1361, #1362, #1363, #1364, #1365, #1366, #1367, #1368, #1369, #1370, #1371, #1372, #1373, #1374, #1375, #1376, #1377, #1378, #1379, #1380, #1381, #1382, #1383, #1384, #1385, #1386, #1387, #1388, #1389, #1390, #1391, #1392, #1393, #1394, #1395, #1396, #1397, #1398, #1399, #1400, #1401, #1402, #1403, #1404, #1405, #1406, #1407, #1408, #1409, #1410, #1411, #1412, #1413, #1414, #1415, #1416, #1417, #1418, #1419, #1420, #1421, #1422, #1423, #1424, #1425, #1426, #1427, #1428, #1429, #1430, #1431, #1432, #1433, #1434, #1435, #1436, #1437, #1438, #1439, #1440, #1441, #1442, #1443, #1444, #1445, #1446, #1447, #1448, #1449, #1450, #1451, #1452, #1453, #1454, #1455, #1456, #1457, #1458, #1459, #1460, #1461, #1462, #1463, #1464, #1465, #1466, #1467, #1468, #1469, #1470, #1471, #1472, #1473, #1474, #1475, #1476, #1477, #1478, #1479, #1480, #1481, #1482, #1483, #1484, #1485, #1486, #1487, #1488, #1489, #1490, #1491, #1492, #1493, #1494, #1495, #1496, #1497, #1498, #1499, #1500, #1501, #1502, #1503, #1504, #1505, #1506, #1507, #1508, #1509, #1510, #1511, #1512, #1513, #1514, #1515, #1516, #1517, #1518, #1519, #1520, #1521, #1522, #1523, #1524, #1525, #1526, #1527, #1528, #1529, #1530, #1531, #1532, #1533, #1534, #1535, #1536, #1537, #1538, #1539, #1540, #1541, #1542, #1543, #1544, #1545, #1546, #1547, #1548, #1549, #1550, #1551, #1552, #1553, #1554, #1555, #1556, #1557, #1558, #1559, #1560, #1561, #1562, #1563, #1564, #1565, #1566, #1567, #1568, #1569, #1570, #1571, #1572, #1573, #1574, #1575, #1576, #1577, #1578, #1579, #1580, #1581, #1582, #1583, #1584, #1585, #1586, #1587, #1588, #1589, #1590, #1591, #1592, #1593, #1594, #1595, #1596, #1597, #1598, #1599, #1600, #1601, #1602, #1603, #1604, #1605, #1606, #1607, #1608, #1609, #1610, #1611, #1612, #1613, #1614, #1615, #1616, #1617, #1618, #1619, #1620, #1621, #1622, #1623, #1624, #1625, #1626, #1627, #1628, #1629, #1630, #1631, #1632, #1633, #1634, #1635, #1636, #1637, #1638, #1639, #1640, #1641, #1642, #1643, #1644, #1645, #1646, #1647, #1648, #1649, #1650, #1651, #1652, #1653, #1654, #1655, #1656, #1657, #1658, #1659, #1660, #1661, #1662, #1663, #1664, #1665, #1666, #1667, #1668, #1669, #1670, #1671, #1672, #1673, #1674, #1675, #1676, #1677, #1678, #1679, #1680, #1681, #1682, #1683, #1684, #1685, #1686, #1687, #1688, #1689, #1690, #1691, #1692, #1693, #1694, #1695, #1696, #1697, #1698, #1699, #1700, #1701, #1702, #1703, #1704, #1705, #1706, #1707, #1708, #1709, #1710, #1711, #1712, #1713, #1714, #1715, #1716, #1717, #1718, #1719, #1720, #1721, #1722, #1723, #1724, #1725, #1726, #1727, #1728, #1729, #1730, #1731, #1732, #1733, #1734, #1735, #1736, #1737, #1738, #1739, #1740, #1741, #1742, #1743, #1744, #1745, #1746, #1747, #1748, #1749, #1750, #1751, #1752, #1753, #1754, #1755, #1756, #1757, #1758, #1759, #1760, #1761, #1762, #1763, #1764, #1765, #1766, #1767, #1768, #1769, #1770, #1771, #1772, #1773, #1774, #1775, #1776, #1777, #1778, #1779, #1780, #1781, #1782, #1783, #1784, #1785, #1786, #1787, #1788, #1789, #1790, #1791, #1792, #1793, #1794, #1795, #1796, #1797, #1798, #1799, #1800, #1801, #1802, #1803, #1804, #1805, #1806, #1807, #1808, #1809, #1810, #1811, #1812, #1813, #1814, #1815, #1816, #1817, #1818, #1819, #1820, #1821, #1822, #1823, #1824, #1825, #1826, #1827, #1828, #1829, #1830, #1831, #1832, #1833, #1834, #1835, #1836, #1837, #1838, #1839, #1840, #1841, #1842, #1843, #1844, #1845, #1846, #1847, #1848, #1849, #1850, #1851, #1852, #1853, #1854, #1855, #1856, #1857, #1858, #1859, #1860, #1861, #1862, #1863, #1864, #1865, #1866, #1867, #1868, #1869, #1870, #1871, #1872, #1873, #1874, #1875, #1876, #1877, #1878, #1879, #1880, #1881, #1882, #1883, #1884, #1885, #1886, #1887, #1888, #1889, #1890, #1891, #1892, #1893, #1894, #1895, #1896, #1897, #1898, #1899, #1900, #1901, #1902, #1903, #1904, #1905, #1906, #1907, #1908, #1909, #1910, #1911, #1912, #1913, #1914, #1915, #1916, #1917, #1918, #1919, #1920, #1921, #1922, #1923, #1924, #1925, #1926, #1927, #1928, #1929, #1930, #1931, #1932, #1933, #1934, #1935, #1936, #1937, #1938, #1939, #1940, #1941, #1942, #1943, #1944, #1945, #1946, #1947, #1948, #1949, #1950, #1951, #1952, #1953, #1954, #1955, #1956, #1957, #1958, #1959, #1960, #1961, #1962, #1963, #1964, #1965, #1966, #1967, #1968, #1969, #1970, #1971, #1972, #1973, #1974, #1975, #1976, #1977, #1978, #1979, #1980, #1981, #1982, #1983, #1984, #1985, #1986, #1987, #1988, #1989, #1990, #1991, #1992, #1993, #1994, #1995, #1996, #1997, #1998, #1999, #2000, #2001, #2002, #2003, #2004, #2005, #2006, #2007, #2008, #2009, #2010, #2011, #2012, #2013, #2014, #2015, #2016, #2017, #2018, #2019, #2020, #2021, #2022, #2023, #2024, #2025, #2026, #2027, #2028, #2029, #2030, #2031, #2032, #2033, #2034, #2035, #2036, #2037, #2038, #															

