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civil - tort

THE STATE OF SOUTH CAROLINA
In the Court of Appeals

APPEAL FROM GREENVILLE COUNTY
Court of Common Pleas

Joseph J. Watson, Circuit Court Judge

Case No. 01-CP-23-2459R

Louie D. Hawkins, individually and d/b/a
Servicemaster of Greenville, Servicemaster
of Greenville, LLC, and Dixie P. Hawkins Appellants,

v.

City of Greenville Respondent.

RECORD ON APPEAL

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STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

Louie D. Hawkins, individually and d/b/a)
Servicemaster of Greenville, Servicemaster)
of Greenville, LLC, and Dixie P. Hawkins,)

Plaintiffs,)

v.)

City of Greenville,)

Defendant.)

IN THE COURT OF COMMON PLEAS

CASE No.: 01-CP-23-2459R

FILED - CLERK OF COURT
JULY 12 2002
JULIE CO. S.C.
JULIE CO. S.C.

ORDER

This matter comes before the Court on a rehearing of Defendant's Motion for Summary Judgment, which was heard on Wednesday, April 24, 2002. Robert C. Childs, III, attorney for the Plaintiffs, and W. Howard Boyd, Jr., attorney for the Defendant, were both in attendance and argued the motion. The Court took Defendant's motion under advisement to allow for the proper review of deposition testimony not readily available during the motion hearing on the 24th. After full review of the record and supplemental deposition testimony, the Court finds the following:

The foundation of Plaintiffs' lawsuit rests upon a flood event that occurred on July 24, 1997 in Greenville County. On this day, approximately 2.5 inches of rain fell in one hour, resulting in an accumulation of stormwater that escaped the banks of Laurel Creek. Unfortunately, this event resulted in extensive flood damage to Plaintiffs' business. Plaintiffs filed their complaint against the City of Greenville on July 23, 1999, alleging the following causes of action: trespass, nuisance, negligence, inverse condemnation, conversion, and S.C. Code Ann. § 5-31-540. Plaintiffs' cause of action in nuisance was disposed of via Defendant's earlier summary judgment motion, which was heard March 21, 2002.

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Inverse Condemnation

Plaintiffs assert a cause of action in inverse condemnation alleging the City of Greenville, as a governmental agency, has taken property owned by Plaintiff without exercising the power of eminent domain. The elements of inverse condemnation are an affirmative, positive act by a governmental agency, a taking, taking for a public use or purpose, and taking that has some degree of permanence. Gray v. South Carolina Department of Highways and Public Transportation, 311 S.C. 144, 427 S.E.2d 899 (Ct. App. 1992). In the present case, the initial element - an affirmative, positive act by a governmental agency - is both the crux of Plaintiffs' allegations and the City's defense. Without an affirmative act by the City, Plaintiffs' cause of action would necessarily fail.

In addition to the aforementioned Gray case, inverse condemnation is addressed in Newsome v. Town of Surfside Beach, whereby the South Carolina Court of Appeals noted the necessary requirement of an overt act by a governmental agency in alleging inverse condemnation. 300 S.C. 14, 386 S.E.2d 274 (Ct. App. 1989). Due to the settlement and release of the City executed by Plaintiff Louie Hawkins in 1994, the only conduct by the former party that could give rise to classification as an "affirmative, positive act" would be the city's installation of riprap near the creek bed in early 1997 (and the possible adverse effect of the riprap on the flow and drainage capabilities of the creek). This type of engineering and topographical analysis requires the testimony of an expert. Plaintiffs admit that their expert, Mr. Sherard, does not support their position in reference to the riprap. The deposition of Julie Arrowood, engineer for the City of Greenville, was also taken. As Ms. Arrowood states in her deposition, the riprap was used to protect a neighboring roadway from further erosion. Unfortunately, she could not form a definite conclusion as to the consequences of the addition of riprap to the area surrounding Laurel Creek, stating the following in response to questions regarding flow capacity of the creek:

But I don't know what the crews did. If the crews went out there - okay, here's a bank and they placed, you know, two feet of riprap

within the channel, yes, you are going to decrease it [creek flow/drainage]. But if the crew - here's the bank. If they went out there, took some dirt out from behind it and then placed it about the same area as the existing bank was, even though it was eroding, then they didn't increase the capacity. *I can't say whether they increased it, decreased it, or whatever they did* (Arrowood depo. at 82-83).

The deposition testimony of Ms. Arrowood is inconclusive as to the riprap's effect on the flooding that occurred on July 24, 1997, and as a result, the "affirmative, positive act" element of inverse condemnation is not satisfied. No genuine issue as to any material act is present.

Negligence

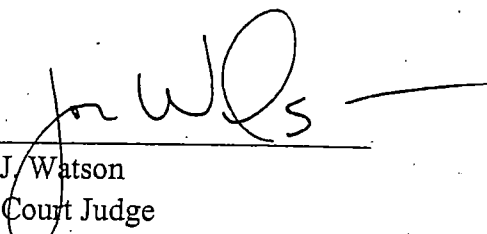
The deposition testimony of both Ms. Arrowood and Mr. Sherard, Plaintiffs' expert, also fails to support Plaintiffs' cause of action in negligence. Plaintiffs claim, which asserts negligence against the city in failing to redesign the drainage system and/or installing riprap near Laurel Creek, is not sufficiently reinforced by either Ms. Arrowood or Mr. Sherard. The lack of any proximate cause connection between acts undertaken by the City of Greenville and Plaintiffs' injury is fatal to the latter's claim. In addition, the city's acts fall within a political system that is protected by the South Carolina Tort Claims Act, § 15-78-60 of the South Carolina Code of Laws. Therefore, Plaintiffs' negligence claim fails to create a genuine issue of material fact.

Trespass, Conversion, S.C. Code Ann. § 5-31-540

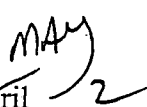
Plaintiffs' causes of action under trespass, conversion, and S.C. Code Ann. § 5-31-540 are not supported by sufficient evidence to create a genuine issue of material fact.

Taking all deposition testimony and the full record under consideration, Defendant's Motion for Summary Judgment is granted.

IT IS SO ORDERED.



Joseph J. Watson
Circuit Court Judge


Date: ~~April~~ MAY 2, 2002
Greenville, South Carolina

STATE OF SOUTH CAROLINA
COUNTY OF GREENVILLE
IN THE COURT OF COMMON PLEAS

JUDGMENT IN A CIVIL CASE
CASE NO.: 01 -CP- 23- 2459R

LOUIE D. HAWKINS

CITY OF GREENVILLE

PLAINTIFF(S)

DEFENDANT(S)

CHECK ONE:

- ☐ JURY VERDICT. This action came before the court for a trial by jury. The issues have been tried and a verdict rendered.
- ☐ DECISION BY THE COURT. This action came to trial or hearing before the court. The issues have been tried or heard and a decision rendered.
- ☐ ACTION DISMISSED (CHECK REASON): ☐ Rule 12(b), SCRCP; ☐ Rule 41(a), SCRCP (Vol. Nonsuit); ☐ Rule 43(k), SCRCP (Settled); ☐ Other
- ☐ ACTION STRICKEN (CHECK REASON): ☐ Rule 40(j) SCRCP; ☐ Bankruptcy; ☐ Binding arbitration, subject to right to restore to confirm, vacate or modify arbitration award; ☐ Other

IT IS ORDERED AND ADJUDGED:

☐ See attached order;

☐ Statement of Judgment by the Court:

Summary Judgment as to Cause of Action for nuisance is granted. Summary Judgment as to other Causes of Action is respectfully denied. Motion may be refiled after deposition of Plaintiff's expert.

Dated at Greenville, South Carolina, this 21st day of MARCH, 2002.

Court Reporter:

for W. H. Boyd
PRESIDING
JUDGE -

This judgment was entered on the 22nd day of March, 2002, and a copy mailed first class this 22nd day of March, 2002 to attorneys of record or to parties (when appearing pro se) as follows:

Robert Childs

W. Howard Boyd

ATTORNEY(S) FOR THE PLAINTIFF(S)

ATTORNEY(S) FOR THE DEFENDANT(S)

STATE OF SOUTH CAROLINA
COUNTY OF GREENVILLE
IN THE COURT OF COMMON PLEAS

2002 MAY -3 P 12:14

JUDGMENT IN A CIVIL CASE

CASE NO.: 01 -CP-23-2459R

FILED-CLERK OF COURT
GREENVILLE CO. S.C.
FILED 5/3/02

Louie D. Hawkins et al.

PLAINTIFF(S)

City of Greenville

DEFENDANT(S)

CHECK ONE:

- ☐ JURY VERDICT. This action came before the court for a trial by jury. The issues have been tried and a verdict rendered.
- ☐ DECISION BY THE COURT. This action came to trial or hearing before the court. The issues have been tried or heard and a decision rendered.
- ☐ ACTION DISMISSED (CHECK REASON): ☐ Rule 12(b), SCRCP; ☐ Rule 41(a), SCRCP (Vol. Nonsuit); ☐ Rule 43(k), SCRCP (Settled); ☐ Other _____
- ☐ ACTION STRICKEN (CHECK REASON): ☐ Rule 40(j) SCRCP; ☐ Bankruptcy; ☐ Binding arbitration, subject to right to restore to confirm, vacate or modify arbitration award; ☐ Other _____

IT IS ORDERED AND ADJUDGED:

☒ See attached order;

☐ Statement of Judgment by the Court:

Dated at Greenville, South Carolina, this _____ day of _____, 2002.

Court Reporter: _____

PRESIDING
JUDGE - _____

This judgment was entered on the 3 day of May, 2002, and a copy mailed first class this 3 day of May, 2002 to attorneys of record or to parties (when appearing pro se) as follows:

Robert C. Childs

ATTORNEY(S) FOR THE PLAINTIFF(S)

W. Howard Boyd, Jr.

Luanne L. Bunge

ATTORNEY(S) FOR THE DEFENDANT(S)

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received

STATE OF SOUTH CAROLINA
COUNTY OF GREENVILLE

IN THE COURT OF COMMON PLEAS

Louie D. Hawkins individually
and d/b/a Servicemaster of
Greenville, Servicemaster of
Greenville, LLC, and Dixie P. Hawkins,
Plaintiffs,

C.A. NO.: 99-CP-23-2934

v.

COMPLAINT
(Jury Trial Requested)

City of Greenville
Defendant.

Plaintiffs allege:

GENERAL ALLEGATIONS

1. Plaintiff Servicemaster of Greenville, LLC, is a limited liability company organized and existing in the State of South Carolina, with its principal place of business located in the County of Greenville, State of South Carolina. The Plaintiff Servicemaster of Greenville, LLC, is a successor in interest to the business known as Servicemaster of Greenville and did business during a portion of the times set forth in this Complaint.

2. Plaintiff Louie D. Hawkins is a citizen and resident the County Greenville, State of South Carolina and did business as Servicemaster of Greenville during a portion of the times set forth in this complaint.

3. Plaintiff Dixie P. Hawkins is a citizen and resident of the County of Greenville, State of South Carolina and owns a certain piece and parcel of land and property ("the

property") located at 1 Byrdline Drive in the County of Greenville, State of South Carolina which is subject to this action.

4. Defendant, City of Greenville, is a body politic and municipal corporation organized and existing in the County of Greenville, State of South Carolina. The Defendant, City of Greenville is the owner of or has an interest in the streets or public thoroughfares adjacent to the property subject to this action, one of which is known as Byrdline Drive. Defendant is also the owner of or has an interest in areas adjoining such streets or public thoroughfares.

5. Jurisdiction and venue are proper in this court.

6. Plaintiff Dixie P. Hawkins leased the property subject to this action to Louie D. Hawkins d/b/a Servicemaster of Greenville and now leases the subject property to Servicemaster of Greenville, LLC.

7. That following the acquisition of the property and subsequent lease to the business in 1972 and after March 28, 1994, the Defendant City of Greenville continued, commenced, authorized, facilitated, and/or approved construction, development, changes and/or improvements on the properties, streets, streams, ditches, rights of way and/or drainage ways adjacent to the property at 1 Byrdline Drive including the installation, alteration, modification and/or changes to curbing, roadway, drainage systems and various other appurtenant structures, devices, uses and/or systems that substantially affected the flow of water, mud, debris and sediment on or about the premises owned and/or occupied by the Plaintiffs.

8. The Defendant also took other positive, overt and aggressive steps around the property of the Plaintiffs, including but not limited to, the placing, permitting to be placed, authorization, facilitation and/or the allowing to be placed, rocks, debris, construction material, concrete blocks and other foreign materials in or about the neighboring stream, ditches and/or drainage ways. The defendant owns, manages, controls and/or maintains the neighboring stream, ditches and/or drainage ways. The Defendant also approved, permitted, authorized and/or encouraged a myriad of permits, projects, drainage plans and improvements on neighboring properties, streets, streams and/or drainage ways affecting the flow, disbursement and placement of water, sediment and debris.

9. In addition to the aforementioned actions, Plaintiffs allege that after the acquisition, subsequent lease and use of the subject property, the Defendant took other positive, overt and aggressive steps concerning the neighboring properties, streams, ditches and drainage ways, the details of which will be more fully developed through discovery.

10. Because of the aforementioned actions of Defendant, large quantities of water, mud, debris and sediment, which formerly lay on, in or about the adjacent property, streams, streets and drainage ways until the water evaporated, ran off, drained away, percolated into the soil, were picked up or otherwise dissipated, are now collected, diverted, directed, altered and channeled down onto the property owned and/or occupied by the plaintiffs.

11. Prior to July 24, 1997, the Plaintiffs, pursuant to S.C. Code Ann. Section 5-31-450, had demanded that the Defendant provide sufficient drainage to carry off surface water from the adjacent public thoroughfares, streets or along such thoroughfares through open or covered drains to prevent passage of such water over their private lands and property.

12. On July 24, 1997, as a result of Defendant's aforementioned actions, the property was inundated with water, mud, debris and sediment causing damage to the machinery, equipment, automobiles and other property of the Plaintiffs. The property remained unusable and inaccessible for a period of days and weeks following July 24, 1997, significantly interfering with the use and enjoyment of the property and interfering with the business operation and thus profits.

13. As a direct and proximate result of the flooding caused by the Defendant's conduct, the Plaintiffs have incurred considerable expense in clean-up and dry out cost, replacement cost for machinery and equipment, cleaning of automobiles, replacement of supplies and repairs to the building and other damages.

14. The actions of the Defendant have significantly reduced the market value of the property as well.

15. The conditions described in the preceding paragraphs and the injuries will continue to exist, to grow worse, and to cause Plaintiffs increasing injuries as long as the present situation remains unaltered.

16. To the extent possible, practical and applicable and where not inconsistent, the following causes of action are brought pursuant but not limited to S.C. Code Ann. Section 5-31-450, the South Carolina Tort Claims Act, the South Carolina and United States Constitutions, and the common law and statutory laws of South Carolina.

FOR A FIRST CAUSE OF ACTION
(Trespass)

17. Plaintiffs reallege and incorporate by reference the assertions made in the Statement of General Allegations, Paragraphs 1 - 16.

18. The Defendant intended, or knew, or had substantial reason to know, that the aforementioned actions would cause water, mud, sediment and debris to physically intrude upon Plaintiffs' property, in a manner in which it did not naturally do.

19. The aforementioned actions on the part of Defendants amounted to a deliberate physical invasion, interference with, intermeddling of, injury to and a taking of Plaintiffs' property and property rights for a substantial period of time tantamount to the physical taking of the property.

20. As a direct and proximate result thereof, the Plaintiffs have suffered the damages alleged herein.

21. Wherefore, Plaintiffs are informed and believe that the Plaintiffs are entitled to judgment against the Defendant for actual and punitive damages in an amount to be determined by a jury.

FOR A SECOND CAUSE OF ACTION
(Nuisance/Strict Liability)

22. Plaintiffs reallege and incorporate by reference the assertions made in the preceding paragraphs, not inconsistent herewith, as if fully set forth herein.

23. By the aforementioned actions, the Defendant created conditions that caused and causes material annoyance and or discomfort to the plaintiffs, worked and works to hurt, inconvenience, damage or otherwise essentially interfered and interferes with the lands, tenements or hereditaments of the Plaintiffs and which tended and tends to both cause damage to Plaintiffs' property and create a danger of future damage. In light of the conditions thereby created, Defendants' use of and maintenance of its property cannot be considered lawful or reasonable, but rather constitutes a nuisance.

24. As a direct and proximate result thereof, the Plaintiffs have suffered the damages alleged herein.

25. Wherefore, Plaintiffs are informed and believe that the Defendant is strictly liable for the damages alleged herein and the Plaintiffs are entitled to judgment against the Defendant for actual and punitive damages in an amount to be determined by a jury.

FOR THIRD CAUSE OF ACTION
(Negligence/Gross Negligence/Reckless Indifference)
Tort Claims Act

26. Plaintiffs reallege and incorporate by reference the assertions made in the previous paragraphs, not inconsistent herewith, as if fully set forth herein.

27. It was reasonably foreseeable to Defendant that its aforementioned positive, overt and aggressive actions, inactions and conduct by the Defendant would result in damages to the Plaintiffs. The Defendant therefore owed a duty to Plaintiffs to conduct itself in a manner that would not cause injury to Plaintiffs. The Defendant had actual or constructive notice of the damaging nature and/or defectiveness of their actions, inactions, activities, ditches, streets, thoroughfares, drains and/or drainways.

28. The Defendant was willful, wanton, careless, reckless, consciously indifferent, negligent, and grossly negligent in the following and other particulars;

- a. doing or failing to do those things set forth above;
- b. in the altering, permitting, authorizing or encouraging the altering of neighboring roads, thoroughfares, ditches, drains, drainways and property;
- c. in failing to erect and/or maintain sediment, drain, water and/or debris control devices;

- d. in failing to erect and/or maintain appropriate storm water management devices;
- e. in failing to comply with local, state and/or federal regulatory requirements concerning sediment control and storm water management;
- f. in placing or permitting the placement of materials, obstructions, sediment and debris in the stream, drains drainways, streets and or thoroughfares in such a manner as to interfere with the stream's flow causing back up and flooding;
- g. in failing to properly maintain, erect and repair structures along the property, streams, drains, thoroughfares and drainways to prevent damage to the property;
- h. by improperly diverting ground water, sediment and debris onto the property;
- i. in failing to do those things that a reasonably prudent person would have done under the circumstances then and there prevailing;
- j. in failing to take appropriate measures and actions required to properly maintain the stream;
- k. in negligently and/or grossly negligently approving drainage plans and/or permits for water disposal;
- l. in negligently and/or grossly negligently preparing and/or approving the drainage and sediment control plans for the areas adjacent to the property owned and/or occupied by the plaintiffs; and
- m. in all other particulars revealed during the discovery process or resulting trial.

29. As a direct and proximate result thereof, Plaintiffs sustained the damages alleged herein.

30. Wherefore, Plaintiffs are informed and believe that they are entitled to judgment against the Defendant for actual damages in an amount to be determined by a jury.

**FOR A FOURTH CAUSE OF ACTION
(Inverse Condemnation)**

31. Plaintiffs reallege and incorporate by reference the assertions made in the preceding paragraphs, not inconsistent herewith, as if fully set forth herein.

32. The affirmative, overt, positive and aggressive actions of the Defendant are an unconstitutional (violative of both South Carolina and the United States Constitutions) taking of the property and property rights of the plaintiffs without due process and compensation, causing Plaintiffs the damages alleged herein. Said taking was and is for the public use and is of a permanent nature in respect to the Plaintiffs.

33. As a proximate result of Defendant's actions described above, and pursuant to each cause of action, Plaintiffs have suffered the damages alleged herein. As long as present conditions persist, Plaintiffs will continue to suffer similar damages in the future.

**FOR A FIFTH CAUSE OF ACTION
(S.C. Code Ann. 5-31-450)**

34. Plaintiffs reallege and incorporate by reference the assertions made in the preceding paragraphs, not inconsistent herewith, as if fully set forth herein.

35. Within the political boundaries of the Defendant it is and has been necessary and/or desirable to carry off water from the streets, alleys, public thoroughfares and along such thoroughfare in the area of the Plaintiffs property and business rather than over private land. The Plaintiffs as owners or having in interest in such private land have demanded that the Defendant provide sufficient drainage which is practicable and the Defendant has failed to do so and if such drainage is not practicable the Defendant has failed to institute proceedings to obtain the right of way to provide for the necessary drains.

36. As a direct and proximate result thereof the Plaintiffs have suffered the damages alleged herein.

37. Wherefore, Plaintiffs are informed and believe that they are entitled to judgment against the Defendant for actual damages in an amount to be determined by a jury.

FOR A SIXTH CAUSE OF ACTION
(Conversion)

38. Plaintiffs reallege and incorporate by reference the assertions made in the preceding paragraphs, not inconsistent herewith, as if fully set forth herein.

39. The Plaintiffs own or have an interest in the real and personal property set forth above. The Plaintiffs have protected property right in the conduct of their business and revenues from their activities. The Defendant by the actions or inactions set forth above has gained control and/or possession of, committed an unlawful detention of and/or has prevented the Plaintiffs from using or benefiting from their property or property rights for a period of time without the permission of the Plaintiffs.

40. As a direct and proximate result thereof, the Plaintiffs have suffered the damages alleged herein.

41. Wherefore, Plaintiffs are informed and believe the Defendant has committed a wrongful conversion of Plaintiffs' property and/or property rights and the Plaintiffs are entitled to judgment against the Defendant for actual and punitive damages in an amount to be determined by a jury.

WHEREFORE, Plaintiffs pray for judgment against Defendant as follows:

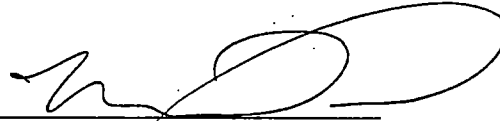
1. Actual damages in an amount to be determined by a jury.

2. Punitive damages against the defendant in an amount to be determined by a jury as they may deem sufficient to punish Defendant for its reckless and malicious conduct, and to deter others from engaging in similar conduct.

3. For a jury trial on all triable issues.

4. For such other and further relief as the court may deem just and proper.

MITCHELL, BOUTON, YOKEL & CHILDS



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David S. Wyatt #9782
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Post Office Box 10285, F.S.
Greenville, SC 29603
(803) 232-9330

ATTORNEY FOR PLAINTIFFS

Greenville, SC
July 23, 1999

STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

IN THE COURT OF COMMON PLEAS

Louie D. Hawkins, individually and d/b/a)
Servicemaster of Greenville, Servicemaster)
Of Greenville, LLC and Dixie P. Hawkins,)

Plaintiffs,)

vs.)

City of Greenville,)

Defendant)

ANSWER

C.A. No.: 99-CP-23-2934

(JURY TRIAL DEMANDED)

The defendant, City of Greenville, answering the complaint of the plaintiffs herein, would respectfully allege and show unto the Court as follows:

FOR A FIRST DEFENSE

1. The defendant, City of Greenville, lacks sufficient information to form a belief as to the allegations of paragraph 1, and therefore denies same.

2. It admits, upon information and belief, the allegations of paragraph 2.

3. It admits, upon information and belief, so much of the allegations of paragraph 3 as allege that Dixie P. Hawkins is a citizen and resident of Greenville County, South Carolina, and owns the property at issue in this action. It denies the remaining allegations and alleges that the property at issue in this action is located at 1 Byrdland Drive, Greenville, South Carolina.

4. It admits so much of the allegations of paragraph 4 as allege that it is a political subdivision of the State of South Carolina, located within Greenville County, South Carolina, and owns or has an interest in the streets or public thoroughfares within the city

limits. It craves references to the records in the RMC office for Greenville County, South Carolina, for information in regard to its ownership of and interest in the property referenced in these allegations, and denies any allegations contained in paragraph 4 which are inconsistent with these records.

5. It admits the allegations of paragraph 5.

6. It lacks sufficient information to form a belief as to the allegations of paragraph 6, and therefore denies same.

7. It admits so much of the allegations of paragraph 7 as allege that after March 28, 1994, it approved permit applications which met minimum standards for construction and development in and around Byrdland Drive and issued these permits, and that it made improvements to the drainage system in and around Byrdland Drive. It denies the remaining allegations of paragraph 7.

8. It admits so much of the allegations of paragraph 8 as allege that it approved permit applications which met minimum standards for construction and development in and around Byrdland Drive and issued these permits, and that it controls a 96-inch pipeline which is part of the drainage system in and around Byrdland Drive. It denies the remaining allegations of paragraph 8.

9. It denies the allegations of paragraph 9.

10. It denies the allegations of paragraph 10.

11. It lacks sufficient information to form a belief as to the allegations of paragraph 11, and therefore, denies same.

12. It denies the allegations of paragraph 12.

13. It denies the allegations of paragraph 13.

14. It denies the allegations of paragraph 14.

15. It denies the allegations of paragraph 15.

16. It admits so much of the allegations of paragraph 16 as allege that the plaintiffs allege causes of action in the complaint pursuant to Section 5-31-450 of the South Carolina Code of Laws, the South Carolina Tort Claims Act, the South Carolina and United States Constitutions, and the common law and statutory laws of South Carolina. It denies the remaining allegations of paragraph 16.

17. In response to the allegations of paragraph 17, the defendant re-alleges and incorporates by reference its response to paragraphs 1 – 16 of the complaint.

18. It denies the allegations of paragraph 18.

19. It denies the allegations of paragraph 19.

20. It denies the allegations of paragraph 20.

21. It denies the allegations of paragraph 21.

22. In response to the allegations of paragraph 22, the defendant re-alleges and incorporates by reference its response to paragraphs 1 – 21 of the complaint.

23. It denies the allegations of paragraph 23.

24. It denies the allegations of paragraph 24.

25. It denies the allegations of paragraph 25.

26. In response to the allegations of paragraph 26, the defendant re-alleges and incorporates by reference its response to paragraphs 1-25 of the complaint.

27. It denies the allegations of paragraph 27.

28. It denies the allegations of paragraph 28.

29. It denies the allegations of paragraph 29.
30. It denies the allegations of paragraph 30.
31. In response to the allegations of paragraph 31, the defendant re-alleges and incorporates by reference its response to paragraphs 1-30 of the complaint.
32. It denies the allegations of paragraph 32.
33. It denies the allegations of paragraph 33.
34. In response to the allegations of paragraph 34, the defendant re-alleges and incorporates by reference its response to paragraphs 1-33 of the complaint.
35. It denies the allegations of paragraph 35.
36. It denies the allegations of paragraph 36.
37. It denies the allegations of paragraph 37.
38. In response to the allegations of paragraph 38, the defendant re-alleges and incorporates by reference its response to paragraphs 1-37 of the complaint.
39. It denies the allegations of paragraph 39.
40. It denies the allegations of paragraph 40.
41. It denies the allegations of paragraph 41.
42. The defendant denies each and every allegation of the complaint not specifically admitted, modified or explained hereinabove.

FOR A SECOND DEFENSE

43. The defendant incorporates the allegations of its first defense which are consistent with this defense.
44. It alleges that the complaint fails to state facts sufficient to constitute a cause of action against it, and therefore, the complaint should be dismissed.

FOR A THIRD DEFENSE

45. The defendant incorporates the allegations of its first defense which are consistent with this defense.

45. It alleges that the plaintiffs' complaint is barred by doctrine of res judicata and/or the doctrine of collateral estoppel. Accordingly, the plaintiff's complaint should be dismissed.

FOR A FOURTH DEFENSE

47. The defendant incorporates the allegations of its first defense which are consistent with this defense.

48. It alleges that damages to the plaintiffs' property, if any, were caused by an unanticipated and unusual storm and that the defendant is not liable for any damages from such an extraordinary storm or flood resulting from an act of God.

FOR A FIFTH DEFENSE

49. The defendant incorporates the allegations of its first defense which are consistent with this defense.

50. It alleges, upon information and belief, that any drainage or discharge of water onto Plaintiffs' property has existed as a natural drainage basin for more than twenty (20) years, and it pleads the existence of a prescriptive easement as a bar to the action herein, in addition to written easements for drainage and utilities, both recorded in the Office for the Greenville County Register of Mesne Conveyances, and those unrecorded.

FOR A SIXTH DEFENSE

51. The defendant incorporates the allegations of its first defense which are consistent with this defense.

52. It alleges, upon information and belief, that the stream alongside Byrdland Drive adjacent to the plaintiffs' property is on private property and subject to the provisions of Sections 49-1-30 and 49-1-40 of the South Carolina Code of Laws, which requires the landowner to clean out his streams. Accordingly, any blockage of the natural stream and drainage system occurring on such private property is the responsibility of the landowner, for which the defendant cannot be held liable.

FOR A SEVENTH DEFENSE

53. The defendant incorporates the allegations of its first defense which are consistent with this defense.

54. It pleads the terms and provisions of the Stormwater Management Ordinance of Greenville, codified in Chapter 34 of the Code of the City of Greenville, including, but not limited to, those terms and provisions which provide that the defendant is not liable for damage to any person or property.

FOR AN EIGHTH DEFENSE

55. The defendant incorporates the allegations of its first defense which are consistent with this defense.

56. It is informed and believes that the plaintiffs' complaint is barred by the doctrine of sovereign immunity and its pleads the terms and provisions of the South Carolina Tort Claims Act, Sections 15-78-10, et seq., Code of Laws of South Carolina, as amended, including all immunities, limitations, and defenses granted or preserved by the Act, including specifically, without limitation, subsections (1), (2), (4), (5), (7), (8), (10),

(12), (13), and (20) of Section 15-78-60, pursuant to which it is not liable for a loss resulting from any of the following:

- a. Legislative, judicial, or quasi-judicial action or inaction;
- b. Administrative action or inaction of a legislative, judicial, or quasi-judicial nature;
- c. Adoption, enforcement, or compliance with any law or failure to adopt or enforce any law, whether valid or invalid, including, but not limited to, any charter, provision, ordinance, resolution, rule, regulation, or written policies;
- d. The exercise of discretion or judgment by the governmental entity or employee or the performance or failure to perform any act or service which is in the discretion or judgment of the governmental entity or employee;
- e. A nuisance;
- f. Snow or ice conditions or temporary or natural conditions on any public way or other public place due to weather conditions unless the snow or ice thereon is affirmatively caused by a negligent act of the employee;
- g. Natural conditions of unimproved property of the governmental entity, unless the defect or condition causing a loss is not corrected by the particular governmental entity responsible for the property within a reasonable time after actual or constructive notice of the defect or condition;
- h. Licensing powers or functions including, but not limited to, the issuance, denial, suspension, renewal, or revocation of or failure or refusal to issue, deny, suspend, renew, or revoke any permit, license, certificate, approval, registration, order, or similar authority except when the power or function is exercised in a grossly negligent manner;
- i. Regulatory inspection powers or functions, including failure to make an inspection, or making an inadequate or negligent inspection, of any property to determine whether the property complies with or violates any law, regulation, code, or ordinance or contains a hazard to health or safety; and

- j. An act or omission of a person other than an employee including but not limited to the criminal actions of third persons.

FOR A NINTH DEFENSE

57. The defendant incorporates the allegations of its first defense which are consistent with this defense.

58. It alleges that even assuming it was negligent, careless, grossly negligent, willful, wanton or reckless in any respect, and that any such conduct acted as a proximate cause of the flooding and the plaintiffs' resulting damages, if any, all of which is expressly denied and admitted solely for the purpose of this defense and no other, the plaintiffs were negligent, grossly negligent, reckless, willful and wanton in the following particulars to wit:

- a. Occupying a building in a low-lying area or flood-prone area, knowing it to have a negligible elevation differential with the roadway and drainage ditch or active creek, also knowing its proximity to an airport with large areas of impervious service of paved runways with the potential to create excessive runoff of surface water;
- b. Failing to take reasonable precautions to protect their building and property from such flooding and water damage;
- c. Occupying a building which they knew or should have known was flood prone;
- d. Constructing or occupying a building constructed on land excavated to such a level as to make it flood prone, and failing to use reasonable judgment and precautions to elevate the floor level to avoid potential flooding problems; and
- e. Otherwise failing to use due care under the conditions existing at the time of occupancy of the property, and at the time of the incident which is the subject of this action.

59. The plaintiffs' negligent, grossly negligent, reckless, willful and wanton conduct was a greater than fifty (50) percent cause of the flooding on the plaintiffs' property

and their resulting injuries or damages, if any, and accordingly, the plaintiffs' claims are barred.

FOR A TENTH DEFENSE

60. The defendant incorporates the allegations of its first defense which are consistent with this defense.

61. It alleges that if it was negligent, grossly negligent, reckless, willful or wanton in any respect, which is expressly denied and admitted solely for the purpose of this defense and no other, and even if such conduct on its part operated as a greater than fifty (50%) percent cause of the flooding and the plaintiffs' resulting injuries and damages, if any, which is also expressly denied and admitted solely for the purpose of this defense and no other, the defendant is entitled to a determination as to the percentage which plaintiffs' negligent, grossly negligent, reckless, willful and wanton conduct contributed to the flooding and to a reduction of any amount awarded to the plaintiffs by an amount equal to the percentage of plaintiffs' own negligent, grossly negligent, reckless, willful and wanton conduct.

FOR AN ELEVENTH DEFENSE

62. The defendant incorporates the allegations of its first defense which are consistent with this defense.

63. It alleges that the plaintiffs assumed the risk of the damages alleged by occupying the premises under the conditions existing that they knew or should have known.

FOR A TWELFTH DEFENSE

64. The defendant incorporates the allegations of its first defense which are consistent with this defense.

65. It alleges that the incident and damages alleged by the plaintiffs in the complaint were the direct, proximate, and sole result of the acts of others over which the defendant had no control, and therefore, it cannot be held liable for those acts.

FOR A THIRTEENTH DEFENSE

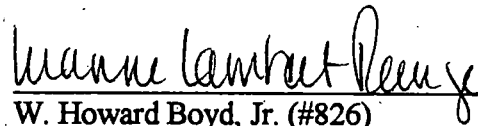
66. The defendant incorporates the allegations of its first defense which are consistent with this defense.

67. It pleads the terms and provisions of Section 15-78-120(b) of the South Carolina Code of Laws, as amended, pursuant to which its liability is limited and it is not liable for punitive or exemplary damages on any state law claims asserted by the plaintiffs.

WHEREFORE, having fully answered the complaint of the plaintiffs herein, the defendant, the City of Greenville, prays that the same be dismissed with costs, and for such other and further relief as the Court deems just and proper.

Greenville, SC

September 21, 1999


W. Howard Boyd, Jr. (#826)
Luanne Lambert Runge (#65389)
GIBBES, GALLIVAN, WHITE
& BOYD, P.A.
P.O. Box 10589
Greenville, SC 29603
(864) 271-9580

Attorneys for defendant

The defendant hereby demands a trial by jury of all issues triable by a jury.


Luanne Lambert Runge

Served 12/3/92

STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

IN THE COURT OF COMMON PLEAS
92-CP-23-3784

Louie D. Hawkins d\b\A
Servicemaster of
Greenville,

Plaintiff,

vs.

AMENDED COMPLAINT
(Property Damage)

Peden Contractors, Inc.,
The Greenville Airport
Commission, The City
of Greenville, William R.
Pearson, individually and
d\b\A Pearson Engineering,

Defendants.

The Plaintiff complaining of the Defendants above named,
would respectfully show unto this Honorable Court:

1. The Plaintiff is a citizen and resident of the County
of Greenville, State of South Carolina and doing business in
Greenville County as Servicemaster of Greenville, located on 1
Byrdland Drive, Greenville.

2. That the Defendant Peden Contractors, Inc. is a
corporation organized and existing under the laws of the State of
South Carolina and doing business in Greenville County as a
construction company, that does among other things grading,
paving and similar road construction work.

3. That the Defendants Greenville Airport Commission and
the City of Greenville are political subdivisions of the State of
South Carolina both located within Greenville County, State of
South Carolina.

4. That this action as against the Defendant Greenville

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Airport Commission and City of Greenville is brought pursuant to Section 15-78-10 et. seq. of the South Carolina Code of Laws more commonly referred to as the South Carolina Tort Claims Act.

5. That the Defendant William R. Pearson, individually and d/b/a Pearson Engineering, is a citizen and resident of Irmo South Carolina, doing business in Greenville County as an engineering firm.

6. That at all times relevant hereto the Defendant City of Greenville has been responsible for the design, construction, maintenance, and operation of the water drainage system on or adjacent to Byrdland Drive, and on or adjacent to the properties owned and/or managed by the Defendant Greenville Airport Commission.

7. That this responsibility includes the design, supervision and maintenance of the water drainage system so as to permit adequate drainage of surface water created during normal and predicted weather conditions.

8. That further, at all times relevant hereto the Defendant City of Greenville is responsible for issuing permits for road construction and would have been responsible for issuing all applicable permits to Peden; that included in this duty to issue permits, is the duty to review applications and review the work performed to see that it conforms to reasonable standards.

9. That at all times relevant hereto the Defendant Greenville Airport Commission was a political subdivision which owned, managed and operated property on which the Greenville Downtown Airport was located, and further, managed, owned and

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operated land on which certain roads adjacent to the airport were located, including the road on which construction work was being performed by the Defendant Peden.

10. That at all times relevant hereto the Defendant Peden was hired by either the Defendant City of Greenville or the Defendant Greenville Airport Commission to perform certain grading and construction work on a section of roadway near or adjacent to the Greenville Airport and the Plaintiff's place of business located on Byrdland Drive.

11. That at all times relevant hereto the Defendant Pearsor was hired by either the Defendant City of Greenville, The Defendant Greenville Airport Commission, or the Defendant Peden Construction Company to perform certain engineering duties including those duties relative to implementing erosion control measures on the road construction project.

12. That prior to July 30, 1991, the Defendant Peden and the Defendant Pearson, had performed certain work on the roads previously mentioned, said work including a disruption of the normal drainage system in and or about those roadways.

13. That prior to July 30, 1991, the work performed by the Defendant Peden and/or description of the normal water drainage system was either known or should have been known to the Defendants City of Greenville and the Defendant Greenville Airport Commission.

14. That on or about July 30, 1991, during a period of rain, substantial surface water, mud, and assorted debris from the Defendant Peden work site which was on property owned by the

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Defendant Greenville Airport Commission flowed through the water drainage system owned, operated, and maintained by the Defendant City of Greenville, causing flooding conditions that resulted in water and mud damage to the Plaintiff's place of business thereby causing the Plaintiff to sustain significant damages more particularly set forth later herein.

FOR A FIRST CAUSE OF ACTION

(Negligence)

15. That the Defendant Greenville Airport Commission through its agents, servants and/or employees, was negligent, grossly negligent, reckless, wilful and wanton in one or more of the following particulars to-wit:

a. In paving or otherwise surfacing large amounts of land thereby causing greater surface water run off without designing and/or changing the existing the water surface drainage system to accomodate that increased water flow;

b. In failing to hire qualified personnel, including but not limited to Peden, to perform road construction work in a manner consistent with reasonable practices and standards;

c. In failing to properly supervise road construction work to insure that the surface water drainage system was not adversely affected by such work and adjoining landowner would not be damaged;

d. In performing or causing to be performed work on the roadways thereby altering and/or changing the water surface drainage systems in a way that caused an unreasonable risk of danger to adjoining land owners, including the Plaintiff;

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e. In failing to act as a reasonably prudent entity should act in the performance of its duties, thereby posing an unreasonable risk of danger to adjoining landowners from surface water run off;

f. In failing to design a reasonably adequate surface water drainage system;

g. In failing to maintain a reasonably adequate surface water drainage system; said acts being in violation of the Statute Laws of the State of South Carolina and cases made and provided.

16. That the Defendant City of Greenville, through its agents, servants and/or employees, was negligent, grossly negligent, reckless, wilful and wanton in one or more of the following particulars to-wit:

a. In failing to design a reasonably adequate surface water drainage system;

b. In failing to maintain a reasonably adequate surface water drainage system;

c. In failing to properly supervise the surface water drainage system to ensure adequate flow of water during periods of inclement weather;

d. In failing to properly supervise the construction work performed on the roadways that would have effected water drainage systems under its control;

e. In granting permits to the Defendant Peden without insuring adequate protection during the construction for the surface water drainage systems;

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f. In failing to provide temporary measures to correct and/or channel the increased water flow caused by surface water drainage during periods of construction by the Defendant Peden; said acts being in violation of the Statute Laws of the State of South Carolina and cases made and provided.

17. That the Defendant Peden, through its agents, servants and/or employees, was negligent, grossly negligent, reckless, wilful and wanton in one or more of the following particulars to-wit:

a. In failing to design a reasonably adequate surface water drainage system;

b. In failing to maintain a reasonably adequate surface water drainage system;

c. In failing to properly supervise the surface water drainage system to ensure adequate flow of water during periods of increment weather;

d. In failing to utilize proper care in its construction of the roadway as to control and appropriately channel surface water caused during increment weather;

e. In failing to reasonable and customary procedures for the temporary control of the surface water drainage during the construction process; said acts being in violation of the Statute Laws of the State of South Carolina and cases made and provided.

18. That the Defendant Pearson, through its agents, servants and/or employees were negligent, grossly negligent, reckless, wilful and wanton in one or more of the following

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particular, to-wit:

- a. In failing to design reasonable erosion control measures for the road construction project;
- b. In failing to implement and/or supervise the implementation of reasonable erosion control procedures for the road construction project;
- c. In failing to design a reasonably adequate surface water drainage system;
- d. In failing to maintain a reasonably adequate surface water drainage system;
- e. In failing to properly supervise the surface water drainage system to ensure adequate flow of water during periods of increment weather;
- f. In failing to utilize proper care in its construction of the roadway as to control and appropriately channel surface water caused during increment weather;
- e. In failing to reasonable and customary procedures for the temporary control of the surface water drainage during the construction process; said acts being in violation of the Statute Laws of the State of South Carolina and cases made and provided.

FOR A SECOND CAUSE OF ACTION

(Trespass)

19. That the Plaintiff reiterates each and every allegation contained in Paragraphs 1 through 18 as if completely repeated herein.

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Covington & Patrick

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20. That the Defendants, jointly and\or severally, through their agents, servants and\or employees, caused flooding and the deposit of water, mud and assorted debris on the Plaintiff's property which represented an impermissible and unlawful trespass resulting in the damages more particularly set forth later herein.

21. That the Defendants, either jointly or severally through their agents, servants and\or employees, knew or in exercising reasonable care should have known that its trespass would result in the discharge of water, mud and assorted debris in such a manner to the Plaintiff's land that substantial damage would result.

FOR A THIRD CAUSE OF ACTION

(Nuisance)

22. That the Plaintiff reiterates each and every allegation contained in Paragraphs 1 through 21 as if completely repeated herein.

23. That the Defendants' actions, either jointly and\or severally, constituted an unreasonable and unnatural use of the Plaintiff's property so as to substantially impair the use, enjoyment and value of the Plaintiff's property, creating a continuing nuisance which has unreasonably interfered with the Plaintiff's reasonable use and enjoyment of his property and has greatly depreciated its value, thereby causing them damages as set forth later herein.

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FOR A FOURTH CAUSE OF ACTION

AS TO THE DEFENDANT CITY OF GREENVILLE

24. That the Plaintiff reiterates each and every allegation contained in Paragraphs 1 through 23 as if completely repeated herein.

25. That on or about July 31, 1991, surface water drained from Byrdland Street and other streets and thorough fares within the city of limits of the Defendant City of Greenville, did flow onto the Plaintiff's property beneath and into the Plaintiff's place of business causing extensive and permanent damage to both his personal and real property.

26. That the damage to the Plaintiff's property was the proximate result of overt acts of the Defendant City of Greenville in its failure to design, construct, maintain and provide adequate drainage of surface water so as to prevent the destructive passage of surface water upon the Plaintiff's property all despite actual, or constructive notice of the conditions causing the damage; said actions and delicts on behalf of the Defendant, being in violation of Section 5-31-450 of the South Carolina Code of Laws (1976, as amended).

27. That the Plaintiff is informed, alleges and believes that he may maintain this cause of action against the Defendant City of Greenville in accordance with Section 5-31-450 of the South Carolina Code of Laws (1976, as amended) and furthermore, the Plaintiff is informed and believes that he is entitled to a judgement for actual damages pursuant to the damages more particularly set forth later herein.

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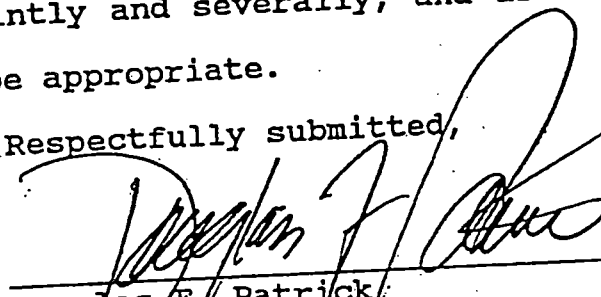
DAMAGES

28. That as a direct and proximate result of the aforementioned acts and/or delicts on behalf the Defendants, jointly and severally, the Plaintiff has been damaged as followed:

- a. Costs of repairs and cleanup for the damages to his property, both real and personal;
- b. Damage to the market value of his property;
- c. Loss of use and enjoyment of his property, including loss and interruption of business;
- d. Anxiety, mental anguish and emotional distress, all to the Plaintiff's loss and damage in a sum to be determined by the jury for both actual and punitive damages.

WHEREFORE, the Plaintiff seeks actual and punitive damages against the Defendants, jointly and severally, and as such other and further relief as may be appropriate.

Respectfully submitted,


Douglas F. Patrick
COVINGTON AND PATRICK
Post Office Box 2343
Greenville, South Carolina 29602
(803) 242-9000

Attorneys for the Plaintiff

November 30, 1992
Greenville, South Carolina

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Covington & Patrick

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STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

IN THE COURT OF COMMON PLEAS

Louie D. Hawkins, individually and d/b/a)
Servicemaster of Greenville, Servicemaster)
of Greenville, LLC and Dixie P. Hawkins,)

Plaintiffs,)

vs.)

City of Greenville,)

Defendant)

NOTICE OF MOTION AND
MOTION FOR SUMMARY JUDGMENT

C.A. No.: 01-CP-23-2459R

TO: LOUIE D. HAWKINS, INDIVIDUALLY AND D/B/A SERVICEMASTER OF GREENVILLE, SERVICEMASTER OF GREENVILLE, LLC AND DIXIE P. HAWKINS, PLAINTIFFS AND ROBERT C. CHILDS, III, ATTORNEY FOR PLAINTIFFS

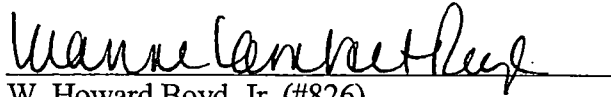
PLEASE TAKE NOTICE that the Defendant, the City of Greenville (the "City"), by and through its undersigned attorneys, will move before the resident or presiding judge of the Greenville County Court of Common Pleas, at a date and time to be set by the court, but not sooner than ten (10) days after service hereof, for an order pursuant to Rule 56 of the South Carolina Rules of Civil Procedure granting summary judgment in its favor, inasmuch as there is no genuine issue as to any material fact and it is entitled to judgment as a matter of law on one or more of the following grounds:

1. The only reasonable inference to be drawn from the evidence is that the plaintiffs previously released the City from all claims asserted in the complaint pursuant to the release executed by plaintiff, Louie Hawkins, on March 28, 1994, and thus, the City is entitled to judgment in its favor as a matter of law;

2. Alternatively, there is no evidence to support the plaintiffs' first cause of action for trespass, and thus, the City is entitled to judgment in its favor as a matter of law;

3. Alternatively, the City is entitled to judgment in its favor as a matter of law as to the plaintiffs' second cause of action for nuisance inasmuch as:
 - a. This claim is barred by the doctrine of sovereign immunity, as codified in the provisions of Section 15-78-60(7) of the South Carolina Code of Laws, as amended; and
 - b. Alternatively, even assuming this cause of action for nuisance is not barred, there is no evidence to support this claim.
4. Alternatively, the City is entitled to judgment in its favor as a matter of law as to the plaintiff's third cause of action for negligence inasmuch as:
 - a. The City does not owe the plaintiffs a duty of care;
 - b. Alternatively, even assuming the City owed the plaintiffs a duty of care, there is no evidence that the City breached this duty; and
 - c. Alternatively, even assuming the City breached a duty of care, there is no evidence that any such breach was a direct and proximate cause of any damage sustained by the plaintiffs.
 - d. Alternatively, this cause of action is barred by the doctrine of sovereign immunity, as codified in the provisions of Section 15-78-60 (1), (2), (4), (5), (7), (8), (10), (12), (13) and (20) of the South Carolina Code of Laws, as amended;
5. Alternatively, there is no evidence to support the plaintiff's fourth cause of action for inverse condemnation, and thus, the City is entitled to judgment in its favor as a matter of law;
6. Alternatively, the City is entitled to summary judgment in its favor as a matter of law on the plaintiff's fifth cause of action for violation of Section 5-31-450 of the South Carolina Code of Laws, as amended, inasmuch as:
 - a. This cause of action is barred inasmuch as Section 5-31-450 was impliedly repealed by the South Carolina Tort Claims Act, Sections 15-78-10 et seq. of the South Carolina Code of Laws, as amended;
 - b. Alternatively, even assuming this cause of action is not barred, there is no evidence to support this claim.
7. Alternatively, there is no evidence to support the plaintiff's sixth cause of action for conversion, and thus, the City is entitled to judgment in its favor as a matter of law.

This motion will be based upon the pleadings that have been filed in this action, depositions taken, written discovery responses, affidavits filed or to be filed, Rule 56 of the South Carolina Rules of Civil Procedure, and upon applicable common and statutory law.



W. Howard Boyd, Jr. (#826)

Luanne Lambert Runge (#65389)

William S.F. Freeman (#16676)

GALLIVAN, WHITE & BOYD, P.A.

330 E. Coffee Street

P.O. Box 10589

Greenville, SC 29603

(864) 271-9580

Greenville, SC

February 12, 2002

Attorneys for Defendant.

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STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

RECEIPT AND RELEASE

FOR AND IN CONSIDERATION of the sum of Four Thousand and No/100 Dollars (\$4,000.00) paid to Louie D. Hawkins, d/b/a/ Servicemaster, the receipt whereof is hereby acknowledged, in the case of Louie D. Hawkins d/b/a Servicemaster of Greenville vs. Peden Contractors, Inc., the Greenville Airport Commission, and the City of Greenville, Case No. 92-CP-23-3784, said company does hereby release, relieve and forever acquit the City of Greenville, South Carolina, a municipal corporation, their agents, employees, officers, successors, and assigns from any and all liability arising out of or in any way connected with the water and mud damage to Plaintiff's place of business located at 1 Byrdland Drive which occurred on or about July 30, 1991 and it is the intention in executing this Release to forever discharge the City of Greenville from any and all claims, demands, actions or causes of action which may exist, known or unknown, of any and all damages, past, present and future, in any way connected with or arising out of the aforesaid damages.

Further it is specifically acknowledged that the payments herein recited are being paid and received upon claims concerning which a bona fide dispute exist, is in compromise of litigation and are not to be construed as admissions of liability on the part of those released.

It is acknowledged and understood that this is a full, complete and final release of all damages arising out of the design, construction, maintenance, and operation of the water drainage system on or adjacent to Bryland Drive, that no future or further payments will be paid as a result thereof and that the persons and corporations in whose favor this Release runs are herewith fully finally and forever discharged from any an778d all liability with respect to the aforementioned property.

WITNESS my hand and seal this 28 day of March, 1994.

WITNESSES:

SERVICEMASTER OF GREENVILLE

BY: Louie D. Hawkins

Louie D. Hawkins

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RELEASE

KNOW ALL MEN BY THESE PRESENTS, that I, Louie Hawkins, individually and d/b/a Servicemaster of Greenville, for the consideration of One Thousand Five Hundred and no/100 (\$1,500.00) Dollars to me in hand paid by William Pearson, individually and d/b/a Pearson Engineering, the receipt whereof is hereby acknowledged, do release and discharge, and by these presents do for myself, my heirs, executors, administrators, successors and assigns release and forever discharge the said William Pearson, individually and d/b/a Pearson Engineering, David McMillan, and the Design Professional Insurance Companies, and their heirs, executors, administrators, successors, assigns, employer, employees, bailees, agents and servants and all other persons, firms, and corporations of and from all and all manner of actions, causes of action, suits, debts, accounts, judgments, claims and demands whatsoever in law or equity as a result of, growing out of, or in any way connected with any and all injuries both to persons and/or damages to property resulting or to result or which might result in the future from any flooding, sedimentation, mud, storm water, and damages of any kind at my property on Byrdland Drive in Greenville, South Carolina, including without limitation, such damages as occurred during the construction of Byrdland Drive Extension in 1991, for which injury or damages I have claimed the said William R. Pearson, individually and d/b/a Pearson Engineering to be legally liable, which liability was and is expressly denied. I agree, as a further consideration and inducement for this compromise settlement, that it shall apply to unknown and unanticipated injuries and damages resulting from construction at or near the Greenville Downtown Airport, as well as to those now.

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disclosed, and I further agree that this release applies to any damages which have occurred and, about which we know now as well as to any damages, casualties and events which may occur in the future.

I further agree and acknowledge that the parties released hereby do not admit any liability in connection with this final settlement and that they have entered into this settlement solely to avoid the trouble and expense of litigation.

In witness whereof I hereunto set my hand and seal this

28 day of March, 1994.

WITNESSES:

[Signature]

[Signature] (Seal)
Louie Hawkins, individually and
d/b/a Servicemaster of Greenville

STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

On this 28 day of March in the year 1994, before me personally came Louie Hawkins, individually and d/b/a Servicemaster of Greenville to me known and known to me the person who is described in and who executed the foregoing instrument, and acknowledged to me that she executed the same, and that the same is her free act and deed.

[Signature]
Notary Public

My Commission Expires: 8-30-95

STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

R E L E A S E

KNOW ALL MEN BY THESE PRESENTS, that we, Dixie P. Hawkins and Louie D. Hawkins d/b/a Servicemaster of Greenville for and in consideration of Four Thousand and No 00/100ths (\$4,000.00) Dollars, paid in hand to us by Greenville Airport Commission and The South Carolina Insurance Reserve Fund, the receipt and sufficiency of which is hereby acknowledged, do release and discharge for ourselves, our heirs, executors, administrators, personal representatives, predecessors, successors, assignees and agents, Greenville Airport Commission and The South Carolina Insurance Reserve Fund, ~~their heirs, executors, administrators, personal representatives,~~ predecessors, successors, assignees, employees, agents, servants, affiliates, officers, directors, elected officials, subsidiaries, parents and stockholders, of and from any and all manner of actions, causes of action, claims, judgments, suits, whether in law or equity, as a result of, growing out of or in any way connected with the subject matter of and a lawsuit entitled Louie D. Hawkins d/b/a Servicemaster of Greenville v. The Greenville Airport Commission, et al., C.A. No. 92-CP-23-3784, which liability therefor was and is expressly denied.

IT IS FURTHER UNDERSTOOD AND AGREED that this Release is a compromise and settlement of the claims and lawsuit referenced above, and Greenville Airport Commission and The South Carolina Insurance Reserve Fund do not admit liability as to these claims and allegations.

IT IS FURTHER UNDERSTOOD AND AGREED that this Release applies to any and all actions which were, or might have been asserted against Greenville Airport Commission and The South Carolina Insurance Reserve Fund and applies to any unknown and unanticipated events which might arise out of the subject matter of this Release.

IT IS FURTHER UNDERSTOOD AND AGREED that Dixie P. Hawkins and Louie D. Hawkins d/b/a Servicemaster of Greenville will indemnify Greenville Airport Commission and The South Carolina Insurance Reserve Fund for any and all claims or liens, that others have or may attempt to assert against Greenville Airport Commission and The South Carolina Insurance Reserve Fund relating to the proceeds paid under this Release.

IT IS FURTHER UNDERSTOOD AND AGREED that the undersigned have carefully read this Release, have had the advice of their own independent legal counsel in this matter, and understand the contents of this Release, and sign it of their own free act.

IT IS FURTHER UNDERSTOOD AND AGREED that the undersigned will keep the fact of this settlement, the terms of this settlement agreement, and all settlement documents confidential.

IN WITNESS WHEREOF, we have hereunto set our hand and seal this 28 day of March, 1994.

IMPORTANT: READ BEFORE SIGNING

[Signature]
Witness

[Signature]
Louie D. Hawkins

[Signature]
Witness

[Signature]
Dixie P. Hawkins

RELEASE OF ALL CLAIMS

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being of lawful age, for and in consideration of the sum of Nine Thousand and No/100 Dollars (\$9,000.00) to the undersigned in hand paid, and other good and valuable consideration, receipt whereof is hereby acknowledged, does hereby for my heirs, executors, administrators, successors and assigns release, acquit and forever discharge Peden Contractors, Inc. and Pennsylvania National Mutual Casualty Insurance Co. and their agents, successors, heirs, executors, administrators and all other persons, corporations, firms, associations or partnerships of and from any and all claims, actions, causes of action, demands, rights, damages, costs, loss of service, expenses and compensation whatsoever, which the undersigned now has or which may hereafter accrue arising out of or in any way relating to work performed by Peden Contractors, Inc. under contract for the Greenville Airport Commission in and about the area of the Greenville Downtown Airport and/or Byrdland Drive in the City of Greenville, State of South Carolina, and/or flooding which occurred on or about July 29, 30, and August 1991,

It is understood and agreed that this settlement is the compromise of a doubtful and disputed claim, and that the payment made is not to be construed as an admission of liability on the part of the party or parties hereby released, and that said releasees deny liability therefor and intend merely to avoid litigation and buy their peace.

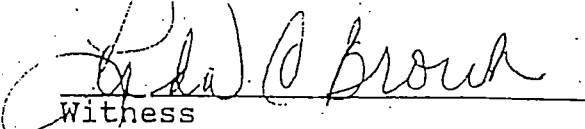
The undersigned further declares and represents that no promise, inducement or agreement not herein expressed has been made to the undersigned, and that this release contains the entire agreement between the parties hereto, and that the terms of this release are contractual and not a mere recital.

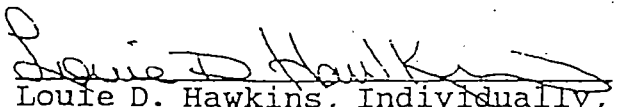
THE UNDERSIGNED HAS READ THE FOREGOING RELEASE AND FULLY UNDERSTANDS THE SAME.

Signed, sealed and delivered this 28 day of ^{March} ~~February~~ 1994.

In the presence of:

CAUTION: READ BEFORE SIGNING


Witness


Louie D. Hawkins, Individually,
and d/b/a Service Master of
Greenville, Inc.

Case: 092-149 - HAWKINS, LOUIE D. V. PEDEN CONST.

Client: LOUIE D HAWKINS

Total Settlement: 18500.00

Attorneys Fee: 3500.00-

Total Medical Due: 0.00-

Total Expenses: 1128.51-

Total Subrogation: 0.00-

PIP Balance: 0.00

Net to Client: 13871.49

The above settlement was made at my request and I am satisfied with the settlement and the services of my attorney.

I understand that the medical bills listed in the detail sheets to follow are the only ones that my attorney is responsible for paying.

Louie D Hawkins
(Client)

Dixie P Hawkins
(Spouse)

Referring Attorney - Initials of persons checking () ()

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P **"** **11-2** **11-11-11**

Personally appeared before me Julie Y.

stormwater basin which includes the property encompasses a 3.24 square mile area on the City's highly developed Eastside, which includes many large commercial developments on Byrdland Drive, as well as Haywood, Airport, and Woods Lake Roads, and extends to the north across I-385. This area is susceptible to natural flooding based on the topography of the area, since all stormwater from this basin naturally runs downhill and eventually drains into Laurel Creek.

4. Currently, the property is not within a floodplain as established by the Federal Emergency Management Agency ("FEMA"). However, it is possible that the property will fall within a floodplain when FEMA remaps this area.

5. The City does not own any portion of Laurel Creek or any land near the property. The City has not taken any action or made any effort to alter or divert the flow of Laurel Creek to cast water onto the property.

6. When property in the City is developed, the owner/developer is required to submit storm drainage calculations to show that the proposed drainage system for the development is designed to handle the stormwater runoff required by the City's ordinances. If the owner/developer's proposal for the drainage system satisfies the City's design criteria for developing that particular parcel of land, then the City must approve the design. In approving such applications, the City expressly rejects liability for stormwater discharge from these parcels onto adjacent property. (See, e.g., Ex. 1). The City is unable to lawfully deny permits for development of property which meet the criteria established by its ordinances.

7. In June and July, 1993, the City installed an elliptical 11'5" x 7'3" pipe ("arched pipe") under the intersection of Byrdland Drive and Airport Roads. The arched pipe replaced a double box culvert which was gathering debris and thus, its capacity was being restricted. The arched pipe increased the drainage capacity of this section of the City's stormwater drainage

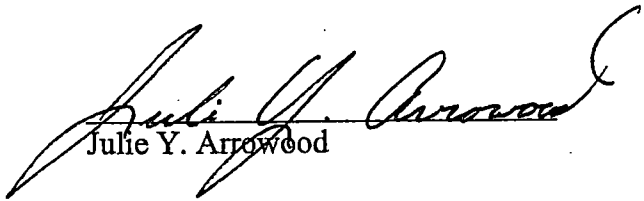
system. The arched pipe installed in July of 1993 is the only improvement to the stormwater system performed by the City in this area since 1980.

8. By installing the arched pipe, the City did not intend to, and did not, alter the flow of Laurel Creek, nor did it direct water onto the property. The City has not taken any other action to increase or redirect the amount of stormwater runoff or surface water onto the property.

9. The rainfall which occurred in the City on July 24, 1997 was an extraordinary rainfall event. Due to the large amount of rain which fell in a short period of time on July 24, 1997, Laurel Creek could not keep the stormwater within its banks, and it naturally spilled over onto Byrdland Drive and other roads in the area. Official rainfall records from National Climatic Data Center in Asheville show that 2.51 inches of rain fell in Greenville in one hour on July 24, 1997. (Ex. 2)

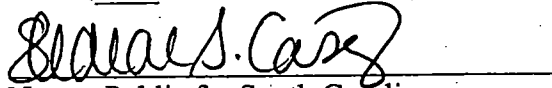
10. The City has funded a study of the Haywood Road/Laurel Creek stormwater basin which encompasses the property. One of the recommendations resulting from this study was to increase the capacity of the stormwater drainage system which services this area. After consideration, City Council has agreed to fund this project, although it will require cooperation from the State of South Carolina and Greenville County since the stormwater drainage system in this area is comprised of interconnected systems owned by the State, City, County and private entities. At this time, it is anticipated that the design for this project will start in the fiscal year which begins July 1, 2002, and construction will begin in 2003 with an estimated completion date of 2004.

11. Once this system is upgraded, it is still possible that extraordinary rainfalls may occur which exceed the capacity of the stormwater system, as happened on July 24, 1997.


Julie Y. Arrowood

SWORN TO BEFORE ME

THIS 17th DAY OF MARCH, 2002



Notary Public for South Carolina

My Commission Expires: 2/22/06

STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

COURT OF COMMON PLEAS

2001-CP-23-2459

LOUIE D. HAWKINS, ET. AL.,)
PLAINTIFFS,)

VS.)

TRANSCRIPT OF RECORD

CITY OF GREENVILLE,)
DEFENDANT.)

April 24, 2002

Greenville, South Carolina

B E F O R E:

THE HONORABLE JOSEPH J. WATSON, JUDGE.

A P P E A R A N C E S:

ROBERT C. CHILDS, III, ESQ.
Attorney for the Plaintiffs

W. HOWARD BOYD, JR., ESQ.
Attorney for the Defendant

HOLLIE JENKINS
Official Court Reporter

I N D E X

(There were no witnesses called.)

E X H I B I T S

(There were no exhibits introduced.)

1 THE COURT: This is the case of Hawkins v. City of
2 Greenville.

3 This is your motion, Mr. Boyd?

4 MR. BOYD: Yes, sir, Your Honor.

5 THE COURT: All right.

6 MR. BOYD: You had previously heard the city's motion
7 for summary judgment, had denied it, but indicated in your
8 order that it could be reheard after we completed the
9 depositions of the Plaintiffs expert. And the Plaintiff
10 has also deposed the city's former storm water
11 administrator, Julie Arrowood. And we are now back before
12 you.

13 As we had argued previously, we do not believe any of
14 the testimony that was adduced at these depositions creates
15 any genuine issue of material fact.

16 And I will very briefly, if the Court will permit me,
17 review --

18 THE COURT: Well, did --

19 Mr. Childs, did y'all get an expert?

20 MR. CHILDS: Yes, sir.

21 THE COURT: Mr. Sherard?

22 MR. CHILDS: Yes, sir.

23 THE COURT: And has he been deposed?

24 MR. CHILDS: Yes, sir.

25 THE COURT: All right.

1 MR. BOYD: And basically -- and I'll certainly let
2 Mr. Childs correct me if I'm wrong. Mr. Sherard has not
3 done a flood study and says he cannot testify without doing
4 one to how it is flooding. He did rely upon a study done
5 by Holpert, LLP, of the storm water basin in question, the
6 Laurel Creek-Haywood Road basin, which is basin number four
7 in the city, which determined that this entire drainage
8 system in this area is undersized and recommends that the
9 city go back in and enlarge the capacity of this system to
10 prevent some of these flooding problems.

11 But as we previously argued, we believe the law is the
12 city is not liable to individual land owners because city
13 council has prioritized its storm water drainage system and
14 has not redesigned and upgraded existing storm water
15 drainage facilities. I believe the law is clear on that
16 around the county.

17 In this case, as we argued previously, what the
18 Plaintiff must show is that some aggressive, affirmative
19 act by the city has caused the flooding of this property.
20 And we believe that there is no evidence of that.

21 The only --

22 THE COURT: Wasn't there something about cutting trees
23 or -- I mean, y'all -- I don't -- y'all remember this case.
24 I'm trying to remember it from --

25 MR. BOYD: I was going to summarize what I believe is

1 the Plaintiffs experts to -- or the Plaintiffs two basis,
2 which I don't believe qualify. And then we'll be glad to
3 answer any questions the Court has.

4 First of all, in about 1975 or 1976, I guess, when
5 Haywood Road was built, the Department of Transportation
6 put an eight-foot pipe under Haywood Road, a 96-inch
7 corrugated metal pipe for storm water drainage.

8 MR. CHILDS: Your Honor, I don't want to interfere
9 with his argument, but he's assuming evidence and facts
10 that are not in evidence. I mean, nobody has testified to
11 who put that 96-inch pipe under Haywood Road.

12 It's an assumption on his part that the Department of
13 Transportation put it in. But the only evidence that we've
14 adduced from the depositions is the city doesn't know -- in
15 particular, the 96-inch pipe that runs in front of my
16 client's business, the city doesn't know who installed it,
17 when it was installed, and why it was installed,
18 essentially.

19 MR. BOYD: Well, I hadn't got to that point yet, Your
20 Honor. If I may continue, Mr. Childs, I assume, will argue
21 in opposition.

22 The reason I mentioned Haywood Road is that all this
23 drains down into Haywood Road. It drains right past
24 Service Master into Airport Road, down Airport Road,
25 underneath Haywood Road. So that is the limiting feature

1 of the system. Eight feet at Haywood Road -- it doesn't
2 matter how big the system is back upstream, it's going to
3 hit that eight-foot pipe under Haywood Road. And that's
4 going to be important, I think, from the redesign
5 perspective that I'll get to in just a moment.

6 Now, as Mr. Childs was starting to say, we believe and
7 he's right that the city has no records concerning this.
8 We do have -- I say, we have no record. We do have records
9 that indicate that in 1989 there was an existing eight-foot
10 aluminum pipe in Laurel Creek right across the street from
11 where the Plaintiffs property is located, right across
12 Byrdland Drive.

13 So that was clearly there -- I'm sorry, it was in '88.
14 As of October 10, 1988, a survey done at that time, that
15 pipe was installed. We have a record of inquiry that we
16 have discussed with Mr. Sherard yesterday from the owners
17 of the property dated May 22nd, 1987, which says Ashmore --
18 Pack Ashmore, one of the owners, is getting ready to
19 develop the lot on the corner of Haywood, Airport, and
20 Byrdland Boulevard. That's the lot right across the street
21 from where the Plaintiffs property is located. They're
22 going to pipe the creek says the city employee who took
23 this information.

24 We assume that means the owners were going to pipe the
25 creek. The city, again, has no records of being notified

1 the creek was actually piped. We have no record concerning
2 information given to us about the size of the pipe or what
3 was done out there. But anyway, the pipe was ultimately
4 installed, obviously, and was in place by October of 1988.

5 The city then takes a maintenance easement. And the
6 city is responsible for the maintenance of that pipe in the
7 creek from that point forward. It is, again, an eight-foot
8 pipe, same size as the pipe under Haywood Road.

9 Mr. Sherard, the expert --

10 THE COURT: And this pipe is under what road?
11 Byrdland?

12 MR. BOYD: This pipe is under -- actually under
13 Airport -- well, I'm sorry. It's not under a road. It's
14 in the creek alongside Byrdland Drive.

15 THE COURT: Okay.

16 MR. BOYD: But it's not under a road.

17 THE COURT: Okay.

18 MR. BOYD: Mr. Sherard testified yesterday that, in
19 his opinion as a civil engineer, that pipe is undersized.
20 He also testified mistakenly believing that what's under
21 Haywood Road is a 20 -- is a pipe size for a 25-year storm
22 event, which is the current requirement. He said this
23 eight-foot pipe is not big enough because it's going
24 into -- it's got to be -- all this has got to be sized for
25 a 25-year storm event.

1 THE COURT: Which would be what size?

2 MR. BOYD: Larger than eight feet. We don't know
3 exactly.

4 THE COURT: Okay.

5 MR. BOYD: But it's no question larger than --
6 everybody agrees that it should be larger than eight feet
7 for a 25-year storm event.

8 THE COURT: And you say he testified erroneously. I
9 mean, is that a factual issue?

10 MR. BOYD: Well, I'm getting there. The Court may
11 conclude it is. I don't believe it is.

12 THE COURT: All right. Go ahead.

13 MR. BOYD: But we don't know why the DOT -- I guess
14 back then it was the Department of Highways and Public
15 Transportation when Haywood Road was built. We don't know
16 why they put an eight-foot pipe under Haywood Road, unless
17 maybe the requirement back then was for less than a 25-year
18 storm event and all they were required to design for is a
19 lesser storm event. But all that is unclear. We don't
20 know anything about that. We haven't got the DOT records.

21 But in any event, the city, in our view, certainly is
22 not responsible for the DOT decision to size that pipe
23 under the road in whatever size they install. Once they do
24 that, that limits the capacity of the system and it can't
25 be enlarged.

1 Now, the only other work the city did on the piping
2 out there is we installed or enlarged the pipe. We
3 replaced a double-box culvert downstream from this pipe
4 across from the Plaintiffs property.

5 And it might help, I guess --

6 Do you have any objection if I hand up to the Court
7 the portion of this map that shows the sewer line in that
8 area -- I mean, the storm water drainage system in that
9 area?

10 MR. CHILDS: No.

11 MR. BOYD: It was marked as Exhibit No. 7 at
12 Mr. Sherard's deposition yesterday.

13 MR. CHILDS: Right.

14 MR. BOYD: And, Your Honor, this will show an outline
15 of the storm water sewer system there. And I didn't
16 highlight it, which I probably should have. But if you'll
17 look at the top center, you'll see Haywood Road and its
18 intersection with Airport Road.

19 THE COURT: I'm there.

20 MR. BOYD: And then if you go up to the top of the
21 map, that little dotted line shows Byrdland Boulevard.
22 It's not labeled there, but that's Byrdland coming into
23 Airport near the intersection of Airport and Haywood Road.

24 THE COURT: I'm with you.

25 MR. BOYD: Now, downstream toward Airport and

1 underneath Airport Road is where this old double-box
2 culvert was. The city replaced that double-boxed culvert
3 in 1993 with an elliptical arched pipe, which increased the
4 capacity. Both Ms. Arrowood and Mr. Sherard agree that
5 that would have increased the capacity of the storm water
6 drainage system.

7 So that certainly did not cause or contribute to any
8 flooding of the Plaintiffs property that was not already
9 occurring.

10 THE COURT: Where is your client's property, Mr. Childs?

11 MR. CHILDS: Your Honor, if I could show you on the --

12 THE COURT: Below Byrdland?

13 MR. CHILDS: It's going to be -- I just kind of wrote
14 it in on the same chart. It's going to be right here on
15 Byrdland.

16 THE COURT: Oh, up here?

17 MR. CHILDS: Right.

18 THE COURT: Okay.

19 MR. CHILDS: And then this is Laurel Creek as it goes
20 into this 96-inch pipe right here.

21 MR. BOYD: And then right across the street --

22 THE COURT: Wait. Hold on.

23 Oh, up here. Okay.

24 MR. CHILDS: Right. So Laurel Creek -- the Hawkins
25 property is here and Laurel Creek -- the pipe somewhere in

1 here starts.

2 THE COURT: On the other side of --

3 MR. CHILDS: On the other side of the street.

4 THE COURT: Well, that -- okay.

5 MR. CHILDS: So this is the 96-inch pipe that we're in
6 discussions about its capacity to handle the water flow.

7 THE COURT: All right.

8 MR. CHILDS: Mr. Boyd's argument is that, well, it
9 doesn't really matter because there's a 96-inch pipe under
10 Haywood Road.

11 THE COURT: Right.

12 MR. CHILDS: Our argument is, well, there's a 96-inch
13 pipe here that won't handle the flow. And as a result of
14 that, water flows across the street into the Hawkins
15 property.

16 THE COURT: Okay. And so what are you saying the city
17 did, Mr. Childs?

18 MR. CHILDS: The city took in this property, this
19 96-inch pipe, and we're still -- cannot determine who put
20 the pipe in. But we know that in 1989, the city requested
21 a 25-foot easement from Tracts (phonetic) that was actually
22 developed in the corner here of Byrdland and Airport next
23 to Haywood Road for maintenance purposes.

24 And the -- Mr. Hawkins property was flooded in July of
25 1991, and put the city basically on notice of the problem

1 with this drainage pipe and its lack of capacity. The city
2 then in 1993 installed an arch culvert across the street,
3 which had a greater capacity than a 96-inch pipe. And they
4 also allowed Rooms To Go a permit in 1996 that basically
5 developed across the street from the Hawkins property.

6 And in July of 1997, they spent 100 hours of labor
7 across the street from Service Master riprapping the bank
8 with broken concrete at the creek. And those are the
9 photographs I showed you at the prior summary judgment
10 hearing. And Ms. Arrowood testified that that would
11 decrease the capacity of the creek to handle the water
12 flow. And then July 24th, 1997, was when Mr. Hawkins was
13 flooded again.

14 So our contention is that the city accepted
15 maintenance responsibility of a deficient pipe in 1989
16 having clear knowledge that it was deficient, that in 1991
17 they were on notice that the pipe was deficient, that it
18 flooded my client's property at that time, and they have
19 failed to do anything to remedy the problem. And, in fact,
20 it's arguable -- it's inferible from the facts that the
21 city may have installed this 96-inch drainage pipe because
22 it connects directly to their drainage system and they
23 accept it as part of their drainage system.

24 So the failure of the city to establish who put the
25 pipe in, it may be a good argument, but there's an argument

1 that either the city should have let the contractor -- or
2 the developer place this 96-inch pipe into the creek or by
3 accepting maintenance responsibility of it, they took an
4 affirmative act and --

5 THE COURT: Do you have any law on that, on taking --
6 just taking over something that might be defective?

7 MR. CHILDS: No, sir. I haven't seen a case on that.

8 I would make an argument that under the Tort Claims
9 Act, they were under notice that they had a defect, first
10 of all, and they failed to remedy it within a reasonable
11 period of time from 1991 until the present.

12 Ms. Arrowood concedes that she is the first person
13 that ever even looked at this drainage pipe, that she knows
14 that it's insufficient. And both experts generally agree
15 it's been insufficient since probably when it was
16 installed.

17 And that as a result of this drainage pipe being
18 permitted or placed across the street from the Hawkins,
19 their property is subject to being flooded to the finished
20 floor level every six years, which is well below the
21 standards of the 25-year flooding that's required by any
22 culvert that crosses under a roadway.

23 THE COURT: All right. Well, I need to see some law
24 on -- are you alleging allowing Rooms To Go to build was a
25 negligent act?

1 MR. CHILDS: I'm alleging inverse condemnation, which
2 is under Newsom v. Town of Surfside.

3 THE COURT: I understand that.

4 MR. CHILDS: And, secondly, that the city had notice
5 of the defect back in 1991 when Mr. Hawkins property was
6 flooded, and took no action and was grossly negligent by
7 doing so and doing anything since 1991 about this drainage
8 pipe.

9 THE COURT: Okay. Mr. Boyd.

10 MR. BOYD: Your Honor, again, we don't think either
11 one of those gives rise to any legal liability. There is
12 certainly no issue as to the underdesign and undercapacity
13 of this eight-foot pipe. Everybody agrees. And the city
14 has now studied the plan at great expense and plans to go
15 back and redo this entire system.

16 However, that is not -- an omission to act does not
17 render governmental agencies liable. If it did, every land
18 owner in the city and every land owner in the county could
19 bring a lawsuit for a lot of things. These aren't
20 political issues.

21 As Ms. Arrowood testified, the city prioritized all
22 these 14 basins within the city. They've been addressing
23 the ones that had the most severe flooding. They have now
24 gotten to basin number four. And that's the political
25 process and how it works. And everybody out there,

1 including Mr. Hawkins and Service Master, will get relief
2 once the process works.

3 Mr. Childs confuses a failure to do anything with
4 inverse condemnation. That is clearly not the law in South
5 Carolina. The government is not liable in inverse
6 condemnation for failing to do something to remedy a
7 problem which causes flooding. They're only liable if they
8 affirmatively, actively, aggressively do something which
9 causes the flooding.

10 And here, there is no evidence of that. In fact, the
11 only -- the closest thing they come to is this maintenance
12 work in the creek bed. However, Mr. Childs, I think,
13 misquoted. I'll be glad to pull out Ms. Arrowood's
14 testimony. She didn't say that the riprap would decrease
15 the capacity of the creek, she said it may or may not,
16 depending on how it was placed.

17 And the Plaintiff -- again, his expert has no evidence
18 and no testimony --

19 THE COURT: All right. Well, I'm going to have to
20 look at it. Before I bring summary judgment, I'm going to
21 have to look at that.

22 MR. BOYD: And we've got that here that I'll be
23 glad to -- we've not gotten --

24 Have you got the original, the deposition of
25 Ms. Arrowood?

1 MR. CHILDS: Yes. I have the condensed version, if
2 that's all right.

3 THE COURT: Well, give it to Mr. Boyd.

4 Both of y'all highlight anything in those depositions
5 that you want me to look at before I rule on this thing.

6 MR. CHILDS: Okay.

7 MR. BOYD: Okay. We'll do that. We can submit those
8 excerpts to you.

9 And then the other point that Mr. Childs continues to
10 harp on is that the city should have replaced this
11 eight-foot pipe and basically redesigned the storm water
12 drainage system to enlarge the capacity. And, again, the
13 law is, I think, fairly clear.

14 We don't have a case in South Carolina on that point,
15 but the law is clear throughout the country and the case is
16 cited in my brief.

17 THE COURT: Your original brief has that?

18 MR. BOYD: Our original brief has that law that
19 municipalities do not have the obligation legally to go in
20 and redesign undersized existing facilities, except through
21 the political process that's been done here. And the
22 reason the Courts stay out of that is for the obvious
23 reason that they have to let the legislature decide how tax
24 money is allocated and how it is spent.

25 THE COURT: All right. Mr. Childs, tell me again

1 exactly -- tell me any acts you want me to look at. In
2 '91, they're on notice of a flood?

3 MR. CHILDS: Yes, sir.

4 THE COURT: All right.

5 MR. CHILDS: In 1990, Service Master -- in 1980, the
6 Service Master site is approved by the City of Greenville.
7 According to Mr. Hawkins testimony in his deposition, no
8 problems with flooding until 1991, which was within --
9 which was -- let me go through the times frames.

10 In 1980, the Service Master site was approved. In
11 1987, Tracts which is at the corner of Haywood, Airport,
12 and Byrdland, they obtained a permit from the City of
13 Greenville. In May of '87, there's a note from the city
14 that Ashmore is developing the lot to pipe the creek, no
15 indication of a review of the size of the pipe, or no
16 indication that the city either permitted that or denied
17 that from being done.

18 By the way, the creek goes along the right of way of
19 Byrdland Drive. And according to Ms. Arrowood's testimony,
20 the city is responsible for the creek along Byrdland Drive
21 within the right of way of Byrdland Drive. In 1989, the
22 city requests that Tracts grant them a 25-foot easement for
23 the 96-inch storm drain flowing across their property.

24 There's no indication at that time that the city
25 determined what capacity this pipe was. And then in July

1 of 1991, the Service Master property was flooded for the
2 first time. And then in 1993, the city installed --
3 there's records that the city installed a 96-inch aluminum
4 pipe, although the city contends that it installed an
5 elliptical culvert.

6 THE COURT: All right. And you're saying that -- are
7 you saying that's an act of gross negligence?

8 MR. CHILDS: We're not sure where that 96-inch pipe
9 was actually installed.

10 THE COURT: You're not sure what?

11 MR. CHILDS: We're not sure where that 96-inch pipe
12 was installed or if it was actually installed. That
13 matches the same time that the city says it put in the
14 elliptical culvert under Airport Road, which is fed by not
15 only the 96-inch pipe from Laurel Creek, but a 24-inch pipe
16 that runs along Byrdland Drive -- I mean, along Airport
17 Drive.

18 THE COURT: Is any expert saying that was an act of
19 gross negligence, putting in the elliptical culvert?

20 MR. CHILDS: No, sir.

21 THE COURT: All right.

22 MR. CHILDS: Not the elliptical culvert.

23 Then in -- I told you in 1997, the city spent 100
24 hours riprapping the bank with broken concrete at the creek
25 across from my client's property.

1 THE COURT: Tell me what your client -- what your
2 expert says about the riprap.

3 MR. CHILDS: He says that -- actually their expert
4 says that the riprap would have diminished the capacity of
5 the creek to handle flooding waters. And then the flood
6 occurred on July the 24th of '97.

7 In addition to that, Your Honor, there is a two-volume
8 notebook that I have not seen that was discovered during
9 the deposition of Ms. Arrowood that is the Holpert report
10 that Mr. Boyd refers to. We took her deposition Friday at
11 which time she says some of her opinions were based upon
12 this two-volume report, which supports our contention that
13 the drainage pipe has lacked the capacity for some lengthy
14 period of time.

15 I have not had the opportunity to review that entire
16 report. I'd like to get that this afternoon from
17 Mr. Boyd's office. It was done in July of 2001 and has
18 never been disclosed to us until we took Ms. Arrowood's
19 deposition. I'd like to be able to review that and submit
20 that to the Court if there's anything pertinent -- anything
21 else pertinent in there.

22 THE COURT: Okay. Y'all highlight the deposition and
23 give it to me this afternoon, if you can.

24 Anything else you want to give to me I'll look at.

25 MR. BOYD: Just one point to make the Court's burden a

1 little easier. Don't forget there was that release signed
2 by the Plaintiffs in 1994. So everything pre-'94 is
3 clearly gone, we would submit to the Court. They had the
4 flooding in '91.

5 So whatever issues were at issue as of 1994 when that
6 release was signed are clearly gone. We, of course,
7 contended at the first hearing that that release barred
8 this claim. We believe the language does. Apparently the
9 Court disagreed with us.

10 But in any event, there's no question that as of the
11 signing of that release in 1994 as to the damage that had
12 occurred prior to that time that the Plaintiffs had no
13 claim.

14 So we believe the only thing that we're talking about
15 now is an affirmative act by the city done since that 1991
16 flooding. And if the Plaintiffs wanted -- the city was a
17 named party. And if they had a claim for this permitting
18 and all that kind of stuff back in those earlier times
19 prior to 1991, they should have brought those claims then.
20 And we don't believe they can bring those now.

21 MR. CHILDS: The point of the '91 incident is that it
22 put the city on notice of the defect.

23 THE COURT: Okay. Thank you very much.

24 *****END OF TRANSCRIPT OF RECORD*****
25

CERTIFICATE OF REPORTER

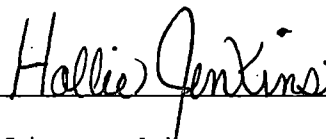
STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

I, HOLLIE JENKINS, Official Court Reporter for the 13th Judicial Circuit of the State of South Carolina, do hereby certify that the foregoing is a true, accurate and complete Transcript of Record of the proceedings had and the evidence introduced in the captioned case, relative to appeal, in the Court of Common Pleas for Greenville County, South Carolina, on the 24th day of April, 2002.

I do further certify that I am neither of kin, counsel nor interest to any party hereto.

August 13, 2002

A handwritten signature in cursive script, reading "Hollie Jenkins", is written over a horizontal line.

Hollie Jenkins, Court Reporter

My Commission Expires: 11-17-10

STATE OF SOUTH CAROLINA

IN THE COURT OF COMMON PLEAS

COUNTY OF GREENVILLE

CASE NO. 01-CP-23-2459R

Louie D. Hawkins, individually
and d/b/a Servicemaster of
Greenville, Servicemaster of
Greenville, LLC, and
Dixie P. Hawkins,

Plaintiffs,

vs.

City of Greenville,

Defendant.

COPY

DEPOSITION OF JULIE ARROWOOD

DATE TAKEN: April 19, 2002

TIME BEGAN: 8:35 a.m.

