Nomination of COOMBES CREEK 11 Most Endangered Historic Properties

Preservation Dallas

Jim Barnes 5th April 2006

The Property:

The valley of the Coombes Creek is known to Dallas citizens as the home of the beautiful Stevens Park Golf Course and the Kessler Memorial Parkway. The parkway was proposed in the "1910 Kessler Plan" as part of a great southwestern motor roadway loop, mirroring a similar parkway along Turtle Creek to the north. According to the *Dallas Morning News*, George E. Kessler himself sketched out the route of the roadway during his stay in Texas during the early 1920s. During the mid-1920s the establishment of the Stevens Memorial Park Golf Course and the El Tivoli Country Club created a greenbelt extending from Beckley up to West Davis. Parks and scenic residential districts now extend beyond. Decades of Dallas citizens have enjoyed the comforting natural scenery of this exceptional area. In 1994 and 1995, the creation of the 100+ acre Kessler Park Historic District was added to the National Registry of Historic Places, citing the landscape that Kessler had helped conceive.

The Problem:

The creek-bed is simply washing away. Urban development of the watershed surface areas, the infilling of the stream-bed's once wide terraces and flood basins, and human engineering improvements aimed only at speeding floodwaters away from buildings have left the creek-bed's soft limestone bottom and softer soil banks exposed to devastating erosion. Recent widening of the Interstate 30 has additionally taken another big bite. Left to the present plan, the professional prediction of the City's own engineering consultants is that the entire stream-bed through the golf course area will ultimately require solidification. Other areas of the creek have never received such official engineering study. The creek, and its originally natural charm, is gradually disappearing.

The Solution:

The destruction is far too slow and the problem is far too big to be quickly understood or to be easily solved. It is difficult to see the gigantic overall loss because the "emergency" acts of "stabilization" seem so necessary and so small. It is difficult for citizens to understand the causes of the devastation or to imagine that any other future might even be possible. When the problem can be seen and the re-engineering of the entire watershed is imagined, the physical cost is staggering. It is hard to imagine that an engineering feat so great might yield profits even greater.



The COOMBES CREEK as it was portrayed running through Stevens Park in the upper half of part of a 1936 street map. (The edges of downtown Dallas appears in the upper right-hand corner.)

Paving Coombes Creek

By Jim Barnes

21st June 2003

The City of Dallas now has plans to pave eight additional streambed segments of Coombes Creek inside the Stevens Park Golf Course, with the expectation that the entire length of streambed through the golf course will eventually require solidification, according to the latest Park & Recreation Department report, the "*Coombs Creek and White Rock Creek Erosion Protection Study*" dated April 2002, prepared by engineers Freese and Nichols, Inc. Streambed solidification will protect golf course land and vehicular bridges from being washed away during rainstorm floods. The new plans employ various erosion control materials already in use within the golf course: concrete blocks, masonry walls, and galvanized wire basketry filled with loose stones. The ultimate price tag to totally solidify the creek banks of the golf course is now estimated at \$3.91 million.

Erosion along Coombes Creek is a classic example of environmental trouble caused by rapid urbanization. Before city construction, rainfall had mostly soaked into grasslands and forests. Now it runs off faster. So, floods are bigger. The creek's drainage channel has been straightened and narrowed with fill. So, floodwater now flows faster. Bigger, faster floods now cut into the old soil creek banks. When the Stevens Park Golf Course cleared trees away from the edge of the stream, it made matters even worse. Tree roots no longer hold soil in place during the short episodes of storm-surge. Paving one damaged spot merely deflects the scouring force downstream onto the next weakest point on the bank. Trouble has slowly accelerated. By the time the magnitude of the soil erosion problem had become obvious, the causes had been set, in concrete.

Technically speaking, paving the creek isn't the only way to stop erosion. There are devices that might re-route the storm surges: underground concrete diversion culverts, subterranean short-term overflow reservoirs, upstream retention basins, or large pumps linked to temporary holding tanks. Cost is certainly a significant consideration in thinking of such plans, but divided jurisdictional responsible and differing bureaucratic goals are actually the first obstacle. The Park & Recreation Department can't redesign storm water drainage; that's done in the Division of Flood Plain Management of the Department of Public Works.

