THE STATE OF SOUTH CAROLINA
In The Court of Appeals

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SC Court of Appeals

APPEAL FROM YORK COUNTY
Court of Common Pleas

D. Garrison Hill, Circuit Court Judge
S. Jackson Kimball, Special Circuit Court Judge

Case No. 2016-002118

Lucille H. Ray, Appellant,

v.

City of Rock Hill, South Carolina, a Municipal Corporation, and South Carolina Department of Transportation, an agency of the State of South Carolina, Defendants,

Of which City of Rock Hill is the Respondent.

RECORD ON APPEAL
Volume II

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STATE OF SOUTH CAROLINA
COURT OF COMMON PLEAS
COUNTY OF YORK

LUCILLE H. RAY,

Plaintiff,

vs. CASE NO. 2012-CP-46-03928

CITY OF ROCK HILL, SOUTH CAROLINA, A MUNICIPAL CORPORATION, AND SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION, AN AGENCY OF THE STATE OF SOUTH CAROLINA,

Defendants.

BEFORE THE HONORABLE S. JACKSON KIMBALL

DATE: June 18, 2014

TIME: 2:09 p.m.

LOCATION: York County Master--In-Equity
1 North Congress Street
York, South Carolina

REPORTED BY: ANGELA D. ZUVER,
Court Reporter

A. WILLIAM ROBERTS, JR., & ASSOCIATES

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THE COURT: This is Case Number 2012-CP-46-3928, Lucille H. Ray against City of Rock Hill and others.

Present and representing the plaintiff is Mr. Rich Fennell and Mr. Charles Bradford. Present and representing the defendant city is Mark White. Present and representing the South Carolina Department of Transportation Mr. John Devlin.

I believe I've covered it all.

These will be the defendants' various motions for summary judgment. Who wants to go first?

MR. DEVLIN: Your Honor, I believe I had earlier filed the motion, so I see no reason I should not.

For the record, I'm John Devlin. I represent the defendant, Department of Transportation. We appreciate you making time available on fairly short notice to hear us this afternoon. We were supposed to have this a couple of weeks ago.

There have been briefs sent, Your Honor, and I'm sure you're aware of the underlying facts, that this is basically a case in which the DOT and the city have been sued on three theories,

trespass, inverse condemnation and injunction because a storm water pipe runs under Mr. Lucille Ray's house on College Avenue and has allegedly caused some property damage to the house.

The DOT has three bases for its motion. One is that an affirmative act is required to prove either of the damage relief plans, either trespass or inverse condemnation.

Our second argument is the statute of limitations bars --

THE COURT: Within the context of trespass, how would you define affirmative act?

MR. DEVLIN: An intentional act. An contact by which the defendant intends to cause what occurred.

THE COURT: Okay.

MR. DEVLIN: There is a case called Snow versus City of Columbia which I believe sets that forth, and I have a copy of it, if you wish.

THE COURT: Not yet.

MR. DEVLIN: The third point in our summary judgment motion, Your Honor, is that to the extent that it is argued that the statute of limitations is not barred because this is a continuing rather than a permanent trespass or

damage, we believe that the requirement in that situation is that the plaintiff set forth evidence to show that the cause of the problem is reasonably abatable. We do not believe that there is any evidence that the cause of the problems of which she complains is in fact reasonably abatable. We think it is a one-time claim which --

THE COURT: What does reasonably mean in that context? It seems to me like you could at any -- as impractical as it may seem, it seems to me that at any point you could divert the water.

MR. DEVLIN: Yes, sir. Your Honor, anything can be abated with will enough and money enough. I would assume that if the standard is simply abatability rather than reasonable abatability, anything could be done, but I think that in order -- and there's a case called, I think, Hedgepath, although I'll check my brief to make sure, that discusses that it has to be reasonably abatable.

I have not found cases that define what determines reasonable abatability. There are cases in which the courts have said the issue of abatability has come up, but we see nothing in the record to indicate -- here I'm referring to Glenn

versus Anderson County -- that the storm water system complained of was not permanent and I believe that the better view of the case law is that if the source of the problem is permanent in nature then it is a single cause of action. If it can be efficiently fixed, fixed inexpensively relative to the problems complained of, I think that there might be an argument there.

In this case there is simply no evidence presented of what it would actually take to abate the problem. There's, I believe, a single sentence in an expert's affidavit from plaintiff's counsel saying you could fix it by running pipes up the street. And my point, when we get to that, Your Honor, is that it is absolutely impossible for the DOT to abate this problem because College Avenue, which is where the plaintiff's expert suggests the abatement should occur, is a city and not a DOT street and the DOT cannot abate this problem on College Street if it wished -- on College Avenue if it wished.

We have submitted an affidavit from an expert in opposition that I think you would have gotten in the mail a couple days from a Tom Griffin that we served on the plaintiffs.

THE COURT: I remember that one.

MR. DEVLIN: I'll be happy to provide you with a copy of it.

THE COURT: That's okay. Go ahead. There's no sense trying to read it right now.

MR. DEVLIN: All right. Mr. Griffin says that he's a professional engineer with a career of experience in utilities/storm water management and he says there is no way for the DOT to abate this problem in the Oakland Avenue area, and I can very quickly point out what that is. I'm getting out of order, but I appreciate --

THE COURT: We're still talking about statute of limitations here?

MR. DEVLIN: Yes, sir.

THE COURT: All right.

MR. DEVLIN: There is a defense -- there is a defense from the statute of limitations trying to anticipate the abatability issue.

This is Oakland. This is College. This is Ms. Ray's house right here. It is at the bottom of Strait Street. The water which enters a catch basin right in front of her house and goes underneath her house takes a 45 degree-ish turn and heads over towards Lucas is fed by a pipe coming

down Strait Street and two pipes which enter from either side of the other side of College Avenue.

For the DOT to abate the problem of water going under her property they would have to stop water from coming off of Oakland onto Strait and the only feasible way they have of doing that is to run a new pipe uphill from Oakland to Strait to Union.

THE COURT: Unless they had the cooperation of the City of Rock Hill, right?

MR. DEVLIN: Yes, sir.

THE COURT: Well, do you think that -- do you think that either -- I mean, if this were a condemnation case -- and it isn't. I mean, do you think -- let me just say what I was thinking. Do you think that either governmental body can hide behind the other and say, well, because somebody else is involved, this can't be fixed?

MR. DEVLIN: No, sir, Your Honor. I think that if Ms. Ray lived one block up on the corner of Oakland and Strait, she would be able to address the DOT and say, you need to get that water out from under my property, and because it would be coming off of, in theory, a state-owned property and a state-maintained property, we would have to

take care of it.

We do not -- we -- the DOT does not have an obligation to handle storm water systems outside of its own state-maintained streets.

We can't make the city do anything. If --

THE COURT: Of course not.

MR. DEVLIN: If Ms. Ray wanted to, and I believe she tried to get the city to do something, that is something that is between the two of them. I do not believe that in order to determine abatability you can assume that political cooperation --

THE COURT: Let me ask you this. Does that mean, Mr. Devlin, that you have -- that the DOT has successfully handed off the problem of abatability to the city because the city's property -- it is the city's domain, if you will -- I'm using that in a general sense -- within which this problem is occurring?

MR. DEVLIN: Well --

THE COURT: Do you see what I'm saying?

MR. DEVLIN: Yes, sir. I see exactly what you're saying.

I'm going to get a little bit outside

of my area of actual knowledge of how the DOT would handle that kind of situation, so I'm going to have to speculate a little bit. My assumption would be that if there were a desire on the part of the city outside of a litigation context to redo its system to abate a problem and they said, DOT, you're dumping a bunch of water over here, that they could go through some political channel and ask for an appropriation. They could ask --

THE COURT: We're talking about the city now?

MR. DEVLIN: I'm talking about the city could go to, in the manners that are allowed by law, a state agency and say, we need a contribution, we need indemnification, we need something or another because you are a part of this.

THE COURT: Oh. To the state? To the DOT?

MR. DEVLIN: Yes. The city could say that to the state, but I do not believe in a lawsuit context that we can be held to have an abatable problem because if something were to happen --

THE COURT: Okay. I understand. I

understand what you're saying. What I'm saying is you say this is out of your domain -- the DOT's domain of responsibility for storm water.

MR. DEVLIN: Yes.

THE COURT: You can't do anything about it because you can't correct anything outside of that domain?

MR. DEVLIN: Yes.

THE COURT: But you're -- what I think I inferred from what you were telling me, that it is within the domain of the city's ability to take action if it wanted to.

MR. DEVLIN: To abate the problem?

THE COURT: Yes, sir.

MR. DEVLIN: I think that is --

THE COURT: It's within their domain?

MR. DEVLIN: Yes, sir, I believe it is within their jurisdiction and their power to do.

THE COURT: Well, then my question is: Has the DOT effectually handed off the problem to the city, the abatement, the abatability problem?

MR. DEVLIN: No, sir. And here's why. The problem of which Ms. Ray complains is a pipe which is not an easemented pipe. It's what I would call a road pipe. We didn't know it was there. We

can't be held responsible for the city tying into pipes for the use of their storm water system.

THE COURT: No. I'm not asking you if you're responsible. I'm trying to get my -- this thing is complicated. Nobody claims to own any of this, yet they continue to maintain a right to channel storm water underneath Ms. Ray's property. And the defense says, well, she waited too long to raise this question, but if we decide that she didn't wait too long then we're back with this thing where -- how can -- the thing that seems strange to me in reading through the file a couple of times is that everybody wants to continue to run the water through her property, but nobody has a right to.

MR. DEVLIN: I can respond to that. The DOT has been asked, you don't want this pipe to be blocked off, do you? We say, that's not our responsibility. If you want to block it off, that's up to you.

THE COURT: Okay.

MR. DEVLIN: We are not taking the position we are entitled to run water through there. What we are entitled to do is to connect to the city system at Strait Street and to assume that

the city will manage its water in an appropriate fashion.

THE COURT: How are you entitled to do that? I just don't know the answer to that question.

MR. DEVLIN: Your Honor, I don't either. I'd have to dig back into probably Title 5 of the South Carolina code and see about road construction and about a city obligation to maintain utilities and a state obligation -- ability to tie into it. I do not have the law on that, although I'll be happy to look at that if you wish for me to.

THE COURT: I may. I may, but I'm not sure what that will do for me.

Go ahead.

MR. DEVLIN: Well, Your Honor has already succeeded in getting far past the knowledge that I brought into this courtroom, but I'll work through the outline that I had of this and whenever there's something that you want to ask me, please feel free.

As I said, Ms. Ray is here.

THE COURT: That's right.

MR. DEVLIN: There is another pipe

which comes down Union, meets a pipe on College, goes under a property here and heads towards the back of Ms. Ray's property. It does not collect in the same pipes. It is a separate drainage area.

One of the reasons that we believe this is not abatable by the DOT is we would have to go up here, down here, down College and then go under this house. One, there's not an easement to allow that pipe to go there, and, two, we have actual knowledge that the pipe under that property is crushed and, as the affidavit of Mr. Griffin says, no competent engineer designing a storm water system is going to design more water to go into a pipe system that they know to have a break in it of the size of the one on College Avenue above Ms. Ray's property.

THE COURT: If the city were to say -- if the city were to say, DOT, no problem, we will be happy to grant you license, permission, whatever it takes to abate your storm water contribution to Ms. Ray's problem, where would you be then with abatability?

MR. DEVLIN: I'm not -- that would depend on the answer to the question I told you I don't know the answer to, which is: What are the

rights and obligations of the city and the state --

THE COURT: No. I'm just -- what if they said, okay, please feel -- if the city said, okay, please feel free to do what you need to do to -- in connection with Ms. Ray's problem to help us abate the problem?

MR. DEVLIN: Again, if a study were determined on what it would cost to move from point A to point B to point C, and if we thought a competent design could be drawn up to get that water out from under Ms. Ray's property and out around to another direction and -- so that it were reasonably abatable, that would be a possibility.

My understanding of the abatement that has been proposed by Ms. Ray's attorney -- Ms. Ray's expert is that a pipe be run from the front of her house uphill on College to Lucas to join a system that runs down there. And I believe Mr. White is going to address the impracticality of that, but there are so many different factors that go into when and how you can add piping to a hundred year old street like that in terms of conflicts that exist and that kind of thing, that I think it would depend, if we were told you can't participate, still on whether or not it was

reasonable or whether or not it were so cost prohibitive as to be determined that this is a permanent cause of a problem and that it's not reasonably abatable.

THE COURT: Where does cost prohibitive figure into something not being -- to eliminating the possibility of abatement?

MR. DEVLIN: Well, because there's case law which I've cited in my brief, Your Honor, which says the problem must be reasonably abatable. And if it's a strict liability standard and if it can be abated, it must be. Then cost prohibitiveness would not be an issue.

But if a jury or a court were required to determine is this reasonably abatable, then I would suggest that a cost comparison of what it's going to take to fix it versus the claims at issue is absolutely a standard which must be addressed.

THE COURT: Well, doesn't that imply a balancing by somebody of facts?

MR. DEVLIN: If there were genuine issues of fact presented to a finder of fact, it might. There are not in this case. There is nothing in this record as to the reasonableness of the abatability. Nothing. There is simply, it

could be abated.

THE COURT: Because there's no cost figure?

MR. DEVLIN: There is no cost figure. There is no background study on whether or not it's feasible to do it in the manner that in the one sentence that the expert says he proposes it to be done. He does not address the fact that the DOT has no license or permission to do any of that work. It is apparently a question of abatability that is addressed to the city rather than to the DOT.

So I think that the reasonableness of an abatability situation might in fact require a balancing if there are issues presented -- admissible evidentiary issues presented for a factfinder's determination.

THE COURT: Okay.

MR. DEVLIN: There's a brief time line that I'd like to walk through, Your Honor, which is primarily set forth in my brief that's based on Ms. Ray's testimony and the testimony of the reports of her experts. The most --

THE COURT: One more question about it. Both your and the city's motion also deal with --

in connection with the statute of limitations, also deal with her knowledge and notice --

MR. DEVLIN: Yes, sir.

THE COURT: -- knew or should have known. If it were -- if it we were determined that the commencement of the statute, knew or should have known, was within three years of the time she brought the lawsuit, this business of abatability wouldn't matter, would it?

MR. DEVLIN: That would be correct.

THE COURT: Okay. Go ahead.

MR. DEVLIN: Your Honor, no one knows when the first owner of 330 College Avenue had actual knowledge of the pipe running under the property, but it predates 1995 when Ms. Ray bought the property because some previous owner tapped a four-inch gutter pipe that drained a gutter system in the house into the 24-inch pipe that runs underneath the house and I don't believe there is any inference that can be drawn from that fact other than that the owner who tapped into the storm water system knew it was there. You can't aim your gutter drain into a pipe unless you know the pipe is there for it to be drained into, and that predates Ms. Ray's ownership.

THE COURT: Is that presupposing that he knew it was underneath the house or just that it was there so he could drain the gutter into it?

MR. DEVLIN: Well, Your Honor, I don't know what that owner might have thought, but I would --

THE COURT: We don't have any evidence of that?

MR. DEVLIN: We don't have any evidence of that one way or the other. We have evidence of a four-inch pipe within the footprint of the current house coming into the 24-inch pipe that goes from the catch basin to a manhole in the backyard and my argument on that is that the only inference you can take from that is knowledge of the existence of a pipe under the house at some point in time before 1985 by an owner of the house.

And I'm sure Your Honor is aware of the case law that imputes notice from one owner to the next in the Aarons versus Highway Department case, which I'll be happy to hand up otherwise.

THE COURT: That goes back to the question I asked about to what -- what is the extent of the knowledge imputed.

MR. DEVLIN: And I may not have

answered that to your satisfaction, but I believe if an owner at 1980 knows that there is storm water running directly under that house via a pipe from the catch basin --

THE COURT: Well, that's the assumption.

MR. DEVLIN: Well, yes, sir. And, Your Honor, I believe that the fact that there's a four-inch pipe sunk down into that 24-inch pipe makes it pretty clear that the only reason that four-inch pipe would have gone there is because somebody knew there was a 24-inch pipe directly under the house.

THE COURT: I'm not -- I understand what you're saying, but if I -- you obviously didn't tap onto the segment of the pipe that runs under the house.

MR. DEVLIN: Yes, they did.

THE COURT: With the gutter? No, no. I said that poorly. The point at which they tapped into the pipe was not under the house?

MR. DEVLIN: No, sir. I believe that it was at the point in time that that tap-in was done immediately outside the house, and I believe there's been about ten feet of house added since

then, but, Your Honor, if there's a pipe one foot away from the footprint of the house that you're tapping into, I believe that it would -- the only inference that you can take from it -- because that pipe came from somewhere and it didn't start there.

THE COURT: No. I agree.

MR. DEVLIN: And if somebody walks up to the catch basin --

THE COURT: They might not even know which way the water flows.

MR. DEVLIN: Unless one were to walk from the catch basin down to the backyard and notice that you're going downhill. That would be my first clue.

The second clue I would have would be that the catch basin has a pipe visible as you stand looking at the catch basin pointed at Ms. Ray's house and that pipe would have been visible from before 1985. So that is a fact which I believe would put any owner of that property on notice that there is a pipe running under the property.

And, Your Honor, it is my contention that we do not -- the DOT nor the city has to show that there was not only a pipe, but there was water

running under it and damage being caused by that so their expert would have to be brought in to determine whether or not there was a claim.

I believe that once a property owner at 330 College Avenue determines that there is a pipe that they don't own going under their property they are on notice of a trespass onto their property by somebody and that the statute of limitations starts to run because there is somebody's pipe under their property.

Now, she might say it's the city's, she might say it's the DOT's, but they are claiming that one of their damages is there's a pipe running under this property and it's not mine and that's a trespass.

And you would know it as soon as you seen the pipe, whether you know if there is other physical damage to house or not.

THE COURT: Would a reasonable person be entitled to assume that the city must have a right-of-way to do that if they are doing it?

MR. DEVLIN: No, Your Honor. I think a reasonable person would be on charge with notice of what's in the public record as to their own property, which in this case would include no

easement of record for the city to tap into that pipe.

THE COURT: Or anybody.

MR. DEVLIN: Anybody to tap into that pipe.

I think that any owner of that property is charged with the knowledge that no one has the right to run that pipe where it is in fact run and once somebody becomes aware or should become aware of that pipe, the statute starts to run irrevocably on a one-time cause of action because the trespass doesn't have to cause any other damage. The act of trespassing is the damage right there.

Because of that, Your Honor, I would contend that from any one of these seven or eight or nine actions that I described in the brief that are supported by Ms. Ray's testimony about things that happened that caused her concern, if she knew or worried that there was a pipe under her property, whether she could tie it to damage happening to the house, she knows there's a trespass. She knows there's a pipe and the statute begins to run.

And she has testified that in 2008 -- and this is at Page 289 and 290 of her deposition,

if I have not destroyed it already. I've cited -- I'm not sure if Mr. White -- I'm sure he has cited it. I'd like to hand up Ms. Ray's original deposition. And I've got a copy of it, if you wish --

THE COURT: I've read the material attached to other people's motions that have to do with her deposition.

MR. DEVLIN: Okay. Well, I'll be happy to maintain it, Your Honor. I'd just note that I have offered it to the court.

THE COURT: You can have it back. I think I've got enough.

MR. DEVLIN: I have come to court before without the original deposition and lived to regret it.

But, Your Honor, at Pages 289 and 290 Ms. Ray says in a fairly straightforward manner, yes, I -- and I'm paraphrasing here. I'll get the exact quote. I was concerned about a piper under my house or on my property in 2008.

In 2008 she called the city out because she thought --

THE COURT: Is that where the engineer got -- corrected his mistake where he said --

MR. DEVLIN: That's where that is -- the issue, as I understand it, is Mr. Leonard, the engineer, says in his report she knew in 2008 about it and in 2014 he says, oh, I was mistaken, that was 2008. I've gone back and checked my notes, which are not in the file that he has provided us, and I have -- I don't believe that presents an issue of material fact because she has testified to 2008 being when she was concerned about a pipe under her property. That's sworn, uncontradicted testimony. It might be contradicted by her or by her expert, but I don't believe that is sufficient to create an issue of fact.

THE COURT: So we're back to abatability again.

MR. DEVLIN: In my opinion, because of her testimony as to the 2008 fear that she had as to a pipe under her property, the clock has to start then. She knows there's a pipe. She doesn't know exactly where it goes, but she has been -- she has learned enough to know that she needs to look into this and take reasonable steps to exercise diligence to protect herself.

THE COURT: Okay.

MR. DEVLIN: And the case of

Graniteville versus I.H. Services has been cited in the plaintiff's memorandum for the proposition that the statute won't start to run until an expert witness has been hired who can explain to a plaintiff whether or not there is a problem -- and I'm paraphrasing that -- and I would point out to Your Honor that the Graniteville case has never in the 20 or so years since it was drafted -- since it was published been cited with approval. It has been distinguished and there have been countless cases where the courts have said the statute begins to run when a reasonable person viewed objectively would know or should know of the existence of a claim whether or not they have a full-blown theory of recovery.

THE COURT: I've read the Graniteville case.

MR. DEVLIN: And I'll be happy to answer any questions about that, if you wish.

I've got some cases that cite Graniteville afterwards and say, this is not like Graniteville, this is a different type of case. I simply don't -- I think that is an outlier in these statute of limitations cases.

THE COURT: I can't put my hands on it

right now. There was some distinction made in a later case between that and Graniteville that had to do with -- and I don't remember exactly. I thought I copied it, but I don't see it.

MR. DEVLIN: I have the Republic Contracting case with me, Your Honor, in which the Graniteville case was distinguished, because in the Graniteville case the testimony was uncontradicted that the plaintiff had a fire in their property of unknown origin without --

THE COURT: Let's move on about that. I know what you're talking about.

MR. DEVLIN: Okay. If you don't mind, as a housekeeping matter, Mr. Fennell and I on behalf of the plaintiff and DOT have a couple of matters that we have stipulated to and I just want to make sure they're on the record --

THE COURT: All right.

MR. DEVLIN: -- in case they might have an impact on your decision.

THE COURT: Certainly.

MR. DEVLIN: There are some allegations in his brief that we have agreed do not apply to the DOT. We have stipulated that there's no evidence that the DOT does maintenance to the

Strait or College Street storm drains. We have stipulated that there is no evidence that the DOT has known of the pipe under the Ray house since 1941, which is -- there's a broad assertion in that brief that defendants had known since 1941. The plaintiff has agreed that there is no evidence that the DOT has known that, and we have stipulated that there is no evidence that the DOT was involved in any alteration of the direction of that water flow back apparently in the '40s when a portion of pipe behind her property was absconded and a relief pipe was redirected over towards Lucas Street. The stipulation is that there is no evidence that the DOT was involved in that.

THE COURT: In this case among these defendants?

MR. DEVLIN: Yes, sir, Your Honor. We can't say absolutely, but in the record that the court has and that the parties have developed in discovery there is nothing that would tie the DOT to any of those three sets of facts.

THE COURT: I understand.

MR. DEVLIN: On the positive, aggressive act, Your Honor --

THE COURT: Inverse condemnation?

MR. DEVLIN: Well, it's primarily inverse condemnation because that is the precise language she used in the inverse cases, but most inverse cases seem to be brought with an accompanying trespass cause of action and courts have often dealt with whether or not there's been a -- the inverse claim has been met and the trespass claim has been met by the same analysis of was there an affirmative act committed, and I would say, Your Honor, that according to the Hawkins versus City of Greenville case and Glenn versus Anderson County School District case, there is no evidence of an affirmative act by the DOT.

And, again, I only represent the DOT. There may be a different argument that I care not about as to the city, but there is no evidence that the DOT has purposefully channeled water under Ms. Ray's house, none, because we did not -- there is no evidence that they knew of the pipe under the house. That has been stipulated to. That is one of the stipulations. There is no evidence that when it started draining water at some point in the deep, dark past off of Oakland that it knew it was going to go through an orphan pipe or a road pipe or whatever. And the case law is clear that the

positive or aggressive act for an inverse case or the intentional act for a trespass case has to be the act which is part of the causation of the damage.

Now, I received a big, thick package of positive -- documents evidencing affirmative, positive acts by the defendant SCDOT. I'll stipulate to every one of these because they don't have anything to do with Ms. Ray's property having water going under it. We have produced in discovery all of the maintenance records as to DOT on Oakland Avenue and there's ample proof that we patched potholes, that we surfaced streets, that we do what a highway department --

THE COURT: Let me be clear what you're telling me.

MR. DEVLIN: Yes, sir.

THE COURT: You are not saying that if the DOT did some road construction at point A that casts water downstream over property Z that that affirmative act would not be compensable under the theory of inverse condemnation assuming an affirmative act up here that causes damage down here?

MR. DEVLIN: Your Honor, under that set

of facts, if you can show I put the road up here and all of the sudden a bunch more water started going under an individual property --

THE COURT: That's way downstream?

MR. DEVLIN: -- way downstream --

THE COURT: Okay.

MR. DEVLIN: -- that might be sufficient.

THE COURT: We're on the same page.