## – Planning –

- Began during 2011-2012 season
- Part of Larger, 10-Year Capital Plan
  - Significant Board/Committee turnover
  - Continual Board education
    - Need, costs, timing, etc.
- Periodic communication to members



# Jupiter Island Club – Challenges–

## Pre-Project:

- Committee and Board Approval
- Budget Approval
- Final Design Approval
- Accept Use of Glyphosate





## JIC work: No-Till Preparation



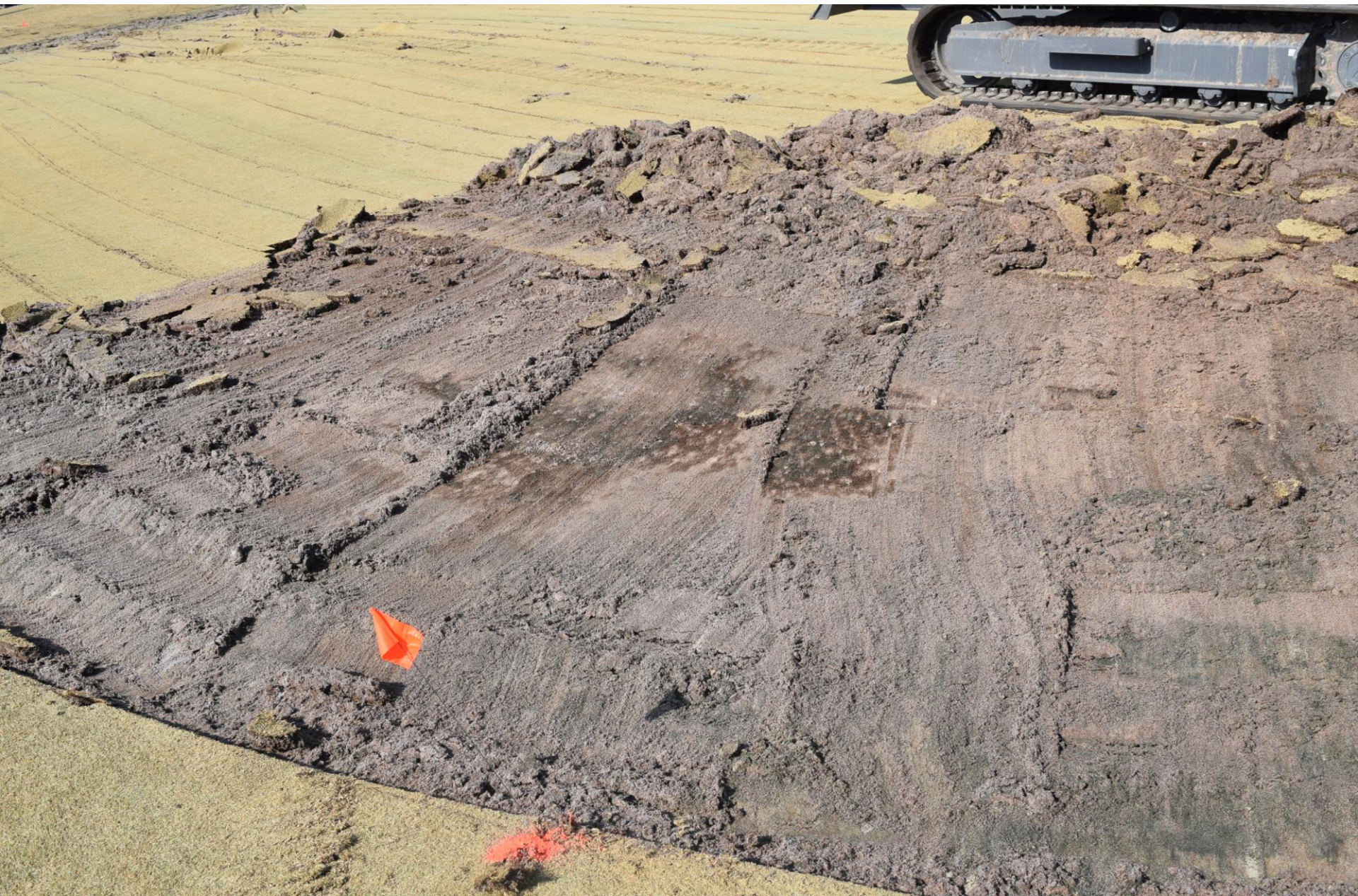


## JIC work: Prune 10,000 palms





## Sod-cut Organic on Green





## Sod stripping





## Organic Removed from Green





## Tilling Organic around Green





## Tilling Organic around Green





## Irrigation Changes around Green





## Root Intrusion into Greens





## Existing Sub-surface Drainage





## Raising Fairway Grades





## Install Fairway Drainage Pump





## Seawall Installation





# HDPE Pond Liner





## Connecting New Pond to Irrigation Lake





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## Pre-purchase Fumigation





# Fumigation





# Fumigation





# Fumigation





# Fumigation





# Pre-purchase Fumigation





## Fumigation tarps being removed





# Superstar Architect





## Architect's Problem





## Implementing Architect's Vision





## Implementing Architect's Vision – Detail





## Architect's Problem





## Details Make the Difference





## Architect's Vision – Final





## Sod-to-Sprig





# Zoysia Tee





## Zoysia Tee





# Product Experiment





## Product Experiment