TIME ENDED: 10:50 a.m.

LOCATION: Gallivan, White & Boyd
330 East Coffee Street
Greenville, South Carolina

REPORTED BY: Mimi M. Gallagher, CVR-CM
Certified Verbatim Reporter
Certificate of Merit
Notary Public for South Carolina

GALLAGHER COURT REPORTING

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00007?

APPEARANCES:

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Mitchell, Bouton, Yokel & Childs
7 Mills Avenue
P. O. Box 10285, F.S.
Greenville, South Carolina 29603

.....On behalf of the Plaintiffs

W. HOWARD BOYD, JR., ESQUIRE
LUANNE L. RUNGE, ESQUIRE
Gallivan, White & Boyd
330 East Coffee Street
P. O. Box 10589
Greenville, South Carolina 29603

.....On behalf of the Defendant

ALSO ATTENDING: (None)

STIPULATIONS: The within deposition was taken pursuant to the South Carolina Rules of Civil Procedure.

WAIVER: Examination and reading of the deposition are waived by the witness and by the parties.

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1 JULIE ARROWOOD, being duly sworn, testified as follows:

2 EXAMINATION BY MR. CHILDS:

3 Q. Ms. Arrowood, my name is Robbie Childs. I know we
4 briefly introduced each other here this morning.
5 I'm going to ask you some questions about your
6 affidavit and your knowledge of this case, which
7 is Louie Hawkins versus City of Greenville. And
8 when I do that, I think it's important for you to
9 understand my questions most of all.

10 A. Uh-huh (affirmative).

11 Q. And it's also important that you understand that
12 you ask me for any clarifications, definitions, or
13 explanations of words or documents that I present.

14 A. Okay.

15 Q. And you must answer the questions that I present
16 unless your counsel instructs you not to answer
17 them, and then we'll get in an argument about
18 that. But if he objects to a question and doesn't
19 instruct you not to answer, you'll go ahead and
20 answer the question and we'll deal with the
21 legitimacy of my question later on. So my main
22 point is that you understand my questions, and if
23 you don't understand my question, please have me
24 explain it to you. Okay?

25 A. Okay.

- 1 Q. I see that you're a licensed professional engineer
2 employed as a civil engineer with the City of
3 Greenville; is that correct?
- 4 A. Correct.
- 5 Q. And based on your affidavit, you've been employed
6 there since July of '98.
- 7 A. Correct.
- 8 Q. Where were you employed before that?
- 9 A. Davis and Floyd Consulting Firm down in
10 Charleston, South Carolina.
- 11 Q. What did you do with them?
- 12 A. I was an engineer. I was not licensed, but I was
13 an EIT.
- 14 Q. When did you become a licensed engineer?
- 15 A. I believe it was in '99 or beginning of 2000.
- 16 Q. And what is a licensed professional engineer?
- 17 A. You actually are required to pass an exam when you
18 graduate college, study under a licensed
19 professional for four years, and then take another
20 exam and if you pass that you are licensed.
- 21 Q. And have you ever provided testimony in any legal
22 proceedings before?
- 23 A. No.
- 24 Q. Have you ever had your deposition taken before?
- 25 A. No.

1 Q. Obviously then you've never been qualified as an
2 expert in court?

3 A. No.

4 Q. What would you say your area of expertise is?

5 A. My main field with civil engineering is
6 stormwater.

7 Q. And your position with Greenville is Stormwater
8 Management Administrator?

9 A. It was. I am now a civil engineer.

10 Q. When did that position for you change?

11 A. January of this year. I am now home with my child
12 and working part time.

13 **MR. BOYD:**

14 Working full time, just getting paid part time.

15 **WITNESS:**

16 That's right.

17 **EXAMINATION RESUMED BY MR. CHILDS:**

18 Q. I'm a little confused about your affidavit. And
19 let me ask you this. It says here on page one,
20 "In my current position, I report to Jason
21 Flowers, Stormwater Management Administrator."

22 A. Uh-huh (affirmative).

23 Q. Is that correct still?

24 A. Correct.

25 Q. And you state that you did serve as the Stormwater

- 1 Manager from the city from 1998 to 2002?
- 2 A. Correct. I was --
- 3 Q. Go ahead and explain that.
- 4 A. I was the Stormwater Manager from 1998 until
- 5 January of this year. I had a child in the fall
- 6 and went part time and took a voluntary demotion.
- 7 So now -- I took a step back and I'm a civil
- 8 engineer and now I'm working for the Stormwater
- 9 Manager.
- 10 Q. Okay. And so when you say that Jason Flowers is
- 11 the Stormwater Management Administrator, is that
- 12 the position that you had prior to January of
- 13 2002?
- 14 A. Correct.
- 15 Q. And what does the Stormwater Management
- 16 Administrator do?
- 17 A. Administers all the regulations for stormwater for
- 18 the city and manages all areas that have to do
- 19 with stormwater for the City of Greenville.
- 20 Q. And who all worked for the Stormwater Management
- 21 Administrator? What's the chain of command
- 22 basically?
- 23 A. There are presently three civil engineers working
- 24 for the Stormwater Manager, and one technician.
- 25 Q. And what's the name of the department?

1 A. We're within the Engineering Department.

2 Q. Is there a division of that?

3 A. Well, actually it's the Public Works Department
4 Engineering Division, and we are the Stormwater
5 Bureau.

6 Q. And so the Stormwater Bureau, what's its primary
7 responsibility?

8 A. Like I said, it is to manage all facets of
9 stormwater management, whether that has to be with
10 stormwater in regards to new development as far as
11 permitting, capital projects that have to do with
12 stormwater areas, and also any kind of work that
13 our crews do we do the design or management of
14 those projects.

15 Q. Is stormwater management a particularly difficult
16 problem for the City of Greenville?

17 A. I think that's --

18 **MR. BOYD:**

19 Object to the form of the question. You may go
20 ahead and answer it.

21 **WITNESS:**

22 I think that's relative. But, yes, I mean,
23 stormwater is always a problem and each area has
24 different problems, and it is a problem in
25 Greenville.

1 **EXAMINATION RESUMED BY MR. CHILDS:**

2 Q. Is it a problem that is worsening with time or
3 improving with time?

4 A. In my opinion, it's improving in the City of
5 Greenville because we have funding. We are
6 currently doing a lot of projects. We're doing a
7 lot of studies. So I believe it's getting better.
8 And we have regulations now.

9 Q. What is the relationship of stormwater management
10 to development of properties? What kind of
11 relationship is there between the two?

12 A. The city has regulations that new development have
13 to meet in order to develop -- that have to do
14 with stormwater.

15 Q. Do you know why there are regulations that deal
16 with stormwater for developments?

17 A. There is state law, and I am not -- I could not
18 quote you exactly what all the state law is. But
19 our regulations are based on what the state law --

20 Q. Well, what I was getting at really is the
21 practical impact of development and why stormwater
22 must be managed.

23 A. Right. The reason it -- the reason we have those
24 regulations is to protect existing properties.
25 And if a new development came in and just paved

1 and did nothing to handle the new stormwater that
2 they created, then we'd have a lot of problems, so
3 it's to avoid that.

4 Q. Is it fair to say that new development without
5 stormwater management naturally increases the flow
6 of stormwater that may flow onto other properties?

7 A. In most cases.

8 Q. And is it a fair statement that the regulations
9 that you all seek to enforce and review are trying
10 to alleviate that -- or trying to prevent or
11 alleviate that problem?

12 A. Correct.

13 Q. Now you've been with the city since July of 1998.
14 Have there been new regulations that have been
15 enacted since July of 1998?

16 A. Not that have affected new development as far as
17 stormwater.

18 Q. And when you took your position as -- did you
19 start your position as Stormwater Management
20 Administrator?

21 A. Actually I started as a civil engineer and was
22 promoted.

23 Q. Who did you replace as Stormwater Management
24 Administrator?

25 A. Candace Heintz.

- 1 Q. And was she the administrator when you came to
2 work with the City of Greenville?
- 3 A. She was.
- 4 Q. Is she still employed with City of Greenville?
- 5 A. No, she is not.
- 6 Q. Do you know where she is?
- 7 A. City of Charlotte.
- 8 Q. Now you've been involved and based on what I have
9 from your affidavit, is you reviewed the records
10 as they relate to Number 1 Byrdland Drive; is that
11 correct?
- 12 A. Uh-huh (affirmative).
- 13 Q. And I assume you're familiar with that, having
14 been with the city since 1998?
- 15 A. Correct.
- 16 Q. To your own knowledge, and I'm not asking you from
17 the records, but have there been problems with
18 flooding along Byrdland Drive since you came to
19 the city in 1998?
- 20 A. I have not witnessed firsthand water on Byrdland
21 Drive. But from the records that I have reviewed,
22 newspaper articles, and other people's testimony,
23 I know that that area has flooded in the past.
- 24 Q. What other people's testimony have you reviewed?
- 25 A. People at the office who have said they have

- 1 witnessed it, or talking about this case, and I
2 have seen a picture in the newspaper. But like I
3 said, I have never witnessed it with my eyes.
- 4 Q. My question really was, what other people's
5 testimony have you reviewed?
- 6 A. Specifically from the office?
- 7 Q. Right.
- 8 A. I know that Don Fogle has mentioned the problem.
- 9 Q. And let me go back. Maybe I'm using the legal
10 term and you're using --
- 11 A. Okay, I don't mean it as -- yeah, other people's
12 --
- 13 Q. -- the practical term. "What other people told
14 me."
- 15 A. Yeah, there we go. No, no formal testimony, no.
16 Sorry.
- 17 Q. So you've spoken with Don Fogle?
- 18 A. Correct.
- 19 Q. And who else?
- 20 A. Bill Lee, Brian Watson.
- 21 Q. And I know who Don Fogle is, but just for the
22 record, could you identify who that is.
- 23 A. He was the city engineer.
- 24 Q. And who is Bill Lee?
- 25 A. Bill Lee is the Stormwater Superintendent.

1 Q. Is that different than the Stormwater
2 Administrator?

3 A. Yes.

4 Q. And how is that?

5 A. Stormwater Superintendent is over the actual crews
6 who do the work.

7 Q. So it's kind of the work branch of the stormwater
8 --

9 A. Uh-huh (affirmative).

10 Q. Okay. And then you said Brian Watson.

11 A. Brian Watson is the Assistant Director of Public
12 Works.

13 Q. Do you recall anybody else, any other people that
14 you spoke with about the problems on Byrdland
15 Drive?

16 A. No.

17 Q. Now, I'm going to show you what was produced by
18 the defense listed as 9000144 in their Answers to
19 Requests to Produce. And I want to see if you can
20 identify that.

21 (EXHIBIT NUMBER 1 MARKED; ATTACHED)

22 **EXAMINATION RESUMED BY MR. CHILDS:**

23 Q. I'm going to show you what's now been marked
24 Exhibit Number 1 and see if you can identify that.

25 A. (Reviewing documents.) I don't recall ever seeing

1 it before but it looks like a plat for some
2 property off of Byrd. It looks like Tracks, where
3 Tracks used to be, and where there's a mattress
4 place there now.

5 Q. Have you been out to the properties?

6 A. Yes.

7 Q. Let me show you what has been listed as 9000083 of
8 the Defendant's Answers to Requests for
9 Production, and see if you can identify that a
10 little more clearly.

11 (EXHIBIT NUMBER 2 MARKED; ATTACHED)

12 **EXAMINATION RESUMED BY MR. CHILDS:**

13 Q. And this has now been marked Exhibit Number 2.
14 Let me show you that and see if that will help you
15 identify it a little better.

16 A. (Reviewing documents.) Okay.

17 Q. And I think also I'll show you a tax map that will
18 help you familiarize yourself with the area, which
19 was produced by the Defendant, 9000147.

20 (EXHIBIT NUMBER 3 MARKED; ATTACHED)

21 **EXAMINATION RESUMED BY MR. CHILDS:**

22 Q. And that's now Plaintiff's Exhibit Number 3.

23 A. (Reviewing documents.) All right.

24 Q. And what does Exhibit Number 3 depict?

25 A. Just a tax map area of the area in question.

- 1 Q. Now the tax map, Exhibit Number 3, has notations
2 on it. And those notations, I will represent to
3 you, were produced to us by the defense, has
4 Hawkins listed.
- 5 A. Uh-huh (affirmative).
- 6 Q. And I think it also has another notation.
- 7 A. Uh-huh (affirmative).
- 8 Q. And what's that other notation there?
- 9 A. Blockbuster Music.
- 10 Q. Is that the Tracks location that you were
11 mentioning?
- 12 A. Yes.
- 13 Q. And is that the Tracks location that you've
14 identified in Exhibit Number 1?
- 15 A. Correct. It's this (indicating) parcel.
- 16 Q. Now, those locations are also identified in
17 Exhibit Number 2, I believe. And I will ask you
18 to see if you can identify the Hawkins location,
19 the Tracks location, or whatever is there now, and
20 the Rooms To Go location. If you could put H for
21 Hawkins.
- 22 A. (Witness complies.)
- 23 Q. And T for Tracks and R for Rooms To Go.
- 24 A. (Witness complies.)
- 25 Q. Okay. Now I believe from your affidavit, and I'm

1 not trying to paraphrase it too much, but you
2 state there that the stormwater basin for Laurel
3 Creek encompasses 3.24 square miles on the city's
4 highly-developed Eastside; is that correct?

5 A. I had put together a map for you all (indicating).
6 I don't know if I can refer to that map.

7 MR. BOYD:

8 Sure.

9 WITNESS:

10 A. And that was an approximate area that I had come
11 up with.

12 EXAMINATION RESUMED BY MR. CHILDS:

13 Q. So that was the basis of your opinion that the
14 area encompasses 3.24 square miles?

15 A. Correct.

16 Q. Do you all have that? I haven't seen that.

17 MR. BOYD:

18 I'm not sure what she's talking about, but I'll be
19 glad to check and see. What is it that you're
20 referring to?

21 WITNESS:

22 You all had asked me to put together just a
23 drainage -- an area, an approximate area of
24 drainage that came to that point. And that's
25 where that number came from.

1 (Off the record)

2 **EXAMINATION RESUMED BY MR. CHILDS:**

3 Q. Now, in your deposition you indicate that this
4 area is susceptible to natural flooding based on
5 the topography of the area. Could you explain
6 that to me.

7 A. The area that drains to this is a much higher area
8 and it's a collection of ditches and channels, and
9 - it all funnels down to the one point, this being
10 the lowest area.

11 Q. And you said currently the property is not within
12 the floodplain as established by FEMA. What is
13 that? Could you explain that to us, please?

14 A. Yes. FEMA maps areas, what they call the FEMA
15 firm panels. They map the 100-year floodplain and
16 they look at certain -- they have in the past
17 looked at certain channels and mapped those
18 channels. This is not an area that they have
19 looked at and mapped. It ended before this area,
20 the actual maps do. So it is not on a mapped
21 area.

22 Q. And you say, "However, it is possible that the
23 property will fall within a floodplain." What's
24 the basis of that?

25 A. We, as a city, have hired -- we hired a firm to

1 study the area to define the floodplains where
2 FEMA has already mapped and beyond those limits.
3 And the new study will show exactly where those
4 limits are. And we may submit that to FEMA to
5 actually be mapped on a FEMA map, but it will be
6 in a local floodplain.

7 Q. Now how long has that study been going on?

8 A. It's complete. We started it -- I would have to
9 look back at our records. But the study is
10 complete.

11 Q. Do you know approximately how many years that
12 study has been ongoing?

13 A. We probably -- no, it's -- when did we get the
14 final -- probably a year -- we probably got the
15 final sometime last year and it had been going on
16 maybe a year before that.

17 Q. I understood at some point that there had been
18 ongoing projects relative to all the stormwater
19 drainage basins for several years with the city,
20 that they had been studying it for some time.

21 A. I don't know exactly what you are referring to,
22 but I'll give you -- Greenville has divided the
23 city into 14 basins. And we have been studying
24 each basin as we have funding and as they are
25 prioritized. And this area falls in a basin that

1 we have just completed the study.

2 Q. Do you know how long the 14 basins have been under
3 study?

4 A. Yes. We started -- I think the first one was
5 started back in the eighties. But there was a
6 large time lapse before they actually did some --
7 I think they did three in -- one in the eighties
8 and then two in the early nineties, and then we
9 didn't do another one until, I think, '94 or '95.

10 Q. And the reason the studies took so long was
11 basically funding?

12 A. Correct.

13 Q. Do you know how the city determined what basins to
14 study first and which ones to study later?

15 A. I do not know for sure exactly how they made that
16 decision before I came. But since I've been here
17 and most likely since before, it's based on known
18 flooding problems and worst areas were studied
19 first.

20 Q. And you state that this area, this basin, does it
21 have a name?

22 A. Yes, it's the Haywood/Laurel Creek basin.

23 Q. And its study was just completed?

24 A. Correct.

25 Q. And did the study results have -- did you review

1 those in preparing your affidavit?

2 A. Yes.

3 Q. And do you know when those results came in?

4 A. I could -- can I look at that?

5 MR. BOYD:

6 Sure.

7 WITNESS:

8 A. What is the date on that? July 2001.

9 MR. CHILDS:

10 And could I see that?

11 MR. BOYD:

12 Yes, you may. (Speaking to the witness): Why is
13 this Volume Two, by the way?

14 WITNESS:

15 There are two volumes. There's one that's called
16 a Summary Report. It's the same information
17 that's in this except it's a condensed version for
18 the non-technical person.

19 MR. BOYD:

20 That's what Mr. Childs and I should have. I'm
21 just kidding.

22 MR. CHILDS:

23 I was opting for that myself.

24 MR. BOYD:

25 For the record, I am handing counsel for the

1 Plaintiff the study that Ms. Arrowood provided to
2 me this morning. This is the first time I have
3 seen that study and I have not yet had a chance to
4 look at it.

5 **EXAMINATION RESUMED BY MR. CHILDS:**

6 Q. This was completed, according to the records here,
7 July of 2001; is that correct?

8 A. That is correct.

9 Q. I assure you that there is no possibility that I
10 can go through this thing in a short period of
11 time to review it. I'd like to take just a minute
12 to look at it off the record, if I could.

13 (Off the record)

14 **EXAMINATION RESUMED BY MR. CHILDS:**

15 Q. Ms. Arrowood, I've looked briefly through this
16 report. And since it was the basis somewhat of
17 your affidavit, I'm going to reserve the right to
18 review this in detail and possibly reconvene your
19 deposition to review it.

20 A. Uh-huh (affirmative).

21 Q. But I'd like to ask you a few questions about it
22 and I know this is going to be difficult because I
23 don't have a copy and we can't -- let me swing
24 around over here.

25 A. Okay.

1 **MR. BOYD:**

2 Let me just note an objection to holding the
3 deposition open. I think this study relates to
4 the design of the stormwater system in this area,
5 which in our view is not an issue in this case.
6 You're certainly welcome to explore with Ms.
7 Arrowood for your general background and
8 understanding the design issues, but obviously the
9 issue is what work the city did in the Laurel
10 Creek basin, not how it's designed and whether it
11 can be redesigned or is going to be redesigned.
12 So all of that is, in our view, not going to lead
13 to the discovery of relevant or admissible
14 evidence.

15 **EXAMINATION RESUMED BY MR. CHILDS:**

16 Q. The Section 7.4, which is Summary of Existing
17 Flooding, could you explain that to me, what that
18 defines.

19 A. It defines the -- in this certain chart, this is
20 your actual storm event, this is your number of
21 structures who are flooding in their finished
22 floor elevation, and this is the number of
23 structures that aren't flooding or may or may not
24 be flooding on finished floor but their foundation
25 is flooding.

1 Q. And Number 1 Byrdland Drive, is that the
2 Servicemaster of Greenville location?

3 A. I do not know Servicemaster's address, but it
4 appears so from this map here.

5 Q. Okay. And this indicates that structure number
6 one, 1 Byrdland Drive, finished floor, return
7 period of flooding, it says nine. What does that
8 mean?

9 A. That means that it is flooding in a finished
10 floor, based on this study, during a nine-year
11 storm event and greater.

12 Q. And the foundation floods every six-year storm
13 event?

14 A. During a six-year.

15 Q. And what does that mean when you say six-year or
16 nine-year flood event?

17 A. It is a probability of flooding and it's a very
18 complicated definition. But a 100-year storm
19 event means that it would flood -- it occurs once
20 in a year, but it doesn't -- like you said, that
21 doesn't -- because it's a six-year storm event
22 doesn't mean it's going to flood six times in one
23 year. It's a probability.

24 Q. It would probably flood once every six years? Is
25 that a way to say it?

1 A. I would have to refer back to a definition that
2 would be exactly accurate. Like I said, it's a
3 complicated probability process, but that may not
4 be exactly right.

5 Q. Okay. But, I mean, is that about what lay people
6 understand about this and -- I mean, I understand
7 a 100-year flood is, you know, once every 100
8 years this property ought to flood.

9 A. Right. That is correct.

10 Q. Now you also have Identification Of Damage
11 Reaches, which is Section 7.4.2. And could you
12 explain to us what that is.

13 A. I'd have to look at this for just a second.
14 (Reviewing documents.) What it is, is when you
15 study a basin you divide it up into reaches,
16 depending on the channel of the area. And this is
17 in Reach Number One. It's how many finished floor
18 you have flooding during a certain event.

19 Q. So in respect to the area of Byrdland Drive, you
20 would expect one finished floor to be flooded
21 every two years?

22 A. Uh-huh (affirmative). Correct.

23 Q. And this next section is the 7.4.3, which says
24 Roadway Overtopping. And I assume that means when
25 water runs over the road?

- 1 A. Correct.
- 2 Q. Now the Laurel Creek that runs by Byrdland Drive
3 here comes out onto -- where would that creek
4 tributary section be listed on this section 7.4
5 table?
- 6 A. The Crossing -- the roadway right below
7 Servicemaster is the Haywood Road crossing on
8 Laurel Creek and the mainstem.
- 9 Q. And it says here ten would be the existing
10 overtopping frequency. What would that be?
- 11 A. That would be the storm event that is overtopping
12 the road, the first storm event overtopping the
13 road.
- 14 Q. In years or what?
- 15 A. In years. This means that Haywood Road is
16 overtopping during a ten-year storm event.
- 17 Q. That's the existing overtopping frequency. And
18 the future is still listed as ten.
- 19 A. Correct.
- 20 Q. So we would expect in the future that every ten
21 years Haywood Road is going to overtop with water;
22 is that --
- 23 A. Say that again.
- 24 Q. We would expect that every ten years Haywood Road
25 would overtop with water in that area?

1 A. During a ten-year storm event, not every ten
2 years. During a ten-year storm event.

3 Q. Right. And you all recommended some upgrades,
4 some alternatives to resolve some of those
5 problems, some mitigation?

6 A. Correct.

7 Q. And could you explain which of these, if any,
8 relate to Mr. Hawkins' property?

9 A. Let's see, on this page there -- what they have
10 recommended is Haywood Road Crossing -- or Haywood
11 Road, Haywood Road Crossing, and Transit Drive,
12 which are the three road crossings directly down
13 from the property in question, they have
14 recommended that they be upgraded and replaced.

15 Q. And what does that mean?

16 A. To replace what is underneath the roadways with
17 larger pipes.

18 Q. Now in respect to Plaintiff's Exhibit Number 1, it
19 indicates here an aluminum pipe. Is that Laurel
20 Creek that runs through that aluminum pipe?

21 A. Correct.

22 Q. And then where would the city propose increasing
23 that -- or where would the study propose
24 increasing the pipe?

25 A. Beginning -- this 96-inch aluminum pipe replacing

1 this -- it's a very large system that crosses
2 under Airport and then under Haywood Road,
3 replacing that entire system.

4 Q. This entire 96-inch pipe?

5 A. Correct.

6 Q. With what? With a 120-inch --

7 A. Let's see, the recommendation is to add one
8 additional eight-foot diameter CMP to the existing
9 eight-foot corrugated metal pipe under Haywood
10 Road.

11 Q. So you're going to add an additional 96-inch pipe?

12 A. That is what this study has recommended.

13 Q. Basically doubling the flow through this aluminum
14 pipe?

15 A. Doubling the capacity.

16 Q. And what would the effect of doubling the capacity
17 of this pipe have on Laurel Creek above the
18 entrance to the pipe?

19 A. It means that the system that's under Haywood Road
20 would be able to handle a greater storm capacity
21 than the ten-year event.

22 Q. And based upon your knowledge and understanding of
23 the area now, this pipe is unable to handle a ten-
24 year event?

25 A. Based on this study that we hired a consulting

- 1 firm to do, yes.
- 2 Q. I believe you also have tabbed Laurel
- 3 Creek/Haywood Road Flood Profiles; is that
- 4 correct?
- 5 A. Correct.
- 6 Q. What does that show us?
- 7 A. This is a map showing us the profiles for your
- 8 floodwater elevation during two- through a 500-
- 9 year storm event. And it shows us that this is
- 10 the -- that's Haywood Crossing. (Reviewing
- 11 documents.) I'd have to -- okay, what this is
- 12 showing on this is that this is the pipe system in
- 13 question. This is the road crossing on down below
- 14 it, which is Haywood Crossing. And this is
- 15 showing that Haywood Crossing is handling the two-
- 16 year storm event, but all other storm events are
- 17 overtopping Haywood Crossing.
- 18 Q. That again goes back to the two-year storm event,
- 19 --
- 20 A. Correct.
- 21 Q. -- frequency of flooding --
- 22 A. Yes.
- 23 Q. -- at 1 Byrdland Drive?
- 24 A. Right. It's just a chart of that.
- 25 Q. You also have here a map, this figure 7-2, which

1 is a map showing impacted structures, could you
2 identify that for me, please.

3 A. All right. This is -- let me look at it for just
4 a minute. This map, the shaded area is the area
5 of the 100-year floodplain established by this
6 report. And the structures in yellow are the
7 structures that are actually impacted by
8 floodwaters. And that's what this is showing.

9 Q. Okay. I think this would help us a lot in all our
10 understanding of this situation. Could we make a
11 copy of this and attach it to her deposition.

12 MR. BOYD:

13 We can. I'm not sure how well it will come out,
14 but we'll try to do the best we can to copy it.

15 MR. CHILDS:

16 And I'd like to include actually a copy of the
17 section -- and we don't need to copy it now -- but
18 a copy of the section, I guess Section 7 of this
19 report, as it relates to the area in question. We
20 can attach that later, but we can make that
21 Exhibit Number 5.

22 COURT REPORTER:

23 Section 7 is 5 and the map is 4.

24 (EXHIBITS NUMBER 4 AND 5 MARKED; ATTACHED)

25 WITNESS:

1 The map that I was looking for you was before the
2 study was complete and it was my approximation of
3 the drainage area. This study fine tuned that so
4 it has the drainage area, if that's what --

5 **MR. BOYD:**

6 The exact drainage area?

7 **WITNESS:**

8 The exact drainage area.

9 **EXAMINATION RESUMED BY MR. CHILDS:**

10 Q. I'll ask you a question while you look.

11 A. Okay.

12 Q. You've indicated that based earlier on in your
13 testimony that you think the drainage problems
14 have lessened during the time that you have been
15 employed with the city. Is it fair to state that
16 this report should approximate the conditions of
17 the property back in July of 1997?

18 A. My statement that the problems have lessened were
19 relative to the entire city of Greenville. Your
20 question again?

21 Q. To your knowledge, has the problem worsened in
22 respect to Byrdland Drive since July of 1997?

23 A. Not to my knowledge, no.

24 Q. So in your opinion would this study reflect the
25 condition of the drainage on Byrdland Drive more

1 or less as it was in 1997 as well?

2 A. More or less, yes.

3 Q. Now in that respect, I have identified to you in
4 your previous testimony, earlier testimony,
5 concerning the 96-inch pipe that is located, I
6 guess, across the Rooms To Go and we'll call it
7 Tracks property; is that correct?

8 A. Can I find this later?

9 Q. Yeah, go ahead. We can find that later. We might
10 even finish your testimony and just look for it
11 then.

12 A. Okay. Say that question again. I'm sorry.

13 Q. We talked about the 96-inch pipe, okay.

14 A. Uh-huh (affirmative).

15 Q. Are you aware of how that 96-inch pipe came into
16 being there at the Rooms To Go and Tracks
17 location?

18 A. No, I'm not.

19 Q. Do you know who installed the pipe?

20 A. No, I do not.

21 Q. Do you know who maintains the pipe?

22 A. The portion that is on the city right-of-way is
23 maintained by the city.

24 Q. Now are you aware of the fact that prior to the
25 installation of this 96-inch pipe that this basic

1 area of Laurel Creek was open? In other words,
2 that there was an area there that was not -- the
3 waters were not impounded by a pipe?

4 A. Before anything was there, somebody had to install
5 the pipe and I'm sure it was open before the pipe
6 was installed, but that's the only knowledge that
7 I would have.

8 Q. Now the real question I have is, we've been
9 provided with some records that indicate that this
10 pipe may have been installed in approximately 1990
11 when this site was filled in. Do you have any
12 knowledge of that?

13 A. I do not.

14 Q. Do you have any knowledge about whether or not
15 this 96-inch pipe was within compliance of the
16 regulations in the City of Greenville when it was
17 installed?

18 A. Do not know.

19 Q. Do you have any knowledge as to whether or not
20 this -- what capacity this 96-inch pipe has at the
21 present time to handle water?

22 A. Yes.

23 Q. And what is that?

24 A. According to the study that was given to us, it is
25 handling storm events up to ten-year.

1 Q. Do you know the flow rate of the 96-inch pipe?
2 What I'm trying to get at is how much water can
3 this thing handle?

4 A. Off the top of my head, no, I do not.

5 Q. And you didn't review that in determining -- in
6 your affidavit you state that the city has not
7 taken any action or made any effort to alter or
8 divert the flow of Laurel Creek to cast water upon
9 the property.

10 A. Correct.

11 Q. If the 96-inch pipe was insufficient when it was
12 installed, would not that be some action to alter
13 or divert the flow of Laurel Creek?

14 **MR. BOYD:**

15 Object to the form of the question.

16 **EXAMINATION RESUMED BY MR. CHILDS:**

17 Q. You can go ahead and answer it.

18 A. Okay. I do not know who installed the 96-inch or
19 when it was installed, so I don't know what the
20 capacity of it was when it was installed.

21 Q. Well, I mean, assuming that it was insufficient
22 when it was installed, wouldn't the city have
23 altered the flow of Laurel Creek?

24 **MR. BOYD:**

25 Object to the form of the question.

1 **WITNESS:**

2 A. Again, I do not know who installed the pipe or
3 when it was installed, so I cannot make an
4 assumption on that.

5 **EXAMINATION RESUMED BY MR. CHILDS:**

6 Q. In not specific terms, but in general terms, if
7 you install a drainage pipe along a creek -- and I
8 believe this creek has actively-flowing water
9 across it.

10 A. Correct.

11 Q. It's not a ditch; it's a creek.

12 A. Correct.

13 Q. And the pipe is insufficient to handle the
14 floodwaters common to that creek, how does that
15 affect it? How does it cause it to flood?

16 A. In general?

17 Q. Uh-huh (affirmative).

18 A. Okay. Let me repeat the question so I make sure
19 I'm understanding what you're asking.

20 **MR. BOYD:**

21 Are you asking her a hypothetical question or --

22 **EXAMINATION RESUMED BY MR. CHILDS:**

23 Q. Just in a practical sense. Not in respect to this
24 one, just in respect to any pipe that -- say, for
25 instance, there's a creek that should have a --

1 let me strike all that and I'll start all over
2 again. What type of flow, as in events, in other
3 words, a two-year event, a ten-year event, 50-year
4 event, 100-year event, do your engineering
5 principles tell you that a drainage pipe should be
6 able to handle?

7 A. The city has standards that we design to meet when
8 we are building something today. And that is that
9 most systems that we install we design to handle a
10 ten-year storm event, and most roadway crossings
11 we install to handle a 25-year storm event.

12 Q. So at present, and you can't testify about what
13 the standard was back in 1997 or even back in
14 1990, I understand that, but at present the pipe
15 that services Laurel Creek across the Rooms To Go
16 and Tracks property can only handle, based on what
17 I saw from your report, a six-year event; is that
18 correct?

19 A. They are saying -- no, that is not correct. The
20 study, the one page that we looked at said that
21 the structure Servicemaster was flooding at a six-
22 year event. The report says that at the ten-year
23 storm event, Haywood Road is overtopping.

24 Q. So you don't know what the capacity of the 96-inch
25 pipe is to handle an event at the present time?

1 In other words -- let me go back to that real
2 quick. This study basically addresses the
3 overtopping issues of the roadways and doesn't
4 really directly address the issue of how
5 frequently Servicemaster would flood based on the
6 present capacity of the pipe, or does it?

7 A. Yes.

8 Q. Okay. And what would that be?

9 A. From that one chart that we looked at, on page 7-3
10 on Table 7-2, structure number one, 1 Byrdland
11 Drive, the finished floor elevation, according to
12 the study, is flooding during a nine-year storm
13 event. The foundation is flooding during a six-
14 year storm event.

15 Q. So is it fair to state that the pipe handles a
16 six-year event?

17 A. It is saying that there is water coming onto the
18 road onto that foundation at a six-year storm
19 event.

20 Q. And likely that means that the pipe really handles
21 something less than a six-year event; --

22 MR. BOYD:

23 Object to the form of the question.

24 EXAMINATION RESUMED BY MR. CHILDS:

25 Q. -- isn't that true?

1 A. I would have to look at exactly the limits of the
2 six-year. I don't have -- they didn't -- when
3 they chart something, they base it on a two-year
4 and a ten-year, so I can't break it down unless I
5 --

6 Q. What does the two-year chart show?

7 (Ms. Runge enters the conference room)

8 **WITNESS:**

9 A. The two-year showed that Haywood is handling the
10 two-year storm event.

11 **EXAMINATION RESUMED BY MR. CHILDS:**

12 Q. What about Byrdland Drive? What about the
13 Servicemaster location?

14 A. On a two-year?

15 Q. Yes.

16 A. The Haywood Road is not overtopping during a two-
17 year storm event.

18 Q. Isn't that a different question about whether or
19 not 1 Byrdland Drive floods as opposed to Haywood
20 Road overtopping? I mean, isn't that a different
21 question? I mean, wouldn't Haywood Road overtop
22 less frequently than 1 Byrdland Drive would flood?

23 A. I'd have to look at it and see exactly.

24 **MR. BOYD:**

25 Can we take just about a one-minute break while I

1 consult with Luanne for a moment?

2 **MR. CHILDS:**

3 Sure.

4 (Off the record; brief recess)

5 **MR. BOYD:**

6 Luanne is going to take over for me. I have got a
7 couple of things I must get done this morning, so
8 you all carry on.

9 **MR. CHILDS:**

10 Thank you, Howard.

11 (Mr. Boyd leaves the conference room)

12 **MR. CHILDS:**

13 I'd like to show you what's been listed in
14 Defendant's Request for Production 9000206 and
15 mark that Exhibit Number 6.

16 (EXHIBIT NUMBER 6 MARKED; ATTACHED)

17 **EXAMINATION RESUMED BY MR. CHILDS:**

18 Q. Let me show you this. Did you see this in
19 preparation of your affidavit?

20 A. (Reviewing documents.) I do not recall whether I
21 saw this specific letter.

22 Q. And that's fine. Let me see the letter and I want
23 to ask really some questions related to it. If in
24 fact the city did apparently issue a memorandum in
25 February of 1989 concerning the 96-inch storm

1 drain at the Tracks music video store, Haywood
2 Road, and there's a letter here, January of '89,
3 from an engineer related to the Tracks music video
4 store setback variance.

5 A. (Affirmative gesture. No verbal response.)

6 Q. Should that accurately reflect about when this 96-
7 inch pipe was put in? It would have been after at
8 least February of 1989.

9 A. According to what I found in the files, that pipe
10 was existing when Tracks was built. That is the
11 latest -- that is as far back as the information
12 that I could find. It just told me that Tracks
13 was there before -- or the 96-inch pipe was there
14 before Tracks was built.

15 Q. The 96-inch pipe, was it installed, according to
16 the records you reviewed, when Rooms To Go was put
17 in?

18 A. I could not find any record of when that pipe was
19 installed.

20 Q. Okay. Now in this letter, and I understand your
21 time frames, and I'm not trying to make you a
22 prognosticator of the past or even know what
23 happened in the past, but the city is requesting a
24 25-foot easement 12.5 feet from the center line of
25 the pipe. Now what kind of easement is that?

1 A. A stormwater easement.

2 Q. Why does the city request an easement across this
3 pipe? What purpose does it serve for the city?

4 A. So we can maintain it, the section that is in the
5 city.

6 Q. And is it true, therefore, that the city has
7 accepted this 96-inch storm drain for maintenance?

8 A. Correct. That's again the section that was in the
9 city right-of-way and easements. There is DOT
10 area of that system as well.

11 Q. And is it not correct that the entrance to this
12 96-inch pipe -- well, let me strike that and I'll
13 start back over again. Let me show you Exhibit
14 Number 7 I'm going to mark for identification.

15 (EXHIBIT NUMBER 7 MARKED; ATTACHED)

16 **EXAMINATION RESUMED BY MR. CHILDS:**

17 Q. And this is Defendant's Production Document
18 9000145. And let me show you that and see if you
19 recognize that.

20 A. (Reviewing documents.) Okay.

21 Q. Do you?

22 A. It appears to be the parcel that Rooms To Go sits
23 on.

24 Q. Now noted on that plat it appears to be --

25 A. It does say that.

- 1 Q. It does say that.
- 2 A. It says it on the front.
- 3 Q. It appears there's a dashed line across the
4 frontage of that lot onto Byrdland Drive. Can you
5 identify that?
- 6 A. This dash line that you have in question?
- 7 Q. Yes.
- 8 A. "Approximate location of sanitary sewer manhole,
9 - unable to locate in field." That is the note
10 underneath it.
- 11 (EXHIBIT NUMBER 8 MARKED; ATTACHED)
- 12 **EXAMINATION RESUMED BY MR. CHILDS:**
- 13 Q. Now let me show you Exhibit Number 8. And see if
14 you can identify that location.
- 15 A. I can't identify it just from this picture.
- 16 Q. Let me represent to you that that's across the
17 street from Servicemaster of Greenville.
- 18 A. Okay.
- 19 Q. If that is, is that the 96-inch pipe we're talking
20 about located across the street?
- 21 A. It appears to be. But again, just from this
22 picture, I can't tell exactly.
- 23 Q. Now the entranceway of that 96-inch pipe, is it
24 not on city right-of-way?
- 25 A. It appears from these that we do have an easement,

1 or from the language in that letter, I would have
2 to -- I have not seen an official copy of the
3 easement itself, and do not know exactly where the
4 right-of-way limits are.

5 Q. Do you understand or do you believe that the city
6 has maintenance responsibilities for the
7 entranceway of that 96-inch pipe?

8 A. Yes, I believe we do.

9 Q. And based on your knowledge and information in
10 respect to the City of Greenville, you're not
11 aware of when this pipe was installed?

12 A. Correct.

13 Q. And are you aware of any studies or analysis or
14 determinations that you all may have done to
15 determine if that pipe was sufficient when it was
16 installed?

17 A. No, I'm not aware of anything like that.

18 Q. Is it correct that at this present time your
19 opinion would be that this pipe is not sufficient
20 today?

21 A. Today it is -- according to the study that we
22 conducted, it is not -- it does not meet the
23 city's minimum standards today.

24 Q. And you don't know how long -- you can't tell us
25 how long, in your testimony, that it has not met

- 1 the city's minimum standards?
- 2 A. Correct. I cannot.
- 3 Q. And you can't tell us whether or not the city
- 4 actually installed that pipe or that it was
- 5 installed by somebody else?
- 6 A. Correct.
- 7 Q. In your affidavit, you state that, "In June and
- 8 July of 1993 the city installed an elliptical
- 9 eleven-foot five-inch by seven-foot three-inch
- 10 pipe under the intersection of Byrdland Drive and
- 11 Airport Roads." Is that correct?
- 12 A. Correct.
- 13 Q. And is that elliptical, the arched pipe, what
- 14 connects to the 96-inch drain pipe?
- 15 A. The elliptical pipe that was installed, yes,
- 16 connects to the 96-inch pipe that you see in this
- 17 picture, which is Exhibit 8.
- 18 Q. Let me make sure I understand. This 96-inch pipe,
- 19 what is that, eight feet?
- 20 A. I believe, yes. Do some quick math.
- 21 Q. So this eight-foot pipe connects to a seven-foot
- 22 three-inch pipe?
- 23 A. The 96-inch connects to this eleven-foot five-inch
- 24 by seven-foot three-inch pipe that we installed,
- 25 yes.

- 1 Q. What dimensions are that? I mean, you say it's
2 arched, so what does that mean? It's seven foot
3 three inches wide and eleven foot five inches --
- 4 A. Correct. Seven foot high, eleven foot five inches
5 wide.
- 6 Q. Is that about the same capacity as a 96-inch pipe?
- 7 A. It's greater.
- 8 Q. How much greater?
- 9 A. I have those calculations, but I do not have them
10 on me.
- 11 Q. Do you remember if that was --
- 12 A. I think it's ten square feet, is what I remember,
13 greater than the 96-inch.
- 14 Q. What's the point in attaching a ten square foot
15 pipe to a eight square foot pipe?
- 16 A. We wanted to make sure -- and it was installed
17 prior to my hire with the city. But I would
18 assume we would at least want the capacity of the
19 96-inch piece of pipe. I don't know why that
20 certain size was decided on.
- 21 Q. But in fact what is a 96-inch pipe flows into a
22 city-installed pipe that is larger?
- 23 A. Correct.
- 24 Q. And you're not aware of any studies or concerns
25 that the city had at that time back in 1993 about

1 increasing the size of this 96-inch pipe at the
2 same time?

3 A. The work that they did was just in a small section
4 of that large system, and it was a maintenance
5 issue. That's why they were doing the work that
6 they were.

7 Q. What kind of maintenance issue was it?

8 A. Like I said, it is a large system. It enters --
9 the end that you see near Servicemaster is a 96-
10 inch corrugated metal.

11 Q. Right.

12 A. But the section that was replaced back in 1993 was
13 two box culverts, and they were side by side. And
14 two concrete box culverts have a pretty large wall
15 thickness, so you had two walls together, and it
16 caught debris. And that was causing a problem
17 with the maintenance. So we wanted to take out
18 that section of box culvert of the system and
19 replace it with the eleven foot by seven foot arch
20 pipe.

21 Q. Now the eleven five by seven three foot arched
22 pipe, could you describe that for me. It says it
23 replaced a double box culvert, but what kind of
24 pipe is that and what does it look like?

25 A. The new pipe that was installed?

- 1 Q. Right.
- 2 A. It is an elliptical pipe. It is one single pipe.
- 3 And that's the dimensions. Eleven foot five
- 4 inches is the width and seven foot is the height,
- 5 so it's not completely round. It's elliptical
- 6 shape.
- 7 Q. So it's got a flat bottom and it lips up?
- 8 A. Right.
- 9 Q. And that services only the 96-inch pipe?
- 10 A. That would not be a correct statement. There's
- 11 probably other systems that connect to it that
- 12 probably drain Haywood Road and different areas
- 13 around that.
- 14 Q. Now you stated in your affidavit that in approving
- 15 the applications for development, that the city
- 16 requires the developers to submit storm drainage
- 17 calculations to show that the proposed drainage
- 18 system for the development is designed to handle
- 19 the stormwater runoff required by the city.
- 20 A. (Affirmative gesture. No verbal response.)
- 21 Q. And that's correct in respect to that one piece of
- 22 property that's being developed; isn't that true?
- 23 A. Say that again.
- 24 Q. Let me give you a better example maybe, if I can.
- 25 When you're developing a piece of property you're

1 required to manage the water that comes off of
2 that property. And you all have certain
3 regulations as to how much water that property has
4 to retain during storms in order to not flood
5 adjacent properties; is that correct?

6 A. We have minimal requirements, correct.

7 Q. Now even though you have those minimal
8 requirements that it retain a certain amount of
9 water during rain, isn't it true that all
10 development necessarily increases the flow of
11 water off the property somewhat?

12 A. No, not in all cases.

13 Q. In most case?

14 A. In most cases, yes.

15 Q. And you don't require developers to submit
16 calculations as to how it's going to affect the
17 water flow -- for instance, if I'm developing
18 property up Laurel Creek, all I have to do is
19 comply with the calculations that are necessary to
20 control the runoff from my property, right?

21 A. Correct. That's all you --

22 Q. But I don't have to submit to you calculations
23 about how much additional water it's going to dump
24 into Laurel Creek?

25 A. I'm still not following your question, and I don't

1 believe it's accurate.

2 Q. I don't have to submit any calculations to your
3 department -- if I'm developing a piece of
4 property on Laurel Creek, all I have to do is
5 submit calculations that says, I've got a
6 stormwater retention pond and I've got this much
7 area. Isn't the formula related to the area that
8 you're paving and developing?

9 A. If you have a parcel that you're developing next
10 to Laurel Creek, the city requires that your
11 development can't -- it has to detain the
12 additional runoff for a two- and ten-year storm
13 event, and that's all. So you have to prove to us
14 in calculations that there is not going to be any
15 additional runoff from that site for a two- and
16 ten-year storm event.

17 Q. Now how do you do it for a two and a ten? I don't
18 understand that.

19 A. You can calculate it based on a two -- you want to
20 be -- if you just detain the ten-year, you might
21 have -- a lot of people in their detention ponds
22 will put a pipe, say, you know, a ten-inch will
23 detain the ten-year storm event, but it may
24 release the two-year storm event. So you have to
25 actually put something smaller to detain the two

1 and something to detain the ten as well.

2 Q. I'm trying to understand that. So basically what
3 you have to do is detain enough water to handle a
4 ten-year storm event, in any event?

5 A. You have to detain -- during a storm event, you
6 have to -- their calculations have to show that
7 during a two-year storm event there's not going to
8 be an increase, during a ten-year storm event
9 there's not going to be an increase. But any
10 storm event that's larger than a ten-year, they
11 are not required to detain.

12 Q. So a one-year storm event, you don't have to
13 detain that?

14 A. You have to prove the two and the ten. If you're
15 detaining the two and the ten, most likely any
16 storm in between you're detaining. So up to the
17 ten-year event, that's -- but they have to submit
18 calculations for specifically the two and the ten.

19 Q. That it detains both?

20 A. Correct.

21 Q. But I don't understand why it would detain -- why
22 you wouldn't just say it detains a ten-year event.

23 A. Because, okay, say during a ten-year storm event
24 you're going to detain -- you're going to place an
25 18-inch pipe that is going to detain all the

1 additional runoff that you're going to create on
2 your development. During a lesser storm, that 18-
3 inch pipe, it may all go through it.

4 Q. Right.

5 A. And that's going to be additional flow for that
6 storm event onto Laurel Creek.

7 Q. So the 18-inch pipe would be higher up?

8 A. Correct. They do like a two-tier system, a small
9 pipe and a large pipe, correct.

10 Q. Okay, I gotcha. So, in effect, if you just had a
11 stormwater detention pond that detained a two-year
12 event, the stormwater pond would overflow on a
13 three-year event?

14 A. Anything larger than -- it would depend on how it
15 was designed, but if it was only based on a two-
16 year it would overtop on anything larger than
17 that.

18 Q. But necessarily, the city recognizes the fact that
19 the property is going to somewhat increase the
20 flow for lesser events into Laurel Creek? I mean,
21 if I used to have a wooded lot, I didn't have a
22 stormwater problem probably. A ten-year event
23 would probably flow across the property in a ditch
24 or something like that. But once I develop it,
25 although I have a stormwater detention pond, I

1 also have a lot of flow that doesn't necessarily
2 go through the stormwater detention pond, don't I?

3 A. No, that wouldn't be correct.

4 Q. The stormwater detention pond would empty on a
5 two-year event through the two-year pipe?

6 A. Uh-huh (affirmative).

7 Q. And then if the water flowed higher it would go
8 through the ten-year pipe?

9 A. Correct, if that's how they've designed it. But
10 that's a very general design.

11 Q. But, I mean, the stormwater retention pond doesn't
12 necessarily stop the flow of water. It just slows
13 it down.

14 A. The reason for the detention is to make sure that
15 that development does not increase the flow. It
16 has to at least be the same as what it was for
17 predevelopment. So that detention is going to
18 detain it so that there is not an increase of flow
19 from that site during a two- and a ten-year storm
20 event.

21 Q. How has the development along Byrdland Drive, the
22 highly developed Eastside, then increased the
23 flooding problems? How long has the city, to your
24 knowledge, been enforcing stormwater management
25 practices?

1 A. Ever since I have been here, but I do not know the
2 first year that they started requiring detention.
3 But it was -- I know in records that I have looked
4 at in the eighties, there are detention
5 requirements, but I don't know the exact year.

6 Q. But I think you recognize the fact that large
7 commercial development has more than likely
8 increased the water flow into Laurel Creek to some
9 extent, regardless of stormwater detention ponds.

10 A. Like I said, I don't know exactly the history of
11 when the development is. But our minimum
12 requirements are the two- and the ten-year storm
13 event, so if you get in anything higher than the
14 ten-year event then even, you know, some of those
15 detention ponds, there is going to be an increase
16 into Laurel Creek.

17 Q. But essentially basically with the city's current
18 standards, Laurel Creek can handle a two-year
19 event but can't handle a ten-year event?

20 A. The crossing at Haywood, according to this study,
21 can handle a two-year, but overtops during a ten-
22 year, correct.

23 Q. Now you've stated in your affidavit that the city
24 has not taken any action or made any effort to
25 alter or divert the flow of Laurel Creek to cast

1 water onto the property. I want to show you
2 what's produced by the Defendant, 9000307, and see
3 if you can identify that. Can we go off the
4 record a second.

5 (Off the record)

6 (EXHIBIT NUMBER 9 MARKED; ATTACHED)

7 **EXAMINATION RESUMED BY MR. CHILDS:**

8 Q. I'm going to show you Exhibit Number 9 and see if
9 you can identify that.

10 A. (Reviewing documents.) It appears to be a work
11 order or a printout from our work management
12 system on work that was done at 1 Byrdland Drive.

13 Q. It indicates there, when we were discussing your
14 affidavit, that the city had taken no action or
15 made any effort to alter or divert the flow of
16 Laurel Creek. That indicates that less than a
17 month prior to this incident that we're here
18 about, that the city was placing riprap along
19 Laurel Creek, does it not?

20 A. That's what it -- yeah. Yes, that's what it says,
21 "Riprap the bank with broken concrete."

22 Q. Does not riprapping of a creek bank alter or
23 divert the flow of the creek?

24 A. I don't believe that -- the reason they put that
25 riprap was due to erosion that was occurring at

1 the front of the pipe. But as far as diverting
2 the flow, no, it's not been diverted.

3 Q. Let me mark these as 10, 11, and 12.

4 (EXHIBIT NUMBERS 10, 11, AND 12 MARKED; ATTACHED)

5 **EXAMINATION RESUMED BY MR. CHILDS:**

6 Q. How do you know that the work that was done on --
7 is it July -- what date?

8 A. 7/2/97.

9 Q. -- July 2, 1997, was to repair erosion at the
10 mouth of the 96-inch pipe?

11 A. That is what I have been told by Bill Lee, whose
12 crews placed it.

13 Q. Let me show you what's been marked as Exhibits
14 Number 10, 11, and 12, and see if you can identify
15 those.

16 A. I don't know -- it appears to be the entrance to
17 the 96-inch pipe, and there's dirt in the channel
18 itself.

19 Q. Now, let me represent to you that Mr. Hawkins
20 indicates that he took those photographs in July
21 of 1997 prior to the flooding.

22 A. Okay.

23 Q. And does not that appear that the debris dumped
24 into that creek has affected the flow of Laurel
25 Creek?

- 1 A. Say that question again.
- 2 Q. Does not that show some deposits into the creek
3 that have either altered or diverted the flow?
- 4 A. It appears that there has been some fill put into
5 the creek itself.
- 6 Q. What does that result in in respect to a creek if
7 you deposit fill along its banks?
- 8 A. The capacity of that certain channel section, it
9 would be less.
- 10 Q. And if the area that this 96-inch pipe was placed
11 into when it was erected, it used to be an open
12 creek area and a low area topographically. Would
13 not an open creek bed and a low area be better
14 able to handle stormwater flow than a 96-inch
15 pipe?
- 16 A. It would depend on the channel section.
- 17 Q. And your only information that you have in respect
18 to the drainage maintenance across from Laurel
19 Creek, riprap the bank with broken concrete at the
20 creek, is you spoke to someone, Bill Lee, about
21 what work was done at that time?
- 22 A. Right. Yes, again, I was not working here, but a
23 conversation with Bill Lee was that his crews --
24 there was erosion occurring at the pipe entrance
25 and for maintenance purposes they placed riprap

1 along the bank to secure the bank.

2 Q. And he was clear about that being before the
3 flood?

4 A. I do not know. That was just a conversation. As
5 far as the dates of exactly when it occurred, I do
6 not know. But according to that, the maintenance
7 was done on that July 2nd.

8 Q. If the city determines that an existing drain pipe
9 is insufficient to handle the flow of water
10 through it, who is responsible for -- and you all
11 have a maintenance easement over that drainage
12 area -- who is responsible for replacing that
13 pipe?

14 A. The city prioritizes according to funding how we
15 will replace or upgrade systems. And if it's in
16 our maintenance then it would be up to Council to
17 decide when we can upgrade that system.

18 Q. But it would be the city that upgrades it, would
19 it not?

20 A. Correct.

21 Q. Do you know of any considerations that the city
22 engaged in in respect to when and how the drainage
23 along Byrdland Drive would be improved? You were
24 talking about prioritization and how the city
25 would prioritize what location needs a new pipe

1 before another one. Do you know what
2 considerations had been involved in this 96-inch
3 pipe?

4 A. What we did was the first step to analyzing that
5 system was we had paid a consultant to actually do
6 a study to determine what needed to be there.
7 That's what this study is. It was completed in
8 July. We took before Council this actual system
9 last January, and they have approved that system
10 to be upgraded. They have approved funding for
11 it. Is that what you're asking?

12 Q. Yes. But the other part of the question was, why
13 wait until 2001 to study this particular drain and
14 study others in 1980 and study others in 1990?

15 A. Depending on what structures are flooding or --
16 the study that was done in 1980 or in the
17 eighties, there were several residential
18 structures that were flooding severely. We
19 actually had to rescue someone out of their home.
20 And that was the area that was studied in 1980 --
21 in the eighties. But it's based on severity of
22 flooding.

23 Q. Or the presence of residences? Is that another
24 consideration?

25 A. Say that again.

- 1 Q. The presence of residences, is that another
2 consideration?
- 3 A. That's certainly something to factor in.
4 Certainly if you have lives in jeopardy, which we
5 did in that one particular basin.
- 6 Q. What basin are you talking about?
- 7 A. It's the Scarlet basin and it's the area down
8 below McAlister Square. That was the particular
9 area that was studied in the eighties.
- 10 Q. And do you know what the next area that was
11 studied after the eighties?
- 12 A. There were two basins that were studied in the
13 early nineties and it was the Henderson Road basin
14 and the White Oak area, White Oak basin.
- 15 Q. So we have the Scarlet Street studies in the
16 eighties, Henderson Road in the nineties, White
17 Oak in the nineties, and then what's the next
18 basin we studied?
- 19 A. We studied Delwood/Chick Springs. And then Park
20 Avenue along with Delwood/Chick Springs. And,
21 let's see, I believe those -- I'd have to look
22 exactly on our records. I can't recall off the
23 top of my head any others that were studied before
24 this one.
- 25 Q. And then Haywood Road?

- 1 A. Uh-huh (affirmative).
- 2 Q. Do you know why, for instance, Delwood/Chick
- 3 Springs was studied before Haywood Road?
- 4 A. The amount of structures that are flooding in that
- 5 area.
- 6 Q. What does the city plan at this time to do in
- 7 respect to -- you said that these things had been
- 8 presented to City Council. Have improvements been
- 9 approved by City Council for --
- 10 A. Correct, for Haywood Road.
- 11 Q. Do any of those improvements involve this 96-inch
- 12 pipe?
- 13 A. Yes.
- 14 Q. And what is it going to be replaced with? I think
- 15 we've already discussed that, haven't we?
- 16 A. Yes, we have.
- 17 Q. Okay. I'm going to show you your affidavit. I've
- 18 been reading from it. So I'm just going to show
- 19 you your affidavit and see if you can identify
- 20 that.
- 21 A. (Reviewing documents.) (Affirmative gesture. No
- 22 verbal response.)
- 23 Q. Let's go ahead and mark that as Number 13.
- 24 MS. RUNGE:
- 25 Do you want to mark the one with exhibits, because

1 I noticed that copy you gave her did not have the
2 exhibits attached?

3 **MR. CHILDS:**

4 Right, let's do that.

5 (EXHIBIT NUMBER 13 MARKED; ATTACHED)

6 **EXAMINATION RESUMED BY MR. CHILDS:**

7 Q. And I want to kind of finish it up by going
8 through that affidavit. And you have a copy of it
9 in front of you. We talked about your background.
10 We've talked about your review of the city records
11 of the property located at 1 Byrdland Drive, which
12 is Servicemaster.

13 A. Uh-huh (affirmative).

14 Q. We've talked about the fact that this is a low-
15 lying area west of -- and you need to say yes when
16 I ask a question.

17 A. Okay, sorry. Yes.

18 Q. You talked about the fact that this is a low-lying
19 area west of Haywood Road and it's at the bottom
20 of a large stormwater basin and is bordered on the
21 east by the stream known as Laurel Creek.

22 A. Yes.

23 Q. Page two of your affidavit, you indicate that the
24 stormwater basin encompasses 3.24 square miles.

25 And you explained to us that that's an estimate

1 that you gave. Do you know the actual size of the
2 stormwater basin now as a result of this study?

3 A. Yes.

4 Q. What is that?

5 A. I would have to -- do you want me to go through
6 the report?

7 Q. If you can find it.

8 A. (Reviewing documents.) What I would have to do is
9 compare -- it would take me a while to put that
10 together for you. If you want me to -- it would
11 take about ten minutes.

12 Q. We'll do that later. I'd like to perhaps just get
13 that figure. Is it going to be more than you
14 calculated --

15 A. It should be, I mean, basically the same.

16 Q. Pretty close?

17 A. Yeah.

18 Q. Okay. Are you the first person to ever calculate
19 the size of this stormwater basin?

20 A. I couldn't answer that. I'm the first person who
21 I've found the records. I have my records. But
22 as far as any other records, I have not found any.

23 Q. So is it fair to say, according to the records
24 that you've seen prior to 1998, nobody has ever
25 determined the size of the stormwater basin?

1 A. I have not seen any records of someone sizing that
2 pipe.

3 Q. And isn't it important to know the size of the
4 stormwater basin in order to determine the
5 sufficiency of the 96-inch drain pipe?

6 A. Yes.

7 Q. And isn't that general professional engineering
8 practice?

9 A. Yes.

10 Q. And isn't it a breach of professional engineering
11 practice for the city to not have done so prior to
12 1998?

13 **MS. RUNGE:**

14 Object to the form of the question.

15 **WITNESS:**

16 A. No, we do not know who -- I do not know who
17 installed the pipe or when it was installed, so I
18 do not know if they actually used calculations or
19 not to install the pipe.

20 **EXAMINATION RESUMED BY MR. CHILDS:**

21 Q. Okay. And you don't know whether the city
22 followed its regulations or its own policies by
23 allowing the installation of the pipe, do you?

24 A. Don't know who installed it or when, so can't
25 answer that.

1 Q. You state that the city does not own any portion
2 of Laurel Creek or any land near the property in
3 Section 5 of your affidavit.

4 A. Uh-huh (affirmative).

5 Q. But, in fact, the city is responsible for the 96-
6 inch drainage pipe; isn't that true? It doesn't
7 necessarily own the property. It's got an
8 easement.

9 A. Correct.

10 Q. And part of that easement obligation is that the
11 city maintains it --

12 MS. RUNGE:

13 Which paragraph are we on?

14 EXAMINATION RESUMED BY MR. CHILDS:

15 Q. Number five. -- and if necessary, upgrades it,
16 correct?

17 A. Correct.

18 Q. And, in fact, the city is responsible for Laurel
19 Creek itself in that the city maintains the banks?

20 A. If the properties are in the right-of-way, uh-huh.

21 Q. And Laurel Creek is in the right-of-way, as far as
22 you know?

23 A. As far as I know, at least that one bank is.

24 Q. And when you state the city has not taken any
25 action or made any effort to alter or divert the

1 flow of Laurel Creek, you base that upon the
2 representation of a city employee that the work
3 they did in July of 1997 was related to the mouth
4 of the 96-inch pipe and not the creek bed?

5 A. Correct. It was for the erosion itself.

6 Q. And you admit that, in fact, if the city dumped
7 the debris shown on Exhibits 10 through 12 into
8 the creek, that it in fact did take some action to
9 alter or divert the flow of Laurel Creek?

10 **MS. RUNGE:**

11 Object to the form of the question.

12 **WITNESS:**

13 A. As it appears in that picture, there is a fill
14 within the creek and that would lessen the
15 capacity of the channel.

16 **EXAMINATION RESUMED BY MR. CHILDS:**

17 Q. And you state in paragraph six that when property
18 in the city is developed, the owner/developer is
19 required to submit storm drainage calculations to
20 show that the proposed drainage system for
21 development is designed to handle the stormwater
22 runoff required by the city ordinances.

23 A. Uh-huh (affirmative).

24 Q. But you have no knowledge of whether or not that
25 was done for the property concerning the 96-inch

1 drain pipe?

2 A. No, I do not.

3 Q. And you state that if the owner/developer's
4 proposal for the drainage system satisfies the
5 city's design criteria for developing that
6 particular parcel of land, then the city must
7 improve the design. But you do not know whether
8 or not the city approved the design in the
9 circumstances of this 96-inch pipe?

10 A. No, I do not.

11 Q. And in approving such applications, the city
12 expressly rejects liability for stormwater
13 discharge from these parcels onto adjacent
14 property. But you don't know if the city did so
15 in respect to this 96-inch pipe?

16 A. Correct..

17 Q. You state that the city is unable to lawfully deny
18 permits for development of property which meet the
19 criteria established by its ordinances. But
20 you're unable to say whether or not the permit for
21 the development of this property encompassed in
22 the 96-inch pipe did in fact meet that criteria.

23 A. I do not -- when the 96-inch pipe was installed, I
24 do not know if it met our requirements.

25 Q. And today it does not meet your requirements?

- 1 A. Based on this study, correct.
- 2 Q. And you state, "In June and July of 1993, the city
3 installed an elliptical eleven foot five-inch by
4 seven foot three-inch pipe under the intersection
5 of Byrdland Drive and Airport Road. The arched
6 pipe replaced a double box culvert which was
7 gathering debris and thus, its capacity was being
8 restricted. The arched pipe increased the
9 drainage capacity of this section of the city's
10 stormwater drainage system." But isn't it true
11 that it did not increase the drainage capacity of
12 the 96-inch pipe?
- 13 A. Correct.
- 14 Q. "The arched pipe installed in July of 1993 is the
15 only improvement to the stormwater system
16 performed by the city in this area since 1980."
17 Is that correct?
- 18 A. According to what I have found in the records.
- 19 Q. And you state that, "By installing the arched
20 pipe, the city did not intend and did not alter
21 the flow of Laurel Creek, nor did it direct water
22 onto the property." But isn't it true that by not
23 increasing the size of the 96-inch drain pipe, the
24 city did direct water onto the property?
- 25 A. No. The only thing that was done was replace one

1 section, and it would not have altered the
2 capacity of the 96-inch --

3 Q. You misunderstood my question. By failing to do
4 these studies sooner and increasing the capacity
5 of this 96-inch pipe, by failing to act, has not
6 the city allowed water to be directed onto 1
7 Byrdland Drive?

8 A. The city can only do what our funding has allowed,
9 and at this point we now have been able to study
10 this area and have a report and can upgrade the
11 system, because we've had the funding and it's
12 been approved.

13 Q. I understand that. But by not doing it sooner,
14 didn't we allow water to go onto 1 Byrdland Drive?

15 A. Presently, I mean, the pipe is there. It handles
16 the two-year and does not handle the ten-year.

17 Q. The rainfall that occurred in the city on July 24,
18 1997 was an extraordinary rainfall event. Were
19 you here in the city in July of 1997?

20 A. No, I was not.

21 Q. The basis of your statement that, "Due to the
22 large amount of rain which fell in a short period
23 of time on July 24, 1997, Laurel Creek could not
24 keep the stormwater within its banks and it
25 naturally spilled over onto Byrdland and other

1 roads in the area," is based upon what?

2 A. Is based upon pictures that I've seen of that area
3 and natural phenomena. If you have a storm event
4 that's a large storm event and it cannot be, you
5 know, maintained within its banks, then it's
6 automatically going to go out to the surrounding
7 areas.

8 Q. And so, however, if the 96-inch pipe were, for
9 instance, a 120-inch pipe, the flooding along
10 Byrdland Drive would have been much less, would it
11 not?

12 A. If the pipe is larger, it's going to handle more
13 flow.

14 Q. You talk about the official rainfall records from
15 the National Climatic Data Center in Asheville
16 that show 2.51 inches of rain fell in Greenville
17 in one hour on July 24, 1997.

18 A. Uh-huh (affirmative).

19 Q. That doesn't necessarily reflect the amount of
20 rain that fell along Byrdland Drive, does it?

21 A. I would have to look at those official records to
22 see exactly where -- it depends on where the
23 monitoring station was.

24 Q. Correct.

25 A. (Reviewing documents.) Yeah, it depends on

1 exactly where the station is located. And in that
2 one location where the station is, that's how much
3 rain it got.

4 Q. Where was this station?

5 A. Where was this station? (Reviewing documents.)

6 Q. Isn't it Greenville-Spartanburg Airport?

7 A. It looks like Greenville-Spartanburg Airport.

8 That's what it looks like.

9 Q. And you've got no personal knowledge of how
10 extraordinary that flood was?

11 A. No, because I was not here.

12 Q. But, in fact, the drainage pipe is insufficient to
13 handle even a ten-year flood. And a ten-year
14 flood is not characterized as an extraordinary
15 flood, is it?

16 A. No, that would --

17 Q. That's basically the 100-year, isn't it?

18 A. No. I mean, a 100-year certainly is
19 extraordinary, but there -- I mean, anything to me
20 -- and I think that's personal and within the
21 area, but anything above a ten-year probably is an
22 abnormal -- it's not your everyday spring shower.

23 Q. And you're aware of the fact that Number 1
24 Byrdland Drive and Laurel Creek have flooded on
25 several occasions since July of 1997?

1 A. No, I don't have any personal -- I have not
2 witnessed that.

3 Q. You're not aware of that?

4 A. Since 1997?

5 Q. Uh-huh (affirmative).

6 A. That actual 1 Byrdland Drive has flooded since
7 then?

8 Q. Uh-huh (affirmative).

9 A. No, I'm not aware of that, that I recall.

10 Q. Does the city have any plans in respect to the
11 properties contained within the study's rendition
12 of floodplain properties?

13 A. Repeat that question.

14 Q. The 1 Byrdland Drive location is identified in
15 your map in the study that we've been talking
16 about so much in the floodplain of the study.
17 Does the city have any plans or projects as it
18 relates to those properties?

19 A. Yes.

20 Q. And what are those?

21 A. They have approved a project to upgrade the
22 crossings under Haywood Road, Haywood Crossing,
23 and Transit Drive.

24 Q. And let me clarify this study. This study has --
25 how many different sections of the city has it

1 reviewed?

2 A. This one study?

3 Q. Yes.

4 A. It's the Haywood Road/Laurel Creek drainage basin.

5 Q. And was it done in conjunction with a study of all
6 the other basins in the city?

7 A. Not in conjunction, no, but we are studying
8 separately all 14 basins. This is just one.

9 Q. And are they all being studied simultaneously?

10 A. No, they're prioritized, and according to funding
11 and prioritization they are studied.

12 Q. All right. That's all the questions I have.

13 **MS. RUNGE:**

14 I have a few questions but I need to go upstairs
15 and get some documents. Can we take a break?

16 **MR. CHILDS:**

17 Yes.

18 (Off the record; brief recess)

19 **EXAMINATION BY MS. RUNGE:**

20 Q. Julie, I came in a little bit after you all had
21 started the deposition, so I'm not exactly sure --
22 I may be rehashing old ground. If I am, I
23 apologize. Let me show you a document we
24 produced, number 9000155. Can you tell me what
25 that is?

1 A. It is the City of Greenville and it's our drainage
2 basin areas.

3 Q. Could you tell me the date on that map?

4 A. Yes. It is 1994.

5 Q. Is that map currently in use by your office?

6 A. Yes.

7 Q. Which basin is 1 Byrdland Drive located in?

8 A. Basin four.

9 Q. And does that document there show you the size of
10 that basin?

11 A. Uh-huh (affirmative). The entire basin is 3.24
12 square miles.

13 Q. I'd like to mark this. I may need to get you
14 another copy of it. We can go off the record.

15 (EXHIBIT NUMBER 14 MARKED; ATTACHED)

16 **EXAMINATION RESUMED BY MS. RUNGE:**

17 Q. Okay, we're back on the record.

18 A. That 3.24 square miles was taken from this map and
19 it includes the whole area. It includes area down
20 below Servicemaster and above it. So that doesn't
21 mean that 3.24 square miles drains to
22 Servicemaster.

23 Q. Let's look at the photos Mr. Childs handed you
24 earlier, Exhibits 10 through 12. You said, I
25 believe, that you are not familiar with these

- 1 photographs; is that correct?
- 2 A. No, not at all.
- 3 Q. In looking at those photographs, do you see any
- 4 riprap in those photographs?
- 5 A. No.
- 6 Q. And I think you said you simply see some dirt in
- 7 the channel; is that right?
- 8 A. Correct.
- 9 Q. And you don't know when these pictures were taken?
- 10 A. No.
- 11 Q. Is it possible that someone other than the city
- 12 could have put the dirt into the creek?
- 13 A. Certainly. I have no idea why it was placed
- 14 there.
- 15 Q. And I didn't quite understand. What is the point
- 16 of putting riprap on the side of a bank of a
- 17 creek?
- 18 A. As you can see from these pictures, the roadway is
- 19 very close to the channel. And if the bank on
- 20 this side is eroding, washing away, then the road
- 21 itself would be in jeopardy. So the riprap is to
- 22 help stabilize that bank so you don't have a
- 23 washout in the roadway.
- 24 Q. If the bank were to continue to erode without
- 25 placing the riprap, would that have any effect on

- 1 the flow of water?
- 2 A. If it continued to erode, you actually increase
3 the capacity of your channel. But, like I said,
4 you would encroach on the roadway itself and cause
5 jeopardy -- cause it to be in jeopardy, the
6 roadway.
- 7 Q. So without putting the riprap there, you would
8 create more problems than putting the riprap there
9 in terms of --
- 10 A. Potential, correct.
- 11 Q. -- flooding, correct?
- 12 A. In terms of roadway stability.
- 13 Q. And what would happen if the roadway wasn't
14 stable?
- 15 A. If the roadway is not stable, I mean, you put your
16 traveling public in danger.
- 17 Q. And this roadway is what proximity to the
18 Servicemaster location; do you know?
- 19 A. Servicemaster is right across the street, so you
20 access Servicemaster from Byrdland Drive.
- 21 Q. In your opinion, looking at these photographs,
22 were these taken before or after the riprap was
23 placed in the creek, along the bank of the creek?
- 24 A. I can only assume, but since there is no riprap in
25 this picture besides just a few rocks in the

1 spring bed itself, I would assume it would be
2 before. But again, I don't know when these --
3 this is the first time I'm seeing these.

4 Q. I'm not sure if I understood Mr. Childs' question
5 before, so I guess I'll ask you what your
6 understanding of it was. Did you understand Mr.
7 Childs to be asking you if you knew whether the
8 city had approved the drainage system for the
9 Tracks property?

10 A. Say that again.

11 Q. He was asking you some questions about whether you
12 knew the city had -- whether the city had approved
13 certain drainage calculations.

14 A. Right.

15 Q. What property was he referring to? Or what was
16 your understanding of the property he was
17 referring to?

18 A. My understanding of the question is he was asking
19 me did I review or did someone from the city
20 review calculations when the 96-inch pipe was
21 actually installed. Because we don't know who
22 installed it or when. And my answer to his
23 question was, I don't know because I could not
24 find records of when or who installed that pipe.

25 Q. If it was installed by the developers of Tracks,

1 then do you know whether the city -- well, I guess
2 that doesn't really matter. I'll strike that
3 question and start over. Do you know whether the
4 city approved the drainage calculations for the
5 Tracks property?

6 A. Yes. On the latest -- the documents that I can
7 find the furthest back are the Tracks documents.
8 And in the Tracks documents it shows that pipe as
9 existing, so that pipe was there prior to Tracks.
10 So the calculations and the permit that we
11 approved for Tracks was for the additional runoff
12 that they were going to create. But that 96-inch
13 pipe was there, according to the Tracks documents.

14 Q. If it was there, then their drainage calculations
15 would have had that pipe in consideration. It
16 would have been part of what they were considering
17 in coming up with their calculations.

18 A. It just showed it on that property. Because
19 everything that they had drained to it, so they
20 weren't really -- so their site wasn't going to be
21 improving that pipe itself or considering that
22 pipe, because everything that they had was going
23 to be draining to it, if that makes sense.

24 Q. If you are a landowner -- we call them a lot of
25 times the lower landowner, someone who is on a

1 low-lying piece of property and there are
2 landowners on higher pieces of property. Isn't it
3 typical that there will be stormwater runoff from
4 a higher landowner's property to the lower
5 landowner's property?

6 A. Correct.

7 Q. And if someone in the city who is a low-lying
8 landowner has a problem with water runoff from a
9 higher landowner, they can certainly work with
10 that other landowner to try to resolve the problem
11 of the extra water runoff they're getting from the
12 higher piece of property, can't they?

13 A. Certainly.

14 Q. I think you testified that the 96-inch pipe, in
15 your opinion, did not meet the city's minimum
16 standards today; is that right?

17 A. Correct.

18 Q. At one point it did meet the city's standards, did
19 it not?

20 A. I cannot say that for sure, because I don't know
21 when it was installed. I don't know what the
22 city's standards were when it was installed, and
23 so I can't say if it met or did not.

24 Q. This elliptical pipe that was put in in 1993, I
25 believe -- did I get that date right?

- 1 A. Uh-huh (affirmative).
- 2 Q. It improved or increased the capacity of the
3 stormwater drainage system in the area, didn't it?
- 4 A. In that one section that was replaced. Again,
5 it's a long system and it was -- that's a section
6 that's in the middle, so within that one section
7 of the system it increased it.
- 8 Q. So that was an improvement put in by the city,
9 right?
- 10 A. Correct. Yes.
- 11 Q. Do you have any idea what type of storm event 2.51
12 inches of rain in one hour is?
- 13 A. I do not.
- 14 Q. You have seen the photographs that were in the
15 newspaper, I believe, that showed that there was
16 water out in the intersection of Haywood and --
17 I'm trying to remember the cross street.
- 18 A. Airport Road.
- 19 Q. -- Airport Road, where there were people standing
20 next to their cars and there was water up to that.
- 21 A. Yes.
- 22 Q. Am I correct in that that is an unusual rainfall
23 event?
- 24 A. Yes, I would say so. I don't think that occurs,
25 you know, weekly or very often on Haywood Road.

- 1 Q. And under the circumstances, you would expect that
2 water would overflow the banks of Laurel Creek?
- 3 A. During extraordinary events, certainly. You know,
4 water is -- the channel only has a certain
5 capacity and during extraordinary events it's
6 going to overtop.
- 7 Q. And under unusual rainfall events, water can
8 overflow the banks of creeks regardless of the
9 size of the pipe, can't they?
- 10 A. Correct.
- 11 Q. There's not a system you can design that would
12 keep it from flooding under any and every
13 circumstance; is that correct?
- 14 A. Correct.
- 15 Q. This study that you have talked about and the
16 funding, where does the funding come from to do
17 that study?
- 18 A. Our stormwater utility.
- 19 Q. And where does that money come from?
- 20 A. It comes from a fee that every parcel owner pays
21 for stormwater purposes.
- 22 Q. And making the decision to do the study was done
23 by City Council?
- 24 A. City Council approved to have funding for studies,
25 yes.

1 Q. And the improvements that are going to be done
2 based upon the study are going to be funded with
3 taxpayer dollars; is that correct?

4 A. Yes, correct.

5 Q. And so City Council's decision here was a decision
6 on how to spend taxpayer money?

7 A. Correct, yes.

8 Q. I have nothing else right now.

9 **REEXAMINATION BY MR. CHILDS:**

10 Q. Just a couple redirect. Exhibit Number 9 from
11 your deposition, isn't it true that the comment
12 there is riprap the bank with broken concrete at
13 the creek?

14 A. Correct.

15 Q. And is it true that Exhibit Number 8 right here
16 shows a similar type of debris dumped at the top
17 of the pipe, as shown in Exhibit number 10 and 11
18 and 12?

19 A. If the debris at the top of the pipe is raw dirt.
20 I couldn't make a determination of when it was
21 placed or whether it was placed at the same time
22 as this dirt was.

23 Q. If that photograph was taken on the day of the
24 flood, wouldn't that indicate that the city is the
25 one that dumped the dirt there?

1 A. No --

2 MS. RUNGE:

3 Object to the form of the question.

4 WITNESS:

5 A. No, because it could be erosion due to the storm
6 event itself. There's no -- I couldn't determine
7 why that's raw dirt there.

8 REEXAMINATION RESUMED BY MR. CHILDS:

9 Q. The riprapping at the creek bank and the
10 protection of the roadway necessarily does
11 decrease the capacity of the creek to handle water
12 flow?

13 A. No, it may or may not. It depends on really how
14 they -- if they took -- I don't know -- I was not
15 there when they placed it, so I don't know
16 exactly. You know, they may have taken out area
17 and placed the dirt or the area may have already
18 been eroded out.

19 Q. Let me rephrase it. If the creek were able to
20 follow its regular course -- I think you already
21 testified to Ms. Runge that if the creek banks
22 were not riprapped and were allowed to follow
23 their normal course, the capacity of the creek
24 would either stay the same or improve actually by
25 erosion.

- 1 A. Correct.
- 2 Q. And by riprapping the banks and confining its
3 course, you actually decrease the capacity of the
4 creek by stopping erosion --
- 5 A. It depends on -- depending on how that riprap is
6 placed. I don't have any pictures --
- 7 Q. I mean, just by stopping natural erosion in
8 general, you --
- 9 A. They might have dug out some dirt and placed that
10 riprap, so they didn't change the capacity. I
11 don't know whether they changed the actual
12 capacity of the channel or not. All I know is
13 they placed that riprap.
- 14 Q. But basically confining the natural flow of a
15 creek and not allowing it to naturally erode the
16 banks as it would, decreases its capacity and
17 increases its propensity for --
- 18 A. No, I wouldn't agree with that.
- 19 Q. I mean, you're in stormwater management. I mean,
20 doesn't -- haven't we done that with the
21 Mississippi River by putting banks up along it and
22 that increased the flooding and --
- 23 A. But I don't know what the crews did. If the crews
24 went out there -- okay, here's a bank and they
25 placed, you know, two feet of riprap within the

1 channel, yes, you are going to decrease it. But
2 if the crew -- here's the bank. If they went out
3 there, took some dirt out from behind it and then
4 placed it about the same area as the existing bank
5 was, even though it was eroding, then they didn't
6 increase the capacity. I can't say whether they
7 increased it, decreased it, or whatever they did.

8 Q. But doesn't a change in the natural course of the
9 creek also contribute somewhat to its ability to
10 handle increased rain flow?

11 MS. RUNGE:

12 Object to the form of the question.

13 REEXAMINATION RESUMED BY MR. CHILDS:

14 Q. I mean, if you have a creek that meanders and goes
15 back and forth, and you make it a straight
16 channel, don't you increase the flow and make it
17 more difficult for it to handle stormwater?

18 A. Now if you straighten -- meanders actually
19 decrease the capacity of a channel. If you
20 straightened it, you would actually increase it.

21 Q. When the city installed the elliptical pipe in
22 1993, shouldn't they have also improved the 96-
23 inch pipe at that time?

24 A. No. Their sole purpose for replacing that section
25 of pipe was for maintenance reasons only, due to

1 the obstructions that were getting caught on the
2 double box culverts. The funding necessary to
3 increase the whole system is a huge amount of
4 money. And, of course, that had to be accrued by
5 the city and then had to be prioritized and
6 approved by Council.

7 Q. Okay. Thank you.

8 MS. RUNGE:

9 Nothing else. Thanks.

10 (THERE BEING NO FURTHER QUESTIONS, THIS DEPOSITION WAS
11 CONCLUDED AT 10:50 A.M.)

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CERTIFICATE

I, the undersigned, Mimi M. Gallagher, CVR-CM,
Notary Public in and for the State of South Carolina,
do hereby certify that the foregoing deposition was
taken on the aforementioned date;

That the within deponent was sworn to tell the
truth, and that the foregoing is an accurate
transcription of the testimony taken under oath;

That all exhibits entered herein are attached
hereto (if requested by counsel) and made a part of
this deposition.

I further certify that I am neither counsel nor
solicitor to any of the parties in said suit, nor
interested in the event of the cause.

In witness whereof, I have hereunto set my hand
and seal.

COPY

Mimi M. Gallagher, CVR-CM
Notary Public for South Carolina
My Commission Expires: 7/10/11

(Seal)

April 20, 2002

Arrowood

11/14/50
FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE

11/14/00 11:44 '90

MAF NIS

BYRDLAND DRIVE

RD
AIRPORT

0.67 ACRES

0.068 AC.

— 58-48-58 E 20101.

HAYWOOD ROAD

I CERTIFY THAT THE ERROR OF CLOSURE OF THE FIELD SURVEY IS 1/10,000 AND AREA WAS COMPUTED BY DMC METHOD

NOTE: 0.068 ACRE TRACT SURVEYED
AND PLAT REVISED 6/1/89

SURVIVY FOR

25032

GOLDSMITH, TIMMONS & ASHMORE

GREENVILLE, SOUTH CAROLINA
SCALE 1" = 40' OCTOBER 10, 1988

RLS #1347 C.O. FIDDLI. SURVEYING CO. GREENVILLE, S.C.

9000144

000158

300 77311801

90- PRESENT

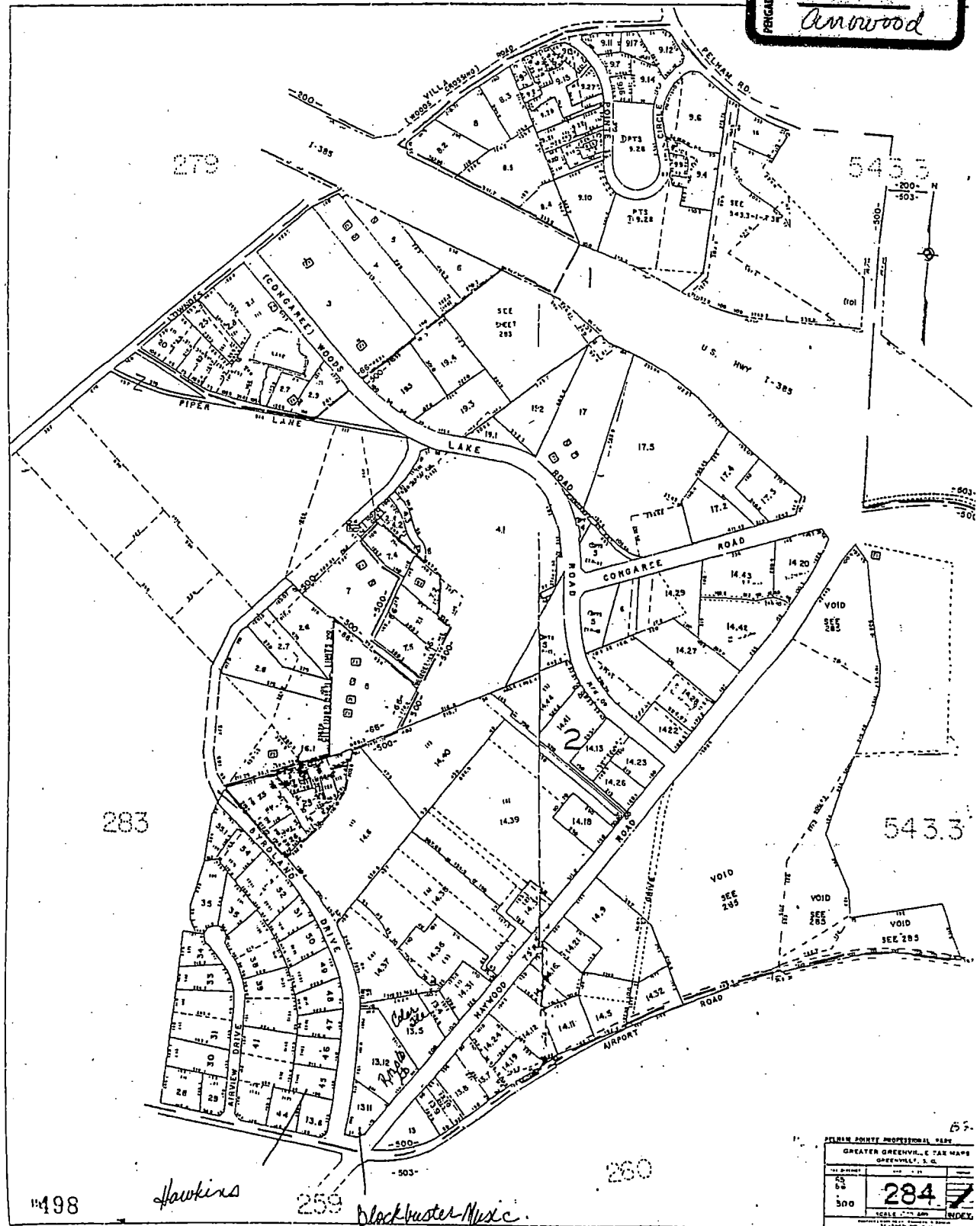


EXHIBIT
2
Amwood
PENICILLIN, N. L.