MR. DEVLIN: But none of the acts --

THE COURT: But if you did something on Oakland that caused -- if you did something on Oakland that caused -- and I'm assuming, I'm not saying you did -- that caused a dramatic increase in the water being cast upon some property down on Lucas Street -- assume those facts -- you could be responsible for that, but --

MR. DEVLIN: Before I bind the DOT --

THE COURT: No. You don't have to connect to the property that's being damaged.

MR. DEVLIN: I know that there's a whole body of inverse condemnation law which talks about the continuity issue. I've not researched that in connection with this, so I honestly can't answer it, but I will be happy to look at it from

that angle if you wish for me to.

I know that in the Glenn versus Anderson County case there is a line in that opinion in which because there are two defendants upstream of the plaintiff who is complaining, the court allows that the upstream property -- in this situation it would be the DOT -- does not have -- and I am paraphrasing the heck out of the case, Your Honor -- does not have exposure because their property went in -- their water went into a county ditch. And I think that it is probably more likely that the law says our responsibility for the water that is on and immediately coming off of my street, if it goes into another municipality system or some other system, it is their responsibility. And if the DOT does something to drastically change the amount of water that is going into a system, I believe that what happens is that before that work gets done they will analyze downstream impact and they --

THE COURT: That begs the question.

MR. DEVLIN: Pardon?

THE COURT: That begs the question.

MR. DEVLIN: Yes, sir, it does, but in situations where the best the plaintiffs have come

up with --

THE COURT: I understand. I know what you're talking about. You've answered my question.

Is that it?

MR. DEVLIN: There are -- there are no affirmative acts that the expert has at all even sought to tie the DOT to the Ray property. There's not even been an effort to say the DOT performed X other than draining water off of a --

THE COURT: I understand. I read that.

MR. DEVLIN: And I don't believe that is enough.

And if you'll give me just a second to look at my notes.

THE COURT: Yes, sir.

MR. DEVLIN: Your Honor, that's all I can think of. I don't know whether I've addressed all of my points yet, but I'll look and see. Thank you very much.

THE COURT: All right. I think the better thing to do is let me go ahead and hear from Mr. White since you all are attacking the same theories on both fronts.

Mr. White.

MR. WHITE: Thank you, Your Honor.

Your Honor, I represent the City of Rock Hill. The city has filed a motion solely on the grounds of statute of limitation as applied to this matter.

In the discussion that preceded there was a -- there are three layers at which the trigger would occur. One layer is that Ms. Ray is bound by the statute being triggered against one of the prior property owners.

THE COURT: I don't remember reading anything about that in anything I read. Maybe I just didn't do it thoroughly enough.

MR. WHITE: Your Honor, if it's all right, there was a third report by the plaintiff's expert which was not attached to his affidavit. So attached to the affidavit that I presented to the court this morning --

THE COURT: This afternoon.

MR. WHITE: -- this afternoon -- it's been a long day --

THE COURT: 30 minutes ago.

MR. WHITE: -- is an affidavit of Jimmy Bagley in which he notes that all -- that the records show there is a tap pipe.

Now, I'm not sure it's a gutter. It

could be where someone was draining a sink in a house in 1935. That would not be terribly unusual. In which case, it would have been under the original footprint of the house, certainly under the footprint now, and that is in Mr. Bagley's affidavit. But Ms. Ray's expert not in the record today -- he notes it in a report that's not in the record.

By the way, I need to be very precise about what's in this record and what's not. There are responses to interrogatories, there is a deposition of transcript of Ms. Ray, there is an affidavit of Ms. Ray, there is affidavit of her expert, Mr. Leonard, with attachments, there is affidavit of the expert from the DOT and there is an affidavit from Mr. Bagley, and that's it.

And when you look at this case which is --

THE COURT: I'm sorry. Did you name both experts -- both sides' experts?

MR. WHITE: I did.

THE COURT: Okay.

MR. WHITE: There is Mr. Bagley, there is whatever the DOT gentleman's name is --

MR. DEVLIN: Griffin.

MR. WHITE: -- Griffin, and then there is Mr. Leonard.

This case is over a year and a half old. It is plaintiff's responsibility to produce facts sufficient to create the genuine issue of material fact. There are a lot of unknowns which cannot be assumed or inferred negatively against the city because they're not on the record when it's her responsibility to come forward with those facts. For example, it is not in the record -- she's produced no facts that the city constructed the subject pipe.

Now, the subject pipe that I'm referring to starts at her property line.

THE COURT: I think the way the -- I think the way the process works is what first has to happen is the movant needs to demonstrate that there is no genuine issue of material fact and then the nonmoving party must come forward and show that there is one.

MR. WHITE: Correct.

THE COURT: So let's deal with the first part first.

MR. WHITE: So the first part is in Mr. Bagley's affidavit he puts into the record that

there is drainage infrastructure located within the watershed, which is area two on the map which is attached to Mr. Bagley's affidavit, that is owned by different public entities and private landowners. Number five, based on the city's review and analysis of the watershed, he gives approximate ownership of that areas within that watershed. The city owns 8 percent, DOT owns a little bit more at 8.6, Winthrop University owns 6.9.

THE COURT: I've read all that, but what does he mean by that?

MR. WHITE: That means in the area within -- you take the surface area within the watershed --

THE COURT: No. I understand. What is the significance of that? That's what I mean.

MR. WHITE: The significance is on the next paragraph. The city does not own, maintain or assume control over storm water infrastructure unless the infrastructure was constructed by the city, dedicated by the landowner to the city and accepted by the city or the city was granted either fee simple title or some right-of-way. So in that 62 percent, unless it falls within one of those

three exceptions, is not a city-controlled or owned or liable part of the system.

THE COURT: All right. Let me -- is this another way of saying that the city has no -- I don't want to say no -- has no control over or right to use the pipe that runs under Ms. Ray's house?

MR. WHITE: I did not say that. What I'm saying is --

THE COURT: Is that what Mr. Bagley is saying?

MR. WHITE: What he's saying is the city does not inherit by some unannounced fiat every area in which water drains in the city. The city has control and liability for those areas that it has in those three categories.

He goes on to say this subject pipe -- and, again, the subject pipe is from her property line to the manhole behind her house.

THE COURT: Is there a manhole behind her house?

MR. WHITE: There is a manhole behind her house.

THE COURT: On her lot?

MR. WHITE: Uh-huh.

THE COURT: I don't remember reading that. Okay.

MR. WHITE: Now, here's -- now, here's why this is -- why I have to stop there. In 1941 there is a drawing by the city -- by a city engineer showing a creation from that manhole going off about 35 degrees. It used to -- apparently this pipe used to run straight back toward the church and hit the open ditch. The city drawing in '41 --

THE COURT: You mean the Church of Christ on Charlotte Avenue?

MR. WHITE: Yes. Not Charlotte -- yes, Charlotte.

The city drawing shows that being abandoned, the continuation from the manhole to the ditch, and a relief valve -- what's described as a relief line coming off about 35 degrees going toward Strait Street -- excuse me -- Lucas, and then catching up with everything that's going down Lucas.

THE COURT: That's the angle that shows --

MR. WHITE: It could very well be when this case is fully developed, if it gets there --

and, again, it's not even known that the city constructed that. All we have right now on the record is -- all that we have is there's a drawing by the city that shows from that manhole over there was a city-designed structure which seems to be in place.

THE COURT: And that would be the angular short piece there directly behind the extension of --

MR. WHITE: Yes. And when I refer to the subject pipe I'm referring from her property line to that manhole only.

THE COURT: Yeah. Where it makes that angle is where the manhole is?

MR. WHITE: Yes, sir.

THE COURT: All right.

MR. WHITE: There is no evidence in this record of who connected to who. There's no evidence in the record that the city connected onto this -- what I call the subject pipe, the pipe that runs under her property to the manhole. There's no evidence in the record to show that. Someone could have put that pipe in and connected it to the city system.

By the way, the connection is on city

property. The city -- the catch basin is not located on plaintiff's property.

THE COURT: Okay.

MR. WHITE: So in the record as we have it there is nothing in the record to show any affirmative act from the city as far as constructing the subject pipe. There's no evidence in the record that the city has maintained that pipe. There is no evidence in the record that the city prepared the dirt on top of the pipe for a building pad for a house. There is no evidence in the record the city built the house, and there's no evidence in the record that the city connected to that pipe versus vice versa. Say there was an open ditch and someone just decided to --

THE COURT: What do you mean, vice versa? What's vice versa?

MR. WHITE: Well, say that the connection was made by the owner of that property removing the existing ditch so they could put a house on it. There's nothing in the record to show that.

THE COURT: Well, in fact, the city denies all that, right?

MR. WHITE: Correct. The city doesn't

claim any ownership or control of that pipe. I mean, if you take it further -- and, again, this is not in the record, but if you take it further, the city took ownership from that manhole down to Lucas. It's quite clear why they didn't take anything else, because somebody -- fool put a house on top of it. It's not the city's obligation to go in and correct someone benefitting themselves to that extent and a judgment of whoever's got to maintain that line.

So what we have in the record is the city -- there's no record the city ever exerted control over it, no evidence the city maintained it, no evidence the city constructed it, no evidence the city connected to it.

Now, to answer the question you asked earlier, what rights -- by the way, every time Ms. Ray's counsel asked the city, we're going to dam up the pipe, my response is always the same: You do whatever you want to do. The city reserves all rights that it may have under law. That's my response, and here's why I respond that way. From a North Carolina case -- which they have some lovely cases up there -- the surface of the earth is naturally uneven with inequality of elevation.

The upper and lower holdings are taken with knowledge of these natural conditions and it's the privilege or easement of the upper tenant to carry off the surface water in its natural course under reasonable limitations and the subserviency of the lower tenant to this easement are the natural incidents of ownership of the soil. That's from Dye's Awnings and Tents versus the City of Winston-Salem.

You find that kind of law all over the place, and -- but that's not really why we're here. Why we're here is there is no affirmative act by the city in this record -- unless you just assume things, there is no affirmative act from the city that connects it to that pipe or the location of that pipe where it is.

So you don't have an affirmative act for either of the two causes of action against the city, thus trespass fails and inverse condemnation fails.

By the way, I would note that their expert makes great note of the fact that in the catch basin in front of her house -- he's very inartful there. He talks about when there was some sewer line work. If you're going south -- you're

going down College this way, the right-hand -- the pipe on the right-hand side was severed from the catch basin and the city reconnected it. All that's on city property. There was no -- no work was being done inside the curtilage or the property line of their house.

So you had Ms. Ray trying to tell -- through her counsel tell the city what to do on city property in its own catch basin located within its own street.

THE COURT: Well, what if it -- I mean, is work on its own property that -- whatever that may be, that may cause damage to adjacent private property not an affirmative act?

MR. WHITE: There is no evidence in this record of any sort of intensification or acceleration of water from city property into Ms. Ray's property. There's none.

THE COURT: You know, what puzzled me about this case is I don't -- as much I've dealt with surface water and what anybody can do with that, I don't remember -- I can't recall reading cases about what you can do piping water underground other than you can't open it up on somebody else's property.

MR. WHITE: It doesn't apply to this motion, but the question is not whether it's surface water. The question is: Is it a natural watercourse or has it become one over the operation of time?

The key to this case, Your Honor, is someone chose to put an artificial event --

THE COURT: We know all that. Tell me the reasons why the city doesn't -- isn't liable or is entitled to summary judgment.

MR. WHITE: For purposes of today, the city is not liable because there is no evidence of any affirmative act, which is a necessary prong on both causes of action.

And moving on to the statute of limitations, the trigger, just to -- the trigger comes in the form of the prior property owners had to know there was a pipe because they punched a hole in it and they affixed the four-inch pipe to it. If that doesn't work for the court, if for some reason that's found to be insufficient, the plaintiff owned the property from 1985 until past 2008 in which she had numerous occasions of bending in her rafters, she had a man fall in a sinkhole. You can stand in front of the property -- in fact,

she has many videos of this -- and look down in the grate on the city property and see where the water is going. There's no question it moves through there pretty good.

And that's an open and obvious condition on the property for over two decades, but even if that doesn't work, her testimony at her deposition makes it clear -- she testified that in 2008 she noticed her front entry steps to her house were sinking. That's level one. There's an issue. In response she contacted the city to investigate the storm damage -- the drain on College. She called them up and said, I want you to look at this drain. Why would she know to ask about the drain if she wasn't worried about it?

But we go past that. The employees came out. The employees -- she testified that the employees told her that the drain ran toward her steps.

In 2008 she saw city employees digging behind her house, which was at the manhole, and that from that she assumed the line went from front to back of her house. So again, 2008.

And then most critically, in 2008 she -- quote, she feared the subject pipe ran under

her house. So in 2008 -- the case was filed in December of 2009 -- excuse me -- 2012. In November 2008 she testified she feared that that pipe ran under her house at the same time her steps were sinking. The case law on that issue -- South Carolina statute of limitations, quote, requires very little to start the clock. That's under Mayer versus Tytex.

In Republic again it distinguishes the other cases. The trigger is once you're put on inquiry notice. It's not a subjective test. It's when you -- a person of reasonable knowledge and experience will notice that they may have a claim. You don't have to know the full extent of the claim. You don't even have to know who the natural defendants are of the claim.

She was on notice in November of 2008 by her own words.

So then you get down to the last prong of the decision tree, which is: Is it a permanent or is it a continuous nuisance or -- not nuisance.

THE COURT: Trespass.

MR. WHITE: -- trespass or condemnation? And on that issue again the case law is decisive. I am quoting from Hedgepath. A

continuing nuisance is defined as a nuisance that is intermittent or periodic.

Now, again, nuisance and trespass and inverse condemnation, the analysis on continuing versus permanent is the same, it's used interchangeably. A continuing nuisance is defined as a nuisance that is intermittent or periodic.

If you'll note in their expert report, one of the causes ascribed to the damage to the house is that the fill on top of the pipe is not prepared sufficient for a building back. That's continuous. That's not intermediate.

This case is not the result of a culvert getting plugged by the proverbial beach ball and then there's a flood and then four years later it gets plugged by someone's lawn chair. This one is being caused by the act of putting the pipe.

The cases go on to say, a nuisance is continuing if abatement is reasonable and practical and possible. In your colloquy with Mr. Devlin, it's not a question of whether she has a claim, but whether it's reasonable or not. The question is: When does she have to bring it? And the policy behind that is if it's really, really cost

ineffective to replace it then the plaintiff has to stand on their rights even more so as not to prejudice the defendants.

THE COURT: How is she to know that?

MR. WHITE: Well, in 2008 she knew.

THE COURT: She didn't know what the cost was. She didn't know what it would cost the city to -- how does she know that?

MR. WHITE: Under our discovery --

THE COURT: I read some stuff that said the city wouldn't talk to her about that.

MR. WHITE: Under the discovery rule she doesn't have to know the ultimate final cost.

THE COURT: No, but you're talking to me about abatable or not, and one element of whether or not it's abatable is what does it cost.

MR. WHITE: My argument on abatability today is --

THE COURT: Of course, that's what Mr. Devlin was telling me.

MR. WHITE: My argument on abatable is it is her burden to show that it's abatable at that level such that the statute of limitations does not apply to her. There is nothing in this record to show that it's abatable, period.

THE COURT: Well, it depends on what -- how you -- I mean, my concern about that is, is it absolutely necessary for a person to formulate the cost to the punitive defendant to abate a trespass in order to prove that the trespass is abatable? And how would one do that? I have a problem with that.

MR. WHITE: If I could address the permanent versus continuous. There are two more cases I want to mention, and then if I could address it head on, I'd like to. If you'll allow me to go in that order it makes more sense.

THE COURT: Go ahead.

MR. WHITE: Again, on a permanent versus continuous, the court noted in Webb versus Greenwood County, if the injury is of a permanent character then it follows that plaintiff has a single cause of action which cannot be split. A single action only may be maintained for all damages present and prospective caused by a permanent structure properly built and properly maintained on. This is Webb. Holding the day-to-day operations of a power plant was a permanent occasion even though the plant was there every day, it's making the noise, doing the things

it did. The statement has a good quote --

THE COURT: In other words, the clock starts to run.

MR. WHITE: The clock starts to run.

THE COURT: I understand.

MR. WHITE: That's all it is.

THE COURT: I understand.

MR. WHITE: So in the Glenn case, Glenn stands on the proposition that drainage infrastructure is permanent. The school district there redid their drainage system. It then went through a county ditch and then it caused damage to Mr. Glenn's property. There they didn't get into whether it was reasonable and all that. What they said is, you waited too long. If they changed their drainage system, those pipes are in the ground, that's a permanent structure. You had, I guess, six years at that time -- six years to bring your claim.

THE COURT: From when?

MR. WHITE: You didn't do so.

THE COURT: From when it was put in the ground?

MR. WHITE: I believe they said from when he noticed the erosion.

THE COURT: Does it have anything to do with when it begins to leak or --

MR. WHITE: I believe the discovery rule applied to Mr. Glenn when he had noticed that he was having erosion issues on his property. That's when he had six years.

THE COURT: That's a different question.

MR. WHITE: So --

THE COURT: Hold on a minute.

I agree with you that the placing -- if the damage is caused by the placing of infrastructure in the lot at some point in time, then if that's the cause of the damage -- the proximate cause of the damage, then the clock began to run when it was put there, but if the damage is a result of the failure of that infrastructure, it seems to me that the -- this is laying aside what notice somebody may have -- the failure of the infrastructure, then the clock would begin to run from the time of the failure of the infrastructure which obviously is a later date.

MR. WHITE: In this case it doesn't matter which way you look at it because the failure --

THE COURT: It may not, but isn't it true?

MR. WHITE: I don't know that I really agree with that, but I try not to argue with judges when it doesn't change the result.

And in this case --

THE COURT: I don't know if I agree with that, but...

MR. WHITE: -- the trespass occurred when it occurred. The damage was by the invasion on the property, and in this case --

THE COURT: She had notice at some point. We don't know whether it was -- at least I don't remember -- whether it was failure or -- all I'm trying to say is if she had notice of the pipe being there and if the pipe is the cause as opposed to the failure of the pipe is the cause, in my mind that starts the clock at a different time.

MR. WHITE: The way I understand the cases is --

THE COURT: They've got to tell me what the facts are here in a minute, but...

MR. WHITE: Well, as I understand the cases, it is when you have a structure such as a pipe that is a permanent injury to the property and

you have a single cause of action for all damage past and prospective.

THE COURT: Because it's a trespass?

MR. WHITE: Well, because it's also a permanent structure. Let's say you look at inverse condemnation. It's a permanent structure which the government is taking and it has a degree of permanence. Remember that it is an element of inverse condemnation.

THE COURT: Let's move on. I understand all that.

MR. WHITE: Look at the record of abatability because --

THE COURT: That's what I want to do.

MR. WHITE: You've asked a lot of questions about whether it's a standard. The only thing you have on abatability, the only thing in this record, one sentence, maybe two. I will note that the last part of Mr. Leonard's says, the attached estimates or repair costs, that has nothing to do with abatability. His repair costs are solely as to fixing the structure, including filling in line, repairing walls and things like that.

THE COURT: I'm sorry. Filling in the

line?

MR. WHITE: Filling in the line.

THE COURT: The pipeline?

MR. WHITE: The subject pipeline.

THE COURT: Okay. Yeah.

MR. WHITE: He doesn't look -- there is no cost analysis about what do you do with the water. He just looked at the house, trying to fix the house.

So you have the sentence, Paragraph 17 on Page 2. The water does not run under the -- the water does not have to run under Ms. Ray's house. You could bury a pipe deep enough so that it ran downhill toward Lucas. Otherwise, divert it around her house.

Mr. Leonard is testifying as an expert to render that opinion. Under South Carolina rules, his testimony has to be admissible at trial to be used by the court in the record today. That -- those two sentences -- those two sentences would not be admissible at trial based on this record.

He -- in South Carolina -- it's the end of the brief. It's the last three pages. It goes through what is required. South Carolina has not

adapted the Daubert test, although South Carolina did adopt Frye under State v Jones and some other cases. Materials used to refute under 56(e) have to be admissible. All expert testimony must meet a reliability threshold and imposes -- Rule 702 imposes an affirmative, meaningful gatekeeper function to you, the trial judge. It is a fundamental requirement that the opinions and inferences of an expert must be grounded in fact. More importantly, this underlying factual basis -- expert must be the type reasonably relied upon by experts in the field at issue. Failure to set forth the factual basis for an expert's conclusions renders the opinions and conclusions unreliable and inadmissible. That's from Dawkins v Fields, 2003 Supreme Court decision.

THE COURT: Was that at trial?

MR. WHITE: Yes, sir.

THE COURT: All right.

MR. WHITE: But under 56(e), it applies here today. They've had a year and a half. I'm sorry. That was not a trial. Dawkins was a finding and affidavit in opposition to motion for summary judgment inadmissible for failure to set forth factual basis for the legal conclusion.

THE COURT: All right.

MR. WHITE: It goes on, conclusory statements do not form a basis for withstanding a motion for summary judgment. That's in Green v State, 2002 decision. An expert's conclusory opinion was inadmissible where the expert offered no factual evidence to support the conclusion.

THE COURT: I'm afraid I have -- I don't disagree with you about the law. I agree with you, but I have not had an -- what I have not done somehow is read the report of this -- Leonard is his name?

MR. WHITE: Leonard.

THE COURT: I don't believe I've read his report.

MR. WHITE: I would proffer to the court that his report does not analyze in any form how he would reroute the water. It solely looks at how to fix the house.

I would note in Mr. Bagley's deposition, paragraph --

THE COURT: Well, he apparently says you can dig a deeper line to Lucas Street --

MR. WHITE: Well, that's not in his report.

THE COURT: -- so it will flow downhill.

MR. WHITE: Well, I'll give you a good example.

THE COURT: No. That's a diversion. Get back on your track.

MR. WHITE: On Bagley's affidavit he notes that any engineering opinion as to whether existing flow can reasonably be diverted from the subject pipe would first necessitate sufficient facts be developed by engineering studies, mapping and planning. To conclude, at a minimum, to find the following: The amount of flow through the subject pipe, the type of material and specifications of the rerouted infrastructure, the path of the rerouted infrastructure, the existing ownership and cost of acquiring the necessary private property through the rerouted path, conflict avoidance through the rerouted path and the location, depth and adequacy of the downstream infrastructure.

What's so interesting about -- the two things that popped to me so fast when I read that --

THE COURT: Hold on a second. What

you're trying to tell me is that there is no -- there is no evidence of what it would cost or what work would be -- well, what work would be necessary and thus what it would cost to abate the situation?

MR. WHITE: I'm saying that, but I'm saying further, as a gatekeeper, Mr. Leonard has not provided the facts to justify his conclusory opinion and thus they're inadmissible. He hasn't said where you would go and how you would get there. For example, College has five layers of sewer lines and power lines underneath it. So how would you get so deep to get down there so that, you know, you're at this level and when you finally get over to Lucas you're at here? He doesn't get into whether that's -- he says it's possible, but there's nothing to support it. He hasn't looked at it.

THE COURT: But all we're talking about is what is the cost ultimately of abatability.

MR. WHITE: I will submit to the court --

THE COURT: Of abatement, thus the realistic likelihood of abatement at all.

MR. WHITE: I would submit the city's position and I would submit to the court that based

on this record there is insufficient facts to even support his opinion that it is abatable at all. There is nothing to support it.

The city does not have to defend against a conclusory statement that has nothing in the record and we just assume that it's possible. It was their duty to show that it was.

THE COURT: Well, he's going to abate it by filling up the pipe.

MR. WHITE: Okay. The water is going to then sheet flow across her own property and right to her steps.

THE COURT: Well, maybe she can build something there.

MR. WHITE: Well, as I suggested from the North Carolina cases --

THE COURT: What is abatement? That's what's troubling me. That sort of begs the fact question. What is abatement?

MR. WHITE: I believe under the case law abatement is removing the condition of the trespass or removing the condition of the inverse condemnation, which in this case, according to Mr. Leonard, you've got to move the pipe and the water that flows in the pipe.

THE COURT: Or plug it.

MR. WHITE: But what Mr. Leonard -- under our case law, Mr. Leonard's Paragraph 17 is not admissible and the plaintiff has failed to show in any form that it can be abated, she's failed to show how it can be abated and she's failed to show anything as to cost of the abatement.

THE COURT: The tabbed version of all this I have is the DOT's. Which of these tabs is Mr. Leonard's report, Mr. Devlin? Do you know?

MR. DEVLIN: Your Honor, I'd have to look at it. I can provide you with a copy of the report easier than I could find it in there.

THE COURT: Here we go. Here's the --

MR. DEVLIN: Ms. Ray's affidavit has it as an attachment to her affidavit, I believe.

THE COURT: Go ahead, Mr. White, but be brief. We've gone over stuff I think I've gotten my mind around listening -- you're making some of the same arguments DOT is, and I think I understand all this, so I don't want to be redundant because these guys -- I want to give them plenty of time.

MR. WHITE: Right. Mine is more tailored based on the record and what is not there. And then, secondly, I would note that we received a

pack of -- a document that says, these documents were produced and show positive, aggressive acts. Those documents are not in the record. Production of documents does not authenticate or otherwise get documents into -- under the rules of evidence such that they are usable in this proceeding.