# Product Experiment





## Bunker during “King” Tide





## Use Old Bunker Sand





# Palm Relocation





# Palm Relocation





# Grow-in Fertility





## Grow-in Fertility





## Grow-in Fertility - Scoring Tee





## Floating Islands





# Floating Islands





# Floating Islands





# **Jupiter Island Club – Challenges–**

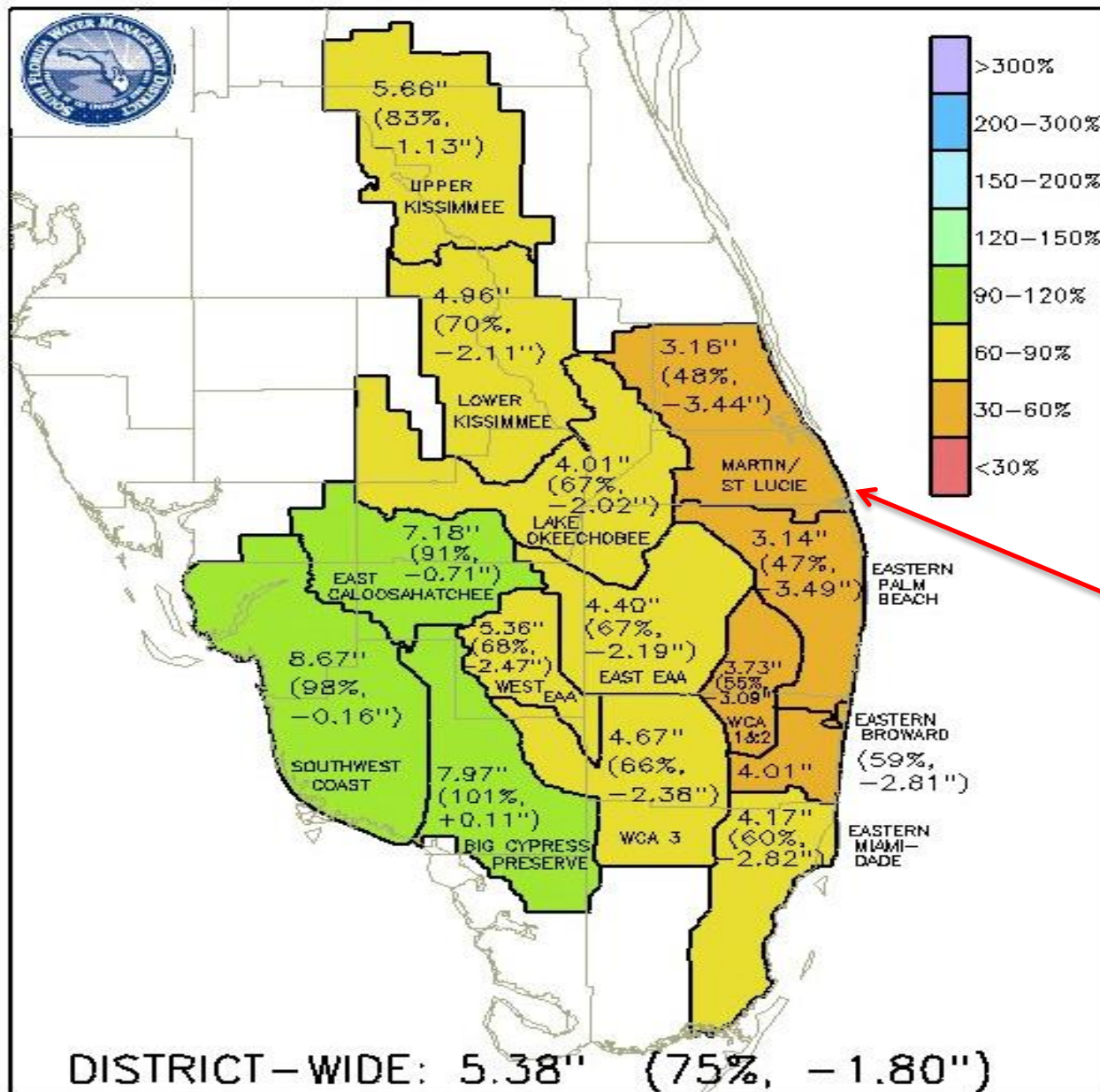
## **During Project:**

- **Contractor Damaging Infrastructure**
- **Weather – Too Dry; Water Shortage  
Delayed Sprigging**
- **Timely Delivery of Products**





02-JUL-2016 to 01-AUG-2016



**Jupiter  
Island  
Club**



## # 1 Tee - Before





## # 1 Tee - After





## # 6 - Before





## # 6 - During





## # 6 - After





## # 6 – Links Road Before





## # 6 – Links Road After





## # 13 Tee - Before





## # 13 Tee - After





## # 14 - Before





## # 14 - After





## # 18 – Before





## # 18 – Before





## # 18 – During





## # 18 – During





## # 18 – During





## # 18 – After





## # 18 – After





# Jupiter Island Club – Challenges–

## Post Project:

- Higher Level of Maintenance
- Training Staff for New Standards
- Hurricane Matthew





## Grow-in Equipment





## Increased Maintenance Costs





# Hurricane Matthew





# Jupiter Island Club

## – Key Take-Aways–

- Hire an Architect (ASGCA): Protects You and the Club
- Glyphosate Use Can Be Controversial
- Define Roles of In-house Staff
- Tree & Palm Root Intrusion a Big Concern
- Contractor Choice has Short- and Long-term Ramifications