000159

9000083

PERCIVAL-Bayonne, N. J.
EXHIBIT
3
Arrowood



(owners:

9000147

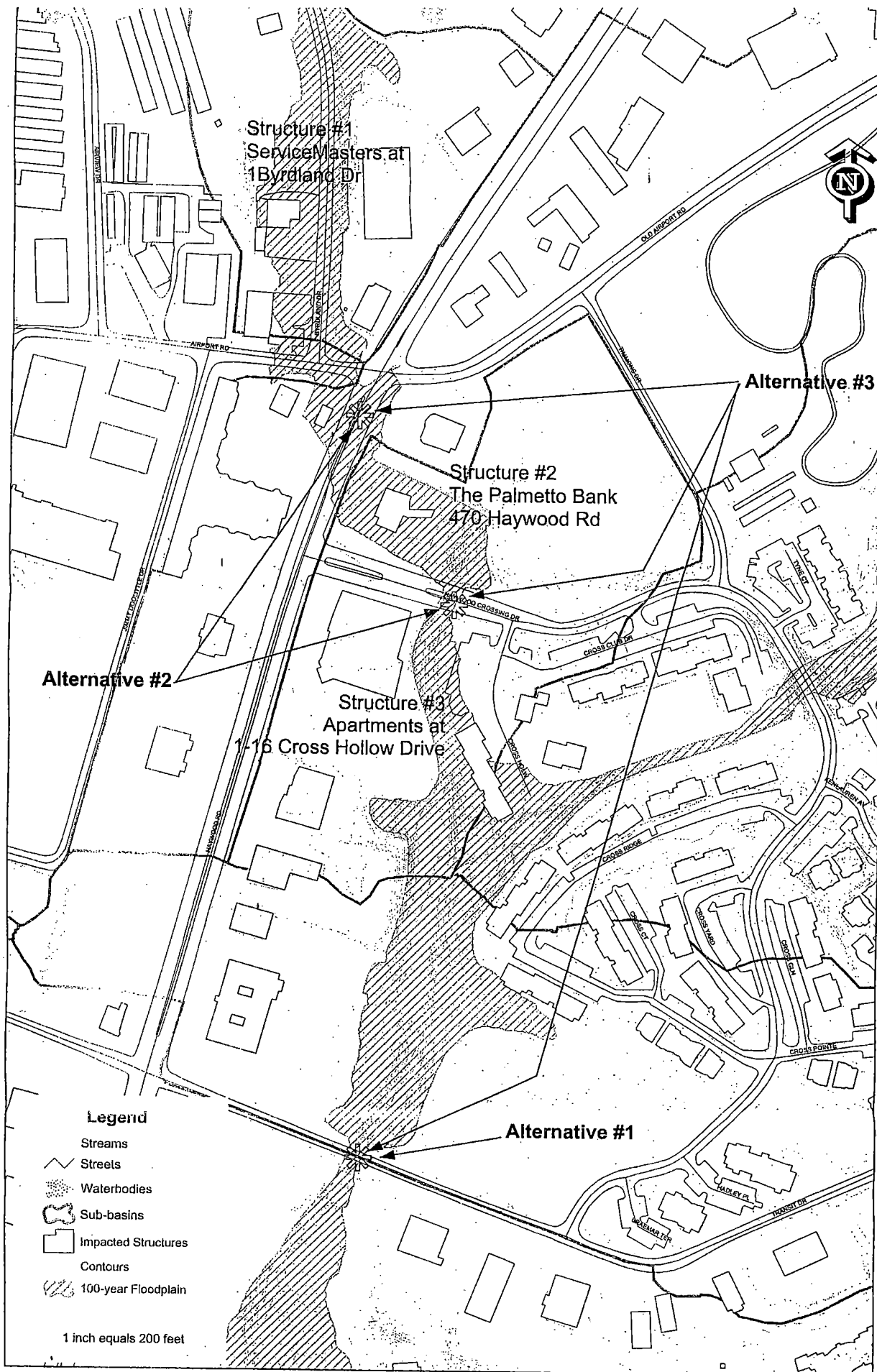


Figure 7-2. Map Showing Impacted Structures

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SECTION 7 STORMWATER MANAGEMENT ALTERNATIVES

7.1 MITIGATION ALTERNATIVE DEVELOPMENT PROCESS

As discussed earlier, existing condition hydrologic and hydraulic models have been prepared to analyze the performance of the drainage system elements in their current configuration under fully developed conditions. These existing condition models predict the occurrence of flooding at numerous locations throughout the watersheds in response to significant rainfall events. Flood elevations from the existing condition models enabled the Project Team to preliminarily identify approximately 5 structures that were potentially at risk of flood damage in the 100-year flood event. This was done by locating all building footprints that were in or bordering the 100-year floodplain and structures that were identified by the City as having flooding complaints. Surveyors were dispatched to obtain accurate finished floor and foundation elevations for the 5 structures. This information enabled detailed analysis of flooding impacts on these structures. From this detailed analysis, the depths of flooding under existing conditions were determined for the 2-, 10-, 25-, 50-, 100-, and 500-year flood events.

The next step in the analysis process was to determine the economic impact of flooding under the existing conditions. This was done using the Benefit/Cost Analysis Methodology described below and in Appendix E. In brief, using the known flood elevations and depth of flooding in each flood analyzed at each impacted structure, an annual damage cost figure was calculated. Annual impacts to individual structures were totaled and converted to a present worth value, based on a useful life of 40 years and an interest rate of 7%. Those situations with little or no present worth of damage were eliminated from further consideration, unless there appeared to be some other non-monetary reason to keep them under consideration.

For those situations with apparent justification for mitigation, the next step was to identify potential mitigation measures that would likely be technically feasible, cost effective, and politically acceptable. These alternatives were focused only on modifications to the City's drainage infrastructure and included such options as culvert improvements, channel improvements, and temporary flood storage. Mitigation alternatives that dealt with flood proofing or otherwise protecting individual structures such as the construction of a berm were also considered.

Acceptable alternatives were conceptually designed and inserted into the hydrologic and/or hydraulic models and re-run to determine the impacts on the flooding conditions. If necessary, alternatives were modified or refined to optimize their performance, as predicted by the models. Once a final version of the alternative (or group of alternatives) was modeled and flood improvements were determined, then the flood elevation information resulting from that alternative was analyzed for its reduction in the flood damage to affected structures. For those mitigation alternatives that produced a sufficient benefit, the next step was to develop a cost estimate for construction of the alternative(s). This was done by 1) identifying the items required for construction, 2) determining unit prices, 3) determining quantities of materials, and 4) calculating construction costs.

A final benefit to cost ratio was determined using the benefits obtained by flood damage reduction from the alternative as compared to the estimated cost of mitigation alternative construction. As a final element of the analytical process, for each of the reasonable mitigation alternatives, discussions were held

with the City Engineers and their staff to evaluate certain intangible factors associated with each alternative. This intangible factors evaluation incorporates a number of factors that cannot readily be quantified based on monetary considerations. They include such things as political sensitivity, impacts to the environment, impacts to public convenience and safety, etc. As a result of these benefit/cost analyses and intangible factors evaluations, the alternatives can be prioritized for consideration in upcoming budget cycles. As well, the alternatives from this study can be readily compared to similar alternatives from other similar studies to identify those flood mitigation projects that should be performed by the City.

7.2 BENEFIT/COST ANALYSIS

This Benefit/Cost (B/C) analysis is intended to determine to a rough degree of accuracy, the ratio of dollar value of benefits to the dollar value of costs for a proposed project. The purpose of this analysis is to enable a manager to make an informed decision regarding the relative priority of a particular project as compared to other similar projects. Projects with higher B/C ratios likely justify a higher priority ranking than those with lower ratios. A project with a B/C ratio less than 1 is not economically feasible based on its own merits alone.

The B/C analysis is only one factor (albeit a major factor) in deciding how to prioritize projects. Other factors enter into this decision that do not lend themselves to economic analysis. A Project Intangibles Evaluation Form has been developed to accompany this B/C analysis that addresses a number of intangible factors to aid in project prioritization.

In general this B/C method requires that each mitigation alternative for solution of a stormwater problem be analyzed individually. First, a cost of implementing the alternative is developed along with future maintenance and other future costs that are reduced to a present worth. Next, the present worth of annual damages without the mitigation alternative is determined, followed by the present worth of annual damages with the mitigation alternative in place. The difference between these two present worth values is the benefit derived from implementation of the mitigation alternative and this is divided by the cost developed above to determine the B/C ratio. Note that the benefits must be calculated individually for each structure that is helped by the mitigation alternative and then the benefits are summed to determine the total benefit.

7.3 Data Sources and Decisions

Evaluation of intangibles requires the use of cost data that is reasonable and suitable for estimating project costs. In developing the Benefit/Cost methods for use in the project, discussions were held with City staff to determine a suitable useful life for structures typical of this type of work, and an appropriate interest rate. A useful life of forty years was adopted and this was used as the term in present worth analyses. An interest rate of 7% was adopted as typical of the cost of money for the foreseeable future.

The Benefit/Cost analysis requires structure value information for each structure impacted by flooding. This information was obtained primarily from Greenville County tax records for the year 2000.

7.4 SUMMARY OF EXISTING FLOODING

7.4.1 Flooding of Buildings

Table 7-1 below provides an overall summary of the results of our analysis of 5 flood prone structures in the watershed. These results are based on existing land use conditions. Table 7-2 provides a detailed summary of the flooding at each building, including both finished floor flooding and flooding of the lowest point on the foundation.

Table 7-1. – Summary of Building Flooding

Storm Event	Number of Structures Flooded	
	Finished Floor	Foundation
2	0	0
10	1	1
25	1	2
50	1	3
100	1	3
500	1	3
Not flooded	4	2
Total	5	5

Table 7-2. – Detail Building Flooding

Structure Number	Structure Address	Return Period of Flooding	
		Finished Floor	Foundation
1	1 Byrdland Drive	9	6
2	470 Haywood Road	>500	32
3	1-16 Cross Hollow Drive	>500	19
4	8000 Glen Forest Drive	>500	>500
5	9000 Glen Forest Drive	>500	>500

7.4.2 Identification of Damage Reaches

Based on our analysis of building flooding, damage reaches were identified. These damage reaches represent areas of the Watershed in which flood damage is concentrated. The damage reaches identified are broken down as follows:

1. Haywood Drive Crossing
2. Confluence of Tributary B with mainstem between Haywood Crossing and Transit Drive.

Table 7-3 provides a more detailed summary of the extent of flooding problems in each of the damage reaches.

Table 7-3. – Summary of Flooding in Damage Reaches

Damage Reach	Finished Floor Flooding					Water Touching Foundation				
	2-Year	10-Year	25-Year	50-Year	100-Year	2-Year	10-Year	25-Year	50-Year	100-Year
1	1	1	1	1	1	0	1	1	2	2
2	0	0	0	0	0	0	0	1	1	1

7.4.3 Roadway Overtopping

Table 7-4 identifies roadway crossings and the related storm events that cause overtopping for existing and future land use conditions.

Table 7-4. – Summary of Roadway Overtopping Storm Events

Road Crossing	Tributary	Existing Overtopping Frequency	Future Overtopping Frequency
Interstate 85	Laurel Creek Mainstem	> 500	> 500
Rail Road Crossing	Laurel Creek Mainstem	> 500	> 500
Verdae Blvd.	Laurel Creek Mainstem	> 500	> 500
Woodruff Rd.	Laurel Creek Mainstem	> 500	> 500
Halton Rd.	Laurel Creek Mainstem	> 500	500
Transit Dr.	Laurel Creek Mainstem	25	10
Haywood Crossing	Laurel Creek Mainstem	10	10
Haywood Road	Laurel Creek Mainstem	10	10
Under Cinemas	Laurel Creek Mainstem	100	50
Woods Lake Rd.	Laurel Creek Mainstem	> 500	> 500
I-385	Laurel Creek Mainstem	> 500	> 500
Haywood Rd.	Tributary A	> 500	> 500
Haywood Crossing	Tributary B	50	50

7.5 FLOOD MITIGATION ALTERNATIVES

Once the existing flooding conditions were identified, site specific mitigation alternatives were developed to address specific flooding problems. A total of 7 alternatives were investigated at various levels of detail. The first level of investigation was to alter the hydrologic and/or hydraulic model in a coarse fashion to see if removing a culvert, enlarging a channel, or significant storage of runoff would beneficially reduce flooding. If the coarse changes in the models produced a beneficial change in the flooding impacts, then the alternative was pursued to the next level of detail. If the coarse changes did not produce any significant benefit and if there was no other reasonable alternative available at that location, then the findings were noted and the alternative was dropped from further consideration.

If the coarse analysis indicated beneficial results, the alternative was then held for more detailed analysis to determine if it produced a significant reduction in flooding damages as calculated in the benefit portion of the Benefit/Cost analysis. Here again, if significant benefits were not achieved, the alternative was not pursued beyond this point. If significant benefits were achieved, a cost was determined for the alternative and a full Benefit/Cost analysis was performed. Table 7.5 lists in priority order based on B/C ratio, those alternatives that were carried through to full analysis. This prioritized list may change once intangible factors are considered in the analysis.

Table 7.5 – Proposed Alternatives Prioritized by Benefit/Cost Ratio

Alternative Number	Alternative Location	Benefit/Cost Ratio
1	Transit Drive Culvert Upgrade	0.826
2	Transit Drive and Haywood Crossing Culvert Upgrades	0.420
3	Transit Drive, Haywood Crossing, and Haywood Road Culvert Upgrades	0.143

7.6 SUMMARY OF ALTERNATIVES

Table 7.6 summarizes the findings for all mitigation alternatives considered. Following this table is a more detailed discussion of the alternatives. Figures 7-1 and 7-2 show the location of each of the alternatives.

Table 7.6 – Summary of Alternatives

Alternative Number	Alternative Description
1	Add 2 additional 8-ft. diameter CMPs to the existing 8-ft. CMP at Transit Dr.
2	Add 2 additional 8-ft. diameter CMPs to the existing 8-ft. CMP at Transit Dr., and add 1 additional 10-ft diameter CMP to the existing 8-ft. CMP at Haywood Crossing
3	Add 2 additional 8-ft. diameter CMPs to the existing 8-ft. CMP at Transit Dr., add 1 additional 10-ft diameter CMP to the existing 8-ft. CMP at Haywood Crossing, and add 1 additional 8-ft. diameter CMP to the existing 8-ft. CMP under Haywood Rd.

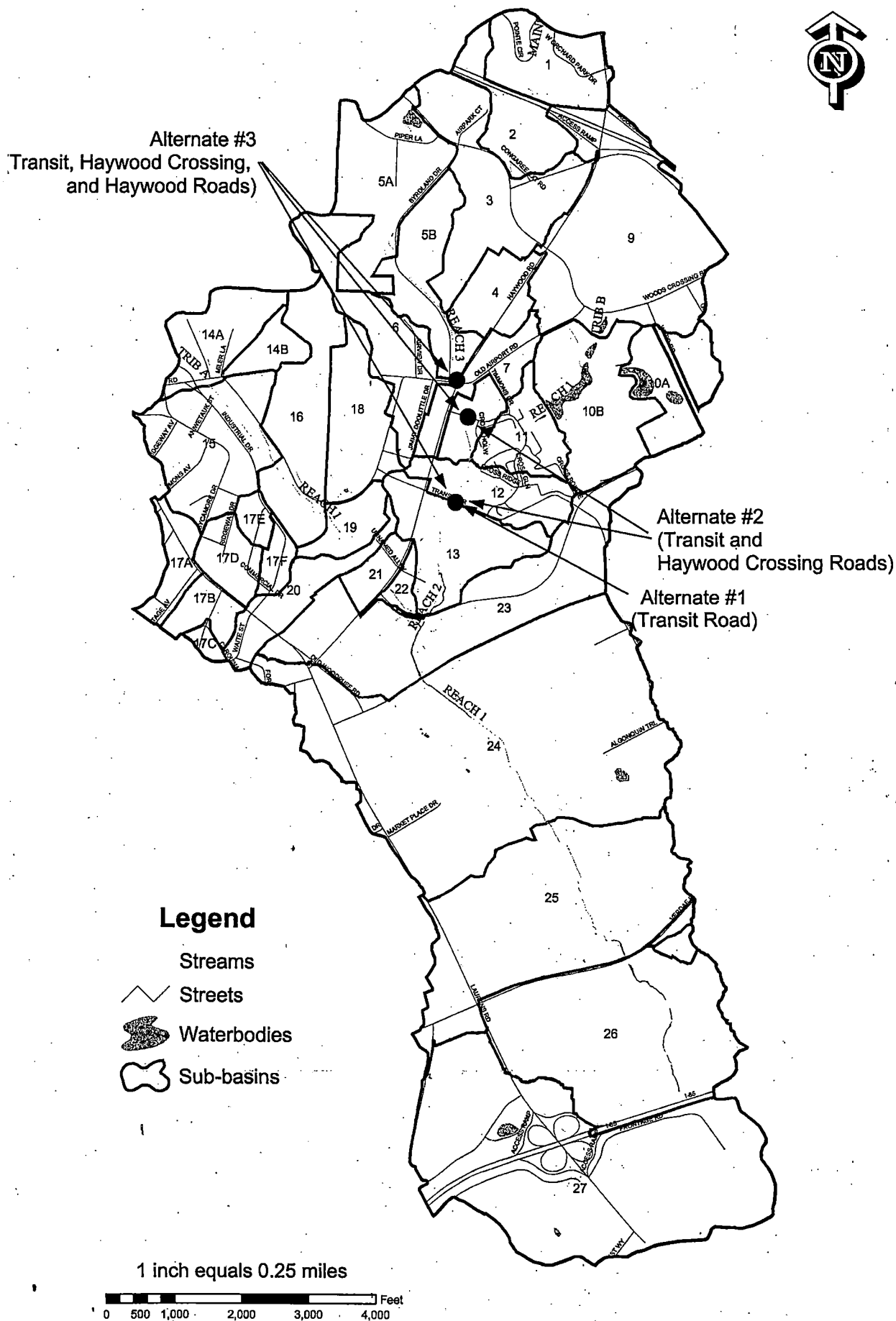


Figure 7-1. Map Showing Locations of Alternatives

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Alternative #1

Location: Transit Drive

Description: Alleviate upstream flooding due to water backing up behind the road crossing culvert.

Alternative: Add two (2) additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP.

- This improvement benefits structure 3 (1-16 Cross Hollow Drive).
- The primary flooding benefit would be the removal of structure 3's foundation from the 25-year flood and safeguarding it from the 100-year flood.
- This improvement would allow the Transit Drive culvert to pass the 25-year storm event without overtopping.

Present Value Benefit: \$155,339

Cost Estimate: \$188,000

Benefit/Cost Ratio: 0.826

The following structures will be positively affected by the culvert upgrade.

Structure	Existing Conditions		Alternative Conditions		PV Benefits
	Annual Damage \$	FF Flood Freq	Annual Damage \$	FF Flood Freq	
3	\$11,895.86	>500	\$244.03	> 500	\$155,338.88

City of Greenville, SC
Stormwater Master Planning
Project Intangibles Evaluation Form

Project Name: Alternative #1
Project Location: Transit Drive
Prepared By: Julie Arrowood
Date: 07/09/01

1. Safety
Direct Public Endangerment - yes-20, no-0 0
Restriction of Emergency Access - yes-15, no-0 0
Impact on Critical Structure(s) - yes-15, no-0 0
Impact on Street System(s) - yes-15, no-0 0

2. Property Damage
Primary Structure(s): (rate each structure and record total) 2
 Major (greater than 20% of structure value) 10
 Moderate (between 10 and 20% of structure value) 5
 Minor (less than 10% of structure value) 2
Secondary Structure(s): (rate each structure and record total) 0
 Major (greater than 20% of structure value) 4
 Moderate (between 10 and 20% of structure value) 2
 Minor (less than 10% of structure value) 1
Site Improvements: (rate significant improvements and record total) 1
 Major (greater than 20% of improvement value) 4
 Moderate (between 10 and 20% of improvement value) 2
 Minor (less than 10% of improvement value) 1

3. Frequency of flooding: 6
 2-Year event 10
 10-Year event 8
 25-Year event 6
 50-Year event 4
 100-Year event 2

4. Public Inconvenience: 0
 Major (Public services reduced or delayed more than 8 hours) 10
 Moderate (Public services reduced or delayed 2 to 8 hours) 6
 Minor (Public services reduced or delayed less than 2 hour) 1

5. Environmental Impacts

Flora and Fauna:

Major (Habitat destroyed, years to re-establish)	5	<u>1</u>
Moderate (Habitat impaired, more than 1 year to re-establish)	3	
Minor (Habitat impaired, less than 1 year to re-establish)	1	

Erosion/Sedimentation:

Major (More than 10 yd ³ of material moved)	5	<u>1</u>
Moderate (Between 1 and 10 yd ³ of material moved)	3	
Minor (Less than 1 yd ³ of material moved)	1	

Streambank Degradation:

Major (Structures endangered or large trees lost or more than 3' of bank lost)	5	<u>1</u>
Moderate (Structures or large trees threatened or 1' to 3' of bank lost)	3	
Minor (Noticeable loss (up to 1') of streambank)	1	

Public Health Hazards:

Major (Public/environmental health endangered)	5	<u>0</u>
Moderate (Public/environmental health threatened)	3	
Minor (Public/environmental health at risk)	1	

6. Public Sensitivity:

Major (More than 20 complaints)	20	<u>5</u>
Moderate (Between 5 and 20 complaints)	10	
Minor (Less than 5 complaints)	5	

7. Years on Priority List:

Add 5 points for each year that the project has been identified by the City as a valid stormwater management project.		<u>0</u>

8. Negative Off-site Impacts of performing the mitigation project:

Major (Buildings/structures impacted adversely impacted)	-20	<u>0</u>
Moderate (Detached buildings/infrastructure adversely impacted)	-10	
Minor (Increased flood elevation, upstream or downstream)	-5	

Total of Points: 17

Special Needs or Considerations

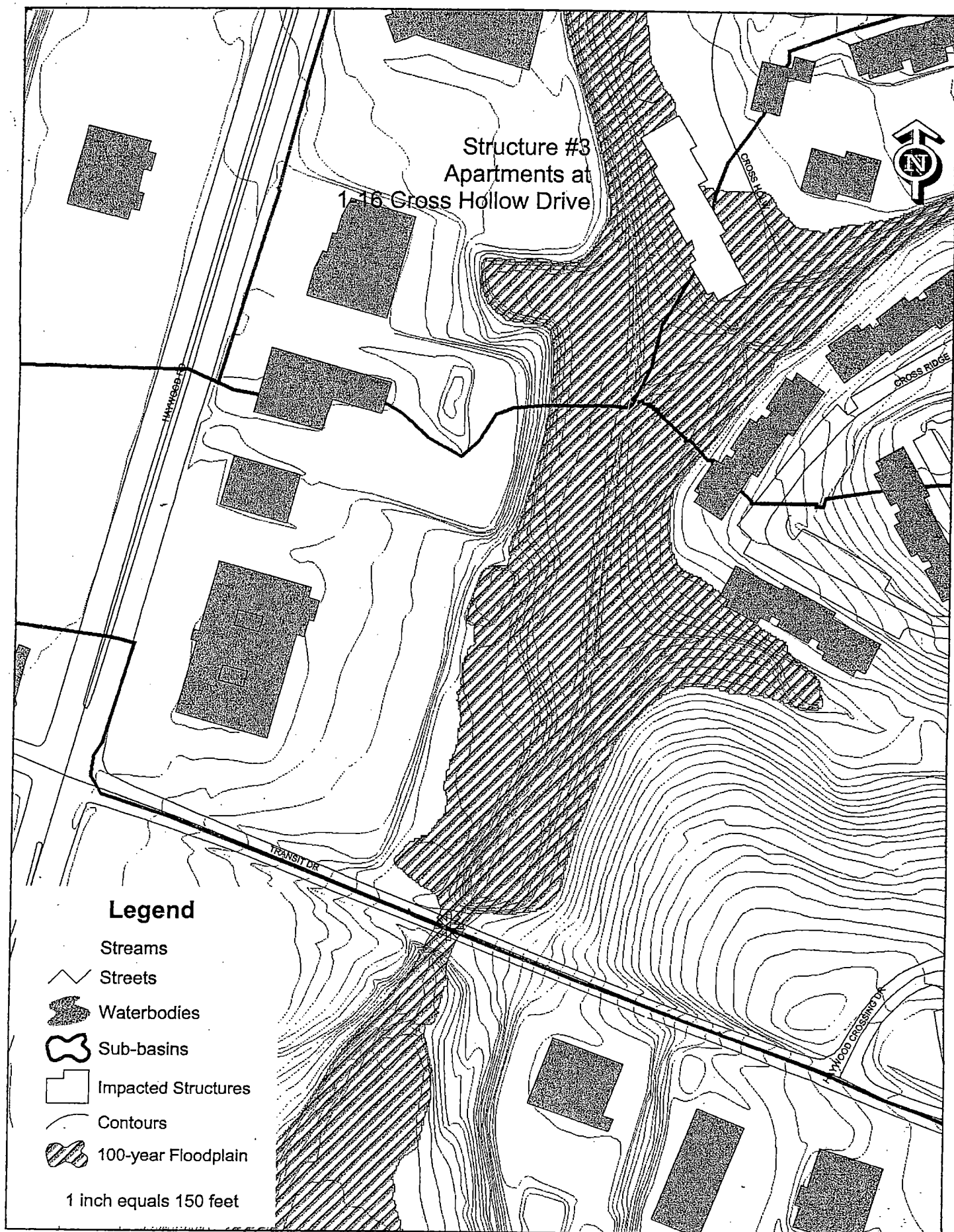


Figure 7-3. Map Showing Alternative #1- Transit Road Culvert

Alternative #2

Location: Transit Drive and Haywood Crossing

Description: Alleviate upstream flooding due to water backing up behind both road crossings.

Alternative: Add two (2) additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP at Transit Drive and add one (1) 10-ft. diameter CMP to the existing 8-ft. diameter CMP at Haywood Crossing.

- This improvement benefits structures 1 (1 Byrdland Drive), 2 (470 Haywood Road), and 3 (1-16 Cross Hollow Drive).
- The primary flooding benefit would be safeguarding the foundations of structures 2 and 3 from the 100-year flood.
- This improvement would allow the Transit Drive and Haywood Crossing culverts to pass the 25-year storm event without overtopping.
- There is no primary finished floor flooding benefit from this alternative.

Present Value Benefit: \$155,567

Cost Estimate: \$370,000

Benefit/Cost Ratio: 0.420

The following structures will be positively affected by the culvert upgrade.

Structure	Existing Conditions		Alternative Conditions		PV Benefits
	Annual Damage \$	FF Flood Freq	Annual Damage \$	FF Flood Freq	
1	\$1,776.10	9	\$1,758.98	9	\$228.22
2	\$25.61	>500	\$25.61	>500	\$0.00
3	\$11,895.86	>500	\$244.03	> 500	\$155,338.88

City of Greenville, SC

Stormwater Master Planning

Project Intangibles Evaluation Form

Project Name: Alternative #2
 Project Location: Transit Drive and Haywood Crossing
 Prepared By: Julie Arrowood
 Date: 7/09/01

1. Safety

Direct Public Endangerment - yes-20, no-0	5	
Restriction of Emergency Access - yes-15, no-0	5	
Impact on Critical Structure(s) - yes-15, no-0	0	
Impact on Street System(s) - yes-15, no-0	5	

2. Property Damage

Primary Structure(s): (rate each structure and record total)		<u>2 x 2 = 4</u>
Major (greater than 20% of structure value)	10	
Moderate (between 10 and 20% of structure value)	5	
Minor (less than 10% of structure value)	2	
Secondary Structure(s): (rate each structure and record total)		<u>0</u>
Major (greater than 20% of structure value)	4	
Moderate (between 10 and 20% of structure value)	2	
Minor (less than 10% of structure value)	1	
Site Improvements: (rate significant improvements and record total)		<u>2 x 1 = 2</u>
Major (greater than 20% of improvement value)	4	
Moderate (between 10 and 20% of improvement value)	2	
Minor (less than 10% of improvement value)	1	

3. Frequency of flooding:

2-Year event	10	
10-Year event	8	
25-Year event	6	
50-Year event	4	
100-Year event	2	
		<u>6</u>

4. Public Inconvenience:

Major (Public services reduced or delayed more than 8 hours)	10	
Moderate (Public services reduced or delayed 2 to 8 hours)	6	
Minor (Public services reduced or delayed less than 2 hour)	1	
		<u>1</u>

5. Environmental Impacts

Flora and Fauna:

Major (Habitat destroyed, years to re-establish)	5	<u>1</u>
Moderate (Habitat impaired, more than 1 year to re-establish)	3	
Minor (Habitat impaired, less than 1 year to re-establish)	1	

Erosion/Sedimentation:

Major (More than 10 yd ³ of material moved)	5	<u>1</u>
Moderate (Between 1 and 10 yd ³ of material moved)	3	
Minor (Less than 1 yd ³ of material moved)	1	

Streambank Degradation:

Major (Structures endangered or large trees lost or more than 3' of bank lost)	5	<u>1</u>
Moderate (Structures or large trees threatened or 1' to 3' of bank lost)	3	
Minor (Noticeable loss (up to 1') of streambank)	1	

Public Health Hazards:

Major (Public/environmental health endangered)	5	<u>0</u>
Moderate (Public/environmental health threatened)	3	
Minor (Public/environmental health at risk)	1	

6. Public Sensitivity:

Major (More than 20 complaints)	20	<u>5</u>
Moderate (Between 5 and 20 complaints)	10	
Minor (Less than 5 complaints)	5	

7. Years on Priority List:

Add 5 points for each year that the project has been identified by the City as a valid stormwater management project.		<u>0</u>

8. Negative Off-site Impacts of performing the mitigation project :

Major (Buildings/structures impacted adversely impacted)	-20	<u>0</u>
Moderate (Detached buildings/infrastructure adversely impacted)	-10	
Minor (Increased flood elevation, upstream or downstream)	-5	

Total of Points: 36

Special Needs or Considerations

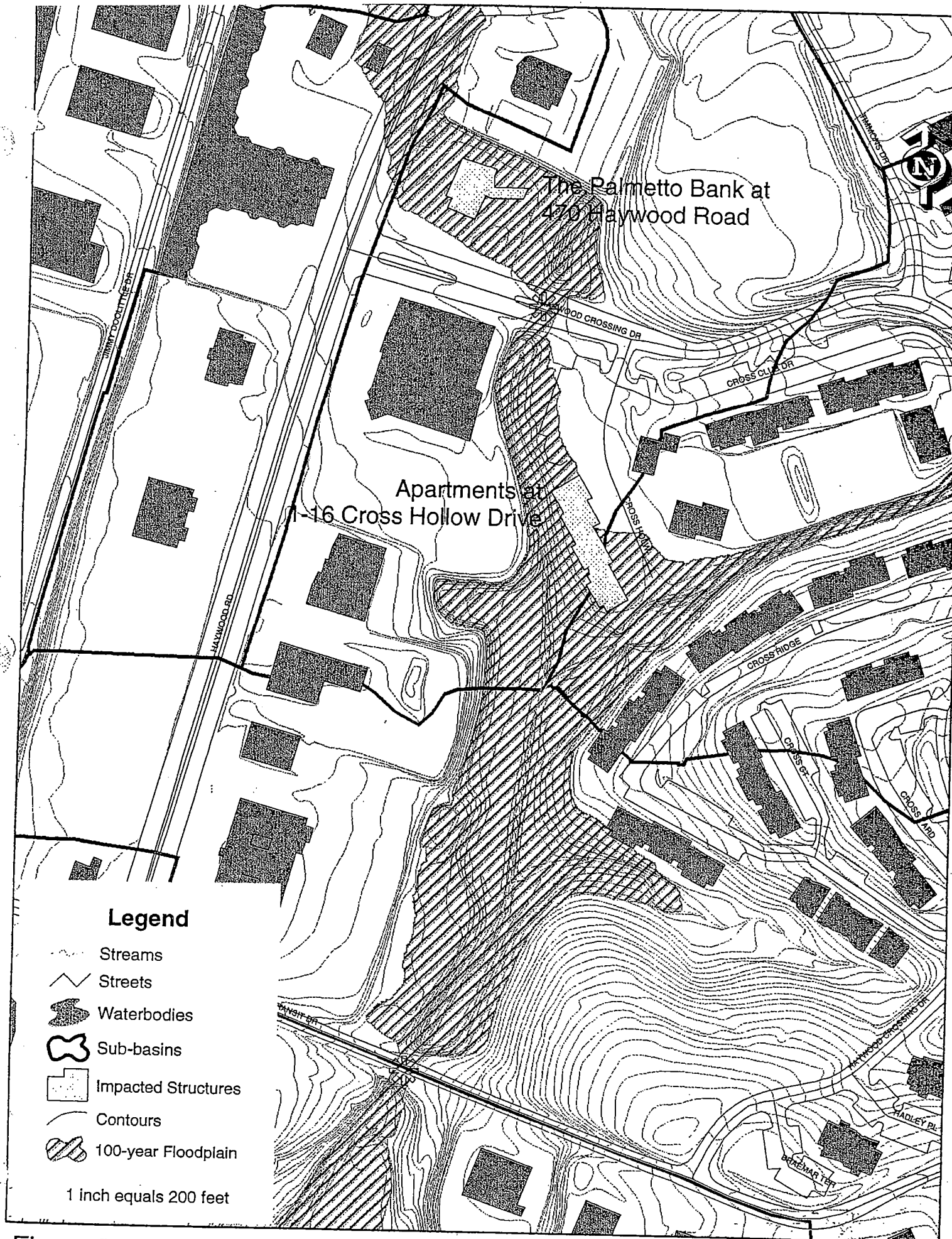


Figure 7-4: Map Showing Alt #2- Transit and Haywood Crossing Culverts
000175

Alternative #3

Location: Transit Drive, Haywood Crossing, and Haywood Road

Description: Alleviate upstream and downstream flooding due to water backing up behind the three culvert crossings.

Alternative: Add two (2) additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP at Transit Drive, add one (1) 10-ft. diameter CMP to the existing 8-ft. diameter CMP at Haywood Crossing, and add an additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP at Haywood Road.

- This improvement benefits structures 1 (1 Byrdland Drive), 2 (470 Haywood Road), and 3 (1-16 Cross Hollow Drive).
- The primary benefit from this alternative is removing the finished floor of structure 1 from the 10- and 25- year flood events.
- Other benefits include safeguarding the foundations of structures 2 and 3 from the 100-year flood.
- This improvement would allow the Transit Drive, Haywood Crossing, and Haywood Road culverts to pass the 25-year storm event without overtopping.

Present Value Benefit: \$173,572

Cost Estimate: \$1,215,000

Benefit/Cost Ratio: 0.143

The following structures will be positively affected by the culvert upgrade.

Structure	Existing Conditions		Alternative Conditions		PV Benefits
	Annual Damage \$	FF Flood Freq.	Annual Damage \$	FF Flood Freq.	
1	\$1,776.10	9	\$408.47	45	\$18,232.82
2	\$25.61	>500	\$25.61	>500	\$0.00
3	\$11,895.86	>500	\$244.03	> 500	\$155,338.88

City of Greenville, SC

Stormwater Master Planning

Project Intangibles Evaluation Form

Project Name: Alternative #3
Project Location: Transit Dr., Haywood Crossing, Haywood Rd.
Prepared By: Julie Arrowood
Date: 7/09/01

1. Safety

Direct Public Endangerment - yes-20, no-0	20	
Restriction of Emergency Access - yes-15, no-0	15	
Impact on Critical Structure(s) - yes-15, no-0	0	
Impact on Street System(s) - yes-15, no-0	15	

2. Property Damage

Primary Structure(s): (rate each structure and record total)		
Major (greater than 20% of structure value)	10	14 $1 \times 10 = 10$
Moderate (between 10 and 20% of structure value)	5	
Minor (less than 10% of structure value)	2	$2 \times 2 = 4$
Secondary Structure(s): (rate each structure and record total)		
Major (greater than 20% of structure value)	4	0
Moderate (between 10 and 20% of structure value)	2	
Minor (less than 10% of structure value)	1	
Site Improvements: (rate significant improvements and record total)		
Major (greater than 20% of improvement value)	4	$3 \times 1 = 3$
Moderate (between 10 and 20% of improvement value)	2	
Minor (less than 10% of improvement value)	1	

3. Frequency of flooding:

2-Year event	10	6
10-Year event	8	
25-Year event	6	
50-Year event	4	
100-Year event	2	

4. Public Inconvenience:

Major (Public services reduced or delayed more than 8 hours)	10	6
Moderate (Public services reduced or delayed 2 to 8 hours)	6	
Minor (Public services reduced or delayed less than 2 hour)	1	

5. Environmental Impacts

Flora and Fauna:

Major (Habitat destroyed, years to re-establish)	5	<u>1</u>
Moderate (Habitat impaired, more than 1 year to re-establish)	3	
Minor (Habitat impaired, less than 1 year to re-establish)	1	

Erosion/Sedimentation:

Major (More than 10 yd ³ of material moved)	5	<u>1</u>
Moderate (Between 1 and 10 yd ³ of material moved)	3	
Minor (Less than 1 yd ³ of material moved)	1	

Streambank Degradation:

Major (Structures endangered or large trees lost or more than 3' of bank lost)	5	<u>1</u>
Moderate (Structures or large trees threatened or 1' to 3' of bank lost)	3	
Minor (Noticeable loss (up to 1') of streambank)	1	

Public Health Hazards:

Major (Public/environmental health endangered)	5	<u>3</u>
Moderate (Public/environmental health threatened)	3	
Minor (Public/environmental health at risk)	1	

6. Public Sensitivity:

Major (More than 20 complaints)	20	<u>10</u>
Moderate (Between 5 and 20 complaints)	10	
Minor (Less than 5 complaints)	5	

7. Years on Priority List:

Add 5 points for each year that the project has been identified by the City as a valid stormwater management project.		<u>25</u>

8. Negative Off-site Impacts of performing the mitigation project :

Major (Buildings/structures impacted adversely impacted)	-20	<u>0</u>
Moderate (Detached buildings/infrastructure adversely impacted)	-10	
Minor (Increased flood elevation, upstream or downstream)	-5	

Total of Points: 120

Special Needs or Considerations

7.7 ROAD OVERTOPPING ALTERNATIVES

Each road crossing that was not able to pass the 25-year storm event, when using existing and future landuse conditions, was analyzed to determine the modification required in order to pass the 25-year storm. Table 7-7 listed these required modifications and their estimated construction cost.

7.8 PIPE SYSTEM ALTERNATIVES

There were three pipe systems within the watershed, Haywood Road (mainstem), Basin 17 (Laurens Drive/Industrial Drive), and Basin 14 (Airport Road), that were evaluated using XP-SWMM. The Haywood Road system was included in Section 7.5 (Flood Mitigation Alternatives) during the Benefit / Cost analysis associated with structure flooding along the mainstem of Laurel Creek. The pipe systems in Basin 14 and Basin 17 were evaluated for their capability of passing the 10-year storm event. Both of these systems were not able to pass the 10-year design criteria, therefore alternatives are listed below that will bring these systems up to City standards.

Basin 17 is a pipe system that runs Southeast along Laurens Road and then turns Northeast towards Commercial Drive, Industrial Drive and finally outfalling into Tributary A. The existing system, which runs under several buildings, has known flooding problems, with Commercial Drive turning into a pond during large storm events. The recommended alternative in order to bring this system up to City Standards is to upsize the 15-inch pipe along Laurens Road with a 36-inch pipe and then run a new system (48-inch top, 54-inch middle, and a 60-inch bottom) down to the outfall. Figure 7-6 shows the existing system and the location of the recommended improvements. Table 7-8 shows the water surface elevations and Table 7-9 shows the flooding depths along the system for the existing conditions and with the recommended improvements in place. The estimated construction costs and design fees for this alternative is \$775,000.

Basin 14 is a pipe system that runs along Airport Road and then outfalls at the top of Tributary A. The existing system has known flooding problems at the top of the system where the ditch backs up and then overtops the road. There were three alternatives analyzed to bring this system up to City Standards. The first alternative is to upsize the 24-inch pipe along Airport Road with a 36-inch pipe, raise the headwall above the roadway elevation, and then run a parallel 36-inch pipe under Airport Road down to the outfall. This alternative requires raising the headwall above the roadway elevation to help pass the 10-year storm. The second alternative is similar to the first which is to upsize the 24-inch pipe along Airport Road with a 42-inch pipe and then run a parallel 36-inch pipe under Airport Road down to the outfall. The last alternative is to upsize the 24-inch pipe along Airport Road with a 42-inch pipe, and upsize the 48-inch pipe under Airport Road with a 60-inch pipe down to the outfall. Figures 7-7 and 7-8 show the existing system and the location of the three Alternatives. Table 7-10, Table 7-11, and Table 7-12 show the water surface elevations and the flooding depths along the system for the existing conditions and with each Alternative in place. The estimated construction costs and design fees for Alternative 1 is \$90,000, Alternative 2 is \$95,000 and Alternative 3 is \$130,000. The recommend Alternative is number 2.

Table 7-7. Haywood Basin Existing Conditions Culvet Change to Pass 25-year storm

Tributary Name	Street Name	Existing Overtop Event (yr)	Structure Modifications	Top of Road Elevation	Water Surface Elevation after modifications (25-yr storm event)	Costs
Mainstem	Interstate 85	> 500	None	918.00	876.35	--
Mainstem	Rail Road Bridge	> 500	None	896.00	882.98	--
Mainstem	Verdae Blvd.	> 500	None	900.73	888.8	--
Mainstem	Woodruff Road	> 500	None	915.70	911.18	--
Mainstem	Halton Road	> 500	None	924.79	916.06	--
Mainstem	Transit Drive	25	Add one 8' CMP to existing 8' CMP	942.53	937.34	\$130,000
Mainstem	Haywood Crossing	10	Add one 10' CMP to existing 8' CMP	949.66	944.92	\$180,000
Mainstem	Haywood Road	10	Add one 8' CMP to existing 8' CMP	951.70	953.88	\$850,000
Mainstem	Under Cinema	100	None	984.00	980.97	--
Mainstem	Woods Lake Road	> 500	None	1009.84	1007.84	--
Mainstem	Interstate 385	> 500	None	1070.00	1047.5	--
Tributary A	Halton Road	> 500	None	925.16	917.1	--
Tributary B	Haywood Crossing	50	None	960.86	957.48	--

000181

TABLE 7-8. BASIN 17 Pipe System Results (WSEL)

Link Description	Link ID	US Node ID	Pipe Dia (ft)	US Invert	New / Modified US Invert	Overtopping / Surcharge	Water Surface Elevations (ft)				
							Existing Conditions			Alternative	
							2-YR	10-YR	25-YR	10-YR	25-YR
Laurens Road (exist / new)	122	104	1.25 / 3.0	975.77	973.27	979.60	979.79	979.87	979.91	979.60	979.92
New System	223	82	4.0	—	969.29	977.04	—	—	—	974.06	977.11
New System	225	222	4.0	—	965.00	971.50	—	—	—	970.48	971.75
New System	227	224	4.5	—	962.00	969.60	—	—	—	968.06	969.67
New System	229	226	4.5	—	957.00	970.00	—	—	—	963.34	964.70
New System	231	228	4.5	—	956.25	966.00	—	—	—	961.00	962.12
New System	233	230	4.5	—	952.50	960.00	—	—	—	957.70	958.65
New System	235	232	5.0	—	949.00	958.00	—	—	—	953.36	954.23
New System	236	234	5.0	—	945.00	952.00	—	—	—	948.75	949.12
New Connector Pipe	249	63	3.0	—	951.74	958.00	—	—	—	956.86	957.85
Wembley Road	134	98	1.25	985.34	—	988.40	985.90	988.47	988.49	988.48	988.51
Wembley Road	135	93	1.25	974.97	—	Sealed	978.49	980.84	980.90	980.43	980.58
Laurens Road	136	92	1.25	972.91	—	977.00	977.59	977.78	977.85	977.19	977.40
Laurens Road	137	81	1.5	972.45	—	Sealed	977.59	977.78	977.85	974.83	977.24
Laurens Road	123	82	2.0	971.79	—	977.04	977.59	977.78	977.85	974.06	977.11
Original System to Outfall	124	83	2.0	971.63	—	977.33	977.41	977.55	977.60	—	—
Original System to Outfall	125	84	2.0	970.55	—	974.05	974.28	974.50	974.73	—	—
Original System to Outfall	126	85	2.0	970.13	—	973.30	973.85	974.48	974.76	—	—
Original System to Outfall	127	80	2.0	968.63	—	971.60	971.88	973.98	974.74	—	—
Original System to Outfall	128	79	2.0	968.28	—	971.40	971.66	974.00	974.74	—	—
Original System to Outfall	129	78	2.0	965.22	—	969.60	971.64	974.01	974.74	—	—
Original System to Outfall	138	77	2.5	964.54	—	969.60	971.45	973.98	974.72	—	—
Original System to Outfall	139	69	3.0	954.78	—	960.16	959.82	960.19	960.21	956.85	958.00
Original System to Outfall	140	63	3.0	951.74	—	960.30	957.95	958.27	958.36	—	—
Low Point on Commercial Drive	—	224	—	—	—	969.60	971.64	974.01	974.74	968.06	969.67
Industrial Drive	144	65	2.0	955.83	—	960.33	960.37	960.51	960.55	960.43	960.64

000182

TABLE 7-9. BASIN 17 Pipe System Results (Flooding Depths)

Link Description	Link ID	US Node ID	Pipe Dia (ft)	US invert	New / Modified US Invert	Overtopping / Surcharge	Flooding Depths (ft)				
							Positive Numbers Indicate Flooding				
							Existing Conditions			Alternative	
							2-YR	10-YR	25-YR	10-YR	25-YR
Laurens Road (exist / new)	122	104	1.25 / 3.0	975.77	973.27	979.60	0.19	0.27	0.31	0.00	0.32
New System	223	82	4.0	—	969.29	977.04	—	—	—	-2.98	0.07
New System	225	222	4.0	—	965.00	971.50	—	—	—	-1.02	0.25
New System	227	224	4.5	—	962.00	969.60	—	—	—	-1.54	0.07
New System	229	226	4.5	—	957.00	970.00	—	—	—	-6.66	-5.30
New System	231	228	4.5	—	956.25	966.00	—	—	—	-5.00	-3.88
New System	233	230	4.5	—	952.50	960.00	—	—	—	-2.30	-1.35
New System	235	232	5.0	—	949.00	958.00	—	—	—	-4.64	-3.77
New System	236	234	5.0	—	945.00	952.00	—	—	—	-3.25	-2.88
New Connector Pipe	249	63	3.0	—	951.74	958.00	—	—	—	-1.14	-0.15
Wembley Road	134	98	1.25	985.34	—	988.40	-2.50	0.07	0.09	0.08	0.11
Wembley Road	135	93	1.25	974.97	—	Sealed	—	—	—	—	—
Laurens Road	136	92	1.25	972.91	—	977.00	0.59	0.78	0.85	0.19	0.40
Laurens Road	137	81	1.5	972.45	—	Sealed	—	—	—	—	—
Laurens Road	123	82	2.0	971.79	—	977.04	0.55	0.74	0.81	-2.98	0.07
Original System to Outfall	124	83	2.0	971.63	—	977.33	0.08	0.22	0.27	—	—
Original System to Outfall	125	84	2.0	970.55	—	974.05	0.23	0.45	0.68	—	—
Original System to Outfall	126	85	2.0	970.13	—	973.30	0.55	1.18	1.46	—	—
Original System to Outfall	127	80	2.0	968.63	—	971.60	0.28	2.38	3.14	—	—
Original System to Outfall	128	79	2.0	968.28	—	971.40	0.26	2.60	3.34	—	—
Original System to Outfall	129	78	2.0	965.22	—	969.60	2.04	4.41	5.14	—	—
Original System to Outfall	138	77	2.5	964.54	—	969.60	1.85	4.38	5.12	—	—
Original System to Outfall	139	69	3.0	954.78	—	960.16	-0.34	0.03	0.05	-3.31	-2.16
Original System to Outfall	140	63	3.0	951.74	—	960.30	-2.35	-2.03	-1.94	—	—
Low Point on Commercial Drive	—	224	—	—	—	969.60	2.04	4.41	5.14	-1.54	0.07
Industrial Drive	144	65	2.0	955.83	—	960.33	0.04	0.18	0.22	0.10	0.31

000183

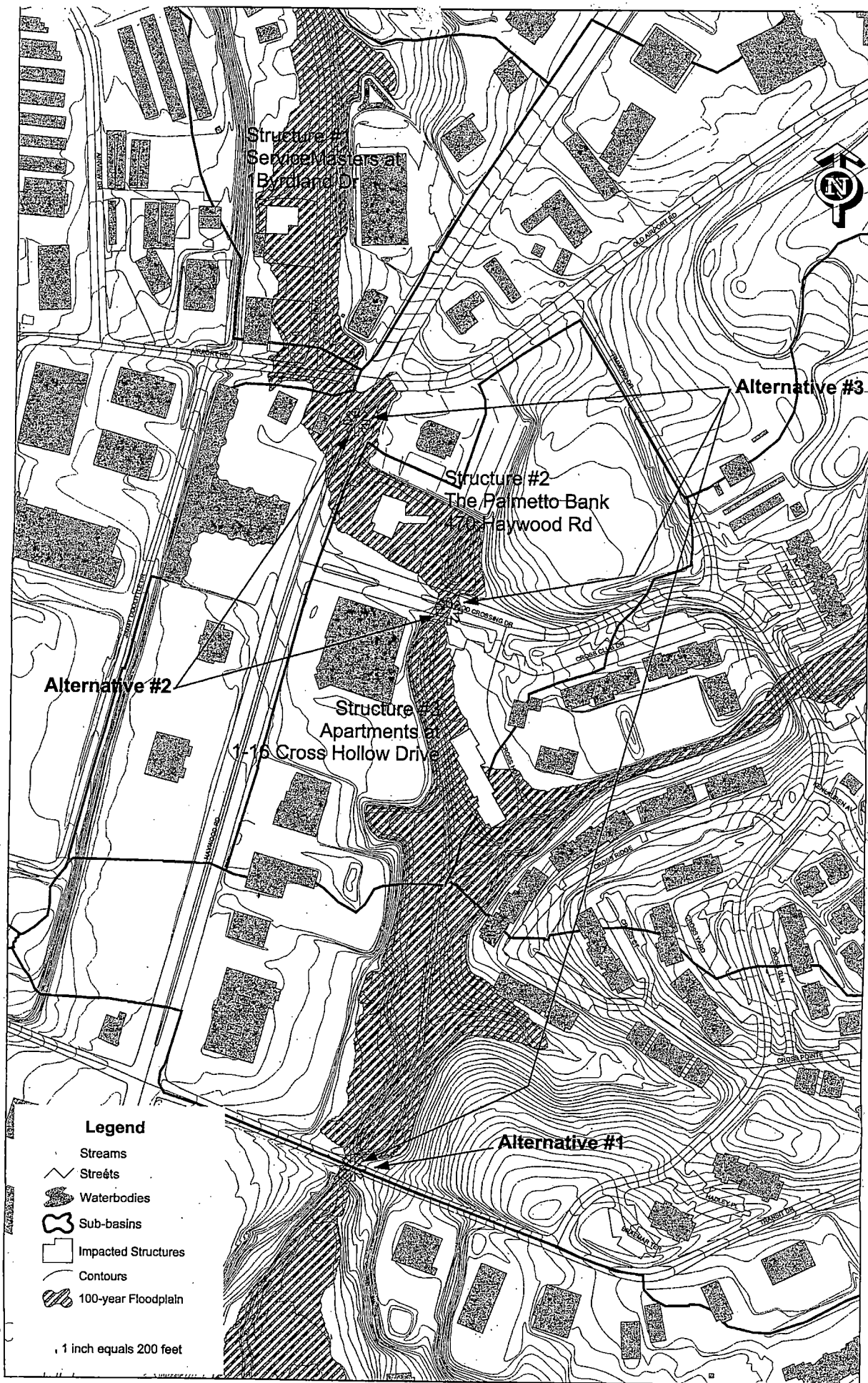


Figure 7-2. Map Showing Impacted Structures

[illegible]

200 0 200 Feet



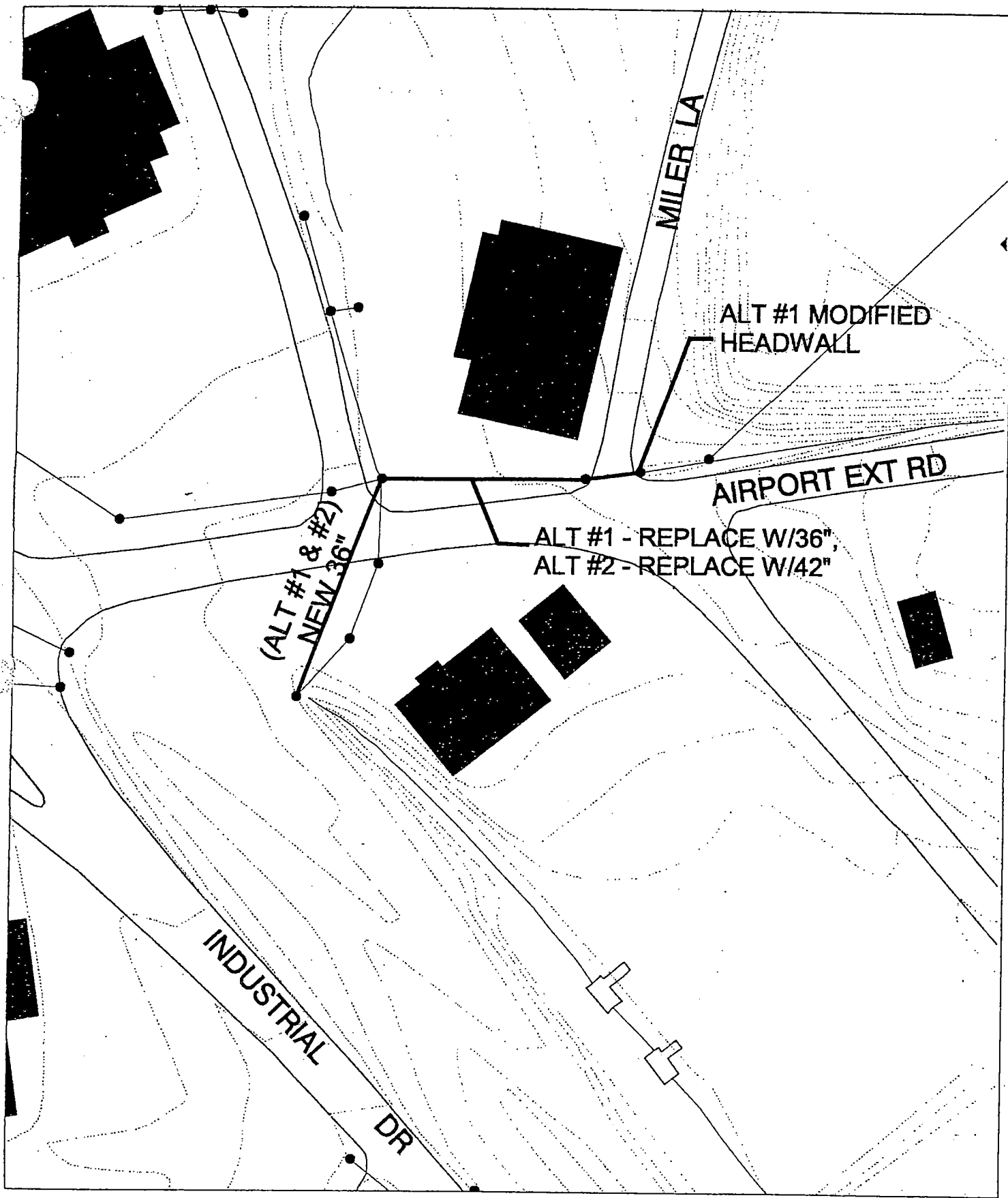


FIGURE 7-7. BASIN 14 - ALTERNATIVES #1 & #2

100 0 100 Feet

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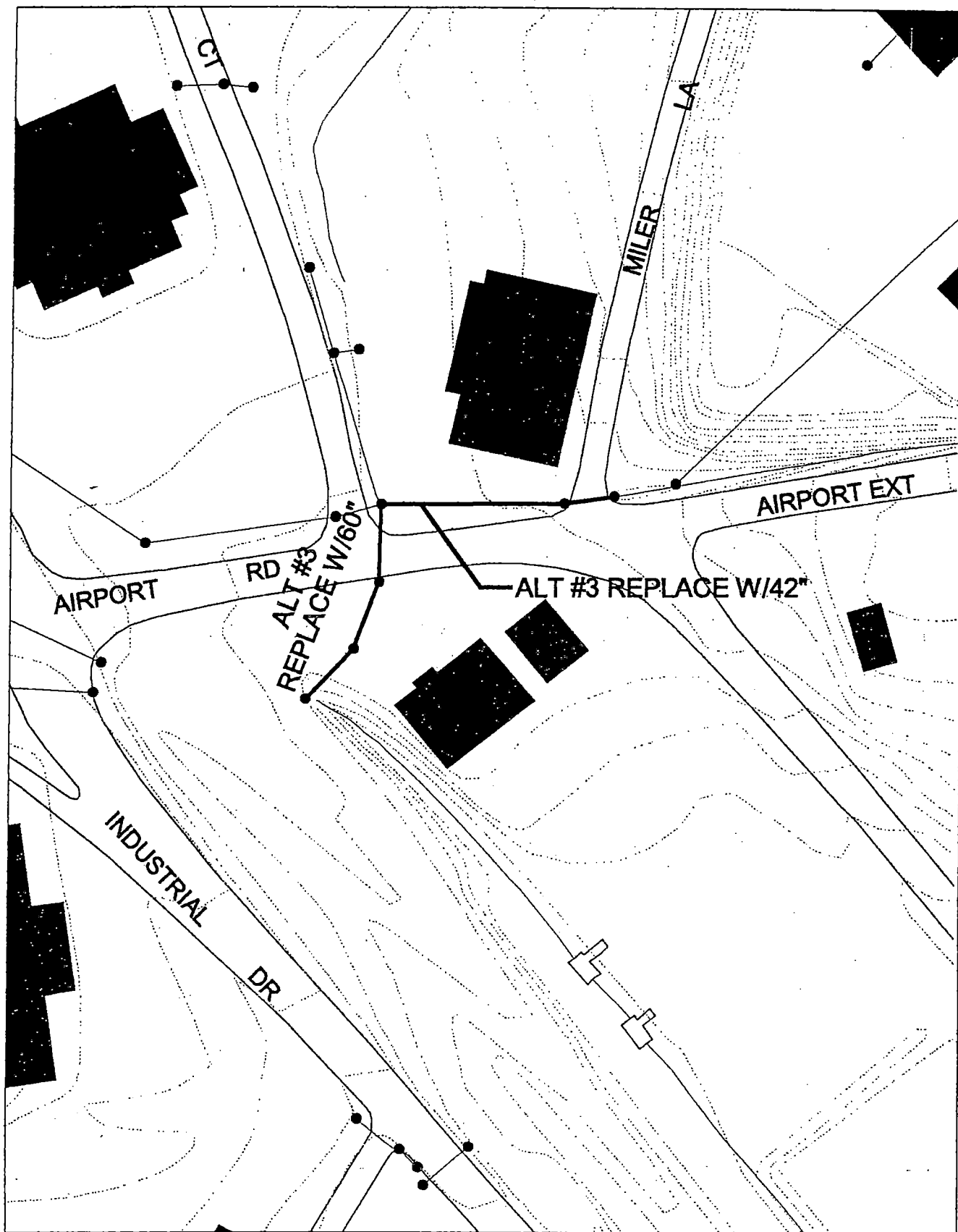


FIGURE 7-8. BASIN 14 - ALTERNATIVE #3

100 0 100 Feet



000187

TABLE 7-10. BASIN 14 Pipe System Results - Alternative 1

Description	Link ID	US invert	New / Modified US Invert	Existing Overtopping / Surcharge	Alt 1 Overtopping / Surcharge	Water Surface Elevations (ft)				
						Existing Conditions			Alternative 1	
						2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	---	980.39	980.71	980.85	980.93	980.97
Pipe under Driveway	226	975.71	973.36	978.21	978.50	978.38	978.51	978.57	978.25	978.84
Down to Junction	227	974.44	972.68	978.04	---	977.11	977.82	978.04	977.54	978.04
New 36 in	246	---	970.36	976.36	---	---	---	---	976.10	977.12
Under Airport Ext	228	970.36	---	976.36	---	974.23	976.36	977.10	976.10	977.12
Under Airport Ext	229	970.11	---	975.66	---	973.37	974.94	976.32	974.78	976.13
Under Airport Ext	230	969.27	---	975.82	---	972.45	973.53	974.29	973.41	974.15
DS Ditch	242	969.04	---	---	---	970.84	971.29	971.48	971.39	971.56
DS Ditch	244	968.85	---	---	---	970.51	970.96	971.14	970.96	971.11
						Flooding Depths (ft)				
						Positive Numbers Indicate Flooding				
Description	Link ID	US invert	New / Modified US Invert	Existing Overtopping / Surcharge	Alt 1 Overtopping / Surcharge	Existing Conditions			Alternative 1	
						2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	---	---	---	---	---	---
Pipe under Driveway	226	975.71	973.36	978.21	978.50	0.17	0.30	0.36	-0.25	0.34
Down to Junction	227	974.44	972.68	978.04	978.04	-0.93	-0.22	0.00	-0.50	0.00
New 36 in	246	---	970.36	976.36	976.36	---	---	---	-0.26	0.76
Under Airport Ext	228	970.36	---	976.36	976.36	-2.13	0.00	0.74	-0.26	0.76
Under Airport Ext	229	970.11	---	975.66	975.66	-2.29	-0.72	0.66	-0.88	0.47
Under Airport Ext	230	969.27	---	975.82	975.82	-3.37	-2.29	-1.53	-2.41	-1.67
DS Ditch	242	969.04	---	---	---	---	---	---	---	---
DS Ditch	244	968.85	---	---	---	---	---	---	---	---

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TABLE 7-11. BASIN 14 Pipe System Results - Alternative 2

					Water Surface Elevations (ft)				
Description	Link ID	US invert	New / Modified US Invert	Overtopping / Surcharge	Existing Conditions			Alternative 2	
					2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	980.39	980.71	980.85	980.96	981.08
Pipe under Driveway	226	975.71	973.36	978.21	978.38	978.51	978.57	976.62	978.24
Down to Junction	227	974.44	972.68	978.04	977.11	977.82	978.04	975.73	977.32
New 36 in	246	---	970.36	976.36	---	---	---	974.28	975.36
Under Airport Ext	228	970.36	---	976.36	974.23	976.36	977.10	974.28	975.36
Under Airport Ext	229	970.11	---	975.66	973.37	974.94	976.32	973.43	974.35
Under Airport Ext	230	969.27	---	975.82	972.45	973.53	974.29	972.53	973.14
DS Ditch	242	969.04	---	---	970.84	971.29	971.48	971.39	971.63
DS Ditch	244	968.85	---	---	970.51	970.96	971.14	970.96	971.17
					Flooding Depths (ft) Positive Numbers Indicate Flooding				
Description	Link ID	US invert	New / Modified US Invert	Overtopping / Surcharge	Existing Conditions			Alternative 2	
					2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	---	---	---	---	---
Pipe under Driveway	226	975.71	973.36	978.21	0.17	0.30	0.36	-1.59	0.03
Down to Junction	227	974.44	972.68	978.04	-0.93	-0.22	0.00	-2.31	-0.72
New 36 in	246	---	970.36	976.36	---	---	---	-2.08	-1.00
Under Airport Ext	228	970.36	---	976.36	-2.13	0.00	0.74	-2.08	-1.00
Under Airport Ext	229	970.11	---	975.66	-2.29	-0.72	0.66	-2.23	-1.31
Under Airport Ext	230	969.27	---	975.82	-3.37	-2.29	-1.53	-3.29	-2.68
DS Ditch	242	969.04	---	---	---	---	---	---	---
DS Ditch	244	968.85	---	---	---	---	---	---	---

000189

TABLE 7-12. BASIN 14 Pipe System Results - Alternative 3

					Water Surface Elevations (ft)				
Description	Link ID	US invert	New / Modified US Invert	Overtopping / Surcharge	Existing Conditions			Alternative 3	
					2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	980.39	980.71	980.85	980.95	981.00
Pipe under Driveway	226	975.71	973.36	978.21	978.38	978.51	978.57	977.60	978.34
Down to Junction	227	974.44	972.68	978.04	977.11	977.82	978.04	976.88	977.69
New 36 in	246	---	---	976.36	---	---	---	---	---
Under Airport Ext	228	970.36	969.36	976.36	974.23	976.36	977.10	975.27	976.43
Under Airport Ext	229	970.11	969.26	975.66	973.37	974.94	976.32	974.43	975.21
Under Airport Ext	230	969.27	969.15	975.82	972.45	973.53	974.29	973.30	973.87
DS Ditch	242	969.04	---	---	970.84	971.29	971.48	971.39	971.61
DS Ditch	244	968.85	---	---	970.51	970.96	971.14	970.96	971.16
					Flooding Depths (ft) Positive Numbers Indicate Flooding				
Description	Link ID	US invert	New / Modified US Invert	Overtopping / Surcharge	Existing Conditions			Alternative 3	
					2-YR	10-YR	25-YR	10-YR	25-YR
Ditch along Airport Road	225	979.34	---	---	---	---	---	---	---
Pipe under Driveway	226	975.71	973.36	978.21	0.17	0.30	0.36	-0.61	0.13
Down to Junction	227	974.44	972.68	978.04	-0.93	-0.22	0.00	-1.16	-0.35
New 36 in	246	---	---	976.36	---	---	---	---	---
Under Airport Ext	228	970.36	969.36	976.36	-2.13	0.00	0.74	-1.09	0.07
Under Airport Ext	229	970.11	969.26	975.66	-2.29	-0.72	0.66	-1.23	-0.45
Under Airport Ext	230	969.27	969.15	975.82	-3.37	-2.29	-1.53	-2.52	-1.95
DS Ditch	242	969.04	---	---	---	---	---	---	---
DS Ditch	244	968.85	---	---	---	---	---	---	---

000190

7.9 PROPOSED ALTERNATIVES

The highest priority due to nuisance flooding is passing the 25-year storm under Haywood Road. The results of the alternatives show that if the culvert running under Haywood Road is upgraded, the culverts under Haywood Crossing and/or Transit Drive must be upgraded to prevent any backwater control at the outlet of the culvert under Haywood Road.

The recommended alternative to alleviate the flooding at Haywood Road is Alternative #3. Alternatives #1 and #2 help control downstream flooding problems, but do not significantly lower the water surface elevation upstream of Haywood Road.

Alternative #3 involves modifying the culverts at Transit Drive, Haywood Crossing, and Haywood Road. The recommendation involves adding two (2) additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP at Transit Drive, add one (1) 10-ft. diameter CMP to the existing 8-ft. diameter CMP at Haywood Crossing, and add an additional 8-ft. diameter CMP to the existing 8-ft. diameter CMP at Haywood Road.

The following are the intangible evaluation scores for each alternative and should be used for information and comparison only.

- Alternative 1 = 17
- Alternative 2 = 36
- Alternative 3 = 120

The intangible evaluation scores reinforce the recommendation of implementing Alternative #3 to alleviate flooding at Haywood Road.



The City of Greenville, S. C. 598

MEMORANDUM

DATE: February 3, 1989

TO: Ron Dickerson
Zoning Administrator

FROM: Cathy Ball *CB*
Civil Engineer

RE: Track's Music/Video Store Haywood Road

To provide proper maintenance for a 96" storm drain located on the above mentioned site, our department is requesting a 25' easement 12.5 foot from the centerline of the pipe.

To achieve this easement the proposed building must be relocated from previously submitted plans.

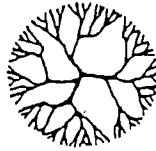
If any additional information is necessary please let me know.

m23



9000206

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WILLIAM RENNINGER ASSOCIATES
LANDSCAPE ARCHITECTS & PLANNERS
108 WOODHAVEN DRIVE
GREENVILLE, SOUTH CAROLINA 29609

Date: January 26, 1989

To: Mr. Ron Dickerson
Zoning Administrator
City of Greenville

Regarding: Track's Music/Video Store - Setback Variance

Dear Mr. Dickerson,

Our office has been requested by the City of Greenville, Engineering Department to reposition the proposed building for the above project. The original position was within the setbacks and outside of all easements on the property. The requested position would provide extra clearance between the building and the 10' drainage easement across the property, but this will also require encroachment into the 25' setback along Haywood road. Repositioning the building in any other manner to provide the extra clearance along the drainage easement would require the elimination of approximately 5 parking spaces which the prospective tenants have required. We have turned the building so that only one corner and a portion of two sides encroach into the setback in order to minimize the obstruction of any views around the building and the square footage of building within the setback. This request does not affect the use or value of any neighboring property since the property is bounded on three side by streets and on the fourth side by the same owner.

We are requesting approval of this variance so that we may comply with the City of Greenville, Engineering Department's request for extra clearance along the 10' drainage easement through the site. Thank you.

Sincerely,

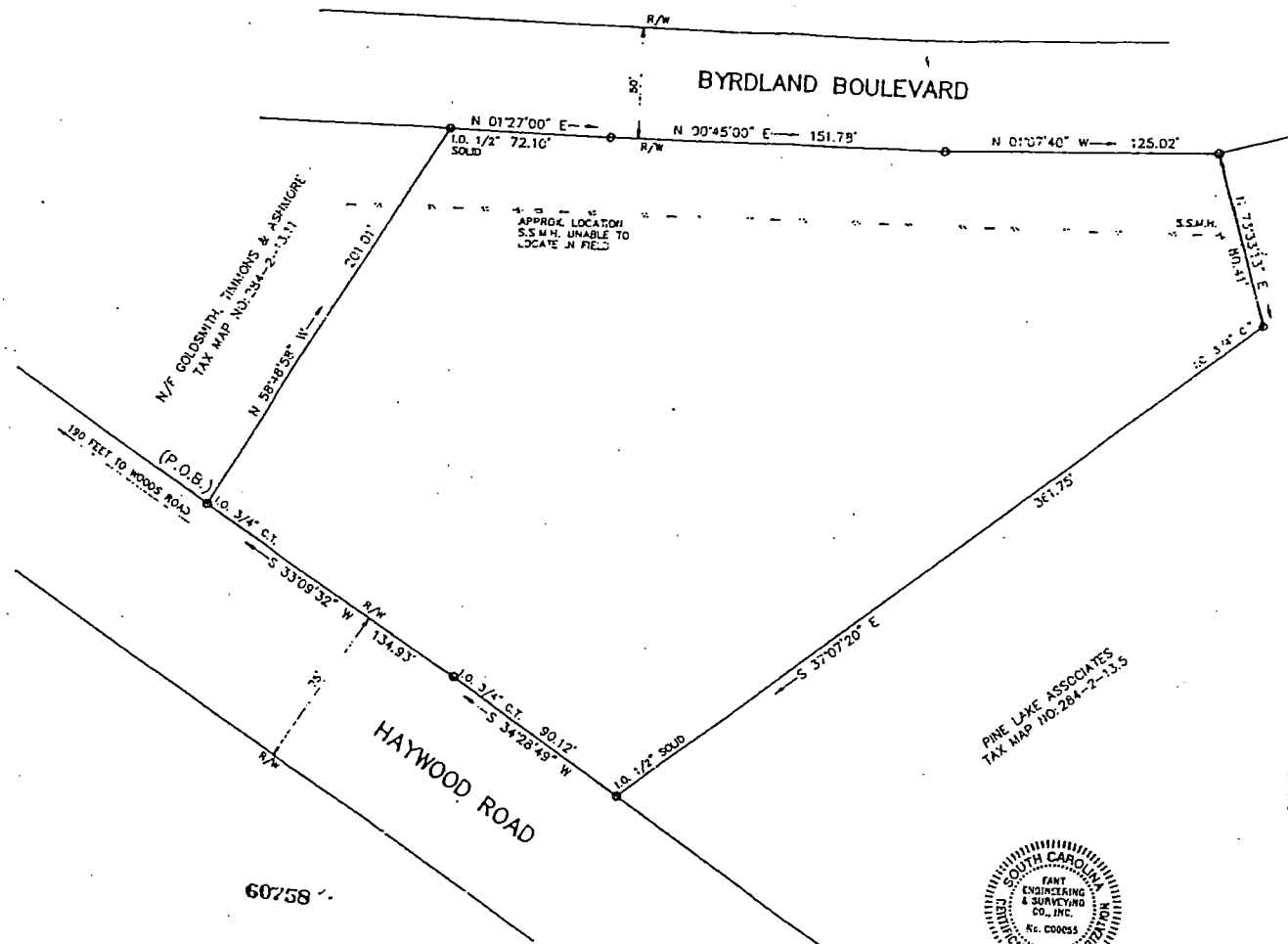
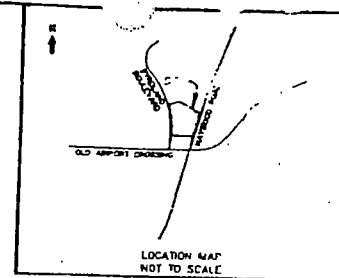
Scott Sonnenberg
Scott Sonnenberg

9000207

FILED
GREENVILLE, S.C.

OCT 5 10 43 AM '95

DONNIF R.M.C. SRSLEY



LEGAL DESCRIPTION
BEGINNING AT AN IRON PIN (P.O.B.) ON THE WESTERN RIGHT-OF-WAY OF HAYWOOD ROAD, WHICH IRON PIN IS 180 FEET FROM THE NORTHERN RIGHT-OF-WAY OF WOODS ROAD, THENCE LEAVING THE WESTERN RIGHT-OF-WAY OF HAYWOOD ROAD AND WITH THE PROPERTY NOW OR FORMERLY GOLDSMITH, TIMMONS & ASHMORE, N58-46-58W 201.01 FEET TO AN IRON PIN ON THE EASTERN RIGHT-OF-WAY OF BYRDLAND BOULEVARD, THENCE WITH THE EASTERN RIGHT-OF-WAY OF BYRDLAND BOULEVARD THE FOLLOWING THREE COURSES AND DISTANCES, N01-37-00E 72.10 FEET TO AN IRON PIN, THENCE N00-45-00E 151.75 FEET TO AN IRON PIN, THENCE N01-07-40W 125.02 FEET TO AN IRON PIN, THENCE LEAVING THE EASTERN RIGHT-OF-WAY OF BYRDLAND BOULEVARD AND WITH THE PROPERTY NOW OR FORMERLY PINE LAKE ASSOCIATES THE FOLLOWING TWO COURSES AND DISTANCES, N73-33-13E 80.41 FEET TO AN IRON PIN, THENCE S37-07-20E 361.75 FEET TO AN IRON PIN ON THE WESTERN RIGHT-OF-WAY OF HAYWOOD ROAD, THENCE WITH THE WESTERN RIGHT-OF-WAY OF HAYWOOD ROAD, THE FOLLOWING TWO COURSES AND DISTANCES, S34-28-40W 80.12 FEET TO AN IRON PIN, THENCE S33-09-32W 134.93 FEET TO THE POINT OF BEGINNING CONTAINING 2.002 ACRES OR 87,193 SQUARE FEET.

TAX MAP NO: 284-2-13.12

SITE AREA: 2.002 ACRES
OR 87,193 S.F.

30-W-98

FILED FOR RECORD IN GREENVILLE
COUNTY SC RMC OFFICE AT 10:43 AM
10/05/95 RECORDED IN PLAT
BOOK 30-W PAGE 0098
DOC # 95060758

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE,
INFORMATION AND BELIEF, THE SURVEY SHOWN HEREON WAS
MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE
MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND
SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS
THE REQUIREMENTS FOR A CLASS "B" SURVEY AS SPECIFIED
THEREIN.

N
W
FANT
ENGINEERING
&
SURVEYING CO., INC.
103 SMITH HINES ROAD
GREENVILLE, S.C. 29607
PHONE (803) 297-4241

CASCO - ROOMS TO GO

BYRDLAND BOULEVARD &
HAYWOOD ROAD
GREENVILLE COUNTY, S.C.

APPROVED BY: S.C. REG. NO. 6266

William B. J. [Signature]

SCALE: 1" = 40'

DATE: 7-6-95

P.C.:

DRAWN BY: H.S.

DWG. NO: C-448

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9000145



000195

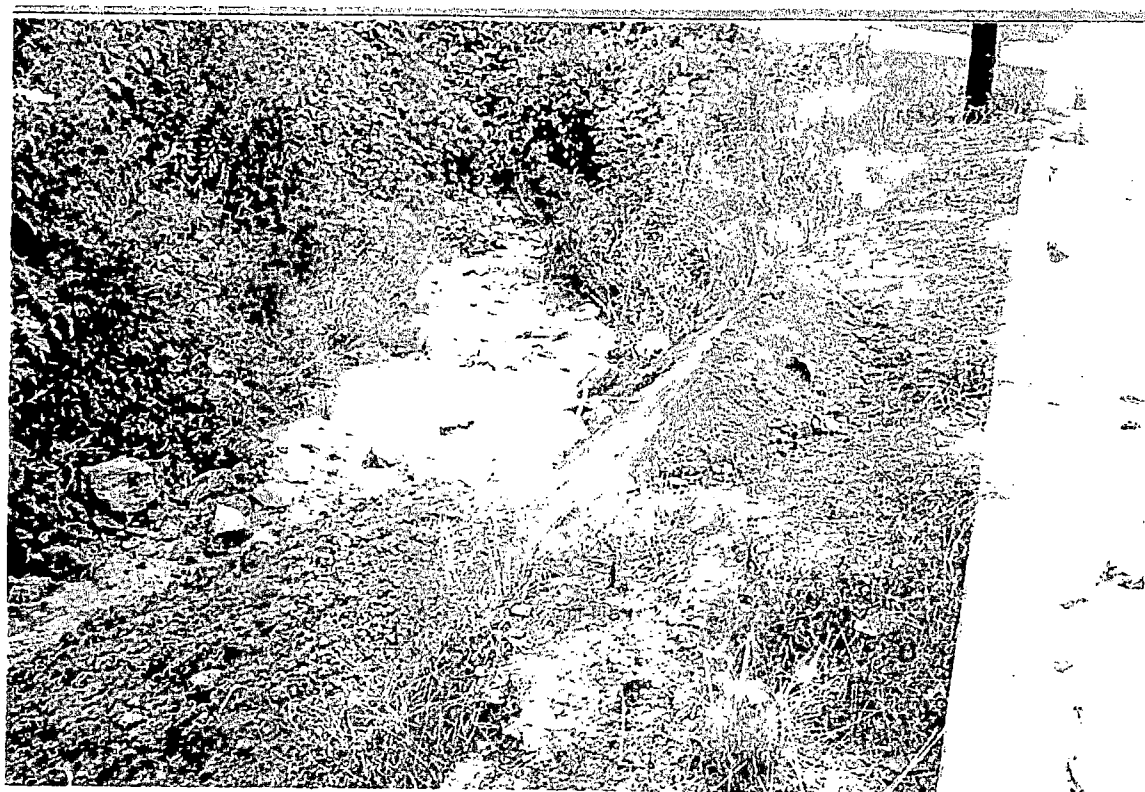
ACTUAL COST by JOB ADDRESS

JOB NUMBER	LOCATION	JOB TYPE	EMPLOYEE CODE	FINISH DATE	NO. OF JOBS	LABOR HOURS	LABOR COST	EQUIPMENT COST	MATERIAL COST	TOTAL COST
* Job Activity: SC - (STREET CONSTRUCTION)										
975646	BYRDLAND DR	SC 450	POWERS	07/11/97	1	20.00	211.50	83.25	0.00	294.75
* SubSubTotal *						1	20.00	211.50	83.25	294.75
* Job Activity: DR - (DRAINAGE MAINTENANCE)										
972043	1 BYRDLAND DR	DR 250	POWERS	07/02/97	1	100.00	1131.20	951.39	42.18	2124.77
COMMENT: ACROSS FROM SERVICE MASTER, RIP/RAP THE BANK WITH BROKEN CONCRETE AT THE CREEK.										
* SubSubTotal *						1	100.00	1131.20	951.39	2124.77
* Job Activity: SE - (SEWER DIVISION)										
976012	55 BYRDLAND DR	SE 270	ADAMS	07/24/97	1	0.25	3.53	1.03	0.00	4.56
COMMENT: LOCATE SEWER LINES. #206990 (CHRISMAN & PARSONS/467-1908)										
975725	59 BYRDLAND DR	SE 270	ADAMS	07/16/97	1	0.25	3.53	1.03	0.00	4.56
COMMENT: LOCATE SEWER LINES. #193860 (AL'S PLUMBING/242-1496)										
* SubSubTotal *						2	0.50	7.06	2.06	9.12
* SubTotal **						5	194.50	2360.53	1493.48	3896.19
** Actual Cost for STREET: CAGLE										
* Job Activity: DR - (DRAINAGE MAINTENANCE)										
975989	CAGLE ST	DR 220	CALICOTT	07/23/97	1	4.00	44.40	39.28	0.00	83.68
COMMENT: AND WALNUT ST.										
* SubSubTotal *						1	4.00	44.40	39.28	83.68
** SubTotal **						1	4.00	44.40	39.28	83.68
** Actual Cost for STREET: CAIN										
* Job Activity: SE - (SEWER DIVISION)										
975829	14 CAIN ST	SE 270	ADAMS	07/17/97	1	0.25	3.53	1.03	0.00	4.56
COMMENT: LOCATE SEWER LINES. #199575 (PNG-SUB CONTR/C.ROPER)										
* SubSubTotal *						1	0.25	3.53	1.03	4.56
** SubTotal **						1	0.25	3.53	1.03	4.56

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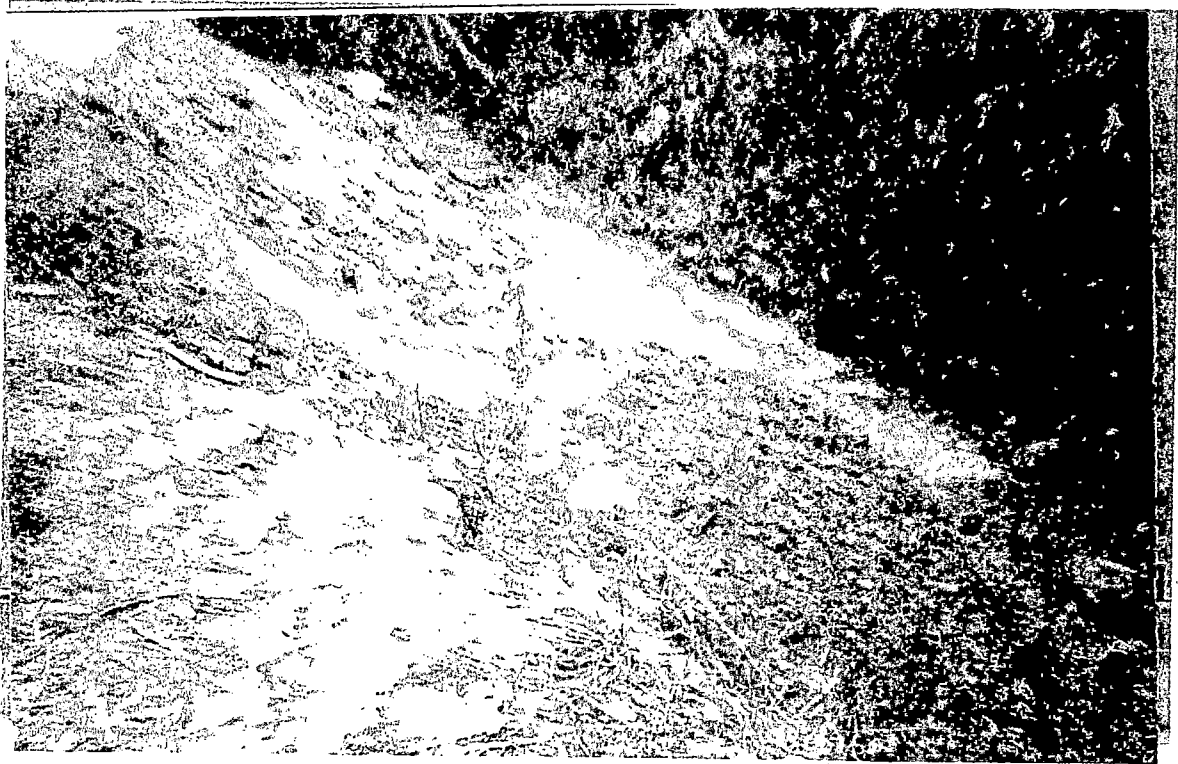


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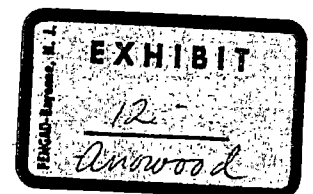




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000189



STATE OF SOUTH CAROLINA)

COUNTY OF GREENVILLE)

Louie D. Hawkins, individually and d/b/a)
Servicemaster of Greenville, Servicemaster)
of Greenville, LLC and Dixie P. Hawkins,)

Plaintiffs,)

vs.)