So we have that, and then the last thing I'd like to point out is, in the document you're looking for, his expert report, a couple interesting things. Number one, he does not make a finding that the pipe is leaking -- the subject pipe is leaking. There's no finding -- he discusses he thinks it is and it might be, but he doesn't discuss that it is.

And lastly, he also ascribes damage potentially to the fill material placed on top of the pipe, which, again, goes toward the fact that it's one action from one project. Whoever built the pipe, that's when it all started and it's not the water flowing through the pipe, but actually the pipe condition itself, which under the case law cited in the brief is where the demarcation line comes from one that is permanent versus one that is continuous.

So for those reasons the city requests

the court enter summary judgment on all claims. Thank you, Your Honor.

THE COURT: All right. Mr. Fennell.

MR. FENNELL: First, with respect to positive --

THE COURT: Before you get into it, help me now while I've got it here with Mr. Leonard's report.

Where is the -- Mr. White, where is the information you were trying to cite me in here? It was two sentences or something like that.

MR. WHITE: It's in the affidavit of Mr. Leonard.

MR. FENNELL: Judge, may I approach?

MR. WHITE: Page 2.

THE COURT: Yeah.

MR. FENNELL: This is a notebook that's got everything that we've been talking to you about. If you look at Tab 14, that's Mikes affidavit.

THE COURT: I'm looking at his affidavit.

MR. WHITE: Paragraph 17.

MR. FENNELL: Yes, sir.

THE COURT: What I'm looking at is not

in numbered paragraph form.

MR. FENNELL: That's his expert report. We did an affidavit for the motion. And that's Ms. Ray's affidavit.

THE COURT: I know it is.

MR. FENNELL: Here is Mr. Leonard's affidavit.

THE COURT: Maybe that's why I haven't seen it.

MR. FENNELL: Yes, sir.

THE COURT: How does it tie in to his report, if at all?

MR. FENNELL: It gives his background, his history, refers to his report. And then what John and Mark have been talking about is the last paragraph of the affidavit.

THE COURT: 17?

MR. FENNELL: Yes, sir.

THE COURT: Does the report deal with that?

MR. FENNELL: No, sir.

THE COURT: Okay.

MR. FENNELL: So Paragraph 17 gives his suggestion for how to abate the problem. The first 16 paragraphs talk about what he did with respect

to the house and his background. Importantly, Paragraph 6, I believe, is where the affidavit talks about his experience in storm design and that his first job as an engineer out of college was doing this sort of work.

So with all due respect to what Mr. White was saying with a great deal of passion, the gatekeeper function is met. He's an expert in this sort of thing and he says that you can fix this problem simple enough --

THE COURT: I understand what he says about how to fix it.

MR. FENNELL: -- by rerouting the water.

Now, the question about whether it's reasonable or not -- and I heard reasonable, I think, about 25 times, but the question about whether it's reasonable or not is for a jury to determine, if that issue even becomes an issue at trial.

THE COURT: Well, the first question is whether it is abatable.

MR. FENNELL: Yes, sir.

THE COURT: What's your position about the cost of abatement?

MR. FENNELL: I think the cost of abatement is not something that I've read in any case, that you can't say that at a particular dollar number it's no longer abatable. It's reasonable. So the question about what is reasonable is a question of fact and something for a jury to resolve. There's nothing in the affidavit which would indicate how much that it would cost. The only thing I can tell you about how much rerouting water would cost is just things that we've talked about in settlement negotiations.

THE COURT: Go ahead.

MR. FENNELL: So with respect to affirmative acts, it's not really putting the pipe under the house that we're talking about. It's collecting and channeling water. If you'll look on this map you'll see the great degree of water that the DOT is responsible for collecting and doing something with under the statute, and that's all in orange. And then the City of Rock Hill has a similar statutory duty to collect and do something with the water on its streets that's all in green.

Positive, aggressive act number one by the state is making the decision that they are going to adhere to their statutory duty or comply

with their statutory duty by routing the water down Strait Street, and what the state seems to be implying is that, once we do that --

THE COURT: Where is it in the record that the state said it was going to do that?

MR. FENNELL: That's -- this is -- you can just see from the water there's no dispute --

THE COURT: No. That's not my question. From what I gather and read, nobody's got any kind of agreements or anything like that to establish rights or licenses or anything like that.

MR. FENNELL: Sure enough.

THE COURT: Where has the city calculated -- I mean, I'm sorry, where has the DOT calculated to do that?

MR. FENNELL: All that we can -- all that we can know is what we see.

THE COURT: We know that water drains into the system.

MR. FENNELL: Yes, sir. And we know where the pipes connect.

THE COURT: And we know where the pipes connect.

MR. FENNELL: Right. And we know that this belongs to the state.

THE COURT: Yes, sir.

MR. FENNELL: And we know that the state is taking its water down a city street.

THE COURT: No. We know the city is taking the state's water down a city street.

MR. FENNELL: No, sir, because the city is not collecting the water from this orange area. The state is.

THE COURT: Whose pipe runs down Strait Street?

MR. FENNELL: That is the city's.

THE COURT: All right. That's what I said.

MR. FENNELL: The water that is coming off of Oakland --

THE COURT: That's right.

MR. FENNELL: -- every bit of that is the state's water.

THE COURT: That's right.

MR. FENNELL: And the state has decided that an easy way to handle their problem under the statute which requires them to manage the water which is -- which flows down this street is to pipe it down Strait for whatever reason.

And you're right. We don't have

anything in the record that would indicate why they would make the decision --

THE COURT: The state didn't make that -- there's nothing in the record to show that the state made that determination other than the state tapped onto an existing pipe.

MR. FENNELL: Yes, sir. And by making that decision to tap onto that existing pipe, that's the affirmative act because by making the decision to tap onto that pipe they made a decision to shoot their water that way.

THE COURT: When did that occur?

MR. FENNELL: We don't know. All that we know is it happened.

THE COURT: Well, it happened more than three years before lawsuit was brought.

MR. FENNELL: Without question. Without question.

So the affirmative act from the state is that. And then what the state is suggesting to you is that once we tap into the city's street or --

THE COURT: I frankly don't think that qualifies as an affirmative act by state.

MR. FENNELL: That's what we've got

with respect to the state, and that the city is then -- the city is responsible for it after it gets into the green section and that they don't have any responsibility to check and see where it goes. And I cited a case to you which indicates that that's not true, that you can't live up to your --

THE COURT: Say that again, please.

MR. FENNELL: That I've cited a case to you which indicates --

THE COURT: No. Before that.

MR. FENNELL: The Hill case.

THE COURT: You said that the city what?

MR. FENNELL: Once the state hands off its water to the city --

THE COURT: Yes.

MR. FENNELL: -- that the state doesn't have to look and see where it goes, that it's not responsible anymore. And under the Hill case you cannot take your statutory responsibility to deal with the water that comes from your impervious areas by saying that I dumped it off on somebody else.

Now, affirmative act number two from

the state is their failure to look and see what happened to the water. The record would show that at least since 1941 there can't have been a question as to where that pipe ran because the documents that we've produced which were attached to Mr. Leonard's affidavit show without a doubt that at this point the water runs under this house. And then in 1941 we know without a doubt that the city made a decision that they were going to alter the course of the pipe, and today we know without a doubt that that decision was made and that decision was complied with and construction was completed because that's where the pipe is.

So as to the state, the extent of it would be, you collected the water like the statute says you're supposed to do it and you channeled it and you shot it under a pipe that you should have known went under my house.

Now, with respect to the city, the affirmative act is similar. The affirmative act is, as to College and Strait, you have a duty under the statute to take care of that water and you have decided that you're going to tap into this pipe -- whoever constructed it, that you are going to tap into this pipe in order to comply with the law and

you're going to shoot it under our house.

Now, we know from the documents that are attached to Mike's affidavit, as I just indicated, that they have known since 1941 that that pipe goes under her house -- and to say otherwise in a strange credulity is a nice way to say it, but the record shows without a doubt that they have known for over 70 years what happens with that pipe.

And then if there was any doubt, the record shows that in 2012 Mr. Bradford said clearly that, if you don't believe you have a right to send water under this house, neither do we, and do not reconnect, don't send your water under our house, and they did it anyway.

THE COURT: What was it that was disconnected? He mentioned a sewer line.

MR. FENNELL: Well, they were doing sewer line work.

THE COURT: When they did sewer line work it was disconnected -- the storm water was disconnected?

MR. FENNELL: Yes, when they were doing sewer line work the waterline was disconnected and Mr. Bradford wrote the letter which we've attached

to Lucille's affidavit saying, don't reconnect, don't send your water under our house anymore, and they did it anyway. Which was consistent with the position that they had taken with Ms. Ray throughout, which was that, we are never moving that pipe.

In 2011 when everybody found out and knew for certain that the water was going underneath that house, in Ms. Ray's affidavit she states plainly -- and they can cross-examine her all day long, but she states plainly in her affidavit that she was told by city officials in 2011, we're not moving it.

So they made a decision -- even if they didn't make it in 1941, they made a decision in 2011, reenforced in 2012, that we're going to send our water under your house, and that is a positive, aggressive, affirmative act.

And there is no way for them to say that they couldn't know what was going to happen because they saw it. It was open. It was open to all the world and they made a decision in the face of a letter saying not to do it anyway.

So with respect to positive, aggressive acts, that's what we have with the city.

Now, with respect to abatability, I think I've talked about that. Abatability is a question of what's reasonable, and John and Mark, I think, are saying two inconsistent things, things that can't be true at the same time, which is that there is -- it's not abatable, there's nothing we can do about it, but that it doesn't amount to a continuing problem. It's a continuing problem every time they send water under her house.

The pipe itself is what falls in line with Mark's cases, that if the damage is the construction of a particular facility, then we know sure enough that that took place on this date.

THE COURT: That's right.

MR. FENNELL: And you have to move forward and whatever damage occurred within three years or six years or whatever the statute is from the date of the construction of that particular facility or that particular infrastructure, then you have to bring your lawsuit.

This is different. The trespass happens every single time their water goes under our house. And the second way it's different is something that you picked up on, which is that the

damage is not resulting from the construction of the pipe. The damage is resulting from its failure.

THE COURT: Well, do we know that?

MR. FENNELL: Yes.

THE COURT: I thought Mr. White said we didn't know that.

MR. FENNELL: According to Mr. White, in -- in Mike's expert reports there are grounds where you can cross-examine him about that. Neither one of them have moved on that basis.

THE COURT: What, now?

MR. FENNELL: In Mike's expert report --

THE COURT: Yes, sir.

MR. FENNELL: -- there are other possible grounds for the damages that are mentioned other than the water leaking out of the pipe, but Mike says in his affidavit that he is sure -- he is certain that the damage is caused by water leaking out of the pipe.

Now, there may be damages --

THE COURT: He must have a factual basis for that, must he not?

MR. FENNELL: Yes, sir, and the factual

bases is the numerous inspections of the home that he's done, the study of the documents that he's been provided with.

THE COURT: So then what is the factual basis for it leaking out of the pipe?

MR. FENNELL: His expert opinion is based on the fact that the house is 90 years old, that the damage is fairly recent, that there must be something of substance that's happened recently.

THE COURT: Is that not Ray Simpson --

MR. FENNELL: No, because when you add to it the video that we took in the beginning part of April which shows the particular failures in the pipe, that shows the holes in it, the cracks, that shows the water stains, and then add that to the videos that the city already which showed it not as clearly, but showed that pipe was failing, in his opinion that's evidence that the house is suffering damage because of moisture problems because of leaks in the pipe.

THE COURT: So you're telling me that there are videos -- earlier videos that show -- of the city that show apparently no leaking in the pipe and then later videos done by Mr. Leonard that show leaks in the pipe?

MR. FENNELL: No. I'm saying that there are three videos. The first two are not very clear. The third one is very clear about where the particular failures are in the pipe. The first two were just -- the quality of the video make it difficult to determine much of anything at all. There are two city videos and then there's one that's Mike's. The motion was not sought on a causation-type issue or we'd be talking about what's in the video, but the video shows with certainty that the pipe has failed and according to Mike, that's what's causing a great deal of damage with Ms. Ray's house.

And then what I think Mark was throwing in at the end is that there's also a mention in the expert report that the pipe may have been improperly installed to begin with, that it's not compacted right and that because the soil was improperly compacted around the pipe that some of the settlement damage that she has been suffering is because of that.

Mike's response to that is if that was the cause of the damage, it would have manifested more than within the last three or four years. And that's an important issue for the statute of

limitations because the statute of limitations -- I mean, I think you argued enough about it with the other lawyers. I won't argue the same points with you, but we presented in the affidavit from Ms. Ray about her testimony that she thought that the damage that she was seeing was normal settlement damage. She suspected that the pipe ran under her house.

THE COURT: What about the colloquy with the city in 2008 where she had a city person come out to look at what she believed to be was the pipe running under her house?

MR. FENNELL: Yes, sir. And she was told that, first, the pipe doesn't run under her house and, second, the pipe isn't causing any damage, and she believed that, and she believed that until 2011 when she hired Mr. Leonard.

THE COURT: But she knew she had damage and she knew she called the city?

MR. FENNELL: Yes. Without a question. In her deposition she said that she feared -- I think the exact words were, she feared that the pipe ran under her house in 2008.

THE COURT: Did she not have a duty -- did that not rise to the level of notice to require

her to at least investigate it further?

MR. FENNELL: No, not without a more firm connection between the damage and cost.

THE COURT: If she was able to isolate it to that extent, it seems to me she's charged with sufficient notice to start the statute.

MR. FENNELL: I think that, again, given the denials from the city that waiting until she was able to talk to an expert about the connection between the settlement damage and what was going on in her house -- or rather the settlement damage and the pipe and the leaking from the pipe was reasonable, and that even though it's an objective standard --

THE COURT: Well, I read the Graniteville case and I came away from it thinking -- I thought I had it here to look at, but I came away thinking that it was a little bit of an isolated application, not typical to the -- not typical to what we all call, you know, the notice standard, knew or should have known.

MR. FENNELL: It may be an outlier, but it's the law and it hasn't been overturned. The Supreme Court hasn't said, don't rely on it. It's the law. And the law of the state of South

Carolina says that given the complication in trying to determine the cause of the damage about which she complains that it's up to a jury to determine whether or not it was reasonable for her to do what she did not from a subjective standard, but from an objective standard.

And then the last point about the statute of limitations is that since we are talking about a continuing problem, every time it rains they shoot the water under our house, that we are entitled to at least be able to recover from damages which occurred within the statute.

THE COURT: That determines on whether the trespass is of a permanent nature, doesn't it?

MR. FENNELL: Correct. And that goes back to the point that I was making before, which is --

THE COURT: Is the trespass the water or the pipe?

MR. FENNELL: The trespass is the pipe, but I can't tell you that either one of these two parties -- or two parties put the pipe there, but the trespass is also channeling the water and shooting it under the house. And if you look at the law in South Carolina -- I think you were

asking about this before, you know, what do you do under the common enemy doctrine if water gets channeled in pipes. You get to do whatever you want to do with water that is going to flow downstream on somebody else's property until you make the -- take the affirmative step of channeling or collecting it and both parties in this case are collecting it. Because both parties are collecting it and sending it downhill to Ms. Ray, they're responsible for the resulting damage and they can't escape the resulting damage just by saying, we never looked -- we know we collected the water, we know we sent it somewhere, but we didn't look to see where it went. Especially given the documentation that was readily available in the city's files about where the pipe went. Neither one wanted to take any responsibility for where it went and both of them wanted to take advantage of the fact that somebody put a pipe there because it made things cheaper. They're entitled to use Ms. Ray's property if they want to. They're entitled to use the pipe that goes under her house. They've just got to pay for it, and that's all we're asking for.

THE COURT: Anything else?

MR. FENNELL: No, sir.

THE COURT: Mr. Devlin, help me with this. We've talked about the pipe as a trespass.

MR. DEVLIN: Yes, sir.

THE COURT: And the pipe is a -- the pipe is a permanent trespass.

MR. DEVLIN: Yes, sir.

THE COURT: I agree with you about that. Where does the water fit into that equation that runs through the pipe?

MR. DEVLIN: It would be another element of what might be causing her damage if she has the expert testimony to prove it.

THE COURT: When does the water itself become a trespass or a nuisance?

MR. DEVLIN: The water becomes --

THE COURT: There is no nuisance cause of action.

MR. DEVLIN: Right.

The water going into the pipe I would suggest becomes actionable under a theory every time it goes under the pipe. And there may be an abatability issue depending on what's causing the water to come into the pipe, but every time someone sends water underground without --

THE COURT: It's a new cause of action.

MR. DEVLIN: I would suggest so unless you have an abatability defense to it.

THE COURT: Well, that would only increase the liability, don't you think, if there was an abatability --

MR. DEVLIN: Yes, sir.

THE COURT: Go ahead. You were going to tell me something.

MR. DEVLIN: The common enemy rule does not apply to this situation. I do not have the case, Your Honor, but I read it in preparation for this, that says that once you have begun channeling water underground it loses its characteristic as surface water. Common enemy applies to surface water.

THE COURT: I understand.

MR. DEVLIN: All of Mr. Fennell's argument I would suggest as to collecting and concentrating in this common enemy rule is inapplicable here.

I would further point out to Your Honor that the record here contains an expert saying leaking is not confirmed. There is no evidence that leaking is causing the problem.

THE COURT: From whose report are you reading?

MR. DEVLIN: The plaintiff's expert.

THE COURT: Leaking was not confirmed.

MR. DEVLIN: Mr. Leonard, according to his report attached to his affidavit, the Bates number is Ray 467, in his opinions, videos of the pipe showed it's old, it's cracking, and other concerns that it may be leaking, parentheses, not confirmed by the study. If it is leaking now or in the future -- and he goes on to make other statements.

Several pages before that at Page 463 -- Ray 463, the Bates number, he makes several statements about the problems -- Geotech evaluations showing that the foundation was settling as a result of soft pipe fill soil. In the absence of the --

THE COURT: That's the original fill, though, right?

MR. DEVLIN: No, sir. I believe that would be the -- the original fill that went over the original pipe went when somebody put a pipe in there.

THE COURT: That's what Mr. White was

saying.

MR. DEVLIN: Yes, sir. And I would suggest that because the pipe is permanent and the fill over it is permanent, I would imagine it's under the house.

THE COURT: Let me ask you this. Assuming -- if I find as a matter of law there was no affirmative, positive act such as to permit a claim for inverse condemnation, what I hear you frankly telling me, and I appreciate it, is that there could be -- you could have a situation where there is no claim for inverse condemnation because you don't have an affirmative, you know, positive act and all that, but you could still have a recurring trespass claim based on the water.

MR. DEVLIN: If there is proof of an intent to put that water under the plaintiff's house.

THE COURT: Yeah, but, in other words, you could -- the two are -- excludeing one doesn't exclude the other. I think I answered my own question. You've said that each occasion that the water goes through the pipe under the house could be a trespass --

MR. DEVLIN: It could be.

THE COURT: -- to use shorthand.

MR. DEVLIN: Yes.

THE COURT: But that wouldn't -- that's not an affirmative act?

MR. DEVLIN: No, sir. The affirmative act would have to be what caused the water to go under the house.

THE COURT: Yes, sir. Right. Okay. All right.

MR. DEVLIN: And I'd like to address that because Mr. Fennell made a couple of points as to the state's affirmative acts. So one was the state's decision to route water down Strait Street. We don't know if the state decided to tap into a Strait Street pipe or if the city decided to tap into an Oakland Street pipe. There's nothing in the record to show there was a conscious decision by anybody at the DOT, the DHPT or otherwise to do that.

THE COURT: I understand.

MR. DEVLIN: It's absent from the record.

Mr. Fennell argues that an affirmative, positive, aggressive act is a failure to look and see. I don't think you can have an affirmative act

that is a failure to act. It has to be an action.

THE COURT: No. I know of no inverse condemnation case like that.

MR. DEVLIN: And he says that we collected water, put -- we -- the DOT collected water, put it in the pipes and should have known it went under her house. Well, Your Honor, one, it's not official --

THE COURT: You've already covered that and I don't believe that the DOT is charged with that knowledge necessarily.

MR. DEVLIN: Okay. That's all I have in response, Your Honor.

THE COURT: Mr. White.

MR. WHITE: I believe Mr. Fennell misspoke. I cannot find in Mr. Leonard's affidavit where he says he's really positive that water is leaking out of the pipe.

THE COURT: Well, I think Mr. Devlin just cleared that up.

MR. WHITE: Well, the affidavit came later. I think Mr. Fennell was trying to say he supplemented his opinions in the affidavit. I looked, Rich, real quick, but I didn't see it.

THE COURT: You mean in his corrected

affidavit or whatever?

MR. WHITE: No. The affidavit came after the report. So Mr. Fennell was making the argument, well, it's not in his report, but he said it in the affidavit and that gets it into the record.

I don't see it in the affidavit itself. I think the only thing in the record is he thinks the pipe might be leaking and it would cause this sort of damage if it did, but I disagree with Mr. Devlin that each occurrence of water flowing through the pipe is a trespass in this case especially since there's nothing in the record to show that the water has caused any damage. It could all be solely attributable, according to opinions of plaintiff's expert, from the soil material. He doesn't distinguish, nor does he nail that down, and he goes into his report saying that he's not nailed it down.

Mr. Fennell is wrong on gatekeeper. He's confusing qualifying an expert based on their education and experience versus a gatekeeper of the opinions. The case law that I read in the last three pages of the brief is very clear that each opinion there's a gatekeeper of function to make

sure that the opinion is not some guy coming in with a briefcase saying, I'm really smart and an expert and it's because I say so.

The city is entitled to be able to test it based on facts and engineering practices, which we have been deprived of in this case.

THE COURT: Does it apply to the Scintilla Rule, the act that applies here to the original determination of whether somebody should be considered to be an expert?

MR. WHITE: The city is not taking the position that Mr. Leonard is unqualifiable as an expert.

THE COURT: He just hasn't said anything about it is what you're saying?

MR. WHITE: Our position is there is nothing admissible in this record to support that it is abatable, how it would be abatable or what any costs would be. It's complete -- the record is void and their claims fail because the record is void on that issue that they have to sustain.

THE COURT: Okay.

MR. WHITE: There is -- the notion that the water is distinct from the pipe is an opposite to the Glenn case. Remember it was water that

caused Mr. Glenn's trouble. Mr. Glenn argued, I should get a new cause of action every time the water comes across my property. The court dealt with that and the court rejected it. The court felt -- said that, no, you have a single cause of action. You had six years to bring it, you failed to do so, so even know you're hurt, even though it's wrong, even though we don't like it, you're out of court.

There is -- again, in this case it's even more specialized because there's nothing in the record that demonstrates that the water has caused any of the damage to the house.

And then finally, in this case the record is void of the city doing anything affirmative to the property, connecting to the pipe, building the pipe. There is nothing about that.

THE COURT: I understand.

MR. WHITE: And then finally, I can brief this, Your Honor, in full, but again, the case law from South Carolina -- there's a nice old case in the 1800s which is very clear that an upper landowner is entitled for water to flow through its natural watercourse. They have that -- they have

that right.

THE COURT: This doesn't have anything to do with a natural watercourse.

MR. WHITE: It does. The event itself by operation of time can become a natural watercourse. So your question is: By what right would someone --

THE COURT: A natural watercourse has to do with surface water.

MR. WHITE: I believe the case law distinguishes between surface water and water and watercourses and having banks and delineated paths and has a very different test on --

THE COURT: I agree that a watercourse may be different from changing the course of surface water.

MR. WHITE: Although it should not matter for purposes of this motion, if for any reason the court feels that whether to grant or deny the city's motion may fall -- whether the city has a right to expect that water will follow its natural path, allow me to please brief it. Otherwise, it really shouldn't matter based on abatability and the statute of limitations.

THE COURT: All right.

MR. WHITE: Thank you, Your Honor.

MR. FENNELL: Judge.

THE COURT: No.

All right. What I want to do is -- hand me up the Edgepath case, the Graniteville case, since I can't find mine, and the Glenn case.

I find as a matter of law there is no positive, aggressive act under the current law that qualifies as a -- under the current law there's nothing that qualifies as a positive, aggressive act for the purposes of inverse condemnation, so I grant the motion as to inverse condemnation. I think that necessarily disposes of the need to consider the statute of limitations in that connection.

I am going to take under advisement the business of statute of limitations in my reading of the other cases. So the trespass case I'm not ruling on yet -- I mean the trespass cause of action I'm not ruling on. I'll take that under advisement.

So why don't we do this. I'm going to get -- I'm going to get Mr. Devlin and Mr. White to prepare me an order concerning the inverse condemnation, but just hold off on doing that until

I rule on the rest of it, and I can do -- I'll do my -- if I deny your relief on the other one I can do that myself because that wouldn't require anything.

Any questions about that?

MR. FENNELL: No.

THE COURT: Anybody have anything else? Yes, sir?

MR. DEVLIN: Your Honor, there is a cause of action pled for injunctive relief that I briefed but not argued. I don't feel any need to brief it. I believe that Your Honor can look at the law, the arguments made and deal with it as you wish, but I don't believe there is any inadequate remedy at law for the plaintiff here. I believe the plaintiff has legal remedies.