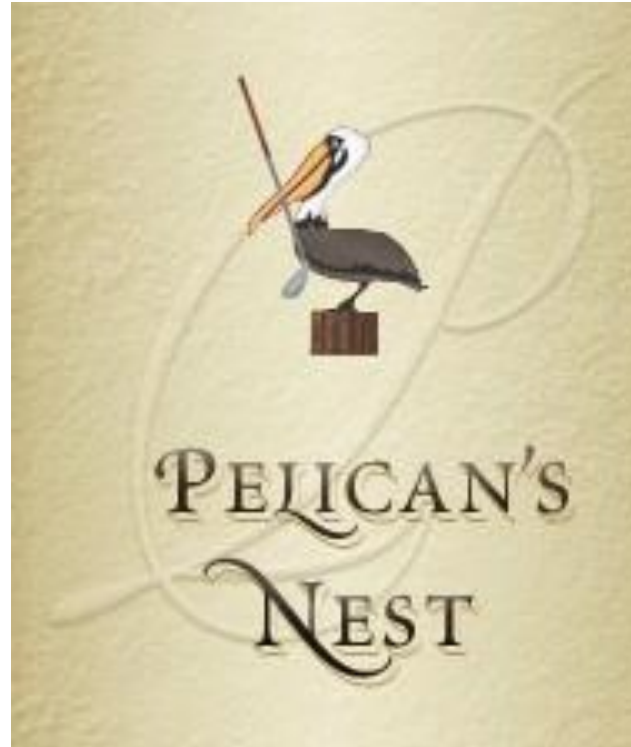


Questions?



# Pelican's Nest Golf Club

## Bonita Springs, FL



**Jason Zimmerman, GCCS**  
**Director of Greens & Grounds**



Maintenance  
Facility

G5

Effluent Valve  
Connection

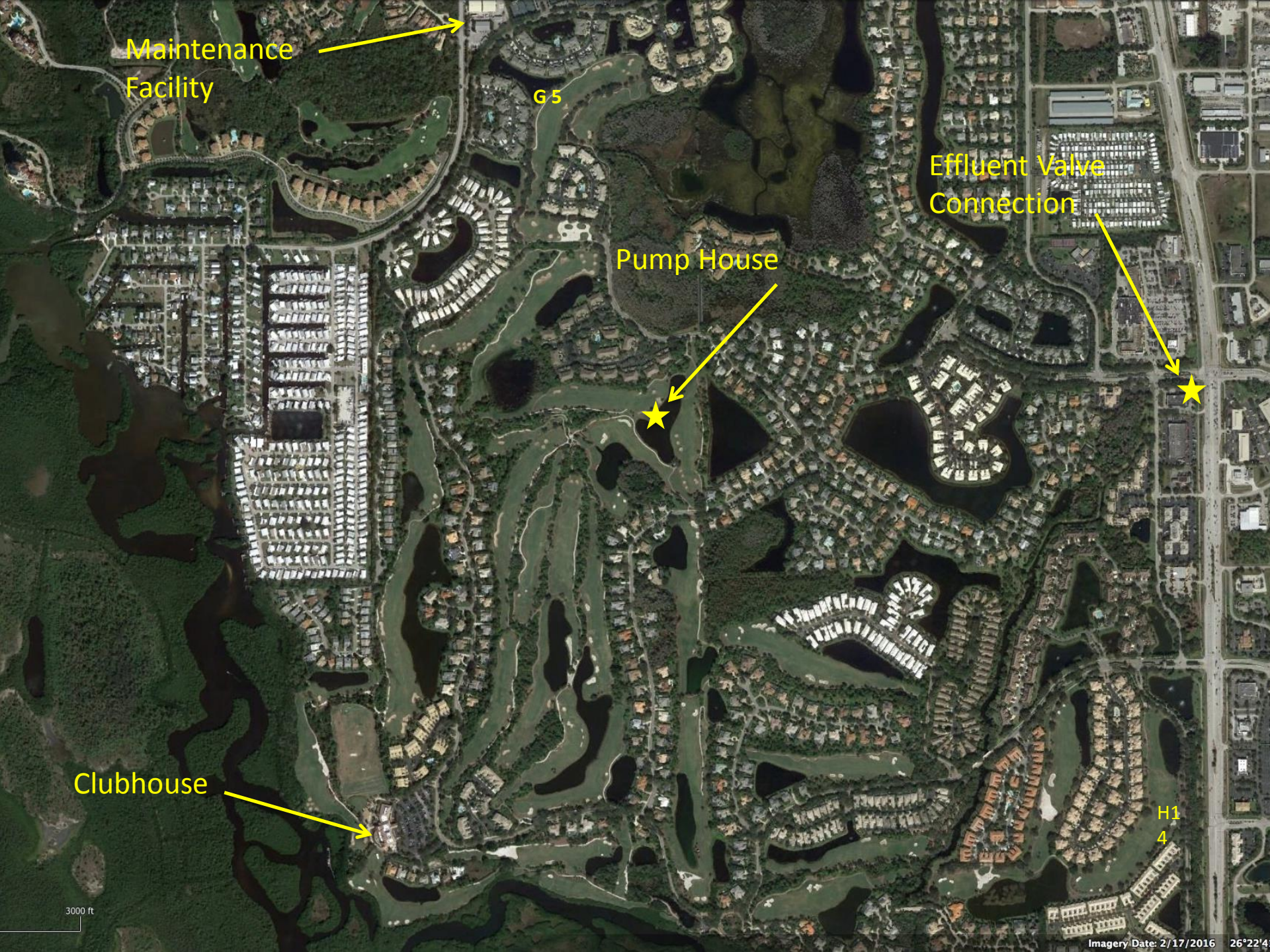
Pump House

Clubhouse

H1  
4

3000 ft

Imagery Date: 2/17/2016 26°22'4





# About Pelican's Nest Golf Club

## 36-Hole Member-owned Private Club

- Tom Fazio Design
- Residential development
- Construction 1984 – 1993
- 543 equivalent memberships
- Over 50,000 rounds per year
- Audubon International certified
- +/- 140 courses in Southwest Florida