City of Greenville,)

Defendant)

IN THE COURT OF COMMON PLEAS

FILED-CLERK OF COURT
GREENVILLE CO. S.C.
PAUL B. WICKENHART

2007 MAR 11 P 4:20

AFFIDAVIT OF JULIE Y. ARROWOOD

C.A. No.: 01-CP-23-2459R

Personally appeared before me Julie Y. Arrowood, who, having first been duly sworn,
deposes and states the following:

1. I am a licensed professional engineer and am currently employed as a Civil Engineer for the City of Greenville ("City"), the defendant in the within lawsuit. I have been employed with the City since July, 1998. In my current position, I report to Jason Flowers, Stormwater Management Administrator. I served as Stormwater Manager for the City from December, 1998 to January, 2002.

2. I make this affidavit based upon my own personal knowledge and based upon my review of the City's records regarding the plaintiffs, the property located at 1 Byrdland Drive, Greenville ("the property"), and the stormwater basin and developed and undeveloped land surrounding the property. These records concern regularly conducted activity and were made at or near the time of the event by a person with knowledge of the event, and/or are public records.

3. The property is in a low-lying area just west of Haywood Road at the bottom of a large stormwater basin and is bordered on the east by a stream known as Laurel Creek. The

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stormwater basin which includes the property encompasses a 3.24 square mile area on the City's highly developed Eastside, which includes many large commercial developments on Byrdland Drive, as well as Haywood, Airport, and Woods Lake Roads, and extends to the north across I-385. This area is susceptible to natural flooding based on the topography of the area, since all stormwater from this basin naturally runs downhill and eventually drains into Laurel Creek.

4. Currently, the property is not within a floodplain as established by the Federal Emergency Management Agency ("FEMA"). However, it is possible that the property will fall within a floodplain when FEMA remaps this area.

5. - The City does not own any portion of Laurel Creek or any land near the property. The City has not taken any action or made any effort to alter or divert the flow of Laurel Creek to cast water onto the property.

6. When property in the City is developed, the owner/developer is required to submit storm drainage calculations to show that the proposed drainage system for the development is designed to handle the stormwater runoff required by the City's ordinances. If the owner/developer's proposal for the drainage system satisfies the City's design criteria for developing that particular parcel of land, then the City must approve the design. In approving such applications, the City expressly rejects liability for stormwater discharge from these parcels onto adjacent property. (See, e.g., Ex. 1). The City is unable to lawfully deny permits for development of property which meet the criteria established by its ordinances.

7. In June and July, 1993, the City installed an elliptical 11'5" x 7'3" pipe ("arched pipe") under the intersection of Byrdland Drive and Airport Roads. The arched pipe replaced a double box culvert which was gathering debris and thus, its capacity was being restricted. The arched pipe increased the drainage capacity of this section of the City's stormwater drainage.

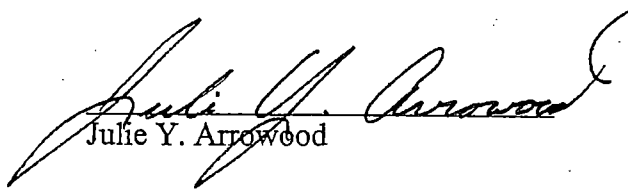
system. The arched pipe installed in July of 1993 is the only improvement to the stormwater system performed by the City in this area since 1980.

8. By installing the arched pipe, the City did not intend to, and did not, alter the flow of Laurel Creek, nor did it direct water onto the property. The City has not taken any other action to increase or redirect the amount of stormwater runoff or surface water onto the property.

9. The rainfall which occurred in the City on July 24, 1997 was an extraordinary rainfall event. Due to the large amount of rain which fell in a short period of time on July 24, 1997, Laurel Creek could not keep the stormwater within its banks, and it naturally spilled over onto Byrdland Drive and other roads in the area. Official rainfall records from National Climatic Data Center in Asheville show that 2.51 inches of rain fell in Greenville in one hour on July 24, 1997. (Ex. 2)

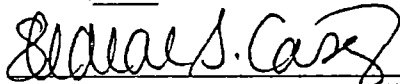
10. The City has funded a study of the Haywood Road/Laurel Creek stormwater basin which encompasses the property. One of the recommendations resulting from this study was to increase the capacity of the stormwater drainage system which services this area. After consideration, City Council has agreed to fund this project, although it will require cooperation from the State of South Carolina and Greenville County since the stormwater drainage system in this area is comprised of interconnected systems owned by the State, City, County and private entities. At this time, it is anticipated that the design for this project will start in the fiscal year which begins July 1, 2002, and construction will begin in 2003 with an estimated completion date of 2004.

11. Once this system is upgraded, it is still possible that extraordinary rainfalls may occur which exceed the capacity of the stormwater system, as happened on July 24, 1997.


Julie Y. Arrowood

SWORN TO BEFORE ME

THIS 17th DAY OF MARCH, 2002



Notary Public for South Carolina

My Commission Expires: 2/22/06

THE CITY OF GREENVILLE, SOUTH CAROLINA

February 7, 1989

Scott Sonnenberg
William Renninger and Associates
108 Woodhaven Drive
Greenville, SC 29609

File

Subject: Track's Music/Video Store

Dear Scott:

The Engineering Department of the City of Greenville has completed a review of the resubmitted site plan and drainage calculations for Track's Music/Video Store. This is to advise that the design is in compliance with the City's minimum design standards; however, the Engineering Department's review and approval of the design in accordance with the City's minimum design standards neither constitutes an endorsement of the engineering design selected nor does it affect the rights of adjoining property owners. The City accepts no liability relative to stormwater discharge from this site onto adjacent sites.

Any deviations from the approved drawings must be resubmitted for review. Prior to the beginning of construction this office requests notification.

Please feel free to contact us if there are any questions concerning this project.

Cordially,

Cathy D. Ball

Cathy Ball
Civil Engineer

f27



WILLIAM PENNINGER ASSOCIATES
LANDSCAPE ARCHITECTS & PLANNERS
108 WOODHAVEN DRIVE
GREENVILLE, SOUTH CAROLINA 29609

STORM DRAINAGE CALCULATIONS

Track's - Music/Video
Haywood Road and Airport Road
Greenville, S.C.
November 28, 1988

The existing site consist of a 0.67 acre lot covered with sparse grass and weeds. No offsite drainage drains onto the site. A minimum time of concentration of 5 minutes was assumed for both the existing and proposed site. The following calculations are based on the Rational method for determining storm runoff rates. The orifice equation ($Q = .62A(2gh)^{1/2}$) and the weir equation ($Q = 3.0bh^{3/2}$) were used in a routing program to determine the required storage volumes, depths and discharge rates for the detention basin.

EXISTING CONDITIONS

Site	0.67 acres, sparse grass and weeds
Offsite	None

EXISTING RUNOFF

	Site
Area (acres)	0.67
Runoff Coef. (C)	.30
Rainfall Intensity 10-yr	6.7 in/hr
Time of Concentration (min)	5
Peak Runoff Rate 10-yr	1.35 cfs

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PROPOSED CONDITIONS

Direct Site Runoff (Northwest corner drive entrance)
Area (acres) .05 (.04 ac. paving)
Runoff Curve No. .82
Time of Concentration (min) 5
Peak Runoff Rate 10-yr 0.27 cfs

Detention Pond Runoff

	Site
Area (acres)	0.62
(.45 ac. site paving)	
Runoff Curve No.	.77
Rainfall Intensity 10-yr	6.7 in/hr
50-yr	8.2 in/hr
Time of Concentration (min)	5
Peak Runoff Rates 10-yr	3.20 cfs
50-yr	3.91 cfs

Maximum Release Rates

10-yr	1.08 cfs

Required Storage Volumes

10-yr	1384 cf
50-yr	1928 cf

Storage Provided 10-yr	1800 cf
50-yr	3300 cf

Primary Outlet

10-yr Max. Release Rate	1.08 cfs
Proposed Orifice Size	6" pipe
Orifice Invert Elevation	95.55
10-yr Pond Elevation	96.84
Actual 10-yr Release Rate	1.00 cfs

Emergency Overflow Weir

50-yr Release Rate	3.91 cfs
Overflow Weir Elevation	97.0
50-yr Pond Elevation	97.09
Width b	20' ± of drive
Depth h	0.5'
Overflow Weir Capacity	20.0 cfs
Actual Weir Release Rate	0.53 cfs
Total 50-yr Release Rate	1.64 cfs

the total drainage area is .62 acres.

the adjusted surface runoff coefficient is .77

the Design Storm is the 10 -year storm.

the primary orifice coef. is .62 and the diameter is .5 ft.

the overflow weir coefficient is 3 , the width is 20 and height is 1.5 ft.

the total allowable depth is 2 ft.

Depth	Volume					
0.5	200.0					
1.0	800.0					
1.5	1800.0					
2.0	3300.0					
Time	Runoff	Release	Storage	Storage	Peak	Peak
	Volume	Volume	Volume	Depth	Primary	Overflow
(min)	(cf)	(cf)	(cf)	(ft)	Discharge	Discharge
					(cfs)	(cfs)
2.50	479.79	48.61	431.17	0.69	0.65	0.00
5.00	959.57	160.62	798.95	1.00	0.85	0.00
7.50	1224.53	290.15	934.39	1.07	0.88	0.00
10.00	1503.81	425.34	1078.47	1.14	0.92	0.00
12.50	1754.45	565.51	1188.94	1.19	0.95	0.00
15.00	1976.44	709.24	1267.19	1.23	0.97	0.00
17.50	2205.59	855.95	1349.64	1.27	0.99	0.00
20.00	2377.45	1004.58	1372.88	1.29	0.99	0.00
22.50	2513.51	1153.39	1360.12	1.28	0.99	0.00
25.00	2685.38	1302.39	1382.98	1.29	1.00	0.00
27.50	2835.76	1451.82	1383.93	1.29	1.00	0.00
30.00	2964.65	1600.90	1363.75	1.28	0.99	0.00
32.50	3072.07	1748.89	1323.18	1.26	0.98	0.00
35.00	3208.13	1895.94	1312.19	1.26	0.98	0.00
37.50	3329.87	2042.33	1287.53	1.24	0.97	0.00
40.00	3379.99	2186.53	1193.46	1.20	0.95	0.00
42.50	3408.64	2326.84	1081.80	1.14	0.92	0.00
45.00	3506.03	2464.24	1041.79	1.12	0.91	0.00
47.50	3605.56	2600.14	1005.42	1.10	0.90	0.00
50.00	3680.75	2734.15	946.61	1.07	0.89	0.00
52.50	3759.53	2865.90	893.63	1.05	0.87	0.00
55.00	3812.52	2994.99	817.53	1.01	0.85	0.00
57.50	3870.52	3120.29	750.24	0.96	0.82	0.00
60.00	3901.31	3240.07	661.24	0.88	0.78	0.00

50-year Storage Volume Calculations

e total drainage area is .62 acres.
 e adjusted surface runoff coefficient is .77
 e Design Storm is the 50-year storm.
 e primary orifice coef. is .62 and the diameter is .5 ft.
 e overflow weir coefficient is 3, the width is 20 and height is 1.5 ft.
 e total allowable depth is 2 ft.

Depth	Volume
0.5	200.0
1.0	800.0
1.5	1800.0
2.0	3300.0

Time (min)	Runoff Volume (cf)	Release Volume (cf)	Storage Volume (cf)	Storage Depth (ft)	Peak Primary Discharge (cfs)	Peak Overflow Discharge (cfs)
2.50	587.20	53.13	534.07	0.78	0.71	0.00
5.00	1174.40	173.84	1000.57	1.10	0.90	0.00
7.50	1632.71	314.86	1317.85	1.26	0.98	0.00
10.00	2005.08	465.85	1539.23	1.37	1.03	0.00
12.50	2363.13	623.72	1739.41	1.47	1.08	0.00
15.00	2706.86	812.88	1893.98	1.53	1.11	0.33
17.50	2957.49	1038.53	1918.96	1.54	1.11	0.47
20.00	3208.13	1280.58	1927.54	1.54	1.11	0.53
22.50	3415.80	1513.83	1901.97	1.53	1.11	0.38
25.00	3580.50	1719.77	1860.73	1.52	1.10	0.17
27.50	3781.01	1912.70	1868.31	1.52	1.10	0.21
30.00	3952.87	2102.64	1850.24	1.52	1.10	0.13
32.50	4068.16	2266.78	1801.38	1.50	1.09	0.00
35.00	4160.54	2428.95	1731.59	1.47	1.08	0.00
37.50	4318.08	2589.94	1728.14	1.46	1.08	0.00
40.00	4468.46	2750.78	1717.69	1.46	1.07	0.00
42.50	4589.49	2910.99	1678.50	1.44	1.06	0.00
45.00	4704.78	3069.92	1634.86	1.42	1.05	0.00
47.50	4830.09	3227.56	1602.54	1.40	1.05	0.00
50.00	4941.09	3383.87	1557.22	1.38	1.04	0.00
52.50	5037.76	3538.41	1499.36	1.35	1.02	0.00
55.00	5120.12	3690.71	1429.41	1.31	1.01	0.00
57.50	5221.09	3840.89	1380.19	1.29	1.00	0.00
60.00	5327.78	3989.45	1338.33	1.27	0.99	0.00

[illegible]

1 STATE OF SOUTH CAROLINA COURT OF COMMON PLEAS
2 COUNTY OF GREENVILLE C/A NO. 99-CP-23-2934
3 LOUIE D. HAWKINS, INDIVIDUALLY AND D/B/A SERVICEMASTER OF
4 GREENVILLE, SERVICEMASTER OF GREENVILLE, LLC AND DIXIE
5 HAWKINS,
6 PLAINTIFFS,
7 VS.
8 CITY OF GREENVILLE
9 DEFENDANT.

10
11 DEPOSITION OF LOUIE D. HAWKINS
12

13 PURSUANT TO NOTICE OF DEPOSITION AND/OR AGREEMENT IN
14 THE ABOVE-ENTITLED CASE, A DEPOSITION WAS TAKEN ON THE
15 2ND DAY OF JULY 2001, COMMENCING AT APPROXIMATELY 10:00
16 A.M., ATTENDED BY COUNSEL AS FOLLOWS:
17
18
19
20
21
22
23
24
25

1 APPEARANCES:

2 ROBERT C. CHILDS, III, ESQUIRE, OF THE FIRM OF
3 MITCHELL, BOUTON, YOKEL, MCCALL & CHILDS, 7 MILLS AVENUE,
4 POST OFFICE BOX 10285, GREENVILLE, SOUTH CAROLINA 29605,

5 ATTORNEY FOR PLAINTIFFS,

6 LUANNE LAMBERT RUNGE, ESQUIRE, OF THE FIRM O
7 GALLIVAN, WHITE & BOYD, 330 EAST COFFEE STREET, POST
8 OFFICE BOX 10589, GREENVILLE, SOUTH CAROLINA 29601,

9 ATTORNEY FOR DEFENDANT.

10

11

12

13

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17 DEPOSITION REPORTED BY:

LINDA L. WILSON

18

DEPOSITIONS AND..., INC.

19

P.O. BOX 10268

20

GREENVILLE, S.C. 29603

21

(864) 235-3518

22

23

24

25

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1 PURSUANT TO NOTICE AND/OR AGREEMENT TO TAKE
2 DEPOSITIONS, THE WITHIN DEPOSITION WAS TAKEN BY THE ABOVE
3 REPORTER, A NOTARY PUBLIC, AS REQUIRED UNDER THE CODE OF
4 LAWS OF SOUTH CAROLINA, 1976, SECTION 19-17-10, AND
5 CIRCUIT COURT RULE 30, ET AL., BY CONSENT OF ALL PARTIES
6 AT THE OFFICES OF GALLIVAN, WHITE & BOYD, 330 EAST COFFEE
7 STREET, GREENVILLE, SOUTH CAROLINA.

8 WAIVER:

9 COUNSEL AGREED THAT BOTH THE READING OVER OF AND
10 SIGNING OF THE DEPOSITION ARE HEREBY DISPENSED WITH AND
11 WAIVED.

12 THE DEPONENT AGREED THAT BOTH THE READING OVER OF
13 AND SIGNING OF THE DEPOSITION ARE HEREBY DISPENSED WITH
14 AND WAIVED.

15 **

15 **

15 **

16 THE DEPONENT WAS DULY SWORN TO TELL THE TRUTH, THE
17 WHOLE TRUTH, AND NOTHING BUT THE TRUTH OF HIS OWN
18 KNOWLEDGE CONCERNING THE MATTER HEREIN.

19 LOUIE D. HAWKINS, BEING DULY SWORN, TESTIFIED AS FOLLOWS:
20 DIRECT EXAMINATION BY MS. RUNGE:

21 Q. STATE YOUR FULL NAME FOR THE RECORD, PLEASE, SIR.

22 A. LOUIE D. HAWKINS.

23 Q. MR. HAWKINS, WE MET BEFORE THE DEPOSITION BEGAN. MY
24 NAME IS LUANNE RUNGE. I'M A LAWYER WITH THE FIRM
25 GALLIVAN, WHITE, AND BOYD, AND WE ARE REPRESENTING

1 THE CITY OF GREENVILLE IN THE LAWSUIT YOU HAVE
2 BROUGHT ON CASE NUMBER 99-CP-23-2934.
3 AND WE ARE HERE TODAY TO TAKE YOUR DEPOSITION, ASK
4 YOU SOME QUESTIONS ABOUT YOURSELF, ABOUT THE
5 COMPANY, AND ABOUT THE ALLEGATIONS OF THE COMPLAINT.
6 IF ANY TIME YOU DON'T UNDERSTAND MY QUESTION, IF YOU
7 WILL LET ME KNOW AND I WILL REPHRASE IT FOR YOU.

8 A. OKAY.

9 Q. OKAY. IF YOU WILL ALSO TRY TO REMEMBER TO SAY "YES"
10 OR "NO," SO THE COURT REPORTER CAN TAKE THAT DOWN.
11 MANY PEOPLE, INCLUDING MYSELF, HAVE A DIFFICULT TIME
12 REMEMBERING NOT TO USE THEIR HANDS AND GESTURING.

13 A. OKAY.

14 Q. BUT IT'S MUCH EASIER FOR HER TO TAKE IT DOWN IF WE
15 USE WORDS.

16 YOU UNDERSTAND THAT YOU ARE SWORN TO TELL THE TRUTH
17 TODAY; IS THAT RIGHT?

18 A. I DO.

19 Q. OKAY. AND I SEE YOU HAVE BROUGHT SOME DOCUMENTS
20 WITH YOU. CAN I SEE WHAT THOSE ARE, PLEASE?

21 A. YEAH. DO YOU WANT TO SEE ALL OF THEM?

22 Q. YES, SIR.

23 A. I WAS HOPING THAT IF I NEEDED TO IT WOULD REFRESH MY
24 MEMORY ON DATES AND SO FORTH AND SO ON.

25 Q. WELL, WHAT I'D LIKE TO DO -- IS THAT PART OF --

1 THAT'S JUST AN EMPTY PAD. OKAY. WHAT I'D LIKE TO
2 DO IS COPY THAT AND THEN MARK THOSE AS AN EXHIBIT.

3 (OFF THE RECORD - COUNSEL REVIEWS DOCUMENTS)

4 BY MR. CHILDS:

5 WE HAVE HERE A LETTER TO THE CITY ATTORNEY, WHICH I
6 ASSUME IS FINE; A LETTER FROM THE CITY ATTORNEY;
7 SOME NOTES FROM DISCUSSIONS; A LETTER TO BILL LEE,
8 STORM DRAIN SUPERINTENDENT; A LETTER TO PAT PASCHAL
9 DATED MARCH 31, 1999, WHICH MAY BE ATTORNEY-CLIENT
10 PRIVILEGED, WHICH WAS -- MR. PASCHAL REPRESENTED YOU
11 IN THE PRIOR LAWSUIT AGAINST THE CITY?

12 BY THE WITNESS:

13 NO. ACTUALLY THAT NOTE IS FROM -- WE HAD TALKED TO
14 HIM ABOUT REPRESENTING US ON THIS CASE, AND I THINK
15 IT READS ON THAT HE'S GOT ANOTHER INTEREST AND FELT
16 LIKE HE MIGHT HAVE A CONFLICT, AND THEN HE
17 RECOMMENDED ME TO GET ANOTHER ATTORNEY.

18 BY MR. CHILDS:

19 AND ALSO A LETTER TO MR. PAUL BURKE, WHICH IS
20 ANOTHER ATTORNEY I THINK YOU'VE CONSULTED WITH.

21 BY THE WITNESS:

22 BASICALLY THAT'S A GUY THAT -- I WAS AT A SEMINAR
23 AND HE WAS THE SPEAKER, AND I JUST WROTE THAT TO HIM
24 ASKING HIM FOR ADVICE; IF HE FELT LIKE, FROM WHAT I
25 WAS TELLING HIM, I EVEN HAD A CASE.

1 BY MR. CHILDS:

2 SO THESE TWO LETTERS FROM HAWKINS TO PASCHAL AND THE
3 LETTERS TO DREW ECKEL AND TO PARNHAM WE WOULD NOT BE
4 WILLING TO DISCLOSE.

5 BY MS. RUNGE:

6 OKAY. WELL, FOR THE RECORD, WE'VE ALREADY BEEN
7 PRODUCED A COPY OF THE LETTER TO PAT PASCHAL.

8 BY MR. CHILDS:

9 OH, YOU HAVE?

10 BY MS. RUNGE:

11 MM-HMM (AFFIRMATIVE).

12 BY MR. CHILDS:

13 OKAY.

14 BY MS. RUNGE:

15 AND I -- YOU KNOW, GLANCING THROUGH, THAT LOOKED --
16 THE LETTER TO DREW ECKEL IS SUBSTANTIALLY SIMILAR TO
17 THAT. I DIDN'T READ IT, BUT IT LOOKS LIKE IT'S
18 SUBSTANTIALLY SIMILAR.

19 BY MR. CHILDS:

20 OKAY.

21 BY MS. RUNGE:

22 THE RECORDS TO THE CITY AND THINGS -- YEAH --
23 THE RECORDS TO THE CITY AND THINGS, I THINK WE
24 ALREADY HAVE.

25 BY MR. CHILDS:

1 YEAH. AND LET ME LOOK AT THIS OTHER ONE TO MAKE
2 SURE.

3 BY MS. RUNGE:

4 BUT IF YOU WANT TO WITHHOLD THE DREW ECKEL LETTER,
5 THAT'S OKAY WITH ME.

6 BY MR. CHILDS:

7 OKAY. ALL RIGHT. THAT'S GOOD. AND THEN I THINK
8 THE REST OF IT IS NOTES. AND YOU CAN CERTAINLY --
9 YOU'RE CERTAINLY ENTITLED TO HIS NOTES IF HE'S GOING
10 TO USE THEM TO REFRESH HIS MEMORY.

11 BY MS. RUNGE:

12 OKAY. ALL RIGHT. WHILE SHE'S MAKING COPIES WE'LL
13 GO AHEAD WITH JUST A LITTLE BIT OF BACKGROUND.

14 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

15 Q. WHERE DO YOU RESIDE, MR. HAWKINS?

16 A. AT 2531 EAST GEORGIA ROAD, SIMPSONVILLE.

17 Q. AND HOW LONG HAVE YOU LIVED AT THAT ADDRESS?

18 A. APPROXIMATELY SEVEN YEARS.

19 Q. OKAY. AND ARE YOU MARRIED, SIR?

20 A. I'M WIDOWED.

21 Q. AND YOUR WIFE WAS DIXIE HAWKINS?

22 A. DIXIE.

23 Q. I UNDERSTAND WHO RECENTLY PASSED AWAY.

24 A. SHE PASSED AWAY DECEMBER THE ELEVENTH, 2000.

25 Q. DO YOU HAVE ANY CHILDREN?

- 1 A. GOT TWO BOYS.
- 2 Q. WHAT ARE THEIR NAMES?
- 3 A. DEAN AND BRANDON.
- 4 Q. DO THEY LIVE IN GREENVILLE COUNTY?
- 5 A. YEAH. ALL THREE OF US LIVE ON THE -- AT THE SAME
- 6 LOCATION. DEAN AND HIS WIFE LIVE ON ONE SIDE OF THE
- 7 PROPERTY, AND BRANDON AND I ACTUALLY LIVE ON THE
- 8 OTHER SIDE OF THE PROPERTY.
- 9 Q. DEAN IS MARRIED?
- 10 A. MM-HMM (AFFIRMATIVE).
- 11 Q. AND WHAT IS HIS WIFE'S NAME?
- 12 A. SHAY.
- 13 Q. AND BRANDON, IS HE MARRIED?
- 14 A. NO.
- 15 Q. DO YOU HAVE ANY RELATIVES OVER THE AGE OF 18 WHO
- 16 LIVE IN GREENVILLE COUNTY WHO HAVE THE LAST NAMES
- 17 OTHER THAN HAWKINS?
- 18 A. NO.
- 19 Q. WHAT WAS YOUR WIFE'S MAIDEN NAME?
- 20 A. PRICE.
- 21 Q. ARE THERE ANY PRICES THAT LIVE IN GREENVILLE COUNTY
- 22 OVER THE AGE OF 18 THAT YOU'RE RELATED TO?
- 23 A. NOT THAT I KNOW OF.
- 24 Q. OKAY. WHAT'S YOUR DATE OF BIRTH?
- 25 A. AUGUST THIRTIETH, '44.

1 Q. OKAY. DID YOU GROW UP IN GREENVILLE COUNTY?

2 A. PICKENS COUNTY. MOST OF MY ADULT LIFE HAS BEEN IN
3 GREENVILLE COUNTY.

4 Q. AND DID YOU ATTEND HIGH SCHOOL?

5 A. LIBERTY HIGH SCHOOL.

6 Q. DID YOU GRADUATE FROM LIBERTY HIGH SCHOOL?

7 A. I DID.

8 Q. WHAT YEAR WAS THAT?

9 A. '62, I THINK IT WAS.

10 Q. OKAY. AND DID YOU GO ON TO COLLEGE OR ANY OTHER
11 TYPE OF POST-SECONDARY EDUCATION?

12 A. I WENT TO FALLS COLLEGE IN ATLANTA, GEORGIA, WHICH
13 WAS A IBM SCHOOL.

14 Q. AND DID YOU ---

15 A. A TWO-YEAR COLLEGE AND I GRADUATED FROM THERE.

16 Q. AND HAVE YOU GONE TO ANY OTHER INSTITUTIONS?

17 A. NO, MA'AM.

18 Q. OKAY. HAVE YOU TAKEN ANY SORT OF SPECIALIZED
19 TRAINING CLASSES OR VOCATIONAL TYPE CLASSES OR
20 CLASSES SUCH AS THEY GIVE GREENVILLE TECH IN A
21 PARTICULAR AREA?

22 A. NO, MA'AM.

23 Q. NOTHING LIKE THAT? HAVE YOU EVER TAKEN ANY
24 ENGINEERING CLASSES?

25 A. NO, MA'AM.

1 Q. ANY SPECIALIZED TRAINING IN THE AREAS OF ENGINEERING.
2 OR STORMWATER MANAGEMENT?

3 A. NO, MA'AM.

4 Q. THIS LAWSUIT HAS SEVERAL PLAINTIFFS: YOURSELF,
5 INDIVIDUALLY, AND THEN DOING BUSINESS AS
6 SERVICEMASTER OF GREENVILLE, AND THEN SERVICEMASTER
7 OF GREENVILLE, AND THEN DIXIE P. HAWKINS, WHO WAS
8 YOUR WIFE.

9 A. OKAY.

10 Q. I WANT TO ASK YOU A LITTLE BIT ABOUT THE DIFFERENT
11 CLAIMS OF THESE DIFFERENT PARTIES, SO I UNDERSTAND
12 THEIR RELATIONSHIP. I BELIEVE I UNDERSTAND THAT THE
13 BUSINESS IS NOW CALLED SERVICEMASTER OF GREENVILLE,
14 LLC. IS THAT CORRECT?

15 A. THAT'S RIGHT.

16 Q. OKAY. AT WHAT TIME DID THE BUSINESS BECOME AN LLC?

17 A. YOU'LL HAVE TO WAIT FOR MY NOTES.

18 Q. OKAY. ALL RIGHT. I'LL KEEP ASKING QUESTIONS.
19 WE'LL SEE.

20 THE BUSINESS BEGAN -- WHEN YOU FIRST STARTED IN
21 BUSINESS THEN, WAS IT LOUIE D. HAWKINS DOING
22 BUSINESS AS SERVICEMASTER OF GREENVILLE?

23 A. YES, MA'AM.

24 Q. HAS THE BUSINESS EVER BEEN IN ANY OTHER FORM OTHER
25 THAN THOSE TWO? LIKE HAS IT EVER BEEN, YOU KNOW, AN

1 INC. OR EVER A PARTNERSHIP OR ANY OTHER TYPE OF
2 BUSINESS?

3 A. NOT SINCE I'VE OWNED IT, NO, MA'AM.

4 Q. OKAY. DO YOU RECALL WHEN YOU STARTED THE BUSINESS?

5 A. APPROXIMATELY 30 YEARS AGO.

6 Q. DID YOU START IT FROM SCRATCH, OR WAS THIS A
7 BUSINESS THAT YOU BOUGHT FROM SOMEBODY?

8 A. I BOUGHT IT FROM ROBERT J.B. BROWN. I WAS EMPLOYED
9 BY HIM AND THEN BOUGHT. AND IT IS A FRANCHISE.

10 Q. YOU ANTICIPATED MY NEXT QUESTION. I WAS GOING TO
11 ASK YOU WHAT YOU WERE DOING BEFORE YOU BOUGHT IT
12 FROM MR. BROWN. THEN APPROXIMATELY IN 1971 -- DOES
13 THAT SOUND ABOUT RIGHT?

14 A. YEAH.

15 Q. YOU WORKED FOR HIM. WAS HE THEN DOING BUSINESS AS
16 SERVICEMASTER? IS THAT THE WAY IT WAS?

17 A. MM-HMM (AFFIRMATIVE). YES, MA'AM.

18 Q. WHAT WAS THE NAME OF HIS BUSINESS CALLED?

19 A. SERVICEMASTER OF GREENVILLE.

20 Q. AND HOW LONG DID YOU WORK FOR MR. BROWN?

21 A. PROBABLY SEVEN YEARS.

22 Q. AND ---

23 A. PART OF THAT WAS PART-TIME, PART OF IT FULL-TIME.

24 Q. AND WHAT WERE THE VARIOUS JOBS THAT YOU HAD WHILE
25 YOU WORKED FOR MR. BROWN?

1 A. EVERYTHING FROM WORKING AS A JANITOR, RIGHT UP TO
2 BEING SUPERVISOR, TO MANAGING THE BUSINESS.

3 Q. BY WAY OF BACKGROUND, WHAT DID YOU DO BEFORE YOU
4 STARTED WORKING FOR SERVICEMASTER FOR MR. BROWN?

5 A. I WORKED FOR RANCH MOTOR EXPRESS. I WAS INBOUND
6 DOCK FOREMAN, OUTBOUND DOCK FOREMAN, DISPATCHER.
7 BEFORE THAT I WORKED FOR WINN DIXIE. I WORKED IN
8 THE IBM DEPARTMENT AND IN THE PRINT SHOP.

9 Q. WHAT MADE YOU DECIDE THAT YOU WANTED TO BUY MR.
10 BROWN'S BUSINESS?

11 A. I GUESS IT WAS BUY IT OR SEE HIM MAYBE TAKE IT DOWN.

12 Q. OKAY.

13 A. IT WAS MORE OR LESS AN OPPORTUNITY I SAW TO MAKE AND
14 BUILD A BUSINESS AND MAKE MONEY.

15 Q. WAS HE RETIRING AT THE TIME ---

16 A. NO.

17 Q. --- OR SELLING THE BUSINESS?

18 A. HE WAS SELLING IT. IT WAS A LITTLE BIT MORE THAN HE
19 WANTED TO HANDLE.

20 Q. AT THE TIME THAT YOU BOUGHT IT WHERE WAS THE
21 BUSINESS LOCATED?

22 A. POINSETT HIGHWAY.

23 Q. DID IT HAVE -- DO YOU RECALL THE STREET NUMBER?

24 A. NO. IT WAS DIRECTLY ACROSS FROM STONE
25 MANUFACTURING, BUT I DON'T KNOW THE NUMBER.

1 Q. OKAY. HAD IT BEEN LOCATED THERE DURING THE SEVEN
2 YEARS YOU WORKED THERE?

3 A. I DIDN'T WORK AT THAT LOCATION THOSE ENTIRE YEARS.
4 HIS BUSINESS, WHEN I FIRST STARTED HELPING HIM, WAS
5 DOING JANITORIAL WORK. AND WE BASICALLY WORKED OUT
6 OF HIS TRUCK GOING FROM BUSINESS TO BUSINESS DOING
7 JANITORIAL WORK. AND THEN EVENTUALLY BOB BOUGHT OUT
8 A GENTLEMAN NAME TERRY ISLAND. AND TERRY WAS
9 LOCATED AT THAT BUILDING, AND THEN WE, OF COURSE,
10 MOVED OUR OPERATION INTO THAT. TERRY'S PART OF THE
11 BUILDING WAS RESIDENTIAL CLEANING, AND BOB'S PART OF
12 THE BUSINESS WAS ORIGINALLY COMMERCIAL, JANITORIAL,
13 AND THAT KIND OF THING. THEY COMBINED THE TWO FOR A
14 WHILE. AND THEN WHEN I BOUGHT BOB OUT, HE SPLIT OFF
15 THE JANITORIAL PART OF IT AND KEPT IT. I KEPT THE
16 ON-LOCATION, THE DAYTIME WORK.

17 Q. OKAY.

18 (INTERRUPTION)

19 BY MS. RUNGE:

20 GO OFF FOR JUST A SECOND.

21 (OFF THE RECORD)

22 (COURT REPORTER MARKS 11 PAGES, COLLECTIVELY, AS
23 DEFENDANT'S EXHIBIT NUMBER 1, FOR ATTACHMENT TO THE
24 DEPOSITION)

25 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

1 Q. MR. HAWKINS, YOU HAD BROUGHT SOME DOCUMENTS WITH
2 YOU, WHICH WE HAVE MARKED AS EXHIBIT 1 TO YOUR
3 DEPOSITION. THEY'RE A SET OF DOCUMENTS WHICH MR.
4 CHILDS IDENTIFIED EARLIER. JUST FOR THE RECORD,
5 THEY'LL BE MARKED AS EXHIBIT 1.

6 I THINK I ASKED YOU A QUESTION EARLIER THAT YOU
7 NEEDED YOUR NOTES FOR WHAT WAS ---

8 A. DO YOU REMEMBER THE QUESTION?

9 Q. I BELIEVE THE QUESTION WAS WHEN YOU BECAME AN LLC.
10 BY MR. CHILDS:

11 THAT'S CORRECT.

12 WITNESS ANSWERS:

13 A. OKAY.

14 (PAUSE - WITNESS REVIEWS DOCUMENTS)

15 I'LL HAVE TO OWE YOU THAT ONE. I DON'T SEE IT IN MY
16 NOTES.

17 Q. OKAY.

18 A. (PAUSE - WITNESS REVIEWS DOCUMENTS)

19 I DON'T HAVE THAT, SO I'LL HAVE TO SUPPLY THAT TO
20 YOU LATER.

21 Q. OKAY. ALL RIGHT. WHEN YOU BEGAN DOING BUSINESS
22 IMMEDIATELY AFTER PURCHASING SERVICEMASTER OF
23 GREENVILLE FROM MR. BROWN, IT WAS LOUIE HAWKINS
24 DOING BUSINESS AS SERVICEMASTER OF GREENVILLE. IS
25 THAT CORRECT?

1 A. THAT'S RIGHT. YES, MA'AM.

2 Q. AND AS FAR AS THE PLAINTIFFS IN THIS LAWSUIT, I
3 UNDERSTAND THAT THERE'S LOUIE HAWKINS DOING BUSINESS
4 AS SERVICEMASTER OF GREENVILLE AND THERE'S ALSO
5 SERVICEMASTER OF GREENVILLE, LLC. IS THERE ANOTHER
6 CLAIM THAT'S BEING BROUGHT ON BEHALF OF YOU
7 INDIVIDUALLY, APART FROM THAT BUSINESS? DO YOU
8 KNOW? IF YOU DON'T KNOW, I CAN TALK TO MR. CHILDS
9 ABOUT IT LATER.

10 A. I DON'T KNOW. ALL I KNOW IS WHAT YOU'RE READING.

11 Q. ALL RIGHT. I'LL ASK MR. CHILDS ABOUT IT -- ABOUT
12 THAT LATER.

13 AND AS FAR AS MS. HAWKINS, AM I CORRECT THAT SHE
14 OWNED THE PROPERTY ON WHICH THE BUSINESS WAS
15 LOCATED?

16 A. THAT'S CORRECT.

17 Q. IS THAT RIGHT? OKAY. WE'LL GET INTO THAT LATER.
18 DID SHE HAVE ANY OTHER CLAIM OTHER THAN BEING THE
19 LANDOWNER FOR THE BUSINESS THAT YOU KNOW OF? WAS
20 SHE PART OWNER OF THE BUSINESS?

21 A. NO. SHE JUST WORKED FOR ME.

22 Q. OKAY. WELL, WHILE WE'RE GETTING INTO THAT, THE
23 BUSINESS IS CURRENTLY A LIMITED LIABILITY COMPANY,
24 CORRECT?

25 A. YES, MA'AM.

1 Q. AND WHO ARE THE MEMBERS OF THE LLC, OR WHO IS THE
2 OWNER? IS IT YOU?

3 A. YES, MA'AM.

4 Q. OKAY. IS THERE ANYBODY ELSE WHO HAS AN OWNERSHIP
5 INTEREST IN THE LLC?

6 A. NO, MA'AM.

7 Q. AND YOUR WIFE AND KIDS OR ANYBODY ELSE, THEY SIMPLY
8 ARE EMPLOYEES OF YOURS; IS THAT CORRECT?

9 A. THAT'S CORRECT.

10 Q. OKAY. WHO CURRENTLY OWNS THE REAL ESTATE ON WHICH
11 SERVICEMASTER IS LOCATED?

12 A. I DO.

13 Q. IT'S GONE TO YOU?

14 A. MM-HMM (AFFIRMATIVE).

15 Q. OKAY. AND WHO OWNS THE BUILDING THAT'S LOCATED ON
16 THE REAL ESTATE?

17 A. I DO.

18 Q. OKAY. AND I BELIEVE I UNDERSTOOD FROM THE COMPLAINT
19 THAT AT THE TIME DIXIE OWNED IT, THE PROPERTY WAS
20 LEASED TO SERVICEMASTER, LLC. IS THAT RIGHT?

21 A. THAT'S CORRECT.

22 Q. IS THAT CURRENTLY THE WAY IT IS ALSO, THAT YOU
23 INDIVIDUALLY OWN IT AND YOU ARE LEASING IT TO THE
24 LLC?

25 A. ACTUALLY, NONE OF THE PAPERS -- NOTHING'S BEEN

1 CHANGED, SO IT'S STILL AS IT WAS.

2 Q. OKAY. BUT IT'S GOING TO BE TRANSFERRED THEN TO YOU?

3 A. WELL, YEAH, IT'LL BE TRANSFERRED.

4 Q. AND THEN -- BUT IT'S A LEASING SITUATION, IS ANOTHER

5 PART OF MY QUESTION. IS THAT RIGHT? THAT DIXIE

6 OWNED IT AND WAS LEASING IT TO THE LLC?

7 A. I DON'T KNOW.

8 Q. OKAY. DO YOU KNOW IF THE LLC PAID ANY RENT?

9 A. YES, WE PAID RENT.

10 Q. OKAY.

11 A. I'VE GOT A DOCUMENT SOMEWHERE IN THE FILE THAT SAYS

12 THAT SHE OWNS IT AND THAT I'M RENTING IT FOR "X"

13 NUMBER OF DOLLARS AND I'M RESPONSIBLE FOR UPKEEP AND

14 BLAH, BLAH, BLAH, YOU KNOW.

15 Q. OKAY. AND -- I'M SORRY. I KNOW I JUST ASKED YOU

16 THIS AND IT ESCAPED ME. THE BUILDING -- WAS THE

17 BUILDING IN DIXIE'S NAME ALSO, OR WAS THAT IN YOUR

18 NAME -- HAS ALWAYS BEEN IN YOUR NAME?

19 A. I'M ALMOST POSITIVE IT'S IN HER NAME.

20 Q. OKAY. ALL RIGHT. I PROMISE WE'LL GET OUT OF THESE

21 DATES AND THINGS SOON, BUT I WANT TO MAKE SURE I

22 UNDERSTAND -- I'VE GOT A GOOD UNDERSTANDING OF

23 WHAT'S BEEN HAPPENING FOR THE PAST SEVERAL YEARS.

24 NOW, WHEN YOU STARTED IN 1971 IN DOING BUSINESS, MR.

25 BROWN HAD THIS LOCATION OUT AT POINSETT HIGHWAY. IS

1 THAT WHERE YOU'RE OPERATIONS WERE ONCE YOU TOOK
2 OVER?

3 A. YES, MA'AM.

4 Q. AND HOW LONG DID YOU STAY AT POINSETT HIGHWAY?

5 A. WE MOVED FROM THERE TO TIMMONS DRIVE, WHICH IS
6 BASICALLY ACROSS THE STREET FROM WHERE WE ARE NOW.
7 THAT WAS BACK PROBABLY IN 1970, MAYBE.

8 WHAT WAS THE DATE WE HAD DOWN THAT WE WAS AT
9 POINSETT HIGHWAY?

10 Q. WELL, I HAD ---

11 A. HAVE YOU GOT THAT?

12 A. YOU SAID YOU'D BEEN OWNING AND OPERATING THE
13 BUSINESS FOR 30 YEARS, SO I WAS USING 1971 ---

14 A. MAYBE WE OUGHT TO UP THAT TO 35 YEARS OR SO.

15 Q. OKAY.

16 A. I CAN -- IF YOU'LL WRITE THOSE DOWN, I CAN GET ALL
17 THOSE DATES FOR YOU, WHEN WE MOVED WHERE.

18 Q. OKAY.

19 A. IT'S JUST. . .

20 Q. I KNOW ALL THAT'S HARD TO REMEMBER.

21 A. WELL, I DON'T TRY TO.

22 Q. OKAY.

23 A. IF DIXIE COULD'VE BEEN HERE, SHE WOULD'VE POPPED
24 THEM RIGHT OFF TO YOU.

25 Q. I LIKE TO THINK WOMEN ARE BETTER ABOUT THAT THAN

1 MEN, BUT I'M NOT ALWAYS SO GOOD MYSELF, SO. . .
2 BUT, ANYWAY, IF YOU STARTED DOING BUSINESS ABOUT
3 1965, YOU SPENT APPROXIMATELY HOW MANY YEARS AT
4 POINSETT HIGHWAY BEFORE MOVING TO TIMMONS DRIVE?

5 A. MAYBE FIVE.

6 Q. OKAY. AND YOU BELIEVE YOU MOVED TO TIMMONS DRIVE
7 THEN AROUND 1970?

8 A. MAYBE IN 1970.

9 Q. OKAY. AND EXACTLY WHERE IS TIMMONS DRIVE?

10 A. IT BACKS UP TO THE DANIEL BUILDING WHERE THE BIG
11 BLACK BUILDING -- MATTER OF FACT, THEY PURCHASED
12 THAT FACILITY FROM US TO WHERE WE ARE NOW IN A LAND
13 SWAP, SOME KIND OF COMPLICATED DEAL.

14 Q. DOES TIMMONS DRIVE STILL EXIST?

15 A. IT DOES.

16 Q. IS IT JUST PART OF THE FLUOR DANIEL CAMPUS?

17 A. WELL, NO. IT GOES PAST THAT FACILITY ON INTO THOSE
18 APARTMENT COMPLEX THAT'S RIGHT THERE FRONTING
19 HAYWOOD ROAD, IN BEHIND THAT BANK, IF YOU'RE
20 FAMILIAR WITH THAT LOCATION.

21 Q. RIGHT. THERE'S A PALMETTO BANK THERE AND THEN ---

22 A. YEAH. IT'S DIRECTLY IN BEHIND THE PALMETTO BANK.

23 Q. AND WHEN DID THAT PURCHASE TAKE PLACE? YOU SAID
24 FLUOR DANIELS PURCHASED YOUR PROPERTY.

25 A. AT ABOUT -- OH, WHEN -- THAT WAS APPROXIMATELY '79-

1 OR '80 WHEN WE DID THE SWAP.

2 Q. OKAY. AND WHY DID YOU DECIDE TO SELL TO FLUOR
3 DANIEL?

4 A. AT THE TIME IT SEEMED LIKE A REAL GOOD INVESTMENT.
5 I ACCUMULATED ABOUT THREE TIMES AS MUCH PROPERTY,
6 AND IT JUST SEEMED LIKE A GOOD BUSINESS DEAL. THAT
7 WAS BEFORE THE WATER.

8 Q. NOW, WHEN YOU SAID YOU SWAPPED LAND, DID THEY PAY
9 YOU MONEY FOR YOUR PROPERTY?

10 A. THEY BUILT A BUILDING ON THE BUILDING THAT WE WORK
11 OUT OF NOW. THEY HAD IT BUILT AND PUT THE PACKAGE
12 TOGETHER AND WE DID A SWAP.

13 Q. OKAY. SO TO MAKE SURE I UNDERSTAND, DID FLUOR
14 DANIEL OWN THE REAL ESTATE WHERE YOUR BUSINESS IS
15 NOW LOCATED?

16 A. THEY MAY HAVE BOUGHT IT FOR A DAY AND THEN SWAPPED
17 IT. I MEAN IT WAS ALL A PACKAGE DEAL PUT TOGETHER
18 WITH THEIR ATTORNEYS AND OURS. ALL THAT WAS PUT
19 TOGETHER IN A SWAP.

20 Q. SO FLUOR DANIEL ALSO BUILT THE ACTUAL BUILDING
21 THAT'S CURRENTLY -- THAT YOU ALL ARE CURRENTLY
22 OPERATING OUT OF?

23 A. THAT'S RIGHT. MM-HMM (AFFIRMATIVE). THAT WAS PART
24 OF THE DEAL.

25 Q. AND ONCE THAT WAS CONSTRUCTED, THEN THEY SOLD --

1 THEY JUST SWAPPED YOU? OR DID YOU GET ANY MONEY OUT
2 OF THE DEAL?

3 A. NO, I DIDN'T GET ANY MONEY.

4 Q. YOU JUST GOT MORE LAND AND A BUILDING?

5 A. RIGHT. BETTER AND BIGGER. A BETTER BUILDING AND
6 MORE PROPERTY. THE VALUE WAS THERE.

7 Q. WAS THE VALUE OF WHAT YOU RECEIVED GREATER THAN WHAT
8 YOU HAD ON TIMMONS DRIVE?

9 A. YEAH, BUT I CAN'T TELL YOU THE DOLLAR AMOUNTS. IF
10 YOU NEED THEM, I CAN DIG THEM OUT FOR YOU.

11 Q. AND WERE YOU INVOLVED AT ALL IN THE CONSTRUCTION OF
12 THE BUILDING?

13 A. JUST FROM A ADVISOR STANDPOINT ON, YOU KNOW, WHERE
14 WE WOULD WANT THE BATHROOM TO BE, WHERE WE WOULD
15 WANT A ROLL-UP DOOR, WHERE WE WOULD WANT -- YOU
16 KNOW, THINGS LIKE THAT.

17 Q. AND SO IT WAS SORT OF LIKE YOU WERE THE OWNER AND
18 THEY WERE YOUR CONTRACTORS CONSTRUCTING IT FOR YOU
19 EXCEPT FOR THE FACT YOU DIDN'T ---

20 A. NO.

21 Q. --- OWN IT? NO?

22 A. NO. IT WAS LIKE THAT DANIEL OWNED IT AND THEY WERE
23 PUTTING THAT TOGETHER TO MY SPECIFICATIONS AND THEN
24 WE WAS SWAPPING.

25 Q. AND ONCE IT WAS COMPLETED, THEN THE DEAL OCCURRED?

1 A. RIGHT.

2 Q. IS THAT RIGHT?

3 A. RIGHT.

4 Q. AND YOU HAD AN ATTORNEY WHO WAS REPRESENTING YOU IN
5 THAT DEAL?

6 A. YEAH.

7 Q. DO YOU REMEMBER WHO THAT WAS?

8 A. I CAN LOOK IT UP. IT MIGHT HAVE BEEN STUART
9 ANDERSON, BUT I'M NOT SURE.

10 Q. NOW, YOU SAID WHEN YOU WERE ON TIMMONS DRIVE YOU
11 DIDN'T HAVE ANY FLOODING PROBLEMS; IS THAT ---

12 A. NO, MA'AM. IT'S ON TOP OF A HILL.

13 Q. WHEN THIS CONSTRUCTION OF YOUR CURRENT LOCATION WAS
14 GOING ON, DID THE ENGINEERS AT FLUOR -- WERE THEY
15 THE ONES WHO DREW UP DRAINAGE PLANS AND SUBMITTED
16 THINGS TO THE CITY, OR DID YOU HAVE TO DO THAT PART
17 OF IT?

18 A. I DON'T REMEMBER.

19 Q. OKAY. YOU DON'T REMEMBER BEING INVOLVED AT ALL IN
20 THE PERMITTING OR ANYTHING LIKE THAT?

21 A. I DON'T REMEMBER.

22 Q. OKAY. SO WHEN THE DEAL WAS DONE, WERE YOU ABLE JUST
23 TO MOVE RIGHT IN AND START BUSINESS, LIKE IT WAS A
24 BRAND NEW HOUSE AND YOU WERE ABLE TO MOVE IN AND GO
25 AHEAD AND ---

1 A. BASICALLY, YES, MA'AM.

2 Q. OKAY. DID FLUOR DO THAT FOR ANY OTHER BUSINESSES IN
3 THE AREA THAT YOU RECALL?

4 A. I DON'T KNOW. I DON'T KNOW.

5 Q. WHEN YOU ALL WERE NEGOTIATING THE DEAL, WERE THERE
6 OTHER LAND SITES THAT WERE CONSIDERED?

7 A. YES.

8 Q. OKAY. WHAT WERE THOSE?

9 A. THERE WERE OTHER LOTS AVAILABLE IN HAYWOOD
10 INDUSTRIAL PARK, AND THERE WAS A LOCATION SOMEWHERE
11 NEAR MAULDIN DOWN NEAR THE BI-LO FACILITIES. THAT'S
12 THE ONLY TWO I REMEMBER OFFHAND.

13 Q. AND DID THE PEOPLE AT FLUOR CONSULT WITH YOU ON
14 WHICH LOCATION YOU WANTED OR DID THEY JUST TELL YOU?

15 A. NO. WE PICKED -- WE PICKED OUT THE LOCATION.

16 Q. OKAY. WHEN YOU SAY "WE," WHO DO YOU MEAN?

17 A. DIXIE AND I.

18 Q. AND WHY DID YOU SELECT THE LOCATION WHICH, I
19 BELIEVE, IS 1 BYRDLAND DRIVE. IS THAT CORRECT?

20 A. AT THE TIME I THOUGHT IT WAS THE BEST LOCATION FOR
21 ME TO BE.

22 Q. AND IT'S 1 BYRDLAND DRIVE; IS THAT RIGHT?

23 A. MM-HMM (AFFIRMATIVE).

24 Q. AND IT'S WHERE YOU CURRENTLY ARE TODAY, RIGHT?

25 A. YES, MA'AM.

1 Q. OKAY. WHY DID -- WHAT FACTOR DID YOU CONSIDER IN
2 DETERMINING IT WAS THE BEST LOCATION FOR YOU?
3 CONVENIENCE, LOCATION TO CUSTOMERS? WHAT SORTS OF
4 THINGS DID Y'ALL THINK ABOUT?

5 A. YOU ALWAYS LOOK AT LOCATION, AND YOU LOOK AT IT FROM
6 A CONVENIENCE FACTOR. YOU LOOK AT IT FROM WHERE
7 YOUR CUSTOMER BASE IS. IF YOU'RE SERVICEMASTER OF
8 GREENVILLE, DO YOU WANT TO RESIDE IN MAULDIN. YOU
9 LOOK AT WHAT YOU HOPE THE LAND VALUES WILL GROW.
10 YOU, OF COURSE, LOOK AT IT BEING HAYWOOD ROAD, AND
11 YOU KNOW HAYWOOD ROAD IS GROWING, GROWING, GROWING,
12 AND YOU HOPE TO BE IN THAT LOCATION SO YOU CAN --
13 YOUR PROPERTY VALUES WILL GO UP. SO THAT'S
14 BASICALLY WHY WE CHOSE THERE.

15 Q. THE NATURE OF YOUR BUSINESS HAS BEEN THE SAME SINCE
16 1965, OR SO, WHENEVER YOU BOUGHT IT FROM MR. BROWN?

17 A. YES, MA'AM.

18 Q. HOW MANY EMPLOYEES DO YOU HAVE NOW?

19 A. 11.

20 Q. DOES YOUR SON DEAN WORK WITH YOU?

21 A. YES.

22 Q. OKAY. AND WHAT IS HIS TITLE?

23 A. BRANDON ALSO WORKS WITH US, SO GO AHEAD AND PUT HIM
24 DOWN.

25 Q. OKAY.

1 A. THEY'RE IN MANAGEMENT. WE -- HERE AGAIN, WE'LL DO
2 EVERYTHING FROM SWEEP THE FLOOR TO CLEAN YOUR HOUSE,
3 BUT THEY DO SALES AND MANAGEMENT.

4 Q. HOW LONG HAVE THEY BEEN -- EACH OF THEM -- BEEN
5 WORKING FOR YOU?

6 A. BRANDON'S PROBABLY BEEN WITH US 5 YEARS. DEAN'S
7 PROBABLY BEEN THERE 15 YEARS.

8 Q. THERE IS A CREEK ACROSS FROM YOUR BUILDING BYRDLAND
9 DRIVE, RIGHT?

10 A. YES, MA'AM.

11 Q. AND IT'S KNOWN AS LAUREL CREEK?

12 A. I DON'T KNOW THE NAME OF IT.

13 Q. AND THIS -- I'VE BEEN OUT THERE MYSELF, AND THIS
14 PART WHERE Y'ALL ARE LOCATED IS IN A LOW POINT
15 COMPARED TO SOME OF THE OTHER BUILDINGS AROUND.

16 Q. THAT'S CORRECT.

17 Q. IS THAT RIGHT?

18 AND, AS YOU SAID, YOUR POINT AT TIMMONS DRIVE WAS ON
19 A HILL OR HIGHER UP?

20 A. YES, MA'AM.

21 Q. OKAY. AND WAS THAT CREEK THERE WHEN YOU MOVED IN --

22 -

23 A. IT WAS.

24 Q. --- AROUND 1980?

25 A. IT WAS.

1 Q. OKAY. AND HAS THE -- THIS ISN'T A VERY DEEP CREEK,
2 IS IT? I MEAN YOU'VE GONE OVER AND LOOKED AT IT, I
3 ASSUME.

4 A. FROM THE TOP OF THE BANK TO THE BOTTOM OF THE
5 STREAM?

6 Q. YES, SIR.

7 A. PROBABLY SEVEN OR EIGHT FEET -- SIX FEET, MAYBE. I
8 DON'T KNOW.

9 Q. ACROSS FROM YOUR ---

10 A. I'M TALKING STRAIGHT DOWN. IF YOU LAID A BOARD OUT
11 AND THEN MEASURED FROM THERE TO THE BOTTOM OF THE
12 STREAM, IT MAY BE SIX FEET.

13 Q. OKAY. AND IS THAT HOW DEEP IT IS ACROSS FROM YOUR
14 LOCATION, YOU BELIEVE?

15 A. YES, MA'AM.

16 Q. NOW, HAVE YOU EVER BEEN TOLD OR LEARNED THAT YOUR
17 PROPERTY WAS IN A FLOODPLAIN?

18 A. DO YOU WANT ME TO REFER TO MY NOTES?

19 Q. IF YOU NEED TO, YOU CAN.

20 A. OKAY. I HAVE A NOTE THAT SAYS ON MARCH THE TWELFTH,
21 1997, WE WERE CONSIDERING BUYING FLOOD INSURANCE.
22 WE CALLED ABOUT A FLOODPLAIN AND WE WAS TOLD BY MR.
23 BILL LEE, ASSISTANT STORM DRAIN SUPERINTENDENT FOR
24 THE CITY OF GREENVILLE, THAT WE WERE NOT IN A
25 FLOODPLAIN. HE SAID THE FLOODPLAIN WAS THE OTHER

1 SIDE OF HAYWOOD ROAD.

2 Q. OKAY. THIS IS -- YOU'RE READING FROM YOUR LETTER TO
3 THE FIRM AT DREW ECKEL. IS THAT ALSO IN YOUR LETTER
4 TO MR. PASCHAL? WHY DON'T WE JUST REFER TO THAT ONE
5 SINCE I THINK YOUR ATTORNEY DIDN'T WANT ME TO HAVE
6 THE DREW ECKEL LETTER.

7 A. IS IT IN THAT ONE, TOO?

8 BY MR. CHILDS:

9 IT'S ALSO IN THE LETTER TO BILL LEE.

10 BY MS. RUNGE:

11 I THINK SO.

12 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

13 Q. WELL, LET'S GO OVER THAT FOR A MINUTE. BEFORE MARCH
14 TWELFTH OF '97 HAD YOU EVER BEEN TOLD THAT YOU WERE
15 IN A FLOODPLAIN BEFORE THIS CONVERSATION WITH MR.
16 LEE?

17 A. I THINK THE ONLY COMMENT I EVER REMEMBER ABOUT THAT
18 BEING EITHER IN OR OUT OF A FLOODPLAIN WAS SOMEBODY
19 FROM THE CITY. WE WERE JUST STANDING IN THE PARKING
20 LOT TALKING AND HIS COMMENT WAS "YOU KNOW YOU'RE IN
21 A FLOODPLAIN?" AND I SAID "NO, WE'RE NOT." BUT,
22 NOW -- AND IT WAS A LADY, BUT I CAN'T TELL YOU WHO
23 IT WAS.

24 Q. OKAY. WAS THAT BEFORE YOU TALKED TO MR. LEE?

25 A. I DON'T KNOW.

1 Q. OKAY.

2 A. I DON'T KNOW.

3 Q. WELL, WHY DID YOU DECIDE TO CONSIDER BUYING FLOOD
4 INSURANCE IN MARCH OF '97? WHAT -- DID SOMETHING
5 HAPPEN THAT PROMPTED YOU TO THINK ABOUT BUYING IT?

6 A. WHEN WAS THE 96-INCH CULVERT INSTALLED?

7 Q. WELL, WE'LL GET TO THAT. I BELIEVE IT WAS 1993.
8 BUT IS THERE AN EVENT THAT HAPPENED OR DID YOU
9 JUST -- DID SOMEBODY MENTION FLOOD INSURANCE? WHY
10 AT THIS POINT, WHEN Y'ALL HAD BEEN THERE FOR ABOUT
11 17 YEARS, DID YOU DECIDE TO BUY FLOOD INSURANCE?

12 A. I DON'T KNOW THE ANSWER TO THAT.

13 Q. OKAY.

14 A. I'M SORRY.

15 Q. THAT'S FINE. YOU CAN ONLY TELL ME WHAT YOU KNOW AND
16 WHAT YOU REMEMBER.

17 SO THIS NOTE THAT YOU'RE -- I KNOW YOU'RE REFERRING
18 TO -- LET'S SEE IF I HAVE ANOTHER COPY OF IT.

19 A. WELL, IT'S EVEN ON THIS COPY IF YOU WANT TO REFER TO
20 IT.

21 Q. ALL RIGHT. WELL, WHY DON'T WE JUST USE THAT ONE.
22 THIS IS ATTACHED TO -- MINE IS BEHIND A LETTER FROM
23 RON MCKINNEY, WHICH I DON'T THINK IS QUITE IN THE
24 RIGHT PLACE. BUT, IN ANY EVENT, YOU'VE GOT A COPY
25 OF A MEMO DATED 3/12/97?

- 1 A. YES.
- 2 Q. OKAY. WHOSE HANDWRITING IS THAT?
- 3 A. DIXIE. MY WIFE.
- 4 Q. OKAY. AND I SEE IT'S -- SHE'S GOT "LOUIE" AT THE
- 5 TOP. THAT'S YOU, RIGHT?
- 6 A. RIGHT.
- 7 Q. OKAY. APPARENTLY SOMEBODY HAD CALLED MR. LEE TO ASK
- 8 ABOUT THE FLOODPLAIN. WHO HAD CALLED?
- 9 A. DIXIE HAD CALLED MR. LEE AND ASKED HIM ABOUT THE
- 10 FLOODPLAIN.
- 11 Q. OKAY.
- 12 A. THE NOTE PRETTY WELL SAYS WHAT HE TOLD HER.
- 13 Q. OKAY. DO YOU KNOW IF DIXIE FOLLOWED UP WITH
- 14 ANYTHING ELSE AFTER GETTING THIS NOTE -- THIS
- 15 INFORMATION FROM MR. LEE?
- 16 A. FOLLOWED UP BY DOING WHAT?
- 17 A. CALLED ANYBODY ELSE, WENT AND LOOKED AT ANY MAPS OR
- 18 ANYTHING?
- 19 A. I DON'T KNOW.
- 20 Q. OKAY. DID YOU DO ANYTHING FURTHER?
- 21 A. NO, MA'AM.
- 22 Q. OKAY. DO YOU HAVE ANY INFORMATION NOW, TODAY, THAT
- 23 1 BYRDLAND DRIVE IS IN A FLOODPLAIN?
- 24 A. I DON'T, BUT WE DID -- WE HAVE PURCHASED SOME FLOOD
- 25 INSURANCE.

- 1 Q. OKAY. WHEN DID YOU PURCHASE YOUR FLOOD INSURANCE?
- 2 A. I DON'T KNOW.
- 3 Q. WAS IT AFTER MARCH TWELFTH OF '97?
- 4 A. YES, MA'AM, IT WOULD BE AFTER THEN.
- 5 Q. OKAY. WAS IT AFTER AUGUST OF '97?
- 6 A. I DON'T KNOW. I'D HAVE TO GO, YOU KNOW, TO THE FILE
- 7 AND LOOK IT UP FOR YOU.
- 8 Q. OKAY. HAVE ANY OF THE FLOODING INCIDENTS THAT YOU
- 9 HAVE BROUGHT THIS LAWSUIT ABOUT, HAVE ANY OF THEM
- 10 BEEN COVERED BY FLOOD INSURANCE?
- 11 A. NOT ANY OF THESE, NO.
- 12 Q. ANY OF THESE IN THE LAWSUIT?
- 13 A. NO.
- 14 Q. OKAY. YOU SAID, I THINK, A MINUTE AGO THAT YOU
- 15 SPOKE TO A WOMAN WITH THE CITY ---
- 16 A. MM-HMM (AFFIRMATIVE).
- 17 Q. --- IN YOUR PARKING LOT.
- 18 A. THAT'S PRETTY VAGUE, BUT ---
- 19 Q. NO. THAT'S OKAY. THAT'S OKAY. AND ABOUT THE
- 20 FLOODPLAIN?
- 21 A. WELL, I WAS, OF COURSE, COMPLAINING ABOUT THE
- 22 FLOOD -- THE WATER, AND SHE JUST KIND OF LIKE MADE
- 23 THE STATEMENT THAT "YOU REALIZE YOU'RE IN A
- 24 FLOODPLAIN?" AND I SAID, "NO, I DIDN'T REALIZE
- 25 THAT, BECAUSE, YOU KNOW, IF WE ARE IN A FLOODPLAIN,

1 YOU PUT US IN THE FLOODPLAIN," I THINK IS WHAT I
2 TOLD HER.

3 Q. OKAY. YOU DON'T RECALL HER NAME, I ASSUME?

4 A. NO, MA'AM.

5 Q. SHE WAS WITH THE CITY?

6 A. YES, MA'AM.

7 Q. AND DO YOU RECALL WHEN YOU HAD THIS CONVERSATION?

8 A. NO.

9 Q. WAS IT AFTER ONE OF YOUR ---

10 A. THAT'S NOT MUCH HELP, BUT ---

11 Q. I UNDERSTAND. WAS IT AFTER YOU HAD BEEN FLOODED?

12 A. YES.

13 Q. OKAY. WAS IT AFTER ---

14 A. I WOULD SAY IT WAS SHORTLY AFTER THIS -- THE FLOOD --
15 -- THE 7/24/97 FLOOD.

16 Q. OKAY.

17 A. FOR THE NEXT FEW DAYS AFTER THAT WE TALKED TO A LOT
18 OF PEOPLE WITH THE CITY.

19 Q. NOW, YOU SAID -- REPEAT WHAT YOU SAID YOU TOLD HER.
20 THAT THE CITY CAUSED IT TO BE IN THE FLOODPLAIN?

21 A. I SAID, "IF WE ARE IN A FLOODPLAIN, YOU PUT US IN
22 THE FLOODPLAIN."

23 Q. OKAY. ALL RIGHT. NOW, CAN YOU EXPLAIN WHAT YOU
24 MEAN BY THAT TO ME?

25 A. WELL, MY FEELINGS ARE IF YOU HAVE A PIPE THAT'S 96.

1 INCHES, IT'S ONLY GOING TO HOLD A LIMITED AMOUNT OF
2 MONEY -- WATER. IF YOU ALLOW MORE WATER THAN IT
3 WILL HOLD TO BE TRYING TO GO THROUGH THAT PIPE, IT'S
4 GOT TO BACK UP SOMEWHERE.

5 Q. MM-HMM (AFFIRMATIVE).

6 A. OKAY. THE PROPERTY THAT IS ACROSS THE STREET FROM
7 ME WHEN I DID THE SWAP WAS ACTUALLY A BIG HOLE IN
8 THE GROUND.

9 Q. LET ME STOP YOU RIGHT THERE. WHICH PROPERTY ARE YOU
10 REFERRING TO?

11 A. I IDENTIFY IT BY THE GOLDSMITH PROPERTY. IT'S NOW
12 THE MATTRESS -- WHERE THE MATTRESS COMPANY STORE IS.
13 WHEN THE LAND SWAP TOOK PLACE THAT WAS ACTUALLY A
14 BIG HOLE IN THE GROUND. OKAY. THE CITY EVIDENTLY
15 ALLOWED THAT TO BE FILLED IN AND THE PIPE PUT IN SO
16 THAT THAT PIECE OF PROPERTY COULD BE UTILIZED. THEY
17 DIDN'T HAVE ENOUGH PROPERTY FOR PARKING, AND ON AND
18 ON AND ON. SO I'M ASSUMING THAT THE CITY ALLOWED
19 GOLDSMITH TO FILL ALL THAT IN, PUT ALL THAT BACKFILL
20 IN THERE, PUT THE PIPE IN, IN ORDER TO BASICALLY
21 PUMP THAT PIECE OF PROPERTY UP AND GET IT HAYWOOD
22 ROAD FRONTAGE. THAT PUT ME IN A BIGGER HOLE.

23 Q. DO YOU RECALL WHEN THE -- THIS CONSTRUCTION WAS
24 GOING ON?

25 A. EARLY 1991. NO, I'M SORRY. THAT'S A WRONG DATE.

1 I'M SORRY. OKAY. THE SUMMER OF 1993.

2 Q. IS WHEN THEY WERE BUILDING THE BUILDING THAT'S NOW
3 THE MATTRESS STORE?

4 A. NO. FILLING -- YEAH, FILLING IN. PUTTING THAT PIPE
5 IN AND FILLING IN THE HOLE.

6 Q. OKAY. AT THE TIME THAT WAS GOING ON DID YOU HAVE
7 ANY CONVERSATIONS WITH ANYBODY FROM THE CITY ABOUT
8 WHAT THEY WERE DOING, OR ANY OF THE LANDOWNERS? AND
9 IN TERMS OF WHAT THEY WERE DOING, I GUESS I'M
10 THINKING MORE IN TERMS OF WHAT THEY'RE DOING WITH
11 THE CREEK.

12 A. I DON'T REMEMBER ANY CONVERSATION WITH ANYBODY AS TO
13 WHAT, WHY OR HOW OR WHEN.

14 Q. OKAY. WELL, THEN, I GUESS -- DID SOMEBODY TELL YOU
15 THE CITY INSTALLED A 96-INCH STORM DRAIN PIPE? OR
16 HOW DID YOU KNOW THAT'S THE EXACT DIAMETER?

17 A. SOMEBODY WITH THE CITY TOLD ME THAT.

18 Q. OKAY. DO YOU RECALL WHO THAT WAS AND WHEN THAT
19 CONVERSATION TOOK PLACE?

20 A. NO, MA'AM.

21 Q. THEN I SEE IN YOUR LETTER TO MR. PASCHAL YOU THEN
22 SAY "THEIR ENGINEER SAID THIS WOULD BE SUFFICIENT TO
23 HANDLE THE WATER RUNOFF."

24 A. OKAY. THAT HAD TO BE SOMEBODY WITH THE CITY.

25 Q. THAT'S WHAT IT LOOKS LIKE. THIS IS ON THE FIRST

1 PAGE OF ---

2 A. THAT WAS ALONG ABOUT THE TIME WHEN WE WERE TALKING
3 ABOUT -- WHEN I ASKED FOR COPIES OF THEIR WORKING
4 FILES RELATED TO MY CLAIM UNDER THE FREEDOM OF
5 INFORMATION ACT, I SPOKE WITH MR. MCKINNEY.

6 Q. OKAY. SO THIS WAS AFTER THE PIPE WAS INSTALLED ---

7 A. RIGHT.

8 Q. --- THAT YOU FOUND OUT IT WAS A 96-INCH PIPE AND
9 THAT THE ENGINEERS BELIEVED IT WAS SUFFICIENT TO
10 HANDLE WATER RUNOFF?

11 A. THAT'S RIGHT.

12 Q. OKAY. THAT'S KIND OF WHAT I'M TRYING TO FIGURE OUT,
13 IS WHAT -- WHO YOU TALKED WITH WHEN AND WHEN YOU
14 LEARNED THIS INFORMATION.

15 NOW, SINCE 1980 HOW MANY TIMES HAS YOUR PROPERTY
16 BEEN FLOODED?

17 A. UP UNTIL '97 OR UP UNTIL NOW?

18 A. WELL, LET'S DO UP UNTIL NOW.

19 A. OKAY. FIVE TIMES. NO, NO. YOU SAID -- ARE YOU
20 TALKING ABOUT MY PARKING LOT INCLUDED OR ARE YOU
21 TALKING ABOUT INSIDE MY BUILDING OR WHAT?

22 Q. WELL, LET'S JUST DO ALL YOUR FLOODING AND WE CAN
23 TALK ABOUT WHAT HAPPENED EACH TIME.

24 A. OKAY.

25 Q. HOW ABOUT THAT?

1 A. YOU WANT DATES, I'M SURE. JULY OF '91 WAS THE MUD
2 AND WATER FROM THE PEDEN CONSTRUCTION AND SO FORTH.

3 Q. OKAY.

4 A. JULY OF '93 WE HAD MUD AND WATER JUST IN THE PARKING
5 LOT.

6 AUGUST OF '95 WE HAD A SMALL AMOUNT OF WATER INSIDE
7 THE BUILDING, NOT EVEN ENOUGH TO MEASURE.

8 AND THEN JULY THE TWENTY-FOURTH OF '97.

9 AND THEN 10/4/99.

10 Q. OKAY. AND YOU'RE LOOKING AT THESE NOTES THAT WERE
11 PART OF WHAT YOU BROUGHT TODAY TO GET THOSE DATES.
12 SO SINCE YOU'VE BEEN THERE IN 1980 YOU'VE HAD FIVE
13 FLOODING INCIDENTS?

14 A. YES, MA'AM.

15 Q. OKAY. AND, AS I UNDERSTAND IT, YOU ARE CLAIMING
16 DAMAGES IN THIS LAWSUIT FROM THE FLOODING THAT
17 OCCURRED IN 1997 AND 1999.

18 A. JUST '97.

19 Q. JUST '97? OKAY.

20 I SEE ON YOUR NOTES HERE YOU SAY 7/24/97 AT 4:45
21 P.M. WATER STARTED COMING INTO THE BUILDING. WERE
22 YOU THERE AT 1 BYRDLAND DRIVE WHEN IT HAPPENED?

23 A. NO. I WAS IN TRANSIT, HEADED BACK FROM THE FARM TO
24 THE OFFICE. I RECEIVED A PHONE CALL FROM MY SON
25 THAT THE WATER WAS BEGINNING TO GET UP INTO THE

1 PARKING LOT AND STARTING TO COME INTO THE BUILDING.

2 Q. AND YOUR SON, WAS THAT DEAN?

3 A. THAT WAS BRANDON.

4 Q. WHEN YOU SAY "THE FARM," THAT'S WHERE YOU THREE
5 LIVE?

6 A. YES, MA'AM. WE'VE GOT 37 ACRES AND WE TRY TO FARM.

7 Q. MORE POWER TO YOU. THAT'S A LOT OF WORK.

8 THERE WAS A RECORD RAINFALL THAT DAY -- IS THAT
9 RIGHT? -- IN JULY OF '97? DO YOU RECALL?

10 A. OH, YEAH, THERE WAS.

11 Q. OKAY.

12 BY MS. RUNGE:

13 LET'S MARK THIS AS EXHIBIT 2, PLEASE.

14 (COURT REPORTER MARKS TWO-PAGE COPY OF NEWSPAPER ARTICLE
15 AS DEFENDANT'S EXHIBIT NUMBER 2, FOR ATTACHMENT TO THE
16 DEPOSITION)

17 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

18 Q. DO ---

19 A. HAVE YOU GOT PAGE FOUR TO GO WITH THIS?

20 Q. YES, SIR. THE SECOND PAGE.

21 A. SEE, THERE'S HOW I LOOK WHEN I'M FARMING, OVERALLS
22 AND ALL.

23 Q. I DIDN'T QUITE RECOGNIZE YOU TODAY. THAT'S THE ONLY
24 PICTURE I'D SEEN OF YOU.

25 SO YOU WERE FAMILIAR WITH THIS ARTICLE THAT WAS IN

1 THE GREENVILLE NEWS ON JULY TWENTY-FIFTH OF '97?

2 A. YES, MA'AM.

3 Q. OKAY. AND I BELIEVE YOU WERE INTERVIEWED FOR THIS
4 ARTICLE. IS THAT RIGHT?

5 A. YES, MA'AM.

6 Q. OKAY. ALL RIGHT. YOU -- LET'S GO IN HERE -- WERE
7 QUOTED SEVERAL TIMES IN THE ARTICLE, AND, AS YOU
8 MENTIONED, YOUR PICTURE WAS IN HERE. ON THE SECOND
9 PAGE OF THE ARTICLE YOU SAY (READING) HAWKINS, THE
10 BUSINESS OWNER WHO WAS FLOODED SAID GREENVILLE NEEDS
11 TO ENLARGE THE CULVERT NEAR HIS BUSINESS OR REDIRECT
12 SOME OF THE STORM WATER (END OF READING). AND THEN
13 YOU WERE QUOTED AS SAYING (READING) WE'VE BEEN
14 TRYING TO GET THE CITY TO PUT A BIGGER PIPE OUT
15 HERE. HE SAID THE BOTTOM LINE IS THE CITY HAS MADE
16 US THE HOLDING POND (END OF READING).
17 TELL ME ABOUT THAT, THE BACKGROUND BEHIND IT.

18 A. REFERRING BACK TO WHEN WE DID THE PROPERTY SWAP,
19 THERE WAS NOT A PIPE THERE.

20 Q. SO IT WAS SIMPLY THE CREEK?

21 A. RIGHT.

22 Q. AND NO PIPING. OKAY.

23 A. AND THE BIG HOLE. HAD THAT NOT BEEN FILLED IN AND
24 THAT 96-INCH PIPE BEEN PUT IN THERE, WE WOULD NOT
25 HAVE BEEN FLOODED. AND AS I SAID TO ONE OF THE

1 ENGINEERS, EITHER MOVE THE PIPE CLOSER TO HAYWOOD
2 ROAD OR EXTEND THE PIPE UP THE CREEK. AND HIS
3 COMMENT WAS "WE CAN'T DO THAT. IT WOULD CAUSE
4 FLOODING UP THE CREEK." AND I SAID, "MY POINT
5 EXACTLY. IT'S TOO SMALL." AND, OF COURSE, IF YOU
6 MOVE IT TOWARD HAYWOOD ROAD, THEN YOU'RE GOING TO
7 FLOOD HAYWOOD ROAD. WHEREVER THAT PIPE IS, IS GOING
8 TO CREATE FLOODING.

9 - Q. LET ME ASK YOU A FEW QUESTIONS ABOUT THAT. DO YOU
10 RECALL THE ENGINEER THAT YOU TALKED TO?

11 A. NO.

12 Q. OKAY. WHEN YOU SAY THE PIPE IS TOO SMALL, DO YOU
13 MEAN TOO SMALL IN TERMS OF LENGTH OR IN TERMS OF
14 DIAMETER?

15 A. DIAMETER.

16 Q. OKAY. YOU SAY THAT FILLING IN THE HOLE ON THE
17 GOLDSMITH PROPERTY AND PIPING THE CREEK IS WHAT'S
18 CAUSED -- YOU BELIEVE THAT'S WHAT'S CAUSING YOUR
19 FLOODING. IS THAT RIGHT?

20 A. THAT'S WHAT PUTS IT IN FRONT OF ME, YEAH.

21 Q. OKAY. HOW HAVE YOU REACHED THAT OPINION? TELL ME
22 HOW YOU CAME TO THAT CONCLUSION.

23 A. COMMON SENSE.

24 Q. HAVE YOU HAD ANY ---

25 A. NO, MA'AM, I HAVE NOT HAD ANY ENGINEERING EDUCATION

1 OR ANY OF THAT.

2 Q. HAVE YOU HAD ANY ENGINEERS TO COME OUT AND LOOK AT
3 THAT FOR YOU OR ANY OTHER PERSONS WITH EXPERTISE IN
4 EITHER STORMWATER OR ENGINEERING TO COME OUT AND
5 WORK WITH YOU?

6 A. I HAVEN'T. I HAVEN'T.

7 HAS THE CITY? I DIDN'T MEAN TO ASK YOU THAT. I'M
8 SORRY.

9 Q. YOU HAD MUD AND WATER -- WELL, LET'S SEE, MUD IN THE
10 STREET AND YOUR PARKING LOT IN JULY OF 1993, RIGHT?

11 A. YES, MA'AM.

12 Q. OKAY. WAS THAT BEFORE OR AFTER THE HOLE HAD BEEN
13 FILLED IN AND THE CREEK HAD BEEN PIPED?

14 A. I DON'T KNOW.

15 Q. NOW, THE WATER THAT CAME IN AUGUST OF '95, THAT WAS
16 PART OF THE REMNANTS OF HURRICANE JERRY, WASN'T IT?
17 THE END OF AUGUST THAT YEAR.

18 A. I GUESS.

19 Q. SO THERE WERE A LOT OF PEOPLE WHO HAD WATER PROBLEMS
20 THEN. AND WITHOUT GOING BACK THROUGH MY OTHER
21 NOTES, I BELIEVE I RECALL THAT THE DATE OF THAT
22 FLOODING WAS ABOUT THE TWENTY-FOURTH OR TWENTY-
23 FIFTH, THE END OF AUGUST, WHICH WAS THE TIME THAT
24 FLOODING OCCURRED.

25 A. OKAY.

1 Q. BUT, AGAIN, CORRECT ME IF YOU THINK DIFFERENTLY.

2 A. I DON'T HAVE ANYTHING -- I AGREE.

3 Q. OKAY. SO GOING BACK TO THE NEWSPAPER ARTICLE, YOU
4 SAY THE CITY NEEDS TO ENLARGE THE CULVERT. INCREASE
5 THE DIAMETER IS WHAT YOU'RE TALKING ABOUT?

6 A. YES, MA'AM.

7 Q. OR REDIRECT SOME OF THE STORMWATER. WHAT STORMWATER
8 ARE YOU REFERRING TO THERE?

9 A. ANY THAT COMES DOWN THAT CREEK.

10 Q. OKAY.

11 A. ANY THAT GETS OUT OF THE BANK AND COMES OVER ON MY
12 PROPERTY.

13 Q. AND WHEN YOU SAY (READING) THE BOTTOM LINE IS THE
14 CITY HAS MADE US THE HOLDING POND (END OF READING),
15 THAT'S WHAT YOU WERE TALKING ABOUT ---

16 A. YES, MA'AM.

17 Q. --- EARLIER WITH THE DEVELOPMENT OF THAT PROPERTY?

18 A. WHEN THE PIPE GETS FULL, IT'S ALMOST LIKE YOU HAD
19 JUST CLOSED IT OFF.

20 Q. MM-HMM (AFFIRMATIVE).

21 WHEN YOU SAY "WE'VE" BEEN TRYING TO GET THE CITY TO
22 DO THAT, THAT IMPLIES TO ME THAT BEFORE JULY OF '97
23 YOU HAD BEEN ASKING THE CITY TO COME OUT THERE AND
24 DO SOMETHING. IS THAT CORRECT?

25 A. IT IMPLIES THAT, BUT I DON'T KNOW THAT WE HAD.

1 Q. OKAY. AND WHEN YOU SAY "WE" JUST NOW AND IN THIS
2 ARTICLE, WHO IS "WE"?

3 A. I'M BASICALLY SPEAKING OF ME AND DIXIE.

4 Q. OKAY. WERE THERE ANY OTHER PROPERTY OWNERS THAT YOU
5 -- IN THIS AREA THAT YOU HAD CONSULTED WITH ABOUT
6 THIS PROBLEM?

7 A. NO.

8 Q. DO YOU KNOW IF THEY WERE EXPERIENCING THE SAME
9 FLOODING THAT YOU WERE?

10 A. THE BANK ACROSS HAYWOOD ROAD WAS FLOODED.

11 Q. ON THE SAME OCCASION IN JULY?

12 A. MM-HMM (AFFIRMATIVE). YEAH.

13 Q. OKAY. WHAT ABOUT THE OTHER TIMES, AUGUST ---

14 A. THEY WERE FLOODED AGAIN IN '97 WHEN WE HAD OURS,
15 TOO.

16 Q. OKAY. WERE THEY FLOODED IN AUGUST OF '95 AND JULY
17 OF '93?

18 A. I DON'T KNOW IF IT GOT UP THAT MUCH. THEY GET IT
19 AFTER I DO, SO I DON'T KNOW IF IT WAS UP HIGH ENOUGH
20 TO GET THEM THOSE TIMES OR NOT.

21 Q. OKAY. NOW, AFTER THIS FLOODING INCIDENT I KNOW YOU
22 TALKED WITH TIM GUERIN, WHO IS A CITY EMPLOYEE,
23 BECAUSE WE'VE GOT YOUR PICTURE HERE IN THE ARTICLE
24 TALKING WITH TIM ABOUT THE PROBLEM.
25 DID YOU TALK WITH ANYBODY ELSE WITH THE CITY ABOUT

1 THE PROBLEM AFTER JULY OF '97?

2 A. EVERYBODY THAT WOULD SHOW UP.

3 Q. OKAY.

4 A. AND NAMES -- IT'S DIFFERENT NAMES ALL THROUGH HERE,
5 THROUGH THESE NOTES OF THE -- YOU KNOW, PEOPLE LIKE
6 JOHN HERBERT AND BILL LEE AND -- WHO IS THE
7 GENTLEMAN THAT WORKS FOR THE CITY THAT'S ABOUT SEVEN
8 FEET TALL?

9 Q. BILL COURCHAINED? I'M NOT SURE IF HE ---

10 A. IF IT'S HIM, I'VE SPOKE WITH HIM ON TWO OR THREE
11 OCCASIONS.

12 Q. OKAY. BUT WHEN YOU SAY "ANYBODY WHO WOULD SHOW UP,"
13 DID YOU CALL DOWN TO PUBLIC WORKS AND THEY CAME OUT
14 TO SEE YOU AND YOUR PROPERTY? IS THAT WHAT
15 HAPPENED?

16 A. YES.

17 Q. AS OPPOSED TO YOUR COMING DOWN TO CITY HALL AND
18 HAVING A MEETING?

19 A. OH, NO, I DIDN'T.

20 Q. OKAY.

21 A. IT'S TEMPTING, BUT I WOULDN'T DO THAT.

22 Q. OKAY. NOW, LET'S SEE, YOU'VE GOT NOTES THROUGH HERE
23 WHO YOU TALKED WITH. I SEE ONE THAT SAYS (READING)
24 DIXIE CALLED CITY ENGINEERING AND TALKED TO JOHN
25 HERBERT IN JULY OF '97. HE SAID SHE NEEDED BILL

1 LEE, WHO IS DRAINAGE OR OPERATIONS (END OF READING).
2 AND THEN IT LOOKS LIKE BILL LEE WOULD COME AND TALK
3 TO YOU AFTERWARDS -- AFTER HE CAME BACK FROM A FLOOD
4 CALL.

5 A. MM-HMM (AFFIRMATIVE).

6 Q. DO YOU KNOW WHETHER BILL CAME OUT AND TALKED TO YOU
7 THEN OR DIXIE?

8 A. HE PROBABLY DID, OR WITHIN THE NEXT DAY OR TWO HE
9 PROBABLY DID. I -- THEY WERE REAL GOOD TO COME OUT
10 AND ACTUALLY TALK TO YOU, BUT, YOU KNOW, THAT WAS
11 ALL THAT WE GOT, WAS JUST CONVERSATION.