THE COURT: Well, nobody's argued that. If anybody wants to argue that, I'll be glad to hear it. I don't to preclude anyone's opportunity to argue that.

MR. DEVLIN: I omitted to argue when I first stood up, Your Honor. The points of the defense of the DOT's summary judgment motion said that there is no genuine issue of material fact that would entitle the plaintiff to an

injunction -- to a permanent injunction in this case because the standard law which applies for injunctive relief which requires there to be an inadequate remedy of law, I believe that the remedy of law which the plaintiff in this case is possessed of is the right to make a claim timely for any number of causes of action under law such as inverse condemnation or trespass. I don't believe that the possible paths under the statute of limitations being set she has an inadequate remedy of law. She just didn't use it in time.

That is the essence of my argument as to the injunctive relief.

MR. FENNELL: Your Honor.

THE COURT: Mr. Fennell.

MR. FENNELL: The response is also in the briefs that we wrote and it is that there is no adequate remedy of law because you can't stop the problem until you cure the source of the problem and what's going to happen if you --

THE COURT: Well, let's assume for the moment that, as they have admitted so far, that Ms. Ray -- and apparently Mr. Leonard suggested that Ms. Ray could fill up the pipe, in other words, disconnect it as it runs on her property,

and if -- and that would -- there's action she can take to do that and there's a remedy of law to recover for her cost of doing that if that's what she does. That's what injunctive relief is for, to require them to get water out of that pipe.

MR. FENNELL: Or to stop sending their water into the pipe, yes, sir.

THE COURT: That's right.

MR. FENNELL: The problem with that is that, you know, again, with all due respect to my friend Mark, he said the same thing to you that he said in mediation and every other time we talked about it, which is that you can stop up the pipe if you want to --

THE COURT: That's right.

MR. FENNELL: -- but I retain all my legal rights. And it goes back into the taking/inverse condemnation, which I know you've already ruled on, but if they have rights to the pipe, they've taken it. They keep saying that, you can stop us, but we're going to --

THE COURT: They claim no -- they claim no right to the pipe.

MR. FENNELL: Yes, sir, they do. They claim a right to the pipe because they've said --

Mark just said it about 30 minutes ago, that you can stop up the pipe if you want to, but I'm retaining all my rights against you if you do. And one of the -- the rights either exist or they don't exist. And what they keep contending is that we can't stop them -- it goes back to Charles' letter -- we can't stop them from sending water under the pipe because of whatever theory it is that they -- that this is now a natural watercourse. In order to keep that from happening, there needs to be an injunction that says, you can't do it anymore, you have to stop sending water underneath Ms. Ray's house. And we shouldn't have to spend the money to block up the pipe --

THE COURT: Let me say it this way. Your expert witness has proffered an opinion about a remedy short of stopping up the pipe, namely to reroute the water around to Lucas Street, and that's an adequate remedy at law.

MR. FENNELL: We can't do that, though. We can't send the water to Lucas. That's not possible for us. Only the entity that owns the road or owns the pipes or owns the water can do that. All we can do is block it up.

And I've asked them can I block it up

and we get the same sort of curious response, which is, do whatever you want to do, but I'm going to sue you if you do it.

THE COURT: No. He didn't say that.

MR. FENNELL: I'm retaining all my rights to bring an action if you do it. I believe that's a direct quote.

THE COURT: I don't think it is, but assume that it is.

MR. FENNELL: And that's the reason why there needs to be an injunction, to tell them to stop doing it. That's why we pled it that way. That's why we asked you for it.

THE COURT: Mr. White.

MR. WHITE: Your Honor, for the same reason that there's no trespass and no inverse condemnation, there's no basis for an injunction. There isn't remedy of law. It would seem that if the court issued an injunction you would then be constraining another branch of government's exercising the power of imminent domain.

And as to issue of --

THE COURT: The city can exercise its right of imminent domain.

MR. WHITE: If it needed to, it could.

THE COURT: They'd pay her for the house and the lot.

MR. FENNELL: If it needed to and the circumstances warranted, the legislative body could make that decision. If the court issues an injunction, it would seem to be precluding that. This case doesn't require equitable powers. There's even some case law that says equitable relief doesn't allow against the state and the subdivision, but in this case, that's a more -- that's a hanging -- what's driving the bus is, is there a cause of action for trespass, is there a cause of action for condemnation. If there's neither, there is certainly not any claim for an injunction. That's a tag law.

THE COURT: All right. I find that the plaintiff has an adequate remedy of law. If it's continuing trespass and the city continues to exercise what it claims may be a right to channel the water even if it doesn't own the property, own the right-of-way, there's a continuing damage for that. They can be compensated. I mean, it doesn't make sense to me to combine the trespass cause of action with the injunctive relief that you seek. So I grant the motion as to the injunctive relief.

There is an adequate remedy of law, even to the tune of the destruction of the whole house. Is there any case -- what's troubling me is, is there any case law that says there's no adequate remedy of law if the statute of limitations has expired?

MR. DEVLIN: Your Honor, I believe there is case that says the opposite. I don't have --

THE COURT: Say that again.

MR. DEVLIN: I believe there is case law that says that the passage of the statute of limitations is not proof of the lack of adequate remedy of law.

THE COURT: That's what I'm asking.

MR. DEVLIN: Yes, sir. I think I -- I think I can find that case for you at about a 70 percent level.

MR. FENNELL: I don't doubt it.

THE COURT: Sir?

MR. FENNELL: I don't doubt that. I think he's right.

THE COURT: Okay. I grant the motion. And hold off on the order until I deal with the rest of it and then we'll see where we are.

MR. DEVLIN: Your Honor asked for several cases.

THE COURT: Yes, sir.

MR. DEVLIN: The Hedgepath, the Glenn, the Graniteville case. I have extra copies of them, if you wish.

THE COURT: Was there another -- well, no. I've got it. That's fine. That's all I need. That's all I need. Somewhere I've got it.

MR. WHITE: Your Honor, with your permission, may I also hand up the two cases I cited in my brief?

THE COURT: Sir?

MR. WHITE: Can I e-mail you two cases that are cited, one out of Georgia and one out of Pennsylvania?

THE COURT: No.

MR. WHITE: They're cited in the brief, just for your --

THE COURT: Well, I'm not interested -- I think there's adequate South Carolina law to address the problem.

MR. WHITE: These are square on.

THE COURT: There's adequate South Carolina law to address the problem.

All right. Thank you.

(The hearing was concluded at 3:54 p.m.)

CERTIFICATE OF REPORTER

I, Angela D. Zuver, Court Reporter and Notary Public for the State of South Carolina at Large, do hereby certify that the foregoing transcript is a true, accurate, and complete record.

I further certify that I am neither related to nor counsel for any party to the cause pending or interested in the events thereof.

Witness my hand, I have hereunto affixed my official seal this 30th day of June, 2014 at Lexington, Lexington County, South Carolina.

Angela D. Zuver, Court Reporter
My Commission expires
June 24, 2024

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STATE OF SOUTH CAROLINA) IN THE COURT OF COMMON PLEAS
) SIXTEENTH JUDICIAL CIRCUIT
COUNTY OF YORK)

LUCILLE RAY,)
)
PLAINTIFF,)
)
VS) C.A. NO. 2012-CP-46-4100
) C.A. NO. 2014-CP-46-3928
CITY OF ROCK HILL,)
SOUTH CAROLINA, ET AL.,)
)
DEFENDANT.)
)

TRANSCRIPTION OF A MOTION TO RECONSIDER BEFORE

THE HONORABLE S. JACKSON KIMBALL, III

YORK, SOUTH CAROLINA

APRIL 15, 2015

AUDIO TRANSCRIBED BY: KELLY L. REITER
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Motion to Reconsider, audio recorded by the Court, at the Master-in-Equity Court, 1 North Congress Street, York, South Carolina, commencing on April 15, 2015. Please note the audio recording did not include the beginning time of the hearing. The Honorable S. Jackson Kimball, III, presiding.

* * * * *

Judge Kimball - All right. This is Case Number 2012-CP-46-3928, Lucille Ray against the City of Rock Hill and others. Present and representing the plaintiff is Mr. Charles Bradford and Mr. Rich Fennell. Present and representing the City of Rock Hill is Mr. Mark White. I've got both sides' motions to reconsider.

Mr. Fennell - Yes, Your Honor.

Mr. White - Yes, Your Honor.

Judge Kimball - Okay. Whose was filed first?

Mr. Fennell - Probably ours.

Judge Kimball - Go ahead.

Mr. Fennell - Judge, as you recall, we were here last June - - -

Judge Kimball - I do recall that.

Mr. Fennell - On a Rule 59(b). Here we are, ten months later arguing it. But we argued all of the factual background. You were kind enough to

let us go on forever, but we can go over whatever you need in order to get it back in your mind. I don't plan to replow a lot of the old ground, but - - -

Judge Kimball - I don't need it. I don't need it replowed. You can tell me as much as you want to - - -

Mr. Fennell - Yes, sir.

Judge Kimball - But I remember it.

Mr. Fennell - Yes, sir. As you remember, Ms. Ray lives in a house on College in Rock Hill. It's 330 College.

Judge Kimball - (Indicating yes)

Mr. Fennell - And this map is the map that we submitted. I think I submitted one that was mounted with - - -

Judge Kimball - I don't know about that.

Mr. Fennell - But you can have this one. There's a storm drainage pipe, a stormwater drainage pipe that goes underneath their house, and there's a lot of water that goes through that pipe.

Judge Kimball - (Indicating yes)

Mr. Fennell - Ms. Ray believes that the water is causing damage to her house, that the pipe has

failed in a number of respects. We filed a lawsuit against the city and against the Department of Transportation for a number of different reasons.

Judge Kimball - Right.

Mr. Fennell - You dismissed the Department of Transportation in your order last August.

Judge Kimball - Yes.

Mr. Fennell - And then granted a partial summary judgment to the city. Both Mark and I are asking you to reconsider two separate issues in your ruling. The first issue that we're asking you to reconsider comes from the fact that you agreed with me that the trespass that we've alleged is a continuing trespass. That is, every time it rains and there's water that's collected in those pipes - - -

Judge Kimball - And the statute of limitations has not run?

Mr. Fennell - Yes, sir. And every time the water is collected in those pipes from the city's roads and it is dispersed beneath Ms. Ray's house, that's a new trespass. The law in South Carolina is pretty clear, that if there is a continuing trespass, that an injunction would

be the appropriate remedy. Because if you don't let Ms. Ray proceed upon her claim for injunction, and we've prevailed against the city for - - -

Judge Kimball - Well, there's a distinction between appropriate and mandatory.

Mr. Fennell - Yes, sir. That's true, but you have dismissed the claim for an injunction, so I - - - I can't even argue it. It's an appropriate remedy for a continuing trespass. Because if I prevail at trial and get a damage award based on the condition of the house that I'm able to show the jury, and the water continues to flow underneath the house and nothing is done to stop it, I'm going to have to sue them again and again and again and again. Because of that fact - - - And I've cited three or four cases in my brief that say that when you have a continuing trespass, in order to prevent a multiplicity of suits, you should be able to consider an injunction in order to stop it. Your initial ruling was for - - - on that issue. I remember and recall very well you saying that you were dismissing my claim for an injunction in court. Then we had a telephone conference,

and I thought that you said that you agreed to reconsider that decision.

Judge Kimball - Rich, I did not pull a copy of my final order. Do you have a copy of that - - -

Mr. Fennell - Yes, sir.

Judge Kimball - That I can look at, please?

Mr. Fennell - Yes, sir.

Judge Kimball - I should have it.

Mr. Fennell - And I thought you said in a phone conference that you had reconsidered that and had just decided to let me go forward to the jury on whether or not we're entitled to an injunction. Then in the final order, it says that I can't. So it's that issue that's number one on my list of things that I would ask you to think about again. And again, it comes down to the nature of the continuing trespass. I don't want to have to sue the city again. So I would ask you to deny the motion for summary judgment and let the trial court decide whether or not the city should be enjoined from allowing their water - - -

Judge Kimball - So are you trying to tell me that the availability, we'll call it, of

injunctive relief to deal with a continuing trespass does not - - - I don't even know how to complete that thought. Does not fail by reason of there being an inadequate remedy at law?
Mr. Fennell - I think that the cases say that there is no adequate remedy at law, because of the fact that you're going to have to deal with it again. It's not the type of case where you can have a trial, and people will put on their evidence, and a jury can say, this is how much damages you either get or don't get, and the situation is resolved. If the trespass is continuing, then we're going to have to file another lawsuit and another lawsuit and another lawsuit. It's because of that multiplicity of lawsuits that the courts have decided in South Carolina, and I think it's consistent pretty much all over the country, that when you're dealing with such a cause of action, that a court should consider not only damages, but perhaps the conduct of stopping the trespass if the trespass is, in fact, unlawful.
Judge Kimball - Just a second. I'm looking at the - - -
Mr. Fennell - Yes, sir.

Judge Kimball - Inverse condemnation. Okay. Go ahead.

Mr. Fennell - And then the second issue that I would ask you to reconsider has to do with - - -

Judge Kimball - Well, let's deal with that one first.

Mr. Fennell - Yes, sir.

Judge Kimball - Mr. White, what about that?

Mr. White - Your Honor, I'm aware of no case that says that they have to allow the injunctive relief for their case. It actually says, if there's an adequate remedy at law - - - Rich's hypothesis presumes that there are damages flowing on and on and on and on, and it's - - -

Judge Kimball - He said - - - What his hypothesis is that there is no - - - And I won't say hypothesis about the law. That there is no adequate remedy at law for a continuing trespass.

Mr. White - I'm not aware of a case that says that continuing - - - a case that involves a continuing trespass, that there is no adequate remedy at law.

Judge Kimball - I'm not either.

Mr. White - And what the Court found was that

money damages can resolve every bit of the damages which she alleges in the complaint or that's in the record, that money damages can resolve that. Then you have an issue of, well, they can sue again and again, but you've got to have damages. There's nothing in the record, at the point that this motion went forward, to suggest that that's the case. So I wasn't aware that the Court was considering rethinking the dismissal of that cause of action. I believe the Court is under just a basic black line rule which is, if money damages make you whole, you don't resort then to the court of equity.

Judge Kimball - No, I wouldn't either. Based on the plaintiff's brief or memo that I got - - - Bear with me a second. All right. Let me ask you this - - -

Mr. White - Yes, sir.

Judge Kimball - Mr. Fennell - - -

Mr. Fennell - Yes, sir.

Judge Kimball - It is now - - - After reading the order and looking at the relief, is there a distinction to be made between a continuing trespass and a repeated trespass?

Mr. Fennell - The cases that I've read argues

that - - -
Judge Kimball - What is the trespass in this case?
Mr. Fennell - The trespass that you found in your order, and based on what our argument - - -
Judge Kimball - It's the water, right?
Mr. Fennell - Yes, sir. Yes, sir. And then that is continuing because it is going to be repeated a lot. I haven't found - - -
Judge Kimball - I didn't rule that.
Mr. Fennell - Sir?
Judge Kimball - I didn't rule that. What I want to be clear is, my memory is that I didn't - - - There is no - - - I did not rule that the piping itself is a trespass.
Mr. Fennell - Correct.
Judge Kimball - I did rule that the discharge of the water is a trespass, and that each occurrence of that is a - - - another trespass.
Mr. Fennell - Yes, sir.
Judge Kimball - I don't know that that makes it a continuing trespass.
Mr. Fennell - It is, unless the city stops.
Judge Kimball - No, I don't agree with that, and I can - - - To make it easy, if I'm your

neighbor and I throw my garbage over my fence, onto your yard, once a week, that doesn't make it a continuing trespass. I'm just repeating it over and over again.

Mr. Fennell - Yes, sir. Unless you have a collection system that takes the garbage and naturally shoots it onto my yard. That's the - - -

Judge Kimball - Well, I only do it once a week.

Mr. Fennell - Which is what the city has. What the city has is, every time it rains, the water that flows onto their streets, which is required by statute to deal with, it deals with it in a manner which ends up with the water going underneath Ms. Ray's house without - - -

Judge Kimball - We don't disagree with that.

Mr. Fennell - There's no way to stop it. The only way to make them stop it is if you or another judge tells them to stop it.

Judge Kimball - Well, no, they can fix it.

Mr. Fennell - Correct, but there's no way to make them fix it. If they don't fix it, then I have to sue them again, and again, and again.

Judge Kimball - I - - - Okay.

Mr. Fennell - And if you look at the Little

case, which is the case that says it most directly, but the Little case says that because - - - In order to prevent a multiplicity of lawsuits, that in a continuing trespass situation, an injunction should be considered by the Court.

Judge Kimball - Okay. I've considered it in this argument, and I deny it.

Mr. Fennell - Yes, sir. Okay. The second issue that we would ask you to reconsider relates to the inverse condemnation claim. I understand your ruling that the pipe itself is not - - - Because it did not present sufficient evidence to satisfy you as to the ownership of the pipe, that I could not use that as evidence of a taking by the city or by the Department of Transportation. I don't want to reargue it, but there was - - - There was evidence that was presented to you, which I can't tell from your order whether you considered it or not, relating to an event in November of 2012. In November of 2012, the city was doing some work on College, and the pipes were disconnected from the pipe that runs underneath Lucille Ray's house. Mr. Bradford wrote a letter to the city's lawyer and

said, don't reconnect. If you say you don't have an easement, then you don't have a right, and you cannot reconnect to the pipe beneath Ms. Ray's house. They did it anyway. In reading through all of the elements of inverse condemnation, it's a positive, aggressive, assertive act which reduces the claimant's property rights to the government's advantage. I can't imagine more evidence of it than - - -

Judge Kimball - That issue was not raised as a positive, aggressive act when we heard this before.

Mr. Fennell - Yes, sir. It's in - - -

Judge Kimball - I don't believe it was.

Mr. Fennell - It's in the brief that I submitted to you. It's on the very last page of the brief.

Judge Kimball - Well, it either is, or it isn't.

Mr. Fennell - Yes, sir.

Judge Kimball - I do not recall that being argued, as a positive, aggressive act sufficient to meet the standard of the case.

Mr. Fennell - I've got a copy of the brief that I submitted in the first go-around, if you'd like to see it. It's also in Lucille Ray's

affidavit and in my - - -
Judge Kimball - I don't have any question about the fact. I'm not questioning the fact.
Mr. Fennell - Yes, sir.
Judge Kimball - What I do not recall is that, that the reconnection of the pipe was asserted as the positive, aggressive act sufficient to satisfy the case law.
Mr. Fennell - Yes, sir. And again, memories - - - Your memory and mine can fade over ten months, but the brief is there. While our minds might be more likely to do that, we - - - We did argue about it in open court, and again, I wrote about it. So I was surprised to see your decision, and - - - Because it didn't reference Charles' letter, I thought that I needed to file a motion in order to have you take a look at it and decide whether or not it changed your mind. But it was a part of the record - - -
Judge Kimball - Well, even - - -
Mr. Fennell - As well as part of the argument.
Judge Kimball - Even if it was, I do not find that it represents a positive, aggressive act within the meaning of the case.
Mr. Fennell - Yes, sir.

Judge Kimball - Those cases have to do, from my recollection of my reading of them, is that in effect the condemnor - - - or that the punitive condemnor did something different to change the flow of water, for example, reconstructing the roads to create a different pattern of drainage, things like that.

Mr. Fennell - Yes, sir. I disagree, but I understand. Then I am arguing against what the city has put before you as their two motions to reconsider. One deals with - - -

Judge Kimball - Well, let me hear from him.

Mr. Fennell - Yes, sir.

Judge Kimball - I'll let you - - - And there's nothing else from you, right?

Mr. Fennell - No, Your Honor.

Judge Kimball - All right. Well, I deny the plaintiff's motion. Mr. White?

Mr. White - Thank you, Your Honor. Two grounds for the basis of the city's motion to alter or amend. The first, the Court in the order found that the water itself was a trespass. The water coming out of the city's pipe, into the subject pipe - - - And let me just say. When I say the subject pipe, I'm talking about the pipe where

it starts on her property, where it goes back to the manhole behind it, the part that's under her house.

Judge Kimball - I understand.

Mr. White - And so the Court found that the city - - - The collection discharge of water under Ms. Ray's house may be considered an affirmative intentional act by the city. The first basis for the motion is that the - - - that finding presupposes information and facts that aren't in the record. If the city had a collection system - - - And let's say it just went into an open ditch. Then someone that owned the property of Ms. Ray's, prior to Ms. Ray, decided they wanted to put a pipe in, the subject pipe. The fact that the city's system collects water and sends it downhill, as it always has gone - - - where it used to be in a ditch, and now it's in a pipe - - - that's not an affirmative, aggressive act by the city.

Judge Kimball - Tell me what the presuppositions are.

Mr. White - The presupposition is, is that the city's affirmative, aggressive act of sending water through its system into that pipe was

caused by the city. Whoever put the pipe in created that situation, not the upstream. The record is completely void of anything that says where that pipe came from. But yet, the finding that the city is creating an affirmative act by discharging its water into that pipe is presuming that the city created the pipe.

Judge Kimball - No, I disagree.

Mr. White - It - - -

Judge Kimball - The act is the water. But the city uses it to dispose of its water, and it is the path of the water itself, which constitutes the trespass.

Mr. White - So in a hypothetical, in a hypothetical of - - - The city has a catch basin, which drops off into a ditch. Someone - - - The city is casting its water through the ditch, just like the DOT does down Highway 5 with all those little offshoots. That's not a trespass because that's the path the water was going in.

Judge Kimball - You mean a natural ditch, or a - - -

Mr. White - A natural ditch or a natural flow downstream.

Judge Kimball - I don't disagree with that.
Mr. White - All right. So if someone - - - Like what actually happened on Highway 5, the little trailer there on the left, when they widened the road, they decided they wanted to put a pipe in to take the water off the road, rather than the open ditch that it was. So they actually piped the discharge of that water off of Highway 5. It now goes to an enclosed pipe, back to a pond back behind the two trailers. Years later, can someone come that owns that property later and say that the DOT's actions of casting water through their culvert and their catch basin into that pipe is an affirmative, aggressive act and a trespass by the water flowing through the pipe?
Judge Kimball - Are you asking me a question?
Mr. White - I'm just - - - I'm just trying to illuminate why it raises this issue. Because when I look at those two situations, you have to read this record as being the same as that situation and - - -
Judge Kimball - I don't - - - I don't agree with that, but go ahead.
Mr. White - Well, there's no evidence that - - -

Judge Kimball - The only record I have before me is this record.
Mr. White - Right, but they have the burden of proof. The burden is, they have to show it was an affirmative, positive, aggressive act.
Judge Kimball - They have to show - - -
Mr. White - And in the hypothetical - - -
Judge Kimball - They have to show a positive, aggressive act.
Mr. White - They have to show a positive, affirmative - - -
Judge Kimball - Affirmative is in the other equation.
Mr. White - All right. So if - - - In the hypothetical, which I would argue that based on our record, you would have to presume would be the case because they didn't show otherwise, then how can it be an aggressive act for water to flow through a pipe, from a city street into a pipe that was created by a landowner? How could that flow be a positive, aggressive act?
Judge Kimball - Once again, that's a rhetorical question and not one you're asking me?
Mr. White - Well, what I'm asking the Court is to, in considering that, recognize that in this

case the city is not putting water through a pipe - - - The city's putting water in a pipe is not an aggressive act, when the record allows for the fact that a previous owner of the property created the situation. Thus, it is not an aggressive act.

Judge Kimball - I don't know who created the situation. That's not in the record.

Mr. White - It's not in the record. It's not in the record. So how can it be an aggressive act unless it is shown that the city created the situation? It's putting the burden - - - It's shifting the burden from the plaintiff onto the defendant to make that shown, which I will submit is - - -

Judge Kimball - Because the city doesn't have to use it to cause damage to Ms. Ray's house.

Mr. White - But that's not the test for whether there's a trespass. The test for a trespass is for them to show that the city is actually using - - - is taking - - - is creating an aggressive act, that there's no right to do so. What the Court's order has done, based on this record, has shifted that burden away from them and showing that it's not their pipe and that it was

some sort of acquiescence or acknowledge by an owner when they built it, and I - - - I don't think that shifting of the burden basically helps the - - -

Judge Kimball - Well, let's - - -

Mr. White - The record.

Judge Kimball - Let's back up a second. From your perspective, the ruling on the trespass claim was a denial of a 12(b)(6)/summary judgment motion, right?

Mr. White - Correct, a fifty - - - a fifty - - -

Judge Kimball - There is no appeal from that.

Mr. White - There is no appeal.

Judge Kimball - Okay.

Mr. White - I was just - - -

Judge Kimball - Hence, what difference does it make what I say now?

Mr. White - Well, it was just - - - I was hoping that, when you saw it as to what was happening, that maybe you would change your mind and reverse that part of the ruling.

Judge Kimball - I think that - - - I spent many an hour going through this case - - -

Mr. White - Okay.

Judge Kimball - And reading cases that I've

never read before. I hope I have gained some understanding of that subject matter, and as a result of that, denied the - - - denied the motion to dismiss.

Mr. White - The second prong of the city's motion has to do with the availability of - - - Judge Kimball - Let me - - - Let me ask. Mr. Fennell, do you have anything to add about the trespass.

