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No. 1 — Lots of Ross character left

"The current green is a good example of a Ross-style plateau green that bleeds off to the left and right rear. The proposed green would restore the green to its former size, extending the green to the left rear, rear and right rear. This would restore some very strategic pin positions. The right front bunker would be re-cut into a Ross pair that sets against the fill pad of the green so as not to restrict visibility of the putting surface. The left bunker would be re-worked into a Ross-style chipping area maintained at fairway or apron height — a good precursor to a classic Ross hazard that we want to repeat throughout the course."

-Brian Silva

pointed them out. . . and his recommended solution. "I had 18 sales opportunities on each round," Lewis says. He also used his column in the monthly club bulletin to talk about the greens and to discuss the USGA construction method.

And he placed a huge artist's rendering of a cross-section of a USGA green where everybody could see it.

Last March he got a break. The board of directors authorized him to spend $30,000 to rebuild the practice green to USGA specifications.

"I knew that was my chance, but I had to move quickly," Lewis recalls. He asked Central Florida Turf, a construction firm with whom he had worked previously, to build a USGA-spec green on a turnkey basis... in 30 days.

"I made sure they realized that my ability to sell renovation of the other 18 greens hinged on the success of this project," Lewis said.

"I videotaped the whole process so I could actually show the members what a USGA green looked like, although I never had to use the tape. The practice green is right by the clubhouse so we had lots of sidewalk superintendents."

The green was completed just before the club's annual "Town Hall meeting," an open forum a week before the annual membership meeting to discuss items on the agenda.

That's where Lewis, Ruffier and Foy gave the first "dog-and-pony show," as general manager Estridge calls them. The trio discussed the history of the 70-year-old course's greens, the soil analyses and what they meant, and the USGA construction method.

A week later, they repeated the process at the meeting that counted and members responded with a 97 percent vote of confidence.

The bonus

A nine-member blue-ribbon committee including Lewis, Estridge and players of all ability levels was then appointed to find an architect to oversee the renovation.

Of three finalists, Silva "had instant rapport with the committee," recalls Estridge. "He seemed genuinely excited about the project and its pros-
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pects."

But, like Lewis before him, Silva feared he would not get the job because he pushed so strongly for expanding the project to include restoring the Ross character.

But also like Lewis, Silva is a good communicator. A scholar who frequently delivers a five-hour lecture on the history of golf architecture — with Ross as the centerpiece — he had his own dog-and-pony show ready for the membership.

By the time he was through, the members were as excited as he was. Go to it, they said. We'll spend the money.

The plan

"This is a major project," Silva says with emphasis. "I've never rebuilt 18 greens on any golf course before. There are not too many clubs that are able to make a decision of this magnitude and go ahead and do it."

Having more than eight months to prepare for the project is an advantage, Silva said. In addition to getting all the permits, locking in the contractor, Silva and Lewis had time to work out a detailed schedule.

"Time is so critical. A day slips here and there and then a week slips away and it's very easy to let that time pass by and not miss it. And then suddenly you realize it's almost time to plant and you've still got nine greens that are not at subgrade.

"We need to compare our progress with the schedule at least once a week. These people are giving up their course for five months. They have made a massive sacrifice. We owe it to them to have it ready for them when we said we would."

As it did with the practice green, Central Florida Turf will provide a turnkey operation on the greens and surrounds. The company will work directly with Silva, who plans to visit the course one or two days every week.

"For me, this is an important job. I'm treating this just like a new course," he says.

"Cary will be my quality-control engineer."

The greens will be built in weekly stages, with four greens at a time in each stage.

By the third week, Silva should be able to look at the final float on the first four greens, the rough subgrade on the second four and the set-up staking on the third set.

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THE FLORIDA GREEN/SUMMER 1990
"The first two stages are critical," Silva says. "After the subgrade is shaped, the rest is pretty much mechanical. Either you do it right or you don't.

"But shaping the subgrade, that's where the art is."

"We're working with a contractor who has a history of doing outstanding work — quality work. That doesn't mean we won't disagree at times — and there probably will be a lot of arm-waving on the first two greens until the shaper understands exactly what I'm looking for, but I would like to think that our final goals are exactly alike: we want to do a good job.

Some things can get in the way of the most talented people in pursuit of the loftiest goals, however.

"We can't control the weather," says Silva. "Cary's abilities as God are limited."

"And we really don't know what we're going to find under five, six and seven," pipes in Lewis. "They were built over a cypress swamp. The story goes that the land was cleared, trees were dropped and they put fill on top of them."

"When we get to number five green, we may find that it's all muck held together by the grass," says Silva.

Lewis and his crew won't be idle while Central Florida Turf is rebuilding the greens.

In fact, he has augmented his staff by four in order to rebuild five tees, renovate parts of several fairways and upgrade part of the irrigation system.

And when they're all done, the greens will be sprigged in Tifdwarf and the tees and fairways will be planted in 419 bermudagrass.

The course should be ready for play by mid-October.

Will CCO's maintenance budget be much different once the renovation is completed?

"Not really," says Silva. "His maintenance program should be more predictable."

Something else that had better be predictable is the putting surface, says Ruffier. "Cary's butt's on the line on this one and he knows it."

"I'm ready," says Lewis.

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Congress recently approved the largest appropriation to date — $27 million for fiscal 1990 — for the U.S. Environmental Protection Agency to implement the federal right-to-know act, specifically to encourage local emergency planning.