12 Q. WHAT I'D LIKE TO GET TO IS WHO CAME WHEN AND WHAT
13 THEY TOLD YOU AS THE BEST YOU REMEMBER. AND I KNOW
14 IT'S BEEN A WHILE, BUT DO YOU HAVE ANY SPECIFIC
15 RECOLLECTION OF WHAT BILL LEE TOLD YOU IN RESPONSE
16 TO DIXIE'S CALL?

17 A. THE ONLY ANSWER I COULD GIVE IS -- MY MEMORY IS THAT
18 THEY WERE WORKING ON THE PROBLEM, IS ALL I CAN
19 REMEMBER AS FAR AS GIVING YOU A DETAIL.

20 Q. OKAY.

21 A. DID YOU NOTICE ON THE BOTTOM OF THAT NOTE THE
22 CONVERSATION DIXIE HAD, EVEN TO THE POINT OF WHEN
23 THEY WERE TALKING ABOUT WHETHER IT WAS A FLOODPLAIN
24 OR NOT, AND ABOUT THE CITY WAS CONSIDERING BUYING
25 US. DO YOU SEE THAT NOTE?

- 1 A. I DO SEE IT. WHY DON'T WE TALK ABOUT IT HERE THIS
2 IS A NOTE -- YOU SAID THIS IS DIXIE'S HANDWRITING?
3 A. YES, MA'AM.
4 Q. OKAY. AND THIS IS DATED 10/29/97; IS THAT RIGHT?
5 A. THAT'S RIGHT.
6 Q. SHE SPOKE WITH JOHN HERBERT WITH THE CITY OF
7 GREENVILLE. SHE SAYS -- HER NOTES SAY (READING) NOT
8 IN FLOODPLAIN, BUT MAY WANT FLOOD INSURANCE (END OF
9 READING). IS THAT WHAT HERBERT TOLD DIXIE?
10 A. THAT'S WHAT HE SUGGESTED TO HER. THAT EVEN THOUGH
11 WE'RE NOT IN A FLOODPLAIN, WE MAY WANT TO PURCHASE
12 SOME FLOOD INSURANCE.
13 Q. OKAY. AND THEN THERE'S A QUESTION (READING) WANT TO
14 BUY US, QUESTION MARK (END OF READING). WAS THAT
15 DIXIE'S QUESTION OR JOHN'S QUESTION, IF YOU KNOW?
16 A. THAT WAS PROBABLY HER QUESTION TO HIM.
17 Q. OKAY.
18 A. BECAUSE SHE AND I HAD TALKED ABOUT THAT IF THE CITY
19 WAS GOING TO USE OUR FACILITY AS A HOLDING POND,
20 THEN THEY SHOULD BE WILLING TO BUY THAT HOLDING POND
21 AND MAKE A PARK DOWN THERE IF THEY WANT TO. AND
22 FROM HER NOTES I'M ASSUMING THAT JOHN HERBERT SAID
23 THE CITY IS CONSIDERING DOING JUST THAT.
24 Q. AND YOU INTERPRET THAT TO MEAN BUY YOUR PROPERTY?
25 A. BUY. YEAH. YES, MA'AM.

- 1 Q. OKAY.
- 2 A. THEY WERE DOING A STUDY NOW TO SEE IF THAT WAS THE
3 WAY TO GO INSTEAD OF EXTENSIVE DRAINAGE REPAIR.
- 4 Q. AFTER THIS CONVERSATION DID ANYTHING FURTHER HAPPEN
5 WITH THE CITY POSSIBLY BUYING YOUR PROPERTY?
- 6 A. NO, MA'AM.
- 7 Q. DID YOU ALL EVER GIVE THE CITY A DEMAND? FOR
8 EXAMPLE: YOU CAN BUY MY PROPERTY FOR \$100.00 OR ---
- 9 A. NO.
- 10 Q. OKAY. SO NO MONEY HAS BEEN DISCUSSED IN TERMS OF
11 THE AMOUNT OF MONEY ---
- 12 A. NO.
- 13 Q. --- FOR YOUR PROPERTY?
- 14 A. BUT I WOULD BE WILLING TO.
- 15 Q. HAS ANY OTHER CITY OFFICIAL SAID THAT THE CITY MIGHT
16 BE WILLING TO BUY YOUR PROPERTY?
- 17 A. NOT THAT I KNOW OF.
- 18 Q. AFTER THESE FLOODS AND RAINS YOU CONTACTED THE CITY
19 TO TALK ABOUT THE PROBLEM AND WHAT WAS GOING TO BE
20 DONE WITH THE PROBLEM. DID THEY EVER COME OUT AND
21 DO ANYTHING EITHER TO HELP YOU WITH THE DAMAGE OR TO
22 HELP MANAGE THE WATER OR MANAGE THE CREEK?
- 23 A. I DON'T UNDERSTAND YOUR QUESTION. I DON'T NEED TO
24 MANAGE THE CREEK. THAT'S SOMEBODY ELSE'S JOB.
- 25 Q. OKAY. DID THEY -- YOU SAID YOU HAD CALLED; YOU'D

1 LET THEM KNOW YOU HAD FLOODING PROBLEMS AND THEY
2 WOULD COME OUT AND TALK WITH YOU ABOUT THEM.

3 A. OH, THEY'VE EVEN HELPED CLEAN OFF MY PARKING LOT AND
4 WASH THE MUD BACK INTO THE STREET AND STUFF LIKE
5 THAT, YES.

6 Q. OKAY. HAS ANYONE EVER SAID THINGS -- AND I'M JUST
7 THROWING SOMETHING OUT. HAVE THEY EVER SAID "OH,
8 WE'LL COME AND PUT RIPRAP OUT THERE" AND THEN THEY
9 DID IT OR THEY DIDN'T, OR DID THEY COME IN ---

10 A. THEY DID DO THAT.

11 Q. OKAY. WHEN DID THEY PUT RIPRAP OUT THERE, IF YOU
12 KNOW?

13 A. I DON'T HAVE THE DATES ON ANY OF THAT WITH ME.

14 Q. OKAY. WAS IT BEFORE OR AFTER ONE OF THESE FLOODS?

15 A. IT WAS BEFORE -- TO THE BEST OF MY RECOLLECTION, IT
16 WAS BEFORE THE -- I DON'T KNOW IF IT WAS BEFORE THE
17 '97 OR BEFORE THE '99, BUT I'M THINKING IT WAS
18 BEFORE THE '97.

19 Q. IF IT WAS BEFORE THE '97 FLOODING, DO YOU KNOW WHY
20 THEY WOULD'VE BEEN OUT THERE PUTTING RIPRAP DOWN?
21 HAD YOU BEEN CALLING ASKING FOR SOMETHING OR ---

22 A. NO, I HADN'T. I WOULD ASSUME IT WAS JUST FROM
23 EROSION AND THEM TRYING TO MAINTAIN IT.

24 Q. YOU'VE GOT A NOTE HERE ON THIS PAGE WITH ONE OF YOUR
25 NOTES, MR. HAWKINS. IT SAYS (READING) I ASKED

1 KATHLEEN KEMPEY, CITY ATTORNEY, AND CANDICE,
2 QUESTION MARK ---

3 A. I DIDN'T GET MY COPY BACK ON THAT ONE, DID I?

4 Q. IS IT THIS ONE RIGHT DOWN HERE (INDICATING)?

5 A. OKAY.

6 Q. AT THE BOTTOM OF THAT PAGE.

7 WHEN DID YOU TALK TO KATHLEEN KEMPEY AND JOHN
8 HERBERT'S REPLACEMENT?

9 A. AUGUST THE EIGHTH OF '98.

10 Q. AUGUST OR JULY 8?

11 A. JULY. I'M SORRY.

12 Q. OKAY. AND WHY DID YOU HAVE OCCASION TO TALK TO
13 THEM?

14 A. WELL, WE HAD JUST ONGOING CONVERSATION WITH THESE
15 PEOPLE FOR MONTHS AND MONTHS AND MONTHS TRYING TO
16 GET SOMETHING. AND EVEN TODAY IF I STAY IN THAT
17 LOCATION, I WANT SOMETHING DONE TO CORRECT THE
18 PROBLEM. IT'S A PRETTY HEAVY STRAIN TO EVERY TIME
19 IT RAINS THAT NO MATTER WHERE YOU ARE AND WHAT
20 YOU'RE DOING -- WHETHER YOU'RE ON VACATION OR AT
21 HOME OR FARMING OR WHATEVER -- THAT YOU FEEL THE
22 URGE TO HAVE TO RUN BACK AND TRY TO PROTECT YOUR
23 PROPERTY. SO, YOU KNOW, REGARDLESS, I'D LIKE TO SEE
24 SOMETHING DONE TO CORRECT THE PROBLEM. AND A LOT OF
25 THIS TIME WAS CONVERSATION WITH THEM ON, YOU KNOW,

1 "WHAT ARE WE GOING TO DO." IF THAT MAKES SENSE.

2 Q. AT WHAT POINT DID YOU START TALKING WITH THE CITY
3 ATTORNEY'S OFFICE? I KNOW YOU'D BEEN TALKING WITH
4 SEVERAL OF THE FOLKS IN ENGINEERING, PUBLIC WORKS
5 AND THINGS. BUT, AS YOU NOTE DOWN HERE, KATHLEEN
6 KEMPEY IS ONE OF THE LAWYERS IN THE CITY ATTORNEY'S
7 OFFICE. I MEAN WAS THERE SOMETHING THAT PROMPTED --
8 -

9 A. PROBABLY JUST RIGHT IN THERE ABOUT THAT SAME TIME
10 WAS WHEN WE STARTED TALKING TO, YOU KNOW, ATTORNEYS
11 AND ENGINEERS, AND WE WOULD GET SOMEBODY'S NAME AND
12 SO WE WOULD START ON THEM UNTIL THEY PASSED US ON TO
13 SOMEONE ELSE.

14 Q. OKAY. AND THIS WAS AFTER YOU HAD STARTED ASKING FOR
15 SOMETHING TO BE DONE FOLLOWING YOUR JULY '97 FLOOD.
16 WAS THIS PART OF THE ONGOING PROCESS OF TALKING WITH
17 THE CITY AFTER THAT FLOODING?

18 A. YES, MA'AM.

19 Q. IS THAT RIGHT?

20 A. YES, MA'AM.

21 Q. AND YOU HAD ASKED THEN WHAT HAD BEEN DONE TO CORRECT
22 THE PROBLEM?

23 A. SEE -- NOT TO INTERRUPT. BUT ON AUGUST THE TWELFTH
24 THAT LETTER FROM THE CITY WHERE THEY'RE DENYING ANY
25 LIABILITY. AND, SEE, THAT WOULD GET ME STARTED

1 AGAIN AND I'D START TALKING TO THEM TRYING TO GET
2 SOMETHING DONE.

3 Q. WHEN YOU ORIGINALLY WROTE THE CITY -- THE FIRST TIME
4 YOU WROTE THEM WAS -- I CAN'T FIND IT.

5 A. PROBABLY JANUARY THE TWENTY-NINTH OF '98. I SENT
6 THEM A BILL. THAT'S BASICALLY ---

7 Q. YOUR LETTER TO BILL LEE?

8 A. NO. WELL, YEAH, TO MR. LEE.

9 Q. OKAY. WHICH WAS IN THE SET OF DOCUMENTS WE MARKED
10 EARLIER. AND THIS WAS THE FIRST TIME YOU PUT THIS
11 CLAIM IN WRITING TO THE CITY?

12 A. YES, MA'AM.

13 Q. OKAY. AND YOU ASKED -- IN THIS LETTER YOU ASKED FOR
14 REIMBURSEMENT IN THE AMOUNT OF 59,804.05; IS THAT
15 RIGHT?

16 A. YES, MA'AM.

17 Q. AND YOU GAVE HIM A COPY OF THE NOTE DIXIE HAD FROM
18 HER CONVERSATION WITH HIM?

19 A. YES, MA'AM.

20 Q. OKAY. AND YOU SAID YOU HAVE (READING) AN ITEMIZED
21 REPAIR INCLUDING LISTS THAT'S AVAILABLE TO YOU UPON
22 REQUEST (END OF READING); BUT THAT WAS NOT ENCLOSED
23 AT THE TIME?

24 A. THAT'S RIGHT.

25 Q. OKAY. AFTER THIS LETTER WHEN DID YOU NEXT HEAR FROM

1 THE CITY REGARDING THIS MATTER?

2 A. AUGUST THE TWELFTH.

3 Q. YOU DID TALK TO KATHLEEN KEMPEY ON JULY EIGHTH?

4 A. YEAH. I PROBABLY -- I DON'T HAVE ANYTHING RIGHT
5 HERE IN FRONT OF ME TO PROVE IT, BUT I PROBABLY HAD
6 SEVERAL CONVERSATIONS WITH THEM IN THAT TIME WHERE
7 THEY, YOU KNOW, WOULD BE CHECKING ON THINGS.

8 Q. OKAY. NOW, WHEN YOU TALKED WITH MS. KEMPEY IN JULY
9 OF '98, IT LOOKS LIKE -- AND, AGAIN, CORRECT ME IF
10 I'M WRONG. I'M LOOKING AT THIS NOTE RIGHT HERE
11 (INDICATING), WHAT HAD BEEN DONE TO CORRECT THE
12 PROBLEM. IS THAT WHAT YOU WERE ASKING MS. KEMPEY?

13 A. YES, MA'AM. MM-HMM (AFFIRMATIVE).

14 Q. OKAY. DO YOU RECALL WHAT SHE TOLD YOU?

15 A. I DON'T THINK SHE GAVE ME AN ANSWER. I DON'T THINK
16 SHE KNEW WHAT TO TELL ME.

17 Q. DID YOU GET ANY INFORMATION FROM KATHLEEN OR THE
18 OTHER WOMAN YOU MET WITH ABOUT -- IN RESPONSE TO ANY
19 OF YOUR QUESTIONS?

20 A. NO, MA'AM.

21 Q. DID SHE SAY ANYTHING ELSE ABOUT -- OR ANYTHING ABOUT
22 YOUR CLAIM FOR THE \$59,000 OR FOR PURCHASE OF YOUR
23 PROPERTY?

24 A. NO. NOT THAT I RECALL.

25 Q. AND THEN YOU GOT A LETTER FROM MR. MCKINNEY ON

1 AUGUST TWELFTH OF '98, AND I ASSUME IN RESPONSE TO
2 THAT YOU WROTE THE LETTER DATED AUGUST EIGHTEENTH OF
3 1998?

4 A. THAT'S CORRECT. YES, MA'AM.

5 Q. ALL OF WHICH ARE A PART OF EXHIBIT 1.

6 WHAT HAPPENED AFTER YOU SENT THE AUGUST 18 LETTER?

7 A. I THINK THAT'S WHEN WE STARTED DECIDING WE NEEDED TO
8 BE REPRESENTED BY AN ATTORNEY AND WE STARTED LOOKING
9 FOR ONE THAT WAS INTERESTED IN HANDLING IT FOR US.
10 I WAS HOPING THAT YOU LAWYERS DIDN'T NEED TO GET
11 INVOLVED.

12 Q. A LOT OF PEOPLE SAY THAT. WE DON'T TAKE IT
13 PERSONALLY, DO WE, ROBBIE?

14 BY MR. CHILDS:

15 NO. IT'S NICE WHEN WE DON'T HAVE TO GET INVOLVED.

16 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

17 Q. AND, JUST AS A MATTER OF SOME PAPERWORK CONFUSION,
18 IN OUR FILES WE HAD A COPY OF THIS SAME AUGUST
19 EIGHTEENTH LETTER ON A DIFFERENT -- LOOKS A LITTLE
20 BIT DIFFERENT THAN THIS ONE THAT YOU HAD AND THAT
21 Y'ALL HAD PRODUCED TO US.

22 A. OKAY.

23 Q. DO YOU KNOW -- YOU JUST RUN OUT OF LETTERHEAD? IS
24 THERE ANY REASON WHY IT'S ON A DIFFERENT PIECE OF
25 PAPER?

1 A. I HAVE NO IDEA.

2 Q. BUT IT'S THE SAME -- IF YOU'D LOOK AT IT AND MAKE
3 SURE IT'S THE SAME LETTER.

4 A. IS THE WORDING THE SAME?

5 (PAUSE - WITNESS REVIEWS DOCUMENT)

6 IT LOOKS LIKE SOMETHING THAT WAS ON THE -- SHE TYPED
7 ON THE COMPUTER AND THEN STUCK THE LETTERHEAD IN AND
8 -- I DON'T KNOW.

9 Q. OKAY.

10 BY MS. RUNGE:

11 LET'S JUST MARK THIS AS EXHIBIT 3 SINCE WE'VE
12 REFERRED TO IT.

13 (COURT REPORTER MARKS TWO-PAGE TYPEWRITTEN LETTER DATED
14 AUGUST 18, 1998, ON LETTERHEAD OF "SERVICEMASTER" AS
15 DEFENDANT'S EXHIBIT NUMBER 3, FOR ATTACHMENT TO THE
16 DEPOSITION)

17 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

18 Q. BUT IT APPEARS THAT THAT LETTER WE'VE MARKED AS
19 EXHIBIT 3 HAS GOT THE -- IT'S THE SAME CONTENTS AS
20 THE LETTER DATED AUGUST EIGHTEENTH THAT WAS IN
21 EXHIBIT 1.

22 A. OKAY.

23 Q. WHILE WE'RE ON THE SUBJECT OF QUIZZING YOU ABOUT WHO
24 ALL YOU TALKED WITH, WHEN YOU TALKED TO THEM AND
25 WHAT YOU SAID, DO YOU RECALL SPECIFICALLY TALKING

1 WITH ANYBODY ELSE WITH THE CITY ABOUT ANY OF THESE
2 PROBLEMS?

3 A. AS FAR AS SOMEBODY'S NAME OR DATE OR ANY OF THAT I -
4 - I CAN'T TELL YOU.

5 Q. NOW, IT LOOKS LIKE ON THE PIECE OF PAPER HERE, WHICH
6 IS SERVICEMASTER PROFESSIONAL CLEANING SERVICE'S
7 SHEET, YOU'VE GOT A NOTE (READING) MARCH FOURTEENTH,
8 2001, GREENVILLE NEWS (END OF READING). WHAT IS
9 THAT?

10 A. THAT'S BASICALLY AN ARTICLE OUT OF THE NEWSPAPER
11 WHERE I'D JUST TOOK NOTES. IF YOU'LL LOOK AT THE
12 GREENVILLE NEWS MARCH THE FOURTEENTH, 2001, IT TELLS
13 THAT THERE'S A TWO-MILLION-DOLLAR PROJECT SCHEDULED
14 FOR ALONG HAYWOOD ROAD FOR FLOODING. THE OTHER ONE,
15 BASICALLY, WAS AUGUST THE TWENTY-FOURTH OF '99.
16 (READING) CITY MANAGER STEVE THOMPSON SAID
17 STORMWATER EROSION IS CAUSED PARTLY BY PAVING OVER
18 GRASSY AREAS. TULIE ARROWWOOD SAID GREENVILLE HAS
19 14 WATER BASINS AND IS UNDERSIZED, WHICH (END OF
20 READING) -- I CAN'T READ MY OWN WRITING NOW --
21 (READING) WHICH THROWS WATER INTO SOME YARDS. GARY
22 COULTER (END OF READING) -- I GUESS IS HIS NAME --
23 (READING) SAID IT'S ONLY -- THAT IT'S OUR JOB TO
24 MAKE SURE IT DOESN'T DAMAGE PEOPLE'S PROPERTY. CITY
25 ENGINEER DON FOGLE SAID THE CITY STORMWATER PROBLEMS

1 ARE COMING FROM A VARIETY OF SOURCES, ESPECIALLY
2 UNDERSIZED PIPE (END OF READING).

3 Q. SO THESE ARE NOTES YOU HAVE MADE BASED UPON
4 NEWSPAPER ARTICLES; IS THAT RIGHT?

5 A. YES, MA'AM.

6 Q. YOU HAVEN'T SPOKEN WITH THESE INDIVIDUALS DIRECTLY,
7 THAT YOU CAN RECALL?

8 A. NO.

9 Q. OKAY. YOU'VE BEEN TALKING SOME ABOUT THIS PIPE.

10 A. YES, MA'AM.

11 Q. I WANT TO MAKE SURE I KNOW WHAT YOU ARE TALKING
12 ABOUT. I'VE GOT SOME PHOTOGRAPHS HERE OF THE AREA
13 NEAR 1 BYRDLAND DRIVE. AND THEY'RE XEROX COPIES;
14 THEY'RE NOT SO GREAT. IF YOU COULD LOOK THROUGH
15 THOSE AND, USING ANY OR ALL OF THEM, SHOW ME WHERE
16 THE PIPE IS.

17 A. (PAUSE - WITNESS REVIEWS COPIES OF PHOTOGRAPHS)
18 RIGHT THERE (INDICATING).

19 BY MR. RUNGE:

20 LET'S MARK THIS PAGE, WHERE HE'S MARKED IT, AS
21 EXHIBIT 4.

22 (COURT REPORTER MARKS COPY OF PHOTOGRAPH AS DEFENDANT'S
23 EXHIBIT NUMBER 4, FOR ATTACHMENT TO THE DEPOSITION)

24 WITNESS RESUMES ANSWER:

25 A. DO YOU NEED IT MARKED ON ALL OF THEM?

- 1 A. NO, SIR. I JUST WANTED TO MAKE SURE IF THAT'S THE
2 EASIEST ONE TO MARK.
- 3 A. YEAH.
- 4 Q. NOW, THERE'S A -- AS I RECALL -- AND I WISH I HAD A
5 BETTER PICTURE OF IT -- THE CREEK GOES INTO A ROUND
6 PIPE.
- 7 A. 96-INCH ROUND PIPE.
- 8 Q. OKAY. THAT IS -- PART OF THE PIPE EXTENDS FROM
9 UNDERNEATH LAND ---
- 10 A. RIGHT.
- 11 Q. --- SO THAT YOU CAN SEE PART OF THE PIPE; IS THAT
12 RIGHT?
- 13 A. MM-HMM (AFFIRMATIVE).
- 14 Q. AND IT'S NOT A SMOOTH PIPE ON TOP?
- 15 A. THAT'S WHERE THE ARROW IS, IS RIGHT WHERE THAT
16 PROTRUDES OUT OF THE GROUND.
- 17 Q. OKAY.
- 18 A. AND IT RUNS DOWN THROUGH HERE (INDICATING).
- 19 Q. OKAY. LET'S SEE NOW, ON THIS ONE -- IN THIS PICTURE
20 THE CREEK WOULD BE UNDERNEATH THIS (INDICATING)?
- 21 A. YEAH. THAT PIPE IS RUNNING UNDERGROUND RIGHT DOWN
22 THROUGH HERE (INDICATING).
- 23 Q. OKAY. AND BEFORE IT GETS TO -- IS THIS AIRPORT ---
- 24 A. THAT'S AIRPORT CROSSING.
- 25 Q. OKAY. -- AIRPORT CROSSING DO YOU SEE ANY OF THE

1 PIPE AGAIN?

2 A. THERE'S SOMETHING CONCRETE THAT STICKS UP RIGHT OUT
3 ALMOST INTO THIS EDGE OF THIS ROAD HERE. RIGHT
4 WHERE IT GOES INTO AIRPORT CROSSING YOU CAN SEE
5 SOMETHING THERE. IT'S SOME KIND OF CONCRETE. AND I
6 KNOW THE CITY HAS DUG IN AND OPENED ALL THAT UP AND
7 DONE SOME WORK IN THERE.

8 Q. OKAY. DO YOU BELIEVE THAT CONCRETE PIECE, FOR LACK
9 OF A BETTER WORD, IS THAT PART OF THE 96-INCH PIPE?

10 A. NO.

11 Q. OKAY. THAT'S SOMETHING THAT IS SEPARATE FROM ---

12 A. THAT'S PROBABLY AN ACCESS TO GET INTO THE DRAINAGE
13 SYSTEM FOR PROBABLY CLEANING OUT OR WHATEVER THEY
14 HAVE TO DO TO IT.

15 Q. BUT ONCE YOU SEE THE PIPE HERE AS YOU'VE MARKED IN
16 EXHIBIT 4, THERE ARE A COUPLE OF INCHES, MAYBE -- AS
17 I RECALL -- AND I'M NOT SURE IF THERE'S MUCH OF
18 THE --- A FOOT OF THE PIPE VISIBLE. I'M SURE YOU'RE
19 MORE FAMILIAR WITH IT THAN I AM. DO YOU ----

20 A. THERE'S MAYBE A FOOT OR TWO STICKING OUT, YEAH.

21 Q. OKAY. A FOOT OR TWO. THEN IS THE PIPE VISIBLE
22 AGAIN FROM THAT POINT TO AIRPORT CROSSING?

23 A. NO.

24 Q. OKAY.

25 BY MS. RUNGE:

1 LET'S MARK THIS, THE SECOND PICTURE, AS EXHIBIT 5.
2 (COURT REPORTER MARKS COPY OF PHOTOGRAPH AS DEFENDANT'S
3 EXHIBIT NUMBER 5, FOR ATTACHMENT TO THE DEPOSITION)
4 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

5 Q. AND THAT'S WHAT WE'VE BEEN TALKING ABOUT AND WHAT
6 YOU SAID WAS NOT PRESENT UNTIL THERE WAS
7 CONSTRUCTION ON THE GOLDSMITH PROPERTY; IS THAT
8 RIGHT?

9 A. THAT'S CORRECT.

10 Q. AND TO MAKE SURE I UNDERSTAND YOUR CLAIM HERE --
11 THAT'S ONE OF THE THINGS I'M TRYING TO DO TODAY.
12 IS THERE ANYTHING ELSE THAT YOU BELIEVE THE CITY HAS
13 DONE TO CAUSE YOUR FLOODING?

14 A. THEY HAVE ALLOWED BUSINESSES TO BE CONSTRUCTED
15 UPSTREAM. THEY'VE ALLOWED APARTMENT COMPLEXES TO BE
16 BUILT. THEY'VE ALLOWED MOVIE THEATERS TO BE BUILT.
17 ALL OF THESE PLACES HAVE PAVED PARKING, PAVED
18 DRIVEWAYS, ON AND ON AND ON. EVEN THE AIRPORT HAS
19 DONE EXTENSIVE RENOVATION AND PAVING AND GRADING AND
20 STUFF LIKE THAT. AND THEY'VE ALLOWED THIS WATER TO
21 BE THROWN RIGHT DOWN ON MY DIRECTION, ON TOP OF US,
22 WITHOUT PUTTING A BIG ENOUGH PIPE IN.

23 Q. YOU UNDERSTAND, I BELIEVE, THAT IF A LANDOWNER MEETS
24 THE REQUIREMENTS FOR DRAINAGE AND PERMITTING THAT
25 THE CITY CAN'T DENY THE PERMIT, RIGHT?

1 A. I UNDERSTAND THAT.

2 Q. HAVE YOU ---

3 A. BUT I ALSO UNDERSTAND THAT IF YOU LET "X" NUMBER OF
4 BUSINESSES BUILD AND THAT INCREASES WATER FLOW, THEN
5 THE NEXT BUSINESS HAS TO HAVE A BIGGER HOLDING
6 POND -- OR SHOULD HAVE. I MEAN ALL THAT SHOULD PLAY
7 INTO THE EQUATION.

8 Q. OTHER THAN WHAT YOU HAVE OBSERVED DURING THE TIME
9 YOU HAVE BEEN AT THE PROPERTY, DO YOU HAVE ANY OTHER
10 EVIDENCE THAT THIS CONSTRUCTION HAS INCREASED THE
11 WATER THAT'S COME DOWN THERE AND THEN BEEN A PART OF
12 YOUR FLOODING?

13 A. I DON'T KNOW HOW TO ANSWER THAT. I'VE GOT PHOTOS OF
14 THE WATER DAMAGE. I'VE GOT, YOU KNOW, PICTURES OF
15 HOLDING PONDS AND -- YOU KNOW, I'VE GOT PICTURES OF
16 A LOT OF STUFF LIKE THAT.

17 Q. HAS ANYBODY TOLD YOU THAT PERHAPS THE BUILDING UP
18 THE STREET HAS DRAINAGE PROBLEMS AND SO THERE'S BEEN
19 MORE WATER RUNOFF THAT COMES DOWN, ANYTHING LIKE
20 THAT?

21 A. I NOTICED IN ONE OF THESE NOTES THAT WE WERE LOOKING
22 AT EARLIER ----

23 Q. MM-HMM (AFFIRMATIVE).

24 A. JUST A MINUTE AND I'LL FIND IT. IT TALKS ABOUT THE
25 PHAR-MOR PROPERTY. JOHN HERBERT'S NOTE DATED

1 10/29/97 SAYS (READING) STORM SEWER UPSTREAM HAD
2 FAILURE UP AT PHAR-MOR AREA IN THE LAST STORM, WAS
3 BYPASSING THE HOLDING POND. HAS BEEN CORRECTED BY
4 PHAR-MOR (END OF READING).

5 Q. OKAY. OTHER THAN THIS NOTE HERE, DO YOU HAVE ANY
6 OTHER KNOWLEDGE ABOUT THIS PROBLEM OR KNOW ANYTHING
7 ELSE ABOUT IT?

8 A. NO.

9 Q. OKAY. DID MR. HERBERT OR ANYBODY ELSE SAY THAT THE
10 PROBLEM PHAR-MOR HAD WAS CAUSING YOUR PROPERTY TO
11 FLOOD?

12 A. NO.

13 Q. HAVE YOU THOUGHT ABOUT OR CONSIDERED BRINGING ANY OF
14 THESE PRIVATE BUSINESSES, WHO CONSTRUCTED THEIR
15 BUILDINGS AND PAVED THEIR PARKING LOTS AFTER YOU'D
16 BEEN THERE, INTO THE LAWSUIT?

17 A. NO.

18 Q. IS THERE ANY PARTICULAR REASON FOR THAT DECISION NOT
19 TO SUE THEM?

20 A. I DON'T HAVE AN ANSWER FOR THAT. I DON'T KNOW.

21 Q. WELL, LET'S TALK BRIEFLY ABOUT THIS PRIOR LAWSUIT
22 THAT YOU HAD. YOU HAD AN ATTORNEY WHO REPRESENTED
23 YOU IN THAT, I BELIEVE. IS THAT RIGHT?

24 A. DOUG PATRICK.

25 Q. DOUG PATRICK?

1 A. MM-HMM (AFFIRMATIVE).

2 Q. OKAY. AND YOU SUED THE CITY AND A NUMBER OF OTHER
3 ENTITIES: PEDEN, THE AIRPORT COMMISSION, AND
4 WILLIAM R. PEARSON. THAT LAWSUIT WAS FILED IN 1992,
5 FROM WHAT I CAN TELL. DOES THAT SOUND ABOUT RIGHT?

6 A. YES, MA'AM.

7 Q. AND AT THAT TIME YOU WERE DOING BUSINESS AS
8 SERVICEMASTER OF GREENVILLE. IT WAS BEFORE IT WAS
9 AN LLC. DOES THAT SOUND RIGHT?

10 A. YES, MA'AM.

11 Q. SO AT LEAST IN TERMS -- BY 1992 YOU WERE STILL A
12 D/B/A?

13 A. YES, MA'AM.

14 Q. I WAS TRYING TO HELP PINPOINT THE DATE OF THE LLC.

15 A. AND I'LL BE GLAD TO LOOK THAT UP.

16 Q. THAT'S FINE. WE'LL FIND IT OUT.

17 AND THAT SUIT TALKED ABOUT, FROM WHAT I CAN TELL
18 FROM LOOKING AT THE COMPLAINT, YOU HAD SOME FLOODING
19 IN JULY OF 1991. IS THAT RIGHT?

20 A. YES, MA'AM.

21 Q. WHAT WAS -- TELL ME ABOUT THAT FLOODING.

22 A. IT WAS CREATED BY A COMBINATION OF THINGS. ONE
23 BEING BYRDLAND WAS A DEAD-END STREET PRIOR TO THEN.
24 PEDEN CONSTRUCTION WAS BUILDING -- EXTENDING THE
25 STREET TO TIE IT IN WITH WOODS CROSSING.

1 Q. AT THE OTHER END FROM WHERE YOU ARE?

2 A. TO MAKE IT A THRU STREET. OF COURSE THEY HAD ALL OF
3 THAT GRADED AND JUST MUD AND DIRT AND STUFF, YOU
4 KNOW, EVERYWHERE. THEY DIDN'T ADEQUATELY PUT UP
5 BARRIERS TO STOP WATER AND MUD AND DIRT AND SO FORTH
6 AND SO ON, AND THAT CAME DOWN THE STREET AND FLOODED
7 AND CAME INTO OUR BUILDING.

8 Q. DID YOU TRY TO WORK WITH ANY OF THE DEFENDANTS ABOUT
9 THE PROBLEM, BEFORE YOU FILED THE LAWSUIT, TO TRY TO
10 RESOLVE IT? TO TRY TO RESOLVE IT WITHOUT FILING A
11 LAWSUIT IS MY QUESTION.

12 A. I DON'T REMEMBER. I FEEL LIKE WE DID. THE PEDEN
13 CONSTRUCTION GUY CAME DOWN WITH A VIDEO AND TOOK THE
14 VIDEOS AND SO FORTH AND SO ON AND THEN SOMEHOW TAPED
15 OVER THEM. SO THAT TOOK CARE OF A LOT OF THE
16 EVIDENCE. AND I THINK FROM DAY ONE PEDEN
17 CONSTRUCTION AND ALL THOSE PEOPLE INVOLVED WERE
18 TRYING TO DO HANDS-OFF. IT WAS NOT THEIR PROBLEM.
19 YOU KNOW, YOU'RE OUT THERE ON YOUR OWN. PEDEN
20 CONSTRUCTION DID COME DOWN AND SCRAPE MUD, LAYERS
21 AND LAYERS OF MUD OUT OF OUR PARKING LOT, YOU KNOW,
22 AS JUST A FRIENDLY GESTURE THEY SAID, NOT ADMITTING
23 THAT THEY HAD DONE ANYTHING WRONG.

24 Q. WAS THIS A CONTINUOUS PROBLEM OR A ONE-TIME
25 FLOODING?

1 A. THAT WAS A ONE-TIME.

2 Q. AND, AS I UNDERSTAND IT, YOU REACHED A COMPROMISE
3 SETTLEMENT WITH EACH OF THESE DEFENDANTS SO THAT THE
4 LAWSUIT DID NOT GO TO TRIAL. IS THAT RIGHT?

5 A. THAT'S CORRECT.

6 Q. OKAY.

7 A. BASED ON MY ATTORNEY'S OPINION.

8 Q. OKAY. LET ME HAND YOU A COPY OF A RECEIPT AND
9 RELEASE DATED MARCH TWENTY-EIGHTH, 1994. IS THAT
10 YOUR SIGNATURE AT THE BOTTOM?

11 A. YES, MA'AM.

12 Q. AND IS THAT THE RELEASE THAT YOU SIGNED GIVING UP
13 YOUR CLAIM AGAINST THE CITY OF GREENVILLE IN
14 EXCHANGE FOR SOME MONEY FROM THE CITY?

15 A. FOR THAT LOSS, YES, MA'AM.

16 BY MS. RUNGE:

17 LET'S MARK THIS AS EXHIBIT -- WHICHEVER NUMBER WE'RE
18 ON -- THANK YOU -- 6. YOU'RE FASTER THAN I AM.

19 (COURT REPORTER MARKS ONE-PAGE DOCUMENT TITLED "RECEIPT
20 AND RELEASE" AS DEFENDANT'S EXHIBIT NUMBER 6, FOR
21 ATTACHMENT TO THE DEPOSITION)

22 BY MS. RUNGE:

23 ROBBIE, DO YOU HAVE THIS?

24 BY MR. CHILDS:

25 YES.

1 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

2 Q. HOW MUCH DID THE CITY PAY YOU IN EXCHANGE FOR THIS
3 RELEASE?

4 A. 4,000.

5 Q. \$4,000?

6 A. YES. THERE'S A BREAKDOWN SOMEWHERE -- YOU'VE
7 PROBABLY GOT IT -- WHERE THE CITY PAID AND THE
8 AIRPORT PAID AND THE ENGINEERING PEOPLE PAID.

9 Q. YOU GOT DIFFERENT AMOUNTS FROM DIFFERENT DEFENDANTS;
10 IS THAT RIGHT?

11 A. YES, MA'AM.

12 Q. NOT EVERYBODY PAID YOU \$4,000.00. IS THAT WHAT
13 YOU'RE SAYING?

14 A. THAT'S RIGHT.

15 Q. AND I BELIEVE YOU SAID IT WAS ON RECOMMENDATION OF
16 YOUR ATTORNEY THAT YOU RELEASED THESE CLAIMS AND
17 ACCEPTED THIS MONEY?

18 A. YES, MA'AM.

19 Q. ARE YOU SAYING THAT YOU DIDN'T WANT TO SETTLE THE
20 CLAIM?

21 A. NOW, I DIDN'T SAY THAT.

22 Q. OKAY. THAT'S WHY I ASKED THE QUESTION. YOU DID
23 WANT TO SETTLE THE CLAIM?

24 A. YES, MA'AM.

25 Q. OKAY. AND WERE YOU HAPPY WITH THE SETTLEMENT AND

1 HAPPY THAT THE MATTER WAS RESOLVED?

2 A. I WAS HAPPY IT WAS OVER WITH AND BEHIND US, YES,
3 MA'AM. IT WAS NOT A WINDFALL PROFIT TYPE SITUATION.
4 WE PROBABLY -- WE MAY HAVE COME CLOSE TO BREAKING
5 EVEN ON OUR DAMAGES AND WHAT HAD HAPPENED TO US.

6 Q. NOW, YOU SAID A MINUTE AGO THAT THAT WAS A RELEASE
7 OF THAT WHAT?

8 A. THAT LOSS AND THAT MUD AND THAT ONE TIME, AND ALL
9 THIS OTHER HAS NOTHING TO DO WITH THAT.

10 Q. OKAY. THAT WAS GOING TO BE MY QUESTION. HOW DO YOU
11 KNOW THAT IT HAS NOTHING TO DO WITH THAT?

12 A. HOW DO YOU KNOW THAT IT DOES?

13 A. WELL, I MEAN, I DON'T. I'M ASKING YOU. HOW DO YOU
14 KNOW THAT THAT'S NOT RELATED, THAT THERE'S NOT A
15 RELATED PROBLEM THERE? HAS ANYBODY TOLD YOU? HAVE
16 YOU GOTTEN ANY EXPERTS TO LOOK AT IT? WHAT -- DO
17 YOU HAVE ANY DOCUMENTS, ANY PICTURES, PHOTOGRAPHS?
18 THAT'S WHAT I'D LIKE TO KNOW.

19 A. I DON'T KNOW HOW TO ANSWER THAT. I HAVEN'T HIRED AN
20 ENGINEER TO PROVE THAT THIS DOESN'T HAVE ANYTHING TO
21 DO WITH IT, NO.

22 Q. BECAUSE YOU KNOW -- I MEAN I KNOW YOU'RE AN
23 INTELLIGENT BUSINESS MAN AND YOU CAN READ THIS AS
24 WELL AS ANYBODY. THAT INDICATES THAT YOU HAVE
25 FULLY, FINALLY, AND FOREVER DISCHARGED THE CITY FROM

1 ANY LIABILITY WITH RESPECT TO THE PROPERTY, WHICH IS
2 THE PROPERTY WHERE YOU'RE STILL LOCATED, 1 BYRDLAND
3 DRIVE.

4 A. AND, YOU KNOW, THIS IS GONE AND DONE AND OVER WITH,
5 AND I'M NOT EVEN BRINGING THAT UP. YOU'RE THE ONE
6 THAT BROUGHT IT UP.

7 Q. YOU'RE RIGHT. I UNDERSTAND. I JUST WANT TO -- I
8 KNOW FROM MY PREVIOUS DISCUSSIONS WITH YOUR ATTORNEY
9 THAT YOUR POSITION IS THAT THIS RELEASE DOES NOT
10 HAVE ANY EFFECT ON THE CURRENT LAWSUIT YOU BROUGHT
11 THAT I'M DEFENDING. AND WHAT I'M TRYING TO FIND OUT
12 IS WHY YOU THINK THAT.

13 A. HOW COULD MARCH OF 1994 -- ME RELEASE ANYBODY FROM
14 SOMETHING THAT'S GOING TO HAPPEN IN 1997 THAT YOU
15 DON'T EVEN KNOW ABOUT? UNLESS THEY'RE GOING SAY,
16 YOU KNOW, "WE GOING PUT A PIPE OUT THERE AND CAUSE
17 YOU A PROBLEM."

18 Q. WELL, YOU SEE HERE IN THE FIRST PARAGRAPH THE
19 LANGUAGE WHICH SAYS (READING) ALL CLAIMS WHICH MAY
20 EXIST, KNOWN OR UNKNOWN, AND ANY DAMAGES PAST,
21 PRESENT, AND FUTURE IN ANY WAY CONNECTED (END OF
22 READING). AND I, YOU KNOW -- I'M NOT GOING TO
23 FIGHT WITH YOU ABOUT IT. I JUST WANTED TO KNOW WHAT
24 YOUR EVIDENCE WAS TO SHOW THAT THEY ARE NOT
25 CONNECTED PROBLEMS. AND I UNDERSTAND THAT YOU SAID

1 YOU DIDN'T HAVE ANY.

2 A. I DON'T HAVE ANY EVIDENCE TO THAT.

3 Q. ALL RIGHT.

4 LET'S TALK ABOUT YOUR DAMAGES IN THIS LAWSUIT. YOU
5 PROBABLY WANT TO TALK ABOUT THOSE. I HAVE GOTTEN
6 FROM YOUR ATTORNEY SOME DOCUMENTS IN RESPONSE TO A
7 REQUEST TO PRODUCE THAT I SENT. AND I HAVE TABBED
8 SOME THINGS IN THEM THAT I WANT YOU TO LOOK AT.

9 FIRST, AT THE BACK OF THIS SET ARE SOME PHOTOGRAPHS.
10 AND I DON'T NECESSARILY NEED AN EXPLANATION FOR EACH
11 PHOTO, BUT IF YOU COULD TELL ME, GENERALLY, WHAT
12 THEY ARE OF AND WHAT THEY ARE TRYING TO SHOW.

13 A. CAN I TAKE IT LOOSE FROM HERE?

14 Q. SURE. WE HAVE THE DOCUMENTS NUMBERED, SO WE CAN
15 JUST REFER TO THE NUMBERS.

16 A. HOW YOU WANT TO DO THIS?

17 Q. IF YOU WOULD REFER TO THE NUMBER AT THE BOTTOM OF
18 THE PAGE. YOU SEE I'VE GOT THEM EACH NUMBERED?

19 A. OKAY.

20 Q. AND JUST TELL THE COURT REPORTER WHAT THOSE
21 PHOTOGRAPHS SHOW, WHO TOOK THEM, AND WHEN THEY WERE
22 TAKEN, IF YOU KNOW.

23 BY THE WITNESS:

24 DO YOU HAVE DATES ON WHEN SOME OF THIS WAS ---

25 BY MR. CHILDS:

1 I HAVE THE ORIGINAL PICTURES.

2 BY WITNESS:

3 OKAY. THE DATES OUGHT TO BE ON THEM.

4 WITNESS ANSWERS:

5 A. 7/24/97, PHOTO IDENTIFIED AS NUMBER 107. THE TOP
6 PICTURE IS SHOWING THE WATER STANDING IN THE STREET
7 UP BYRDLAND DRIVE. THE BOTTOM PHOTO SHOWS WATER
8 INSIDE OUR OFFICES.

9 PHOTO 108 ---

10 BY MR. CHILDS:

11 DO YOU WANT HIM TO GO THROUGH ALL OF THEM OR THE
12 ONES THAT WERE TABBED?

13 BY MS. RUNGE:

14 I'M SORRY?

15 BY MR. CHILDS:

16 DO YOU WANT HIM TO GO THROUGH ALL OF THEM OR THE
17 ONES THAT WERE TABBED?

18 BY MS. RUNGE:

19 NO. ALL OF THE PHOTOS.

20 BY MR. CHILDS:

21 OKAY.

22 WITNESS RESUMES ANSWER:

23 A. THE TOP ONE IS, AGAIN, WATER INSIDE OF OUR BUILDING.
24 THE LOWER PHOTO IS BRANDON AND SOMEBODY ELSE
25 STANDING IN THE PARKING LOT IN FRONT OF OUR

1 FACILITIES.
2 109 IS JUST A CONTINUATION OF SHOWING HOW MUCH WATER
3 AND THE VEHICLES SITTING IN WATER.
4 PHOTOS 110, MORE OF THE SAME. IT SHOWS ONE OF
5 OUR EMPLOYEES IN THIGH-DEEP WATER.
6 NUMBER 111, TOP PHOTOGRAPH IS OUR CHEMICAL ROOM.
7 THE BOTTOM PHOTOGRAPH IS A REPEAT.
8 PHOTOGRAPH 112 -- IT LOOKS LIKE THE PHOTO FROM
9 SOMEONE STANDING IN THE PARKING LOT AT THE MATTRESS
10 BUSINESS ACROSS THE STREET, TAKING A PICTURE JUST
11 SHOWING HOW MUCH WATER IS STANDING IN THE STREET AND
12 IN THE PARKING LOT AND ON DOWN TOWARD THE PANTRY.
13 THE BOTTOM PHOTO IS MORE OF THE SAME.
14 113 IS PARKING LOT. THE BOTTOM PHOTO IS PARKING
15 LOT.
16 114 IS MORE OF THE SAME. THESE WERE TAKEN,
17 EVIDENTLY, FROM A VEHICLE BECAUSE I SEE THE
18 WINDSHIELD WIPERS.
19 115 IS JUST UP BYRDLAND ABOVE OUR PLACE OF BUSINESS.
20 116 IS MORE OF THE SAME.
21 117, TOP PHOTO IS THE -- SOMEONE STANDING INSIDE OUR
22 BUILDING TAKING A PICTURE OUT THE ROLL-UP DOOR INTO
23 OUR PARKING LOT. 117 IS OUR LAUNDRY ROOM FLOODED.
24 118 IS JUST PICTURES INSIDE OF OUR OFFICES.
25 119 IS MORE OF THE SAME.

1 120 IS A PICTURE SHOWING HOW DEEP THE WATER GOT UP
2 ON A EMPLOYEE'S HONDA. THIS BOTTOM PHOTO IS A
3 PICTURE SHOWING HOW DEEP THE WATER GOT ON A TOYOTA
4 FORERUNNER.

5 121 IS PICTURES UP HAYWOOD ROAD, ALONG WHERE THE
6 REDEMPTION OUTREACH CHURCH BUILDINGS ARE, SHOWING
7 WATER.

8 122 IS THE SAME. IT'S SHOWING WATER RUNNING DOWN
9 FROM ABOVE US, UP NEAR THE OUTREACH CHURCH.

10 123 IS MORE OF THE SAME.

11 124 IS MORE OF THE SAME FROM A DIFFERENT ANGLE.

12 125 IS SHOWING ONE OF THE CARS THAT SUSTAINED WATER
13 DAMAGE.

14 126 IS SHOWING HOW HIGH UP ON THE DRYWALL -- I'M
15 SORRY. I'M SORRY. I'M SORRY. 126 IS SOMEBODY
16 STANDING BESIDE AN AUTOMOBILE. THE LOWER PHOTO, I
17 DON'T KNOW WHAT IT IS.

18 127 IS PICTURES OF INSIDE OF SOMEONE'S CAR.

19 128 IS THE CITY PATCHING OUR PARKING LOT.

20 Q. WHEN WAS THAT TAKEN; DO YOU KNOW?

21 A. SEVERAL DAYS AFTER THE ---

22 Q. THE FLOODING.

23 A. --- FLOOD.

24 Q. OKAY.

25 A. THIS IS AFTER THEY CAME IN AND HELPED CLEAN THE

1 PARKING LOT, BROUGHT IN TRUCKS WITH WATER AND WASHED
2 THE PARKING LOT, AND THEN THEY CAME IN AND DUG UP
3 SOME OF THE PAVING -- ASPHALT AND LITERALLY, LIKE,
4 REHEATED IT AND PUT IT -- YOU KNOW, THEY GOT A
5 MACHINE THAT THEY CAN REHEAT IT -- TO TRY TO FILL IN
6 THE PARKING LOT.

7 Q. WAS THERE -- I GUESS I DIDN'T QUITE UNDERSTAND.
8 WHAT HAPPENED TO THE PARKING LOT THAT NEEDED TO BE -
9 - THEY CLEANED IT AND THEN ----

10 A. BASICALLY IT WAS UNDER ABOUT FOUR OR FIVE FEET OF
11 WATER. AND THEN WHEN YOU CLEANED IT, SOME OF THIS -
12 - THE WATER JUST WAS UNDER IT AND IT JUST WASHED IT
13 AWAY.

14 Q. OKAY. GOT YOU.

15 A. PHOTOS 129 WAS SHOWING -- THE TOP ONE IS A
16 REFRIGERATOR IN THE KITCHEN. THE BOTTOM ONE IS THE
17 SAME WITH SOMEBODY POINTING TO HOW DEEP THE WATER
18 GOT UP ON THE REFRIGERATOR, INTO THE MOTOR.
19 130 IS FILE CABINETS THAT GOT WET. THE BOTTOM OF
20 130 -- I'M NOT SURE WHAT IT IS.
21 131 IS BOXES THAT GOT WET. THOSE ARE NEW BOXES THAT
22 WE USE TO PACK OUT PEOPLE'S FURNITURE AND BELONGINGS
23 WHEN THEY HAVE FIRE DAMAGES. THE BOTTOM PHOTO IS
24 PICTURES OF STUFF THAT WE HAD IN STORAGE IN THE
25 BUILDING. THOSE ARE CUSTOMER GOODS.

1 132 IS MORE OF THAT SAME WAREHOUSE WHERE WE HAVE
2 CUSTOMER GOODS THAT WERE GETTING WET.

3 133, THE TOP PHOTO IS ONE OF THE EMPLOYEE'S MUSTANG
4 THAT GOT WET. THE BOTTOM PHOTO IS SOME MORE OF THE
5 CITY WITH THAT TRUCK THAT REHEATS THE ASPHALT.

6 Q. OKAY. ON THE SAME OCCASION THAT WE WERE TALKING
7 ABOUT?

8 A. YES, MA'AM.

9 Q. OKAY.

10 A. PHOTOS 134, THAT'S CITY EMPLOYEES THERE WORKING IN
11 THE PARKING LOT AND IN THE STREET.

12 135 IS MORE OF THE SAME.

13 136 IS THE INSIDE OF AN AUTOMOBILE THAT GOT DAMAGED.

14 137 IS SOME MORE PICTURES OF THE STORAGE UNIT.

15 THOSE, HERE AGAIN, ARE NEW BOXES AND CUSTOMER GOODS
16 AND THINGS OF THAT NATURE.

17 138, THE TOP PHOTO IS THE SIDE OF AN AUTOMOBILE.
18 THE BOTTOM IS CUSTOMER GOODS.

19 139, THAT LOOKS LIKE A PICTURE OF THE CREEK -- TOP
20 ONE. AND THE BOTTOM ONE LOOKS LIKE A PICTURE OF
21 HAYWOOD ROAD CROSSING. THAT'S CHILI'S RESTAURANT.

22 Q. IS THAT WATER AT THE BOTTOM OF THE PICTURE?

23 A. YES, MA'AM.

24 Q. OKAY.

25 A. RIGHT IN HERE IS WHERE THAT CONCRETE THING IS THAT

1 YOU AND I TALKED ABOUT EARLIER.

2 Q. OH, OKAY.

3 A. 140 LOOKS JUST -- YOU KNOW, THAT'S THE CREEK.
4 AND THAT'S IT.

5 Q. AND THESE ALL RELATE TO THE JULY '97 FLOOD. THEN
6 THE DAMAGE THEY SHOW, GENERALLY, THE DAMAGE THAT YOU
7 SUSTAINED AND THEN SOME PHOTOGRAPHS OF THE AREA AND
8 THE CITY DOING SOME WORK FOLLOWING THE FLOOD?

9 A. YES, MA'AM.

10 Q. DO YOU HAVE ANY OTHER PHOTOGRAPHS THAT RELATE TO
11 THIS OR THAT YOU'RE GOING TO USE LATER ON TO SHOW
12 DAMAGE, SHOW THE CREEK, ANYTHING RELATED TO THIS?
13 ANYTHING ELSE THAT Y'ALL -- THAT'S IT?

14 A. NOT THAT I KNOW OF RIGHT NOW.

15 Q. OKAY. FOR THE RECORD, THOSE PHOTOGRAPHS BEGIN AT
16 5030107 AND GO THROUGH 140 AND WERE ATTACHED TO THE
17 PLAINTIFF'S RESPONSE TO THE DEFENDANT'S REQUEST TO
18 PRODUCE.

19 LET'S GO THROUGH THIS. IN YOUR ANSWERS TO OUR
20 INTERROGATORIES, IN RESPONSE TO OUR QUESTION ABOUT
21 THE TYPES OF DAMAGES THAT YOU'RE CLAIMING HERE, YOU
22 LIST THREE DIFFERENT TYPES: PROPERTY DAMAGE, LOSS
23 OF BUSINESS REVENUE, AND DAMAGE TO VEHICLES. WE'LL
24 GO THROUGH EACH ONE SEPARATELY.

25 THE PROPERTY DAMAGE OF \$59,000, THAT'S THE SAME.

1 AMOUNT THAT YOU SUBMITTED TO MR. LEE BACK IN JANUARY
2 OF '98; IS THAT RIGHT?

3 A. YES, MA'AM.

4 Q. AND THOSE NUMBERS HAVE NOT CHANGED?

5 A. NO.

6 Q. AND, AS YOU'VE GOT IN YOUR LETTER TO MR. LEE WE
7 MARKED EARLIER, THE CLEAN-UP AND DRY-OUT OF
8 \$19,928.80; EQUIPMENT REPAIR OR REPLACE, \$4,517.70;
9 REPLACEMENT OF SUPPLIES, \$1,668.61; REPAIRS TO THE
10 BUILDING, \$33,688.94.
11 CLEAN-UP AND DRY-OUT FOR 19,000-AND-SOME DOLLARS,
12 CAN YOU TELL ME EXACTLY WHAT Y'ALL DID AND HAD TO DO
13 AND WHAT THE DAMAGE WAS THERE?

14 A. BASICALLY, YOU BEGIN BY MOPPING AND SQUEEGEE THE
15 WATER OUT OF THE BUILDING. YOU START TO VACUUM,
16 EXTRACT THE WATER FROM YOUR CARPETS. YOU START
17 TAKING FILE CABINETS APART AND TAKING THE FILES OUT
18 OF THEM AND GETTING THEM SPREAD OUT SOMEWHERE WHERE
19 AIR CAN GET TO THEM SO THEY CAN START TO DRY OUT.
20 YOU SET UP FANS AND DEHUMIDIFIERS TO START DRYING
21 AND PULLING THE WATER OUT OF THE AIR. A LOT OF THAT
22 MONEY IS FOR DRYING EQUIPMENT THAT'S USED IN THE
23 INDUSTRY TO DRY OUT HOUSES AND BUILDINGS.
24 Q. SO THAT \$19,000 IS THE USE OF EQUIPMENT AND LABOR TO
25 DO THE WORK?

1 A. YES, MA'AM.

2 Q. AND YOU WERE ABLE TO USE YOUR OWN EMPLOYEES AND YOUR
3 OWN EQUIPMENT TO DO THE WORK, RIGHT?

4 A. YES, MA'AM.

5 Q. SO THERE AREN'T BILLS THAT YOU SUBMITTED TO ANOTHER
6 COMPANY OR ANYTHING LIKE THAT?

7 A. RIGHT.

8 Q. HOW DID YOU REACH THAT TOTAL?

9 - A. I'VE GOT IT ITEMIZED: SO-MANY FANS, SO-MANY
10 DEHUMIDIFIERS. I'VE GOT IT -- AS YOU READ THAT, IT
11 SAYS -- WHERE DOES IT SAY? (READING) WE HAVE AN
12 ITEMIZED REPAIR AND CLEANING LIST THAT IS AVAILABLE
13 UPON YOUR REQUEST (END OF READING).

14 Q. AND IN A MINUTE I'LL GIVE YOU A LIST AND SEE IF SOME
15 OF IT IS IN HERE. I THINK IT MAY BE, BUT I'LL --

16 A. THAT LOOKS LIKE IT RIGHT THERE.

17 Q. YEAH, I THINK THAT'S IT RIGHT HERE.

18 A. MM-HMM (AFFIRMATIVE).

19 Q. WE'LL IDENTIFY THAT IN A SECOND, BECAUSE I SEE IN
20 THIS NOTE THAT WAS PART OF EXHIBIT 1 EARLIER THAT'S
21 TYPED JULY 24, '97, I SEE YOU'VE GOT A REFERENCE IN
22 HERE TO THE WORK THAT WAS DONE. FOR EXAMPLE,
23 (READING) AT 4:45 ON THE TWENTY-FOURTH, STARTED
24 PUTTING BOXES AND ITEMS ON FLOOR UP HIGH. SEVEN
25 PEOPLE WORKED (END OF READING), ET CETERA. THREE

1 PEOPLE WORKED, WHAT THEY DID, AND ALSO WHAT THEY DID
2 THE NEXT DAY.

3 A. MM-HMM (AFFIRMATIVE).

4 Q. IS THIS A PRETTY GOOD SUMMARY OF GENERALLY THE WORK
5 THAT WAS DONE?

6 A. THAT'S JUST THE BEGINNING.

7 Q. OKAY. THAT WAS GOING TO BE MY QUESTION. HOW MANY
8 DAYS -- I MEAN WAS THIS OVER THE COURSE OF A WEEK OR
9 -- HOW LONG DID IT TAKE TO DO THE WORK?

10 A. PROBABLY FROM JUST THIS CLEAN-UP STANDPOINT YOU'RE
11 PROBABLY LOOKING AT A WEEK, TEN DAYS, MAYBE EVEN TWO
12 WEEKS.

13 Q. EQUIPMENT REPAIR OR REPLACE. IS THIS EQUIPMENT THAT
14 WAS DAMAGED DUE TO THE WATER?

15 A. MM-HMM (AFFIRMATIVE).

16 Q. IS THAT WHAT THAT REFERENCES?

17 A. YES, MA'AM.

18 Q. REPLACEMENT OF SUPPLIES. WHAT IS THAT EXACTLY?

19 A. JUST LIKE BOXES THAT I WAS SAYING A WHILE AGO, NEW
20 BOXES THAT WE HAD. A LOT OF THAT WAS CARPET
21 PADDING, CARPET -- JUST, YOU KNOW, STUFF THAT WE USE
22 TO WORK WITH.

23 Q. IT WASN'T ----

24 A. IT'LL BE IN THAT LIST.

25 Q. WHICH I'LL GIVE TO YOU IN JUST A SECOND. I WANT TO

1 MAKE SURE I UNDERSTAND ALL OF THIS.

2 SO THE SUPPLIES WERE NOT THE SUPPLIES YOU ACTUALLY
3 USED TO CLEAN UP YOUR WATER PROBLEMS, BUT EQUIPMENT
4 THAT YOU WOULD USE ON OTHER JOBS?

5 A. I WOULD HAVE TO REFER TO THE ITEMIZED BILLING TO
6 ANSWER THAT.

7 Q. ALL RIGHT. I'LL LET YOU DO THAT.
8 TELL ME WHAT THE REPAIRS TO THE BUILDING FOR 33,000-
9 SOME-DOLLARS, WHAT WERE THOSE?

10 A. I'LL HAVE TO REFER TO THE ---

11 Q. ALL RIGHT. I THINK -- AND YOU'RE WELCOME TO LOOK
12 THROUGH ANY OF THIS TO SEE IF I'M WRONG, BUT I THINK
13 MOST OF THAT IS IN THE SECOND TAB.

14 A. OKAY.

15 Q. I GUESS MY QUESTIONS WERE ABOUT THE SUPPLIES. WELL,
16 MY FIRST QUESTION IS: ARE ALL THOSE DOCUMENTS YOUR
17 ITEMIZED LIST TO SUPPORT YOUR \$59,804.05 CLAIM?

18 A. YES, MA'AM.

19 Q. AND WHO PREPARED THAT ITEMIZED LIST?

20 A. THE FIRST PORTION OF IT WAS PREPARED BY DIXIE AND
21 MYSELF.

22 Q. AND THE REST OF IT?

23 A. AND THE BACK PORTION, WHICH SAYS "SOUTHERN HOME
24 IMPROVEMENTS," WAS BY RALPH PAGE, OWNER OF SOUTHERN
25 HOME IMPROVEMENTS.

1 Q. AND WHAT DID SOUTHERN HOME IMPROVEMENTS DO?

2 A. HE'S A GENERAL CONTRACTOR.

3 Q. AND WHAT KIND OF ESTIMATE -- WHAT DID HE DO FOR YOU?
4 TELL ME WHAT THOSE DOCUMENTS ARE AND WHAT HE DID.

5 A. IT'S ITEMIZED. BASICALLY TELLING ROOM BY ROOM WHAT
6 NEEDS TO BE DONE IN EACH ROOM. AS AN EXAMPLE, IN
7 THE LOBBY HE'S GOT TO REMOVE AND REPLACE HALF-INCH
8 DRYWALL, HANG IT, TAPE IT, FINISH IT, FLOAT IT, GET
9 IT READY FOR THE PAINTER; REPLACE THE BASEBOARD, THE
10 DOOR CASINGS, CHAIR RAIL, INSULATION IN THE WALLS;
11 REPLACE THE GLUE-DOWN CARPET, METAL TRANSITION
12 STRIPS; REPLACE SOME OUTLETS, PLUG-INS; THEN STAIN
13 AND FINISH THE BASEBOARD; PAINT THE DOORS; CHANGE
14 SOME WALLPAPER. I MEAN IT'S AN ITEMIZED LIST OF
15 WHAT HE WOULD DO IN EACH ROOM.

16 Q. AND IS THIS THE \$33,688?

17 A. YEAH.

18 Q. SO IT WAS RALPH PAGE? THAT WAS HIS NAME?

19 A. YEAH.

20 Q. HE CAME OUT AND GAVE YOU THAT ESTIMATE. NOW, DID HE
21 PERFORM THAT WORK?

22 A. SOME OF THIS WORK HAS BEEN DONE.

23 Q. HOW MUCH OF THE WORK? OR HOW MUCH IS REMAINING TO
24 BE DONE? WHICHEVER WAY YOU WANT TO ANSWER.

25 A. WELL, I DON'T KNOW HOW TO ANSWER THAT BECAUSE SOME

1 OF THIS HAS BEEN DONE OVER A PERIOD OF TIME AND THEN
2 SOME OF IT WASN'T EVEN COMPLETED WHEN WE HAD THE
3 OTHER FLOOD.

4 Q. WE KNOW THE FLOOD YOU'RE TALKING ABOUT.

5 A. THE '99.

6 Q. MM-HMM (AFFIRMATIVE).

7 A. SO I DON'T KNOW EVEN WHAT PERCENTAGE OF THIS
8 WOULD'VE BEEN COMPLETED.

9 Q. IS THERE WORK THAT REMAINS TO BE DONE TO THE
10 BUILDING AS A RESULT OF THE '97 FLOOD?

11 A. YEAH.

12 Q. CAN YOU TELL ME WHAT THAT WORK IS?

13 A. I CAN'T ANSWER THAT BECAUSE IT ALL INTERTWINES WITH
14 WHAT WAS GOING ON THEN AND EVEN, YOU KNOW, WHAT'S
15 GOING ON IN '99 AND EVEN TODAY.

16 Q. CURRENTLY ARE YOU ---

17 A. I MEAN, TO BE QUITE FRANK, WITHOUT THE CITY'S HELP I
18 WASN'T IN A POSITION TO SPEND THIS KIND OF MONEY.
19 AND WE HAVE MADE OUT WITH MUCH LESS BECAUSE WE
20 DIDN'T HAVE FLOOD INSURANCE; WE DIDN'T HAVE THE CITY
21 TAKING CARE OF ANY OF THIS RESPONSIBILITY. WE JUST
22 WEREN'T SET UP TO DO ALL THIS.

23 Q. MR. PAGE PERFORMED SOME WORK; IS THAT RIGHT?

24 A. NO.

25 Q. HE PERFORMED NO WORK?

1 A. HE GAVE US AN ESTIMATE.

2 Q. DID SOMEBODY PERFORM THE WORK THAT'S ON HIS
3 ESTIMATE?

4 A. SOME OF IT HAS BEEN DONE BY US, ME AND MY EMPLOYEES,
5 YES.

6 Q. HAVE YOU HAD ANYBODY OTHER THAN YOU OR YOUR
7 EMPLOYEES TO DO REPAIRS TO THE BUILDING?

8 A. NO.

9 Q. I THINK MY OTHER SPECIFIC QUESTION WAS IN TERMS OF
10 REPLACEMENT OF SUPPLIES, WHETHER THOSE WERE SUPPLIES
11 THAT WERE USED TO CLEAN UP YOUR PROPERTY OR THOSE
12 ARE SUPPLIES WHICH YOU USED ON OTHER JOBS.

13 A. OKAY. LET ME SEE WHAT I CAN FIND.

14 (PAUSE - WITNESS REVIEWS DOCUMENT)

15 HERE'S THE LIST OF EQUIPMENT TO BE REPAIRED OR
16 REPLACED, IF YOU NEED THAT.

17 Q. OKAY..

18 A. AND THEN THIS IS ITEMS THAT WAS RUINED. WE'RE
19 TALKING BOXES; BAGS OF TSP, WHICH IS A CLEANING
20 CHEMICAL; LAUNDRY DETERGENT; COMPUTER PAPER; SHELF
21 UNITS, PRESSBOARD THAT FELL APART; FAX PAPER;
22 TYPEWRITER RIBBONS -- ON AND ON AND ON -- COPY
23 PAPER; SERVICEMASTER FIRST-AID KITS; BELL ATLANTIC
24 TELEPHONE IN A JEEP; EIGHT-FOOT SECTION OF LOWER
25 CABINETS WITH DRAWERS THAT WAS OUT IN THE STORAGE

1 BARN. THAT'S THE 16.

2 Q. 16,068.61.

3 A. YEAH.

4 Q. SO THEY WERE THINGS THAT YOU USED IN YOUR BUSINESS,
5 NOT SUPPLIES THAT WERE USED TO CLEAN UP YOUR WATER?

6 A. RIGHT.

7 Q. OKAY. LET'S GO TO THE NEXT ITEM THAT YOU'VE GOT
8 HERE, LOSS OF BUSINESS REVENUE, \$25,000. WHEN I
9 LOOKED THROUGH THIS I DIDN'T SEE ANY DOCUMENTS
10 RELATING TO THAT. HOW DID YOU ---

11 A. WHERE DO YOU SEE THAT?

12 Q. --- ARRIVE -- THIS IS IN YOUR ANSWERS TO
13 INTERROGATORIES. WE'VE JUST TALKED ABOUT THE 59,000
14 PROPERTY DAMAGE IN YOUR LETTER TO MR. LEE.

15 A. OKAY.

16 Q. DO YOU HAVE ANY DOCUMENTS OR OTHER EVIDENCE ABOUT A
17 LOSS OF BUSINESS REVENUE?

18 A. I DON'T HAVE THAT WITH ME, BUT THAT'S EVIDENTLY A
19 FIGURE THAT DIXIE HAD ARRIVED AT AFTER WE HAD
20 RETAINED MR. CHILDS.

21 Q. DO YOU KNOW HOW SHE ARRIVED AT THAT AMOUNT?

22 A. NOT RIGHT OFFHAND I DON'T.

23 Q. DO YOU KNOW OF ANY SPECIFIC DOCUMENTS THAT YOU HAVE
24 RELATING TO THAT AMOUNT?

25 A. NO. BASICALLY YOU COULD PRETTY WELL FIGURE THE TIME

1 THAT WAS SPENT DOING OUR WATER DAMAGE WE COULD NOT
2 BE OUT DOING OTHER PEOPLE'S. THAT WOULD BE A GOOD
3 RULE OF THUMB.

4 Q. AND YOU SAID IT TOOK YOU HOW LONG TO GET EVERYTHING
5 CLEANED UP?

6 A. I'D SAY TWO WEEKS, A WEEK AND A HALF TO TWO WEEKS.

7 Q. AND HOW MANY EMPLOYEES DID YOU HAVE WORKING ON THAT
8 PROJECT?

9 A. PROBABLY AT THAT TIME MAYBE EIGHT, SOMEWHERE BETWEEN
10 EIGHT AND TEN.

11 Q. AND WERE THEY WORKING ON IT ALL DAY EVERY DAY OR ---

12 A. PRETTY MUCH. PRETTY MUCH ALL DAY EVERY DAY. THE
13 BEST I REMEMBER THERE WAS MAYBE TWO OR THREE CARPET
14 JOBS --- CARPET CLEANING JOBS OR SOMETHING THAT WE'D
15 SEND A CREW TO DO, AND THEN WHEN THEY GOT BACK THEY
16 WOULD CONTINUE TO HELP WITH THE CLEAN-UP. WE HAD
17 STUFF SCHEDULED.

18 Q. IF YOU CAN GET ME ANY DOCUMENTS YOU'VE GOT TO HELP
19 SUPPORT THAT IN ADDITION TO THE DATE YOU BECAME AN
20 LLC --- I THINK WE'VE GOTTEN MOST OF THE OTHER
21 QUESTIONS RESOLVED --- I'D APPRECIATE IT.

22 BY THE WITNESS:

23 LET ME BORROW YOUR PENCIL.

24 BY MR. CHILDS:

25 I'M MAKING NOTES.

1 BY THE WITNESS:

2 OKAY, GOOD.

3 BY MS. RUNGE:

4 YOUR LAWYER IS MAKING NOTES FOR YOU.

5 BY THE WITNESS:

6 GREAT.

7 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

8 Q. YOUR DAMAGE TO VEHICLES, 17-SOMETHING. ON THE FIRST
9 TAB HERE IN THESE DOCUMENTS I THINK -- IF YOU'LL
10 LOOK AT THAT, THOSE THINGS I'VE GOT TABBED, AND TELL
11 ME IF THOSE ARE THE ESTIMATES THAT SUPPORT THAT
12 AMOUNT.

13 A. (PAUSE - WITNESS REVIEWS DOCUMENT)

14 I WOULD SAY YES, MA'AM. DO THEY ADD UP? IF THEY --

15 -

16 Q. I HAVEN'T ADDED THEM UP.

17 A. OKAY. THEY LOOK TO ME AS TO BE FOR THAT.

18 Q. AND THEN ON THE 7/24/97 TYPED NOTE THAT IS PART OF
19 EXHIBIT 1 YOU'VE GOT SOME REFERENCE TO CARS. YOU
20 SAY (READING) THE WATER RAN INSIDE SEVEN VEHICLES IN
21 OUR PARKING LOT, WHICH INCLUDE THE FOLLOWING (END OF
22 READING) AND YOU LIST SEVEN DIFFERENT CARS, AND
23 YOU'VE GOT SOME HANDWRITTEN NOTES BY IT. THIS FIRST
24 ONE, THE '88 HONDA, EMPLOYEE MARY ANN PALMER, SHE'S
25 AN EMPLOYEE OF YOURS?

1 A. YES, MA'AM.

2 Q. AND YOU'VE GOT A NOTE, "TOTALLED"?

3 A. HER VEHICLE WAS TOTALLED.

4 Q. WAS THAT HER PERSONAL VEHICLE?

5 A. YES.

6 Q. AND THEN A '95 MUSTANG, SHERRY MOORE.

7 A. THE VERY SAME.

8 Q. YOU LIST THE FIRST FOUR AS EMPLOYEES. ARE THOSE
9 EMPLOYEE-OWNED VEHICLES THAT HAD DAMAGE?

10 A. YES.

11 Q. AND THEN THE NEXT THREE YOU LIST AS SERVICEMASTER,
12 THEN YOU SAY BRANDON HAWKINS; SERVICEMASTER WORK
13 VAN; SERVICEMASTER, DEAN HAWKINS. ARE THOSE
14 VEHICLES OWNED BY SERVICEMASTER?

15 A. RIGHT. NOW, I THINK THE TOYOTA FORERUNNER -- AND I
16 WOULD HAVE TO LOOK -- I THINK IT'S IN BRANDON'S
17 NAME.

18 Q. IS IT PART OF WHAT'S BEEN ----

19 A. LET'S SEE.

20 (PAUSE - WITNESS REVIEWS DOCUMENT)

21 BY MR. CHILDS:

22 IF I MIGHT ELABORATE FOR YOU, THE CAR FIGURE IS THE
23 THREE BOTTOM ---

24 BY MS. RUNGE:

25 OKAY. THAT WAS GOING TO BE MY NEXT QUESTION.

1 BY MR. CHILDS;

2 I DON'T THINK WE'RE CLAIMING FOR OUR EMPLOYEES'
3 VEHICLES, I DON'T THINK.

4 BY MS. RUNGE:

5 I DIDN'T THINK YOU WERE EITHER, BUT I APPRECIATE
6 YOUR ANTICIPATING MY NEXT QUESTION, ROBBIE.

7 WITNESS RESUMES ANSWER:

8 A. I DON'T SEE IT. HERE AGAIN, I DON'T KNOW IF THAT
9 VEHICLE IS IN BRANDON'S NAME OR -- I FEEL LIKE IT'S
10 IN HIS NAME INSTEAD OF MINE. I WAS JUST TRYING TO
11 MAKE SURE I WASN'T ANSWERING WRONG.

12 Q. DO THE ESTIMATES RELATING TO THOSE THREE VEHICLES
13 YOU'VE GOT HERE ON YOUR LIST ARE ALL -- YOU'VE
14 PRODUCED COPIES OF THE ESTIMATES FOR THE REPAIRS AND
15 ALL OF THAT?

16 A. YES, MA'AM.

17 Q. HAVE THEY BEEN REPAIRED; DO YOU KNOW?

18 A. YES, MA'AM.

19 Q. AND YOU'VE GOT THESE FIGURES HANDWRITTEN BY THESE
20 THREE -- LAST THREE VEHICLES. CAN YOU TELL ME WHAT
21 THEY MEAN? I DON'T KNOW THAT I CAN QUITE MAKE THEM
22 OUT.

23 A. THOSE NUMBERS SHOULD ADD UP TO THE MONEY WE'RE
24 CLAIMING.

25 Q. OKAY. THE 17,027.39?

- 1 A. YEAH, THEY SHOULD ADD UP TO THAT.
- 2 Q. AND HAS INSURANCE ---
- 3 A. THERE MAY BE SOME DEDUCTIBLES INVOLVED THERE, BUT
- 4 THEY SHOULD ADD UP.
- 5 Q. YEAH, I CAN SEE A DEDUCTIBLE ON A COUPLE OF THEM --
- 6 WELL, ALL THREE OF THEM, I GUESS, AND THEN YOU'VE
- 7 GOT (READING) INSURANCE PAID (END OF READING). SO
- 8 INSURANCE HAS PAID FOR A PORTION OF THE REPAIRS TO
- 9 THESE VEHICLES?
- 10 A. YES, MA'AM.
- 11 Q. I GUESS THE REPAIRS MINUS THE HUNDRED-DOLLAR
- 12 DEDUCTIBLE ON EACH ONE.
- 13 A. THAT'S RIGHT.
- 14 Q. SINCE WE'VE BEEN SITTING HERE YOU BROUGHT UP THAT
- 15 THE CITY -- OR YOU DISCUSSED BRIEFLY WITH THE CITY
- 16 SELLING YOUR PROPERTY TO THEM. IS THAT RIGHT?
- 17 A. YES, MA'AM.
- 18 Q. BUT YOU'VE NEVER GIVEN THEM A FIGURE OF HOW MUCH YOU
- 19 WOULD WANT FOR THE PROPERTY; IS THAT RIGHT?
- 20 A. THAT'S RIGHT.
- 21 Q. AND YOU ARE STILL INTERESTED IN SELLING YOUR
- 22 PROPERTY, AS I UNDERSTAND YOU.
- 23 A. YES, MA'AM.
- 24 Q. HAVE YOU HAD AN APPRAISAL PERFORMED ON YOUR
- 25 PROPERTY?

- 1 A. NO, MA'AM.
- 2 Q. HAVE YOU EVER HAD ONE THAT YOU KNOW OF?
- 3 A. NO, MA'AM.
- 4 Q. ARE YOU -- I GUESS THIS MAY BE AN ALTERNATIVE
- 5 REQUEST FOR DAMAGES. I'M NOT SURE. ARE YOU
- 6 CLAIMING THAT YOU HAVE LOST VALUE IN YOUR PROPERTY
- 7 BECAUSE OF YOUR FLOODING; IT'S NOT WORTH AS MUCH AS
- 8 IT USED TO BE WORTH?
- 9 A. YES, MA'AM.
- 10 Q. HAVE YOU HAD AN EVALUATION OF THAT PERFORMED?
- 11 A. NO, MA'AM.
- 12 Q. AND THEN YOU MENTIONED SOMETHING EARLIER ABOUT
- 13 WANTING SOMETHING DONE ABOUT THE PIPE.
- 14 A. WELL, THE PROBLEM NEEDS TO BE ADDRESSED. IT'S GOT
- 15 TO EITHER BE FIXED OR EVERY TIME IT RAINS YOU --
- 16 YOUR HANDS GET SWEATY, YOU KNOW, "WHAT HAVE I GOT TO
- 17 DO."
- 18 Q. BUT EVERY TIME IT RAINS IT DOESN'T FLOOD, RIGHT?
- 19 A. RIGHT.
- 20 Q. IT JUST FLOODS WITH THESE EXCEPTIONAL RAINS? FROM
- 21 WHAT YOU -- I MEAN FROM THESE FIVE ---
- 22 A. IT FLOODS WHEN THAT PIPE'S NOT BIG ENOUGH.
- 23 Q. BUT YOU HAVE FIVE FLOODS THAT WE'VE TALKED ABOUT:
- 24 JULY OF '91, JULY OF '93, AUGUST '95, 5/97, AND
- 25 OCTOBER OF '99. IS THAT RIGHT?

1 A. YES, MA'AM.

2 Q. OKAY.

3 A. AND ALL OF THOSE WERE AFTER THE PIPE WAS PUT IN.

4 Q. WELL, NOT ALL OF THEM, WERE THEY? THE PIPE WASN'T
5 PUT IN ---

6 A. WELL, THE MUD MAY HAVE BEEN PRIOR TO THAT, BUT
7 WASN'T THE REST OF THEM AFTER THE PIPE WAS PUT IN?

8 Q. I WISH I KNEW THE DATE THE PIPE WAS PUT IN, I COULD
9 HELP YOU ON IT. BUT I'M NOT SURE. I THOUGHT
10 EARLIER WE WEREN'T SURE IF IT HAD BEEN PUT IN BEFORE
11 YOUR '93 ---

12 A. OKAY. THE PIPE WAS PUT IN JULY THE NINETEENTH OF
13 '93.

14 Q. OKAY. AND THEN ---

15 A. SO WE DID HAVE SOME MUD AND WATER IN JULY OF '91.

16 Q. THE MUD AND WATER THAT CAME IN YOUR LOT IN JULY OF
17 '93, THAT WAS WHEN? DO YOU REMEMBER THE DAY IN
18 JULY?

19 A. I DON'T KNOW IF IT WAS BEFORE THE NINETEENTH OR
20 AFTER THE NINETEENTH.

21 Q. AND WHERE DID YOU GET THE INFORMATION THAT THE PIPE
22 WAS PUT IN ON JULY NINETEENTH OF '93; DO YOU KNOW?

23 A. I'VE GOT IT WROTE DOWN, BUT I DON'T KNOW WHERE I GOT
24 IT.

25 Q. IN THESE ANSWERS TO INTERROGATORIES YOU IDENTIFY

1 YOURSELF AS A WITNESS. IS THERE ANYBODY ELSE THAT
2 YOU KNOW OF WHO YOU WOULD CALL TO BE A WITNESS TO
3 TESTIFY IN YOUR BEHALF AT TRIAL?

4 A. I HADN'T DISCUSSED THAT WITH MY ATTORNEY, SO I DON'T
5 KNOW.

6 Q. WELL, YOU'VE GOT SOME PEOPLE THAT DID SOME WORK FOR
7 YOU, TO CLEAN UP. HAVE YOU THOUGHT ABOUT ANYBODY
8 OUT OF THAT GROUP THAT YOU WOULD CALL?

9 A. I JUST HADN'T THOUGHT ABOUT IT.

10 Q. EITHER OF YOUR SONS, ARE YOU PLANNING ON CALLING
11 THEM?

12 A. HERE AGAIN, IF MY ATTORNEY SUGGESTS THAT OR WANTS
13 SOME OF THAT, I'M OPEN TO IT.

14 Q. DEAN CAME TO THE MEDIATION; IS THAT RIGHT?

15 A. YEAH. I WAS DETAINED IN MARYLAND AT THAT TIME.
16 DIXIE WAS IN THE HOSPITAL.

17 Q. IF YOU'D LET ME KNOW WHEN Y'ALL DECIDE WHO YOU WANT
18 TO CALL. YOU ALSO SAY YOU HAVEN'T IDENTIFIED ANY
19 EXPERT WITNESSES. DO YOU KNOW OF ANY EXPERT
20 WITNESSES NOW THAT YOU PLAN TO CALL TO TESTIFY?

21 A. I DON'T.

22 Q. ANYBODY WITH SPECIALIZED KNOWLEDGE OR TRAINING THAT
23 WOULD SUPPORT YOUR CLAIMS?

24 A. I DON'T.

25 BY MS. RUNGE:

1 I THINK I AM ABOUT THROUGH. IF YOU WILL GIVE ME A
2 MINUTE TO LOOK THROUGH MY NOTES.

3 (OFF THE RECORD)

4 DIRECT EXAMINATION RESUMED BY MS. RUNGE:

5 Q. IN ANSWERS TO INTERROGATORIES ABOUT PRIOR LAWSUITS
6 YOU RESPOND -- YOU'RE WELCOME TO LOOK AT IT -- ALSO
7 TWO OTHER CASES 10, 15 YEARS AGO, DETAILS OF WHICH
8 CANNOT BE RECALLED. IT'S TOWARDS THE END. I WAS
9 LOOKING TO SEE WHAT MY QUESTION WAS.

10 A. I STILL CAN'T RECALL.

11 Q. DO YOU HAVE ANY IDEA WHAT THEY HAD TO DO WITH? WERE
12 THEY BUSINESS MATTERS, PERSONAL MATTERS, CRIMINAL
13 MATTERS?

14 A. I DON'T -- I DON'T KNOW. AND THERE MAY NOT EVEN BE
15 ANYTHING. YOU'LL HAVE TO CHECK ME OUT.

16 Q. WERE THEY IN GREENVILLE COUNTY, SOMEWHERE ELSE?

17 A. IF THERE IS ANYTHING, IT WOULD'VE BEEN GREENVILLE
18 COUNTY.

19 Q. WERE THESE LAWSUITS THAT YOU FILED OR WHERE YOU HAD
20 BEEN SUED?

21 A. I THINK I JUST MADE THAT STATEMENT TO PROTECT MYSELF
22 AND MY MEMORY. I DON'T SPECIFICALLY KNOW OF ANY.
23 WHEN YOU'VE BEEN IN BUSINESS FOR A GOOD WHILE,
24 SOMETIMES YOU. . .

25 Q. OKAY. ALL RIGHT.

1 I GOT YOUR DATE OF BIRTH BUT DIDN'T GET YOUR SOCIAL
2 SECURITY NUMBER. DO YOU HAVE THAT?

3 A. 251-40 -- I CAN'T REMEMBER. SEE, THAT GOES TO PROVE
4 I'M NOT JUST FAKING ABOUT THESE DATES.

5 (WITNESS RETRIEVES WALLET)

6 IT'S NOT ON THE VOTER REGISTRATION. YOU KNOW, I
7 DON'T THINK I HAVE IT WROTE DOWN. IS IT ON YOUR
8 HUNTING AND FISHING LICENSE? 251-72-4335. AND IT
9 IS ON YOUR HUNTING LICENSE.

10 Q. I'M GLAD TO KNOW THAT. I DIDN'T KNOW THAT BEFORE.
11 AFTER THE FLOODING ON JULY TWENTY-FOURTH HOW MANY
12 DAYS WAS IT BEFORE YOU WERE ABLE TO SEND CREWS AND
13 PEOPLE OUT TO DO BUSINESS FOR OTHER -- YOU KNOW, TO
14 HELP SOMEBODY OTHER THAN YOURSELF? DO YOU REMEMBER?

15 A. HERE AGAIN, I CAN GO BACK AND PULL OUT OUR WORK
16 RECORDS, BUT PROBABLY FOR THE FIRST SEVERAL DAYS WE
17 DIDN'T SEND ANYONE OUT. AND THEN WE PROBABLY
18 STARTED TRYING TO RECOUP OUR SCHEDULE AND SENDING
19 CREWS OUT TO DO, LIKE, CARPET AND UPHOLSTERY
20 CLEANING AND MAYBE, YOU KNOW, WHATEVER WAS CALLED
21 IN. BUT IT WAS PROBABLY FOR FOUR OR FIVE DAYS WE
22 PROBABLY DIDN'T SEND ANYONE OUT.