Mr. Fennell - No, Your Honor. In addition to what you've already said, they make a decision every time they decide to use the pipe that goes through Ms. Ray's yard to trespass upon her property, whether or not they put the pipe there or not. They don't have to put the water - - - They don't have to deal with the water - - - Again, their statutory mandate is to deal with that street surface water. They decide, every time water goes down that pipe, that they're going to do it that way. That's why it's a trespass. That's why it's an affirmative act.

Judge Kimball - All right. Mr. White, what's next?

Mr. White - The next issue is on availability. This, of course, deals with whether there was a

- - - back then, a six-year statute of limitations or whether it was a three-year statute that's continuing. They have an affirmative duty to show that the issues here are available, so they can get to a continuing trespass. The - - - They - - - In the brief, we cited a number of cases. One of which, I will highlight for you in greater detail. It's Grays versus CAS Medical. I think Mr. Fennell, and probably legitimately so, took issue with the Grays case - - - I mean, excuse me, the Dawkins case because it was a - - - The holding - - - The specific holding in the Dawkins was about the - - -

Judge Kimball - What's the full title of the Dawkins case?

Mr. White - The full title was - - -

Judge Kimball - So I can remember it. Let me see if it's - - -

Mr. White - Dawkins v Fields. It's a 2003 decision.

Judge Kimball - Okay.

Mr. White - In that case, it has the same issues, but the court went onto - - - The specific ruling is that the affidavit just makes

conclusory legal opinions, ultimate conclusions of the legal opinions. So - - - But also in our brief, we cited Grays v CAS Medical, which I will highlight for the Court. It begins with - - - It's a computer - - - It's about computer code. It was a monitor for children, and it provides - - - There's two issues here. Number one, you have to have expert testimony about what is reasonably and practically available. It deals with that issue. It also deals with, what does it take for an expert to come before a court at summary judgment and be - - - and get his information into the record sufficient to withstand a summary judgment. The court says, we have little trouble concluding as a matter of law that Grays' claim is one such case requiring it for opinion, because it involves complex issues of computer science. Although we use computers in some form or fashion almost every day in our lives, the design and structure of the software they run is beyond the ordinary understanding and experience of the layman. Hence, they must support their allegations with expert testimony. Without it, their claims are subject to dismissal. It does a great job of

going through it. You know, it's - - - Rule 703 basically is the science and technical - - - will assist the jury as to facts, and then you can have someone admit expert testimony. In this case, the issue again is whether any experts involved are reasonably and practically available. Let's say it can be available. It doesn't say, is it available? It says reasonably and practically available. The court - - - This - - - Our state court has not accepted the Dobbs standard, the federal standard, but there's still a gatekeeper function.

Judge Kimball - Wouldn't there always be, at some level, a question of fact about what is reasonable and - - - whatever the other element was. Available?

Mr. White - Practical.

Judge Kimball - Practical.

Mr. White - The question of fact only - - - But only with expert testimony. You can't have - - - You know, a landowner can get up and testify what the value of their property is, because there's a case that says so, and I understand the basis for that. But here, you have a

function of what is - - - What is reasonable and practical from an engineering standpoint of redirecting hydrology and redirecting flow? You've got to look at storms and how heavy the storm is, saturations, and concentrations, and hard surfaces. All of that is going to require expert testimony. Remember in this case, all we had - - - The support that was available was a conclusory statement and an affidavit that says, there's no reason for the water to run on her property. That's all it said, I'm paraphrasing. What this case says is, you have an obligation at summary judgment to see whether it would be admissible if that's all that he said at trial. What I'm arguing is, it would not be admissible at trial. Thus, it wasn't admissible here. Since it was part of their necessary proof, they failed to - - - They failed to carry the burden at summary judgment, and summary judgment should be granted. In this case, you have three things you've got to look at. Number one is, is it proper for expert testimony? The second is, was he qualified? And the third is, how reliable was his statements? The court goes on to say that the factors that the court has to consider

as to reliability is the facts that he used that he based his decision on, and the methodologies, are they consistent with his expertise? Is that the way that someone in that field would render that decision? He can't just get up there and say, it can be done. He has to say, Fact 1, 2, 3, and 4, and as an engineer, I applied these facts. So that I can get another engineer to say, is Fact 1 true? Was it proper? Did he miss a fact? Did he include a fact? And then apply the engineering processes to look at how he came to his conclusion, so - - -

Judge Kimball - What did the - - - What did you, in support of the motion, submit to show that it was not reasonable and practical?

Mr. White - We have an affidavit from Mr. Bagley.

Judge Kimball - Who is an employee of the city?

Mr. White - An engineer.

Judge Kimball - Who is an electrical engineer?

Mr. White - He's in charge of their utility department.

Judge Kimball - That's right. Go ahead.

Mr. White - It's not my burden, again, to - - -

Judge Kimball - What did he say?

Mr. White - I'd have to - - - I don't have that document with me, but I believe he testified that based on grades and conflicts, that the relocation of this would be unreasonably - - -

Judge Kimball - Expensive.

Mr. White - Unreasonably expensive.

Judge Kimball - Well, what's expensive got to do with your question?

Mr. White - Well, because something that is reasonable and something that's practical - - - I don't believe it was the city's obligation to show there was a - - -

Judge Kimball - In other words, this - - - I don't recall there being any engineering study in terms of like - - - Like in the case we had about the park, where the creek ran and flooded the lady's house, I do not recall there being any engineering calculations or data to support the proposition that - - - abating the trespass, in other words rerouting the water, would not be reasonable or practical from an engineering standpoint.

Mr. White - I - - -

Judge Kimball - I understand perfectly that it may be a very expensive thing from the city's

standpoint. Unreasonable, in the city's viewpoint, expensive.

Mr. White - Again, in the case you're referring to, there was no hydrology study. That's one reason why the summary judgment was granted, because the plaintiff had an obligation to come forward with that showing. It's not the city's - - -

Judge Kimball - Well, in that case, the only evidence was that the small pipe that the state highway department had to deal with was the cause of the problem, not - - - not any - - - pretty much anything else.

Mr. White - In this case, it was the plaintiff who bears the obligation to show the continuing nature of the trespass or whatever. Thus, it's Ms. Ray's obligation to come before this court and show that it is available. It's not the city's obligation - - - If it were my obligation to show it's available, then I would have come before this court with a lot of different types - - -

Judge Kimball - But it's your motion.

Mr. White - It's my motion, but it's my motion testing - - - Rule 56 says I don't have to prove

the absence of their case. It shifts the burden to them to show beyond the mere pleadings and the mere speculation, that wouldn't be admissible at trial, that they have satisfied their elements, and they didn't. That was their obligation to show that, and they didn't do it. Under our - - -

Judge Kimball - What did they have to rebut?

Mr. White - They didn't have to rebut. They had to show that the - - - that the situation that she's complaining of is abatable. Otherwise, she's stuck with a six-year statute that started - - -

Judge Kimball - No. Your motion is - - - Your motion, as it sets out, your motion was that it is not abatable because it is not reasonable and practical. You have to offer support of that in your - - - in support of the motion.

Mr. White - And I did offer the prima facie support necessary to - - -

Judge Kimball - I don't see that's prima facie. I don't accept that as prima facie support, the fact that the city considers it to be unreasonably expensive. There was no engineering data presented by Mr. Bagley, that I

recall. Am I wrong about that, Mr. Fennell?
Mr. Fennell - You're not. Mr. Bagley said it's too expensive.
Mr. White - The - - - Under the Rule 56 process, when - - -
Judge Kimball - What it says is, when one side presents an affidavit in support of its motion, then the obligation shifts to the opponent of the motion to present a counter affidavit.
Mr. White - I believe what Rule 56 says, and what the case law says is, when a party comes before the court and articulates there's no genuine issue of material fact, it is incumbent upon the plaintiff to put into the record sufficient evidence which, introduced at trial, would be sufficient to satisfy all of its elements, and they haven't done that.
Judge Kimball - You just said - - - You just answered the question. You must come forward with something that shows there is no genuine issue of material fact. That's all I found, there is, based on what's before me.
Mr. White - And what I'm articulating to the Court is, the lack of any evidence, one way or another, is not sufficient for the plaintiff to

withstand a motion for summary judgment. They have to come forward with evidence.

Judge Kimball - And my question to you is, how has the city shown that there's no genuine issue of material fact? The answer is, it submitted the affidavit of the city's utility director, who said it's unreasonably expensive. That does not mean that it's - - - As a matter of law, it is - - - It does not show, as a matter of law, that it is not practical or reasonable to reroute the water. From the rest of the evidence, there must only be a scintilla of evidence to be drawn based on any influence in favor of the non-moving party that there's a genuine issue of fact. That's all I want, is a genuine issue of fact.

Mr. White - And what I submit to the Court is, there is no scintilla of evidence submitted by the plaintiff in support of that that's admissible.

Judge Kimball - With that being the point, I think there is, based on the entire record. There's an inference to be drawn from the entire record.

Mr. White - The only way they could get it in is

through expert testimony. The expert, the only thing he testified to was a conclusory statement which would not be admissible at trial, and thus, cannot create a scintilla of evidence. It's - - - This - - -

Judge Kimball - How can you ignore the fact - - - On either side, how can you ignore the fact that water can be rerouted? That doesn't require an engineer. Water can be rerouted.

Mr. White - Well, if that's the Court's ruling, I - - -

Judge Kimball - No, that's not my ruling. I'm just telling you, it seems to be that's where you begin.

Mr. White - Well, if the Court's position is that it's res ipsa, that it's - - - the thing speaks for itself or - - -

Judge Kimball - No, it's not res ipsa.

Mr. White - Then - - -

Judge Kimball - Those are facts commonly knowable by a layperson.

Mr. White - Without seeing Mr. Bagley's affidavit to refresh my - - - It goes more than saying it's expensive. It talks about conflicts. It talks about grades. It talks

about water forces. It goes into greater detail than that. I would submit, the way the lay of the land is, I have cases that, you know, maybe we'll look at later in these proceed - - - further proceedings down the road. There's cases that talk about how just the natural grade of the land determines a lot of what happens as far as where the water goes, so - - -

Judge Kimball - And nobody would disagree with that.

Mr. White - Well, it's the plaintiff's job, in response to a motion for summary judgment, to come before this Court, and you take everything that they present into the record and would be admissible at trial. A jury could make a decision based on that, that there's sufficient evidence, and you - - - You infer everything in their favor. They have not done that. They have not come before this court with sufficient evidence. They have not - - -

Judge Kimball - I disagree with you. I don't want to hear anymore.

Mr. White - Okay.

Judge Kimball - Anything to add to that?

Mr. Fennell - No, sir.

Judge Kimball - All right. Anything further - -
-
Mr. White - No, Your Honor.
Judge Kimball - From either side?
Mr. Fennell - No, Your Honor.
Judge Kimball - All right. I will do an order denying both motions by a Form 4.
Mr. Fennell - Yes, sir. Thank you.
Mr. White - Thank you, Your Honor.
Whereupon - The hearing concludes. Please note the audio recording did not include the time the hearing concluded.

CERTIFICATE OF TRANSCRIPTIONIST

State of South Carolina)
County of York)

I, Kelly Lynn Reiter, a Notary Public for the State of South Carolina, do hereby certify that I transcribed from court audio the foregoing proceedings at the time and place herein designated and that the foregoing pages are a true, accurate, and correct transcript of the aforesaid proceedings.

I further certify that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, nor in any way interested in the event of said cause.

In witness my hand and official seal this the ____ day of _____, 20____, in the City of Rock Hill, County of York, State of South Carolina.

Kelly Lynn Reiter

Court Reporter/Notary Public

My Commission Expires:
7-20-22

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STATE OF SOUTH CAROLINA.

----------x

LUCILLE H. RAY,

Plaintiff,

Case No.

-against- 2014-CP-46-4100

CITY OF ROCK HILL,

Defendant.

----------x

September 12, 2016

York, S.C.

B E F O R E:

HONORABLE D. GARRISON HILL

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

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Official Court Reporter

I N D E X

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS

(NO WITNESSES)

E X H I B I T S.

NO.	DESCRIPTION	I.D.	EVD.

(NO EXHIBITS ENTERED)

THE COURT: Okay, so we are ready for the jury panel to come up.

THE BAILIFF: Judge, the bailiff -- the chief bailiff said that they would send us a jury. It would be anywhere from 10 minutes to 30 minutes.

THE COURT: Oh, ok. That's good to know. Well, let's see, let's get some stuff done. Do you all have any voir dire you want to talk about or does everybody agree on it?

MR. FENNELL: Your Honor, I filed a proposed voir dire, the most important question is question 42 which has been marked as modified and I think he's correct in the modification.

May I approach.

THE COURT: Sure.

MR. FENNELL: As I indicated because of Judge Kimbrall's orders there is a pretty specific set of rules to apply to this case and I think that more accurately states what we are talking about.

MR. WHITE: Your Honor, I don't object. I didn't quite get to finish reading that. That's a little more extensive then I'm use to.

My only two requests for voir dire specifics are, does anyone ever had an issue with flooding or anyone had an issue with trespass.

MR. FENNELL: And I don't have any problem with that Judge.

THE COURT: Okay.

MR. WHITE: And I will finish looking at that in the next two minutes.

Your Honor, may I approach.

THE COURT: Sure.

MR. WHITE: Prepared this for your consideration.

(WHEREUPON, there was a document handed to the Court.)

THE COURT: So I will be inclined to just ask a pretty simple voir dire about if they are related by blood or marriage to the parties or any witnesses and I guess there is a witness list here I can go by. If they have a personnel, social or business relationship with any of those people, whether they ever had an issue with flooding or trespass, whether they've had prior involvement with a civil lawsuit and if so what kind, whether or not they had either had a dispute or filed a claim against the City of Rock Hill or other governmental entity, whether they have some bias or prejudice about the the civil justice system to the extent they couldn't be fair or impartial in a civil case, whether they know of any bias or prejudice about this matter, whether they know the lawyers or related

to the lawyers or have a relationship with the lawyers.

That will be about probably be as far as I am going to go.

MR. WHITE: Yes, sir.

THE COURT: Anything else we can talk about before the jury comes in.

MR. FENNELL: I don't know that there is a motion that is short.

THE COURT: Okay. Do you all want to get into the motion in limine and we see how far we can get before the jury comes up. As much as I enjoy this staring contest, probably not a productive use of our time.

So this is the plaintiff's motion in limine. Excuse me -- the City's.

MR. WHITE: Thank you, Your Honor.

Mark White, I represent the City of Rock Hill in this matter. The City asked the Court to exclude certain anticipated portions of the structural expert retained and proposed the testimony by the plaintiff Miss Ray. Just so we are clear, under our rules there are three thresholds determination for expert testimony. We are only going to deal with the third.

The first one is whether the subject matter is one that requires expert testimony. We do not contest

that. Number two, is whether the person in question has by experience or education or some form acquired an expertise that's not common to the lay person such as to assist the trier of fact. We do not contest that Mr. Leonard does meet that qualification, except as to perhaps the geotechnical service which we will talk about in a second. But as structural engineer he does and admittedly so by the City.

The third requirement though is the one that we are dealing with here. The substance of the testimony must be deemed reliable, and our courts have set up a gatekeeper role for Your Honor and in fact one of the cases, State V White even has a quote that says the familiar evidentiary mantra that a challenged evidence goes to weight, not admissibility. It even preempts what a lot of older judges would say. That familiar mantra can only be evoked by a trial judge after it vetted the matters of qualifications and reliability and admitted the evidence.

So the Court has been vested with not only the authority but the mandate to serve as gatekeeper to make sure that evidence that comes under the cloak of expert testimony, scientific testimony, is reliable. When you look at reliability, there are a lot of factors; the publication and pure view technique,

prior application of the method, the quality control procedures used to ensure reliability. That one comes in to play here. The consistency of the method with recognized scientific laws and procedures. That's from Graves v CAS Med Systems.

THE COURT: Let me -- I see Mr. Hamilton. Is the jury now?

THE CLERK: The are waiting out front there whenever you are ready.

THE COURT: All right, we are ready I guess.

THE CLERK: Bring them in?

THE COURT: Okay.

MR. WHITE: Thank you, You Honor. We at least got the preamble done.

THE COURT: Yes, you did.

(WHEREUPON, the jury enters the courtroom.)

THE COURT: All right good afternoon, ladies and gentlemen. My name is Gary Hill. I am one of the circuit judges in our state and I'm from Greenville. I am glad to be serving with you this week in the County of York, and we are going to select a jury in the case of Lucille H. Ray versus City of Rock Hill.

This case involves allegations about trespass and water runoff that Miss Ray alleges has caused her damage and the lawyers will tell you more about it

when we --

JUROR: Speak up.

THE COURT: You can't hear me? Let's see.

THE CLERK: There's a switch.

THE COURT: Right here?

THE CLERK: Down at the base.

THE COURT: Is that any better? I will try and speak up. Can everybody hear me?

(Jurors respond affirmatively)

THE COURT: Okay.

All right, this case is Lucille H. Ray verses City of Rock Hill. It alleges that Miss Ray had damage caused to her property by water runoff or flooding that she alleges is the responsibility of the City of Rock Hill. The lawyers will tell you more about it in their opening statements. Right now we just have to make sure we can find a jury that will be fair and impartial in this matter and can decide it without any kind of bias or prejudice. So to that end I will ask a series of questions and we will have the jury selected hopefully in pretty short order.

If you need to response to any of my questions please just stand up if you can or raise your hand and tell me your name and jury number and then can you respond.

The first thing I want to do is see if anybody is related by blood or marriage or kin to in any way to Miss Lucille H. Ray. And Miss Ray if you can just identify yourself, ma'am.

(WHEREUPON, the plaintiff stands.)

THE COURT: If anybody is related by blood or marriage to Miss Ray or kin to her in any way please raise your hand.

Does anyone have any personal, social or business relationship which Miss Ray, if so please stand. I am going to ask the lawyers who are going to be involved in this case to introduce themselves and anybody at their table.

Yes, sir.

MR. FENNELL: Thank you. I am Rich Fennell. I represent Miss Ray. With me is my parnter, Jennifer Houti, and my colleague, Charles Bradford.

THE COURT: Thank you, sir.

MR. WHITE: My name is Mark White and I represent the City of Rock Hill with my colleague, Jerry Melville.

THE COURT: Thank you. Anybody related by blood or marriage or kin to any of the lawyers that are going to be involved in this case, if so please stand.

Does anyone have any personal, social or business

relationship with any of the lawyers, if so please stand.

(Two people stand.)

THE COURT: Yes, sir.

JUROR: My name is Charles Meadow. My number is 116.

THE COURT: Thank you.

JUROR: And I know Mr. Bradford.

THE COURT: Would that effect your ability to be fair or impartial in this case Mr. Meadow.

JUROR: I would say yes, I believe that I can be fair, but I don't know the circumstances so I don't want to tell you something that might turn out otherwise.

THE COURT: All right. Well, I will excuse you from the case sir, just so you would not feel uncomfortable. All right.

Okay. Yes, ma'am.

JUROR: Lyla Johnson, 92. I worked for the City of Rock Hill.

THE COURT: Okay. How are you employed by them?

JUROR: Planning and development department.

THE COURT: Okay. Well, I haven't gotten to that question yet, but I appreciate your foresight. I'll come back to you. I'm was asking you about the

lawyers right now if anyone is related by blood or marriage to them or have any personnel, social or business relationship with them. Okay.

The people who may testify in this case include Daniel Bunnell, B-u-n-n-e-l-l, Allen L. Lumpkin, James J. Bagley, Matt Kirshner, Kim Cassarus, Robert Young, Lucille Ray, Hale Murray, Bob Macock, Marshall Rogers, Mark Leonard, Ed Cummings, Leslie Macock.

Is anyone related by blood or marriage or kin to any of these potential witnesses, if so please stand.

Does anyone have any personal, social or business relationship with any of these witnesses, if so please stand.

Yes, ma'am.

JUROR: Marshall Rogers has been a family friend for years and years. He and my brother went to grade school together.

THE COURT: And your name?

JUROR: Jamie Struif-pheowski 179

THE COURT: Thank you. All right, I excuse you from this case ma'am.

Has anyone ever been employed by the City of Rock Hill or brought a claim against the City of Rock Hill or had a dispute with them or had a member of your immediate family be employed by the City of Rock Hill,

and by mediate family I mean spouse, a parent or a child or sibling.

Okay. Starting right here with you, sir. (Indicating)

JUROR: Juror number nine, Rock Hill Fire, Rock Hill PD.

THE COURT: You currently work there?

JUROR: Yes, sir.

THE COURT: All right, I will excuse you from the case sir.

Yes, ma'am.

JUROR: Ninety-two, Lyla Johnson.

THE COURT: Okay, I'll excuse you.

THE COURT: Ma'am.

JUROR: Number 11, Sara Baker. I'm currently employed by the City of Rock Hill.

THE COURT: I will I excuse you from the case.

Yes, sir.

JUROR: Sandy Crowder, number 40, my son is employed by the City of Rock Hill.

THE COURT: In what capacity?

JUROR: He is on the meter staff.

THE COURT: Okay, and would that he effect your ability to be fair and impartial in this case?

JUROR: I don't think it would.

THE COURT: You could decide the case solely on the evidence and the law?

JUROR: Yes, sir.

THE COURT: Thank you.

JUROR: Harry Fetter, juror 56. Work for an engineering firm that is under contract with the City of Rock Hill, doing storm water.

THE COURT: All right, I will excuse you from the case. Storm water.

THE COURT: Has anyone ever had an issue with flooding or trespass or water runoff in terms of their property whether you were involved in a dispute with another person about that, or had an issue with it whatsoever? If so please stand or raise your hand.

JUROR: Your Honor, Gary Simrill, juror number 164. I represent House District 46 which lies within the City of Rock Hill. I own property in the vicinity of Miss Ray's property and have spoken to her about this case prior to it being adjudicated as her representative and as a property owner in that area. I don't know if you have a box for that you were coming to that sir. I just wanted to make sure --

THE COURT: No, I appreciate that Mr. Simrill and I'm glad that your public service has allowed you some benefit.

JUROR: Yes, sir.

THE COURT: I'll excuse you from the case sir.

JUROR: Yes, sir.

THE COURT: Thank you for being here.

Does anyone have any strong feeling about the civil justice system, or about the Court system to the extent that they don't feel they can be fair and impartial in this civil case? If so, please raise your hand.

Has anyone ever been a party to a civil lawsuit before?

All right, just tell me the nature of the case. That's all I need to know and whether you brought the case or had it brought against you.

JUROR: Juror number 55. I was a defendant in an accident case.

THE COURT: Thank you.

JUROR: Plaintiff and defendant. It was a landlord/tenant as plaintiff, and as defendant in a district case.

THE COURT: Your number?

JUROR: Juror 101.

THE COURT: Thank you.

JUROR: Forty-seven. I was plaintiff in a car accident.

THE COURT: Thank you.

All right. Does anyone know of any bias or prejudice they might have about anyone involved in the case or any issue involved in this case?

Let me ask you to come down here if I could.

JUROR: Thank you, Your Honor.

(WHEREUPON, juror comes down to the sidebar.)

JUROR: My name is Matthew Klein. I am president of North Carolina Utilities, Inc Carolina, it may involve different legal issues similar to here.

THE COURT: We will excuse you.

All right, we will proceed with the selection of the jury.

Yes, ma'am.

JUROR: For that last question. You said do you feel --

THE COURT: Do you want to come down here?

JUROR: I'm Juror number 152, Paige River.

(Whereupon, there was an off the record discussion.)

THE COURT: You are excused.

All right. We are having some computer problems up here evidently. So, there is no reason for people that have been excused to stick around. I'm sure you have better things to do. Do they need to call back

tonight?

THE CLERK: No, sir, they are going to be dismissed completely.

THE COURT: Okay, but I do thank you for your service, and Mr. Simrill, you in particular. You have been a wonderful representative for Rock Hill for a long time and it would have been easy for you to try and avoid your jury obligation. I know you wouldn't do that but you would be surprised how people do try and do it and I think be commended to being here because I know this is a busy time for you when you are out of session. So if anybody been excused you are free to leave at this time and we will work on the sheet up here.

How much time do you think you will need with the list?

MR. FENNELL: About five minutes.

THE COURT: All right. Thank you.

(WHEREUPON, there was a brief recess.)

THE COURT: Okay, everybody ready. All right.

THE CLERK: Alternate back and forth with the plaintiff and the defendant. Plaintiff starting first.

MR. FENNELL: We would strike number five.

MR. WHITE: Strike number two.

MR. FENNELL: Number seven.

MR. WHITE: Number one.

MR. FENNELL: Number ten.

MR. WHITE: Number eight.

MR. FENNELL: Number eleven.

MR. WHITE: Number six.

MR. FENNELL: Number 23.

MR. WHITE: Number 22.

THE CLERK: I would like to verify the strikes for both sides. I the following strikes for the plaintiff; five, seven, ten, eleven, and alternate twenty-three. Is that correct?

MR. FENNELL: Yes, ma'am.

THE COURT: And for the the defendant, I have two, one, eight, six and for your alternate twenty-two?

MR. WHITE: Yes, ma'am.