*(25-mile radius)*





# About Pelican's Nest Golf Club

BE IT KNOWN THAT

PELICAN'S NEST GOLF CLUB

HAS MET THE CRITERIA SET FORTH BY THE

AUDUBON COOPERATIVE SANCTUARY PROGRAM  
FOR GOLF COURSES

AND HAS ACHIEVED

## RECERTIFICATION

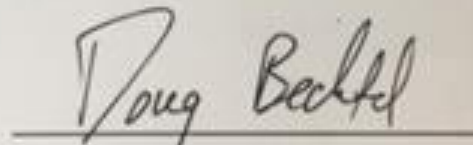
FOR ACCOMPLISHMENTS IN SUSTAINABLE NATURAL RESOURCE MANAGEMENT  
AND ENVIRONMENTAL STEWARDSHIP

RECERTIFICATION ISSUED

OCTOBER 2, 2015

CERTIFIED SINCE 2001





DOUG BECHTEL  
EXECUTIVE DIRECTOR OF AUDUBON INTERNATIONAL





# Pelican's Nest Golf Club

## – Issues –

### Issues identified with Club Governors

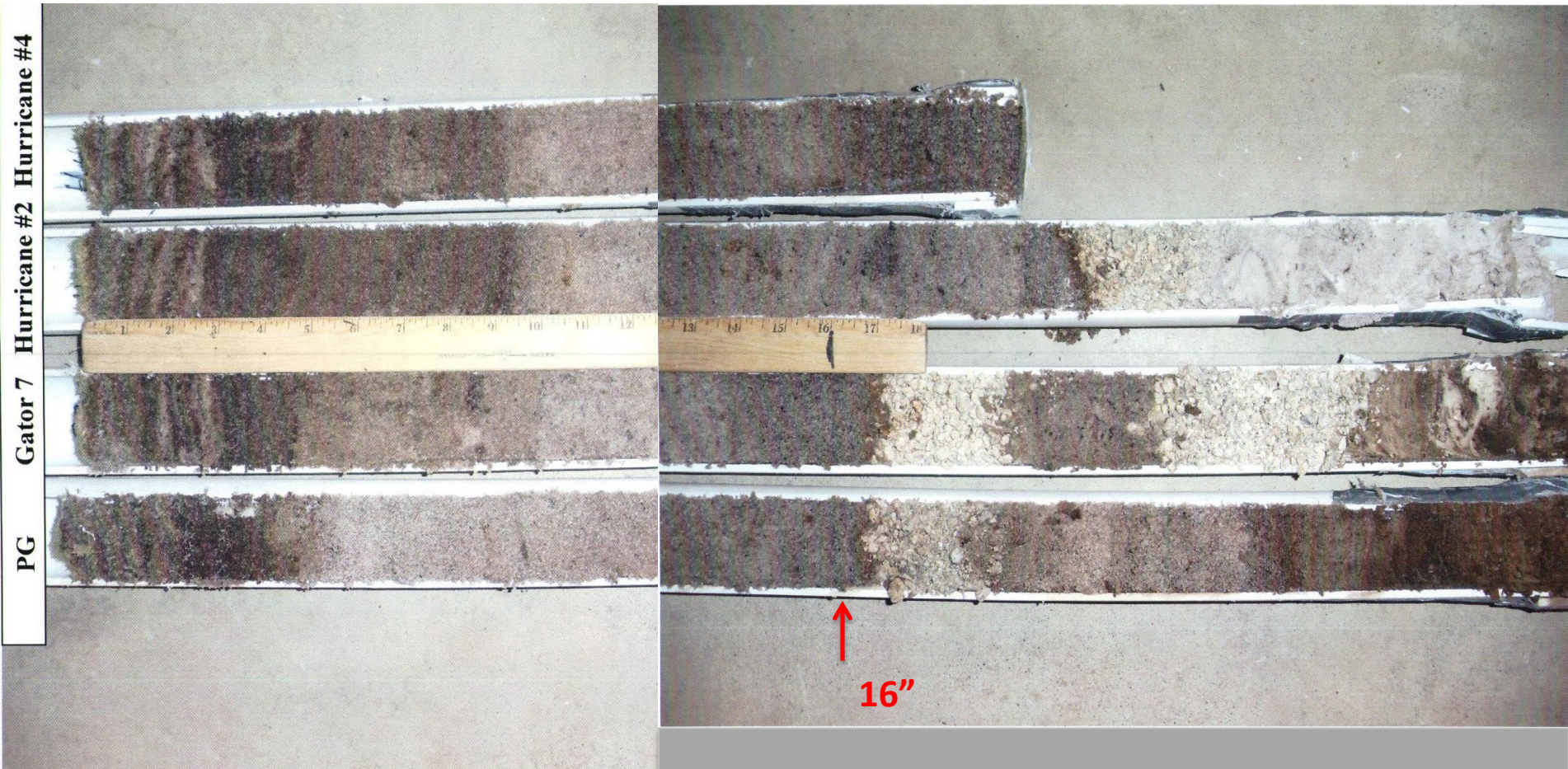
- 36 Holes designed & built 1983 thru 1994
- Putting surfaces smaller; ages of mix, iron oxide layer, blocked drainage, steep contours
- Bunker depths, sizes & shapes changed; restoring eroded faces after rainstorms
- Irrigation wells compromised by salt water intrusion during 2007- 2008 drought
- Members want to “tee it forward”





## — Greens Disparity —

Sample cores from four greens to 30" (*Hummel & Co.*)





– Iron Oxide Layer–





## – Greens' Slopes –





## – Encroachment –





– Shade on Green –





## – Bunker Size and Access –





## – Bunker Depth and Height –





## – Bunker Depth and Access –





## – Bunker Depth and Access –





– Build-up outside of bunkers –





# Pelican's Nest Golf Club

## – Solutions –

- Bring effluent 1.25 miles to irrigation pond
- Rebuild greens to original design intent
- Rebuild bunkers (playability & maintenance)
- Use spent greens mix to create “Scoring Tees”
- Use excavated bunker sand to raise grades & improve drainage
- No-till fairway renovation
- Build retaining walls at Practice Green & G17