23 Q. DO Y'ALL ---

24 A. AND I KEEP A DAILY LOG OF ALL THAT, SO WE CAN DIG IT
25 UP.

1 Q. OKAY. THAT WOULD BE GREAT.

2 DO YOU NORMALLY SEND CREWS OR PEOPLE OUT TO DO WORK
3 ON SATURDAYS?

4 A. WE TRY NOT TO. WE DO, BUT WE TRY NOT TO. AS A
5 GENERAL RULE WE TRY TO SCHEDULE FIVE DAYS A WEEK.

6 Q. I SEE FROM THE NEWSPAPER ARTICLE THIS FLOOD OCCURRED
7 ON A THURSDAY, SO IT WOULD HAVE BEEN TOWARD THE
8 WEEKEND.

9 BY MS. RUNGE:

10 I DON'T HAVE ANYTHING ELSE.

11 BY MR. CHILDS:

12 NO QUESTIONS.

13 [THERE BEING NO FURTHER QUESTIONS, THIS DEPOSITION WAS
14 CONCLUDED AT APPROXIMATELY 12:20 P.M.]

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1 STATE OF SOUTH CAROLINA COURT OF COMMON PLEAS
2 COUNTY OF GREENVILLE C/A NO. 99-CP-23-2934
3 LOUIE D. HAWKINS, INDIVIDUALLY AND D/B/A SERVICEMASTER OF
4 GREENVILLE, SERVICEMASTER OF GREENVILLE, LLC AND DIXIE
5 HAWKINS,
6 PLAINTIFFS,
7 VS.
8 CITY OF GREENVILLE
9 DEFENDANT.

10 CERTIFICATE

11 THIS IS TO CERTIFY THAT THE FOREGOING DEPOSITION OF
12 LOUIE D. HAWKINS WAS TAKEN BY THE WITHIN COURT REPORTER,
13 A NOTARY PUBLIC FOR THE STATE OF SOUTH CAROLINA, DULY
14 COMMISSIONED AND QUALIFIED AS SUCH, ON JULY 2, 2001, AT
15 THE OFFICES OF GALLIVAN, WHITE & BOYD, 330 EAST COFFEE
16 STREET, GREENVILLE, SOUTH CAROLINA.

17 THAT SAID COURT REPORTER IS NOT A RELATIVE OR
18 EMPLOYEE OF ANY OF THE PARTIES OR THE ATTORNEYS, AND
19 FURTHER, IS NOT OF COUNSEL OR ATTORNEY FOR ANY OF THE
20 PARTIES TO SAID ACTION, AND, IS NOT IN ANY MANNER
21 INTERESTED IN THE CAUSE, FINANCIAL OR OTHERWISE.

22 THAT THE DEPONENT WAS DULY PLACED UNDER OATH AND
23 ADMONISHED TO SPEAK THE WHOLE TRUTH. THAT THE ORAL
24 DEPOSITION WAS DULY TAKEN AND TRANSCRIBED AS TO THE
25 QUESTIONS PROPOUNDED AND THE ANSWERS GIVEN, THAT THE

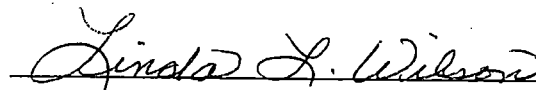
1 FOREGOING 92 PAGES IS A TRUE, ACCURATE, AND CORRECT
2 RECORD OF THE TESTIMONY GIVEN BY THE DEPONENT TOGETHER
3 WITH SUCH CHANGES AS SAID DEPONENT MAY HAVE MADE, IF ANY,
4 DURING THE READING OVER AND SIGNING PROCEDURE.

5 THAT THE COURT REPORTER HAS RETAINED THE ORIGINAL
6 DEPOSITION IN ITS POSSESSION FOR THE PURPOSE OF SEALING
7 AND FILING SAME WITH THE PROPER OFFICIAL.

8 THAT ALL OFFERED EXHIBITS, STIPULATIONS AND
9 OBJECTIONS, IF ANY, INVOLVED IN THIS CAUSE ARE DULY
10 ATTACHED OR INCLUDED HEREIN.

11 IN WITNESS WHEREOF, I HAVE SET MY HAND AND OFFICIAL
12 SEAL.

13 DATE: July 12, 2001

14 
15 NOTARY PUBLIC FOR SOUTH CAROLINA
16 MY COMMISSION EXPIRES 9/15/2002
17
18
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22
23
24
25

ServiceMASTER.

Residential/
Commercial
Cleaning Services

Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183

City Attorney
City of Greenville
Post Office Box 2207
Greenville, SC 29602

August 18, 1998

Mr. McKinney,

I received your letter dated August 12, 1998, and find several items that I disagree with. I am so sorry the City has had to go through flooding similar to mine. I also hope the cause of that flooding was taken care of. I have asked the City to take care of this water problem.

The location of my property and building site was studied and approved by the City in 1980. This was done well before the city owned culverts were installed in 1993. Prior to the culverts being installed, we NEVER had any water problem. Who had the culverts installed, and why were they installed across from my flat land? Why were the culverts not shorter nearer the intersection of Haywood Road, Byrdland Drive, and Airport Road crossings? Why were the culverts up stream not longer?

The culverts are 96" in diameter and will only handle what a 96" culvert is designed to handle. When planning and engineering by the City allowed much more water to be released than a 96" pipe can handle, where did they expect the water to go? This is the basis of my claim. The water that entered my building was not MY water. It was diverted into a stream by City Engineering, which allowed more water to flow than the culvert could handle. This is negligence on the part of the City.

I am now asking under the Freedom of Information Act, that you supply me with a copy of your working files used to review my claim and arrive at this conclusion.

Finally, the past claim was a mud damage and is not related to this claim.

CC: Lee Dumbauld, Interim City Mgr.
Don Fogle, City Engineer
Cathy Eargle, Risk Mgr.
Rhonda Maynard, Hewitt, Coleman, & Assoc.

Sincerely,



Louie D. Hawkins
Louie D. Hawkins,
Owner



An Independent business

000304

The city allowed the
Pipe & back Fill



City of Greenville

Serving...Protecting...Caring

206 South Main Street ♦ Post Office Box 2207 ♦ Greenville, South Carolina 29602

(864) 467-4420 (Telephone)

(864) 467-4424 (Facsimile)

August 12, 1998

Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, SC 29606

Dear Mr. Hawkins:

I have reviewed carefully your claim for damages arising from the torrential rainfall and consequent flooding of July 24, 1997 along Byrdland Drive. The City regrets your having had flooding at your place of business. The City's own facilities in the past have been flooded in similar circumstances, and we understand the frustration.

However, I find no basis for establishing liability against the City. As you know, your building is located in a flat area and at the bottom of a hill near a small stream. The stream has two banks at the location. That which is nearer to you is considerably lower so that all water from the rising of the creek will overflow onto your property rather than the opposite side. While your property may not be within an area officially designated as a flood plain, it is susceptible to natural flooding. The City is not responsible for that topography nor did it select the site for your building.

The stream enters into culverts owned by the City. Those culverts are ninety-six inches in diameter, which by engineering standards is ample for a stream with an ordinary depth of only a few inches.

In issuing permits for new construction which is within the city limits and which has runoff into the stream, the City has required detention basins or similar devices in accord with standard engineering practices. Its permitting practices have been reasonable and not grossly negligent in any regard. Nor can the City lawfully deny a permit to a property owner who otherwise meets requirements for permit issuance. Accordingly, there is no basis for a claim against the City for its permitting practices.

Finally, the City settled a disputed claim with you in the past. It did so in consideration for a release of that claim and all future claims.

Under these circumstances the City cannot accommodate your request for compensation. Thank you for your patience in receiving this response.

000306

3-12-97
WWD
@4:53

Letter

Bill Lee

4161-4335

W/Public Works City of Bill

We are not in flood plain
flood plain is other side of
Haywood Rd.

Pipe that was put in 2 yrs.
ago is adequate to carry
water ~~runoff~~ runoff received
in this area

This is what we were told.
In March 1997, when we
were considering buying flood
insurance.

July 24, 1997 We were flooded
with 8-10 inches mud + water
inside building. Water was
waist deep outside Building.

000392

ServiceMASTER.

Residential/
Commercial
Cleaning Services

Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183

1-29-98

Mr. Bill Lee
Asst. Storm Drain Supt.
360 W. Hudson St.
Greenville, SC 29601

Dear Mr. Lee -

On July 24, 1997, my business was flooded as a result of improper drainage for water runoff.

As a result of this, Cleaning, Repairs & Replacement had to be done.

Clean up & dry out	19,928.80.
Equipment Repair or replace	4,517.70.
Replacement of supplies, etc.	1,668.61.
Repairs to the building	33,688.94.

Total \$ 59,804.05

On March 12, 1997, when we were considering buying Flood Insurance, we were told by you that we were not in a flood plain, and that the pipe that was recently installed, was adequate to handle the runoff water. (see enclosure) July 24, 1997, we were flooded again.

Therefore, as a result of this, we are looking to you for re-imburement in the amount of \$59,804.05. We have an itemized repair & cleaning list that is available to you upon request.

We would appreciate hearing from you at your earliest convenience. Thanking you, I remain,

Sincerely,

Louie D. Hawkins

CC: John Herbert
CC: William Courchaine

000308

ServiceMASTER

ServiceMASTER.

**Residential/
Commercial
Cleaning Services**

**Louie D. Hawkins
ServiceMaster of Green**
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183

March 31, 1999

Mr. Pat Paschal, Atty.
644 E. Washington St.
Greenville, S.C. 29601

*copy
mailed to P. Paschal
3-31-99*

Re: Water Damage of July 24, 1997

Dear Mr. Paschal,

As per our telephone conversation of today, I am enclosing some of the information and correspondence concerning the Water Damage.

May I give you a little background:

I built and moved into my present location in early 1980. A Dead End Street at 1 Byrdland Drive in the city of Greenville.

We were there for eleven years with no problems whatsoever.

Then in early 1991, the City allowed Peden Construction to extend our street all the way through, and join to Woods Lake Rd.

It was during this Construction, which lasted several months, that we were flooded with water and mud. It was 8" deep inside our building. This was July 29, 1991.

Getting the estimates together and the normal legal delays lasted until March, 1994, when we settled, without going to court. (copies of that settlement, etc. enclosed).

During the summer of 1993, the City installed a 96" storm drain pipe (culvert) across the street from my building. Their engineers said this would be sufficient to handle the water runoff.

The City is continuing to issue permits for new construction since this street is now a thru street. (Since 1991 there are 6 new businesses and a large Apartment Complex new to this street). More new construction is under way now.

On March 12, 1997, when we were considering buying flood insurance, and called about our flood plain, we were told by Mr. Bill Lee, Asst. Storm Drain Superintendent for the city of Greenville, that we were not in a flood plain. He said the flood plain was on the other side of Haywood Rd. (see enclosed copy of note).

ServiceMASTER

000309

*An independent business
licensed to serve you by
The ServiceMaster Company*

On July 24, 1997, we were flooded again. (Drainage water, not mud). This happened about 4:30 in the afternoon. The water was again 8" to 10" inside the building, and waist deep in the parking lot. 3 of our employees automobiles were a total loss by their insurance companies. Several others had to be dried out & carpet changed, etc.

I have been corresponding with the City about this loss. My Insurance Company denied the claim because we didn't carry Flood Insurance.

I sent the City of Greenville a bill for the damage to my building, etc., on January 29, 1998. (copy enclosed) They told me on August 12, 1998, there was no basis for a claim against the City. I sent a letter on August 18, 1998 stating that I disagreed with their decision with step by step reasons why. (copy enclosed). I also asked for a copy of their working files related to my claim, under the Freedom of Information Act. I spoke with Mr. McKinney, Greenville City Attorney, on September 1, 1998. He said they would supply me with the information, but wanted me to tell them what I needed. We talked about the culvert across from my building. When was it installed? Why was it installed? What was the reasoning? He said he would look into this and share this info with me. (To date, I have not received this information).

Please look this over and let me know if you think we have a case, etc.

Sincerely,

Louie D. Hawkins

LDH/dh

Enclosures

Page_____

P.O. Box 16283 (Haywood Ind. Pk.)

GREENVILLE, S.C. 29606

PHONE 297-1183

PROFESSIONAL CLEANING SERVICES

Room	Item	Quan.	Cost to Clean Dwelling	Contents	Other Costs	Comments
	We moved in to office & in 1980					Drip under sink 7-1-91
	mud + water July 91					under sink 7-1-91
	mud in street + parking lot July 93					under sink 7-1-91
	Aug 95 inside Building					
	7-24-97 - at 4:45 PM water started coming into building - 10-29-97 - Per John Herbert - Storm Sewer upstream had failure - up at Phnomh with was passing holding pond - & been repaired by Phnomh on 7-8-98					
	I ask Kathleen Kempe City Atty + Candice ? - (she took John Herbert's job) what had been done to correct the problem.					

10-15

10-29-97

John Herbert 467-4809

City of Greenville

in & out \$100 - 5:00
mon - Friday

Storm Sewer upstream had picture
up at Pharms area a lost storm
was by passing holding pond - Has
been connected by Phas Mox -

Not in Flood plain
but may want flood ins.
Want to buy us?

City is considering doing just that.

Doing a study now to see if that
is the way to go instead of extensive drain
repairs.

7-24-97

At approximately 4:45 p.m. water started coming inside our building. The water rose to approximately 10 inches inside the building. The water on the outside rose to approximately 3 ft. in the parking lot.

Dixie Hawkins called the City Engineering Office and talked to John Herbert. He said she needed Bill Lee @ 467-4335 who is the drainage and operations man.

John called Mrs. Hawkins back and said Bill Lee was out on a flood and would come on to us afterward.

The water came from the drain across the street and our drain in the parking lot and ran into building.

The water ran inside 7 vehicles in our parking lot which include the following:

88 Honda	Employee Mary Ann Palmer	— Totalled
95 Mustang	Employee Sherry Moore	— Totalled
88 Buick LeSabre	Employee Carol Street	—
84 Jeep	Employee Melvin Means	—
97 Toyota Forerunner	ServiceMaster Brandon Hawkins	573.94
96 Chevy Van	ServiceMaster work van	105.44
91 Jeep	ServiceMaster Dean Hawkins	473.94

836.32
- 105.44 = 730.88 + some
+ 473.94 = 1204.82
217.08 less Pd

Thursday 7-24-97:

4:45 - Started putting boxes and items on floor up high.

5:30 - Water started receding.

7 People worked from 5:30 til 8:00--17.5 hrs.

3 People worked from 5:30 til 7:00--4.5 hrs.

They worked on:

- Squeegee cement floors
- Extract carpet - still soggy
- Extract vehicles
- Apply Milgo
- Setting up drying equipment

Friday 7-25-97:

Extracted water from carpets and cleaned the carpets to try to remove odor. Applied Milgo to help control the odor. Next, the concrete floors were extracted and everything was removed and replaced. All the rugs that got wet were cleaned. All the boxes that got wet were thrown out. Also, the things in the laundry room were transferred to dry boxes. The bottom kitchen cabinet, bath vanity, and bottom file drawer

Cunanan sought port in final days

WRITER

Fla. — Andrew meone he knew in to obtain a false failing that, he r handgun in his the trigger, the d serial killer victim — himself y, in the upstairs of a houseboat in led up, 2½ miles re fashion design- ice was gunned

down.

Nine days after Versace's murder, after one of the most intense manhunt in the nation's history, authorities had Cunanan's body. What they lacked was answers.

Why, in the course of three months, did Cunanan kill five men? Why did he kill these five men?

How did Cunanan elude one of the FBI's most ferocious dragnets? And why did so clever a man stay close to Miami Beach after Versace's murder?

See CUNANAN on page 10A



FBI PHOTO

Fugitive becomes suicide:
Andrew Cunanan's photo appeared this way on the FBI's Ten Most Wanted Fugitives home page Thursday.

Barbour: Charges ab loan for GOP are 'ph

By Chuck Raasch

GANNETT NEWS SERVICE

WASHINGTON — A phalanx of former Rep. Barbour said money was paid to him by Democrats he had used as a back door to "funnel" money from a loan guaranty company into the GOP coffers to turn the election tide late in the 1994 congressional campaigns.

A sometimes combative Barbour told the Senate Governmental Affairs Committee investigating campaign finance abuses that the

National Policy Forum, which he created in 1993 as a nonprofit organization, legally could accept foreign money, anyway.

In his most heated testimony in weeks of hearings, Barbour "infuriatingly" phony Democrats he had used as a back door to "funnel" money from a loan guaranty company into the GOP coffers to turn the election tide late in the 1994 congressional campaigns.

But the Dem documents suggest can National Co much closer rela NPF than the Barbour portra

Democrats als ments suggesting nancially strapp campaigns — w control of Cong time in 40 year motive for Barbo for campaign cas

ded protein protect ics

yard
PRESS

— A human pro- a useless byprod- one that drug row away — may levastating heart ge that diabetes

n rats backs up a rts from Sweden an diabetics may e substance. And ie findings, to be in the journal Sci- ing enough for in- whether adding C- lin therapy really

lizing possibilities e further study," f Chicago diabetes ald Steiner, who nbining insulin and offer therapy "pos- ture's own way," million Americans which blood sugar control. Type 1 di- no insulin, the hor- lates blood sugar, iabetics are unable es' insulin properly. at great risk of d nerve damage, as out the body leak pulses fail.

byproduct of insu- whether produced synthetically. For ave considered the ally inactive — so ke insulin don't get

t study by Washing- n St. Louis and in- Eli Lilly & Co., nd that injecting di- high doses of hu- repaired leaky ivented, nerve dam-

WATER STALLS GREENVILLE



ALAN HAWES/STAFF

Wet work: Russ Harner pushes his car, and wife Muff, out of the intersection of Haywood and Old Airport roads in Greenville. At rush hour Thursday, Haywood Road turned into a muddy river 2 to 3 feet deep, just south of Haywood Mall.

2.4 inches of rain measured in one hour

By Bryan Gilmer
STAFF WRITER

A severe summer thunderstorm walloped Taylors and Greenville's Eastside from 4:30 to 5:30 p.m. Thursday, sending trees crashing onto power lines and cutting off electricity to 6,400 homes and businesses.

Water that overflowed a drainage ditch seeped under the front doors of about 15 apartments at the Mallard Cove complex on Pleasantburg Drive. Two apartments were damaged severely

enough that the American Red Cross checked the residents into motel rooms for the night.

At rush hour, Haywood Road turned into a muddy river 2 to 3 feet deep just south of Haywood Mall when a 6-foot-wide drainage culvert couldn't carry all the runoff from new and old parking lots and roofs in the rapidly growing shopping district.

"System overload," said Bill Lee, assistant storm drain superintendent for the city of Greenville. "Engineers will have to decide what we do or don't do" to

fix the problem, he said.

Winds were as strong as 65 mph, and the Greenville Downtown Airport measured 2.4 inches of rain in the single hour, according to the National Weather Service in Greer.

Since the rain began Wednesday, about 3 inches have been measured at Greenville-Spartanburg International airport, but the total for Taylors and Greenville may be closer to six inches, the weather service said.

There were no reported injuries.

A torrent of water rushed into Palmetto Bank at 470 Haywood Road and, ironically, a business that specializes in repairing flood damage. Louie Hawkins, owner of Servicemaster, had his crews using vacuum trucks to remove a layer of mud from the building's carpeting but "no one to send the bill to."

Cars traveled at a snail's pace along Laurens Road. It was the same on Pleasantburg Drive, and traffic remained heavy even after

See WATER on page 4A

Cigare harde teens

State sale
down to 2
kids still

By James T. Ha
CAPITAL BUREAU

COLUMBIA about teen str tougher for the ple to buy cigare year ago.

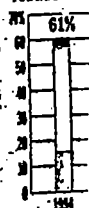
The bad new getting cigarett is on the rise a perts disagree d understand its pe

"Unfortunately still too high, young people v are three time: alcohol, seven use marijuana likely to use c Hamilton, dire partment of Drug Abuse S

Underage with the stat cessful in buy percent of the 40 percent in last year. stepped-up er of vendors an- cern about y

SMOKE

Tobacco sa



Cigarette : Teenagers v

SIDE

■ Dan Foster..... 1C

000215

9000134



ALAN HAWES/Staff

One cup at a time: Melvin Means scoops water out of his flooded jeep in Greenville Thursday afternoon.

WATER

FROM PAGE 1A

the storm passed as drivers crept through intersections without working traffic lights.

On South Pleasantburg Drive near Tower Drive, water stood nearly a foot deep across the roadway.

The Wade Hampton Fire Department got about 30 calls reporting fallen power lines and trees, flooded streets and car wrecks.

"We've called in all of our off-duty people," said Jim Covil, a Wade Hampton firefighter. "I'd say this is one of the worst storms we've had

in a while. This one had a lot of wind."

Duke Energy Corp. also had "everybody we could get hold of" working to restore power to all customers by midnight, said spokesman Roger Hagy. By midnight, power had been restored to all but 665 households.

At Mallard Cove, "the fire department had all of us out of here, worried about electrical problems," said Alice Linton, whose floor was still damp as a second heavy shower started about 11:20 p.m. and gave her a scare that the rushing water would return.

"It looked like Niagara," said Tracy Pepper, a field supervisor for Professional Carpet Systems who was cleaning carpet in vacant apartments about 5 p.m. when 3 feet of water began to flow over the walkway between two buildings and into first-floor units.

Pepper called for reinforcements, and his crew worked past midnight to dry out the drenched apartments.

It was the wind that captured the Dye family's attention on East Lee Road in Taylors. Jack Dye was inside his home with his wife and grandchildren when the wind began howling and dark clouds blocked the afternoon sun.

"The rain was coming down hard, and the lighting was popping," Dye said Thursday, surveying the damage to neighbor Annie Burnside's home where a huge tree fell through the roof. No one was home.

Dye's wife immediately called the Taylors day care center where Mrs. Burnside works.

"I'm just glad she wasn't here," said Candice Burnside, Mrs. Burnside's 25-year-old daughter. "When I came up, I couldn't believe it. There's a big limb coming through the living room."

A bedroom was severely damaged, but a brass stand filled with china figurines in the living room wasn't touched.

"I've had a couple of big trees taken down out of my yard because I know how dangerous they are,"

HOW TO STAY SAFE, DRY

■ Don't cross flowing water on foot if the water is deeper than your ankles. Strong currents or powerful suction at culverts and drains under the water can pull you under.

■ Never drive over a flooded road. Two feet of water can sweep away most automobiles. It's much harder to spot flooded areas at night, so be extra careful then.

■ If your car stalls, get out and climb to higher ground.

■ Stay away from low-lying areas.

■ Stay tuned to the media for news about what to do, where to go and where to avoid.

Source: Metropolitan Life Insurance Co.

city to put a bigger pipe out here," he said. "The bottom line is the city has made us the holding pond."

There isn't expected to be a repeat of those problems today. A slight chance of an afternoon thunderstorm is the only thing that could stand in the way of a mostly sunny day with a high around 90 degrees, according to the weather service.

Elsewhere, The Associated Press reported one person died when the remnants of Hurricane Danny ripped through Lexington County early Thursday morning. Trina Jackson's body was found in some woods about 150 feet from a destroyed duplex.

Tornadoes also touched down near Fort Jackson and Camden.

Gov. David Beasley flew over the area by helicopter shortly after returning from a trip to South Africa and met with members of the Jackson family.

— Staff writer April E. Moorefield contributed to this story.

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ALAN HAWES/Staff

Reaction time: Louie Hawkins, the owner of Servicemaster on Haywood Road in Greenville, discusses the problem with Tim Guerin, Greenville's assistant street superintendent, after about eight inches of water flooded Hawkins' business Thursday.

The Only All Digital

ServiceMASTER.

Residential/
Commercial
Cleaning Services

Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183

RECEIVED

AUG 20 1998

CITY ATTORNEY

August 18, 1998

City Attorney
City of Greenville
Post Office Box 2207
Greenville, SC 29602

Mr. McKinney,

I received your letter dated August 12, 1998, and find several items that I disagree with. I am so sorry the City has had to go through flooding similar to mine. I also hope the cause of that flooding was taken care of. I have asked the City to take care of this water problem.

The location of my property and building site was studied and approved by the City in 1980. This was done well before the city owned culverts were installed in 1993. Prior to the culverts being installed, we NEVER had any water problem. Who had the culverts installed, and why were they installed across from my flat land? Why were the culverts not shorter nearer the intersection of Haywood Road, Byrdland Drive, and Airport Road crossings? Why were the culverts up stream not longer?

The culverts are 96" in diameter and will only handle what a 96" culvert is designed to handle. When planning and engineering by the City allowed much more water to be released than a 96" pipe can handle, where did they expect the water to go? This is the basis of my claim. The water that entered my building was not MY water. It was diverted into a stream by City Engineering, which allowed more water to flow than the culvert could handle. This is negligence on the part of the City.

I am now asking under the Freedom of Information Act, that you supply me with a copy of your working files used to review my claim and arrive at this conclusion.



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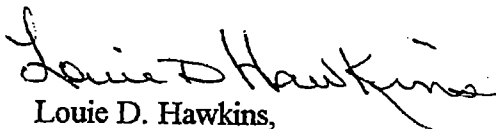
ServiceMASTER.

**Residential/
Commercial
Cleaning Services**

**Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183**

Finally, the past claim was a mud damage and is not related to this damage.

Sincerely,


Louie D. Hawkins,
Owner

CC: Lee Dumbauld, Interim City Manager
Don Fogle, City Engineer
Cathy Eargle, Risk Manager
Rhonda Maynard, Hewitt, Coleman, & Assoc.

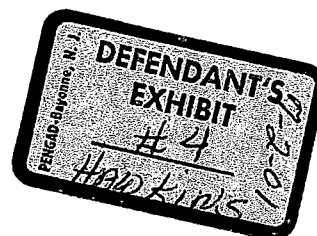
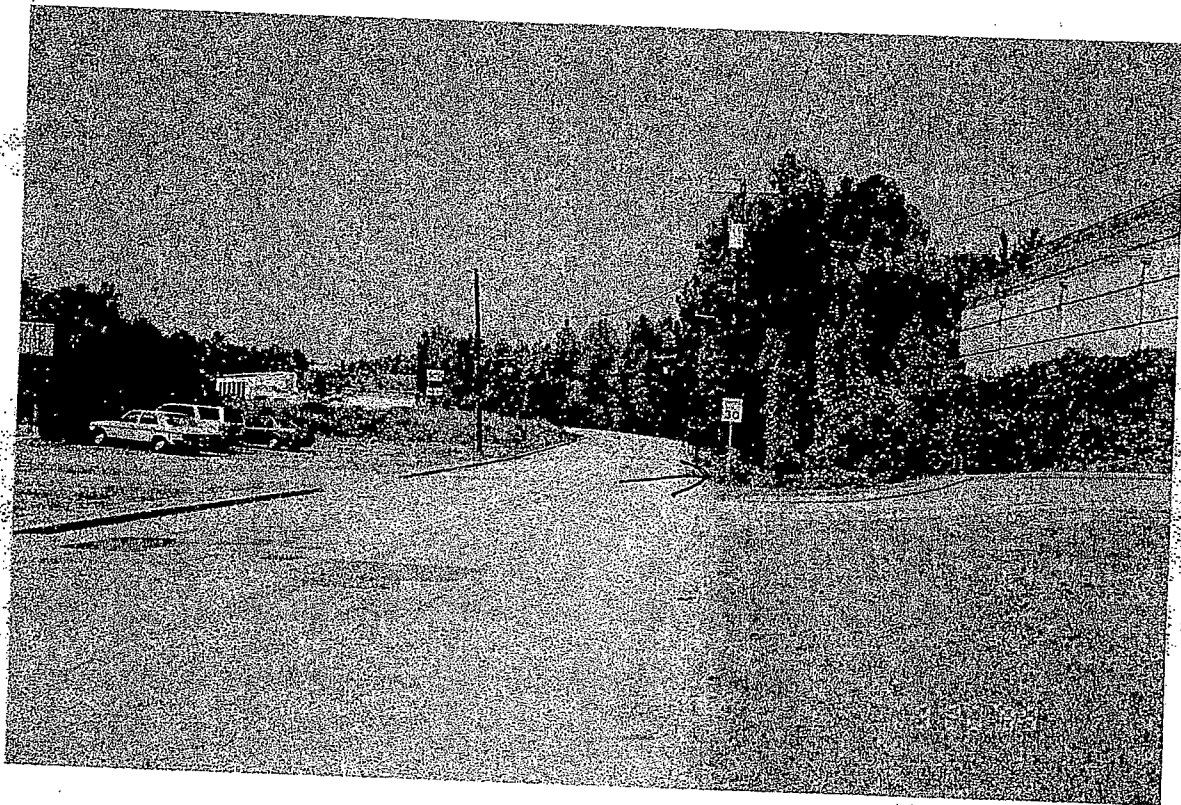
LDH/cks

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ServiceMASTER

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000319



000320

STATE OF SOUTH CAROLINA)
COUNTY OF GREENVILLE)

RECEIPT AND RELEASE

FOR AND IN CONSIDERATION of the sum of Four Thousand and No/100 Dollars (\$4,000.00) paid to Louie D. Hawkins, d/b/a/ Servicemaster, the receipt whereof is hereby acknowledged, in the case of Louie D. Hawkins d/b/a Servicemaster of Greenville vs. Peden Contractors, Inc., the Greenville Airport Commission, and the City of Greenville, Case No. 92-CP-23-3784, said company does hereby release, relieve and forever acquit the City of Greenville, South Carolina, a municipal corporation, their agents, employees, officers, successors, and assigns from any and all liability arising out of or in any way connected with the water and mud damage to Plaintiff's place of business located at 1 Byrdland Drive which occurred on or about July 30, 1991 and it is the intention in executing this Release to forever discharge the City of Greenville from any and all claims, demands, actions or causes of action which may exist, known or unknown, of any and all damages, past, present and future, in any way connected with or arising out of the aforesaid damages.

Further it is specifically acknowledged that the payments herein recited are being paid and received upon claims concerning which a bona fide dispute exist, is in compromise of litigation and are not to be construed as admissions of liability on the part of those released.

It is acknowledged and understood that this is a full, complete and final release of all damages arising out of the design, construction, maintenance, and operation of the water drainage system on or adjacent to Bryland Drive, that no future or further payments will be paid as a result thereof and that the persons and corporations in whose favor this Release runs are herewith fully finally and forever discharged from any an778d all liability with respect to the aforementioned property.

WITNESS my hand and seal this 28 day of March, 1994.

WITNESSES:

SERVICEMASTER OF GREENVILLE

BY:

Louie D. Hawkins



000321

9000052

1 STATE OF SOUTH CAROLINA

COURT OF COMMON PLEAS

2 COUNTY OF GREENVILLE

C/A NO: 01-CP-23-2459R

3 LOUIE D. HAWKINS, INDIVIDUALLY AND D/B/A SERVICEMASTER OF
4 GREENVILLE, SERVICEMASTER OF GREENVILLE, LLC AND DIXIE
5 HAWKINS,

6 PLAINTIFFS,

7 VS.

8 CITY OF GREENVILLE,

9 DEFENDANT.

10
11 DEPOSITION OF THOMAS ANDREW SHERARD
12

13 PURSUANT TO NOTICE OF DEPOSITION AND/OR AGREEMENT IN THE
14 ABOVE-ENTITLED CASE, A DEPOSITION WAS TAKEN ON THE 23RD DAY OF
15 APRIL 2002, COMMENCING AT APPROXIMATELY 10:10 A.M., ATTENDED
16 BY COUNSEL AS FOLLOWS:
17
18
19
20
21
22
23
24
25

1 APPEARANCES:

2 ROBERT C. CHILDS, III, ESQUIRE, OF THE FIRM OF MITCHELL,
3 BOUTON, YOKEL, MCCALL & CHILDS, 7 MILLS AVENUE, GREENVILLE,
4 SOUTH CAROLINA 29605,

5 ATTORNEY FOR PLAINTIFFS,

6 W. HOWARD BOYD, JR., ESQUIRE, OF THE FIRM OF GALLIVAN,
7 WHITE & BOYD, 330 EAST COFFEE STREET, GREENVILLE, SOUTH
8 CAROLINA 29601,

9 - ATTORNEY FOR DEFENDANT.

10
11
12
13
14
15
16
17
18 DEPOSITION REPORTED BY: LINDA L. BROWN
19 DEPOSITIONS AND..., INC.
20 P.O. BOX 10268
21 GREENVILLE, S.C. 29603
22 (864) 235-3518
23
24
25

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1 PURSUANT TO NOTICE AND/OR AGREEMENT TO TAKE DEPOSITIONS,
2 THE WITHIN DEPOSITION WAS TAKEN BY THE ABOVE REPORTER, A
3 NOTARY PUBLIC, AS REQUIRED UNDER THE CODE OF LAWS OF SOUTH
4 CAROLINA, 1976, SECTION 19-17-10, AND CIRCUIT COURT RULE 30,
5 ET AL., BY CONSENT OF ALL PARTIES AT THE OFFICE OF MITCHELL,
6 BOUTON, YOKEL, MCCALL & CHILDS, 7 MILLS AVENUE, GREENVILLE,
7 SOUTH CAROLINA.

8 WAIVER:

9 COUNSEL AGREED THAT BOTH THE READING OVER OF AND SIGNING
10 OF THE DEPOSITION ARE HEREBY DISPENSED WITH AND WAIVED.

11 THE DEPONENT AGREED THAT BOTH THE READING OVER OF AND
12 SIGNING OF THE DEPOSITION ARE HEREBY DISPENSED WITH AND
13 WAIVED.

14 ** ** ** **

15 THE DEPONENT WAS DULY SWORN TO TELL THE TRUTH, THE WHOLE
16 TRUTH, AND NOTHING BUT THE TRUTH OF HIS OWN KNOWLEDGE
17 CONCERNING THE MATTER HEREIN.

18 THOMAS ANDREW SHERARD, BEING DULY SWORN, TESTIFIED AS FOLLOWS:
19 DIRECT EXAMINATION BY MR. BOYD:

20 Q. STATE YOUR FULL NAME FOR THE RECORD, PLEASE.

21 A. THOMAS ANDREW SHERARD.

22 Q. MR. SHERARD, OBVIOUSLY WE KNOW EACH OTHER, BUT FOR THE
23 RECORD IN THIS CASE TELL ME HOW YOU ARE EMPLOYED AND GIVE
24 ME JUST A BRIEF SUMMARY OF YOUR EDUCATIONAL BACKGROUND
25 AND YOUR PROFESSIONAL EXPERIENCE.

1 A. I AM THE OWNER OF SITE DESIGN, INCORPORATED. OUR
2 BUSINESS IS CIVIL ENGINEERING. WE PERFORM STORM WATER
3 MANAGEMENT, SITE PLANS, GRADING PLANS, SANITARY SEWER, ET
4 CETERA, FOR DIFFERENT DEVELOPMENT PROJECTS.

5 Q. AND HOW LONG HAVE YOU BEEN A PROFESSIONAL ENGINEER
6 PERFORMING THOSE SERVICES?

7 A. I WAS LICENSED A PROFESSIONAL ENGINEER IN 1988, A
8 GRADUATE OF CLEMSON UNIVERSITY IN 1981, REGISTERED IN
9 - SOUTH CAROLINA AND NORTH CAROLINA AND GEORGIA.

10 Q. BACHELOR OF SCIENCE IN CIVIL ENGINEERING FROM CLEMSON?

11 A. YES, SIR.

12 Q. IN THIS CASE YOU HAVE BEEN RETAINED, WE UNDERSTAND, MY
13 MR. CHILDS ON BEHALF OF THE PLAINTIFFS, THE HAWKINS AND
14 SERVICEMASTER. WHEN WERE YOU RETAINED TO CONSULT IN THIS
15 CASE?

16 A. APPROXIMATELY TWO MONTHS AGO.

17 Q. YOU HAVE BROUGHT WITH YOU A PACKET OF MATERIALS. TELL ME
18 WHAT YOU HAVE WITH YOU SO THAT I'LL KNOW WHAT YOU HAVE
19 HAD A CHANCE TO REVIEW.

20 A. I HAVE MS. ARROWOOD'S DEPOSITION AND I HAVE MS.
21 ARROWOOD'S AFFIDAVIT.

22 Q. WITH THE ATTACHMENTS TO THE AFFIDAVIT?

23 A. YES, WITH THE ATTACHMENTS TO THE AFFIDAVIT.

24 Q. WHEN DID YOU RECEIVE THOSE MATERIALS?

25 A. I RECEIVED MS. ARROWOOD'S -- LET'S SEE IF THE FAX IS

1 DATED.

2 (PAUSE - WITNESS REVIEWS DOCUMENT)

3 MARCH THE FOURTEENTH. AND I RECEIVED HER DEPOSITION
4 YESTERDAY.

5 Q. AND HAVE YOU HAD A CHANCE TO REVIEW THOSE DOCUMENTS?

6 A. SOMEWHAT, YES.

7 Q. WHAT OTHER FILE MATERIALS HAVE YOU EITHER RECEIVED FROM
8 MR. CHILDS OR GENERATED YOURSELF IN CONNECTION WITH THIS
9 - CASE?

10 A. THAT'S REALLY IT. I PERSONALLY MADE SOME SITE VISITS TO
11 THE PROPERTY JUST TO FAMILIARIZE MYSELF FURTHER WITH THE
12 SITE.

13 Q. DID YOU MAKE ANY FIELD NOTES OF THOSE SITE VISITS?

14 A. NO, I DID NOT.

15 Q. OTHER THAN GOING TO THE SITE -- HOW MANY TIMES HAVE YOU
16 BEEN TO THE SITE?

17 A. WELL, SPECIFICALLY FOR SERVICEMASTER JUST TWICE.

18 Q. AND OTHER THAN GOING TO THE SITE TWICE AND REVIEWING,
19 BRIEFLY YOU SAID, THE DEPOSITION OF MS. ARROWOOD AND HER
20 AFFIDAVIT AND ATTACHMENTS TO HER AFFIDAVIT, WHAT OTHER
21 WORK HAVE YOU DONE ON THIS CASE PRIOR TO THE DEPOSITION
22 THIS MORNING?

23 A. NONE.

24 Q. LET ME JUST START BY ASKING YOU TO TELL ME WHAT OPINIONS
25 OR CONCLUSIONS YOU HAVE REACHED IN CONNECTION WITH THE

1 FACTS OF THIS CASE BASED UPON THE WORK THAT YOU'VE DONE.

2 A. I DON'T KNOW THAT I'VE REACHED ANY PARTICULAR
3 CONCLUSIONS. WHEN I FIRST REVIEWED THE SITE, I EXPRESSED
4 TO MR. CHILDS THAT IN ORDER FOR US TO RENDER A OPINION, I
5 GUESS, OF THE PROBLEMS THERE THAT WE WOULD NEED TO DO A
6 FLOOD STUDY OF THE AREA.

7 Q. WHAT IS INVOLVED IN DOING A FLOOD STUDY?

8 A. RUNNING DRAINAGE -- EVALUATING THE WHOLE DRAINAGE BASIN,
9 - RUNNING DRAINAGE CALCULATIONS ON THE PIPES, THE CREEKS,
10 EVERYTHING ASSOCIATED WITHIN THE DRAINAGE BASIN AND THEN,
11 DEPENDING ON WHAT -- THE DETAIL THAT YOU TAKE IT TO I
12 GUESS DEPENDS ON WHAT YOUR ULTIMATE GOAL IS TO OBTAIN
13 FROM THE FLOOD STUDY.

14 Q. WHAT WOULD YOU BE LOOKING TO OBTAIN FROM THE FLOOD STUDY
15 IN THIS CASE?

16 A. I THINK OUR INITIAL FOCUS WAS TO EVALUATE THE ROADSIDE
17 CHANNEL ALONG BYRDLAND DRIVE, THE 96-INCH CULVERT THAT
18 THEN CROSSES UNDER HAYWOOD ROAD, AND THE DRAINAGE AREAS
19 FEEDING INTO THAT LOCATION.

20 Q. WITHOUT DOING SUCH A FLOOD STUDY ARE YOU ABLE TO RENDER
21 ANY OPINIONS OR CONCLUSIONS ABOUT THE STORM WATER
22 DRAINAGE IN THAT AREA?

23 A. NO, NOT REALLY. I MEAN, YOU KNOW, EXCEPT LOOKING AT
24 THE -- BRIEFLY LOOKING AT THE STUDY THAT HAD BEEN
25 PERFORMED BY THE CITY AND BEING FAMILIAR, SOMEWHAT, WITH

1 THE AREA. IT OBVIOUSLY HAS SOME FLOODING PROBLEMS.

2 Q. HAVE YOU PERSONALLY DONE WORK OR HAS YOUR FIRM DONE WORK
3 IN WHAT I WILL LOOSELY CALL THE LAUREL CREEK BASIN?

4 A. YES, WE HAVE. WE HAD A PROJECT A QUARTER MILE UP THE
5 ROAD FROM WHERE THIS SITE IS.

6 Q. WHAT PROJECT WAS THAT?

7 A. IT'S CALLED BYRDLAND OFFICE PARK.

8 Q. IS THAT ON BYRDLAND DRIVE?

9 A. YES, IT IS.

10 Q. AND YOU DID THE SITE DESIGN WORK AT THAT LOCATION?

11 A. WE DID.

12 Q. WHO WAS THE DEVELOPER OF THAT PROJECT?

13 A. I WAS A PARTIAL OWNER MYSELF AS WELL AS A GROUP CALLED ---
14 I'M SORRY. I'M DRAWING A BLANK ON THAT. FALL STREET
15 INVESTORS. I'M SORRY.

16 Q. AND WHAT DID YOU DETERMINE FROM YOUR WORK ON BYRDLAND
17 OFFICE PARK THAT MAY HAVE ANY RELEVANCE TO THE ISSUES
18 INVOLVED IN THIS CASE?

19 A. NOTHING PARTICULARLY. I MEAN OBVIOUSLY IT WAS MADE ---
20 AND WE KNEW GOING INTO THE PROJECT THAT BYRDLAND ITSELF
21 HAS HAD SOME FLOODING OVER THE YEARS. THE CITY MADE IT
22 VERY WELL KNOWN TO US OF THE POTENTIAL PROBLEMS
23 DOWNSTREAM. CONSEQUENTLY WE WENT TO EXTREME MEASURES TO
24 PROVIDE STORM WATER DETENTION, ET CETERA, ON THE SITE AND
25 MAKE SURE THAT WE WEREN'T INCREASING ANY OF THE FLOODING

1 DOWNSTREAM.

2 Q. AND THAT IS, OF COURSE, REQUIRED OF DEVELOPMENT WITHIN
3 THE CITY PURSUANT TO THE STORM WATER MANAGEMENT ACT,
4 CORRECT?

5 A. THAT'S CORRECT.

6 Q. HAVE YOU REVIEWED THE STUDY DONE BY WOOLPERT, LLP FOR THE
7 CITY CALLED THE LAUREL CREEK/HAYWOOD ROAD STORM WATER
8 MASTER PLAN, BASIN NUMBER FOUR?

9 A. - BRIEFLY. BRIEFLY. I HAVE REVIEWED THE PORTION, I GUESS,
10 THAT WAS ---

11 (INTERRUPTION - OFF THE RECORD)

12 WITNESS RESUMES ANSWER:

13 A. I HAVE REVIEWED THE PORTION THAT WAS INCLUDED WITH MS.
14 ARROWOOD'S DEPOSITION. I DON'T KNOW IF THAT'S THE FULL
15 STUDY OR NOT. I BRIEFLY HAVE REVIEWED THOSE
16 CALCULATIONS..

17 Q. WHAT, IF ANY, OPINIONS OR CONCLUSIONS DID YOU REACH AFTER
18 REVIEWING THAT?

19 A. THE ONLY SIGNIFICANT THING THAT I NOTICED, OBVIOUSLY THE
20 PIPING SYSTEM UNDER HAYWOOD ROAD AND DOWNSTREAM AS WELL
21 IS UNDERSIZED FOR THE DESIGN CRITERIA, AND THEY MADE SOME
22 RECOMMENDATIONS THAT THOSE PIPES NEED TO BE REPLACED.

23 Q. DO YOU KNOW WHAT CRITERIA THEY WERE USING FOR WHETHER OR
24 NOT THE PIPING SYSTEM NEEDS TO BE INCREASED?

25 A. DON'T RECALL SPECIFICALLY, BUT I THINK THEY WERE

1 EVALUATING IT BASED ON A 25-YEAR STORM, WOULD BE THE
2 STANDARD THAT WOULD NORMALLY BE APPLIED TO CROSS DRAINS
3 GOING UNDER ROADS. YEAH, THAT LOOKS LIKE WHAT THEY
4 HAVE -- THEY HAVE USED THE 25-YEAR STORM.

5 Q. WE UNDERSTAND FROM MS. ARROWOOD'S DEPOSITION TESTIMONY
6 THAT PREVIOUSLY THE 10-YEAR STORM EVENT WAS THE DESIGN
7 CRITERIA. IS THAT CONSISTENT WITH YOUR UNDERSTANDING OF
8 WHAT THE PRIOR DESIGN CRITERIA HAS BEEN?

9 A. - NOT FOR CROSS DRAINS, NO, SIR. CROSS DRAINS ---

10 Q. I'M SORRY. I MISSPOKE. TEN YEARS FOR -- WELL, WHAT IS
11 THE 10-YEAR STORM EVENT DESIGN CRITERIA FOR?

12 A. YOU PROVIDE STORM WATER DETENTION AND RUNOFF FOR THE 2-
13 AND THE 10-YEAR STORMS, AND TYPICALLY CROSS-DRAIN PIPES
14 UNDER ROADS AND MAJOR CHANNELS ARE PROVIDED FOR THE 25-
15 YEAR STORM.

16 Q. ALL RIGHT. DO YOU KNOW WHO DESIGNED THE STORM WATER
17 DRAINAGE UNDERNEATH HAYWOOD ROAD WHEN IT WAS BUILT?

18 A. HAVE NO IDEA.

19 Q. WOULD IT LIKELY HAVE BEEN THE DEPARTMENT OF
20 TRANSPORTATION?

21 A. PROBABLY SO.

22 Q. DO YOU KNOW WHETHER THE DRAIN CROSSING UNDERNEATH HAYWOOD
23 ROAD IS DESIGNED FOR THE 25-YEAR STORM EVENT OR NOT?

24 A. I DO NOT REALLY KNOW.

25 Q. OTHER THAN WHAT YOU'VE READ IN THIS WOOLPERT REPORT I

1 GATHER YOU DON'T HAVE ANY INFORMATION ABOUT THAT.

2 A. NO, SIR.

3 Q. THE SPECIFIC QUESTION WE'RE TRYING TO ANSWER -- AT LEAST
4 THAT I'M TRYING TO ANSWER IN THIS CASE -- IS WHETHER THE
5 CITY OF GREENVILLE HAS DONE ANY AFFIRMATIVE ACT WHICH HAS
6 CAUSED FLOODING OF THE HAWKINS/SERVICEMASTER PROPERTY.

7 DO YOU HAVE ANY KNOWLEDGE OF WHETHER THE CITY OF
8 GREENVILLE HAS DONE ANY AFFIRMATIVE ACT TO INCREASE STORM
9 WATER RUNOFF ONTO MR. HAWKINS' AND THE SERVICEMASTER
10 PROPERTY IN THE PAST?

11 A. I'M NOT SURE EXACTLY WHAT YOU MEAN BY THE QUESTION, BUT I
12 THINK I CAN ANSWER AS FAR AS -- THE ONLY THING THE CITY
13 SEEMS TO HAVE DONE IS WHEN THE 96-INCH CULVERT WAS
14 INSTALLED ACROSS THE TRACK'S PROPERTY, AS WE'VE BEEN
15 CALLING IT, THAT SEEMS TO HAVE CREATED SOME OF THE
16 PROBLEMS IN THAT AREA.

17 Q. FIRST OF ALL, DO YOU KNOW WHO INSTALLED THAT PIPE?

18 A. NO, SIR, I DO NOT.

19 BY MR. BOYD:

20 LET'S MARK THAT AS THE FIRST EXHIBIT, PLEASE, MA'AM.

21 (COURT REPORTER MARKS ONE-PAGE DRAWING TITLED "SURVEY FOR
22 GOLDSMITH, TIMMONS & ASHMORE" AS DEFENDANT'S EXHIBIT NUMBER 1,
23 FOR ATTACHMENT TO THE DEPOSITION)

24 DIRECT EXAMINATION RESUMED BY MR. BOYD:

25 Q. LET ME SHOW YOU WHAT WE'VE MARKED AS EXHIBIT 1 TO YOUR

1 DEPOSITION AND ASK YOU TO REVIEW THAT AND TELL ME IF YOU
2 CAN IDENTIFY THAT DOCUMENT.

3 A. THIS IS A SURVEY PREPARED FOR GOLDSMITH, TIMMONS AND
4 ASHMORE OCTOBER TENTH OF 1988 OF THE PROPERTY AT THE
5 INTERSECTION OF HAYWOOD ROAD, AIRPORT ROAD, AND BYRDLAND
6 DRIVE.

7 Q. AND DOES THAT APPEAR TO BE THE TRACK'S PROPERTY THAT IS
8 DIRECTLY ACROSS BYRDLAND DRIVE FROM THE HAWKINS PROPERTY?

9 A. - YES, SIR.

10 Q. THE SURVEY WAS PERFORMED BY, IT LOOKS LIKE, C.O. RIDDLE
11 SURVEYING COMPANY. ARE YOU FAMILIAR WITH THAT FIRM?

12 A. YES, SIR, I AM.

13 Q. AND DOES IT SHOW ON THAT SURVEY AN EXISTING 8-FOOT
14 ALUMINUM PIPE?

15 A. YES, SIR. IT REFLECTS AN 8-FOOT ALUMINUM PIPE AND A 10-
16 FOOT DRAINAGE EASEMENT.

17 Q. AND THEN DOES THAT INDICATE THAT THAT PIPE HAD BEEN
18 INSTALLED PRIOR TO THE DATE OF THIS SURVEY?

19 A. YES, SIR, IT DOES.

20 Q. I GUESS ASSUMING THE SURVEY IS ACCURATE.

21 BY MR. BOYD:

22 LET'S MARK THIS AS EXHIBIT 2.

23 (COURT REPORTER MARKS ONE-PAGE DOCUMENT TITLED "CITY OF
24 GREENVILLE DEPARTMENT OF PUBLIC WORKS RECORD OF INQUIRY" AS
25 DEFENDANT'S EXHIBIT NUMBER 2, FOR ATTACHMENT TO THE

1 DEPOSITION)

2 DIRECT EXAMINATION RESUMED BY MR. BOYD:

3 Q. LET ME ASK YOU TO REVIEW EXHIBIT 2 AND THEN I WANT TO ASK
4 YOU A QUESTION ABOUT THAT. THIS IS A RECORD OF INQUIRY
5 MAINTAINED BY THE CITY OF GREENVILLE DEPARTMENT OF PUBLIC
6 WORKS, AS IT INDICATES, AND IT NOTES THAT PACK ASHMORE,
7 WHOM I AM TOLD IS ONE OF THE THREE OWNERS OF THIS
8 PROPERTY -- GOLDSMITH, TIMMONS, AND ASHMORE -- IS GETTING
9 - READY TO DEVELOP THE LOT ON THE CORNER OF HAYWOOD,
10 AIRPORT, AND BYRDLAND BOULEVARD. THEY'RE GOING TO PIPE
11 THE CREEK. WOULD THAT INDICATE TO YOU THAT THE OWNERS OF
12 THAT PROPERTY IN THE COURSE OF DEVELOPING THE PROPERTY
13 INSTALLED THAT 8-FOOT -- OR HAD THE 8-FOOT ALUMINUM PIPE
14 INSTALLED?

15 A. THAT'S CERTAINLY A REASONABLE INFERENCE, YES.

16 Q. AND IF A PRIVATE DEVELOPER PIPES A CREEK, WHAT MUST THE
17 PRIVATE DEVELOPER DO? MUST THE DEVELOPER GIVE NOTICE TO
18 THE CITY OR THE COUNTY, WHOEVER THE GOVERNING AGENCY IS?

19 A. CERTAINLY TODAY YOU WOULD BE REQUIRED TO -- YOU'D BE
20 REQUIRED TO SUBMIT PLANS, DRAINAGE CALCULATIONS, ET
21 CETERA, FOR THE INSTALLATION OF THAT PIPING.

22 Q. DO YOU KNOW IF THAT WAS REQUIRED BACK IN 1987 WITHIN THE
23 CITY?

24 A. I WOULD THINK THAT IT WAS.

25 Q. AND SO THEN PRESUMABLY, ASSUMING THEY FOLLOWED THE

1 PROCEDURE THAT WAS IN EFFECT AT THAT POINT IN TIME, THEY
2 WOULD'VE SUBMITTED SOME PLANS TO THE CITY AND WOULD'VE
3 HAD TO HAVE SHOWN SOME STORM WATER MANAGEMENT PLAN FOR
4 THAT PROPERTY?

5 A. WELL -- YES. STORM WATER MANAGEMENT PLANS OR DRAINAGE
6 CALCULATIONS FOR THE INSTALLATION OF THAT PIPE.

7 Q. DO YOU BY ANY CHANCE KNOW WHO DID THE ENGINEERING WORK
8 FOR THAT DEVELOPMENT BACK IN THE 87-88 TIME FRAME?

9 A. NO, I DON'T. I THINK I DID SEE SOME REFERENCE, THOUGH,
10 THAT MAYBE GRAY ENGINEERING DID. I'M NOT REALLY SURE OF
11 THAT.

12 Q. NOW, WHAT -- DO YOU HAVE AN OPINION AS TO WHAT EFFECT
13 THAT 8-FOOT ALUMINUM PIPE HAS ON THE FLOODING OF THE
14 SERVICEMASTER PROPERTY?

15 A. I REALLY DON'T HAVE AN OPINION WITHOUT STUDYING A LITTLE
16 FURTHER THE WOOLPERT STUDY. AND IN FACT IF THE PIPE
17 UNDER HAYWOOD ROAD -- OR ACTUALLY THE SIZE OF THE PIPE
18 UNDER HAYWOOD ROAD WOULD HAVE AN IMPACT ON WHAT MY
19 OPINION MAY BE ON THAT LINE, AND I'M NOT SO SURE WE KNOW
20 EXACTLY WHAT IS UNDER HAYWOOD ROAD AT THIS POINT.

21 Q. IS THERE ANYTHING ELSE THAT YOU HAVE CONCLUDED ABOUT THE
22 ISSUES IN THIS CASE OTHER THAN WHAT WE'VE TALKED ABOUT
23 THUS FAR THIS MORNING?

24 A. NO. I DON'T KNOW THAT THERE IS. I MEAN I THINK -- I
25 THINK THE 96-INCH PIPE DOES HAVE AN IMPACT, IF THAT'S

1 WHAT YOU'RE ASKING ME, ON THE DRAINAGE SITUATION. THE
2 CREEK HAS BEEN PIPED. AND, AGAIN, IF THE SIZE OF THE
3 CULVERT GOING UNDER HAYWOOD ROAD APPEARS TO BE BIGGER
4 THAN WHAT THE 96-INCH PIPE IS, THEN THAT'S OBVIOUSLY
5 GOING TO HAVE SOME LIMITING EFFECT ON THE WATER BEING
6 ABLE TO DRAIN UNDERNEATH HAYWOOD ROAD, CONSEQUENTLY
7 CAUSING THE BACK-UP OF THAT 96-INCH PIPE.

8 Q. I GUESS I'M CONFUSED ABOUT WHAT YOU TOLD ME EARLIER. I
9 THOUGHT WITHOUT DOING A FLOOD STUDY YOU COULDN'T REACH
10 ANY OPINIONS IN THAT REGARD.

11 A. WELL, WITHOUT KNOWING -- BUT KNOWING THAT THE SIZE OF THE
12 96-INCH PIPE IS UNDERSIZED FOR THE CURRENT STORM ---

13 Q. AND WHAT ARE YOU BASING THAT ON?

14 A. OFF THE WOOLPERT STUDY.

15 Q. OKAY.

16 A. AND IT APPEARS THAT THE PIPE UNDER HAYWOOD ROAD WAS
17 EITHER INSTALLED -- OR, ACCORDING TO JULIE'S TESTIMONY, I
18 BELIEVE THAT THAT WAS A BOX CULVERT AT ONE POINT AND THE
19 CITY REMOVED THAT PIPE AND INSTALLED AN ARCHED CULVERT
20 UNDERNEATH HAYWOOD ROAD. AND IF THAT -- ASSUMING THAT
21 THE -- I MEAN THE POINT IS IF THE CAPACITY OF THE LINE
22 UNDER HAYWOOD ROAD IS LARGER THAN THE CAPACITY OF THE 96-
23 INCH PIPE FEEDING INTO IT, THEN OBVIOUSLY THAT'S GOING TO
24 HAVE SOME LIMITING EFFECTS ON THAT DRAINAGE CHANNEL.

25 Q. WHAT I UNDERSTAND THE CITY DID WAS INSTALL -- TAKE OUT A

1 DOUBLE BOX CULVERT AT THE INTERSECTION OF LAUREL CREEK
2 AND AIRPORT ROAD WHICH WAS CATCHING DEBRIS AND INSTALLED
3 A LARGER ELLIPTICAL PIPE TO INCREASE THE STORM WATER
4 DRAINAGE AT THAT LOCATION. THAT WORK BY THE CITY --
5 WOULD THAT WORK BY THE CITY HAVE CAUSED ANY ADDITIONAL
6 STORM WATER TO RUN ONTO THE HAWKINS PROPERTY OR WOULD IT
7 HAVE IMPROVED THE DRAINAGE?

8 A. I THINK THE INTENT WAS FOR IT TO IMPROVE THE DRAINAGE
9 SITUATION. AND ASSUMING THAT THE CAPACITY OF THE NEW
10 CULVERT THE CITY INSTALLED IS COMPARABLE OR GREATER THAN
11 THE BOX CULVERT THEN CERTAINLY YOU WOULD SAY IT IMPROVED
12 THE SITUATION.

13 Q. AND THEN WHAT EFFECT -- AND, OF COURSE, TO CARRY THAT
14 FURTHER -- YOU HAD MENTIONED HAYWOOD ROAD EARLIER. THE
15 CITY, AS I UNDERSTAND IT, HAS DONE NOTHING OUT THERE
16 UNDERNEATH HAYWOOD ROAD. THAT'S NOT BEEN WORKED ON BY
17 THE CITY. DO YOU HAVE ANY INFORMATION TO THE CONTRARY?

18 A. NO, I DO NOT. I WAS PROBABLY MISSTATING THAT. IT SHOULD
19 HAVE BEEN THE BOX CULVERT UNDER AIRPORT ROAD.

20 Q. RIGHT. OKAY.

21 A. THAT'S ONE THING I'M NOT REAL CLEAR ON, IS EXACTLY HOW
22 THAT PIPING DOES TIE TOGETHER AND THEN GO UNDER HAYWOOD
23 ROAD.

24 Q. AND ALL OF THAT'S A RELATED SYSTEM THAT HAS TO BE
25 EVALUATED AS YOU'RE TRYING TO EVALUATE THE STORM WATER

1 DRAINAGE IN THIS AREA, CORRECT?

2 A. THAT'S CORRECT.

3 Q. AND YOU'D HAVE TO COORDINATE WHATEVER IS UNDER HAYWOOD
4 ROAD, WHATEVER IS UNDER AIRPORT ROAD, AND IN THE CREEK IN
5 ORDER TO GET THE STORM WATER DRAINAGE PROBLEM OUT THERE
6 SOLVED?

7 A. THAT'S CORRECT.

8 Q. NOW, GOING BACK TO THIS 8-INCH (SIC) PIPE, I'M NOT SURE I
9 - UNDERSTOOD ---

10 BY MR. CHILDS: .

11 EIGHT-FOOT.

12 BY MR. BOYD:

13 I'M SORRY.

14 DIRECT EXAMINATION RESUMED BY MR. BOYD:

15 Q. HOW DOES THE 8-FOOT PIPE FACTOR INTO FLOODING OF THE
16 HAWKINS PROPERTY?

17 A. I'LL GIVE YOU AN EXAMPLE. LET'S SAY THAT THE PIPE UNDER
18 AIRPORT ROAD IS A 10-FOOT PIPE AND YOU'RE FEEDING AN 8-
19 FOOT PIPE INTO IT AND THE CHANNEL REQUIRES THE NEED FOR A
20 10-FOOT PIPE. THEN YOU HAVE OBVIOUSLY DECREASED THE
21 ABILITY OF THE WATER COMING DOWN LAUREL CREEK AND
22 BYRDLAND DRIVE -- YOU'RE TRYING TO FIT THE VOLUME OF
23 WATER NEEDED FOR A 10-FOOT PIPE INTO AN 8-FOOT PIPE.
24 CONSEQUENTLY IT'S BACKING UP.

25 Q. SO YOU THINK THE 8-FOOT PIPE SHOULD BE LARGER?

1 A. I DO, BASED -- YES.

2 Q. AND THAT'S BASED ON THIS STUDY BY WOOLPERT?

3 A. THAT'S CORRECT.

4 Q. BECAUSE YOU HAVE NOT ANALYZED THAT YOURSELF?

5 A. THAT'S CORRECT.

6 Q. BY THE WAY, DO YOU KNOW ANYTHING ABOUT WOOLPERT, LLP? IS
7 THAT A REPUTABLE FIRM, OR DO YOU KNOW ANYTHING ABOUT
8 THEM?

9 A. - I KNOW OF THEM. TO MY KNOWLEDGE, YES, THEY'RE A VERY
10 REPUTABLE FIRM.

11 Q. HAVE YOU BEEN OUT THERE TO OBSERVE WATER IN THE FLOOD
12 STAGE AT THE HAWKINS PROPERTY?

13 A. I HAVE NOT.

14 Q. SO THEN YOU DON'T KNOW WHAT EXACTLY IS OCCURRING WHEN
15 THERE ARE HEAVY RAINS IN THAT AREA AND WHERE THE WATER
16 GOES?

17 A. THAT'S CORRECT. I REALLY DO NOT. I HAVE -- AND I WILL
18 SAY -- AND THIS HAS BEEN -- I DON'T EVEN REMEMBER -- FIVE
19 OR SIX YEARS AGO. THERE WAS A SITUATION WHEN I WAS ON
20 BYRDLAND AND I DID NOTICE THE WATER COMING OUT OF THE
21 CREEK ON BYRDLAND AND ACTUALLY RUNNING DOWN BYRDLAND
22 DRIVE. OTHER THAN THAT, NO. IT'S BEEN A WHILE BACK.

23 Q. AND THIS STORM EVENT THAT IS THE SUBJECT OF THIS LAWSUIT
24 OCCURRED ON JULY TWENTY-FOURTH, 1997, AFTER A PERIOD OF
25 FAIRLY SIGNIFICANT RAINFALL WITHIN ONE HOUR WHICH FLOODED

1 THIS WHOLE AREA OUT THERE AROUND THE HAWKINS PROPERTY,
2 THE PALMETTO BANK IN THE LOCATION -- VICINITY OF AIRPORT
3 ROAD AND BYRDLAND DRIVE AND HAYWOOD ROAD. ARE YOU
4 FAMILIAR WITH THAT STORM EVENT?

5 A. SIMPLY FROM THE DOCUMENTS OF RECORD.

6 Q. I'M NOT ASKING YOU FOR A LEGAL OPINION ABOUT THAT, BUT
7 JUST FROM THE ENGINEERING PERSPECTIVE WHOSE
8 RESPONSIBILITY IS IT TO MAKE SURE THAT THAT 8-INCH
9 - ALUMINUM PIPE WHICH IS INSTALLED ON THIS TRACK'S PROPERTY
10 IS PROPERLY SIZED?

11 A. THE DESIGN ENGINEER ULTIMATELY -- I MEAN TO START WITH.

12 Q. WELL, SHOULDN'T GRAY ENGINEERING, IN DOING ITS WORK FOR
13 THE DEVELOPER, AND ULTIMATELY THE DEVELOPER MAKE SURE
14 THAT WHATEVER STORM WATER DRAINAGE SYSTEM THEY PUT IN
15 PLACE FOR THE DEVELOPMENT OF THAT PROPERTY IS ADEQUATE?

16 A. PROBABLY NOT. IF I WERE IN GRAY ENGINEERING'S SHOES AND
17 I WAS SIMPLY WORKING ON MY SITE AND THE PIPE WAS ALREADY
18 IN PLACE, THEN I'M GOING TO BE LOOKING TO PROVIDE
19 DETENTION, ET CETERA, FOR MY SITE, AND THE EXISTING STORM
20 WATER SYSTEM THAT'S IN PLACE I WOULD PROBABLY NOT BE A --

21 -

22 Q. I ASKED YOU THE WRONG QUESTION. I THINK THAT'S RIGHT AND
23 I UNDERSTAND WHAT YOU JUST SAID. BUT, GOING BACK, WHEN
24 THE 8-FOOT ALUMINUM PIPE WAS INSTALLED, WOULD IT NOT BE
25 THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY WHO PIPES

1 THE CREEK TO MAKE SURE OR HAVE A DESIGN ENGINEER MAKE
2 SURE THAT THAT PIPE IS ADEQUATE?

3 A. BY ALL MEANS.

4 Q. AND, AS YOU PREVIOUSLY TESTIFIED, THERE SHOULD HAVE BEEN,
5 ASSUMING THE NORMAL PROCEDURE WAS FOLLOWED, SOME SET OF
6 STORM WATER DRAINAGE CALCULATIONS PROVIDED BY THAT DESIGN
7 ENGINEER AND THE OWNER TO THE CITY CERTIFYING THAT THE
8 DESIGN IS PROPER AND THE PIPE IS ADEQUATE?

9 A. - I WOULD CERTAINLY HAVE EXPECTED THAT.

10 Q. HAVE YOU REVIEWED ANY PHOTOGRAPHS THAT I UNDERSTAND WERE
11 MADE BY MR. WILLIE HAWKINS AT THE TIME OF THE FLOOD?

12 A. I DID SEE A COUPLE OF PHOTOGRAPHS. I'M NOT SURE -- THEY
13 REALLY DID NOT DEPICT ANY FLOODING. THE PICTURES I HAVE
14 REVIEWED WERE PICTURES OF THE CITY WORKING ON BYRDLAND
15 DRIVE.

16 Q. LET ME ASK YOU TO REFER TO EXHIBITS 10, 11, AND 12 OF MS.
17 ARROWOOD'S DEPOSITION, WHICH ARE THREE PHOTOGRAPHS WHICH
18 WERE INTRODUCED AT HER DEPOSITION. FIRST, LOOKING AT
19 EXHIBIT 10 WHAT DO YOU UNDERSTAND THAT PHOTOGRAPH
20 DEPICTS?

21 A. IT WAS MY UNDERSTANDING THIS PHOTOGRAPH WAS DEPICTING
22 WHERE THE CITY WAS DOING SOME REPAIRS ALONG THE EDGE OF
23 BYRDLAND DRIVE.

24 Q. AND DO YOU KNOW WHEN THAT PHOTOGRAPH WAS MADE?

25 A. I DO NOT KNOW THE EXACT DATE, NO, SIR.

1 Q. AND DO YOU KNOW WHETHER THAT CONDITION EXISTED AT THE
2 TIME OF THIS STORM ON JULY TWENTY-FOURTH, 1997?

3 A. I DO NOT KNOW THAT FOR SURE.

4 Q. THEN LET'S LOOK AT EXHIBIT 11 TO MS. ARROWOOD'S
5 DEPOSITION. WHAT DO YOU UNDERSTAND THAT PHOTOGRAPH
6 SHOWS?

7 A. I THINK THIS IS PROBABLY ESSENTIALLY THE SAME PICTURE AS
8 EXHIBIT 10, FROM THE OTHER DIRECTION, DEPICTING SOME
9 - REPAIRS AND SO FORTH BEING MADE TO BYRDLAND.

10 Q. AND THEN EXHIBIT 12, WHAT DOES THAT PHOTOGRAPH DEPICT?

11 A. A COMPARABLE SITUATION. AGAIN, REPAIRS ALONG BYRDLAND
12 WHERE THEY FILLED IN ALONG THE EDGE OF THE ROAD.

13 Q. DO YOU KNOW WHAT REPAIRS WERE BEING MADE OR WHAT WORK WAS
14 BEING DONE THERE BY THE CITY?

15 A. NOT SPECIFICALLY, BUT OBVIOUSLY, FROM MY REVIEW OF THE
16 SITE AND THE CHANNEL, THEY WERE ATTEMPTING TO STABILIZE
17 THE BANKS OF THE CHANNEL.

18 Q. AND ACCORDING TO THE RECORDS THAT WE'VE OBTAINED IN THIS
19 CASE THE CITY PERFORMED SOME WORK ON JULY THE SECOND,
20 1997, TO RIPRAP THE BANKS OF -- THE BANK OF LAUREL CREEK
21 AT THE ENTRANCE TO THAT 8-FOOT ALUMINUM PIPE WHERE THERE
22 WAS SOME EROSION GOING ON. WOULD THAT BE A NORMAL KIND
23 OF REPAIR THAT IS MADE TYPICALLY IN THE EVENT OF EROSION?

24 A. CERTAINLY, YEAH. I MEAN THAT'S AN ONGOING MAINTENANCE
25 ITEM THAT I'M SURE THEY WOULD HAVE TO DEAL WITH, YES.

1 Q. FROM YOUR VISIT TO THE SITE RECENTLY IN REGARD TO THIS
2 CASE OR FROM OTHER KNOWLEDGE YOU MAY HAVE OF THIS AREA IS
3 THIS THE WAY THAT AREA LOOKS TODAY?

4 A. IT'S A PRETTY ROUGH CHANNEL UP AND DOWN THROUGH THERE.
5 YES, I WOULD SAY THAT'S PROBABLY A COMPARABLE VIEW OF
6 THAT CHANNEL.

7 Q. IS THERE SOME RIPRAP OUT THERE AT THE MOUTH OF THE 8-FOOT
8 ALUMINUM PIPE NOW?

9 A. TO THE BEST OF MY KNOWLEDGE AND FROM WHAT I RECALL, YES.

10 Q. IS THAT RIPRAP SHOWN IN THESE PHOTOGRAPHS OR HAD IT NOT
11 YET BEEN INSTALLED?

12 A. I DON'T THINK -- THERE'S CERTAINLY NO RIPRAP OR NO
13 SIGNIFICANT AMOUNT OF RIPRAP VISIBLE HERE. I MEAN THE
14 RIPRAP I WAS SPEAKING OF WAS MORE RIGHT AT THE MOUTH OF
15 THE CULVERT. BUT, NO, THIS DOES NOT APPEAR TO REALLY BE
16 RIPRAP. IT'S MORE DIRT.

17 Q. AND CAN YOU TELL FROM THESE PHOTOGRAPHS WHETHER THOSE
18 PHOTOGRAPHS WERE MADE DURING THE COURSE OF SOME WORK THAT
19 HAD NOT YET BEEN COMPLETED, OR CAN YOU TELL WHETHER THE
20 WORK HAD BEEN COMPLETED AT THE TIME THOSE PHOTOGRAPHS
21 WERE MADE?

22 A. I WOULD SAY THAT THE WORK WAS IN PROGRESS. IT CERTAINLY
23 DOESN'T APPEAR TO BE COMPLETED.

24 Q. AND SO THEN IF THAT WORK WAS DONE BY THE CITY ON JULY
25 SECOND OF 1997 AND THEN THIS STORM THEN OCCURRED ON JULY

1 TWENTY-FOURTH, 1997, SOME ADDITIONAL WORK HAD BEEN DONE
2 BETWEEN THE TIME THE PHOTOGRAPH WAS MADE AND THE TIME OF
3 THE STORM TO INSTALL THE RIPRAP?

4 A. IF THERE WAS RIPRAP, YEAH, BECAUSE THERE'S CERTAINLY NO
5 SIGNIFICANT AMOUNT OF RIPRAP VISIBLE HERE -- OR, REALLY,
6 NONE.

7 Q. AND OF COURSE THERE'S NO WAY TO TELL FROM THE PHOTOGRAPH
8 ITSELF WHERE THAT DIRT SHOWN THERE CAME FROM OR WHAT IT
9 WAS THE RESULT OF?

10 A. I HAVE NO IDEA.

11 Q. WE HAVE SOME INFORMATION THAT THE STORM EVENT ON JULY
12 TWENTY-FOURTH, 1997, WAS A GREATER-THAN-10-YEAR STORM
13 EVENT AS CALCULATED BY SOME METEOROLOGICAL SERVICE OR
14 SOMEBODY WHO DOES THAT KIND OF CALCULATION. ASSUMING
15 THAT IS CORRECT DOES THAT MEAN THAT EVEN IF THE 8-FOOT
16 ALUMINUM PIPE HAD BEEN SIZED FOR A 10-YEAR STORM EVENT,
17 THE CREEK BED WOULD'VE OVERTOPPED?

18 A. I'D LIKE TO MAKE A COUPLE OF CLARIFICATIONS THERE, IF I
19 COULD, IN REFERENCE TO THE METEOROLOGICAL REPORT. THE
20 STORM DATA THAT I SAW REFLECTED THAT WAS TWO AND A HALF
21 INCHES OVER A 24-HOUR PERIOD, AND I NOTICE THAT JULIE, I
22 BELIEVE, HAD MADE THE STATEMENT THAT THAT WAS TWO AND A
23 HALF INCHES IN A ONE-HOUR TIME FRAME. I'M NOT SO SURE
24 HOW SHE GOT TO THAT CONCLUSION. HOWEVER, TO FURTHER
25 ANSWER YOUR QUESTION OF IF THE RAIN WAS LARGER THAN A 10-

1 YEAR STORM, YES, IT WOULD BE REASONABLE TO ASSUME THAT
2 THAT PIPE MAY HAVE OVERTOPPED. BUT, AGAIN, THE PIPE
3 SHOULD BE DESIGNED FOR A 25-YEAR STORM, NOT A 10-YEAR
4 STORM.

5 Q. THIS 8-FOOT PIPE WHICH DOESN'T GO UNDER A ROAD?

6 A. THAT'S CORRECT.

7 Q. IT SHOULD STILL BE SIZED FOR A 25-YEAR EVENT?

8 A. BECAUSE IT IS FEEDING UNDER -- IT ESSENTIALLY DOES GO
9 UNDER THE ROAD. ALTHOUGH THE SPECIFIC PORTION YOU'RE
10 SPEAKING OF DOES NOT GO UNDER THE ROAD, BUT ULTIMATELY
11 IT'S FEEDING THE LINE UNDER THE ROAD.

12 Q. I MAY HAVE ASKED YOU THIS EARLIER, AND I APOLOGIZE IF I'M
13 REPEATING MYSELF.

14 AS I UNDERSTAND IT, THE MASTER PLAN DONE IN BASIN FOUR IS
15 CALLING FOR AN UPGRADE AND ENLARGEMENT OF THE STORM WATER
16 DRAINAGE CAPACITY OUT THERE IN THIS BASIN, CORRECT?

17 A. THAT'S CORRECT.

18 Q. IS THAT BECAUSE STORM WATER MANAGEMENT AND DESIGN
19 CRITERIA HAVE CHANGED OVER THE YEARS?

20 A. OVERALL, NO, THE STORM WATER DESIGN CRITERIA HAS NOT
21 CHANGED THAT SIGNIFICANTLY. THERE ARE -- YOU KNOW, THERE
22 ARE CONSTANT REVISIONS TO THE ORDINANCE, ET CETERA, BUT I
23 DON'T THINK -- FROM PROBABLY 1985 TILL TODAY THE
24 REQUIREMENTS OF SIZING FOR PIPES AND CROSS DRAINS, ET
25 CETERA, HAS PROBABLY NOT CHANGED.

1 Q. BASED UPON YOUR REVIEW OF THE STUDY WHAT IS THE HAYWOOD
2 ROAD CROSSING DESIGNED FOR NOW?

3 A. THE ACTUAL PIPE UNDER AIRPORT ROAD OR UNDER HAYWOOD ROAD?

4 Q. HAYWOOD ROAD.

5 A. I DO NOT RECALL SEEING SPECIFICALLY WHAT IT WAS DESIGNED
6 FOR IN THE WOOLPERT REPORT. NOW, THE NEW PIPE IS
7 DESIGNED FOR A 25-YEAR STORM, I KNOW. I DON'T RECALL
8 WHAT THE ---

9 Q. - YOU MEAN THE PROPOSED NEW PIPE?

10 A. PROPOSED NEW PIPE. I DON'T KNOW WHAT THE EXISTING PIPE
11 WAS SIZED FOR.

12 Q. BUT AT THE TIME HAYWOOD ROAD WAS BUILT WOULD NOT THE
13 D.O.T., ASSUMING THE D.O.T. WAS RESPONSIBLE FOR THE
14 DESIGN OF THE STORM WATER DRAINAGE UNDER THE HIGHWAY,
15 HAVE HAD TO HAVE CALCULATED WHAT STORM EVENT THE DRAINAGE
16 UNDER THE ROAD COULD HANDLE?

17 A. YES. I WOULD HAVE EXPECTED THE D.O.T. TO HAVE SIZED THAT
18 CULVERT FOR A 25-YEAR STORM OR BETTER.

19 Q. EVEN WHEN IT WAS BUILT BACK IN 1975 OR '76 WHENEVER
20 HAYWOOD ROAD WAS BUILT?

21 A. YES.

22 Q. AND THEN AS THEY EVALUATE THE FEEDER SYSTEM INTO THE PIPE
23 UNDER HAYWOOD ROAD WOULD THEY NOT HAVE TAKEN INTO ACCOUNT
24 THE FACT THAT THE PIPES FEEDING IN WERE NOT SIZED FOR THE
25 25-YEAR STORM EVENT?

1 A. I'M NOT SURE EXACTLY WHAT YOU'RE TRYING TO ASK ME THERE.

2 Q. WELL, FOR EXAMPLE, IF I'M AN ENGINEER AND I'M PUTTING A
3 PIPE UNDER HAYWOOD ROAD AS THE ROAD IS BEING BUILT TO
4 HANDLE THE 25-YEAR STORM EVENT, BUT THE NEXT CROSSING
5 UPSTREAM IS ONLY SIZED FOR A 10-YEAR STORM EVENT, DOES
6 THAT NOT TELL ME THAT MY 25-FOOT (SIC) PIPE IS NOT GOING
7 TO SOLVE THE PROBLEM; THERE'S GOING TO BE A PROBLEM IN
8 FLOODING UPSTREAM?

9 A. - WHAT YOU'RE ASKING ME IS -- YES, THEY'RE GOING TO
10 EVALUATE THE WHOLE BASIN. NOW, WHEN YOU GET INTO A
11 SITUATION WITH THE STATE WHERE YOU HAVE A STATE
12 JURISDICTION AND THEN A COUNTY JURISDICTION OR A CITY
13 JURISDICTION AS FAR AS ANOTHER ROAD IS CONCERNED, THE
14 STATE IS GOING TO -- THE STATE OR THE COUNTY OR THE CITY
15 IS GOING TO SIZE THE SPECIFIC PIPE THAT THEY ARE
16 DESIGNING FOR TO HANDLE THE 25-YEAR STORM EVEN IF THE
17 UPSTREAM PIPE IS UNDERSIZED.

18 Q. BUT, FOR EXAMPLE, THE D.O.T. DOESN'T WANT WATER FLOWING
19 OVER THE TOP OF HAYWOOD ROAD, BECAUSE THAT'S A TRAFFIC
20 HAZARD, CORRECT?

21 A. SURE

22 Q. EXCEPT IN THE 100-YEAR OR THE HUGE STORM EVENT. BUT IF
23 YOU'RE SIZING THE PIPE TO HANDLE A 25-YEAR STORM EVENT,
24 THAT BASICALLY MEANS THE DEPARTMENT OF TRANSPORTATION
25 DOESN'T WANT RAINFALL AND STORM WATER OVERFLOWING THE

1 ROAD IN THE 25-YEAR STORM EVENT?

2 A. THAT'S CORRECT.

3 Q. IN THIS PARTICULAR CASE ON JULY TWENTY-FOURTH, 1997,
4 WATER DID FLOW OVER HAYWOOD ROAD AND CAUSED A TRAFFIC JAM
5 AND CAUSED SIGNIFICANT RESTRICTION OF TRAFFIC. ASSUMING
6 THAT STORM EVENT WAS NOT GREATER THAN A 25-YEAR STORM
7 EVENT DOESN'T THAT INDICATE THAT THE DESIGN OF THAT
8 SYSTEM BY THE D.O.T. WAS NOT ADEQUATE TO HANDLE THE STORM
9 - OR WAS NOT ADEQUATE, PERIOD?

10 A. NO, NOT NECESSARILY. AGAIN, YOU'RE TALKING ABOUT A
11 SITUATION WHERE THE D.O.T. SIZED A -- YOU KNOW, HAS THEIR
12 PIPE UNDERNEATH HAYWOOD ROAD AND YOU'VE GOT OTHER PIPES
13 THAT HAVE BEEN TIED INTO IT OVER THE YEARS, THINGS THAT
14 HAVE CHANGED FROM THE ORIGINAL CONSTRUCTION PLANS OF THE
15 HAYWOOD ROAD CONSTRUCTION. SO, NO, I DON'T FULLY AGREE
16 WITH THAT.

17 Q. WELL, I'M GOING THE OTHER WAY. WHEN HAYWOOD ROAD IS
18 BUILT IN 1975 AND THERE'S AN EXISTING STORM WATER
19 DRAINAGE SYSTEM IN THE AREA, HAVEN'T THEY GOT TO TIE
20 THEIR SYSTEM INTO THE EXISTING SYSTEM?

21 A. THEY DO.

22 Q. BECAUSE IT WOULDN'T DO THEM ANY GOOD TO HAVE A 25-YEAR
23 PIPE UNDER HAYWOOD ROAD, BUT FLOODING UPSTREAM FROM THE
24 UPSTREAM PIPE AT AIRPORT ROAD IS ONLY SIZED FOR TEN
25 YEARS.

1 A. I AGREE. BUT, AGAIN, THE D.O.T. IS GOING TO MAKE SURE
2 THAT WHAT THEY'RE DESIGNING FOR IS GOING TO HANDLE A 25-
3 YEAR STORM. IF IT'S OUTSIDE OF THEIR JURISDICTION, THEY
4 MAY BRING IT TO THE ATTENTION OF THE CITY OR THE COUNTY,
5 OR WHOEVER, AND, YOU KNOW, IT'S THE CITY OR COUNTY'S
6 ISSUE TO DEAL WITH BEYOND -- BACK UPSTREAM. THEY'RE NOT
7 GOING TO TAKE RESPONSIBILITY FOR EVERYBODY UPSTREAM.

8 Q. I UNDERSTAND. BUT YOU'D WANT TO COORDINATE THAT WORK AND
9 MAKE SURE THAT THE FEEDER SYSTEM IS REDESIGNED TO FEED
10 INTO HAYWOOD ROAD, WOULD YOU NOT?

11 A. YOU WOULD TRY TO DO THAT, YES.

12 Q. DO YOU KNOW WHETHER THIS AREA WAS IN THE CITY LIMITS IN
13 1975 OR 1976 WHEN HAYWOOD ROAD WAS BUILT?

14 A. I DON'T HAVE ANY IDEA.

15 BY THE WITNESS:

16 CAN WE GO OFF THE RECORD FOR A SECOND?

17 BY MR. CHILDS:

18 YES, IF IT'S OKAY WITH HOWARD.

19 BY MR. BOYD:

20 SURE.

21 (DISCUSSION OFF THE RECORD)

22 DIRECT EXAMINATION RESUMED BY MR. BOYD:

23 Q. WHILE WE WERE OFF THE RECORD YOU WERE INQUIRING WHETHER
24 ANYBODY HAD GOTTEN THE D.O.T. PLANS. WHAT WOULD BE --
25 WHAT KNOWLEDGE WOULD YOU GAIN FROM LOOKING AT THE D.O.T.

1 PLANS CONCERNING THE SUBJECT WE'RE TALKING ABOUT?

2 A. I THINK IT WOULD ANSWER WHAT THE EXISTING CONDITIONS WERE
3 WHEN HAYWOOD ROAD WAS CONSTRUCTED AND HOW THE CAPACITY OF
4 THE CULVERT UNDER HAYWOOD ROAD MAY HAVE BEEN EVALUATED AS
5 WELL AS THE CULVERT UNDER AIRPORT ROAD, AND I THINK IT
6 WOULD SHED KNOWLEDGE ON EXISTING CONDITIONS AT THAT TIME.
7 IT WOULD BE ABLE TO MAYBE BETTER ANSWER YOUR QUESTIONS AS
8 FAR AS HOW THEY SIZED -- WHY AND HOW THEY SIZED THEIR
9 CULVERT.

10 Q. IS THIS PROPERTY THE LOW POINT IN THIS BASIN, THE HAWKINS
11 PROPERTY?

12 A. WELL, IT IS IN THE LOWER PORTION OF THE BASIN. OBVIOUSLY
13 THE BASIN KEEPS FLOWING ON DOWNSTREAM, BUT, YES, THIS
14 PROPERTY IS IN THE LOWER PORTION OF THE BASIN.

15 Q. DO YOU KNOW ANYTHING ABOUT THE HISTORY OF THE PROPERTY IN
16 TERMS OF HOW MANY TIMES IT HAS EXPERIENCED FLOODING AND
17 WHAT THE CIRCUMSTANCES WERE SURROUNDING THOSE OTHER
18 FLOODS?

19 A. AGAIN, STRICTLY WHAT I HAVE READ IN THE RECORD. I THINK
20 IT WAS FIRST FLOODED IN '91, IF I'M NOT MISTAKEN. THE
21 SECOND FLOOD, I THINK, WAS IN '97. OTHER THAN THAT, NO,
22 SIR, I'M NOT THAT FAMILIAR WITH THE DETAILS.