THE CLERK: Ladies and gentlemen as I call your name please your bring your personnel belongings and move to the jury box here to my right.

Juror number 55, Joanne Fallow; Number 23, Rosalind G. Burton; number 76, Linda B. Harris; number 123, Derek Moore; number 89, Fonda D. Hyatt; number 171, Jeannette L Stabler; number 28, David H. Champbell; number 58, Mary C. Finns; number 184, Melissa L. Thompson; number 20, John Buchanan; number 162,

Danielle L. Simcox; number 160, Ervin T. Shillinglaw; and number 47, Donna L. Deruyscher.

THE COURT: Okay. Any matters or motions related to the selection process or composition of the jury?

MR. FENNELL: Not from the plaintiff.

MR. WHITE: No, Your Honor.

THE COURT: All right. Ladies and gentlemen you have been selected as the jury in the case Lucille H. Ray versus City of Rock Hill. We have some pretrial matters we will have to undertake and have a lunch break. So just be back in the jury room at 3:30 this afternoon. If I am reading that clock right it is about 1:32 right now. Is that correct?

THE CLERK: Yes, sir.

THE COURT: Okay. So just be back in the jury room at 3:30 and the bailiffs will show you where the jury room is and where you will need to report.

Don't talk about the case. Don't do any kind of outside investigation. You haven't heard any evidence yet obviously. So, we will see you back at 3:30.

Thank you.

(WHEREUPON, the jury leave the courtroom.)

THE COURT: All right. Those of you who weren't chosen I can see the disappointment etched on your faces and you will be either further saddened to know

this is last case on the docket this week. So, you've satisfied your obligation as a citizen in York County for the purposes of your Circuit Court jury duty. So you have a three year exemption. I can't do anything about City Court, Magistrate Court or Federal Court, but as far as the Circuit Court goes we don't need to see you all for at least another three years. But I know Mr. Hamilton is always glad for you to come by.

Have a good afternoon and I appreciate your patience and corporation.

(WHEREUPON, jurors leave the courtroom.)

THE COURT: We will reconvene at 2:30.

(WHEREUPON, court recessed for luncheon recess.)

THE COURT: Okay. We were -- Mr. White had made his preamble and we will pick up there I guess, the motion In Limine.

MR. WHITE: Thank you, Your Honor.

THE COURT: Yes, sir.

MR. WHITE: I believe I was at the point were also according to Graves v CAS Med Systems held that basically that a witness -- when the Court encounters a witness who objects unreasonably doesn't count for alternative factors and causes it may be inconsistent with the opinion that that expert should be barred or that those opinions barred. "When an expert can not

offer an explanation for the rejection of a possible alternative cause the expert's testimony is not sufficiently reliable."

THE COURT: Now that's an interesting statement. I read that case many times before. That's kind of an interesting take on the scientific method, isn't it? I mean, scientific method is about guessing anyway.

MR. WHITE: About guessing, Your Honor, I think scientific method is about combining two things. You know, kind of like your carburetor you take a spark and fuel and add air and you get some combustion. You got to have the elements though to have the combustion. Where is here we are talking only about those opinion testimony that don't have each one of those key ingredients. There's no facts. There's no -- I put this stress gauge on there and came back every six months over a two-year period and observed it moving this much as opposed to I went by and it looked worse.

As I'm applying it here you have a myriad of things going on that is just being completely disregarded such that -- I guess my point is if there were a set of facts and scientific method being applied that someone else can come test it. Here when you don't have that these other causes get lost in the mix

because there is no process. It's just because I said so. In my experience I believe this to be true to a reasonable degree of engineering certainty. There has to be some facts. It has to be applied -- the engineering process has to be applied to it at least to a conclusion so that the opposing party can retain the services of someone in that field who can then test and validate it.

What we have in this case is on a number of fronts Mr. Leonard has not done that. But to start off with the first area is geotechnical. Mr. Leonard was not retain and is not being offered to the Court as an expert in geotechnical science. Everything below grade is the work of Mr. Cummings. That's the way Mr. Leonard testified in his deposition anyway. Mr. Leonard expressly testified he is not expert in geotechnical science and we have the deposition if the Court is in any way interested if I am accurately reflecting the record. He testified he wasn't a geotechnical engineer in another part. That he's not an expert with directive soil under the structure obtained to the subject matter of the action. He relies and defers upon the geotechnical engineering of Edward Cummings to provide the scientific analysis related to soil mechanics and geotechnical issues.

Mr. Leonard though when he gets -- when he starts discussing his conclusions, he starts talking about soil mechanics. He starts saying things that are contrary to Mr. Cummings. What we ask the Court do is to exclude or to bar him from issuing opinion testimony based on soil mechanics or geotechnical science.

The second area is testimony of water leaking from the pipes. This is critical. He has testified as his conclusion that the pipe is leaking. He does not base that on any facts or data consistent with engineering sciences. He bases it on he has looked at a tape of the camera that was put through the pipe. He sees some cracks and thus he knows it has to be leaking. Well, our review of the scholarly writings in that field reveal nobody that opines that is consistent with engineering practices. He can offer none. He offered none in his deposition. He testified though he has no physical evidence that the pipe is leaking at any specific point. He did testify that there are a number of non-destructive tests that could have been performed to confirm the pipe is leaking, but that he didn't employ those tests. Now, subsequent to his deposition they did hire a geotechnical expert to perform a test pit at Pier F and the test pit did not

support Mr. Leonard's theory. In fact, according to his theory, the water is leaking out of every crack in the pipe and thus it gets worse as it goes downhill and so you should find voids and moisture from the point of the crack downhill.

Well, again, the question is is his testimony, his scientific testimony reliable. In his deposition he states that is what you will find. When they dug at Pier F which is about the midpoint of the house well below downstream from a number of cracks that he testified he knows to be leaking, what the geotech encountered -- a man named Kurshner (phonetics) -- he encountered solid soil with no voids and it was dry even though the surrounding conditions were well wet during the time period of the testing.

So again we have -- we have again, looking at the Grave's case, we have data which is entirely inconsistent and the lack of any sort of desire or willingness to analyze that data or at least explain it. That is exactly the sort of thing that the gatekeeper is to prevent from getting into these proceedings when we start having a jury verdict. He failed to account for any of the facts and data contrary to his opinion.

Mr. Cummings, the original geotech, testified --

testified that the soils -- all the consolidation of soils and thus the movement of the piers was due to improper fill material on top of the pipe. He was asked specifically was that the consolidation of improper placed fill in the original instance or because of water coming back later. He said in the original instance. He did testify that if a pipe was leaking it would accelerate it. He was asked did you see any evidence that there's been acceleration of any consolidation due to leaking and he said no. So, here you a plaintiff's case where the geotech has testified the sole cause as improper placement of fill in the original instance. The City of course didn't place that fill. And then you have a structural engineer who is testifying that all these damages are flowing not from that, but from water getting out of the pipe. That's the sort of thing in a very rare case -- this is a very rare case, I admit to you -- but when you read these depositions and what the record has and how he has committed himself, it's a rare case when an is expert divorcing himself of the methodologies of his science and stating things expressly to a reasonable degree of engineering certainty when he doesn't have the data points, any data point, and any sort of engineering methodology to support it.

THE COURT: Well, how does he deal with the Kurshner results.

MR. WHITE: That occurred after his deposition. I'm not sure.

THE COURT: Okay.

MR. WHITE: From Mr. Kurshner he was asked to dig that pit. He was told where to dig it. He dug it. He reported his findings and he was sent home on his way. He was asked for nothing further.

THE COURT: So, Graves involved differential diagnosis. Are you saying this is a differential diagnosis too?

MR. WHITE: Well, sir, I believe Graves is actually a medical case. What happened in Graves was the expert -- there was an alternative potential cause of the occurrence and the expert assumed it wasn't true. He just -- it's was an alarm -- it was about an alarm and the woman said well, I didn't hear the alarm so he assumed it didn't go off. In this case you have an expert coming in who is assuming that water is getting out of the pipe and everything -- pun intended -- flows from there. He didn't first prove that water was getting out of the pipe, although the testing that he did have disproves the water getting out of the pipe.

At a minimum, Your Honor, he should have continued his testing until it proved his theory. One would argue that perhaps he could have expanded his scope and looked at potential other theories, but he likened not to do so. But yet he's ready to come in here and sit in front of this jury under the cloak and mantle of an expert in engineering science and pollute their minds because he's testifying not as an engineer using science, but as a witness for whatever reason. I won't profess to know why, but for whatever reason he is testifying of someone just from a frame of reference. He's not using science. It's the old classic, in Federal Court you have a lot of cases that say this, an expert can not come in and say it because I said so. And Mr. Leonard is because he said so. And that's just as to the water leaking out of the pipe. Then you have issue of abatement. This one is even more clear. In this one he -- again, Your Honor, there's a statute of limitations. What Judge Kimball ruled was there may be. He refused to throw out trespass. And he said that there was potential for Miss Ray that she might could come in to Court and prove a trespass and she might could come in and prove that the water somehow is abatable and thus the three-year statute of limitations won't apply here.

So she has to prove that the condition of the water flowing through the pipe is reasonably abatable. Not abatable possibly, but reasonably abatable under the case law.

Well, Mr. Leonard testified that he had not performed any hydrology study or study the flow of water to or through the pipe -- from page 62 and 63. He testified he had not analyzed whether an alternative drain line could be placed in any particular location to divert water flow. He had not analyzed whether any alternatives could conflict -- would conflict with existing infrastructure.

What the testimony will show is that College Avenue has a lot of infrastructure in it already and there are conflicts. He has not analyzed the topography of the watershed area and you know, wind and if an alternative line could reroute the water flow because as gravity fed, relative heights is important. He did not study, analyze the feasibility or cost of any alternative of routing the water flow. He testified he never performed a hydrology study of the storm basin watershed. Never studied the sources or amount of water flowing through or to the pipe. Never studied the rate during any storm system, and never analyzed -- critically, never analyzed the flow

downstream. It's all got to link up. And so, we did include in there a classic of have you analyzed feasibility at all? No. Have you analyzed cost? No.

Your Honor, the statute of limitation bars the trespass claim if they can not show that it's is reasonably abatable and if it's not reasonably abatable then it's a permanent trespass, if at all, and that the three-year statute of limitation had already run pursuant to Judge Kimball's order. So on that issue by his own testimony -- I don't have to go anywhere else -- by his own testimony he has not provided any sort of data or any sort of engineering process. He said I didn't look at it. I just say it can because I say it can.

Then you have the issues of causation. With trespass the water -- again the water has to be getting out of the pipe and has to be causing the damage. Here we have two key ingredients. First, there's a time component. It has to be damaged post 2009. Well, his report and his testimony talks about damage over a long period of time. Decades. But then when Judge Kimball issued his ruling we find out, oh well, everything is post 2009. All the damage that's on his report. You have other causes affecting this house. Cummings testified that the pipe can affect a

six foot wide zone of influence when you get to the house. The zone of influence of the pipe if it were settling because of water getting out of it the zone of influence from that would be six feet. Their expert says six feet. The house has damage well outside -- the same types of structural issues, well outside the six foot zone in both directions; right and left. Mr. Leonard did not analyze in any way any sort of other causes that could be affecting the components of his damage list. Plaintiff has a duty to come in here and not ask for a wish list and not ask for what they think the damages are. They have a duty to come in and prove their damages. Mr. Leonard has testify that he has no information. He did not study in any form whether the damage was before or after 2009. He even said it can't be done. He testified that he didn't look at whether it was from other causes or not. All the damage is from that. So for these reasons -- for these reasons -- you have his testimony -- is not reliable and should not be allowed in.

I did skip over on causation. From his own report he stated that the causes were insulation of the fill soil at the time of insulation. Mr. Leonard included that in his report. And then he says also water

leakage and back pressure. Well, again, he doesn't differentiate between the affect on the house from the improper placement of fill, with is not the responsibility of the City, and he hasn't made any attempt to try and distinguish between that which is and that which isn't. On back pressure he stated that he did not -- we ask the Court to exclude any sort of reference to damages flowing from back pressure because he didn't do a hydrology study. He didn't analyze what sort of force. He didn't analyze what the rate of flow was. He didn't do any sort of analyze even whether there was a back pressure resulting in damage. So, again, there is no data points and there is no scientific methodology to support or allow that testimony to get into the case.

He testified he can't identify damages occurring since or before 2009. That's on page 219. So, when you look at under 702 as the gatekeeper, the Court is being asked to exclude these components of evidence. Also his testimony falls prey to Rule 403, which evidence may be excluded if it's probative value is substantially outweighed by the danger of unfair prejudice, confusion of issues or misleading the jury. In this case his testimony that the plaintiff has been damaged without any sort of data, without any sort of

methodology leaves the City without any sort of ability to rebut it which is prejudicial to the City. It does confuse the issue because he is declaring things to be damaged without delineating between causes or time, and he is not using very basic scientific methods in support of his conclusions.

For those reasons we ask that the Court exclude those areas. There is one other issue we'll take up after that on the other, but I think that's what encapsulated in the written motion.

THE COURT: Thank you, Mr. White. Mr. Fennell.

MR. FENNELL: Thank you, Your Honor. Rich Fennell for the plaintiff, Lucille Ray. I will take the arguments in the order that Mark presented them unless there something you want me to go straight to.

THE COURT: No, that's okay.

MR. FENNELL: With respect to Mr. Leonard's qualifications and his ability to speak as to soil conditions, he did testify a number of times as Mark indicated that he is not a geotechnical engineer and when he gets into a situation, a forensic project, when he is trying to figure out what is going on with a structure in order to determine what is going on below grade he has to hire somebody that's actually studied that and that's why he hired Mr. Cummings.

What he also -- I think the dividing line is not at surface and then below surface, the dividing line between what he can do stops at he has studied and is an expert on the soil bearing capacity of dirt. That's what structural engineers do and when there's an issue as to when he thinks the soil bearing capacity of the soil has been impacted he needs a soil tech in order to try to help him figure out why that happened. So he believes based on what he has seen in the structure that the soil bearing capacity of the soil has been impacted and that would be what his expert testimony would be about.

THE COURT: And he's going to say what's the cause of that?

MR. FENNELL: That's what -- he believes that it's the pipe and then also as Mark indicated he attributes some of the damage to back flow. Rather a leaking pipe. And then he attributes some of damage to back flow and attributes some of the damage to the initial installation of the pipe and then also talks in his deposition about a remodel and the potential impact that that has had on the house. But he said throughout that the leaking pipe is part of the cause. With the soil tests I can't disagree very much with what Mark has said because it's in the deposition.

Kurshner is somebody that we hired after they submitted their expert report in February. And the goal was to try to find evidence that would help me rebut primarily their geotechnical evidence. And as Mark said and has Mr. Kurshner has said what I asked him to do was to tell me whether he thought there was any evidence that the pipe was leaking and that was leading to the damage in Miss Ray's house, and he said that he didn't see any evidence of that. He did a visual inspection of the crawl space and then he asked me did you want me to dig a hole. I asked him to dig around Pier F which is the pier that is the most obviously impacted by whatever is going on on that property. It's leaning over a foot and a half. It's got a brace on it. It's obviously been a problem and I wanted to know if there was any moisture in the soil around it. He dug on the side away from the pipe. Again at my direction, he asked me how much of a risk do you want me to take of puncturing the pipe. I said as minimal as you can. So he dug on the other side of the pipe expecting to see some evidence of a void in the soil or moisture in the soil around the footing that had moved so much and said that he did not find any. He then probed on the side of the pipe which is -- rather the side of the pier which faces the pipe

and didn't find any evidence that would suggest to him that moisture was playing a part of what was going on. You asked how Mr. Leonard deals with that and Mr. Leonard deals with it by saying that we didn't dig in enough places and that he is still convinced that there is moisture getting out of the pipe because primarily of the video and the defects that it shows and then the location of the damage in the house.

THE COURT: Did Mr. Kurshner look at the video?

MR. FENNELL: Yes, he's looked at the video.

THE COURT: And he said what about it?

MR. FENNELL: I don't know if that has changed his opinion at all. So that's what the geotechs have said about the condition of the soil and the ultimate cause of the problems. Mr. Leonard's methodology consists of walking around the house. He's reviewed multiple videos that were shot by the City, and the one that was shot by the company that we hired. He has performed flow analysis to see where the water goes underneath the house. He's looked at the location of the damage inside the house and he believes that the location of the damage inside the house reveals that it's along the zone of influence of the pipe and he adds all of those together and concludes that the leaking water is what is causing the damage. And that

would be the sum total of what he would testify to or could testify to.

With respect to abatability, the issue is -- as again as Mark described, because of Judge Kimball's Order we are left with having to prove a continuing trespass. Judge Kimball said that because the trespass -- the trespass was the collection of water and the collection of water underneath the city streets and then having that water flow underneath Lucille's house that he believed that under the law that may be a continuing trespass. And if it's a continuing trespass then the statute starts over and over and over again. The issue becomes if it is a permanent trespass. And I think the City's position is that the water has been flowing underneath that house for so long that I have to be able to show that it is abatable because continuing trespass is something that's abatable. It's something you can stop if you wanted to, and the argument that we had in multiple summary judgement motions and now in this Motion in Limine is just really the providence of the Court in determining what is reasonable.

Mr. Leonard testified as Mark described in his deposition that he didn't do a cost analysis. He didn't do a logistical analysis. He didn't do a

feasibility analysis. What he testified to in his affidavit was that he had experience in storm water design and that you could take on this -- this is a City's document. It would be one of the exhibits in the trial. Miss Ray's house is right here. (Indicating)

THE COURT: Okay.

MR. FENNELL: And the pipe system flows -- you can see the arrows or I hope can you he see the arrows. These green shaded portions are City maintained roads.

THE COURT: Okay.

MR. FENNELL: So the water that gets collected on College part of it flows this way and then underneath 340. Part of it flows down straight and then under Miss Ray's house and then there's a pipe over here that collects water and takes it over to Miss Ray's house and then underneath it, and then you will see where it elbows and goes over to Lucas.

What Mr. Leonard said is that you could if you wanted to dig up the street and change the direction of that pipe and I think the issue that the City has is what evidence do you have that will show that was reasonable.

We have another document from the City, and in all candor to the Court all that we know about this

document is that the City produced it. And it shows the water flow being changed in the way that Mr. Leonard describes where the water is collected in front of Miss Ray's house and then goes down to Lucas and then down in the pipe. I can't tell you how much that would cost. Whether it's possible. I can only tell you at some point somebody in the City drew it up. That's the evidence of abatability.

With respect to the damages issue, the causation, the statute of limitations, again is under Judge Kimball's order, is a hurdle for me. I've got to be able to show that the damage that we are complaining about resulted from a trespass that took place after 2009. And the only evidence that we have of that would be Miss Ray's testimony that she didn't really start seeing damage in her house until 2011 and 2012. Mr. Leonard testified, again as Mark said, that he didn't know any sort of engineering study that you could perform in order to verify that fact; that the crack in the wall took place because of the leak that moved a pier or moved a wall after 2009 or before 2009. But that would be the evidence, the physical manifestation of the damage took place in 2011, 2012 and then going forward and that would be enough to carry out burden and get pass the hurdle that was set

up in Judge Kimball's order.

With respect to causation, the issue is I think as I described when I first started talking about Mike Leonard's testimony, the causation theory is that there's a zone of damage in the house which appears to be over the pipe, and the pipe video reveals that it has cracks and that it has issues. Some that are little more significant then others. But it has issues because the cracks are there and the water that was getting out from the pipe is impacting the soil and causing the movement.

The evidence that Mr. Leonard prepared back in April of 2014 -- in order to help show that again we will use these exhibits from the trial -- and he took the length of the pipe and just marked the defects that are revealed in the video to show where they all were and then can correlate that to the damage that is seen in the house. So I think that's the extent of the evidence. Again, in all candor to the Court, the issue that I think I'm thinnest on is abatability and the abatability evidence as I described it. Mr. Leonard has said that based on his experience designing these systems you can change the water flow if you wanted to. And I don't have a cost analysis.

THE COURT: What about his opinion on the leak?

What is Mr. Leonard basing that on?

MR. FENNELL: The visual of the pipe.

THE COURT: Okay.

MR. FENNELL: And that since the pipe shows these defects water must be getting out and since there is a pattern of damage in the house that correlates with the location of the pipe that he assumes from that the damage is caused by leaks from the pipe.

THE COURT: And he has relating that directly to the sole soil bearing capacity?

MR. FENNELL: Yes, sir. I don't think there is any dispute that once water gets in to dirt it does bad things, especially if it gets in fill. What their expert reports have revealed is that the soil bearing capacity of the line above the pipe is approximately 1000 PSF. Most of the time for single family construction you want 2000 PSF. The soil that's outside of that zone they measured out at 3000 PSF. So it's firm. If water is getting in to soil that is not compacted or is as weak as the 1000 PFS soil that they found over the pipe then I think Mr. Cummings is right, that the water is going to accelerate the process of settlement that would take place if there's weight that's sitting on that soil. But again, as Mark said, Mr. Cummings could not find evidence that

that had happened.

THE COURT: What would be the traditional methodology used in Mr. Leonard's field to determine whether there was a water leak?

MR. FENNELL: What he thought about doing but then because of the danger didn't do it, was to do a pressure test on the pipe. He would stop the pipe on both ends and then -- or at one end and shoot water in it and then stop it up at the other end and see what happened. And he said that he thought if he did that that the pipe may completely -- I don't know if explode is the right word -- but completely fail, so he didn't do it.

THE COURT: So the video is of -- is that a camera inside the pipe?

MR. FENNELL: Yes, sir.

THE COURT: Where did it come from?

MR. FENNELL: There was a company that Mr. Leonard knew about. We hired them to come down April the first of 2014 and shoot the video. Mark was there. The lawyer for the Department of Transportation that was still in the case was there and we all watched as the video was taken and that's one of the exhibits in the case.

THE COURT: Does Mr. Leonard have any citation or

authority for the view that you can base your opinion about the leaking of the pipe on such a video camera.

MR. FENNEL: No, sir. It would be experience, common sense and his education.

THE COURT: Right. All right, Mr. White.

MR. WHITE: I could put some meat on the bone, Your Honor. The specific references, you just asked the question how would someone test if the pipe is leaking. One way is to fill it up. In Mr. Leonard's report, way back on December 5, 2012, delineated on page three of it, he says, "Further testing would be needed along the entire pipe route to determine if there are washouts or voids in place." So there he's saying the way you test to see is you look for voids and washouts. Mr. Kurshner will testify that that's the way you look. You should have found washouts at Pier F if there was anything ahead of it. And you if you would have done six such tests you would have covered the entire house. So six tests just like he did on that day would have verified once and for all whether the pipe is leaking. But they told him to go home.

Mr. -- staying on that subject -- Mr. Cummings, there first year technical, was asked on page 85, "You didn't encounter any strata -- in any strata, any

evidence of a washout or impact of water erosion through your strata?" Answer, "No." Then he was asked on page 87 starting at line three, "So, is it your opinion" -- excuse me. "Is that your opinion of what's happening?" He said again, "The piers are settling due to the backfill over the top of the pipe? Question, "Because of the backfill installation method or because of voids created by water?" Answer, "Installation method."

He was asked specifically, "Is it your opinion that the settling is because of washouts or because of installation method?" He said, "Installation method."

When you talk about abatement the clearest way is, Mr. Leonard was asked on page 126, "What factors if you were designing a storm waterline would you have to require to complete task? How would you abate this?" He says, "In this case or a general case?" He's asked, "In general. Well, you do a model on the watershed based on time of concentration, runoff, pipe sizes. You have you to deal with what's already there. You have to deal with the volume. The design form is. I forgot to mention that first. There is a design rate and you work your way down hill. I actually worked my way up hill in terms of most feasible route, see if that works. If it doesn't you

move. Keep moving until you have a solution. That's storm water design simplified."

Question after next, "And until you have all these factors you can't testify to a reasonable degree of engineering certainty that a line can be rerouted, can you? Answer, "No. I think we answered that earlier. It would take far more study."

On abatement he testified, to get to a reasonable degree of engineering certainty he would have to do study that he hadn't done and he couldn't testify to. So on the issue of leaking we have -- we have a circular organ. We have the pipe that's cracked so I'm going to just say in my experience that means it's leaking and I have damage in the house that I am going to focus on because it's consistent. Actually what you're going to see and this is minutiae, but in the -- the only data he gave us was on a floor. Rich just pulled up the big board. If you look at the slop of the floor it's going the wrong way. It should be sloping toward the indentation of the pipe. Instead it goes the other way. And here's the best one, Your Honor, if you look underneath the house, on top of the pipe, if the soil is consolidated there should be a depression down the length of the pipe. There is isn't. It is completely flat like the rest of house.

So you add all that up. You have an engineer who is admitting that he doesn't have the data points. He hasn't done the study. He admits how you're suppose to do abatement and he admits he didn't do it. The geotech states definitively he found no voids and that's not in his opinion what's causing the damage.

You have the second geotech they hired stating he dug -- digging in the second spot that they picked. There are no voids. It's solid and its dry. And oh, by the way, you could have done five more and you could have done the entire length of the pipe but it wasn't done.