As The Florida Green went to press, Congress also had ordered the Federal Emergency Management Agency to prepare by March 31 a study on the major threats facing communities and local emergency management coordinators.

In 1986, the U.S. Congress enacted the Emergency Planning and Community Right-to-Know Act as a response to growing concerns about the effects of chemical releases on communities.

The act does three things:
- Supports emergency planning efforts at the state and local levels.
- Provides citizens and local governments with information concerning potential chemical hazards present in their communities.
- Establishes enforcement procedures and civil, administrative and criminal penalties for non-compliance.

Subtitle A establishes the framework for emergency planning by state and local governments by calling for the creation of state emergency response commissions and local emergency planning committees. These local panels are designed to work on emergency response plans in cooperation with representatives of facilities — including golf courses — covered by the law.

Subtitle B, which was designed to provide information to appropriate local, state and federal officials on the type, amount, location, use, disposal and release of chemicals, includes three reporting provisions:

Section 311 applies to all facilities, such as golf courses, that are subject to the Occupational Safety and Health Act of 1970 and subsequent OSHA regulations. The owner or operator of a golf facility must submit material safety data sheets, referred to as MSDS’s, or a list of the chemicals for which the facility is required to keep MSDS’s to state emergency response commissions and local emergency planning committees and fire departments.

Updates are due within three months after OSHA regulations require the
owner/operator to prepare or have available an MSDS for a specific hazardous chemical. A revised MSDS must be submitted for significant new information regarding a chemical for which an MSDS was previously submitted.

Also under Section 311, EPA can establish threshold quantities for hazardous chemicals, so that no reporting is required if a facility has a below-threshold amount of a hazardous chemical.

**SECTION 312** requires facilities covered by Section 311 to submit a chemical inventory form annually by March 1. The inventory forms must contain an estimate of the maximum amount of the hazardous chemicals present at the facility during the preceding year, an estimate of the average daily amount of hazardous chemicals at the facility and the location of these chemicals at the facility.

Section 312 calls for two reporting "tiers." Tier I requires only general information on the amount and location of hazardous chemicals at the facility. Tier II information, which need not be submitted unless requested by the state commission or the local planning committee or fire department, requires more detailed information about each chemical.

**SECTION 313** requires EPA to establish an inventory of toxic chemical emissions from facilities that meet certain criteria. The information will be used to establish a computerized national database accessible by the general public.

Under Section 313, owners and operators of certain facilities must complete a toxic chemical release form for specified chemicals, reflecting releases during the preceding calendar year, to be submitted to EPZ and state officials annually on or before July 1.

Facilities that use more than 10,000 pounds of a single listed toxic chemical or that manufacture or process more than 25,000 pounds total of any of the listed chemicals must submit toxic chemical release forms. These forms request information on the maximum amount present at the location; treatment and disposal methods; and annual quantity released into the envi-
The initial list of toxic chemicals subject to reporting requirements consists of 329 entries, including 20 categories of chemicals. EPA’s administrator may add or delete chemicals on the list based upon an agency determination of health or environmental hazards. State governors and the public may petition the administrator to add to or delete from the list.

**Title III** outlines trade secret protection and enforcement procedures.

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**Fire department is the place to start in Florida**

Florida’s 1985 Worker and Community Right-to-Know Law establishes the Florida Substance List for reporting purposes and requires specified employers to notify fire departments and emergency service personnel of existing toxic substances.

A 1988 statute, the Florida Hazardous Materials Emergency Response and Community Right-to-Know Act, establishes a fee system and penalty provisions.

Both laws apply to golf course operations.

The Worker and Community Right-to-Know law is administered by the state Department of Labor and Employment Security. The state Department of Community Affairs administers the Hazardous Materials Emergency Response and Community Right-to-Know Act.

The Toxic Substances Advisory Council assists in reviewing the Florida Substance List, which is maintained and distributed to employers by the state Department of Labor and Employment Security.

The list identifies substances by their chemical or common names. Generic substances or categories are excluded from the list. Substances not currently on the list that have been determined to pose a serious threat to public health or safety may be added on an emergency basis following a public hearing. The emergency revision will become permanent unless it is repealed by the legislature within a year.

Golf course operations must provide fire departments with the following information:

- Chemical name and common name of each substance in the workplace included on the Florida Substance List.
- Workplace location information.
- Copies of material safety data sheets (MSDS’s).

Facilities that must report under Section 312 of Title III are required to pay an annual registration fee. The fee is based upon the number of employees and ranges from $25 to $2,000. However, the maximum fee is limited to $500 for facilities that do not produce, store or use an extremely hazardous substance in excess of the threshold planning quantities established by Title III.

Additionally, a one-time fee of $50 is required from facilities that must notify the state emergency response commission under Section 302.

The Florida Department of Labor and Employment Security may file suit in circuit court for alleged violations of the Worker and Community Right-to-Know Law. Employers found to be in non-compliance are liable for civil penalties of not more than $1,000 per violation.

Employers will not be held responsible when injury or death occurs as a result of exposure to a substance that is recognized as hazardous as a matter of common knowledge.

The following penalties may be assessed under the Hazardous Materials Emergency Response and Community Right-to-Know Act:

- Maximum of $2,000 for failure to report within 30 days after receipt of a notice of non-compliance.
- Maximum of $4,000 for failure to report within 30 days after receipt of second notice.
- Civil penalties of $5,000 for each item of false information submitted.