## **– Planning –**

- **Planning began 2012 for 2015 / 2016 work**
- **Create design & construction documents for all 36 holes & bid at the same time**
- **Work on 18 holes in sequential years**
- **Up-grade pump station for blending water before construction begins**
- **Improve Practice Tee, Putting Green & Chipping Green**





## – Planning –

Member Survey/Meetings

Scope of Work for Two Years

Project Design

Design Review by Club

Governors

Preliminary Budgeting

Specifications/Bid Package

Pre-Bid & Bid Meetings

Bid Review & Contract Award





# About Pelican's Nest Golf Club

## 36 holes and Practice Areas

- Greens – 6 acres
- Tees – 9 acres
- Fairways – 65 acres
- Roughs – 120 acres
- Bunkers – 5 acres
- Maintained turf – 200 acres
- Lakes & wetlands – 140 acres





# About Pelican's Nest Golf Club

## Turf-types

**Greens – TifEagle™ Bermudagrass**

**Collars – TifGrand™ Bermudagrass**

**Tees – Celebration™ Bermudagrass**

**Fairways – Celebration™, Tifway 419 and  
Common Bermudagrass**

**Roughs – Tifway 419 and Common  
Bermudagrass**





## – Design Review by Committee –





# Pelican's Nest Golf Club

## – Challenges –

### Pre-Construction

- Confirm necessity with three agronomists
- Water table has been raised since original construction
- Locating drainage outfalls for greens & bunkers
- Staging areas
- Bury sites









## – Staging Areas –





– High water table –





## – Bury Sites –





# Pelican's Nest – Challenge –

Finding and marking  
drainage  
and  
outfalls





# Pelican's Nest Golf Club

## – Challenges –

### During Construction

- Equipment not always available
- Unknown that nine of 36 greens had two layers of gravel and drainage
- Continual herbicide treatment of bunkers before renovation
- Gravel and sand delivery delays
- Rain at sod farms delayed sprigs and sod