For those reasons, Your Honor, the reliability of Mr. Leonard's testimony is not sufficient to cross over the gatekeeper's threshold and we ask that he be limited accordingly.

THE COURT: All right. Well, I know you all tried to resolve this matter out of Court several times and I appreciate that and I think those efforts have been genuine from everything I know about it, but I would urge you to try to explore some resolution. I will take a break. I'm going to take a break.

I'm just going to tell you I do have concerns about the admissibility of this testimony of Mr. Leonard, and once I come back out and make a decision it might

be a different scenario here in this case, so, we will take a recess and then let you all talk and see if something can be reached in terms of a resolution, but I urge you to do so. I mean, even if it got to the jury, juries are notoriously unpredictable and even if you won this Court there are two other ones the loser could go to. That takes years to do and this is an opportunity to resolve it while you have control over it. So I urge you to talk and we'll take a recess and let you all explore that and I will be back in my office if anybody needs me.

Thank you.

(WHEREUPON, there was a brief recess.)

THE COURT: So the motion to exclude the testimony of the witness, Michael Leonard, concerning the abatability of the alleged trespass is granted. I find that the opinion he has on abatability does not meet the requirements of Rule 702, State versus White or the Grave's decision. He admitted that he had not done any engineering work on this issue, and it would not meet criteria of being reliable or assist the jury. So, I grant that part of the motion.

MR. FENNELL: Your Honor, with the ruling and I understand it, the plaintiff must in all candor disclose to the Court that I can't meet my burden. So

I believe that at this point in time given the prior rulings of Judge Kimball it would be appropriate to enter judgement against me.

THE COURT: Okay. Well, of course as you mentioned earlier, Mr. Fennell, and I appreciate your fine representation you have shown, but Judge Kimball's ruling on the trespass and statute of limitations is the law of the case. It can't be changed at this point. Whether it is right or wrong is not for me to determine at this stage obviously. But he did state that the only genuine issue of fact was whether or not it was abatable. So I understand the quandary you are in sir and I would have to agree there is no issue of fact now given the ruling on Mr. Leonard's expert testimony being inadmissible. So, I will grant the directed verdict. All right.

MR. WHITE: Thank you, Your Honor.

MR. FENNELL: Thank you, very much.

THE COURT: Thank you.

So, jury will be discharged at this stage. We don't have to bring them in here unless you all want to.

MR. WHITE: No, sir.

THE COURT: With your permission I'll just tell them.

MR. WHITE: Thank you.

THE COURT: All right, thank you all very much.

MR. WHITE: Yes, sir.

MR. FENNELL: Thank you.

(END OF PROCEEDINGS)

C E R T I F I C A T E

I, the undersigned Aileen Butler, Official Court Reporter for the 16TH Judicial Circuit of the State of South Carolina, do hereby certify that the foregoing is a true, accurate, and complete transcript of record of all the proceedings in the captioned case, in the Circuit Court for York County, South Carolina, on the 12th day of September, 2016.

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

December 9, 2016

STATE OF SOUTH CAROLINA

COURT OF COMMON PLEAS

COUNTY OF YORK

LUCILLE H. RAY,

Plaintiff,

vs. CASE NO.: 2012-CP-46-03928

CITY OF ROCK HILL, SOUTH CAROLINA, A MUNICIPAL CORPORATION, AND SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION, AN AGENCY OF THE STATE OF SOUTH CAROLINA,

Defendants.

DEPOSITION OF: LUCILLE H. RAY

DATE: November 6, 2013

TIME: 9:44 A.M.

LOCATION: Law Offices of
Charles S. Bradford, P.A.
4 East Liberty Street
York, SC

TAKEN BY: Counsel for the Defendant
South Carolina Department of
Transportation

REPORTED BY: WANDA K. CECIL
Certified Court Reporter

A. WILLIAM ROBERTS, JR., & ASSOCIATES

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Q. Okay. How did you know the McDowells?

A. Well, they lived -- I think Thomas F. might have been still single then, when I lived on Oak Drive; but sometime in that area they got married. I'm not sure.

Q. Okay. And when you bought the house, it did not have the sun porch on it that you have -- I call it a sun porch. You may call it just a porch that you now have; right?

A. No.

Q. You put a reasonably significant sized addition on to the house on the driveway side; correct?

A. Yes.

Q. Do you recall if you had the house appraised back in 1980 when you bought it?

A. I'm sure they did an appraisal. I have no recall on what it appraised for.

Q. Do you recall whether or not, as a condition of the sale occurring, a home inspection had to be performed?

A. No.

Q. Outside of inspections that have been done by folks you hired as potential experts or experts in this case, have you ever had an

it will be clearer.

A. (Complying.)

Q. Okay. You've now put an asterisk on Exhibit 3 at what is roughly the back property line between the two Xs where the brick wall was located; correct?

MR. ABERMAN: Objection.

BY MR. DEVLIN:

Q. Is the asterisk on Exhibit 3 where you think that wall -- where you think that manhole is?

A. Yes.

Q. Is there more than one manhole in the back of your house? I'm sorry. In the back of your property?

A. Manhole for what?

Q. Anything. Is there more than one manhole in the back of your property?

A. I think they have taken the other manhole out.

Q. Okay. During the time you have owned your property from 1985 forward, has there been more than one manhole on the back side of your property, between the back of your house and the back property line?

A. The sewer manhole was on this side lot

property. Right (indicating). And no house was over it or in that -- it was on the second lot.

Q. Okay. You're indicating that there was a manhole, other than the one that you've already marked, that was on the longer side of your property; is that correct?

A. A sewer manhole.

Q. Okay. And why don't you draw a -- let's make a circle so that we can keep our shapes different, a circle where that manhole is located.

A. This is just a guess.

Q. I understand we're not surveying here.

A. (Complying.) Somewhere near that wall.

Q. Okay. And you called that a sewer manhole and you made a couple of distinctions between manholes of various types. Do you know what functions these two manholes in your backyard were intended to serve?

A. No.

Q. Do you know what they have been used for generally? Let me make it a little bit easier. There are sewer pipes and there are storm sewer pipes. There's a lot of difference between what flows through the two, if you get my meaning. Okay? The storm sewer pipe that I believe is an issue in

this lawsuit runs a storm drain directly in front of your house to a manhole that I believe is behind your house. And that has been referred to generally speaking in this litigation as a storm sewer pipe. Okay? I'm just doing definitions right now.

A. Storm sewer, not storm drain?

Q. No. A storm sewer pipe or a storm drain carries stormwater. A sewer pipe alternatively does not carry stormwater. In a perfect world, it carries waste. Okay? There are sewer pipes and there are storm sewer pipes.

Do you think that one of these two manholes or either of these two manholes are sewer pipes as opposed to -- that they serve as sewer pipes as opposed to storm sewer pipes?

MR. ABERMAN: Objection.

THE WITNESS: I think this is just a stormwater pipe. (Indicating.)

BY MR. DEVLIN:

Q. Okay. Now, you're pointing at -- and it's real important for us, Ms. Ray, when you point at something, that we identify what you're pointing at. You're pointing at the asterisk that indicates the manhole more or less directly behind your house; correct?

A. Yes.

Q. And you think that's a stormwater manhole? And I'm not trying to trick you with the labeling on this. Different people might call it different things. I just want to make sure that we are all talking about the same thing as regards storm sewer versus sewer.

A. I think this is only stormwater.

Q. Okay. And the one that is marked with a circle, that's on the longer side of your parcel, do you believe that is only stormwater or do you think that might be a sewer line?

A. I think that is sewer.

Q. Okay. The manhole behind your property -- I'm sorry. Scratch that.

The storm sewer manhole, the one with the asterisk, when did you first notice that on your property?

MR. ABERMAN: Object to the form.

BY MR. DEVLIN:

Q. Okay. Whatever that manhole is that you have marked with an asterisk, when did you first notice it?

A. We found it in August 2012.

Q. And you did not know that it existed

able to understand that a month from now.

A. Okay. Let's see. Now, you look at it. This is the pipe coming from the Maycocks' house. (Indicating.)

Q. Okay. We're looking at Exhibit 5 now?

A. Yes. This is the broken pipe that the sewer line people broke. (Indicating.)

Q. Okay.

A. The three pipes, bam, bam, bam. (Indicating.) The main pipe coming down the hill, you can see the shadow.

Q. Down the hill? Down Strait?

A. Down Strait Street. This is the shadow of that pipe. (Indicating.) This is the pipe that enters and it's the inlay box that takes all three pipes into it --

Q. When you say --

A. -- before --

Q. When you say inlay box, what do you mean?

A. An inlay box is where -- a cement thing that all pipes -- I don't know enough about it.

Q. A junction?

A. A junction box. Yes. That's the inlay box.

Q. And this is a pipe coming from the Maycock house?

A. Yes.

Q. And going where?

A. It junctions right in the center.

Q. Right in front of your front walk?

A. Right in front of my front walk and goes under my house.

Q. Okay. Is there one pipe that goes under your house or do you believe that there's more than one pipe that goes under your house or your property?

A. One pipe.

Q. And this is the inlay pipe that leads to that pipe; correct?

A. Yes.

Q. What's above this picture in elevation? College Avenue?

A. Yes.

Q. And this picture was taken with Ms. Maycock's camera?

A. Yes.

Q. How many of the pictures that you have provided your counsel came from Ms. Maycock?

A. Probably five or eight.

Q. Do you know if you got all of the pictures which Ms. Maycock has that relate to these pipes and storm sewer issues?

A. Pretty much so.

MR. DEVLIN: I'm going to show you Ray 7, which will be Defendant's 6.

(DFT. EXH. 6, Photograph Bates Stamped RAY000007, was marked for identification.)

MR. WHITE: Couldn't sneak one more in there so it'd be seven for seven?

MR. DEVLIN: Well, we're going to start jumping real bad in a minute.

THE WITNESS: Is this six or seven?

BY MR. DEVLIN:

Q. That is Defendant's Exhibit 6. It is Bates Stamped Ray 7.

A. Oh, okay.

Q. Do you know when this picture was taken?

A. November probably 17th or 18th. I'm not --

Q. Of 2012?

A. I'm not exact on the date. 2012.

Q. And this is of the construction that went on on College Avenue in that time period;

correct?

A. Yes.

Q. Did you take this picture?

A. I really cannot tell you whether it was myself or Ms. Maycock. I mean, I can if I saw my computer -- if I had my computer.

Q. Can you tell me what this picture is supposed to be of?

A. This is the storm drain that was broken coming out of the Maycocks, the corner of the Maycocks.

Q. You say this is the storm drain that was broken?

A. Yeah.

Q. Point at the line that you're talking about on six that is broken?

MR. ABERMAN: Objection.

THE WITNESS: (Indicating.)

BY MR. DEVLIN:

Q. Okay. Go ahead.

A. It was -- I mean, it just was broken and being replaced.

Q. And the line that I think you're referring to has a brand new piece of pipe right next to the gentleman in the picture?

A. Yes.

MR. ABERMAN: Objection.

BY MR. DEVLIN:

Q. On the right-hand side of that picture, there appears to be a manhole. Do you know where that manhole is?

A. That is in the middle of College Avenue.

Q. And are you -- I'm sorry. Is the camera in this picture aimed in the direction of the Maycock house?

A. I think so.

Q. So that the bulldozer would be more or less on Strait Street?

A. Yes.

Q. And your house would be probably to the right of the photographer, roughly?

A. I would say my house would be behind the photographer.

Q. Okay. Why did you take this picture?

A. It was just of construction going on on College Avenue.

Q. Do you know what entity was hiring the workers to do the construction work? Was it DOT or was it the City or was it some other entity?

MR. ABERMAN: Objection.

THE WITNESS: I think it was the City replacing the sewer line.

BY MR. DEVLIN:

Q. Okay. There is a smaller diameter pipe in the foreground of this picture. Do you know what pipe that is?

A. I believe it's water.

MR. DEVLIN: I'm going to show you a picture marked Ray 19 that will be Defendant's Number 7.

(DFT. EXH. 7, Photograph Bates Stamped RAY000019, was marked for identification.)

BY MR. DEVLIN:

Q. Can you tell me what this picture is of and where it is?

A. It's the storm drain, the end storm drain on the alley off of Strait Street.

Q. If I understand correctly, in between College and Oakland, there's an alley that runs behind the properties that front on to those two streets; correct?

A. Yes.

Q. And it goes both directions off of Strait Street, doesn't it?

A. Yes.

Q. Okay. Which one of these is that storm drain? Is it the one that would be to the left as you're going uphill or the one that would be to your right?

A. You're going up the hill, it'd be to your right.

Q. Okay. Why did you take this picture?

A. Because it connects to the storm drain going down the hill.

Q. And that that storm drain itself is in the alley?

A. You mean, this one? (Indicating.)

Q. The metal grate that's in the middle of this picture.

A. There are four of those.

Q. Well, I'm only interested in this one right now.

A. Okay.

Q. Is this storm drain that's part of Exhibit 7 in the alley --

A. Yes.

Q. -- on Strait Street? And your purpose in taking that was just to show where water could get into the pipe system that leads down towards

your house?

A. Yes.

Q. And I would assume that water comes from different properties on that alley; is that right?

A. It's piped there for storm drain. Their pipe. You know, I don't know where they come from.

Q. Okay. Do you know if the water that gets into that storm drain comes off of the property of private landowners?

A. I have no idea.

Q. Do you know if the water that comes into the storm drain comes off of property that belongs to the DOT?

A. It just gets water. That's all I know.

MR. DEVLIN: I'm going to show you Ray 33, which is going to be Defendant's 8.

(DFT. EXH. 8, Photograph Bates Stamped RAY000033, was marked for identification.)

BY MR. DEVLIN:

Q. Did you take that picture?

A. Yes.

Q. In November 2012?

A. Yes.

Q. Someone's feet and a leg appear on the

far right-hand side. Is that person standing right next to your front walk?

A. Yes.

Q. There appear to be three -- there appear to me to be three pipes shown in this cross section. Do you believe that's the correct count of the pipes in this picture?

MR. ABERMAN: Objection.

THE WITNESS: Yes.

BY MR. DEVLIN:

Q. Why did you take this picture?

A. These three pipes are moving water under my house, storm drain water.

Q. And generally speaking, they come from Strait Street, the Maycock property and the McDonald property?

A. Yes.

MR. ABERMAN: Objection.

BY MR. DEVLIN:

Q. To the best of your knowledge, were these pipes, after this work is done, connected back up so that they weren't plugged as they appear to be in this picture?

MR. ABERMAN: Objection.

THE WITNESS: Yes.

Q. And behind the photographer and to the photographer's left?

A. That's what it looks like.

Q. Okay. What was your purpose in taking this picture?

A. To show that Oakland was flooded.

Q. And why is flooding on Oakland something of importance to you?

A. Because all that water will go under my house.

Q. Do you know where that water came from other than a storm?

A. No.

Q. Do you know if it came from any -- do you know if it flowed off of any private property?

MR. ABERMAN: Objection.

THE WITNESS: I'm sure it did, some of it.

BY MR. DEVLIN:

Q. Do you know if the water shown in Exhibit 9 in fact drained into the Strait Street system that lead down towards your house?

A. Eventually that water, where it is, would get under my house.

Q. Unless it evaporated?

moving?

A. The picture will show the -- the picture shows they're moving.

Q. If you look on Exhibit 14 at the -- I'm going to call it the mortar joint that runs from one flower pot to the other. You see what I'm talking about?

A. Yes.

Q. Had you ever done any repair or had someone do any repair to that mortar joint?

A. I cannot remember repairing that mortar joint.

Q. Okay. Do you know if any repair had been done to that mortar joint before you bought the property?

A. I do not know.

Q. Do you know if that mortar joint shows two separate lines of mortar or grout, whatever the substance is?

MR. ABERMAN: Objection.

THE WITNESS: I honestly can't tell you.

BY MR. DEVLIN:

Q. Did the steps looks like this in 1985?

A. No.

Q. And is it your testimony that the first

time that you believed the steps were moving was in 2011?

A. No.

Q. When did you believe -- when did you first come to believe that the steps were moving?

A. Somewhere around 2008.

Q. And what makes you -- why does that date come to mind?

A. I guess that is -- that is when I asked for the City's assistance.

Q. Okay. And we'll get to the asking the City's assistance part in just a minute.

I'm going to hand you a series of pictures marked -- well, one at a time. Ray '93, which is going to be 15.

(DFT. EXH. 15, Photograph Bates Stamped RAY000093, was marked for identification.)

BY MR. DEVLIN:

Q. Did you take that picture?

A. Yes.

Q. Did you take that in 2011 at the same time you took the one that's marked as Exhibit 14?

A. I would assume so.

Q. It is a somewhat closer view of the

house, they had beams and this is just a support beam going down.

Q. When was it put in?

A. I think that has always been in there.

Q. And that appears to be put in on a diagonal going from the deck of the attic up to the peak of the house; correct?

A. You're going to have to talk to my engineer about this. I don't understand any of this.

Q. Yes, ma'am. Do you see that piece of wood there behind the more diagonal pieces? (Indicating.)

A. Yes.

Q. That appears to be going straight up towards the peak of your attic?

A. Yeah.

Q. Do you know when that was put into your attic?

A. That was put in in 2007.

Q. And that's the lighter colored piece of lumber that appears to be --

A. Correct.

Q. -- several pieces of lumber there together? And why was that put in?

A. I think it was to support it.
Q. Why did your roof need support in 2007?
A. It was moving.
Q. Was it bending?
A. Yeah. I mean, I think some beams were bending. They were -- the long beams were making a bend.
Q. Okay.
A. But this one was to connect -- to just make sure that that was put together, I think, at the very front.
Q. The purpose of the lighter piece of lumber in this picture was to stabilize the roof, to stop it from moving?
A. The very front. That was, what, in 2007.
Q. And the lumber I was referring to is this one that I'm going to put a small circle on.
A. Right there. Early 2007. Right.
Q. Who put that in?
A. Paul Little and Rodney Kirk.
Q. Are they contractors?
A. I think they had their contracting license then.
Q. And when did you first notice bending or

movement in the roof frame?

A. The very first time I saw it was 1995. Then this was late 2006 and early 2007, just -- now, these were just -- these and this. (Indicating.) After 2011, the other beams, things started moving.

Q. Okay. You were pointing at something on 29 when you said the other things had started moving. Show me again what on Exhibit 29 started moving after 2011.

A. (Indicating.) First thing you talked about.

Q. The timber to which all the joists going up attach at the peak of the roof?

A. Correct.

Q. Okay. When you first noticed the bending in the roof frame in 1995 --

A. Let me correct myself. It was not in 2011. It was 2012 when I first noticed that.

Q. Let's back up.

A. Okay.

Q. And we'll get back up to 2011 or '12.

A. Okay.

Q. In 1995, what caused you to notice the bending in the roof frame?

A. I was getting my Christmas decorations

down.

Q. That will do it. Did you take any remedial action to deal with the bending in the roof frame?

A. Yes.

Q. What did you do?

A. There were also squirrels in my roof. And so the guy fixed the siding on the -- all the way around the house where the squirrels had gotten in and he also went in and fixed the bending.

Q. Okay.

A. They were the single boards.

Q. Okay. The guy?

A. I don't know what you call him.

Q. How did you find the guy? The guy who fixed the stuff, how did you locate him? Did you ask a friend? Did you look him up in the yellow pages?

A. He had a construction company. I play golf with him.

Q. Did he give you an estimate on what he was going to charge for the repair work he was doing up there or was it just verbal?

A. I think I paid 5,000 and I have a bill for it, but most of it was the squirrel damage. He

and 2006 or '7, did anything else notable happen on your property that would make you think you might have a problem with the stability of the soil on your property?

A. Between what year and what year?

Q. Between 1995 and 2006 or '7.

A. No.

Q. Okay. Was there a time when a gardener stepped into a waist deep hole in your yard?

A. He didn't step into it. It went away. Went down on him.

Q. All right. And was that a -- when did that happen?

A. I would say around 1992. That's a -- guessing here.

Q. Okay. When that happened -- I'm sorry. I thought that happened after 1995.

A. I think it was 1992.

Q. When the gentleman stepped into the spot in your yard that he sank waist deep into, what was he doing?

A. He was working in my backyard.

Q. Gardening? Yard work?

A. Yard work. Yeah.

Q. Okay. And how close to your house was

that spot where he stepped into?

A. I'd say 10 to 12 feet away from the back end.

Q. Okay. And describe to me what that area looked like, if you can, before he stepped into it.

A. It was just pretty grass.

Q. And what was this gentleman's name?

A. George.

Q. Do you remember George's last name?

A. I do not.

Q. Okay.

A. I should though.

Q. Was he a gentleman who just did odd jobs occasionally?

A. He worked for everybody in the neighborhood.

Q. Came around the neighborhood?

A. Yes.

Q. Asked if you needed any work done?

A. Uh-huh.

Q. Have you seen him lately?

A. He's dead, we think.

Q. Were you at home when he stepped into that -- I'm going to call it a hole, but I understand that it was not a hole before he stepped

into it; right?

A. (Nodding head.)

Q. Were you at home when he stepped into the hole?

A. I was in the backyard.

Q. Did you see him step into it?

A. I did.

Q. How tall a man was George?

A. Probably six feet two.

Q. And did he go waist deep into that hole?

A. He did.

Q. Tell me what happened from that point forward. I'm interested in this story.

A. Well, Marshall Rogers was out there and I was out there and we both almost went to the ground laughing.

Q. Was George laughing?

A. When he got over the shock.

Q. After all of you got over the initial surprise of him stepping into something that landed him waist deep, did you investigate that hole in some fashion?

A. I had dirt brought in and filled it in.

Q. Did you look at the hole before you had that filled in?

A. I cannot remember, but I do not think so.

Q. Did you take any pictures of it?

A. No.

Q. Did Mr. Rogers take any pictures of it?

A. No.

Q. Did you recall whether or not the dirt in that hole was wet or dry?

A. I do not recall.

Q. Did you investigate in some fashion why there should be a spot in your backyard capable of sinking a six-foot tall man up to his waist?

A. No.

Q. Why not?

A. Honestly, I didn't know to investigate the hole like that.

Q. Did you do anything to determine if there were any other places in your yard where such spots existed?

A. No.

Q. I'm going to show you Defendant's Exhibit 3, which is the white map of your property, and I believe that would be a generally accurate pencil drawing of the outline of your house as it existed in 1992; correct? Because the addition

A. This was in November of last year.
Q. Okay. And what was covered?
A. This was when the lines were broken in the road and they were covered with dirt. They covered them with dirt while they kept on going.
MR. DEVLIN: I'm going to show you what's going to be marked as Exhibit 36, which is Ray 412.
(DFT. EXH. 36, Photograph Bates Stamped RAY000412, was marked for identification.)
BY MR. DEVLIN:
Q. And it is during a period of construction, I believe, and it has handwriting in the bottom right-hand corner. I'd ask you what that says?
A. This is the broken pipe from the Maycocks' house that goes into the inlay box, which I must -- and it's broken and an original line goes under the water line which you asked about earlier today. (Indicating.)
Q. So in the middle of the picture, there's that water line you're referring to?
A. Was one of your first pictures.
Q. Sure.

A. And it was clean and they were putting the pipe in.

Q. Okay.

A. This is when they were getting the water out. I don't know where the water -- I think it came from a broken sewer area. The whole area filled with water. And they are getting it out, I guess, to put the pipes in.

Q. There are a number of pictures related to the construction in November 2012 and the breaking of pipes; correct?

A. Correct.

Q. Do you believe or has somebody, not your lawyer, told you that the fact the pipe were broken and later reconnected has caused damage to your house?

A. I don't -- I don't know. You'll have to ask the engineer that.

Q. I've read the engineer's report and it leaves me curious what, in your mind, the significance of the broken pipes during the construction in 2012 is.

A. They were showing three broken pipes coming into my house was the significance.

Q. Do you think that those pipes were

broken during construction or before the construction began?

A. Oh, they were definitely broken during construction.

Q. Do you know whether or not they were repaired as the construction concluded and the road was -- I'll say the road was rebuilt?

A. They were prepared -- repaired.

Q. Do you believe that any damage occurred to your house or to your property as a result of the fact that some of these pipes were broken during construction?

A. Not at the time of construction. I mean, that would not have been any part of it. That was just showing broken pipes.

Q. Is there some other time, other than at the time of construction, when the fact that these pipes were broken for a period caused damage to your property?

A. I don't think these pipes were broken before construction.

Q. I understand. Is the fact that during construction the pipes were broken something that you say damaged you?

A. What is your question?

Q. The pipes were broken during construction?

A. Correct.

Q. Did that damage your house?

A. No.

Q. Okay. If that did not damage your house, why did you provide the pictures of it?

A. To show that there were three pipes coming into my house.

Q. When you say three pipes coming into your house, would another way of saying that be there are three pipes coming into the catch basin in front of your house and one pipe going under your property?

A. Correct.

Q. Okay. So there aren't three pipes going under your house?

A. No.

Q. There are three pipes leading to one pipe?

A. Correct.

Q. Okay. And we'll be reading this transcript for some period to come and I don't want there to be any mistake by somebody about there being maybe three pipes under your house.

A. These three broken pipes are in the middle of the road.

Q. I understand.

I'm going to show you a document that's marked Ray 413. It's going to become Exhibit 37.