In taking up the task of storm water drainage the City also shoulders liability for drainage failures. The price to compensate for flooded homes and swamped automobiles (not to mention drowned children) could become enormous. For the Flood Plain Management employees, the current operative plan is the "*Coombes Creek Flood Plain Information and Management Report*" report dated June 1983 by Powell & Powell Engineers. The major purpose of this report is to predict damage from a theoretical "100 year flood" and to propose works to minimize potential liability losses. Soil erosion is scarcely mentioned, except to note that erosion within the Stevens Park Golf Course has been a longstanding and complex problem outside the report's scope of investigation. Though the vehicular bridge at Edgefield Avenue collapsed in a 1990s' flood and the creek channel below West Davis is now littered with toppled masonry from failed erosion control structures, for the current Flood Plain managers there is simply no significant erosion problem along lower Coombes Creek at this time. They are not interested in reading the new report about Stevens Park Golf Course erosion. As long as there is no liability for major losses of private property, and the eroded debris washes away enough for the channel to drain properly, they are relatively unconcerned. Whether streambed solidification will inevitably be needed outside of the Stevens Park Golf Course is, at this point, an uninvestigated question. For now, Coombes Creek is being treated like any other regular Dallas storm sewer.

Repetitious applications of minimal allowable design standards for storm water drainage seem to be quietly overwhelming the functions of lower Coombes Creek as the backbone element of a naturalistic park. Little by little the channel has been straightened, especially below Edgefield. Sunken terraces and small ravines sloping down into the main channel are slowly being filled to the maximum allowable criteria. Outside of the golf course, a person can hardly find a way to get down to the water anymore; there are no explicit design guidelines promoting human activity in the creek bed. And, in general, there are, at present, no rules or criteria for fostering, managing, or conserving systems of landscape or wildlife down within the Coombes Creek drainage channel.

Coombes Creek park -- Historical Background:

Unbelievable as it may now seem, during the 1870s the most spectacular botanical garden in all of Dallas County was along Coombes Creek just above where Stevens Park ends today. Where Plymouth Road now winds between Bahama Drive and West Davis, horticulturalist Maximillien Reverchon cultivated 120 acres. Dallas attorney Milton McCoy visited in 1872 and wrote that he had witnessed no array of blooming flowers and exotic fruit trees so diverse since his visit to the Cincinnati Exposition. Maximillien's more famous son, internationally renowned botanist Julien Reverchon, inherited and maintained this little piece of paradise, where he quietly died in 1905.

George E. Kessler, in two details of his 1910 "*Master Plan for the City of Dallas*" proposed a park and a parkway in the Coombes Creek watershed. Kessler's park was originally proposed for a 60-80 acre site where Greenbriar Lane now runs east of Cedar Hill to Haines. But no purchase was made. Secondly, Kessler's 1910 Master Plan proposed two scenic automotive parkways, one along Turtle Creek and the other forming a gigantic loop running up Coombes Creek. Though the full Oak Cliff parkway loop was never built, Kessler's park and parkway along Coombes Creek were realized within a decade after similar beginnings along Turtle Creek.

Throughout the late 1920s and 1930s, the notion that Coombes Creek was going to be enhanced and developed "like another Turtle Creek" was constantly advanced. A private community group, the "Stevens Park League" was established as a forum to organize and promote the area. Real estate salesman Hugh January was president of the Stevens Park League and then stepped up to the Dallas City Park Board. There was a push for more land acquisition and the southern half of the Stevens Park Golf Course was acquired during the 1930s. At least one map from the mid-1930s clearly shows an intent that the Reverchon old botanical garden be acquired as an extension of the Stevens Memorial Park. As late as the mid 1940s it was still open for possible acquisition, a wooded landscape containing a privately owned amusement park called "El Tivoli." That's why the City had acquired the upstream lots along Hampton and Plymouth that now have no function. The grand dream pictured a beautifully landscaped park going along Coombes Creek from the Trinity River up into Ravinia.