– Two layered green construction –





## – Two Layers of Greens Construction with Drainage –





– Green Liner –





# Pelican's Nest Golf Club

– Typical Layers –





# Pelican's Nest Golf Club

Conductivity Meter

High Reading  
Organic Matter



**MAKE** *the* **TURN**



# Pelican's Nest Golf Club

Conductivity Meter

Low Reading  
Original Mix





## – Regular Herbicide Treatment of Bunkers –





Maintenance  
Facility

G5

Effluent Valve  
Connection

Pump House

Clubhouse

H1  
4

3000 ft



## Reclaimed Water Valve





## Fusing 12" HDPE Delivery Line





## Effluent Delivery Line





# Vermeer Borer





## 12" HDPE Pipe Bore





## 12" HDPE Pipe Bore









## 12" HDPE Pipe Bore





## Connecting Blending Line









## Connections at Pump House









## Connections inside Pump House





# Pelican's Nest Golf Club

– Blending Panel –



MAKE *the* TURN



## – #2 Hurricane Scoring Tee –





## – #2 Hurricane Scoring Tee –





## – #2 Hurricane Tees –





## – #5 Hurricane Before –



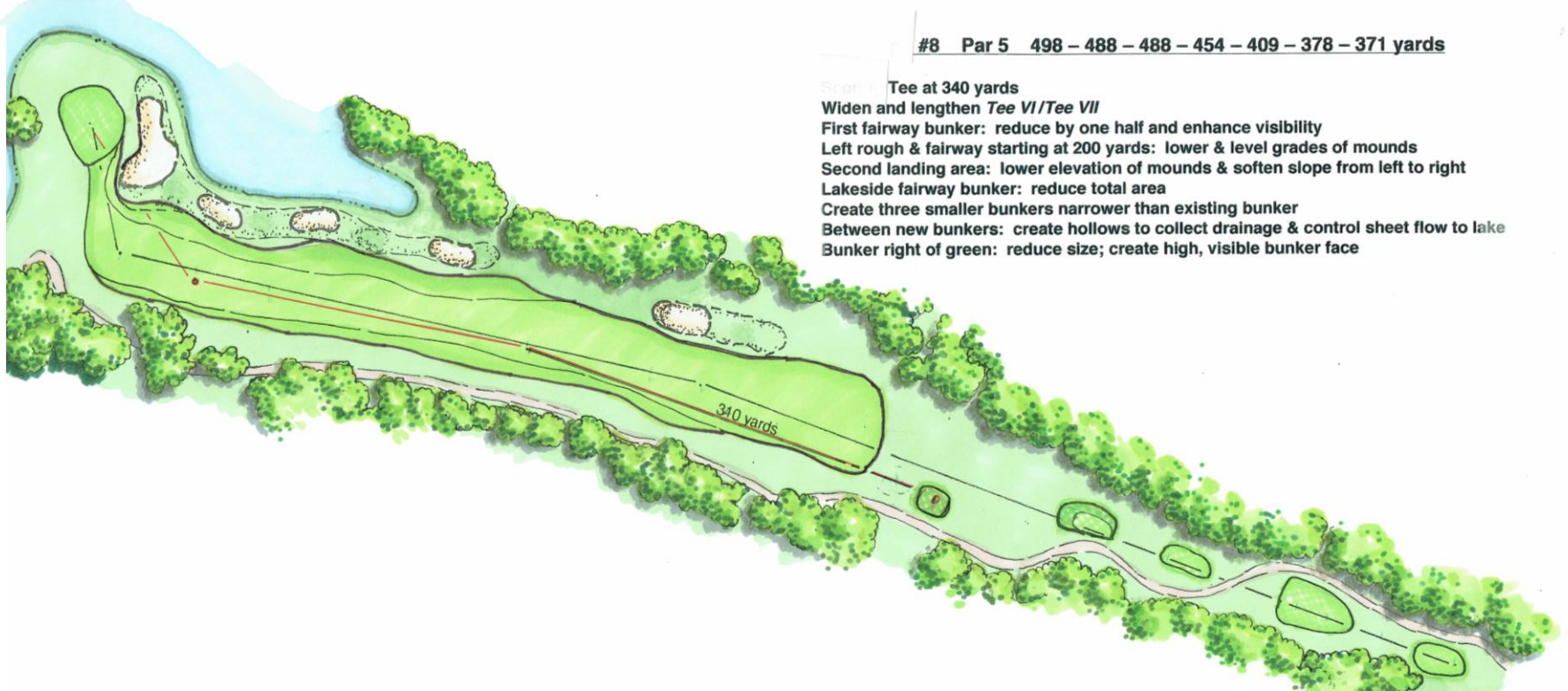


– #5 Hurricane After –





## – #8 Hurricane Before –



**#8 Par 5 498 – 488 – 488 – 454 – 409 – 378 – 371 yards**

**Scorecard Tee at 340 yards**

**Widen and lengthen Tee VI/Tee VII**

**First fairway bunker: reduce by one half and enhance visibility**

**Left rough & fairway starting at 200 yards: lower & level grades of mounds**

**Second landing area: lower elevation of mounds & soften slope from left to right**

**Lakeside fairway bunker: reduce total area**

**Create three smaller bunkers narrower than existing bunker**

**Between new bunkers: create hollows to collect drainage & control sheet flow to lake**

**Bunker right of green: reduce size; create high, visible bunker face**



– #8 Hurricane Before –





– #8 Hurricane During –





– #8 Hurricane Before –





## – #8 Hurricane Under Construction –





## – #8 Hurricane Pre-plant –





## – #8 Hurricane Grow-in –





– #8 Hurricane –





## – #13 Hurricane –





## – #13 Hurricane Before –





## – #13 Hurricane After –





# Hurricane Course

## — Scoring Tee Scorecard —

HOLE	RATING/SLOPE	1	2	3	4	5	6	7	8	9	OUT	INTL	10	11	12	13	14	15	16	17	18	IN	TOT		
SCORING	M:62.0/108	85	236	242	330	252	193	108	340	230	2016		222	92	245	242	338	108	234	228	337	2046	4062		
		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
+/-		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
PAR		3	4	4	5	4	4	3	5	4	36		4	3	4	4	5	3	4	4	5	36	72		
+/-		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
		/	/	/	/	/	/	/	/	/	/		/	/	/	/	/	/	/	/	/	/	/		
SCORING	L:64.6/115	85	236	242	330	252	193	108	340	230	2016		222	92	245	242	338	108	234	228	337	2046	4062		
SCORER:												ATTEST:												DATE:	



# Hurricane Course

## – Scoring Tee Scorecard –

### THE SCORING COURSE

The Scoring Course at Pelican's Nest compliments our Mission Statement to provide an exceptional golfing experience for every level of golfer. For players who drive the ball 150 yards or less, or accomplished players looking to refine their wedge game from 130 yards in, the Scoring Course provides an enjoyable and challenging experience for all golfers. Regulation teeing grounds were constructed from the extracted subsurface layer of the original greens, strategically placed to seamlessly fit the design and feel of Pelican's Nest.

While embracing the history of the game predicated on score, the Scoring Course redefines the concept of fun. Golf is a game based on "Fairway, Green, Two-Putt", and the Scoring Course at Pelican's Nest strives to deliver that experience to every level of golfer. We don't just believe in Teeing It Forward, we believe in Teeing It Up and Having Fun. Below are a few of our suggestions to those who play the Scoring Course.

- If your drive travels 150 yards or less, this is the regulation course that fits your game.
- For players driving the ball 150-180, this is the course that makes you think off the tee to have a second shot remaining in the 70-100 yard area.
- For players driving the ball 180 yards or more, we suggest your tee shot selection be your 150 yard club for any hole measuring 250 yards or less. For holes measuring 250 yards or more, we suggest your club selection off the tee be the club that leaves you 100 yards into the green. This will allow multiple yardages into the greens to utilize your various scoring clubs.

Some suggested game play:

- Five-Iron Fridays: The longest club in your bag can only be a five iron. This makes you think off the tee, and challenges your various short irons into the greens.
- Three-Club Thursdays: That's right, only three clubs allowed. Carefully select what three clubs you can challenge yourself with, and find out how many different shots you can play with those clubs.

PLAY GOLF. HAVE FUN.

4450 Pelican's Nest Drive, Bonita Springs, FL 34134  
Phone: 239-947-4600 • [www.nestgolf.com](http://www.nestgolf.com)



**HURRICANE**  
**SCORING COURSE**



# 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
<i>Irrigation Control System</i>	<i>10 – 15 years</i>	Corrugated Metal Pipes	15 – 30 years
<i>PVC Pipe (under pressure)</i>	<i>10 – 30 years</i>	Bunker Drainage Pipes (3)	5 – 10 years
<i>Pump Station</i>	<i>15 – 20 years</i>	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.

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.



# Assistant Superintendents' Meeting - 2015

## OUR EVENT HOST



Pelican's Nest  
Golf Club

Host Golf Course Superintendent:  
Matt Franco

Host Director of Golf Course  
Operations:  
Jason Zimmerman, CGCS

Directions:  
Pelican Nest Golf Club  
4450 Pelicans Nest Dr  
Bonita Springs, FL 34134  
(239) 947-4600

The main entrance of Pelican's Nest is on  
the West side of 41, North of Bernwood  
Parkway and South of Strike Lane.

## CALENDAR OF EVENTS

### July

EGCSA Annual Meeting  
Time and Date TBA

### August

EGCSA/CGCSA Joint Meeting and Golf Outing  
Old Corkscrew Golf Club  
August 20, 2015

CUT AND HAL WITH PAYMENT

## RSVP

No onsite registration is accepted at EGCSA events.