23 Q. AND THERE APPARENTLY WAS A FLOOD IN THE EARLY NINETIES,
24 WHICH WAS AT THE TIME THE DOWNTOWN AIRPORT WAS APPARENTLY
25 EXPANDING ITS RUNWAY OR BUILDING A NEW RUNWAY, AND I

1 BELIEVE THERE WAS ALSO SOME FLOODING IN 1999. ARE YOU
2 FAMILIAR WITH EITHER OF THOSE OTHER TWO INCIDENTS?

3 A. NO. I THINK THE ONLY REFERENCES I'VE SEEN ARE TO A '91
4 AND A '97 FLOODING.

5 Q. '95 WAS THE OTHER ONE, I THINK, IF WE DIDN'T MENTION '95.
6 '91, '95, '97, AND '99 ARE THE FOUR FLOODS THAT I -- THE
7 FOUR TIMES, I BELIEVE, THE PROPERTY HAS EXPERIENCED
8 FLOODING. BUT YOU'RE NOT FAMILIAR WITH ANY OF THOSE FOUR
9 - STORMS?

10 A. NOT OUTSIDE OF JUST WHAT I HAVE READ FROM THE RECORD. AS
11 FAR AS ANY OF THE DETAILS OF WHAT ACTUALLY FLOODED, THE
12 EXTENT OF THE FLOOD, NO, SIR.

13 Q. AND ORIGINALLY, WE ASSUME AT LEAST, THIS AREA NATURALLY
14 DRAINED THROUGH LAUREL CREEK, WHICH WAS JUST A CREEK THAT
15 RAN THROUGH THIS RURAL AREA, PROBABLY.

16 A. MM-HMM (AFFIRMATIVE).

17 Q. IS THAT YOUR ASSUMPTION?

18 A. SURE.

19 Q. AND THEN ONCE YOU PUT A PIPE IN A CREEK WHAT DOES THE
20 PIPE DO TO THE STORM WATER OR DRAINAGE THROUGH THAT
21 CREEK? DOES IT INCREASE IT OR DECREASE IT?

22 A. DOES IT INCREASE THE CAPACITY OF THE CHANNEL?

23 Q. RIGHT.

24 A. IT SHOULD BE SIZED TO HANDLE THE CAPACITY OF THE CHANNEL,
25 SO IT SHOULD NOT HAVE A SIGNIFICANT EFFECT ON THE CHANNEL

1 OUTSIDE OF WHEN YOU HAVE THE STORM EVENTS THAT ARE
2 GREATER THAN THE 25-YEAR ---

3 Q. THE CAPACITY OF ---

4 A. YEAH.

5 Q. SO, FOR EXAMPLE, IF I UNDERSTAND WHAT YOU'RE TELLING ME,
6 IF I'VE GOT A CREEK THAT HAS THE CAPACITY TO HANDLE A 10-
7 YEAR STORM EVENT NATURALLY BUT OVERTOPS IN A STORM EVENT
8 GREATER THAN THE 10-YEAR STORM AND I'M PUTTING A PIPE IN
9 - THAT CREEK, I WOULD WANT TO PUT A 10-YEAR-STORM-SIZED
10 PIPE FOR THE 10-YEAR STORM SO THAT IT WOULD HANDLE THE
11 10-YEAR STORM?

12 A. IN THAT SCENARIO THAT'S CORRECT. YOU KNOW, 25 YEARS IS
13 SORT OF WHAT WE'RE USING, BUT. . .

14 Q. BUT YOU'D WANT TO AT LEAST HAVE THE PIPE SIZED TO NOT
15 RESTRICT THE NATURAL DRAINAGE CAPACITY OF THE CREEK?

16 A. THAT'S CORRECT.

17 Q. AND I UNDERSTAND WHAT YOU'RE SAYING, THAT IF YOU'RE
18 DESIGNING MAYBE ON A CONSERVATIVE DESIGN BASIS YOU'D GO
19 TO A 25-YEAR STORM EVENT FOR A SYSTEM FEEDING A MAJOR
20 ROAD.

21 A. WELL, A MAJOR ROAD OR -- IN A SITUATION LIKE THIS,
22 CERTAINLY YOU WOULD BE -- ALL UP AND DOWN BYRDLAND
23 BOULEVARD ALL THOSE CULVERTS SHOULD BE SIZED FOR A 25-
24 YEAR STORM. IT'S A MAJOR COLLECTOR SYSTEM.

25 Q. AND WITHOUT DOING THE CALCULATIONS DO YOU KNOW WHAT AN 8-

1 FOOT ALUMINUM PIPE'S CAPACITY IS?

2 A. NO, SIR, NOT OFF THE TOP OF MY HEAD.

3 Q. IS THAT SOMETHING THAT IS READILY AVAILABLE OR WHICH CAN
4 BE READILY DETERMINED FROM SOME PRIOR CALCULATIONS DONE
5 ON WHAT AN 8-FOOT PIPE'S CAPACITY IS?

6 A. YEAH. NOW, THERE ARE A NUMBER OF GRAPHS AND CHARTS
7 THAT -- DEPENDING ON THE SLOPE OF THE PIPE AND CERTAIN
8 OTHER DRAINAGE CONDITIONS, THAT, YES, YOU CAN GET A
9 CAPACITY FOR THAT PIPE FAIRLY EASILY.

10 Q. HOW DOES THE SLOPE FACTOR INTO THE DRAINAGE CAPACITY OF
11 THE PIPE?

12 A. THE GREATER THE SLOPE THE MORE THE CAPACITY. IF IT'S ON
13 A 10-PERCENT, THEN IT'S GOING TO HANDLE A FAIR AMOUNT
14 MORE WATER THAN IT WOULD IF IT'S ON A 2-PERCENT.

15 Q. THIS IS ONE OF MANY REASONS I'M NOT AN ENGINEER. EXPLAIN
16 THAT TO ME. I WOULD THINK THAT THE DIAMETER OF THE PIPE
17 WOULD DETERMINE ITS CAPACITY WHETHER IT'S SLOPED OR FLAT.

18 A. BUT IF THE PIPE IS LAYING FLAT, THEN ONCE IT FILLS UP THE
19 WATER IS NOT GOING TO BE FLOWING. THE VELOCITY IS
20 ESSENTIALLY ZERO, IF YOU WANT TO LOOK AT IT LIKE THAT.
21 IF YOU INCREASE THE SLOPE, THEN THE VELOCITY OF THE WATER
22 GOING THROUGH THE PIPE IS GOING TO INCREASE
23 SIGNIFICANTLY. IT'S A BASIC RULE OF CIVIL ENGINEERING.
24 IT FLOWS DOWNHILL, AND THE STEEPER THE HILL THE FASTER
25 IT'S GOING TO FLOW.

1 Q. I THINK I UNDERSTAND THAT. SO, ANYWAY, YOU'D LOOK AT,
2 FIRST OF ALL, THE SLOPE OF THE GROUND, THE TOPOGRAPHY OF
3 THE LAND IN THE AREA AND THEN THE NATURAL DRAINAGE
4 CAPACITY OF THE CREEK BED IN ORDER TO FIND THE SIZE OF
5 THE PIPE?

6 A. YOU WOULD BE EVALUATING THE SLOPE OF THE LAND, THE SIZE
7 OF THE CHANNEL, THE EXISTING CONDITIONS OF THE SURFACE,
8 WHETHER IT'S WOODS, FIELDS, AIRPORTS, ROADS, ET CETERA,
9 - BECAUSE THAT HAS A SIGNIFICANT IMPACT ON THE VOLUME OF
10 WATER THAT YOU'RE GOING TO BE DEALING WITH, AND RUN YOUR
11 DRAINAGE CALCULATIONS USING THOSE CRITERIA.

12 Q. AND THEN WHAT ARE YOU TRYING TO MATCH UP WHEN YOU'RE
13 TRYING TO MATCH OR SIZE A PIPE FOR THE CREEK?

14 A. YOU'RE GOING TO GET A CUBIC-FEET-PER-SECOND CALCULATION
15 THAT SAYS YOU'RE GOING TO HAVE THIS VOLUME OF WATER AT
16 ANY PARTICULAR GIVEN TIME. AND THAT'S WHAT YOU'RE GOING
17 TO SIZE THE PIPE FOR, IS TO HANDLE THAT CERTAIN VOLUME OF
18 WATER AT ANY GIVEN TIME.

19 Q. AND THOSE CALCULATIONS WOULD HAVE BEEN DONE OR SHOULD
20 HAVE BEEN DONE BY WHOEVER THE OWNERS HAD DO THE
21 ENGINEERING WORK BACK WHEN THAT PIPE WAS INSTALLED?

22 A. YES, SIR.

23 Q. BEAR WITH ME JUST A MINUTE AND LET ME MAKE SURE I'VE
24 COVERED EVERYTHING I NEED TO.

25 (OFF THE RECORD)

1 DIRECT EXAMINATION RESUMED BY MR. BOYD:

2 Q. MR. HAWKINS WROTE A LETTER DATED AUGUST EIGHTEENTH, 1998,
3 TO RON MCKINNEY, THE CITY ATTORNEY FOR THE CITY OF
4 GREENVILLE, DISCUSSING THE FLOODING THAT HE HAD
5 EXPERIENCED BACK IN JULY OF 1997. HE STATES (READING)
6 PRIOR TO THE CULVERTS BEING INSTALLED IN 1993 (END OF
7 READING) -- AND HE'S REFERRING -- HE USED THE WORD
8 "CULVERTS" THERE, BUT HE'S REFERRING TO THE WORK DONE BY
9 THE CITY IN 1993 TO REPLACE THE DOUBLE BOX CULVERTS WITH
10 AN ARCHED PIPE, THE ELLIPTICAL PIPE THAT INCREASED THE
11 STORM WATER DRAINAGE CAPACITY. BUT HE SAYS (READING)
12 PRIOR TO THE CULVERTS BEING INSTALLED WE NEVER HAD ANY
13 WATER PROBLEM (END OF READING).
14 IF THAT IS IN FACT THE CASE, WOULDN'T THAT INDICATE THAT
15 THE INSTALLATION OF THIS 8-FOOT ALUMINUM PIPE DID NOT
16 CAUSE ANY FLOODING PROBLEMS FOR THE HAWKINS/SERVICEMASTER
17 PROPERTY IF THAT PIPE WAS IN FACT INSTALLED IN 1987?

18 A. THAT SEEMS TO BE HIS INFERENCE, YES.

19 Q. (PAUSE - COUNSEL REVIEWS DOCUMENTS)

20 I DON'T HAVE ANOTHER COPY OF THIS, BUT LOOK AT THIS
21 REPORT.

22 BY MR. BOYD:

23 THAT, WE'LL MARK AS THE NEXT EXHIBIT.

24 (COURT REPORTER MARKS FOUR-PAGE DOCUMENT TITLED "STORM
25 DRAINAGE CALCULATIONS" AS DEFENDANT'S EXHIBIT NUMBER 3, WITH

1 LEAVE TO SUBSTITUTE A COPY FOR ATTACHMENT TO THE DEPOSITION)

2 DIRECT EXAMINATION RESUMED BY MR. BOYD:

3 Q. EXHIBIT 3 IS A REPORT DATED NOVEMBER TWENTY-EIGHTH, 1988,
4 BY WILLIAM RENNINGER ASSOCIATES CONCERNING THE TRACK'S
5 SITE. AND THEN AFTER YOU'VE HAD A CHANCE TO LOOK AT THAT
6 I WANT TO ASK YOU A QUESTION ABOUT IT.

7 A. (PAUSE - WITNESS REVIEWS DOCUMENT)

8 OKAY.

9 Q. - NOW THAT YOU'VE HAD A CHANCE TO BRIEFLY REVIEW THAT --
10 AND I REALIZE THAT REPORT CONTAINS A NUMBER OF
11 CALCULATIONS AND DATA THAT YOU'VE NOT HAD A CHANCE TO
12 STUDY, BUT JUST GENERALLY WHAT DID IT APPEAR TO YOU THAT
13 REPORT CONCERNS?

14 A. THESE ARE THE STORM WATER DRAINAGE CALCULATIONS AND THE
15 DETENTION POND SIZING FOR THE TRACK'S MUSIC/VIDEO AT THE
16 CORNER OF HAYWOOD AND AIRPORT ROAD.

17 Q. DOES IT INCLUDE DRAINAGE CALCULATIONS THAT RELATE TO THAT
18 8-FOOT ALUMINUM PIPE THAT WAS ALREADY IN EXISTENCE PRIOR
19 TO THE TIME THAT STUDY WAS DONE?

20 A. NO, SIR, THEY DO NOT.

21 Q. IT WOULD JUST RELATE, THEN, TO THE STORM WATER THAT IS
22 GOING TO BE DRAINING FROM THE PROPERTY ONCE THE
23 DEVELOPMENT IS COMPLETED COMPARED TO HOW IT DRAINED
24 BEFORE THE DEVELOPMENT WAS BUILT?

25 A. THAT'S CORRECT.

1 BY MR. BOYD:

2 MARK THAT AS EXHIBIT 4, PLEASE.

3 (COURT REPORTER MARKS ONE-PAGE LETTER DATED FEBRUARY 7, 1989,
4 ON LETTERHEAD OF "THE CITY OF GREENVILLE, SOUTH CAROLINA" AS
5 DEFENDANT'S EXHIBIT NUMBER 4, WITH LEAVE TO SUBSTITUTE A COPY
6 FOR ATTACHMENT TO THE DEPOSITION)

7 DIRECT EXAMINATION RESUMED BY MR. BOYD:

8 Q. NEXT LET ME SHOW YOU A LETTER FROM CATHY BALL, A CIVIL
9 ENGINEER EMPLOYED BY THE CITY OF GREENVILLE ENGINEERING
10 DEPARTMENT, TO SCOTT SONNENBERG AT WILLIAM RENNINGER AND
11 ASSOCIATES CONCERNING THE TRACK'S MUSIC/VIDEO STORE
12 PROPERTY DATED FEBRUARY 7, 1989. AND LET ME ASK YOU IF
13 YOU CAN REVIEW THAT LETTER AND THEN I WANT TO ASK YOU A
14 QUESTION OR TWO ABOUT IT.

15 A. (PAUSE - WITNESS REVIEWS DOCUMENT)

16 OKAY.

17 Q. THAT LETTER IS MS. BALL ADVISING MR. SONNENBERG THAT THE
18 CITY'S REVIEW OF HIS CALCULATIONS INDICATE THAT THE
19 DEVELOPER HAS MET THE STORM WATER MANAGEMENT GUIDELINE
20 REQUIRED AND, THEREFORE, IS PERMITTED TO PROCEED?

21 A. YES, IT DOES.

22 Q. AND THAT'S CONSISTENT WITH THE NORMAL COURSE. THE
23 DEVELOPER HIRES A CIVIL ENGINEER OR SOME ENGINEERING FIRM
24 WHO MAKES THE STORM WATER CALCULATIONS AND SUBMITS THOSE
25 TO THE CITY IN ORDER THAT THE CITY CAN CONFIRM THAT THE

1 STORM WATER MANAGEMENT ACT IS BEING MET?

2 A. THAT'S CORRECT.

3 Q. AND THAT BASICALLY MEANS THAT THE STORM WATER RUNOFF DID
4 NOT EXCEED THE REQUIREMENTS OF THE ACT AFTER THE
5 DEVELOPMENT WAS COMPLETED?

6 A. THAT'S CORRECT.

7 Q. AND YOU BELIEVE A SIMILAR PROCESS WOULD HAVE BEEN
8 REQUIRED WHEN THE CREEK WAS PIPED A YEAR OR TWO EARLIER
9 BY THE OWNERS?

10 A. I DO.

11 Q. HAVE YOU GONE OUT IN YOUR SITE VISITS AND INSPECTED THE
12 TOPOGRAPHY TO SEE WHERE FLOODWATER WOULD FLOW IF IT
13 OVERTOPPED THE CREEK AT THE ENTRANCE TO THAT 8-FOOT
14 ALUMINUM PIPE?

15 A. I HAVE NOT STUDIED THAT SIGNIFICANTLY. I HAVE A GENERAL
16 KNOWLEDGE OF WHERE IT WOULD BE GOING.

17 Q. WHAT'S YOUR GENERAL KNOWLEDGE ABOUT WHERE IT WOULD BE
18 GOING?

19 A. IT'S GOING TO FLOW RIGHT ON DOWN BYRDLAND DRIVE.

20 Q. DOWNHILL TOWARD AIRPORT ROAD?

21 A. THAT'S CORRECT.

22 Q. IS THAT BECAUSE THE ROAD SLOPES DOWN FROM THAT POINT?

23 A. YES. NATURAL TOPOGRAPHY.

24 Q. AND THEN WHAT ABOUT THE LOCATION OF THE
25 HAWKINS/SERVICEMASTER PROPERTY ACROSS THE STREET, DOES IT

1 LIKewise Slope Down Toward Their Property?

2 A. NO. His Property is sitting up above Byrdland Drive a
3 Little bit.

4 Q. Why then would he would be flooded if the water
5 overtopped the creek at that location?

6 A. At some point it backs up so that there is no place for
7 it to flow downstream and then consequently backs up and
8 floods that area.

9 Q. You mean once it flows down and gets on Haywood Road and
10 forms these four-foot-high levels in the road that were
11 depicted in the photographs it would then back up toward
12 his property?

13 A. That's correct.

14 Q. Is there anything else that we have not discussed during
15 the deposition that you have gained through prior
16 knowledge of this basin or from your work on this case
17 that you believe may be relevant to any of the issues
18 regarding whether the City of Greenville should have any
19 liability to the Hawkins and Servicemaster about this
20 flooding?

21 A. Not that I can think of.

22 Q. And do you have any opinion or conclusion concerning
23 whether or not the City should have any liability or be
24 responsible for the flooding of the property at one
25 Byrdland Drive on July twenty-fourth, 1997?

1 A. NO. I THINK THAT'S MORE OF A LEGAL QUESTION THAN A
2 TECHNICAL QUESTION.

3 Q. WELL, FROM THE TECHNICAL STANDPOINT WHAT, IF ANY,
4 INVOLVEMENT DO YOU THINK THE CITY OF GREENVILLE HAD FROM
5 AN ENGINEERING OR PUBLIC WORKS PERSPECTIVE IN THE
6 FLOODING ON JULY TWENTY-FOURTH, 1997?

7 A. WHAT ROLE DID THE CITY PLAY IN THAT?

8 Q. RIGHT.

9 A. - I DON'T KNOW THAT I CAN DRAW A CONCLUSION OF WHAT ROLE
10 THE CITY MAY OR MAY NOT HAVE PLAYED IN THAT, AGAIN,
11 WITHOUT KNOWING EXACTLY THE CAPACITY OF THAT LINE, I
12 GUESS, FROM THE 8-FOOT CULVERT THAT WE'VE BEEN DISCUSSING
13 CROSSING TRACK'S WHERE IT TIES INTO AIRPORT ROAD AND
14 GOING UNDER AIRPORT ROAD. I THINK THAT WOULD BE THE
15 BIGGEST ISSUE THAT I WOULD SEE WITH THE CITY, FROM A
16 TECHNICAL STANDPOINT, IS WHETHER THAT PIPE CAPACITY WAS
17 ACTUALLY SIZED CORRECTLY.

18 Q. AND IN THAT REGARD THE CITY'S ROLE WOULD HAVE SIMPLY BEEN
19 TO REVIEW THE CALCULATIONS DONE BY THE OWNER'S ENGINEER
20 CONCERNING THE SIZING OF THAT PIPE WHEN THE CREEK WAS
21 PIPED IN '87 OR '88?

22 A. WELL, THAT SITUATION AS WELL AS THE ACTUAL REPLACEMENT
23 THAT IT APPEARS THAT THE CITY DID OF THE PIPE UNDER
24 AIRPORT ROAD AS WELL AT THE TIME -- IN '93, I BELIEVE IT
25 WAS.

1 Q. AND THAT'S WHAT YOU SAID YOU WOULD HAVE TO CALCULATE OR
2 STUDY TO BE ABLE TO DRAW ANY CONCLUSIONS ABOUT?

3 A. THAT'S CORRECT.

4 BY MR. BOYD:

5 THANK YOU. I BELIEVE THAT'S ALL THE QUESTIONS I HAVE.

6 CROSS-EXAMINATION BY MR. CHILDS:

7 Q. LET ME JUST ASK YOU A FEW QUESTIONS.

8 I WAS SITTING HERE KIND OF RUNNING CALCULATIONS AND

9 - PROBABLY NOT DID A VERY GOOD JOB OF IT.

10 THE CITY APPARENTLY INSTALLED A 11-FOOT-5-INCH BY 7-FOOT-

11 3-INCH CULVERT IN 1993. WE'VE TALKED ABOUT THAT A GOOD

12 BIT. THE RECORDS INDICATE IT WAS 11-FOOT-5 BY 7-FOOT-3-

13 INCHES. MY CALCULATIONS SHOW THAT TO BE A 780-SQUARE-

14 FOOT SIZE. WOULD THAT BE 11 TIMES 7 FOR ---

15 BY MR. BOYD:

16 I'LL OBJECT TO THE FORM OF THAT QUESTION. I'M SURE THAT

17 CALCULATION IS PROBABLY WRONG.

18 WITNESS ANSWERS:

19 A. IF IT'S AN ARCHED CULVERT, THERE'S NOT A DIRECT

20 CALCULATION. I MEAN I COULD FIGURE IT, BUT. . .

21 Q. IS THAT CULVERT LARGER THAN THE 7-FOOT PIPE THAT CONNECTS

22 TO IT?

23 BY MR. BOYD:

24 8-FOOT.

25 CROSS-EXAMINATION RESUMED BY MR. CHILDS:

1 Q. 8-FOOT.

2 A. OFF THE TOP OF MY HEAD I WOULD SAY THAT THAT ARCHED
3 CULVERT IS CERTAINLY LARGER THAN THE 8-FOOT CULVERT.

4 Q. AND WOULD THAT BE FAIRLY OBVIOUS TO ANY PERSON THAT WAS
5 INSTALLING THE CULVERT?

6 A. YES.

7 Q. YOU WERE ASKED SOME QUESTIONS ABOUT THE STORM WATER
8 MANAGEMENT COMPLIANCE, AND I THINK IT KIND OF BLEND OVER
9 INTO, I GUESS, CREEK MANAGEMENT, SO TO SPEAK. BUT ARE
10 THERE REALLY TWO DIFFERENT CONSIDERATIONS INVOLVED HERE:
11 ONE IS THE STORM WATER MANAGEMENT OF A PARTICULAR
12 PROPERTY, AND THE SECOND IS HOW DO YOU HANDLE THE CREEK
13 SEPARATE AND APART FROM HOW MUCH WATER FLOWS OFF THE
14 PROPERTY?

15 A. YOU SORT OF LOST ME ON THAT ONE.

16 Q. STORM WATER RETENTION PONDS, I UNDERSTAND, ARE ---

17 A. ARE YOU TALKING ABOUT THE TRACK'S PROPERTY NOW?

18 Q. YES.

19 A. OKAY.

20 Q. AREN'T THOSE CALCULATIONS THAT YOU WERE SHOWN IN RESPECT
21 TO TRACK'S SIMPLY STORM WATER RETENTION CALCULATIONS THAT
22 ARE INTENDED TO IMPOUND WATER COMING OFF OF TRACK'S LOT?

23 A. THAT'S CORRECT.

24 Q. DOES IT HAVE ANYTHING TO DO WITH THE CREEK?

25 A. NO. THOSE CALCULATIONS DIDN'T.

1 Q. I'D LIKE TO SHOW YOU THIS DOCUMENT AND HAVE IT MARKED
2 NUMBER 1.

3 (COURT REPORTER MARKS ONE-PAGE PRINTOUT TITLED "CITY OF
4 GREENVILLE PUBLIC WORKS" AS PLAINTIFFS' EXHIBIT NUMBER 1, FOR
5 ATTACHMENT TO THE DEPOSITION)

6 (PAUSE - WITNESS REVIEWS DOCUMENT

7 CROSS-EXAMINATION RESUMED BY MR. CHILDS:

8 Q. THIS IS THE CITY OF GREENVILLE PUBLIC WORKS PRINTOUT THAT
9 - SHOWS THAT ON JULY 27, 1993, AT AIRPORT ROAD AT HAYWOOD
10 ROAD IT INSTALLED A 96-INCH ALUMINUM PIPE. DO YOU HAVE
11 ANY IDEA WHERE THAT WOULD HAVE BEEN?

12 A. WHERE THE PIPE WAS INSTALLED?

13 Q. YES.

14 A. NO, SIR, NOT REALLY, OUTSIDE OF THE DESCRIPTION GIVEN
15 HERE, AIRPORT ROAD AT HAYWOOD ROAD.

16 Q. AND I KNOW THAT THIS WOOLPERT STUDY THAT YOU REVIEWED, WE
17 RECEIVED PORTIONS OF IT ON FRIDAY AT MS. ARROWOOD'S
18 DEPOSITION. BUT BASED UPON THE CONCLUSIONS OF THE REPORT
19 DO YOU BELIEVE THE 96-INCH PIPE THAT RUNS ALONG BYRDLAND
20 DRIVE HAS BEEN SUFFICIENT -- IS SUFFICIENT BY ENGINEERING
21 STANDARDS TO HANDLE THE FLOW OF LAUREL CREEK?

22 A. NO, I DO NOT THINK IT'S ADEQUATE.

23 Q. AND WHAT IS THAT CONCLUSION BASED UPON AS FAR AS THE
24 RECORDS ARE CONCERNED?

25 A. JUST BASED UPON THE WOOLPERT STUDY AND THE PIPE SIZING

1 THAT THEY HAVE CALCULATED ALONG HAYWOOD ROAD AND BYRDLAND
2 DRIVE.

3 Q. IN THE STUDY THAT INDICATES THAT NUMBER ONE BYRDLAND
4 DRIVE HAS A RETURN PERIOD OF FLOODING FOR THE FINISHED
5 FLOOR OF NINE AND THE FOUNDATION OF SIX. THAT'S A
6 SUMMARY OF EXISTING FLOODING, SECTION 7.4.1. I'LL SHOW
7 YOU THAT FROM MS. ARROWOOD'S DEPOSITION. WHAT DOES THAT
8 MEAN?

9 A. - WHAT DOES THAT MEAN?

10 Q. YES, SIR.

11 A. IT MEANS THAT THE FLOODING OF THE BUILDING WOULD OCCUR,
12 THEORETICALLY, ONCE EVERY NINE YEARS BASED ON THEIR
13 NUMBERS AND THE FOUNDATION ONCE EVERY SIX YEARS.

14 Q. TO YOUR KNOWLEDGE HAS IT EVER BEEN ACCEPTED ENGINEERING
15 PRACTICE THAT A PARTICULAR STRUCTURE BE FLOODED EVERY SIX
16 YEARS?

17 A. NO, SIR.

18 Q. YOU INDICATED EARLIER THAT THE CULVERT UNDER AIRPORT ROAD
19 SHOULD BE DESIGNED FOR A 25-YEAR FLOOR EVENT; IS THAT
20 CORRECT?

21 A. THAT'S CORRECT.

22 Q. WHAT DOES THAT MEAN?

23 A. IT MEANS THAT THE PIPE SHOULD BE SIZED TO HANDLE A STORM
24 THAT WILL, THEORETICALLY, OCCUR ONCE EVERY 25 YEARS.

25 Q. AND BASED UPON THE RESULTS OF THE STUDY WOULD YOU HAVE AN

1 OPINION ABOUT THE SUFFICIENCY OF THAT 96-INCH ALUMINUM
2 PIPE BACK IN 1997?

3 A. BASED ON THE CALCULATIONS THAT I HAVE SEEN AT THIS POINT
4 I WOULD SAY THAT THAT PIPE WAS UNDERSIZED AT THE TIME.

5 Q. HOW LONG WOULD YOU ESTIMATE THAT PIPE WAS UNDERSIZED
6 BASED ON YOUR KNOWLEDGE OF THE REQUIREMENTS THAT WERE
7 IMPOSED BY THE CITY OF GREENVILLE?

8 A. I THINK IT WAS UNDERSIZED WHEN IT WAS INSTALLED.
9 BY MR. CHILDS:

10 THAT'S ALL THE QUESTIONS I HAVE.

11 REDIRECT EXAMINATION BY MR. BOYD:

12 Q. THE ENGINEER FOR THE OWNERS WOULD HAVE MADE THE
13 CALCULATIONS TO DETERMINE WHAT SIZE PIPE TO BE INSTALLED
14 IN LAUREL CREEK BACK IN '87 OR '88 WHENEVER THAT PIPE WAS
15 INSTALLED, CORRECT?

16 A. THAT WOULD'VE BEEN MY ASSUMPTION, YES, SIR.

17 Q. DEPENDING UPON WHETHER THAT AREA WAS IN THE CITY OR THE
18 COUNTY AT THAT POINT IN TIME THOSE CALCULATIONS WOULD'VE
19 GONE TO EITHER THE CITY ENGINEER OR THE COUNTY ENGINEER?

20 A. FOR THE COUNTY IT WOULD PROBABLY HAVE GONE TO THE
21 GREENVILLE COUNTY SOIL AND WATER CONSERVATION SERVICE.

22 Q. THAT'S RIGHT.

23 GOING BACK TO THE 1975-76 TIME FRAME, D.O.T. BUILDS
24 HAYWOOD ROAD, PUTS IN THE STORM WATER DRAINAGE SYSTEM
25 UNDER THE HIGHWAY, WHICH, AS YOU'VE TESTIFIED PREVIOUSLY,

1 HOPEFULLY WAS COORDINATED WITH THE EXISTING STORM WATER
2 DRAINAGE IN THE AREA.

3 A. MM-HMM (AFFIRMATIVE).

4 Q. CORRECT?

5 A. YES, SIR.

6 Q. AND THEN, FOLLOWING THROUGH FROM THERE, IF THERE WERE
7 REQUIREMENTS FOR STORM WATER MANAGEMENT IN PLACE AT THE
8 TIME OF THE DEVELOPMENT, EACH SUBSEQUENT DEVELOPER WOULD
9 HAVE BEEN REQUIRED TO PROVIDE STORM WATER MANAGEMENT
10 MEASURES THAT WOULD HAVE PROTECTED THE HAYWOOD ROAD
11 STREAM CROSSING?

12 A. YES.

13 Q. BECAUSE ALL THIS TIES TOGETHER, THIS ENTIRE SYSTEM?

14 A. THAT'S CORRECT.

15 Q. AND AS A CIVIL ENGINEER YOU WOULD LOOK AT, IN PIPING THE
16 STREAM OR IN DEVELOPMENT PROPERTY, WHAT EFFECT THE STORM
17 WATER DRAINAGE FROM THAT -- WHAT SYSTEM THE STORM WATER
18 DRAINAGE IS GOING TO AFFECT?

19 A. YES.

20 Q. AND IF THE STORM WATER MANAGEMENT MEASURES ARE
21 EFFECTIVELY PROVIDED, THEN THERE SHOULD NOT BE ANY
22 INCREASE IN RATE OR VOLUME OF STORM WATER RUNOFF FROM THE
23 DEVELOPMENT FOR THE -- IS IT THE 10-YEAR OR THE 25-YEAR --
24 -- THE 2- AND THE 10-YEAR EVENTS?

25 A. RIGHT.

1 Q. IN THE EVENT OF A 25-YEAR STORM EVENT THERE WILL BE AN
2 INCREASE IN VOLUME OR RATE, BUT THE DEVELOPER IS NOT
3 REQUIRED TO ACCOUNT FOR THAT?

4 A. THAT'S CORRECT?

5 Q. WHY IS THAT? BECAUSE THE COST OF PROVIDING THAT MUCH
6 INFRASTRUCTURE WOULD SIMPLY BE GREATER THAN IS WARRANTED?

7 A. IT'S A GOOD QUESTION. IT'S THE WAY THE ORDINANCE IS AND
8 THE LAWS OF SOUTH CAROLINA -- THE STATE OF SOUTH CAROLINA
9 - AND THE CITY OF GREENVILLE AND MOST OTHER MUNICIPALITIES
10 ARE WRITTEN.

11 Q. DO YOU KNOW WHAT THE ENGINEERING BASIS FOR -- I THINK IT
12 WAS THE STATE STORM WATER MANAGEMENT GUIDELINES THAT CAME
13 OUT FIRST, WEREN'T THEY?

14 A. THEY WERE.

15 Q. AND THEN EVERYBODY ELSE MODELED THEIRS ON THE STATE'S?

16 A. THAT'S CORRECT.

17 Q. DO YOU KNOW WHAT THE BASIS FOR THE ENGINEERING DECISION
18 TO USE 2- AND 10-YEAR STORM EVENTS WAS?

19 A. NO, I DO NOT. I'M SURE IT WAS A COST BENEFIT ANALYSIS
20 DONE SOMEWHERE, PROBABLY BY THE EPA.

21 Q. HOW DOES THAT TIE INTO THE REQUIREMENT OR THE ENGINEERING
22 CRITERIA THAT THE HAYWOOD ROAD STORM WATER MEASURE SHOULD
23 HANDLE A 25-YEAR STORM EVENT?

24 YOU'RE LOOKING LIKE YOU DON'T UNDERSTAND THE QUESTION.

25 PERHAPS MY QUESTION WASN'T CLEAR. IT PROBABLY WASN'T

1 CLEAR.

2 A. I THINK I UNDERSTAND.

3 Q. BUT IF YOU'VE GOT DEVELOPERS WHO ARE DEVELOPING PROPERTY
4 ALL ALONG HAYWOOD ROAD, WHICH IS OBVIOUSLY A WELL
5 DEVELOPED COMMERCIAL AREA, ALL OF WHOM ARE PROVIDING ONLY
6 FOR THE 10-YEAR STORM EVENT, HOW DO YOU PROTECT HAYWOOD
7 ROAD IN THE EVENT OF A 25-YEAR STORM EVENT?

8 A. THAT IS A CALCULATION THAT THE DESIGN ENGINEER -- AND I'M
9 SPEAKING NOW OF THE DESIGN ENGINEER FOR THE D.O.T. WHEN
10 HE SIZED HAYWOOD ROAD'S ROAD CULVERT, HE HAD TO MAKE A
11 DECISION OF WHAT THE -- LET'S CALL IT THE RUNOFF
12 COEFFICIENT, AND THE RUNOFF COEFFICIENT BEING WHETHER
13 IT'S WOODS OR IT'S ASPHALT PARKING LOT. AND HE SHOULD
14 HAVE BEEN LOOKING AT THE POTENTIAL DEVELOPMENT OF HAYWOOD
15 ROAD 10 YEARS FROM NOW, 20 YEARS FROM NOW AND MAKING SOME
16 DETERMINATION. THAT'S OBVIOUSLY A JUDGMENT CALL,
17 SOMETIMES ON THE ENGINEER'S PART, AS TO WHAT THE FUTURE
18 DEVELOPMENT OF THAT AREA IS GOING TO BE AND HOW IT WILL
19 BE DEVELOPED. OBVIOUSLY YOU WOULD HAVE EXPECTED THE
20 D.O.T., IN THAT SPECIFIC AREA, TO KNOW THAT A GOOD
21 PORTION OF THAT PROPERTY IS ULTIMATELY GOING TO BE
22 DEVELOPED INTO COMMERCIAL USES. THEREFORE, THE RUNOFF
23 COEFFICIENT WOULD'VE BEEN MUCH HIGHER.

24 Q. AND THEN WHAT EFFECT DOES THAT DEVELOPMENT HAVE ON LAUREL
25 CREEK OVER THE COURSE OF TIME? AND, AGAIN, GOING BACK,

1 YOU KNOW, BEFORE THAT AREA WAS COMMERCIALY DEVELOPED WE
2 ASSUME IT WAS RURAL LAND AND THE RAINFALL DRAINS INTO THE
3 LAND, PERMEATES THROUGH WHATEVER, AND YOU DON'T HAVE AS
4 MUCH -- I GUESS AS MUCH RATE OF RUNOFF INTO LAUREL CREEK.
5 THEN YOU ASPHALT IT. DOES THAT HAVE ANY EFFECT ON THE
6 RUNOFF INTO LAUREL CREEK AND HOW MUCH WATER IS FLOWING
7 THROUGH LAUREL CREEK?

8 A. SURE. SURE IT DOES. AND I THINK THE -- YOU'VE GOT A
9 - SIMILAR SITUATION FOR EVERY PIECE OF -- NOT FOR EVERY
10 PIECE OF PROPERTY BUT FOR EVERYBODY ALONG LAUREL CREEK.
11 AND, AGAIN, THAT'S WHY THE CROSS DRAINS AND THE CULVERTS
12 THERE ARE SIZED FOR THE 25-YEAR STORM AND NOT JUST THE
13 10-YEAR STORM IN MAKING SOME PROVISION FOR THE FACT THAT
14 THERE ARE GOING TO BE SOME INCREASES OVER TIME, YES, WITH
15 THE DEVELOPMENT OF AIRPORT, COMMERCIAL PROPERTIES.

16 Q. AND SO, AGAIN, THE CIVIL ENGINEER OR DESIGN
17 PROFESSIONAL -- WHOEVER IT WAS WHO WAS HIRED BY THE
18 OWNERS OF THE TRACK'S PROPERTY, MESSRS. GOLDSMITH,
19 TIMMONS, AND ASHMORE -- SHOULD HAVE DESIGNED THIS PIPE IN
20 LAUREL CREEK FOR THE 25-YEAR STORM EVENT?

21 A. THAT'S CORRECT.

22 Q. IS THAT WHAT YOU'RE SAYING?

23 A. THAT'S EXACTLY WHAT I'M SAYING.

24 Q. IS THE ONLY SOURCE OF FLOODING OF THE
25 HAWKINS/SERVICEMASTER PROPERTY THE OVERTOPPING OF THE

1 CREEK AT THE 8-FOOT ALUMINUM PIPE LOCATION?

2 A. I'M NOT SURE I CAN FULLY ANSWER THAT QUESTION. I WOULD
3 THINK I WOULD NEED TO DO A LITTLE FURTHER INVESTIGATION,
4 BUT FROM MY RECOLLECTIONS OF SOME OF THE OTHER WORK DONE
5 IN THAT AREA AND SO FORTH SOME OF THAT WATER IS GOING TO
6 BE COMING FROM AN OVERTOPPING OF THE ROADSIDE DITCH ALL
7 ALONG LAUREL CREEK ---

8 Q. WHAT IS CAUSING ---

9 A. --- WHICH IN TURN ---

10 Q. I'M SORRY.

11 A. WHICH IN TURN IS BEING CREATED SOMEWHAT BY THE BACK-UP OF
12 THE 8-FOOT CULVERT. WHEREAS, THE CAPACITY OF THE CHANNEL
13 ALONG BYRDLAND DRIVE IS PROBABLY NOT CAPABLE OF HANDLING
14 ALL THE WATER RUNNING INTO IT EITHER.

15 Q. MR. HAWKINS SAYS UNTIL THE 1993 WORK DONE BY THE CITY HE
16 DIDN'T EXPERIENCE ANY PROBLEMS WITH FLOODING. ISN'T THAT
17 INCONSISTENT WITH THE 8-FOOT ALUMINUM PIPE THAT WAS
18 INSTALLED IN '87 OR '88 BEING THE CAUSE OF THE FLOOD?

19 A. I THINK WHAT YOU'RE ASKING IS -- REPHRASE THAT AGAIN.
20 I'M SORRY.

21 Q. IT GOES BACK TO THE LETTER I REFERRED TO EARLIER.

22 A. I THINK THE ANSWER -- MY OPINION OF THE SITUATION IS IF
23 THE DOWNSTREAM CULVERT THAT THE CITY INSTALLED IN '93 IS
24 LARGER CAPACITY, WHICH IT APPEARS TO BE, AND WAS OF A
25 COMPARABLE CAPACITY OF THE EXISTING STRUCTURE THAT WAS IN

1 THERE, THEN THERE SHOULD HAVE BEEN NO CHANGE FROM THE
2 EFFECTS OF WHAT THE CITY DID AT THAT PARTICULAR TIME.

3 Q. OR AN ACTUAL INCREASE IN THE STORM WATER DRAINAGE
4 CAPACITY?

5 A. IT'S NOT GOING TO -- IT'S NOT REALLY GOING TO INCREASE
6 THE -- IT'S GOING TO INCREASE THE CAPACITY AT AIRPORT
7 ROAD, BUT IT'S NOT GOING TO HAVE ANY EFFECT, REALLY, ON -
8 --

9 Q. - THE 8-FOOT ALUMINUM PIPE?

10 A. I'M SORRY. I'LL TAKE THAT BACK. IT WOULD HAVE A -- IF
11 THEY INCREASED THE CAPACITY OF THE PIPE UNDER AIRPORT
12 ROAD, ASSUMING THAT THERE WAS NO BACK-UP UNDER HAYWOOD
13 ROAD, YES, IT WOULD POTENTIALLY INCREASE THE CAPACITY
14 OF -- THE ABILITY OF THE 8-FOOT PIPE TO FUNCTION.

15 Q. AND WOULD MAKE IT LESS LIKELY THAT YOU WOULD HAVE
16 OVERTOPPING AT THE 8-FOOT PIPE LOCATION?

17 A. IF ALL OF THAT WAS CORRECT, YES.

18 BY MR. BOYD:

19 LET'S GO AHEAD AND MARK THIS LETTER SINCE I REFERRED TO
20 IT EARLIER. AND I'LL HAVE TO TAKE ALL OF THIS APART.

21 (COURT REPORTER MARKS ONE-PAGE LETTER DATED AUGUST 18, 1998,
22 ON LETTERHEAD OF "SERVICEMASTER" AS DEFENDANT'S EXHIBIT NUMBER
23 5, WITH LEAVE TO SUBSTITUTE A COPY FOR ATTACHMENT TO THE
24 DEPOSITION).

25 DIRECT EXAMINATION RESUMED BY MR. BOYD:

1 Q. AND, AGAIN, REFERRING TO EXHIBIT 5 THAT I READ FROM
2 EARLIER, THAT'S THE LETTER IN WHICH MR. HAWKINS SAYS HE
3 DID NOT EXPERIENCE ANY FLOODING OF HIS PROPERTY PRIOR TO
4 1993 WHEN THE CITY DID ITS WORK. AND OF COURSE THAT'S
5 REFERRING TO THE ONLY WORK DONE OUT THERE BY THE CITY,
6 WHICH IS THE INSTALLATION OF THAT ARCHED ELLIPTICAL PIPE
7 IN PLACE OF THE DOUBLE BOX CULVERT. AND SO WHEN THE 8-
8 FOOT ALUMINUM PIPE WAS INSTALLED IN '87 OR '88 BY THE
9 OWNERS OF THE TRACK'S PROPERTY, APPARENTLY FOR FIVE YEARS
10 AFTER THAT OR SIX YEARS MR. HAWKINS DIDN'T EXPERIENCE ANY
11 FLOODING.

12 A. THAT'S CORRECT.

13 Q. THAT APPEARS TO BE WHAT HE'S SAYING, CORRECT?

14 A. THAT APPEARS TO BE WHAT HE'S SAYING.

15 Q. AND SO I GUESS MY QUESTION IS HOW DO WE KNOW THAT THE 8-
16 FOOT ALUMINUM PIPE IS THE SOURCE OF ANY FLOODING?

17 A. BASED ON THE EXISTING DESIGN CALCULATIONS. I STILL,
18 PERSONALLY, HAVE SOME QUESTION. I'M NOT SURE WHERE THE
19 REFERENCE TO ARCHED CULVERT CAME FROM OUTSIDE OF, I
20 THINK, JULIE HAD REFERRED TO THAT IN HER DEPOSITION, AND
21 THE CITY'S REQUISITION SAYS 96-INCH PIPE.

22 Q. BUT THAT'S AT A DIFFERENT LOCATION. ISN'T THAT AT
23 AIRPORT ROAD AND HAYWOOD ROAD?

24 A. THAT'S CORRECT.

25 Q. AND THE ELLIPTICAL PIPE IS AT AIRPORT ROAD AND BYRDLAND

1 DRIVE. IF YOU FOLLOW -- THE ELLIPTICAL PIPE -- IF YOU'RE
2 GOING DOWN BYRDLAND DRIVE HEADING TOWARD AIRPORT, YOU GO
3 THROUGH THE 8-FOOT ALUMINUM PIPE THAT WAS PUT IN BY THE
4 OWNERS OF THE TRACK'S OR THE OWNERS OF THE PROPERTY WHERE
5 TRACK'S WAS. AND THEN YOU GET DOWN TO AIRPORT ROAD AND
6 THE INTERSECTION OF BYRDLAND AND AIRPORT AND THAT'S WHERE
7 THE ELLIPTICAL PIPE WAS INSTALLED, AND I THINK THE
8 EXHIBIT 1 YOU'RE REFERRING TO THERE IS FURTHER ON DOWN
9 - AIRPORT TOWARD HAYWOOD.

10 AND WHAT DATE DOES THAT WORK REFER TO?

11 A. THIS WORK (INDICATING)?

12 Q. RIGHT.

13 A. 7/27 OF '93.

14 YOU THINK THIS 96-INCH PIPE IS WHERE?

15 Q. WELL, THE ELLIPTICAL ---

16 A. THAT'S WHAT I WAS TRYING TO ---

17 Q. THE ELLIPTICAL PIPE THAT I AM REFERRING TO IS RIGHT HERE
18 (INDICATING). IS THIS THE CREEK HERE?

19 A. RIGHT THERE.

20 Q. IT'S IN THIS VICINITY HERE (INDICATING). IT MIGHT BE
21 HERE AT THE INTERSECTION.

22 A. I THOUGHT THE ARCHED CULVERT WAS INSTALLED HERE
23 (INDICATING), WAS MY UNDERSTANDING.

24 Q. WELL, IT MIGHT BE.

25 A. I THOUGHT THAT'S REALLY WHAT THIS WAS REFERRING TO. IS

1 THAT NOT THE CASE?

2 Q. LET ME SEE EXHIBIT 1 FOR A MINUTE.

3 (PAUSE - COUNSEL REVIEWS DOCUMENT)

4 (OFF THE RECORD)

5 BY MR. BOYD:

6 LET'S MARK THIS WITH THE UNDERSTANDING I WILL HAVE TO
7 RETAIN THIS BECAUSE I DON'T THE FACILITY TO MAKE A COPY
8 OF THIS LARGE A DOCUMENT TODAY, HERE AT LEAST.

9 - MARK THIS AS EXHIBIT 6.

10 (COURT REPORTER MARKS OVERSIZED DRAWING AS DEFENDANT'S EXHIBIT
11 NUMBER 6, TO BE RETAINED BY COUNSEL)

12 REDIRECT EXAMINATION RESUMED BY MR. BOYD:

13 Q. LET ME SHOW YOU EXHIBIT 6. IT IS, I HOPE, THE PIPE IN
14 QUESTION. SEE IF YOU CAN DETERMINE THE SIZE OF THAT PIPE
15 FROM THAT DRAWING. IF YOU CAN'T, WE'RE OUT OF LUCK
16 BECAUSE I CERTAINLY CAN'T.

17 A. (PAUSE - WITNESS REVIEWS DOCUMENT)

18 THAT'S OBVIOUSLY THE SIZE OF THE PIPE, 11-FOOT-5-INCHES
19 BY 7-FOOT-1-INCH ELLIPTICAL PIPE.

20 Q. ALL RIGHT.

21 BY MR. CHILDS:

22 DIDN'T ARROWOOD SAY IT WAS 7-FOOT-3?

23 BY MR. BOYD:

24 RIGHT.

25 REDIRECT EXAMINATION RESUMED BY MR. BOYD:

1 Q. BUT THAT WOULD NOT BE A 96-INCH PIPE, IN ANY EVENT, WOULD
2 IT?

3 A. NO, IT WOULD NOT.

4 Q. AND I WILL REPRESENT TO YOU THAT I HAVE BEEN TOLD IT IS
5 THE PIPE THAT WAS ACTUALLY INSTALLED IN 1993 AT AIRPORT
6 AND BYRDLAND.

7 A. AIRPORT AND BYRDLAND. YOU'RE SAYING THE ARCHED CULVERT
8 IS THE CULVERT PASSING UNDER BYRDLAND?

9 Q. - UNDER -- TO BE HONEST, THE ONLY PLACE I HAVE BEEN POINTED
10 TO IS -- IT GOES UNDERGROUND BEFORE YOU GET TO THE
11 INTERSECTION OF BYRDLAND AND AIRPORT. A CITY EMPLOYEE
12 SAID, "THERE'S WHERE THE ARCHED PIPE IS" AND HE POINTED
13 WHERE IT WENT UNDERGROUND. IT'S BURIED UNDERGROUND. AND
14 THEN YOU'VE GOT SOME, YOU KNOW, DISTANCE DOWN TO AIRPORT
15 ROAD, BUT I GUESS IT PROBABLY EXTENDS UNDER AIRPORT ROAD.

16 BY MR. CHILDS:

17 WOULD THERE POSSIBLY BE A DIAGRAM IN THERE (INDICATING)?

18 BY THE WITNESS:

19 YEAH. I ---

20 BY MR. BOYD:

21 YOU'RE WELCOME TO LOOK IN THERE AND SEE IF YOU CAN FIND
22 IT (REFERRING TO WOOLPERT STUDY).

23 REDIRECT EXAMINATION RESUMED BY MR. BOYD:

24 Q. WHAT DOES THE ABBREVIATION IN ENGINEERING "CMP" MEAN?

25 A. CORRUGATED METAL PIPE.

1 Q. IS THAT WHAT THAT 8-INCH (SIC) PIPE IS ACROSS THE STREET
2 FROM HAWKINS?

3 A. THE 8-FOOT PIPE.

4 Q. YES. 8-FOOT PIPE. I'M SORRY.

5 A. YES, IT IS -- ACTUALLY IT'S CORRUGATED ALUMINUM,
6 PROBABLY.

7 Q. BUT ALUMINUM BEING A TYPE OF METAL, OBVIOUSLY.

8 A. CORRECT.

9 Q. - SO A 96-INCH CMP WOULD BE WHAT THAT IS?

10 A. THAT'S CORRECT.

11 (OFF THE RECORD - WITNESS REVIEWS VARIOUS PLANS)

12 (COURT REPORTER MARKS OVERSIZED STORM WATER DRAINAGE SYSTEM
13 MAP AS DEFENDANT'S EXHIBIT NUMBER 7, TO BE RETAINED BY
14 COUNSEL)

15 REDIRECT EXAMINATION BY MR. BOYD:

16 Q. WHILE WE WERE OFF THE RECORD WE WERE LOOKING AT WHAT
17 WE'VE NOW MARKED AS DEFENDANT'S EXHIBIT NUMBER 7, WHICH
18 IS THE STORM DRAINAGE SYSTEM MAP FOR THE CITY OF
19 GREENVILLE IN THE HAYWOOD ROAD LOCATION.
20 YOU WERE LOOKING THROUGH TRYING TO FIGURE OUT THE SYSTEM
21 WHERE THE CITY HAD DONE THE WORK IN 1993 TO REPLACE A
22 DOUBLE BOX CULVERT WITH THE ELLIPTICAL PIPE. IF YOU
23 WILL, NOW THAT WE'RE ON THE RECORD, GO BACK THROUGH THAT
24 AND WALK US THROUGH THE SYSTEM AS IT EXISTS OUT THERE AT
25 BYRDLAND, AIRPORT ROAD, AND HAYWOOD ROAD.

1 A. OKAY. IT APPEARS THAT THE CITY REPLACED THE TWIN BOX
2 CULVERT UNDERNEATH AIRPORT ROAD IN '93 WITH THE NEW 11-
3 FOOT-3-INCH BY 7-FOOT-1-INCH ARCHED CULVERT, AND THEN
4 THAT TIES INTO THE 96-INCH PIPING SYSTEM THAT GOES UNDER
5 HAYWOOD ROAD AND ON DOWNSTREAM AS WELL AS CONNECTS TO THE
6 96-INCH PIPE THAT COMES ACROSS THE TRACK'S PROPERTY.

7 Q. AND DOES IT APPEAR THAT THAT ARCHED PIPE INCREASED THE
8 STORM WATER DRAINAGE CAPACITY AT THAT LOCATION VERSUS THE
9 - DOUBLE BOX CULVERT?

10 A. THAT'S A TOUGH QUESTION TO GIVE A DIRECT ANSWER TO RIGHT
11 AT THIS SECOND, BUT IN GENERAL I WOULD THINK THAT IF THE
12 CITY WAS REPLACING THAT, THAT THEY CERTAINLY LOOKED AT
13 THOSE CAPACITIES AND WOULD HAVE HAD SOMETHING COMPARABLE
14 OR GREATER.

15 Q. AND THE DOUBLE BOX CULVERT, I AM TOLD, WAS TRAPPING
16 DEBRIS BETWEEN THE TWO CULVERTS. AND IF THAT IN FACT WAS
17 OCCURRING, THAT WOULD HAVE REDUCED THE CAPACITY OF THE
18 DOUBLE BOX CULVERTS TO DRAIN STORM WATER, CORRECT?

19 A. THAT'S CORRECT.

20 Q. AND SO IF YOU WERE REPLACING IT WITH SOMETHING THAT
21 DOESN'T TRAP DEBRIS, THEN YOU SHOULD BE HELPING THAT
22 SITUATION AS WELL?

23 A. YES.

24 Q. NOW, JUST TO MAKE SURE I UNDERSTAND, IF YOU'RE GOING BACK
25 NOW TO ENLARGE THE STORM WATER DRAINAGE SYSTEM AT THIS

1 LOCATION, YOU'RE GOING TO HAVE TO CHANGE WHAT'S UNDER
2 HAYWOOD ROAD, RIGHT?

3 A. ULTIMATELY, YES.

4 Q. AND JUST CHANGING BYRDLAND -- YOU KNOW, AIRPORT ROAD BACK
5 UP BYRDLAND PAST THE HAWKINS PROPERTY WOULD NOT RESULT IN
6 INCREASING THE STORM WATER CAPACITY AT HAYWOOD ROAD?

7 A. THAT'S CORRECT.

8 Q. WHAT PROCESS, IF YOU KNOW, WILL HAVE TO BE UTILIZED TO
9 - COORDINATE ALL OF THIS WORK?

10 A. I DON'T REALLY KNOW. I'M SURE THERE ARE SEVERAL
11 DIFFERENT AGENCIES INVOLVED: D.O.T., CITY OF GREENVILLE,
12 GREENVILLE COUNTY. THE WOOLPERT REPORT OFFERS THREE
13 ALTERNATIVES, ALL OF WHICH INVOLVE REPLACING CULVERTS AT
14 MAJOR ROAD CROSSINGS AND INCREASING THE CAPACITY THERE.

15 Q. WILL THAT BE A D.O.T. PROJECT OR A CITY OF GREENVILLE
16 PROJECT, OR HOW WILL IT BE FUNDED?

17 A. I THINK A GOOD PORTION OF IT IS PROBABLY GOING TO BE CITY
18 OF GREENVILLE FUNDED WITH THE STORM WATER MANAGEMENT
19 FEES, I WOULD ASSUME, AND SOME OF -- THE D.O.T. PROBABLY
20 WOULD HAVE SOME RESPONSIBILITY, PARTICULARLY WITH HAYWOOD
21 ROAD.

22 Q. IS THAT GOING TO INVOLVE PUBLIC BIDDING ON THE PROJECT TO
23 SEE WHO WILL DO THE WORK AND AT WHAT COST, THAT KIND OF
24 THING?

25 A. I'M SURE IT WILL.

1 Q. AND OBVIOUSLY WILL HAVE TO, I GUESS, BE APPROVED AND
2 FUNDED BY EITHER THE CITY COUNCIL OR THE D.O.T. THROUGH
3 WHATEVER FUNDING SOURCES THEY'VE GOT.

4 A. I WOULD ASSUME SO, YES.

5 Q. AND IS THIS AREA, BASIN FOUR, JUST ONE OF A NUMBER OF
6 BASINS WITHIN THE CITY OF GREENVILLE -- STORM WATER
7 BASINS?

8 A. YES.

9 Q. - AND ALL OF THOSE HAVE PROBLEMS, I SUPPOSE, OF VARIOUS
10 NATURES IN TERMS OF NEEDING TO BE REVISED OR UPGRADED
11 OVER TIME..

12 A. YES.

13 Q. AND THAT'S THE TYPE OF INFRASTRUCTURE IMPROVEMENT THAT
14 GOVERNMENTS GO THROUGH PERIODICALLY AS THEY HAVE
15 AVAILABLE FUNDING AND PRIORITIZE THE NEEDS OF THE
16 COMMUNITY?

17 A. I WOULD THINK SO, YES.

18 BY MR. BOYD:

19 THAT'S ALL THE QUESTIONS I HAVE ABOUT EXHIBIT 7. DO YOU
20 HAVE ANY, ROBBIE? I'M GOING TO GO AHEAD AND PUT IT BACK
21 IN MY FILE AND RETAIN THAT. I'LL BE GLAD TO MAKE YOU A
22 COPY IF YOU NEED ONE, BUT THAT'S THE ONLY COPY I'VE GOT
23 TODAY.

24 BY MR. CHILDS:

25 NO.

1 BY MR. BOYD:

2 OKAY.

3 BY THE WITNESS:

4 I'D LIKE TO GET A XEROX OF THAT, IF I COULD (INDICATING
5 AREA OF OVERSIZED PLAN).

6 BY MR. CHILDS:

7 WE CAN DO THAT REAL QUICK.

8 BY THE WITNESS:

9 - JUST XEROX ME THAT AREA (INDICATING).
10 (OFF THE RECORD)

11 BY MR. BOYD:

12 I'M THROUGH. THOSE ARE ALL THE QUESTIONS I HAVE.

13 BY MR. CHILDS:

14 I'M THROUGH.

15 [THERE BEING NO FURTHER QUESTIONS, THE DEPOSITION WAS
16 CONCLUDED AT APPROXIMATELY 12:15 P.M.]

17

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25

1 STATE OF SOUTH CAROLINA COURT OF COMMON PLEAS
2 COUNTY OF GREENVILLE C/A NO: 01-CP-23-2459R
3 LOUIE D. HAWKINS, INDIVIDUALLY AND D/B/A SERVICEMASTER OF
4 GREENVILLE, SERVICEMASTER OF GREENVILLE, LLC AND DIXIE
5 HAWKINS,

6 PLAINTIFFS,

7 VS.

8 CITY OF GREENVILLE,

9 DEFENDANT.

10 CERTIFICATE

11 THIS IS TO CERTIFY THAT THE FOREGOING DEPOSITION OF
12 THOMAS ANDREW SHERARD WAS TAKEN BY THE WITHIN COURT REPORTER,
13 A NOTARY PUBLIC FOR THE STATE OF SOUTH CAROLINA DULY
14 COMMISSIONED AND QUALIFIED AS SUCH, ON APRIL 23, 2002, AT THE
15 OFFICE OF MITCHELL, BOUTON, YOKEL, MCCALL & CHILDS, 7 MILLS
16 AVENUE, GREENVILLE, SOUTH CAROLINA.

17 THAT SAID COURT REPORTER IS NOT A RELATIVE OR EMPLOYEE OF
18 ANY OF THE PARTIES OR THE ATTORNEYS, AND FURTHER, IS NOT OF
19 COUNSEL OR ATTORNEY FOR ANY OF THE PARTIES TO SAID ACTION,
20 AND, IS NOT IN ANY MANNER INTERESTED IN THE CAUSE, FINANCIAL
21 OR OTHERWISE.

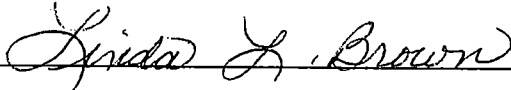
22 THAT THE DEPONENT WAS DULY PLACED UNDER OATH AND
23 ADMONISHED TO SPEAK THE WHOLE TRUTH. THAT THE ORAL DEPOSITION
24 WAS DULY TAKEN AND TRANSCRIBED AS TO THE QUESTIONS PROPOUNDED
25 AND THE ANSWERS GIVEN, THAT THE FOREGOING 59 PAGES IS A TRUE,

1 ACCURATE, AND CORRECT RECORD OF THE TESTIMONY GIVEN BY THE
2 DEPONENT TOGETHER WITH SUCH CHANGES AS SAID DEPONENT MAY HAVE
3 MADE, IF ANY, DURING THE READING OVER AND SIGNING PROCEDURE.

4 THAT THE COURT REPORTER HAS OR WILL DELIVER THE SEALED
5 ORIGINAL DEPOSITION TO THE ORDERING ATTORNEY FOR THE PURPOSE
6 OF FILING SAME WITH THE PROPER OFFICIAL.

7 THAT ALL OFFERED EXHIBITS, STIPULATIONS AND OBJECTIONS,
8 IF ANY, INVOLVED IN THIS CAUSE ARE DULY ATTACHED OR INCLUDED
9 HEREIN.

10 IN WITNESS WHEREOF, I HAVE SET MY HAND AND OFFICIAL SEAL.
11 DATE: April 24, 2002

12 
13 _____

14 NOTARY PUBLIC FOR SOUTH CAROLINA

15 MY COMMISSION EXPIRES: 9/15/2002
16
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FILED S.C.
JUN 14 11 11 AM '90
DUNN STATION
R.M.C.

AIRPORT RD.

BYRDLAND DRIVE

0.67 ACRES

HAYWOOD ROAD

18-W-5

I CERTIFY THAT THE ERROR OF CLOSURE OF THE FIELD SURVEY IS .110,000 AND AREA WAS COMPUTED BY OMC METHOD

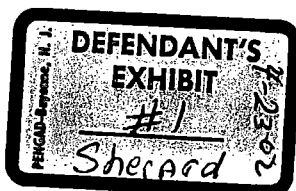
NOTE: 0.068 ACRE TRACT SURVEYED AND PLAT REVISED 6/1/89

SURVEY FOR

28932

GOLDSMITH, TIMMONS & ASHMORE

GREENVILLE, SOUTH CAROLINA
SCALE 1" = 40' OCTOBER 10, 1988



9000144

R.L.S. #1347 C.O. FIDDLER SURVEYING CO. GREENVILLE, S.C.

000393

300 • 77311801

CITY OF GREENVILLE
DEPARTMENT OF PUBLIC WORKS
RECORD OF INQUIRY

NAME : Pack Ashmore

INQUIRY COMPLETED : Y

ADDRESS : Haywood Rd.

HOME TELEPHONE :

DATE : 5/22/87 TIME :

WORK TELEPHONE :

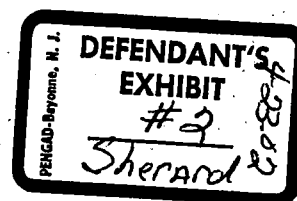
REQUESTED BY : Mark McCain

ASSIGNED TO : Knight

DESCRIPTION OF INQUIRY : Ashmore is getting ready to develop the lot on the corner at Haywood/Airport and Ryrdland Blvd. They're going to pipe the creek. Ashmore said that our sewer line crossing is leaking pretty bad and going into the creek. Please look at it and take the necessary action.

DATE REVIEWED : 5/25/87

ACTION TAKEN BY THE DEPARTMENT : Checked sewer. Unit 202 cleaned stream and washed out line. put dye into line, none came out in stream.



9000115

000384



WILLIAM PENNINGER ASSOCIATES
LANDSCAPE ARCHITECTS & PLANNERS
108 WOODHAVEN DRIVE
GREENVILLE, SOUTH CAROLINA 29609

STORM DRAINAGE CALCULATIONS

Track's - Music/Video
Haywood Road and Airport Road
Greenville, S.C.
November 28, 1988

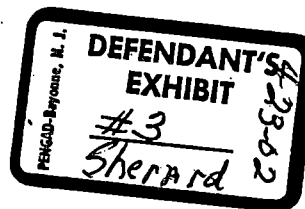
The existing site consist of a 0.67 acre lot covered with sparse grass and weeds. No offsite drainage drains onto the site. A minimum time of concentration of 5 minutes was assumed for both the existing and proposed site. The following calculations are based on the Rational method for determining storm runoff rates. The orifice equation ($Q = .62A(2gh)^{1/2}$) and the weir equation ($Q = 3.0bh^{3/2}$) were used in a routing program to determine the required storage volumes, depths and discharge rates for the detention basin.

EXISTING CONDITIONS

Site	0.67 acres, sparse grass and weeds
Offsite	None

EXISTING RUNOFF

	Site
Area (acres)	0.67
Runoff Coef. (C)	.30
Rainfall Intensity 10-yr	6.7 in/hr
Time of Concentration (min)	5
Peak Runoff Rate 10-yr	1.35 cfs



9000098

PROPOSED CONDITIONS

Direct Site Runoff (Northwest corner drive entrance)
Area (acres) .05 (.04 ac. paving)
Runoff Curve No. .82
Time of Concentration (min) 5
Peak Runoff Rate 10-yr 0.27 cfs

Detention Pond Runoff

	Site
Area (acres)	0.62
(.45 ac. site paving)	
Runoff Curve No.	.77
Rainfall Intensity 10-yr	6.7 in/hr
50-yr	8.2 in/hr
Time of Concentration (min)	5
Peak Runoff Rates 10-yr	3.20 cfs
50-yr	3.91 cfs

Maximum Release Rates

10-yr	1.08 cfs

Required Storage Volumes

10-yr	1384 cf
50-yr	1928 cf

Storage Provided 10-yr	1800 cf
50-yr	3300 cf

Primary Outlet

10-yr Max. Release Rate	1.08 cfs
Proposed Orifice Size	6" pipe
Orifice Invert Elevation	95.55
10-yr Pond Elevation	96.84
Actual 10-yr Release Rate	1.00 cfs

Emergency Overflow Weir

50-yr Release Rate	3.91 cfs
Overflow Weir Elevation	97.0
50-yr Pond Elevation	97.09
Width b	20'± of drive
Depth h	0.5'
Overflow Weir Capacity	20.0 cfs
Actual Weir Release Rate	0.53 cfs
Total 50-yr Release Rate	1.64 cfs

9000099

000386

e total drainage area is .62 acres.
 e justed surface runoff coefficient is .77
 e sign Storm is the 10 -year storm.
 e primary orifice coef. is .62 and the diameter is .5 ft.
 e overflow weir coefficient is 3 , the width is 20 and height is 1.5 ft.
 e total allowable depth is 2 ft.

Depth	Volume
0.5	200.0
1.0	800.0
1.5	1800.0
2.0	3300.0

Time	Runoff Volume	Release Volume	Storage Volume	Storage Depth	Peak Primary Discharge	Peak Overflow Discharge
(min)	(cf)	(cf)	(cf)	(ft)	(cfs)	(cfs)
2.50	479.79	48.61	431.17	0.69	0.65	0.00
5.00	959.57	160.62	798.95	1.00	0.85	0.00
7.50	1224.53	290.15	934.39	1.07	0.88	0.00
10.00	1503.81	425.34	1078.47	1.14	0.92	0.00
12.50	1754.45	565.51	1188.94	1.19	0.95	0.00
15.00	1976.44	709.24	1267.19	1.23	0.97	0.00
17.50	2205.59	855.95	1349.64	1.27	0.99	0.00
20.00	2377.45	1004.58	1372.88	1.29	0.99	0.00
22.50	2513.51	1153.39	1360.12	1.28	0.99	0.00
25.00	2685.38	1302.39	1382.98	1.29	1.00	0.00
27.50	2835.76	1451.82	1383.93	1.29	1.00	0.00
30.00	2964.65	1600.90	1363.75	1.28	0.99	0.00
32.50	3072.07	1748.89	1323.18	1.26	0.98	0.00
35.00	3208.13	1895.94	1312.19	1.26	0.98	0.00
37.50	3329.87	2042.33	1287.53	1.24	0.97	0.00
40.00	3379.99	2186.53	1193.46	1.20	0.95	0.00
42.50	3408.64	2326.84	1081.80	1.14	0.92	0.00
45.00	3506.03	2464.24	1041.79	1.12	0.91	0.00
47.50	3605.56	2600.14	1005.42	1.10	0.90	0.00
50.00	3680.75	2734.15	946.61	1.07	0.89	0.00
52.50	3759.53	2865.90	893.63	1.05	0.87	0.00
55.00	3812.52	2994.99	817.53	1.01	0.85	0.00
57.50	3870.52	3120.29	750.24	0.96	0.82	0.00
60.00	3901.31	3240.07	661.24	0.88	0.78	0.00

9000100

000387

50-yr Storage Volume Calculations

total drainage area is .62 acres.
adjusted surface runoff coefficient is .77
Design Storm is the 50 -year storm.
primary orifice coef. is .62 and the diameter is .5 ft.
overflow weir coefficient is 3 , the width is 20 and height is 1.5 ft.
total allowable depth is 2 ft.

Depth	Volume					
0.5	200.0					
1.0	800.0					
1.5	1800.0					
2.0	3300.0					
Time	Runoff Volume	Release Volume	Storage Volume	Storage Depth	Peak Primary Discharge	Peak Overflow Discharge
(min)	(cf)	(cf)	(cf)	(ft)	(cfs)	(cfs)
2.50	587.20	53.13	534.07	0.78	0.71	0.00
5.00	1174.40	173.84	1000.57	1.10	0.90	0.00
7.50	1632.71	314.86	1317.85	1.26	0.98	0.00
10.00	2005.08	465.85	1539.23	1.37	1.03	0.00
12.50	2363.13	623.72	1739.41	1.47	1.08	0.00
15.00	2706.86	812.88	1893.98	1.53	1.11	0.33
17.50	2957.49	1038.53	1918.96	1.54	1.11	0.47
20.00	3208.13	1280.58	1927.54	1.54	1.11	0.53
22.50	3415.80	1513.83	1901.97	1.53	1.11	0.38
25.00	3580.50	1719.77	1860.73	1.52	1.10	0.17
27.50	3781.01	1912.70	1868.31	1.52	1.10	0.21
30.00	3952.87	2102.64	1850.24	1.52	1.10	0.13
32.50	4068.16	2266.78	1801.38	1.50	1.09	0.00
35.00	4160.54	2428.95	1731.59	1.47	1.08	0.00
37.50	4318.08	2589.94	1728.14	1.46	1.08	0.00
40.00	4468.46	2750.78	1717.69	1.46	1.07	0.00
42.50	4589.49	2910.99	1678.50	1.44	1.06	0.00
45.00	4704.78	3069.92	1634.86	1.42	1.05	0.00
47.50	4830.09	3227.56	1602.54	1.40	1.05	0.00
50.00	4941.09	3383.87	1557.22	1.38	1.04	0.00
52.50	5037.76	3538.41	1499.36	1.35	1.02	0.00
55.00	5120.12	3690.71	1429.41	1.31	1.01	0.00
57.50	5221.09	3840.89	1380.19	1.29	1.00	0.00
60.00	5327.78	3989.45	1338.33	1.27	0.99	0.00

9000101

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THE CITY OF GREENVILLE, SOUTH CAROLINA

February 7, 1989

Scott Sonnenberg
William Renninger and Associates
108 Woodhaven Drive
Greenville, SC 29609

Subject: Track's Music/Video Store

Dear Scott:

The Engineering Department of the City of Greenville has completed a review of the resubmitted site plan and drainage calculations for Track's Music/Video Store. This is to advise that the design is in compliance with the City's minimum design standards; however, the Engineering Department's review and approval of the design in accordance with the City's minimum design standards neither constitutes an endorsement of the engineering design selected nor does it affect the rights of adjoining property owners. The City accepts no liability relative to stormwater discharge from this site onto adjacent sites.

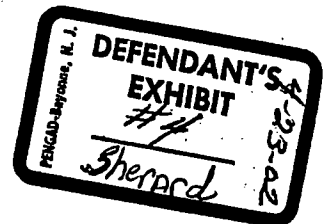
Any deviations from the approved drawings must be resubmitted for review. Prior to the beginning of construction this office requests notification.

Please feel free to contact us if there are any questions concerning this project.

Cordially,

Cathy D. Ball
Cathy Ball
Civil Engineer

f27

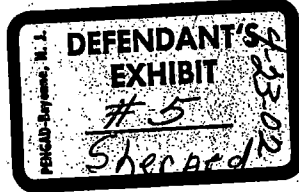


ServiceMASTER

**Residential/
Commercial
Cleaning Services**

**Louie D. Hawkins
ServiceMaster of Greenville
P.O. Box 16283
Greenville, S.C. 29606
803/297-1183**

City Attorney
City of Greenville
Post Office Box 2207
Greenville, SC 29602



August 18, 1998

Mr. McKinney,

I received your letter dated August 12, 1998, and find several items that I disagree with. I am so sorry the City has had to go through flooding similar to mine. I also hope the cause of that flooding was taken care of. I have asked the City to take care of this water problem.

The location of my property and building site was studied and approved by the City in 1980. This was done well before the city owned culverts were installed in 1993. Prior to the culverts being installed, we NEVER had any water problem. Who had the culverts installed, and why were they installed across from my flat land? Why were the culverts not shorter nearer the intersection of Haywood Road, Byrdland Drive, and Airport Road crossings? Why were the culverts up stream not longer?

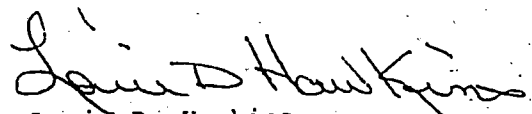
The culverts are 96" in diameter and will only handle what a 96" culvert is designed to handle. When planning and engineering by the City allowed much more water to be released than a 96" pipe can handle, where did they expect the water to go? This is the basis of my claim. The water that entered my building was not MY water. It was diverted into a stream by City Engineering, which allowed more water to flow than the culvert could handle. This is negligence on the part of the City.

I am now asking under the Freedom of Information Act, that you supply me with a copy of your working files used to review my claim and arrive at this conclusion.

Finally, the past claim was a mud damage and is not related to this claim.

CC: Lee Dumbauld, Interim City Mgr.
Don Fogle, City Engineer
Cathy Eargle, Risk Mgr.
Rhonda Maynard, Hewitt, Coleman, & Assoc.

Sincerely, 5030069


Louie D. Hawkins,
Owner

ServiceMASTER

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licensed to serve you by
The ServiceMaster Company*

LDH/cks

00390

Date: 08/04/93
Time: 19:34:53

CITY OF GREENVILLE PUBLIC WORKS

Page: 2

Actual Cost by Address

Job Number	Location	Employee Code	Finish Date	Job Type	No. Of Jobs	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Total Cost
** Actual Cost for Street: ACADEMY										
933906	ACADEMY ST	BOOKER J	07/07/93	SC 210	1	1.50	13.36	15.15	12.34	40.85
Comment: AND CHURCH ST										
Street Subtotals:					1	1.50	13.36	15.15	12.34	40.85
** Actual Cost for Street: AIRPORT										
933198	AIRPORT RD	HAMBY	07/27/93	DR 110	1	1,359.00	15,214.44	7,642.55	3,774.51	26,631.50
Requestor: PHILLIPS Comment: AT HAYWOOD RD., INSTALL 96" ALUMINUM PIPE.										
933643	400 AIRPORT RD	COLLINS	07/16/93	DR 250	1	28.00	304.99	291.71	0.00	596.70
Requestor: SHULLY, RACHEL- 277-4998 Comment: FILL AREAS ALONGSIDE OF THE EDGE OF THE ROAD, IN THE 400 BLK AREA FILL IN WITH CRUSHER RUN.										
934311	760 AIRPORT RD	CALLICOTT	07/27/93	SE 270	1	2.00	22.05	19.64	0.00	41.69
Comment: CLEAN CUT PORT-O-LET										
Street Subtotals:					3	1,389.00	15,541.48	7,953.90	3,774.51	27,269.89
** Actual Cost for Street: ALASKA										
933942	ALASKA AV	BOOKER J	07/08/93	SC 220	1	3.00	26.72	22.53	24.67	73.92
Comment: AND SITKA AVE.										
934071	ALASKA AV	BOOKER J	07/15/93	SC 220	1	3.00	26.72	27.84	12.34	66.90
Comment: AND SITKA AV										
Street Subtotals:					2	6.00	53.44	50.37	37.01	140.82
** Actual Cost for Street: ALDRIDGE										
934072	ALDRIDGE AV	BOOKER J	07/30/93	SC 290	1	159.00	1,539.64	1,302.67	1,011.47	3,853.78
Street Subtotals:					1	159.00	1,539.64	1,302.67	1,011.47	3,853.78
** Actual Cost for Street: ALPINE W										
933935	110 ALPINE WAY	CALLICOTT	07/08/93	SE 270	1	1.00	9.82	7.70	0.00	17.52
Comment: SANAFAX S.S. LINE										
Street Subtotals:					1	1.00	9.82	7.70	0.00	17.52



000391

9000157

Cunanan sought port in final days

WRITER

Fla. — Andrew meone he knew in to obtain a false failing that, he handgun in his the trigger, the

d serial killer victim — himself y, in the upstairs of a houseboat in led up, 2½ miles re fashion design- ice was gunned

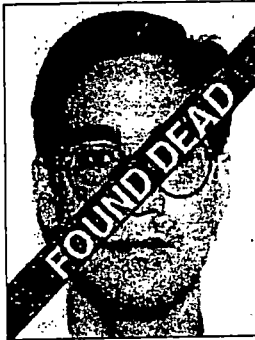
down.

Nine days after Versace's murder, after one of the most intense manhunts in the nation's history, authorities had Cunanan's body. What they lacked was answers.

Why, in the course of three months, did Cunanan kill five men? Why did he kill these five men?

How did Cunanan elude one of the FBI's most ferocious dragnets? And why did so clever a man stay close to Miami Beach after Versace's murder?

See CUNANAN on page 10A



FBI PHOTO

Fugitive becomes suicide:
Andrew Cunanan's photo appeared this way on the FBI's Ten Most Wanted Fugitives home page Thursday.

Barbour: Charges ab loan for GOP are 'ph

By Chuck Raasch
GANNETT NEWS SERVICE

WASHINGTON — Flanked by a phalanx of lawyers and advisers, former Republican chairman Haley Barbour said Thursday no foreign money went into 1994 party campaigns, and denied prior knowledge that a controversial loan to a GOP issues group came from abroad.

A sometimes combative Barbour told the Senate Governmental Affairs Committee investigating campaign finance abuses that the

National Policy Forum, which he created in 1993 as a nonprofit issues organization, legally could have taken foreign money, anyway.

In the most heated testimony in three weeks of hearings, Barbour blasted "infuriatingly phony charges" by Democrats he had used the NPF as a back door to "funnel" foreign money from a loan guarantee by a Hong Kong company into GOP coffers to turn the election tide late in the 1994 congressional campaigns.

But the Democrats' documents suggest the National (much closer relation) NPF than the Barbour portrayal.

Democrats' allegations suggest financial straits, campaigns — control of Congress in 40 years — motive for Barbour for campaign ca-

ded rotein protect ics

guard
PRESS

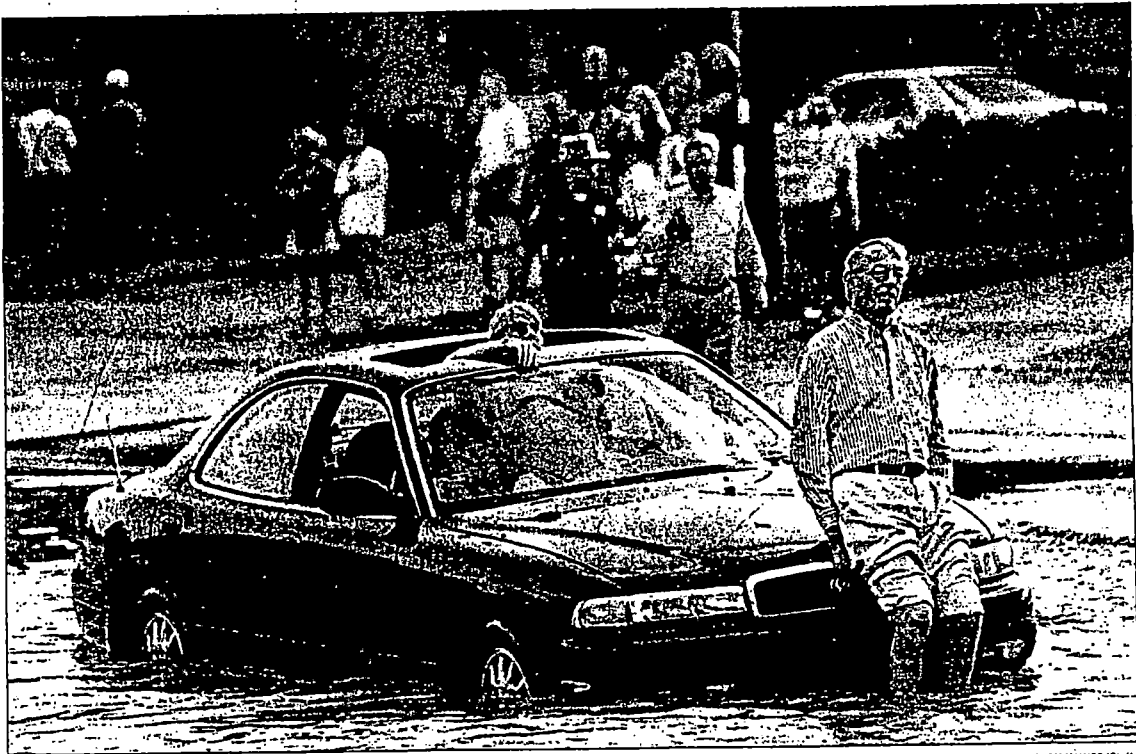
— A human prod- a useless byprod- one that drug row away — may devastating heart ige that diabetes

n rats backs up a rts from Sweden an diabetics may e substance. And e findings, to be in the journal 'Sci- ing enough for in- whether adding C- lin therapy really

lizing possibilities e further study," f Chicago diabetes ald Steiner, who nbining insulin and offer therapy "pos- ture's own way." million Americans which blood sugar control. Type I di- no insulin, the hor- lates blood sugar, iabetics are unable s' insulin properly. at great risk of d nerve damage, as out the body leak ipulses fail. byproduct of insu- whether produced synthetically. For ave considered the ally inactive — so ke insulin don't get

t study by Washing- St. Louis and in- Eli Lilly & Co., nd that injecting di- high doses of hu- repaired leaky wented, nerve dam-

WATER STALLS GREENVILLE



ALAN HAWES/Staff

Wet work: Russ Harner pushes his car, and wife Muff, out of the intersection of Haywood and Old Airport roads in Greenville. At rush hour Thursday, Haywood Road turned into a muddy river 2 to 3 feet deep, just south of Haywood Mall.

2.4 inches of rain measured in one hour

By Bryan Gilmer
STAFF WRITER

A severe summer thunderstorm walloped Taylors and Greenville's Eastside from 4:30 to 5:30 p.m. Thursday, sending trees crashing onto power lines and cutting off electricity to 6,400 homes and businesses.

Water that overflowed a drainage ditch seeped under the front doors of about 15 apartments at the Mallard Cove complex on Pleasantburg Drive. Two apartments were damaged severely

enough that the American Red Cross checked the residents into motel rooms for the night.

At rush hour, Haywood Road turned into a muddy river 2 to 3 feet deep just south of Haywood Mall when a 6-foot-wide drainage culvert couldn't carry all the runoff from new and old parking lots and roofs in the rapidly growing shopping district.

"System overload," said Bill Lee, assistant storm drain superintendent for the city of Greenville. "Engineers will have to decide what we do or don't do" to

fix the problem, he said.

Winds were as strong as 65 mph, and the Greenville Downtown Airport measured 2.4 inches of rain in the single hour, according to the National Weather Service in Greer.

Since the rain began Wednesday, about 3 inches have been measured at Greenville-Spartanburg International airport, but the total for Taylors and Greenville may be closer to six inches, the weather service said.

There were no reported injuries.

A torrent of water rushed into Palmetto Bank at 470 Haywood Road and, ironically, a business that specializes in repairing flood damage. Louie Hawkins, owner of Servicemaster, had his crews using vacuum trucks to remove a layer of mud from the building's carpeting but "no one to send the bill to."

Cars traveled at a snail's pace along Laurens Road. It was the same on Pleasantburg Drive, and traffic remained heavy even after

See WATER on page 4A

Cigar harde teens

State sale
down to
kids still

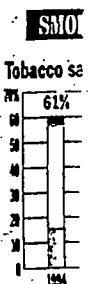
By James T. H.
CAPITAL BUREAU

COLUMBIA about teen sr- tougher for the ple. to buy 'ciga- year ago.

The bad nev- getting cigaret- is on the rise a- perts disagree- derstand its pe-

"Unfortunately still too high, young people v- are three time alcohol, seven- use marijuana- likely to use c- Hamilton, dire- partment of Drug Abuse S-

Underage with the stat- cessful in buy- percent of the 40 percent in last year. stepped-up er- of vendors an- cern about y-



Cigarette
Teenagers

SIDE

IB Dan Foster..... 1C
IB Health..... 7A

9000134



ALAN HAWES: Staff

One cup at a time: Melvin Means scoops water out of his flooded Jeep in Greenville Thursday afternoon.

WATER

FROM PAGE 1A

the storm passed as drivers crept through intersections without working traffic lights.

On South Pleasantburg Drive near Tower Drive, water stood nearly a foot deep across the roadway.

The Wade Hampton Fire Department got about 30 calls reporting fallen power lines and trees, flooded streets and car wrecks.

"We've called in all of our off-duty people," said Jim Covil, a Wade Hampton firefighter. "I'd say this is one of the worst storms we've had

in a while. This one had a lot of wind."

Duke Energy Corp. also had "everybody we could get hold of" working to restore power to all customers by midnight, said spokesman Roger Hagy. By midnight, power had been restored to all but 665 households.

At Mallard Cove, "the fire department had all of us out of here, worried about electrical problems," said Alice Linton, whose floor was still damp as a second heavy shower started about 11:20 p.m. and gave her a scare that the rushing water would return.