But strangely, at the end of World War II, the voices advancing that dream were silenced. George Kessler died suddenly in 1923, Walter Stevens in 1932, L.A. Stemmons in 1939, and Annie Stevens in 1941. Hugh January moved to Houston in 1946. There must have been other significant losses. The "Stevens Park League" evaporated. Beginning in the late 1940s, the old Reverchon farm started being covered with new residential housing. During the 1950s a large section of the creek bed at Sylvan was paved solid with concrete as a new expressway to Fort Worth crowded up against the creek. During the 1960s giant apartment blocks were dropped down onto flood terraces along Plymouth. At the corner of West Davis and Plymouth a great sunken flood basin was slowly filled to build a pawn shop. As vehicular street bridges were replaced or repaired, increasingly larger sections of creek bed were paved for erosion stabilization. Interstate Highway construction is now clearing sections of the north side of the creek at Sylvan.

What happened to the idea that Coombes Creek was going to be maintained like Turtle Creek? Can the flowing stream of Coombes Creek not still be saved as the central living artery of a community nature center and recreational park?

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A portion of the natural streambed without any erosion control solidification --- October 2003



Portion of the creek bank very near failing, just below the Colorado bridge — May 2003



Total concrete creek bed lining south of the Edgefield Street bridge—May 2003



Composite photo showing mass of toppled masonry from a former erosion control attempt and giant teetering tree, just upstream from the Edgefield bridge—May 2003



View looking south between Hampton and the North Oak Cliff Boulevard bridge, showing cart bridge that has been shored up with loose rocks behind galvanized wire basketry. Extreme new erosion can be seen to its right --- October 2003



Concrete block walls on the left bank below the North Oak Cliff Boulevard bridge --- October 2003



Cart bridge being undercut by scouring -- downstream from N. Oak Cliff Blvd. bridge --- October 2003



Concrete paving of west creek bank, north of the Colorado bridge—May 2003



Just below the North Oak Cliff Boulevard bridge, large loose boulders of Austin limestone have been dumped along the banks. Raw concrete has been dumped at the end of the cart bridge to try to stop scouring by floodwaters. --- October 2003



Small loose Austin limestone held in place with galvanized wire basketry-- downstream from N. Oak Cliff Blvd. bridge ---October 2003



New Interstate 30 widening just above Sylvan -to extend two new lanes of highway construction cantilevering over the creek — August 2003



Streambed paved during Fort Worth Turnpike construction in the mid-1950's —August 2003



View looking south to Colorado bridge – May 2003 showing: solid paved foundation, rock filled galvanized wire basketry stepped down the bank immediately beside the bridge, and a large tree threatened by ongoing creek bank erosion



Coombes Creek floodwater run-off at Colorado Boulevard bridge, about 1:45 p.m. on the afternoon of Sunday the 19th of March 2006



Coombes Creek floodwater flood run-off below the Colorado Boulevard bridge, about 1:45 p.m. on Sunday the 19th of March 2006. As the bottom of the creek bed is scoured clean of loose dirt and gravel, the flow starts cutting down into the soft limestone.



Coombes Creek floodwaters at the North Oak Cliff Boulevard bridge—about 1:45 p.m. on Sunday afternoon the 19th of March 2006. Rushing water almost completely fills the bridge's opening for runoff flow.



Coombes Creek floodwaters at the golf course bridge below Hampton Road—about 1:45 p.m. on Sunday afternoon the 19th of March 2006. The water is the color of a sort of chocolate milk, due to the soil that is being carried away.



Coombes Creek floodwater runoff at Hampton Road bridge—about 1:45 p.m. on Sunday afternoon the 19th of March 2006. Water rushes under the bridge at what seems like forty or fifty miles an hour, making a constant frightful roar.