**Please RSVP by phone at 239-513-8016  
or resister at [www.evergladesgcsa.com](http://www.evergladesgcsa.com)**

## MEMBERSHIP CONTACT INFO

Direct all membership inquiries to  
Jason Zimmerman, CGCS, Membership Chair  
Phone: 239-949-5669  
[jzimmerman@pelicansnest.org](mailto:jzimmerman@pelicansnest.org)

**EVERGLADES**  
Golf Course Superintendents Association

P.O. Box 110422  
Naples, FL 34108



# Assistant Superintendent Meeting

**Pelican's Nest Golf Club**

**Tuesday, June 23, 2015**

*Presented in partnership with:*

**WESCO|URF**  
INC.





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## – Green Sub-grade Spot Elevations –





## – Green Sub-grade Detail –





## – Green Sub-grade Compaction –





## – Assistant Superintendents' Meeting –





– Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





– Countersink Perimeter of Green for Sod –





– Countersink Perimeter of Green for Sod –





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





## – Assistant Superintendents' Meeting –





# Assistant Superintendents' Meeting - 2016



## President's Message Bryce Koch

Fellow Member:

Next EGCSA Assistant Superintendent meeting will be held on Tuesday, June 28th at Pelican's Nest Golf Club. This meeting is the second in our two-part series on construction. Jason Zimmerman, CGCS is in the process of completing his second course renovation in two years, and we encourage you to take part in this year's informative, construction

The meeting will involve a 2.5 hour discussion with renowned architect Jan Sanders Construction, on the process and the work involved in building Pelican's Nest. This is a great opportunity to learn and ask questions of dealing with construction to prepare yourself for the challenge of building a golf course that our Assistant Superintendents will face at some point in their career. Following the meeting, there will be a lunch which will prepare you for a fun and challenging 9-hole golf match on newly renovated scoring tees from last year's renovation.

A Board of Directors strongly urge you to encourage your staff to participate in a day of camaraderie, fun, and education. These opportunities such as these can greatly help develop the skills of our Assistant Superintendent members.

The Assistant Superintendent Program would not be possible without the support and partnership of Wesco Turf, our local Toro distributor, and Jason Zimmerman, Certified Golf Course Superintendent at Pelican's Nest Golf Club.

to seeing you there!

Country Club  
Golf Course Superintendents Association ~ President  
Bryce Koch  
kecc.com

## OUR EVENT HOST



Director of Golf Maintenance  
Jason Zimmerman, CGCS  
Host Golf Course Superintendent  
Evan Touchette

Directions:  
Pelican Nest Golf Club  
4450 Pelicans Nest Dr  
Bonita Springs, FL 34134  
(239) 947-4600

The main entrance of Pelican's Nest is on the West side of 41, North of Bernwood Parkway and South of Strike Lane.

## EVENT DETAILS

### Assistant Superintendent Meeting Pelican's Nest Golf Club Tuesday, June 28, 2016

RSVP DEADLINE: Friday, June 24th

#### SCHEDULE OF EVENTS

8:30 AM - 9:00 AM	Registration
9:00 AM - 11:30 AM	Construction Meeting
11:30 AM - 12:30 PM	Lunch
1:00 PM	Shotgun

COST \$15.00 per person

GOLF FORMAT 2 Man Scramble - 9 Holes

ATTIRE Shorts are permissible.

SERVICE POINTS Attendees will be awarded .10 service points by the Golf Course Superintendents Association of America.

## CALENDAR OF EVENTS

July 12, 2016  
Annual Meeting  
Island Country Club

August 8, 2016  
EGCSA/CGSA Joint Meeting  
Old Corkscrew Golf Club

## RSVP

No onsite registration is accepted at EGCSA events.

Please RSVP by phone at 239-513-8016  
or resister at [www.evergladesgcsa.com](http://www.evergladesgcsa.com)

## REGISTRATION

### Assistant Superintendent Meeting

Pelican's Nest Golf Club  
Tuesday, June 28, 2016

RSVP DEADLINE: Friday, June 24th

#### SCHEDULE OF EVENTS

8:30 AM - 9:00 AM	Registration
9:00 AM - 11:30 AM	Construction Meeting
11:30 PM - 12:30 PM	Lunch
1:00 PM	Shotgun

#### COST

\$15.00 per person

#### GOLF FORMAT

2 Man Scramble - 9 Holes

#### ATTIRE

Shorts are permissible.

#### SERVICE POINTS

Attendees will be awarded .10 service points by the Golf Course Superintendents Association of America.

Player Name \_\_\_\_\_  
Club \_\_\_\_\_ Handicap \_\_\_\_\_

Player Name \_\_\_\_\_  
Club \_\_\_\_\_ Handicap \_\_\_\_\_

Make check payable to EGCSA and mail to  
EGCSA PO. Box 110422 Naples, FL 34108 or pay  
online using a credit card at [www.evergladesgcsa.com](http://www.evergladesgcsa.com)

Please RSVP by phone at 239-513-8016  
or resister at [www.evergladesgcsa.com](http://www.evergladesgcsa.com)



## Putting Green Retaining Wall





# Putting Green Retaining Wall





## Putting Green Retaining Wall





## Gator 17 Green Retaining Wall





## Gator 17 Green Retaining Wall





## Gator 17 Green Retaining Wall





## #15 Gator Before





## #15 Gator Grow-in





– #13 Gator Before –





– #13 Gator After –





# Pelican's Nest Golf Club – Challenges –

## Post-Construction

- Grow-in with wet, cloudy weather
- Training staff to new maintenance techniques





## – New Maintenance Practices –







# **Pelican's Nest Golf Club**

## **– Key Take-aways –**

- **Hire an Architect ( ASGCA)**
- **Begin planning early**
- **Expect the unexpected**
- **Have a contingency**
- **Keep to your schedule**
- **Share your renovation with assistant superintendents in your area**
- **Keep Opening Date flexible**
- **Enjoy the experience!**





Thank you for your interest and attention!