"It looked like Niagara," said Tracy Pepper, a field supervisor for Professional Carpet Systems who was cleaning carpet in vacant apartments about 5 p.m. when 3 feet of water began to flow over the walkway between two buildings and into first-floor units.

Pepper called for reinforcements, and his crew worked past midnight to dry out the drenched apartments.

It was the wind that captured the Dye family's attention on East Lee Road in Taylors. Jack Dye was inside his home with his wife and grandchildren when the wind began howling and dark clouds blocked the afternoon sun.

"The rain was coming down hard, and the lighting was popping," Dye said Thursday, surveying the damage to neighbor Annie Burnside's home where a huge tree fell through the roof. No one was home.

Dye's wife immediately called the Taylors day care center where Mrs. Burnside works.

"I'm just glad she wasn't here," said Candice Burnside, Mrs. Burnside's 25-year-old daughter. "When I came up, I couldn't believe it. There's a big limb coming through the living room."

A bedroom was severely damaged, but a brass stand filled with china figurines in the living room wasn't touched.

"I've had a couple of big trees taken down out of my yard because I know how dangerous they are,"

HOW TO STAY SAFE, DRY

- Don't cross flowing water on foot if the water is deeper than your ankles. Strong currents or powerful suction at culverts and drains under the water can pull you under.
- Never drive over a flooded road. Two feet of water can sweep away most automobiles. It's much harder to spot flooded areas at night, so be extra careful then.
- If your car stalls, get out and climb to higher ground.
- Stay away from low-lying areas.
- Stay tuned to the media for news about what to do, where to go and where to avoid.

Source: Metropolitan Life Insurance Co.

Dye said. "She was planning to have this one removed."

Hawkins, the business owner who was flooded, said Greenville needs to enlarge the culvert near his business or redirect some of the stormwater.

"We've been trying to get the

city to put a bigger pipe out here," he said. "The bottom line is the city has made us the holding pond."

There isn't expected to be a repeat of those problems today. A slight chance of an afternoon thunderstorm is the only thing that could stand in the way of a mostly sunny day with a high around 90 degrees, according to the weather service.

Elsewhere, The Associated Press reported one person died when the remnants of Hurricane Danny ripped through Lexington County early Thursday morning. Trina Jackson's body was found in some woods about 150 feet from a destroyed duplex.

Tornadoes also touched down near Fort Jackson and Camden.

Gov. David Beasley flew over the area by helicopter shortly after returning from a trip to South Africa and met with members of the Jackson family.

— Staff writer April E. Moorefield contributed to this story.



ALAN HAWES: Staff

Reaction time: Louie Hawkins, the owner of Servicemaster on Haywood Road in Greenville, discusses the problem with Tim Guerin, Greenville's assistant street superintendent, after about eight inches of water flooded Hawkins' business Thursday.

TOO MANY BILLS? NEED CASH?

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9 a.m.-8 p.m. Monday-Friday

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- Debt Consolidation
- Cash Out Any Reason
- Self-Employed/NIV
- Loans Up To 125% Of Value
- Bankruptcy/Foreclosure
- Single & Double Wides With Land
- Fast and Free Pre-Approval
- Apply By Phone

Office DEPOT

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We Guarantee It!
...or you get 155% of the difference*

COMPUTERS

HEWLETT PACKARD Pavilion
BRAND NEW At Office Depot

The Only All Digital

5-18-1

Greenville City Code

5-172

CHAPTER 18**Stormwater Management**

Historical Note: Ord. 92-81, adopted 12/14/92 determined the placement of Ord. 92-59 as new Ch. 5-18.

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ARTICLE A.**General Provisions****Sec. 5-18-1 Title—Purpose—Chapter application.**

(a) The provisions of this chapter will be known as the "Stormwater Management Ordinance of Greenville, South Carolina."

(b) The purpose of this chapter is to protect, maintain and enhance the public health, safety and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased stormwater runoff associated with both future land development and existing developed land within the city. Proper management of stormwater runoff will minimize damage to public and private property, insure a functional drainage system, reduce the effects of development on land and stream channel erosion, assist in the attainment and maintenance of water quality standards, enhance the local environment associated with the drainage system, reduce local flooding, maintain as nearly as possible the predeveloped runoff characteristics of the area, and facilitate economic development while mitigating associated flooding and drainage impacts.

(c) The application of this chapter and the provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other powers granted by state statute. In addition, if site characteristics indicate that complying with these minimum requirements will not provide adequate designs or protection for local property or residents, it is the designer's responsibility to exceed the minimum requirements as necessary. The engineering and public works director or designee shall be responsible for the coordination and enforcement of the provisions of this chapter. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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Sec. 5-18-2 Definitions.

(a) For the purpose of this chapter, the following term, phrases and words and their derivatives, shall have the meaning given herein:

(1) *As-built plan* shall mean the construction plans with any field changes identified and shown on the plan.

(2) *City* shall mean the city of Greenville, South Carolina.

(3) *City Council* shall mean the elected officials of the city of Greenville, South Carolina.

(4) *CFP* shall mean a capital facilities plan.

(5) *County* shall mean Greenville County, South Carolina.

(6) *Cross-drain culvert* shall mean a culvert located under a roadway.

(7) *Designer* shall mean a professional who is permitted to prepare plans and studies required by this chapter.

(8) *Detention structure* shall mean a permanent structure for the temporary storage of runoff which is designed so as not to create a permanent pool of water.

(9) *Development* should generally mean any of the following actions undertaken by a public or private individual or entity:

(1) The division of a lot, tract or parcel of land into two (2) or more lots, plots, sites, tracts, parcels or other divisions by plat or deed; or

(2) Any land change, including, without limitation, clearing, tree removal, grubbing, stripping, dredging, grading, excavating, transporting and filling of land.

(10) *Developed land use conditions* shall mean the land use conditions according to the current city zoning map or proposed development plan.

(11) *Easement* shall mean a grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

(12) *Engineering and public works director* shall mean the duly designated department head of the engineering services department in Greenville, South Carolina to perform the duties of engineer, as herein specified, or his duly authorized agent.

(13) *Engineering services department* shall mean the department responsible for all stormwater management activities and implementation of the provisions of this chapter.

(14) *Erosion* shall mean the process by which ground surface is worn away by the action of wind and/or water.

(15) *Existing land use condition* shall mean the land use conditions existing at the time of the most recent official aerial photography available from the city.

(16) *Impervious* shall mean the condition of being impenetrable by water.

(17) *Imperviousness* shall mean the degree to which a site is impervious.

(18) *Infiltration* shall mean the passage or movement of water into the soil subsurface.

(19) *Interior culvert* shall mean a culvert that is not located under a roadway.

(20) *Registered land surveyor* shall mean a land surveyor properly registered and licensed in South Carolina by the State Board of Land Surveyors.

(21) *Maintenance* shall mean any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in Article A of this chapter and to prevent structural failure of such facilities. Maintenance shall not include actions taken solely for the purpose of enhancing the aesthetics aspects associated with stormwater management facilities.

(22) *On-site stormwater management* shall mean the design and construction of a facility necessary to control stormwater runoff within and for a single development.

(23) *Predeveloped conditions* shall mean those land use conditions that existed before any development had taken place on the site, when the site was in its natural undisturbed condition.

(24) *Preliminary development plan* shall mean the set of drawings and other documents that comprise all of the information and specifications for the drainage systems, structures, concepts and techniques that will be used to control stormwater as required by this chapter and the stormwater management design manual. Also included are the supporting engineering calculations and results of any computer analysis.

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(25) *Preliminary plat* shall mean the preliminary plat of a residential subdivision submitted pursuant to the subdivision regulations.

(26) *Record survey* shall mean a final field survey which locates the visible surface features of a constructed stormwater facility on the ground, but without locating nonvisible or subsurface features such as the actual route and elevation of buried pipe.

(27) *Regional stormwater management* shall mean the design and construction of a facility necessary to control stormwater runoff within or outside a development and for one (1) or more developments.

(28) *Registered civil engineer* shall mean a civil engineer properly registered and licensed in South Carolina by the State Board of Engineering Examiners.

(29) *Registered landscape architect* shall mean a landscape architect properly registered and licensed in South Carolina by the State Board of Licensing Examiners.

(30) *Retention structures* shall mean a permanent structure that provides for the storage of runoff and is designed to maintain a permanent pool of water.

(31) *Stormwater concept plan* shall mean the overall proposal for a storm drainage system, including stormwater management structures, and supporting documentation as specified in the Stormwater Management Design Manual, for each proposed private or public development to the extent permitted by law. Also included are the supporting engineering calculations and results of any computer analysis, if necessary.

(32) *Stormwater management* shall mean the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner to minimize accelerated channel erosion, increased flood damage, and/or degradation of water quality and in a manner to enhance and ensure the public health, safety and general welfare.

(33) *Stormwater management facilities* shall mean those structures and facilities that are designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the drainage system.

(34) *Stormwater management plan (stormwater master plan)* shall mean a plan developed for a watershed or part thereof which has been approved by the city council to guide the design and development of the drainage system covered in the plan.

(35) *Subdivision* shall mean

(a) The creation of one or more new streets, alleys or other public ways or, the changing of any rights-of-way or any existing streets, alleys or other public ways;

(b) Any division or redivision of lot, tract or parcel of land, regardless of its prospective use. Such subdivision may be accomplished by platting or by description by metes and bounds or otherwise into two (2) or more lots or other divisions for sale or improvement.

(c) The following are not defined as subdivisions:

a. The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the resultant lots are in accordance with the rules and regulations contained in the city of Greenville subdivision regulations and with the Greenville city zoning ordinance.

b. Division or sale of land by judicial decree which shall not be deemed a division for purposes of this chapter;

c. The acquisition of land for the purpose of widening or opening of streets when the acquisition and work is done by the city, state or other governmental agency;

d. The division of land into parcels greater than five (5) acres where no street right-of-way dedication is involved.

(36) *Stormwater management design manual* shall mean the manual of design, performance and review criteria for stormwater management practices, prepared under the direction of the engineering and public works director. Revisions to this manual are to be approved by the zoning board of adjustment.

(37) *Zoning board of adjustments* shall mean a board whose purpose is to review appeals to this chapter and render decisions. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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Sec. 5-18-3 Stormwater management plan requirements.

(a) For those areas that have been selected for masterplanning, the engineering and public works director should submit for review and approval by resolutions of the city council, a stormwater management plan for the control of water quantity and quality, of any watershed or part thereof within the city.

(b) The stormwater management plan shall serve to guide development as it affects the quantity and quality of runoff from the watershed. Proposed developments found to be in noncompliance with the plan will only be allowed if approved by the zoning board of adjustments.

(c) The stormwater management plan should be periodically reviewed and amended as necessary to keep the plan current and ensure that the objectives of the plan are met. The engineering and public works director shall be responsible for the periodic updating of said plan.

(d) Said stormwater management plan shall include basin specific stormwater management policies and recommendations for the implementation of these policies.

(e) Said stormwater management plan shall include alternatives as appropriate for the location of structural and nonstructural, private and public, stormwater management measures and strategies to control the adverse effects of stormwater runoff. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-4 Adherence to chapter provisions required.

No person shall develop any land without having provided for appropriate stormwater management measures that control or manage runoff, in compliance with this chapter. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-5 Exemptions from requirements.

The following development activities are exempt from the provisions of the chapter and the requirements of providing stormwater management measures:

- (1) Agricultural and forestry activities;
- (2) Additions or modifications to existing detached single-family dwellings;
- (3) Residential developments consisting of one (1) single-family or one (1) duplex dwelling;
- (4) Developments that do not disturb more than 5,000 square feet of land area in total;
- (5) Residential subdivision developments of less than five (5) acres in total; and less than 40 percent impervious area in total; and
- (6) All runoff quantity requirements related to controlling discharge peak flow from proposed developments are waived when the tract being developed drains directly into a regulated floodplain without flowing over any other land areas or drainage systems, unless required by the stormwater management plan for the area in question. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-6 Stormwater management design manual.

To assist in the design and evaluation of stormwater management facilities in the City of Greenville, a stormwater management design manual has been developed. Recommended design procedures and criteria are presented for conducting hydrologic and hydraulic evaluations. Although the intention of the manual is to establish uniform design practices, it neither replaces the need for engineering judgement nor precludes the use of information not presented. Other accepted engineering procedures may be used to conduct hydrologic and hydraulic studies if approved by the engineering and public works director. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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ARTICLE B.**Stormwater Concept and
Preliminary Development Plans****Sec. 5-18-7 Stormwater concept and
preliminary development plans.**

(a) A stormwater concept plan for each development shall be submitted for review by the engineering and public works director prior to submission of the preliminary development plan and construction plans for the entire development, or any portion thereof. Such plans shall be consistent with the appropriate stormwater management plan if available for the area in question.

(b) All preliminary plans of the development shall be consistent with the stormwater concept plan required in paragraph 1 above, and with the appropriate stormwater management plan, if existing.

(c) Upon approval of the concept plan, the applicant shall submit a final preliminary development plan (as part of the construction plans) to the engineering and public works director for review and approval; provided, that the engineering and public works director may accept and submit into the review process a stormwater concept plan if it identifies the location and type of facilities to be constructed in sufficient detail to accurately estimate construction costs and the engineering and public works director determines that a preliminary development plan for drainage is not needed. If accepted under this provision, the stormwater concept plan then becomes the preliminary development plan for this development.

(d) Should any preliminary development plan involve any stormwater management facilities or land to be dedicated to public use, the same information shall also be submitted for review and approval to the department having jurisdiction over the land or other appropriate departments or agencies identified by the engineering and public works director for review and approval. This preliminary development plan shall serve as the basis for all subsequent construction.

(e) The stormwater concept plan may be reviewed, if needed, with the designer, after city review, where it will be either be approved, approved with changes, or rejected. If rejected, changes,

additional analysis, or other information needed to approve the next submittal of the concept plan shall be identified. The city review will be completed within five (5) working days from and after the receipt of the plan.

(f) Within ten (10) working days from and after the receipt of the preliminary development plan, the engineering and public works director shall issue a decision approving, rejecting or conditionally approving a plan with modification. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-8 Permit requirements.

(a) No final occupancy permit shall be issued without the following:

(1) Recorded easements for stormwater management facilities;

(2) Receipt of an as-built plan which includes a certification of the storm drainage system.

(b) No site grading permit shall be issued or modified without the following:

(1) Right of entry for emergency maintenance if necessary;

(2) Any off-site easements needed;

(3) An approved preliminary development plan or stormwater concept plan, as appropriate.

(c) The approved preliminary development plan shall contain certification by the applicant that all land clearing, construction, development and drainage will be done according to the preliminary development plan or previously approved revisions. Any and all site grading permits may be revoked at any time if the construction of stormwater management facilities are not in strict accordance with approved plans.

(d) In addition to the plans and permits required from the city, applicants shall obtain all county, state and federal permits required for the proposed development. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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Sec. 5-18-9 Fees.

Fees for plan review and other fees associated with this chapter are as follows:

Acres of Plan Coverage	Application Fee	Review Fee	Inspection Fee	Total Fee
Type 1				
<5 acres	\$ 30	\$ 120	\$ 200	\$ 350
5 to <10 acres	30	200	270	500
10 to <20 acres	30	350	370	750
20 acres & >	30	450	520	1000
Type 2	30	50	120	200

(Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-10 Permit suspension and revocation.

(a) A site grading permit may be suspended or revoked if one or more of the following violations have been committed:

- (1) Any violation(s) of the conditions of the preliminary developments plan approval;
- (2) Construction not in accordance with the approved plans;
- (3) Noncompliance with correction notice(s) or stop work order(s); or
- (4) The existence of an immediate danger in a downstream area in the judgement of the engineering and public works director.

(b) If one or more of these conditions is found, a written notice of violations shall be served upon the owner or authorized representative and an immediate stop-work order may be issued. The notice shall set forth the measures necessary to achieve compliance with the plan. Correction of these violations must be started immediately or the owner shall be deemed in violation of this chapter. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-11 Minimum runoff control requirements.

(a) The minimum stormwater control requirements shall provide management measures necessary to accomplish the following:

(1) Comply with all discharge limitations and stormwater management requirements specified in the stormwater management plan (master plan) which includes the proposed development, if available;

(2) If the proposed development is located where a stormwater management plan has not been developed, install stormwater management facilities to limit the two (2) year and 10-year developed peak discharge rates to predeveloped peak discharge rates. The design of these facilities shall be based on procedures contained in the stormwater management design manual or approved by the engineering and public works director;

(3) The requirements, or portions thereof, of subsection (2) above by the engineering and public works director if it can be shown by detailed engineering calculations and analysis which are acceptable to the director that one of the following exists:

a. The installation of stormwater management facilities would not have detrimental effects on reducing downstream flood peaks, or

b. Stormwater management facilities are not needed to protect downstream developments and the downstream drainage system has sufficient capacity to receive any increase in runoff for design storms up to and including the 100-year event, or

c. It is not necessary to install stormwater management facilities to control developed peak discharge rates at the exit to a proposed development and installing facilities would increase flood peaks at some downstream locations, or

d. The engineering and public works director determines that stormwater management facilities are not needed to control developed peak discharge rates and installing such facilities would not be in the best interest of the city;

(4) The requirements, or portions thereof, of subsection (2) above may not be waived if the engineering and public works director determines that not controlling downstream flood peaks would increase known flooding problems, or exceed the capacity of the downstream drainage system;

(5) Control bankfull flow velocities from stormwater management facilities to a level which will not cause erosion problems at the exit of the facilities and immediately downstream.

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(b) For all stormwater management facilities, a hydrologic-hydraulic study shall be done showing how the drainage system will function with and without the proposed facilities. For such studies the following land use conditions shall be used.

(1) For the design of the facility outlet structure, use developed land use conditions for the area within the proposed development and existing land use conditions for upstream areas draining to the facility.

(2) For any analysis of flood flows downstream from the proposed facility, use existing conditions for all downstream areas.

(3) All stormwater management facilities emergency spillways shall be checked using the 100-year storm and routing flows through the facility and emergency spillways. For these analyses, developed conditions shall be used for all areas within the analysis.

(4) The effects of upstream detention facilities can be considered in the hydrologic-hydraulic study only if such facilities have been accepted for maintenance, as detention facilities, by the city, or if the facilities have been identified as regional facilities by the city.

(5) All major portions of the conveyance system through the proposed development (i.e., channels, culverts) shall be analyzed using the 100-year storm. The results of this analysis shall be included in the hydrologic-hydraulic study.

(6) For determining downstream effects of storm runoff from the development including peak flows, volumes of flow, and velocity, the hydrologic-hydraulic study shall extend downstream to a point at which the proposed development represents less than 10 percent of the total watershed draining to this point. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-12 Stormwater management facilities.

(a) Stormwater management facilities may include both structural and nonstructural elements. Natural swales and other natural runoff conduits shall be retained where practicable.

(b) Where additional stormwater management facilities are required to satisfy the minimum control

requirements, the following measures are examples of what may be used in their order of preference:

(1) Stormwater detention structures (dry basins);

(2) Stormwater retention structures (wet ponds);

(3) Facilities designed to encourage overland flow, slow velocities of flow, and flow through buffer zones;

(4) Infiltration practices.

(c) Where detention and retention structures are used, designs which consolidate these facilities into a limited number of large structures will be preferred over designs which utilize a large number of small structures.

(d) Preliminary development plans can be rejected by the engineering and public works director if they incorporate structures and facilities that will demand considerable maintenance, will be difficult to maintain, or utilize numerous small structures if other alternatives are physically possible.

(e) The drainage system and all stormwater management structures within the city (including both public and private portions) will be designed to the same engineering and technical criteria and standards. The engineering services department's review will be the same whether the portion of the drainage system will be under public or private control or ownership.

(f) All stormwater management measures shall be designated in accordance with the design criteria contained in the stormwater management design manual. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-13 Plan requirements.

Preliminary development plans shall include as a minimum the following:

(1) Location, dimensions, elevations and characteristics of all stormwater management facilities;

(2) A determination that no occupied first floor elevation of any structure is below the 100-year plus one (1) foot elevation;

(3) At the discretion of the engineering and public works director, for all portions of the drainage system which are expected to carry between 50 and 150 cfs for the 100-year storm, the 100-year plus one (1) foot flood elevation analysis shall be required. To require the 100-year plus one foot

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flood elevation analysis, the director should determine that one of the following conditions may exist:

- a. The estimated runoff would create a hazard for adjacent property or residents;
- b. The flood limits would be of such magnitude that adjacent residents should be informed of these limits;

(4) For all portions of the drainage system which are expected to carry 150 cfs or more for the 100-year storm, the 100-year plus one foot flood elevation analysis shall be done and flood limits shall be shown on the preliminary development plans;

(5) Preliminary development plans shall include designation of all easements needed for inspection and maintenance of the drainage system and stormwater management facilities. As a minimum, easements shall have the following characteristics:

- a. Provide adequate access to all portions of the drainage system and structures;
- b. Provide sufficient land area for maintenance equipment and personnel to adequately and efficiently maintain the system with a minimum of 10 feet along both sides of all drainage ways, streams, channels, etc., and around the perimeter of all detention and retention facilities. This distance shall be measured from the top of the bank or toe of the dam whichever is applicable.
- c. Restriction on easements shall include prohibiting all fences and structures which would interfere with access to the easement areas and/or the maintenance function of the drainage system;

(6) To improve the aesthetic aspects of the drainage system, a landscape plan for all portions of the drainage system shall be part of the preliminary development plan. This landscape plan shall address the following:

- a. Tree saving and planting plan;
- b. Types of vegetation that will be used for stream bank stabilization, erosion control, sediment control, aesthetics and water quality improvement;
- c. Any special requirements related to the landscaping of the drainage system and efforts necessary to preserve the natural aspects of the drainage system;

(7) The preliminary development plan shall include all engineering calculations needed to design the system and associated structures;

(8) The expected timing of flood peaks through the downstream drainage system shall be assessed when planning the use of detention facilities;

(9) In determining downstream effects from stormwater management structures and the development, hydrologic-hydraulic engineering studies shall extend downstream to a point where the proposed development represents less than 10 percent of the total watershed;

(10) All stormwater management facilities shall be evaluated, using the design and 100-year storms, for design conditions and operating conditions which can reasonably be expected during the life of the facility. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-14 Plan criteria.

The hydrologic criteria to be used for the stormwater concept and preliminary development plans shall be as follows:

(a) 25-year design storm for all cross-drain culverts and drainage designs;

(b) 10-year design storm for all interior culverts and drainage designs;

(c) Two (2) and 10-year design storms for all detention and retention basins using procedures contained in the stormwater management design manual or approved by the engineering and public works director;

(d) All drainage designs shall be checked using the 100-year storm for analysis of local flooding, and possible flood hazards to adjacent structures and/or property;

(e) All hydrologic analysis will be based on land use conditions as specified in Section 5-18-11(b);

(f) For designed storage facilities, a secondary outlet device or emergency spillway shall be provided to discharge the excess runoff in such a way that no danger to loss of life or facility failure is created. The size outlet device or emergency spillway shall be designed to pass the 100-year storm as a minimum requirement. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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Sec. 5-18-15 Professional registration requirements.

(a) Stormwater concept and preliminary development plans that are incidental to the overall or ongoing site design shall be prepared by a qualified registered South Carolina professional engineer, Tier A land surveyor or landscape architect, using acceptable engineering standards and practices. Tier B land surveyor may, for subdivisions, prepare and furnish subdivision plans for storm drainage systems, if the systems do not require the structural design of system components and are restricted to the use, where relevant, of any standards prescribed by local, state or federal authorities. All other stormwater concept and design plans shall be prepared by a qualified registered South Carolina professional engineer, using acceptable engineering standards and practices.

(b) The engineer, surveyor or landscape architect shall perform services only in areas of his/her competence, and shall undertake to perform engineering or land surveying assignments only when qualified by education and/or experience in the specific technical field. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

ARTICLE C.**Ownership and City Participation****Sec. 5-18-16 Ownership of stormwater management facilities.**

(a) Any stormwater management facility which services a single lot or commercial and industrial developments shall be privately owned and maintained; provided, however, the owner thereof shall grant to the city, a perpetual, nonexclusive easement which allows for public inspection and emergency repair.

(b) All stormwater management measures relying on designated vegetated areas or special site features shall be privately owned and maintained as defined on the preliminary development plan.

(c) Most regional stormwater management facilities will be publicly owned and/or maintained.

(d) All other stormwater management facilities shall be publicly owned and/or maintained only if accepted for maintenance by the city. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Sec. 5-18-17 City participation.

(a) When the engineering and public works director determines that additional storage capacity beyond that required by the applicant for on-site stormwater management is necessary in order to enhance or provide for the public health, safety and general welfare, to correct unacceptable or undesirable existing conditions or to provide protection in a more desirable fashion for future development, the engineering and public works director may:

(1) Require that the applicant grant any necessary easements over, through or under the applicant's property to provide access to or drainage for such facility;

(2) Require that the applicant attempt to obtain from the owners of property over, through or under where the stormwater management facility is to be located, any easements necessary for the construction and maintenance of same (and failing the obtaining of such easement the city may, at its option, assist in such matter by purchase, condemnation, dedication or otherwise, and subject to subsection

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(3) below, with any cost incurred thereby to be paid by the city; and/or

(3) Participate financially in the construction of such facility to the extent that such facility exceeds the required on-site stormwater management as determined by the engineering and public works director.

(b) To implement this provision both the city and developer must in agreement with the proposed facility that includes the additional storage capacity and jointly develop a cost sharing plan which is agreeable to all parties. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

ARTICLE D.

Construction, Maintenance and Inspection

Sec. 5-18-18 Requirements.

Construction, maintenance and inspection requirements related to stormwater management facilities are contained in the "Greenville, South Carolina Construction and Maintenance of Stormwater Management Systems" ordinance. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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ARTICLE E.

Miscellaneous Provisions

5-18-19 Variances from requirements.

(a) The engineering and public works director may grant an exception from the requirements of this chapter if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of the chapter will result in unnecessary hardship and not fulfill the intent of the chapter.

(b) A written request for an exception shall be required and shall state the specific variance sought and the jurisdiction therefor. It shall include descriptions, drawings, calculations and any other information that is necessary to evaluate the proposed variance.

(c) Any substantial variance from the preliminary development plan or concept plan shall be referred to all agencies which reviewed the original plan. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-20 Appeals.

(a) Any person aggrieved by a decision of the engineering and public works director (including any decision with reference to the granting or denial of a variance from the terms of this chapter) may appeal same by filing a written notice of appeal with the engineering and public works director within 30 calendar days of the issuance of said decision by the engineering and public works director. The engineering and public works director can then reverse his/her decision or send this notice to the zoning board of adjustments with comments. A notice of appeal shall state the specific reasons why the decision of the engineering and public works director is alleged to be in error and the engineering and public works director shall prepare and send to the board of appeals and appellant, with 15 days of the notice of the appeal, a written response to said notice of appeal.

(b) All such appeals shall be heard by the zoning board of adjustments which is hereby granted specific authority to hear and determine such appeals in a quasi-judicial capacity. Said appeal shall be heard

by the zoning board of adjustments at its next regularly scheduled meeting date, not to exceed 30 days after receipt of the notice of appeal, or at such other time as may be mutually agreed upon in writing by the appellant and the chairperson of the zoning board of adjustments. The zoning board of adjustments will then render a decision within 15 days after the appeal has been heard.

(c) Each party to the appeal shall be entitled to a hearing before the zoning board of adjustments under judicial forms of procedure, at which hearing each party shall have the right to present evidence and sworn testimony of witnesses, to cross-examine witnesses, and to cause a transcription of the proceedings to be prepared.

(d) Should either party be dissatisfied with the decision of the zoning board of adjustments, any appeal of said decision shall be appealed to the Superior Court by writ of certiorari. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-21 Violations—Penalties.

(a) Upon determination that a violation of this chapter has occurred, the owner shall be given a written notice of the violations and the time in which to correct the deficiencies.

(b) If construction violations of the approved plan are occurring, an immediate stop-work may be issued by the engineering and public works director.

(c) Any person violating this chapter or any part thereof, including failing to stop work upon order, shall upon conviction thereof, be fined not more than 200 dollars or imprisoned not more than 30 days for each offense. Each separate interval of 24 hours, or every day, such violations shall be continued, committed or existing, shall constitute a new and separate offense and be punished, as aforesaid, for each separate period of violation.

(d) The city attorney may institute injunctive, mandamus or other appropriate action or proceedings at law or equity for the enforcement of this chapter or to correct violations of this chapter, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

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5-18-22 Grandfather clause.

Any applicant or owner of a parcel of land within the jurisdiction of the city who has constructed the required stormwater management facility or who is in the process of meeting the stormwater management requirements of the law at the time of the effective date of this chapter, may elect to apply to the engineering and public works director for reconsideration under the provisions of this chapter. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-23 Conflict with other laws.

Whenever the provisions of this chapter impose more restrictive standards than are required in or under any other ordinance, the regulations herein contained shall prevail. Whenever the provisions of any other ordinance require more restrictive standards than are required herein, the requirements of such shall prevail. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-24 Severability.

If any term, requirement or provision of this chapter or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this chapter or the application of such terms, requirements and provisions to person or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each term, requirement or provision of this chapter shall be valid and be enforced to the fullest extent permitted by law. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-25 Amendments.

This chapter may be amended in the manner as prescribed by law for its original adoption. Before the city governing body amends this chapter, it must seek the advice of the engineering and public works director who will make a recommendation for each amendment within 30 days of this request. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

5-18-26 Liabilities.

Neither the approval of a plan under the provisions of this chapter nor the compliance with the provisions of this chapter shall relieve any person from the responsibility for damage to any person or property otherwise imposed by the law nor shall it impose any liability upon the city of Greenville, South Carolina for damage to any person or property. (Ord. 92-59, 10/12/92; as amended by Ord. 92-81, 12/14/92)

Chapter 34

STORMWATER MANAGEMENT***Article I. In General**

Secs. 34-1—34-10. Reserved.

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- Sec. 34-13. Applicability of article; responsibility for administration and enforcement.
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Article III. Construction and Maintenance of Stormwater Management Systems

- Sec. 34-51. Title of article.
- Sec. 34-52. Purpose of article.
- Sec. 34-53. Definitions.
- Sec. 34-54. Maintenance standards.
- Sec. 34-55. Fees.
- Sec. 34-56. Construction schedule.
- Sec. 34-57. Conformance with approved plans.
- Sec. 34-58. Temporary use of detention pond as sediment control basin.

*Cross references—Buildings and building regulations, ch. 6; environment, ch. 16; soil erosion and sedimentation control, ch. 30; streets, sidewalks and other public places, ch. 36; subdivisions, ch. 38; storm drainage system improvements for subdivision, § 38-97; stormwater detention and retention basin improvements for subdivisions, § 38-98; floodway regulation improvements in subdivisions, § 38-100; utilities, ch. 44; vegetation, ch. 46; zoning, ch. 50.

State law reference—The Stormwater Management and Sediment Reduction Act, S.C. Code 1976, § 48-14-10 et seq.

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- Sec. 34-59. Maintenance during construction.
- Sec. 34-60. Maintenance covenants.
- Sec. 34-61. Modification of system.
- Sec. 34-62. Protective measures for hazardous basins.
- Sec. 34-63. Storage of runoff on parking lots.
- Sec. 34-64. Dry detention systems and swales.
- Sec. 34-65. Certification of compliance.
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ARTICLE I. IN GENERAL**Secs. 34-1—34-10. Reserved.****ARTICLE II. DESIGN REQUIREMENTS
FOR STORMWATER MANAGEMENT
SYSTEMS****Sec. 34-11. Title of article.**

The provisions of this article will be known as the Stormwater Management Ordinance of Greenville, South Carolina.
(Code 1985, § 5-18-1(a))

Sec. 34-12. Purpose of article.

The purpose of this article is to protect, maintain and enhance the public health, safety and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased stormwater runoff associated with both future land development and existing developed land within the city. Proper management of stormwater runoff will minimize damage to public and private property, ensure a functional drainage system, reduce the effects of development on land and stream channel erosion, assist in the attainment and maintenance of water quality standards, enhance the local environment associated with the drainage system, reduce local flooding, maintain as nearly as possible the predeveloped runoff characteristics of the area, and facilitate economic development while mitigating associated flooding and drainage impacts.
(Code 1985, § 5-18-1(b))

Sec. 34-13. Applicability of article; responsibility for administration and enforcement.

The application of this article and the provisions expressed in this article shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other powers granted by state statute. In addition, if site characteristics indicate that complying with these minimum requirements will not provide adequate design or protection for local property or residents, it is the designer's responsibility to exceed the minimum requirements as

necessary. The city engineer or his designee shall be responsible for the coordination and enforcement of the provisions of this article.
(Code 1985, § 5-18-1(c); Ord. No. 95-31, § 1, 5-22-95)

Sec. 34-14. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

As-built plan means the construction plans with any field changes identified and shown on the plan.

CFP means a capital facilities plan.

City engineer means the duly designated division head of the engineering services division in the city designated to perform the duties of engineer, as specified in this article, or his duly authorized agent.

Cross-drain culvert means a culvert located under a roadway.

Designer means a professional who is permitted to prepare plans and studies required by this article.

Detention structure means a permanent structure for the temporary storage of runoff, which is designed so as not to create a permanent pool of water.

Developed land use conditions means the land use conditions according to the current city zoning map or proposed development plan.

Development, generally, means any of the following actions undertaken by a public or private individual or entity:

- (1) The division of a lot, tract or parcel of land into two or more lots, plots, sites, tracts, parcels or other divisions by plat or deed; or
- (2) Any land change, including, without limitation, clearing, tree removal, grubbing, stripping, dredging, grading, excavating, transporting and filling of land.

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Easement means a grant or reservation by the owner of land for the use of such land by others for a specific purpose, and which must be included in the conveyance of land affected by such easement.

Engineering division means the division responsible for all stormwater management activities and implementation of the provisions of this article.

Erosion means the process by which the ground surface is worn away by the action of wind and/or water.

Existing land use condition means the land use conditions existing at the time of the most recent official aerial photography available from the city.

Impervious means the condition of being impenetrable by water.

Imperviousness means the degree to which a site is impervious.

Infiltration means the passage or movement of water into the soil subsurface.

Interior culvert means a culvert that is not located under a roadway.

Maintenance means any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in section 34-2 and to prevent structural failure of such facilities. Maintenance shall not include actions taken solely for the purpose of enhancing the aesthetic aspects associated with stormwater management facilities.

On-site stormwater management means the design and construction of a facility necessary to control stormwater runoff within and for a single development.

Predeveloped conditions means those land use conditions that existed before any development had taken place on the site, when the site was in its natural undisturbed condition.

Preliminary development plan means the set of drawings and other documents that comprise all of the information and specifications for the drainage systems, structures, concepts and techniques that will be used to control stormwater as re-

quired by this article and the stormwater management design manual. Also included are the supporting engineering calculations and results of any computer analysis.

Preliminary plat means the preliminary plat of a residential subdivision submitted pursuant to the subdivision regulations (chapter 38).

Record survey means a final field survey which locates the visible surface features of a constructed stormwater facility on the ground, but without locating nonvisible or subsurface features such as the actual route and elevation of buried pipe.

Regional stormwater management means the design and construction of a facility necessary to control stormwater runoff within or outside a development and for one or more developments.

Registered civil engineer means a civil engineer properly registered and licensed in the state by the state board of engineering examiners.

Registered land surveyor means a land surveyor properly registered and licensed in the state by the state board of land surveyors.

Registered landscape architect means a landscape architect properly registered and licensed in the state by the state board of licensing examiners.

Retention structure means a permanent structure that provides for the storage of runoff and is designed to maintain a permanent pool of water.

Stormwater concept plan means the overall proposal for a storm drainage system, including stormwater management structures, and supporting documentation as specified in the stormwater management design manual, for each proposed private or public development to the extent permitted by law. Also included are the supporting engineering calculations and results of any computer analysis, if necessary.

Stormwater management means the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner to minimize accelerated channel erosion, increased flood damage,

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and/or degradation of water quality, and in a manner to enhance and ensure the public health, safety and general welfare.

Stormwater management design manual means the manual of design, performance and review criteria for stormwater management practices, prepared under the direction of the city engineer. Revisions to this manual are to be approved by the zoning board of adjustments.

Stormwater management facilities means those structures and facilities that are designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the drainage system.

Stormwater management plan and *stormwater master plan* mean a plan developed for a watershed or part thereof which has been approved by the city council to guide the design and development of the drainage system covered in the plan.

Subdivision.

(1) Subdivision means:

- a. The creation of one or more new streets, alleys or other public ways, or the changing of any rights-of-way or any existing streets, alleys or other public ways.
- b. Any division or redivision of a lot, tract or parcel of land, regardless of its prospective use. Such subdivision may be accomplished by platting or by description by metes and bounds or otherwise into two or more lots or other divisions for sale or improvement.

(2) The following are not defined as subdivisions:

- a. The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the resultant lots are in accordance with the rules and regulations contained in the city subdivision regulations (chapter 38) and the city zoning ordinance (chapter 50).

- b. Division or sale of land by judicial decree, which shall not be deemed a division for purposes of this article.
- c. The acquisition of land for the purpose of widening or opening of streets when the acquisition and work is done by the city, the state or other governmental agency.
- d. The division of land into parcels greater than five acres where no street right-of-way dedication is involved.

Zoning board of adjustments means a board whose purpose is to review appeals to this article and render decisions.

(Code 1985, § 5-18-2; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, §§ 1, 2, 5-22-95)

Cross reference—Definitions generally, § 1-2.

Sec. 34-15. Stormwater master plans.

(a) For those areas that have been selected for master planning, the city engineer should submit for review and approval by resolution of the city council a stormwater management plan for the control of water quantity and quality of any watershed or part thereof within the city.

(b) The stormwater management plan shall serve to guide development as it affects the quantity and quality of runoff from the watershed. Proposed developments found to be in noncompliance with the plan will only be allowed if approved by the zoning board of adjustments.

(c) The stormwater management plan should be periodically reviewed and amended as necessary to keep the plan current and ensure that the objectives of the plan are met. The city engineer shall be responsible for the periodic updating of the plan.

(d) The stormwater management plan shall include basin-specific stormwater management policies and recommendations for the implementation of these policies.

(e) The stormwater management plan shall include alternatives as appropriate for the location of structural and nonstructural private and

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public stormwater management measures and strategies to control the adverse effects of stormwater runoff.

(Code 1985, § 5-18-3; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, § 1, 5-22-95)

Sec. 34-16. Compliance with article.

No person shall develop any land without having provided for appropriate stormwater management measures that control or manage runoff, in compliance with this article.

(Code 1985, § 5-18-4)

Sec. 34-17. Exemptions.

(a) The following development activities are exempt from the provisions of this article and the requirements of providing stormwater management measures:

- (1) Agricultural and forestry activities;
- (2) Additions or modifications to existing detached single-family dwellings;
- (3) Residential developments consisting of one single-family or one duplex dwelling;
- (4) Developments that do not disturb more than 10,000 square feet of land area in total; and
- (5) Residential subdivision developments of less than five acres in total and less than 40 percent impervious area in total.

(b) All runoff quantity requirements related to controlling discharge peak flow from proposed developments are waived when the tract being developed either drains directly into a regulated floodplain without flowing over any other platted parcel or drains directly into a regulated floodplain flowing over another platted parcel having a recorded drainage easement for such purpose as approved by the city engineer.

(Code 1985, § 5-18-5; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-18. Stormwater management design manual.

To assist in the design and evaluation of stormwater management facilities in the city, a stormwater management design manual has been developed. Recommended design procedures and

criteria are presented for conducting hydrologic and hydraulic evaluations. Although the intention of the manual is to establish uniform design practices, it neither replaces the need for engineering judgment nor precludes the use of information not presented. Other accepted engineering procedures may be used to conduct hydrologic and hydraulic studies if approved by the city engineer.

(Code 1985, § 5-18-6; Ord. No. 95-31, § 1, 5-22-95)

Sec. 34-19. Review and approval of plans.

(a) A stormwater concept plan for each development shall be submitted for review by the city engineer prior to submission of the preliminary development plan and construction plans for the entire development, or any portion thereof. Such plans shall be consistent with the appropriate stormwater management plan if available for the area in question.

(b) All preliminary plats of the development shall be consistent with the stormwater concept plan required in subsection (a) of this section, and with the appropriate stormwater management plan, if existing.

(c) Upon approval of the concept plan, the applicant shall submit either two sets of preliminary development plans or two sets of final development plans to the city engineer for review and approval.

(d) Should any preliminary development plan involve any stormwater management facilities or land to be dedicated to public use, the same information shall also be submitted for review and approval to the department having jurisdiction over the land, or other appropriate departments or agencies identified by the city engineer, for review and approval. This preliminary development plan shall serve as the basis for all subsequent construction.

(e) The stormwater concept plan may be reviewed, if needed, with the designer, after city review, where it will be either approved, approved with changes, or rejected. If rejected, changes, additional analysis or other information needed to approve the next submittal of the

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concept plan shall be identified. The city review will be completed within five working days from and after the receipt of the plan.

(f) Within ten working days after the receipt of either the preliminary or final development plan, the city engineer shall issue a decision approving the plan, rejecting the plan, or conditionally approving the plan with modifications.
(Code 1985, § 5-18-7; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, §§ 1, 2, 5-22-95)

Sec. 34-20. Permit requirements.

(a) *Prerequisites for issuance of final occupancy permit.* No final occupancy permit shall be issued without the following:

- (1) Recorded easements for stormwater management facilities.
- (2) Receipt of an as-built plan which includes a certification of the storm drainage system.

(b) *Prerequisites for issuance of site grading permit.* No site grading permit shall be issued or modified without the following:

- (1) Right of entry for emergency maintenance if necessary.
- (2) Any off-site easements needed.
- (3) An approved preliminary development plan or stormwater concept plan, as appropriate.

(c) *Conformance with approved plans.* The approved preliminary development plan shall contain certification by the applicant that all land clearing, construction, development and drainage will be done according to the preliminary development plan or previously approved revisions. Any and all site grading permits may be revoked at any time if the construction of stormwater management facilities is not in strict accordance with approved plans.

(d) *County, state and federal permits.* In addition to the plans and permits required from the city, applicants shall obtain all county, state and federal permits required for the proposed development.
(Code 1985, § 5-18-8)

Sec. 34-21. Fees.

Fees for plan review and other fees associated with this article shall be fixed from time to time by the city council and are set forth in the fee schedule in appendix A to this Code.
(Code 1985, § 5-18-9)

Sec. 34-22. Suspension or revocation of site grading permit; notice of violation; stop work orders.

(a) *Suspension or revocation of site grading permit.* A site grading permit may be suspended or revoked if one or more of the following violations have been committed:

- (1) Any violation of the conditions of either the preliminary or final development plan approval;
- (2) Construction not in accordance with the approved plans;
- (3) Noncompliance with a correction notice or stop work order; or
- (4) The existence of an immediate danger in a downstream area in the judgment of the city engineer.

(b) *Notice of violation; stop work orders.* If one or more of these conditions is found, a written notice of violation shall be served upon the owner or authorized representative and an immediate stop work order may be issued. The notice shall set forth the measures necessary to achieve compliance with the plan. Correction of these violations must be started immediately or the owner shall be deemed in violation of this article.
(Code 1985, § 5-18-10; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-23. Minimum runoff control requirements.

(a) The minimum stormwater control requirements shall provide management measures necessary to accomplish the following:

- (1) The development shall comply with all discharge limitations and stormwater management requirements specified in the

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stormwater management plan (master plan) which includes the proposed development, if available.

- (2) If the proposed development is located where a stormwater management plan has not been developed, stormwater management facilities shall be installed to limit the two-year and ten-year developed peak discharge rates to predeveloped peak discharge rates. The design of these facilities shall be based on procedures contained in the stormwater management design manual or approved by the city engineer.
- (3) The requirements, or portions thereof, of subsection (a)(2) of this section may be waived by the city engineer if it can be shown by detailed engineering calculations and analysis acceptable to the city engineer that one of the following exists:
 - a. The installation of stormwater management facilities would not have detrimental effects on reducing downstream flood peaks;
 - b. Stormwater management facilities are not needed to protect downstream developments and the downstream drainage system has sufficient capacity to receive any increase in runoff for design storms up to and including the 100-year event;
 - c. It is not necessary to install stormwater management facilities to control developed peak discharge rates at the exit to a proposed development and installing facilities would increase flood peaks at some downstream locations; or
 - d. The city engineer determines that stormwater management facilities are not needed to control developed peak discharge rates and installing such facilities would not be in the best interest of the city.
- (4) The requirements, or portions thereof, of subsection (a)(2) of this section may not be waived if the city engineer determines

that not controlling downstream flood peaks would increase known flooding problems or exceed the capacity of the downstream drainage system.

- (5) Bankfull flow velocities from stormwater management facilities shall be controlled to a level which will not cause erosion problems at the exit of the facilities and immediately downstream.
 - (b) For all stormwater management facilities, a hydrologic-hydraulic study shall be done showing how the drainage system will function with and without the proposed facilities. For such studies the following land use conditions shall be used:
 - (1) For the design of the facility outlet structure, developed land use conditions for the area within the proposed development and existing land use conditions for upstream areas draining to the facility shall be used.
 - (2) For any analysis of flood flows downstream from the proposed facility, existing conditions for all downstream areas shall be used.
 - (3) All stormwater management facility emergency spillways shall be checked using the 100-year storm and routing flows through the facility and emergency spillways. For these analyses, developed conditions shall be used for all areas within the analysis.
 - (4) The effects of upstream detention facilities can be considered in the hydrologic-hydraulic study only if such facilities have been accepted for maintenance as detention facilities by the city, or if the facilities have been identified as regional facilities by the city.
 - (5) All major portions of the conveyance system through the proposed development (i.e., channels and culverts) shall be analyzed using the 100-year storm. The results of this analysis shall be included in the hydrologic-hydraulic study.
 - (6) For determining downstream effects of storm runoff from the development, in-

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cluding peak flows, volumes of flow and velocity, the hydrologic-hydraulic study shall extend to the first point of significant impact to ensure no adverse effects resulting from exceeding the capacity of the downstream system. Points of significant impact include inlets to cross drains, closed systems, defined and undefined channels, and retention and detention facilities. The second point of significant impact may need to be included in the study if it is located within close proximity (approximately 500 feet) of the first point of significant impact. In basins where a history of flooding is known to exist as determined by the city engineer, the hydrologic-hydraulic study shall extend downstream to a point at which the proposed development represents ten percent of the total watershed draining to this point.

(Code 1985, § 5-18-11; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-24. General design standards.

(a) Stormwater management facilities may include both structural and nonstructural elements. Natural swales and other natural runoff conduits shall be retained where practicable.

(b) Where additional stormwater management facilities are required to satisfy the minimum control requirements, the following measures are examples of what may be used, in their order of preference:

- (1) Stormwater detention structures (dry basins).
- (2) Stormwater retention structures (wet ponds).
- (3) Facilities designed to encourage overland flow, slow velocities of flow, and flow through buffer zones.
- (4) Infiltration practices.

(c) Where detention and retention structures are used, designs which consolidate these facilities into a limited number of large structures will be preferred over designs which utilize a large number of small structures.

(d) Either the preliminary or final development plan may be rejected by the city engineer if the plan incorporates structures and facilities that will demand considerable maintenance or will be difficult to maintain, or utilizes numerous small structures if other alternatives are physically possible.

(e) The drainage system and all stormwater management structures within the city, including both public and private portions, will be designed to the same engineering and technical criteria and standards. The engineering division's review will be the same whether the portion of the drainage system will be under public or private control or ownership.

(f) All stormwater management measures shall be designed in accordance with the design criteria contained in the stormwater management design manual.

(Code 1985, § 5-18-12; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-25. Contents of development plans.

Preliminary and/or final development plans shall include as a minimum the following:

- (1) The plan shall include the location, dimensions, elevations and characteristics of all stormwater management facilities.
- (2) The plan shall include a determination that no occupied first floor elevation of any structure is below the 100-year plus one foot elevation.
- (3) At the discretion of the city engineer, for all portions of the drainage system which are expected to carry between 50 and 150 cfs for the 100-year storm, the 100-year plus one foot flood elevation analysis may be required provided one of the following conditions exists:
 - a. The estimated runoff would create a hazard for adjacent property or residents.
 - b. The flood limits would be of such magnitude that adjacent residents should be informed of these limits.

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- (4) For all portions of the drainage system which are expected to carry 150 cfs or more for the 100-year storm, the 100-year plus one foot flood elevation analysis shall be done and flood limits shall be shown on the preliminary and/or final development plan.
- (5) Preliminary and final development plans shall include designation of all easements needed for inspection and maintenance of the drainage system and stormwater management facilities. As a minimum, easements shall have the following characteristics:
 - a. Easements shall provide adequate access to all portions of the drainage system and structures.
 - b. Easements shall provide sufficient land area for maintenance equipment and personnel to adequately and efficiently maintain the system, with a minimum of ten feet along both sides of all drainageways, streams, channels, etc., and around the perimeter of all detention and retention facilities. This distance shall be measured from the top of the bank or toe of the dam, whichever is applicable.
 - c. Restrictions on easements shall include prohibiting all fences and structures which would interfere with access to the easement areas and/or the maintenance function of the drainage system.
- (6) To improve the aesthetic aspects of the drainage system, a landscape plan for all portions of the drainage system may be required as part of either the preliminary or final development plan. This landscape plan shall address the following:
 - a. Tree saving and planting plan.
 - b. Types of vegetation that will be used for stream bank stabilization, erosion control, sediment control, aesthetics and water quality improvement.

- c. Any special requirements related to the landscaping of the drainage system and efforts necessary to preserve the natural aspects of the drainage system.

- (7) The preliminary and the final development plan shall include all engineering calculations needed to design the system and associated structures.
- (8) The expected timing of flood peaks through the downstream drainage system shall be assessed when planning the use of detention facilities.
- (9) In determining downstream effects from stormwater management structures and the development, hydrologic-hydraulic engineering studies shall extend downstream to a point where the proposed development represents less than ten percent of the total watershed.

(Code 1985, § 5-18-13; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-26. Hydrologic criteria for drainage design.

The hydrologic criteria to be used for the stormwater concept plan and preliminary and final development plan shall be as follows:

- (1) The 25-year design storm shall be used for all cross-drain culverts and drainage designs.
- (2) The ten-year design storm shall be used for all interior culverts and drainage designs.
- (3) The two- and ten-year design storms shall be used for all detention and retention basins, using procedures contained in the stormwater management design manual or approved by the city engineer.
- (4) All drainage designs shall be checked using the 100-year storm for analysis of local flooding and possible flood hazards to adjacent structures and/or property.
- (5) All hydrologic analysis will be based on land use conditions as specified in section 34-23(b).

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- (6) For designed storage facilities, a secondary outlet device or emergency spillway shall be provided to discharge the excess runoff in such a way that no danger of loss of life or facility failure is created. The size outlet device or emergency spillway shall be designed to pass the 100-year storm as a minimum requirement.

(Code 1985, § 5-18-14; Ord. No. 94-53, § 1(m), 10-10-94; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-27. Plans to be prepared by qualified professional.

(a) Stormwater concept plans and preliminary and final development plans that are incidental to the overall or ongoing site design shall be prepared by a qualified registered South Carolina professional engineer, Tier B land surveyor or landscape architect, using acceptable engineering standards and practices. A Tier B land surveyor may, for subdivisions, prepare and furnish subdivision plans for storm drainage systems, if the systems do not require the structural design of system components and are restricted to the use, where relevant, of any standards prescribed by local, state or federal authorities. All other stormwater concept and design plans shall be prepared by a qualified registered South Carolina professional engineer, using acceptable engineering standards and practices.

(b) The engineer, surveyor or landscape architect shall perform services only in areas of his competence, and shall undertake to perform engineering or land surveying assignments only when qualified by education and/or experience in the specific technical field.

(Code 1985, § 5-18-15; Ord. No. 95-31, § 2, 5-22-95)

Sec. 34-28. Ownership of facilities.

(a) Any stormwater management facility which services a single lot or commercial and industrial developments shall be privately owned and maintained; provided, however, the owner thereof shall grant to the city a perpetual, nonexclusive easement which allows for public inspection and emergency repair.

(b) All stormwater management measures relying on designated vegetated areas or special site features shall be privately owned and maintained as defined on the preliminary development plan.

(c) Most regional stormwater management facilities will be publicly owned and/or maintained.

(d) All other stormwater management facilities shall be publicly owned and/or maintained only if accepted for maintenance by the city.
(Code 1985, § 5-18-16)

Sec. 34-29. Authority to require additional storage capacity; city participation in provision of facilities.

(a) When the city engineer determines that additional storage capacity beyond that required by the applicant for on-site stormwater management is necessary in order to enhance or provide for the public health, safety and general welfare, to correct unacceptable or undesirable existing conditions, or to provide protection in a more desirable fashion for future development, the city engineer may:

- (1) Require that the applicant grant any necessary easements over, through or under the applicant's property to provide access to or drainage for such facility;
- (2) Require that the applicant attempt to obtain, from the owners of property over, through or under which the stormwater management facility is to be located, any easements necessary for the construction and maintenance of the stormwater management facility, and failing the obtaining of such easement the city may, at its option, assist in such matter by purchase, condemnation, dedication or otherwise, and, subject to subsection (a)(3) of this section, with any cost incurred thereby to be paid by the city; and/or
- (3) Participate financially in the construction of such facility to the extent that such facility exceeds the required on-site stormwater management as determined by the city engineer.

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(b) To implement this section, both the city and the developer must be in agreement with the proposed facility that includes the additional storage capacity and jointly develop a cost sharing plan which is agreeable to all parties.

(Code 1985, § 5-18-17; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-30. Construction, maintenance and inspection requirements.

Construction, maintenance and inspection requirements related to stormwater management facilities are contained in article III of this chapter.

(Code 1985, § 5-18-18)

Sec. 34-31. Variances.

(a) The city engineer may grant an exception from the requirements of this article if there are exceptional circumstances applicable to the site such that strict adherence to the provisions of this article will result in unnecessary hardship and not fulfill the intent of this article.

(b) A written request for an exception shall be required and shall state the specific variance sought and the jurisdiction therefor. It shall include descriptions, drawings, calculations and any other information that is necessary to evaluate the proposed variance.

(c) Any substantial variance from the preliminary development plan or concept plan shall be referred to all agencies which reviewed the original plan.

(Code 1985, § 5-18-19; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-32. Appeals.

(a) Any person aggrieved by a decision of the city engineer under this article, including any decision with reference to the granting or denial of a variance from the terms of this article, may appeal the decision by filing a written notice of appeal with the city engineer within 30 calendar days of the issuance of the decision by the city engineer. The city engineer may then reverse his decision or send this notice to the zoning board of adjustments with comments. A notice of appeal

shall state the specific reasons why the decision of the city engineer is alleged to be in error. The city engineer shall prepare and send to the board of appeals and the appellant, within 15 days of the notice of the appeal, a written response to the notice of appeal.

(b) All such appeals shall be heard by the zoning board of adjustments, which is hereby granted specific authority to hear and determine such appeals in a quasijudicial capacity. The appeal shall be heard by the zoning board of adjustments at its next regularly scheduled meeting date, not to exceed 30 days after receipt of the notice of appeal, or at such other time as may be mutually agreed upon in writing by the appellant and the chairperson of the zoning board of adjustments. The zoning board of adjustments will then render a decision within 15 days after the appeal has been heard.

(c) Each party to the appeal shall be entitled to a hearing before the zoning board of adjustments under judicial forms of procedure; at which hearing each party shall have the right to present evidence and sworn testimony of witnesses, to cross examine witnesses, and to cause a transcription of the proceedings to be prepared.

(d) Should either party be dissatisfied with the decision of the zoning board of adjustments, any appeal of the decision shall be appealed to the superior court by writ of certiorari.

(Code 1985, § 5-18-20; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-33. Enforcement generally; penalty.

(a) *Notice of violation.* Upon determination that a violation of this article has occurred, the owner shall be given a written notice of the violation and the time in which to correct the deficiencies.

(b) *Stop work orders.* If construction violations of the approved plan are occurring, an immediate stop work order may be issued by the city engineer.

(c) *Penalty.* Any person violating this article or any part thereof, including failing to stop work upon order, shall upon conviction thereof be punished in accordance with section 1-5. Each separate interval of 24 hours, or every day, such

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violations shall be continued, committed or existing shall constitute a new and separate offense and be punished as provided in this subsection for each separate period of violation.

(d) *Additional remedies.* The city attorney may institute injunctive, mandamus or other appropriate actions or proceedings at law or equity for the enforcement of this article or to correct violations of this article, and any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

(Code 1985, § 5-18-21; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-34. Existing facilities.

Any applicant or owner of a parcel of land within the jurisdiction of the city who has constructed the required stormwater management facility, or who is in the process of meeting the stormwater management requirements of the law at the time of the effective date of the ordinance from which this article is derived, may elect to apply to the city engineer for reconsideration under the provisions of this article.

(Code 1985, § 5-18-22; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-35. Conflicting regulations.

Whenever the provisions of this article impose more restrictive standards than are required in or under any other ordinance, the regulations contained in this article shall prevail. Whenever the provisions of any other ordinance require more restrictive standards than are required in this article, the requirements of such ordinance shall prevail.

(Code 1985, § 5-18-23)

Sec. 34-36. Amendments to article.

This article may be amended in the manner as prescribed by law for its original adoption. Before the city council amends this article, it must seek

the advice of the city engineer, who will make a recommendation for each amendment within 30 days of this request.

(Code 1985, § 5-18-25; Ord. No. 94-53, § 1(m), 10-10-94)

Sec. 34-37. Liability for damages.

Neither the approval of a plan under the provisions of this article nor compliance with the provisions of this article shall relieve any person from the responsibility for damage to any person or property otherwise imposed by the law, nor shall this article impose any liability upon the city for damage to any person or property.

(Code 1985, § 5-18-26)

Secs. 34-38—34-50. Reserved.

ARTICLE III. CONSTRUCTION AND MAINTENANCE OF STORMWATER MANAGEMENT SYSTEMS

Sec. 34-51. Title of article.

This article will be known as Greenville, South Carolina, Construction and Maintenance of Stormwater Management Systems.
(Code 1985, § 5-16-1)

Sec. 34-52. Purpose of article.

(a) Improper construction and maintenance of stormwater management systems may result in system failures which cause soil erosion and downstream flooding. Because of the endangerment to life, health and property and the inconvenience to the general public, such improper construction and maintenance is declared to be a public nuisance.

(b) The purpose of this article is to ensure proper construction and maintenance of stormwater management systems and to ensure that these systems are built and maintained in accordance with the approved plan.

(Code 1985, § 5-16-2)

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Sec. 34-53. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

City engineer means the duly designated department head of engineering in the city, licensed and registered in the state to perform the duties of engineer, as specified in this article, or his duly authorized agent.

Construction means any building or erection of a structure, or any preparation for building or erection of a structure.

Designer means a registered landscape architect or registered civil engineer.

Detention pond means an earthen basin, normally dry or containing very little water, which is designed to fill only during runoff events.

Drainage is a general term applied to the removal of surface or subsurface water from a given area either by gravity via natural means, or by systems constructed to so remove water, and is commonly applied in this article to surface water.

Erosion means the movement of soil particles and/or aggregate by the action of water, wind, air and gravity.

Land disturbing activity means any use of the land by any person in residential, industrial, educational, institutional or commercial development, or highway and road construction and maintenance, that results in a change in the natural cover or topography and that may cause or contribute to erosion.

Owner means the individual, partnership, firm, association, joint venture, public or private corporation, trust estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision, any interstate body, or any legal entity who owns a legal interest in the property, or the person in control of the property, which the stormwater management system is designed to serve.

Person engaged in or conducting land disturbing activity means the individual, partnership, firm, association, joint venture, public or private

corporation, trust estate, commission, board, public or private institution, utility, cooperative, state agency, municipality or other political subdivision, any interstate body, or any legal entity who initiates and is financially responsible for the project which necessitates the land disturbing activity.

Registered civil engineer means a civil engineer properly registered and licensed in the state by the state board of engineering examiners.

Registered landscape architect means a landscape architect properly registered and licensed in the state by the state board of landscape licensing examiners.

Retention pond means an earthen basin which maintains a permanent volume of water for recreational and aesthetic functions but is primarily used for the temporary storage of runoff.

Runoff means that portion of the precipitation falling on the land which reaches the drainage system.

Sediment means solid material, both mineral and organic, that:

- (1) Is in suspension;
- (2) Is being transported; or
- (3) Has been moved from its site of origin by air, water, ice or gravity as a product of erosion.

Sediment control basin means a temporary earthen basin with a controlled stormwater release structure used to intercept soil particles before they enter the natural terrain.

Stormwater management and sediment control plan and *plan* mean a set of drawings, other documents, and supporting calculations submitted by a person as a prerequisite to obtaining a permit to undertake a land disturbing activity, which contains all the information and specifications required by the city.

Stormwater management system and *system* mean the method of restraint of excess stormwater from developments, which includes such devices as detention ponds, retention ponds, underground detention, parking lot storage, and gravel and/or grass areas to limit runoff.

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Subdivision.

(1) Subdivision means:

- a. The creation of one or more new streets, alleys or other public ways, or the changing of any rights-of-way or any existing streets, alleys or other public ways.
- b. Any division or redivision of lot, tract or parcel of land, regardless of its prospective use. Such subdivision may be accomplished by platting or by description by metes and bounds or otherwise into two or more lots or other divisions for sale or improvement.

(2) The following are not defined as subdivisions:

- a. The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the resultant lots are in accordance with the rules and regulations contained in this Code and the city zoning ordinance (chapter 50).
- b. Division or sale of land by judicial decree, which shall not be deemed a division for purposes of this article.
- c. The acquisition of land for the purpose of widening or opening of streets when the acquisition and work is done by the city, the state or other governmental agency.
- d. The division of land into parcels greater than five acres where no street right-of-way dedication is involved.

Underground detention means a structure, pipe, catchbasin or manhole which is used for the temporary storage of stormwater.

Vegetative practices means measures for the stabilization of erosion- or sediment-producing areas by covering the soil with:

- (1) Permanent seeding or planting, producing long-term vegetative cover;

- (2) Short-term seeding, producing temporary vegetative cover; or

- (3) Sodding, covering areas with turf or perennial sod-forming grass.

(Code 1985, § 5-16-3)

Cross reference—Definitions generally, § 1-2.

Sec. 34-54. Maintenance standards.

Proper maintenance includes the prevention of deterioration in the stormwater management system and the repair or replacement of failed system components. Proper maintenance shall include but shall not be limited to:

- (1) Fertilization and vegetative practices, as well as cutting and/or spraying with an approved herbicide to remove undesirable vegetation.
- (2) Removal of all foreign materials from the system.
- (3) Maintaining a slope of no less than 0.5 percent on the bottom of retention and detention ponds.
- (4) Removal of all depressions in a normally dry detention facility where water might pocket when the water level is receding.
- (5) Removal of silt from the system if:
 - a. The primary outlet capacity is reduced by 25 percent of the maximum design discharge; and/or
 - b. The storage volume is reduced by 25 percent of the design storage volume.
- (6) Using an aquatic weed control program in permanently wet structures to prevent an overgrowth of vegetation in the pond. Manual harvesting is preferred. Fish may be stocked in permanently wet retention and detention ponds.
- (7) Repair of erosion or other damage.
- (8) Any other maintenance-related item that obstructs the proper functioning of the system.

(Code 1985, § 5-16-4)

Sec. 34-55. Fees.

When applying for approval of a stormwater management and sediment control plan, a nonre-

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fundable fee for construction inspections of stormwater management systems shall be included with the application.
(Code 1985, § 5-16-5(1))

Sec. 34-56. Construction schedule.

An anticipated construction schedule for the stormwater management system, identifying proposed starting and completion dates and relative timing of key events of retention or detention ponds, shall be submitted with the sedimentation and erosion control plan for approval by the city engineer. The construction schedule for the system must demonstrate to the city engineer that all proposed land disturbing activity is included in the initial phase of project construction.
(Code 1985, § 5-16-5(2))

Sec. 34-57. Conformance with approved plans.

All stormwater management systems must be installed in accordance with the design and in the time schedule approved by the city engineer.
(Code 1985, § 5-16-5(3))

Sec. 34-58. Temporary use of detention pond as sediment control basin.

During construction, a detention pond may also serve the dual role of a sediment control basin. In such instances, it must be clearly indicated on the stormwater management and sediment control plan submitted to the city engineer.
(Code 1985, § 5-16-5(4))

Sec. 34-59. Maintenance during construction.

The owner's responsibility for maintenance of the stormwater management system shall begin upon the issuance of the site grading permit.
(Code 1985, § 5-16-5(5))

Sec. 34-60. Maintenance covenants.

For stormwater management systems within a subdivision, the owner shall file for record, in the office of the county register of mesne conveyance, covenants running with the land imposing the duty to maintain such basins. Failure to comply

with the maintenance covenants shall constitute a public nuisance. The city may notify the owner of conditions needing correction, may require that the owner take such action as is necessary to correct the conditions, and if the conditions are not corrected may have city employees or a person employed for that purpose enter upon the property to correct the conditions. The cost of such action shall become a lien upon the real estate and shall be collectable in the same manner as municipal taxes.

(Code 1985, § 5-16-5(6))

Sec. 34-61. Modification of system.

No stormwater management system required by the city may be modified or altered in any way without prior written approval from the city engineer.

(Code 1985, § 5-16-5(7))

Sec. 34-62. Protective measures for hazardous basins.

Detention basins and/or retention basins exceeding two feet in depth, measured from the bottom of the emergency spillway, and with any side slopes steeper than 3:1, shall be considered hazardous to life and shall be required to have protective measures installed to ensure the health, safety and welfare of the general public.

(Code 1985, § 5-16-5(8))

Sec. 34-63. Storage of runoff on parking lots.

Storage of stormwater on the surface of parking lots shall be limited to a maximum depth of six inches within any designated parking space.

(Code 1985, § 5-16-5(9))

Sec. 34-64. Dry detention systems and swales.

(a) *Drainage.* Normally dry detention systems and swales should be designed to drain within three days upon termination of surface and sub-surface runoff.

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(b) *Bottom material.* Normally dry swales and detention pond bottoms should be constructed with a gravel blanket or other measures to minimize the creation of tire ruts during maintenance activities.

(Code 1985, § 5-16-5(10), (11))

Sec. 34-65. Certification of compliance.

Upon completion of construction, the designer of the stormwater management system shall provide written certification that the facility has been constructed in conformance with approved plans.

(Code 1985, § 5-16-5(12))

Sec. 34-66. Inspections.

(a) The city engineer shall periodically inspect stormwater management systems for which permits have been issued to determine if systems are functioning in accordance with the approved plan.

(b) If, through inspection, it is determined that the owner or the person engaged in stormwater management system construction has failed to comply with an approved plan, or is operating a system not in compliance with an approved plan, a written notice of the violation shall be served by hand delivery or by certified mail upon that person. The notice shall set forth the necessary measures required to achieve compliance with the plan and shall state the time within which such measures must be completed. If the person engaged in the stormwater management system construction fails to comply within the time specified, he shall be deemed in violation of this article.

(c) The city engineer shall conduct such inspections at a frequency he deems necessary to carry out his duties as prescribed in this article. For this purpose, the city engineer may enter any property, public or private, for the purpose of inspecting the sites of stormwater management systems.

(d) No person shall refuse entry or access to the city engineer when he requests entry onto the private property for the purpose of inspection and presents appropriate credentials, nor shall any

person obstruct, hamper or interfere with the actions of city engineer while he is in the process of carrying out his official duties.

(Code 1985, § 5-16-6)

Sec. 34-67. Enforcement generally; penalties.

(a) *Notice of violation.* Upon determination that a violation of this article has occurred, the owner shall be given a written notice of the violation and the time in which to correct the deficiencies. No penalty shall be assessed until the owner has been notified of the violation and the time listed to correct the deficiencies has expired.

(b) *Stop work order.* If a plan has been submitted and approved, but construction violations of the plan are occurring, an immediate stop work order may be issued by the city engineer.

(c) *Criminal penalty.* Any person violating this article or any part thereof, including failing to stop work upon order, shall upon conviction thereof be punished in accordance with section 1-5.

(d) *Civil penalty.* Any person who violates any provision of this article or any part thereof, including failing to stop work upon order, or who initiates or continues a land disturbing activity for which a stormwater management and sediment control plan is required except in accordance with the terms, conditions and provisions of an approved plan, is subject to a civil penalty of not more than \$1,000.00 for each offense. The city attorney is authorized to initiate an action in the circuit court to collect this penalty. Each separate interval of 24 hours, or every day, such violations shall be continued, committed or existing shall constitute a new and separate offense and be punished, as provided in this subsection, for each separate period of violation.

(e) *Additional remedies.* The city attorney may obtain injunctive relief to enjoin violations of the article. Any person damaged as a result of such violation may, upon a proper showing of such damages, obtain relief therefrom in a civil action. (Code 1985, § 5-16-7)

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Sec. 34-68. Conflicting regulations.

Whenever the provisions of this article impose more restrictive standards than are required in or under any other ordinance, the regulations contained in this article shall prevail. Whenever the provisions of any other ordinance require more restrictive standards than are required in this article, the requirements of such ordinance shall prevail.

(Code 1985, § 5-16-8(a))

Sec. 34-69. Amendments to article.

This article may be amended in the manner as prescribed by law for its original adoption. Before the city council amends this article, it must seek the advice of the city engineer, who will make a recommendation for each amendment within 30 days of the request.

(Code 1985, § 5-16-8(b))

Sec. 34-70. Liability for damages.

Neither the approval of a plan under the provisions of this article nor compliance with the provisions of this article shall relieve any person from the responsibility for damage to any person or property otherwise imposed by law, nor shall it impose any liability upon the city for damage to any person or property.

(Code 1985, § 5-16-8(c))

Secs. 34-71—34-90. Reserved.

ARTICLE IV. STORMWATER MANAGEMENT UTILITY*

Sec. 34-91. Findings.

The city council has made the following findings:

- (1) The management and regulation of stormwater runoff and sediment is necessary to reduce pollution, siltation, sedimentation, local flooding and stream channel erosion, all of which impact adversely

on land and water resources and the health, safety, property and welfare of the residents of the city;

- (2) The city maintains a system of stormwater management facilities, including but not limited to inlets, conduits, manholes and certain drainage easements;
- (3) The stormwater management facilities and components of the city need to be regularly rehabilitated, upgraded or expanded, and additional stormwater management facilities and measures need to be installed throughout the city;
- (4) The city needs to upgrade its capability to maintain existing and future stormwater management facilities and measures;
- (5) All parcels of real property in the city, particularly those with improvements, both use or benefit from the stormwater management system and program; and the improvement of existing facilities and construction of additional facilities in the system will directly or indirectly benefit the owners of all real estate;
- (6) Continued growth in the city will contribute to the need for improvements in and maintenance and regulation of the stormwater management system;
- (7) The extent of use of the stormwater management system by all parcels of real property depends on factors that influence runoff, such as land use, intensity of development, amount of impervious surface, and location in a particular watershed or basin;
- (8) The city can best manage and regulate the control of stormwater by a policy which regulates the use of real property, both private and public, and which takes reasoned, measured steps to involve the city in additional methods of participation and regulation;
- (9) Owners of real property should finance the stormwater management system to the extent they and the persons they permit to utilize their property contribute to the need for the system, and fees or

*Cross reference--Utilities, ch. 44.

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other charges therefor should bear a substantial relationship to the cost of the service; and

- (10) It is in the best interests of the citizens of this city and, most specifically, the owners of real property, that a stormwater management utility and stormwater management utility fee system be established by ordinance and implemented as part of the city's utility special revenue fund, by whatever name designated.

(Ord. No. 95-68, § 1, 9-11-95)

Sec. 34-92. Title of article; statutory authority.

This article may be cited as the Stormwater Management Utility Ordinance of the City of Greenville and is adopted pursuant to S.C. Code 1976, § 48-14-10 et seq., S.C. Code 1976, § 5-7-30, and South Carolina Land Resources Conservation Commission Regulations 72-300 through 72-316. (Ord. No. 95-68, § 2, 9-11-95)

Sec. 34-93. Definitions.

(a) Unless the context specifically indicates otherwise, the meanings of words and terms used in this article shall be as set forth in South Carolina Land Resources Conservation Commission Regulation 72-301, *mutatis mutandis*.

(b) The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Developed multi-residential and nonresidential property means developed property which does not serve the primary purpose of providing permanent dwelling units for single-family detached units and duplexes, regardless of the zoning district in which such property is located. Such property shall include but not be limited to triplexes, apartment buildings and complexes, condominiums, boardinghouses, commercial properties, industrial properties, parking lots, recreational, institutional and governmental facilities, hotels, offices, schools and other educational facilities, theaters and other facilities for performances, and churches and other religious institutions.

Developed property means real property which has been altered from its natural state by the addition and attachment of any improvements such as buildings, structures or other impervious area. For new construction, property shall be considered developed property upon final approval of site improvements by the city.

Developed residential property means developed property which serves the primary purpose of providing a permanent dwelling unit or units, regardless of the zoning district in which such property is located, for single-family detached units and duplexes, and which may or may not have accessory uses related to the purpose of providing permanent dwelling facilities.

Equivalent residential unit (ERU) means the total impervious area of a typical single-family residential property, and is defined as the median impervious area of a representative sample of all developed residential properties in the single-family residential category. The equivalent residential unit is 2,389 square feet.

Fee means the annual monetary amount charged to a property owner of record of real property for the services provided by the stormwater utility system and program.

Impervious surface area means a surface which is compacted or covered with material that is resistant to infiltration by water, including but not limited to most conventional surfaced streets, roofs, sidewalks, parking lots and other similar structures.

Property owner of record means the person identified as owner by county tax records.

Revenues means all fees, assessments or other income received by the stormwater utility, including but not limited to amounts received from the investment or deposit of monies in any fund or account, and all amounts received as gifts or donations, and the proceeds from the sale of bonds to finance the stormwater management program, or any other type of funds derived from grants, charges or loans which by purpose or effect relate to stormwater management activities.

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Undeveloped multi-residential and nonresidential property means undeveloped property located within a zoning district in which multifamily, industrial, service or commercial uses are included as permitted uses.

Undeveloped residential property means undeveloped property in a district zoned primarily for detached single-family dwelling units and duplexes, but not including as permitted uses industrial, service and commercial uses.

(Ord. No. 95-68, § 3, 9-11-95)

Cross reference—Definitions generally, § 1-2.

Sec. 34-94. Civil penalty.

Any person who violates any provision of this article shall be subject to a civil penalty of not more than \$1,000.00, or such additional maximum amount as may become authorized by state law, provided the owner or other person deemed to be in violation has been notified of a violation. Notice shall be deemed achieved when sent by regular United States mail to the last known address reflected on the county tax records, or such other address as has been provided by the person to the city. Each day of continuing violation shall be deemed a separate violation. If payment is not received or equitable settlement reached within 30 days after demand for payment is made, a civil action may be filed on behalf of the city in the circuit court to recover the full amount of the penalty. This provision on penalties shall be in addition to and not in lieu of other provisions on penalties, civil or criminal, remedies and enforcement which may otherwise apply.

(Ord. No. 95-68, § 13, 9-11-95)

Sec. 34-95. Stormwater management utility established; administration; powers and duties.

The city council hereby establishes a stormwater management utility to carry out the purposes, functions and responsibilities set forth in this article. The governing body of the stormwater management utility shall be the city council. The city manager shall administer the stormwater management utility through the public works department or such other departments and divisions as the city manager shall designate. The stormwater management utility shall have the

following powers and duties, which powers and duties are not necessarily exclusive to the stormwater management utility:

- (1) Stormwater management planning and preparation of comprehensive watershed master plans for stormwater management.
- (2) Regular inspections and maintenance of public stormwater management facilities and measures for the construction thereof, as well as regular inspections of private stormwater management facilities.
- (3) Maintenance and improvements of stormwater management facilities that have been accepted by the city for purposes of stormwater management.
- (4) Plan review and inspection of sediment control and stormwater management plans, measures and practices.
- (5) Retrofitting designated watersheds to reduce existing flooding problems or to improve water quality.
- (6) Acquisition of interests in land, including easements.
- (7) Design and construction of stormwater management facilities and measures and acquisition of equipment.
- (8) Water quantity and water quality management, including monitoring surveillance.
- (9) Any and all powers and duties delegated or granted to it as a local government implementing agency under the laws and regulations of the state and the ordinances of the city.

(Ord. No. 95-68, § 4, 9-11-95)

Sec. 34-96. Boundaries and jurisdiction.

The boundaries and jurisdiction of the stormwater management utility shall extend to the corporate limits of the city, as they may exist from time to time, and such areas lying outside the corporate limits of the city as shall be approved by the city council.

(Ord. No. 95-68, § 5, 9-11-95)

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Sec. 34-97. Amount and classifications of fees.

(a) *Criteria for establishing fees.* The city council hereby establishes the amount and classifications of fees to be implemented to help fund the stormwater management utility and its programs and projects. In establishing such fees, the city council has considered, among other things, the following criteria:

- (1) The fee system must be reasonable and equitable so that users pay to the extent they contribute to the need for the stormwater management utility, and so that fees or other charges bear a substantial relationship to the cost of service. The city council recognizes that these benefits, while substantial, in many cases cannot be measured directly.
- (2) The components of the calculations used to establish fees must include, but may not be limited to, the following cost factors, which may be associated with the resolution of stormwater problems which the stormwater management utility shall seek to alleviate:
 - a. Stormwater management planning and preparation of comprehensive watershed master plans for stormwater management;
 - b. Regular inspection and maintenance of public stormwater management facilities and measures for the construction thereof, as well as regular inspections of private stormwater management facilities;
 - c. Maintenance and improvement of stormwater management facilities that have been accepted by the city for purposes of stormwater management;
 - d. Plan review and inspection of sediment control and stormwater management plans, measures and practices;
 - e. Retrofitting designed watersheds to reduce existing flooding problems or to improve water quality;

- f. Acquisition of interests in land, including easements;
 - g. Design and construction of stormwater management facilities and measures and acquisition of equipment;
 - h. Administration and enforcement;
 - i. Water quantity and water quality management, including monitoring surveillance; and
 - j. Debt service and financing costs.
- (3) The components of the calculations used to establish fees must be based on an equivalent residential unit (ERU), determined and approved by the city council, with reasonable general adjustments being made for, but not limited to, the following factors:
 - a. Commercial, service and industrial land uses other than single-family residential;
 - b. Open and/or forested land;
 - c. Lot or tract size;
 - d. The amount of site that is impervious; and
 - e. Other generally accepted factors relevant to such calculations based upon the provisions of this article.
 - (4) The practical difficulties and limitations related to establishing, calculating and administering such fees should be addressed with due regard for fairness, efficiency, ease of comprehension, and ease of administration.
 - (b) *Fee structure.* Stormwater management utility fees shall be fixed from time to time by the city council and are set forth in the fee schedule in appendix A to this Code. Fee categories are as follows:
 - (1) Developed residential property. The fee structure for each parcel of developed residential property shall be allocated between two categories based on size of impervious area:
 - a. Developed residential properties with an impervious area of 1,640 square feet or less; and

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- b. Developed residential properties with an impervious area greater than 1,640 square feet.

- (2) Undeveloped residential property.
 (3) Developed multi-residential and nonresidential property.
 (4) Undeveloped multi-residential and nonresidential property.

(c) *Review.* The fee structure adopted may be reevaluated in three to five years for its fairness in implementation and its capacity to fund adequately, but not excessively, the needs of the program.

(d) *Adjustments.* The city may provide a system of adjustments against stormwater management utility fees which can be applied to properties on which stormwater management facility construction, or other comparable provisions of construction or design of the premises, substantially mitigates the effect of stormwater runoff from the property on the city's stormwater management system or materially reduces the cost for the city to provide a system of stormwater management.

(Ord. No. 95-68, § 6, 9-11-95)

Sec. 34-98. Determination of amount of impervious area.

The city engineer will determine the amount of impervious area on each developed multi-residential and nonresidential property. A determination will be made using information derived from digital and other photographic data, as maintained by the city engineer, commonly designated as Geographic Information System (GIS) data, and such additional information, if available, as may reliably supplement such data. Upon written request, an owner, or lawful occupant obligated to the owner for payment of the fee, shall be provided a written determination of the amount of impervious area for which a fee has been established.

(Ord. No. 95-68, § 7, 9-11-95)

Sec. 34-99. Collection of fees.

(a) *Taxable property.* The city manager or his designee shall prepare and forward all information necessary to the county tax collector or his

designee for the purpose of an annual billing of the stormwater management utility fee. Notice of the fee shall be included on the property owner's notice of ad valorem real property taxes, and the fee shall be due and payable simultaneously with the taxes. By resolution, the council may authorize the city manager to implement other reliable means of billing.

(b) *Nontaxable property.* The city council recognizes that nontaxable as well as taxable properties generate stormwater runoff and benefit from the stormwater management system and that the principle of fairness dictates that such properties be charged. The city manager or his designee shall make arrangements for billing for nontaxable property in the same manner as taxable property. By resolution, the council may authorize the city manager to implement other reliable means of billing.

(c) *Date of imposition of fee for developed properties.* Developed properties shall become subject to the imposition of the stormwater management utility fee at the billing cycle following final approval of site development by the city.
 (Ord. No. 95-68, § 8, 9-11-95)

Sec. 34-100. Use of revenue; investment of funds; borrowing.

Funds generated for the stormwater management utility from fees, bond issues, other borrowing and other sources shall be utilized only for those purposes for which the stormwater management utility has been established, including but not limited to regulation, planning, acquisition of interests in land, including easements, design and construction of facilities, maintenance of the stormwater system, billing and administration, and water quantity and water quality management, including monitoring, surveillance, private maintenance inspection, construction inspection and other activities which are reasonably required. Such funds shall be invested and reinvested pursuant to the same procedures and practices established by the city for investment and reinvestment of funds. The city council may use any form of borrowing authorized by law to fund capital acquisitions or expenditures for the stormwater management utility. The city council,

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in its discretion and pursuant to standard budgetary procedures, may supplement such funds with amounts from the general fund.

(Ord. No. 95-68, § 9, 9-11-95)

Sec. 34-101. Requests for reconsideration; appeals.

(a) Request for reconsideration.

- (1) A property owner of record, or a lawful occupant obligated to the owner for payment of the fee, may request a reconsideration of any determination or interpretation by the city engineer in the operation of the stormwater management utility. Such request must be in writing and filed with the city engineer, or such other person as the city manager may designate, within 30 days of receipt of notification of the determination or interpretation.
- (2) The city shall review the application and make a decision on the request within 30 days of receipt of the request.
- (3) The request shall be made upon such forms and be accompanied by such information as the city, by written policy, shall require.

(b) Appeals.

- (1) Persons who are authorized to make a request and who are aggrieved by a decision of the city under subsection (a) of this section shall have the right to appeal to the city manager, or such person, committee or board as he may establish for such purpose.
- (2) The appeal shall be in writing and shall set forth, in detail, the grounds upon which relief is sought. The person designated to review such appeal shall provide a hearing on the appeal within 30 days of filing and render a decision within 60 days of filing.
- (3) The person designated to review such appeal shall have full authority to affirm, modify or reverse a decision being reviewed upon determining whether the de-

cision was made in compliance with the standards, policies and criteria of this article.

(c) Payment of fee required. No provision of this article allowing for a request for reconsideration or for an administrative appeal shall be deemed to suspend the due date of the fee with payment in full. Any adjustment in the fee for the person pursuing a request for reconsideration or appeal shall be made by refund of the amount due.

(Ord. No. 95-68, §§ 10—12, 9-11-95)

Chapter 35

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THE STATE OF SOUTH CAROLINA
In the Court of Appeals

APPEAL FROM GREENVILLE COUNTY
Court of Common Pleas

Joseph J. Watson, Circuit Court Judge

Case No. 01-CP-23-2459R

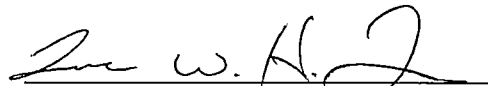
Louie D. Hawkins, individually and d/b/a
Servicemaster of Greenville, Servicemaster
of Greenville, LLC, and Dixie P. Hawkins Appellants,

v.

City of Greenville Respondent.

CERTIFICATE OF COUNSEL

The undersigned hereby certifies that this Record on Appeal contains all material
proposed to be included by any of the parties and not any other material



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ATTORNEYS FOR APPELLANTS

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Louie D. Hawkins, individually and d/b/a
Servicemaster of Greenville, Servicemaster
of Greenville, LLC, and Dixie P. Hawkins Appellants,

v.

City of Greenville Respondent.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the **Record on Appeal** was served
upon the following by First Class Mail, postage prepaid, on this 21st day of
February 2003.

Kenneth A. Richstad, Clerk of Court,
Court of Appeals, PO Box 11629, Columbia, SC 29211

W. Howard Boyd, Jr., Esquire
Gallivan, White & Boyd, PO Box 10589, Greenville, SC 29603

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SC Court of Appeals

THE STATE OF SOUTH CAROLINA
In the Court of Appeals
APPEAL FROM GREENVILLE COUNTY
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Louie D. Hawkins, individually and d/b/a
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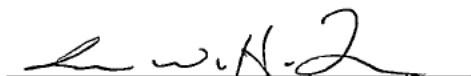
City of Greenville Respondent.

CERTIFICATE OF SERVICE

I hereby certify that three copies of the **Record on Appeal** were served upon counsel for the
Respondent and that fifteen copies were served upon the Court of Appeals by First Class Mail,
postage prepaid, on this 21st day of February 2003.

Kenneth A. Richstad, Clerk of Court,
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