(DFT. EXH. 37, Photograph Bates Stamped RAY000413, was marked for identification.)

BY MR. DEVLIN:

Q. And there's a black and white copy of the same picture, I believe, that is going to be the second page of that exhibit. If you'll look at 37, please.

A. (Complying.)

Q. Was this picture e-mailed to you or from you?

A. I e-mailed it to myself from my computer at my house.

Q. Okay. You e-mailed it --

A. This is an e-mail from me. Leslie Maycock took this picture and she e-mailed to me. We've discussed this picture before.

Q. Picture entitled inlay pipe at Lucille's house was taken by Ms. Maycock?

A. Correct.

4th, you had ever met him?

A. Yes.

Q. Had you talked to him prior to that?

A. I had set up an appointment with his wife.

Q. How did you learn of Mr. Leonard's area of expertise?

A. I asked a real estate person in Charlotte who was the best structural engineer that they knew of that concerned -- that would know something about stormwater and other structural damages.

Q. And who is that real estate person?

A. I forget her name. She dated Trip Lightner. I can get you the name later. I just can't --

Q. She is a real estate broker or agent?

A. She's an agent in Charlotte and she dated a real good friend of mine.

Q. Okay. And there's a fairly lengthy four paragraph --

A. Can I stop you?

Q. You certain can.

A. Leigh Cunningham is her name.

Q. Very good. Thank you. In the second

paragraph of this letter, it appears Mr. Leonard is referring to a conversation you and he have had where it says you also, referring to you, Ms. Ray, also outlined information regarding a history of problems with sinkholes and pipe cave-ins behind your house and at other nearby neighbors.

Tell me what you can recall about a history of problems with sinkholes and pipe cave-ins behind your house and at other nearby neighbors.

A. The one behind my house was --

Q. George?

A. -- George, the yard man. And the others that we talked about were in the Marshall Rogers backyard, where they had server line cave-in. They had also had that cave-in from the picture that we had seen earlier, where I told it was a March 13th, where the pipe -- they did something with that. So those are the cave-ins we were talking about.

Q. Okay. The work that got done on the Rogers' property that ended up taking out the brick wall, was that a sewer line cave-in?

A. Yes.

Q. Do you know if the Rogers took any pictures of that cave-in?

A. I have no idea.

Q. At the bottom of that page, there's a reference to a pipeline study which you asked the City to do in 2008. Tell me what caused you in 2008 to request a pipeline study.

A. I really did not request the pipeline study. The City came in and said they were going to do a pipeline study. I wouldn't have known what a pipeline study was.

Q. Okay. Your lawyer is writing the City, if I understand this letter correctly, telling the City that you asked for a pipeline study. Do you think that your lawyer had it backwards? And I hate to break this to you, but lawyers have been known to make mistakes. Do you think that your lawyer got it backwards or did you in fact ask for a pipeline study?

A. I just told you, I didn't ask for a pipeline study. I wouldn't have known what a pipeline study was. He probably got it -- I mean, what they did is we came in and that is how they said they would be able to tell if there was a break in the pipe and they would do a pipeline study.

Q. In 2008, when the City told you they wanted to do a pipeline study, did they send you a letter? Did they call you? How did they let you

know they wanted to do that?

A. They just came and did it.

Q. Had you had any communication with the City prior to 2008 about any concerns you had about the stormwater pipe that leads out from that catch basin in front of your house?

A. No. I didn't even know it was there or think about it.

Q. When the pipeline study -- when the video of the pipeline was completed, did you ask for a copy of it?

A. I asked what it said and it was lost.

Q. Did you find out what the conclusion of that study was?

A. That it -- I was told that it was broken at the front and at the end of the pipe and that they could not find it.

Q. What was broken at the front and the end of the pipe? I need to make sure I understand what it is.

A. Exactly like I'm saying. At the front, there was -- something showed something at the front and at the end of the pipe that. . .

Q. The pipe was broken at the front and at the end? Is that what you're saying?

A. I didn't say broken. I said there is something at the front and the end of the pipe and that's all that Jason told me.

Q. And was that in 2008 that he told you that?

A. I don't -- I cannot recall when it was.

Q. Did you see him doing the video?

A. No.

Q. When did you learn that a study or a video had been done in 2008?

A. The day it happened, because they had been digging in Marshall's backyard.

Q. Do you know why they were digging in Marshall's backyard?

A. I would have assumed at that point that they were looking for the pipe.

Q. Do you know where in Marshall's backyard generally speaking they were digging?

A. Back near his driveway area, behind where the pipe has been found today.

Q. There are a number of pipes that we've talked about. I want to make sure that we're talking about the pipe that runs from the catch basin directly in front of your house to the manhole that's behind your house. Right now, that is the

only section of pipe that I'm interested in.

Was the City digging in Mr. Rogers' backyard, you think, because they were studying that pipe?

A. I have no idea.

Q. Did you ask Mr. Rogers what the City was doing digging in this backyard?

A. He couldn't remember when I asked him. I did not ask him at that time.

Q. Do you know when you first got in touch with someone at the utility department about what they were doing with the digging or videoing?

A. That would probably be late 2008 or sometime in 2009. I do not recall. And it would have been Mr. Tinkler.

Q. Have you ever received any documents showing any results of that pipeline study?

A. We finally received -- no. They never gave a document. We received the pipeline studies in May of 2012.

Q. Have you ever seen a video that the City did of the pipe under your house in 2008?

A. Mr. Leonard has seen it in 2012.

Q. Have you seen any video of the pipe that leads from the catch basin in front of your front

walk leading down under your house ever?

A. I saw -- well, I was sitting outside the truck about 20 feet when they did the second one on June the 2nd -- I mean, the June the 3rd, 2011. And then the insurance people were at my house last week and they were doing a video and we saw the camera then.

Q. What I'm talking about, and I'm probably not being very clear, is whether you've ever reviewed the video tape itself? Not viewed somebody making a videotape.

A. No, I have not.

Q. Are you aware that a 2008 videotape has been produced in this lawsuit by the City?

A. Yes.

Q. Have you reviewed it?

A. No.

Q. Has your engineer reviewed it?

A. I just told you he had reviewed it.

Q. But you said he reviewed it in 2012?

A. That's when we got it.

Q. Did it show breaks at the front and the end of the pipe?

A. His report is right there for you to read. It tells exactly what his report says.

Q. You've probably told me this and maybe more than once. When did you first know that there was a pipe under you house?

A. Really know that the pipe was under my house?

Q. Well, we'll start with that.

A. Okay. It was in June 3, 2011.

Q. Over the years, you've had a number of appraisals of your house done; correct?

A. Correct.

Q. Have you ever advised any of those appraisers about problems with the roof frame?

A. No.

Q. Have you ever advised any of those appraisers about sinkholes in the backyard?

A. No.

Q. Have you ever advised any of those appraisers about a stormwater pipe running under your house?

A. No.

Q. How much did you pay for the house in 1985?

A. I think 80,000.

Q. And do you know -- well, what is your opinion on what your house is worth right now?

the repair estimate is 147.

MR. DEVLIN: Okay. All right.

Q. Ms. Ray, let's talk about the addition on your house.

A. Okay.

Q. When did you get that put on?

A. I think it was 2001.

Q. Who built it?

A. My father and a construction man from Charlotte and I don't know who it was. My father was out there watching it.

Q. What is your father's education and background that would qualify him to build a house?

A. Well, he had the construction man -- I mean, a builder from Charlotte. I just don't know who the guy was.

Q. Okay. Did you pay the builder from Charlotte?

A. I paid some of it.

Q. Do you remember his name?

A. I do not. I mean, I never wrote a check to him personally. That was not what I did in the house.

Q. How did you pay for part of it if you didn't write a check to him?

briefcase. They're rolled up. I can get you copies.

BY MR. DEVLIN:

Q. But there are also documents in your den in a briefcase that have something to do with construction.

A. Okay.

Q. And I'd like those also.

A. Okay.

MR. FENNELL: We'll get them.

(This page contains information to be supplied by counsel and/or the deponent.)

BY MR. DEVLIN:

Q. How long did it take to add the addition?

A. I cannot remember.

Q. You don't need to be precise.

A. I just don't know. I think I was through in 2000 -- what was it? 2001 or '2. I can't remember.

Q. But you think it was finished in 2001 or '2?

A. Yeah. I know it was.

Q. After that work was finished, were there ever any problems that you had to address with the

builder?

A. I think there was a problem during the building, when he left the roof off and it got wet, the new section got wet or they didn't get the -- thunderstorm came up and it got wet.

Q. Did you ever call the builder back to do warranty work?

A. I didn't need warranty work done.

Q. Congratulations. Did you ever communicate with the builder about any problems that you associate with the construction of the addition?

A. The addition has been fabulous.

Q. Yes, ma'am. Have you ever been of the opinion that some problem in your house was caused by the addition?

A. No.

Q. Is your house on the National Historical Register?

A. No.

Q. Is it on some other type of historical register?

A. Not that I know of.

(DFT. EXH. 41, Grant of Right-of-Way to The City of Rock Hill, SC for Storm or Sanitary Sewer, Bates Stamped RAY001196

through 001200, was marked for identification.)

BY MR. DEVLIN:

Q. Okay. I'm going to show you a document that's marked as Ray 1196. It is a right-of-way that I'll summarize as something that you granted to the City in 1999.

A. Okay.

Q. You recognize that document?

A. I do.

Q. And it shows a stamp on the front page that shows that it was clocked in on December the 3rd, 1999?

A. Yeah.

Q. And to short form it a good bit, you gave the City a right over a 10 foot by 74 foot stretch running down the side lot line on your property to put in a pipe of some sort; correct?

A. A sewer line pipe.

Q. Although this does say for the installation of --

A. Supposed to be sewer. Supposed to be sewer.

Q. If you look at the top of the page, first page, does it say for storm or sanitary sewer?

BY MR. DEVLIN:

Q. I'm going to represent to you, Ms. Ray, that this floor plan, if that's a good label for it, comes from an appraisal that a gentleman named Hugh Rock performed on your house in the first decade of the 2000s.

A. Uh-huh.

Q. That's where I pulled it from.

A. Okay.

Q. Does it appear to be an accurate representation of your house floor plan, the main living area after the construction of the addition?

A. I'm sure it is.

Q. Well, take a minute. I don't want to rush you.

A. (Reviewing.) Looks right.

Q. Okay. What I would like for you to do is to give me an idea as to each one of these rooms, what damage there is that you attribute to this pipe under your house. Let's just start with an individual room. Okay?

On the bottom left of the drawing, there's a patio. Do you know of any damage that you can see to the patio?

A. No.

Q. There's the dining room immediately adjacent to the patio. Are there any damages of any sort that you attribute to the stormwater pipe?

A. No.

Q. The living room, which is next to the dining room, do you believe that has any damage as a result of this stormwater pipe?

A. My engineer says there's stress in the living room.

Q. Okay. And I understand your engineer may be able to --

A. I think that's --

Q. -- talk about things.

A. I really think that's who you have to talk to. I cannot.

Q. Well, one day I will; but today, I'm talking to you.

A. Yeah. But I don't know anything about damage in the rooms like he does.

Q. Well, I'm not asking you for any engineering conclusions.

A. Okay.

Q. If you know where there are cracks in the wall --

A. Okay.

Q. -- that I believe you pointed out on the --

A. I'll be glad to.

Q. -- video. And as to every one of these rooms, if there's a creek on the wall or if there's a problem that you have observed --

A. Okay.

Q. -- in a floor or anything that you think is a problem caused by this pipe, I want you on a room-by-room basis to tell me about it. Okay?

A. Okay.

Q. So let's -- patio, dining room, nothing; is that correct?

A. Patio. Where are we?

Q. Bottom left.

A. Patio and dining room? No, nothing.

Q. Living room?

A. There's some stress.

Q. Okay. Where is it and what does it looks like?

A. There's some stress as you walk in right before the entry on the -- going back into the bar room, at the top.

Q. Okay. If you'll put that down on -- I want you to mark on 43 what wall that stress appears

on.

A. Okay. Where is the wall? Where is the -- I can't really tell which one we're talking about. I thought the entry was here.

Q. I --

A. I thought there was an entry -- there is an entry right here. (Indicating.) I'm saying right in here is the stress, I think from this diagram. (Indicating.)

Q. When you say there's stress, what does it looks like? What is the physical manifestation that you say is the stress?

A. The engineer says it moves out, I think. I'm not sure what we're saying; but I mean, you can see it. It's not a straight, straight area.

Q. And that's on the wall?

A. Going -- I want to say going in this way. (Indicating.)

Q. In towards the house?

A. Yeah. This is in the living room area, not in the den area. And, actually, it's stressed on this side of the den area also. (Indicating.)

Q. Okay. So on the common wall between the living room and the den --

A. That is where --

Q. -- you say there is some stress on that wall also?

A. Uh-huh.

Q. And it takes the form of some --

A. I don't know how to explain it.

Q. Can you see it?

A. You're the construction engineer. Can you give me an explanation of it?

Q. Can you see anything that indicates the stress?

A. It just bulges. I mean, I don't know exactly how to say it.

Q. Can you see the bulge?

A. I can see it.

Q. Okay. Are there any sheetrock cracks or displacement or any other evidence of something that you consider to be damage to your house in the living room?

A. I don't believe there are any sheetrock cracks. I don't have sheetrock. I have plaster and I think, right now in the living room, there's not any plaster cracks.

Q. Is there anything else in the living room which you think is a problem caused by a stormwater pipe under your house?

A. I would have to be in the living room to be able to tell you that right now.

Q. Okay. We've got a video in which you do a little bit of a walk around tour, but it's very difficult to figure out while watching the video what particular wall you might be talking about.

A. Okay. I can tell you that one.

Q. I was hoping that you could show me which wall it is on a piece of paper because that's much, much easier for someone of my limited abilities to figure out. Can you not tell me what walls have cracks on them?

A. I honestly cannot right now. But if you show me the video, I'll show you which walls they are.

Q. Okay. We'll get to that. Is it your testimony that, as you sit here right now, you can't tell us where any particular crack is without looking at a video?

A. There are cracks -- okay. The porch definitely has cracks. There is a -- the doorway going -- the floor in the --

Q. Morning area?

A. I would call it the bar area is what I would call it, the wet bar area. The floor is --

does like this. (Indicating.)

Q. Hold on. Does like this? It has a sag in it?

A. Yes, it has a sag in it. And a golf ball will roll from one side to other. The bathroom right there, in the corner has a crack. (Indicating.)

Q. Okay. Hold on. The bathroom in the corner has a crack?

A. Closest to the wet bar area, that corner.

Q. All right. It has a crack. Where is that crack in that bathroom?

A. You look up at the crack going out the door.

Q. Okay. I'm standing in the bathroom, going to walk back out into that hallway, it's in front of me or it's to my right?

A. If I'm walking out, to my right.

Q. Okay. Hold on. When did you first notice the sag in the wet bar area?

A. I could not tell you.

Q. When did you first notice the crack in the bathroom?

A. That has just happened in the last

probably six months to a year. Now there -- the doorway going right through the wet bar area to the back hall, I have never noticed it until last week and it goes like this. (Indicating.)

Q. I'm sorry. I didn't follow that. The doorway leading -- okay. The doorway leading right past the wet bar into the back hallway does what?

A. You cannot shut the door any longer and it's leaning right, going downhill to the left now probably an inch -- it looks like about three-fourths of an inch, but Mike has not been here to tell me anything about that.

Q. Okay.

A. My bedroom is cracked, the whole right -- all the way from the walk-in right to the right side where there's a two -- I don't know how to explain it to you. Two tier, where it drops, it's cracked all the way down that side and then it's started cracking across the room.

Q. All right. Hold on. Your bedroom?

A. Which is at the very back. Right there. (Indicating.)

Q. It's at the very back.

A. And this wall right here. (Indicating.) There's a wall right here, at the top. I don't know

to -- you can't draw it --

Q. You're indicating a wall --

A. There's a top, like a ceiling.

Q. Like a tray ceiling?

A. Yeah. That's drops down about that much, where the lamps and all the. . .

Q. You've noticed cracks in the ceiling in your bedroom?

A. No. It's -- the crack goes down this -- it's just like a corner where it drops. Where you have the thing right there, it drops and there's a crack that runs all the way and goes that way across the ceiling. (Indicating.)

Q. Is the crack at the joint between the horizontal and the vertical?

A. It's at the top. The top.

Q. At the top? See, it's very difficult for me to -- you know what you're talking about; but when you say at the top, there are lots of different things that it could be at the top of. I need you to try to --

A. Would you like me to take a video of it tonight so you can see it?

Q. No, ma'am. I've seen all the videos right now I want to. But I will show you a video at

a later point --

A. Okay.

Q. -- and maybe we can clear it up then.

A. Okay.

Q. But there are cracks in the ceiling in your bedroom?

A. There's a drop ceiling. I guess that's what you call it, where it drops this much below the other part of the ceiling. (Indicating.) Where the lamps are in, the lights. What do they call them? Fluorescent, I mean --

Q. Fixtures?

A. Huh?

Q. Fixtures?

A. Well, they're fixtures. You know how you have --

MR. WHITE: Can lights?

THE WITNESS: Thank you. It's can lights. And so the ceiling drops that much there. Right around the edge of that, there is a crack all the way and it's down the line and it's cracked this way a little now. (Indicating.)

BY MR. DEVLIN:

Q. When you say it's cracked this way a little bit, to the left of those can lights?

A. Yeah.

Q. When were those can lights installed? It's not original construction if it's can lights.

A. 1990 or something like that.

Q. Okay. So --

A. It might have been 1986-87, but I don't know.

Q. Did you have some renovation done in the bedroom area in the first five or six, seven years you were in the house?

A. I just had the can lights put in and the bathroom I picked up put in.

Q. Okay. Continuing to look at the sketch map from the Rock appraisal.

A. Okay.

Q. What other rooms can you recall having any damage to them?

A. I really can't recall any other rooms that have -- other than that doorway that I've seen. And we're seeing maybe little cracks, but I've never seen them before. They're just starting to pop up now.

Q. If you walk into the bedroom that's immediately adjacent to the hall bath --

A. Oh, yeah. There is a crack -- now,

there was a hairline crack there years -- I mean, years ago. Right here. (Indicating.) And it has gotten tremendously big in the last couple of years.

Q. Define tremendously big. Could I put a cat in it?

A. No. But it's pretty --

Q. A kitten?

A. No.

Q. Sorry. In inches, can you measure it?

MR. WHITE: What room was that hairline crack it?

MR. DEVLIN: There's a bedroom immediately behind the hall bath.

THE WITNESS: Yeah.

MR. DEVLIN: If you go backwards, wet bar, bathroom, bedroom.

THE WITNESS: And over the years, it -- in the last year, it has grown tremendously.

BY MR. DEVLIN:

Q. Okay. And that's what I'm trying to get at. Tremendously means a lot of different things. Does that mean it's a quarter inch now or do you mean three inches now? Reasonable minds can differ.

A. It's something you really notice now.

Q. And what wall is that on in that

bedroom?

A. It is on the wall that is against the bathroom.

Q. And the wall that is a common wall between that bedroom and the covered porch, did that use to be the exterior edge of the house?

A. It did. It did.

Q. Okay. Moving back towards the front of the house a little bit into the kitchen area. Are there any signs of any cracks of any sort in the kitchen area?

A. There's one little crack coming up in the corner going -- if you're going to the bar area, into the bar area, up in the right corner, top right.

Q. Okay. So if I am in your kitchen looking out at the bar area, the crack is in the top right area?

A. Right -- just right in that corner. (Indicating.) The very corner.

Q. You're drawing pictures in the air that I can't see.

A. Well, if you're looking at that corner, let's say that's what we're looking at, going out of my kitchen.

Q. Okay.

A. It's in that corner, the right corner. (Indicating.)

Q. Okay. Are there any other signs in the kitchen area that you believe are evidence of some damage caused by the stormwater pipe?

A. No.

Q. Have you ever thought that there were some issues in your house that were caused by the addition of the addition?

A. No.

Q. Have you ever measured any of these cracks so that we could see what amount of change may have occurred in them?

A. No.

Q. Have you ever had a contractor look at any of these issues to see what they thought an appropriate repair would be?

A. No. Except Mike.

Q. Have you ever attempted any repair --

A. No.

Q. Okay. I was going to say, I'm sorry, of any of the issues that we just discussed?

A. No.

MR. DEVLIN: Before I go on to my next

scintillating subject, it's 20 'til 5.

THE COURT REPORTER: Off the record or --

MR. DEVLIN: Yes. We're off.

(Off-the-record conference.)

(The deposition was adjourned at 4:40 p.m.)

THE WITNESS: That's the only map we've received from the City.

BY MR. DEVLIN:

Q. Okay. I did not have it clear in my head that this was the document that was referred to your complaint.

A. Okay.

Q. Your statement in the complaint is that this map does not accurately reflect the location of the 24-inch pipe. Where do you believe that pipe goes if Exhibit 2 is not accurate?

A. Let's see. Let me look at it. I thought we had already marked it.

Q. We may have.

A. Okay. Where is my house? Isn't there a better -- there was a better map that we could see, wasn't it?

Q. This is the one that you've identified in your complaint.

A. Okay.

Q. I want to know why you think it's not accurate.

A. Well, I know it's not accurate. Okay. This is one that goes down to my house. See. (Indicating.) And it goes all the way to the back

of Carolyn Rogers' lot. My house -- my lot ends right here. Right here. (Indicating.) And the storm drain goes here and cuts across. (Indicating.)

Q. Okay. So once the storm drain --

A. Hits --

Q. -- exits underneath your building itself --

A. It gets to the doghouse.

Q. -- it takes a right and heads for Lucas?

A. Right.

Q. As opposed to heading straight down to the bottom of that little area?

A. Yeah.

Q. Okay.

A. And it also does not accurately show any other water coming in because it does not show any of the water coming down Strait Street.

Q. Who provided that to you?

A. The City of Rock Hill.

Q. Did anyone at the City of Rock Hill tell you that this map represented the source of all the water coming on to your property?

A. No. It's called a partial stormwater. And it was given to us as public -- their public,

what they have for public.

Q. Okay. And who told you that was what they had available for the public?

A. They did it, I guess, just for us.

Q. Okay.

A. Because they wouldn't let my engineer have any other maps.

Q. Let me jump backwards to paragraph 5 of that complaint again.

A. Okay.

Q. You reference in there that you determined what you believed to be a stormwater pipe of the defendant, singular, extended from the street to your front entry. Do you know whose pipe extends from the street on College Avenue to the front entry of your house? Do you know whose that is?

A. I do not. Nobody wants it.

Q. What information do you have that makes you think that that stormwater pipe belongs to the Department of Transportation?

A. I don't think it belongs to me. I don't know who it belongs to.

Q. That leaves a fairly large volume of people to sort through to figure out who owns that pipe. Do you have any information that would

Q. And so he, Mr. Quantz, told you that he recalls, during his lifetime, somebody replacing those step completely?

A. Yeah.

Q. What sort of problems did the steps have that he --

A. He just said he remembered them replacing those steps.

Q. You got a sense that he was referring to not faulty construction of the first set of steps, but that the step were having trouble similar to what you're experiencing?

A. I just -- he just said they replaced the steps. He didn't know any more than that.

Q. Okay.

A. And if you look at them, the two steps are entirely different colors than the old bricks going completely around the house. And I've never replaced any steps.

Q. In 2008, when you had the steps issue, didn't you suspect at that time that there was an issue underneath your steps causing this trouble with them?

A. No. I didn't know. I just -- all of a sudden, it -- I was getting ready to have a cocktail

party and it started and they were moving. Before that, I'd never had any issue with them.

Q. All right. Well, you've been a seemingly candid witness perhaps. At the time you called the City in 2008 --

A. Yeah.

Q. -- you suspected there was something going on underneath your steps that was causing the trouble with steps; is that correct?

A. I had been looking at my steps. And all of a sudden, I saw, which I had never noticed before and I don't know how, the storm drain setting at the front. And, of course, I'm like anybody else, I went out and looked where it looked like it was going to. And then I called the City to ask where that storm drain was going. So I did do that.

Q. I think I misunderstood some earlier testimony because that was bothering me.

A. Okay.

Q. When you called the City, you suspected there was a storm drain going underneath your steps?

A. I called to find out where that storm drain was going.

Q. I understand. But when you called them, you thought that storm drain might be going

City; right?

A. I had been seeing this problem with this thing and I had been searching, I'll be the first to admit. And to see a storm drain sitting there, point the flashlight toward it and it looks like it's going that way. I just wanted to know where it went.

Q. I understand. I understand that. You wanted to know where it went. But what I'm trying to get you to --

A. To say --

Q. -- to admit --

A. -- that I knew it. I did not.

Q. No, ma'am. I'm not asking you to admit that you knew it.

A. Okay.

Q. Let's see the difference there.

A. Okay.

Q. That I agree, maybe you didn't know.

A. I didn't.

Q. What I'm asking -- the question though is, when you called the City in 2008, you feared that stormwater line might be running underneath your steps?

A. I might have feared that storm line

might be running against my steps.

Q. All right. I don't have a problem with the second might, but I have a problem with the first might. You didn't might fear that. You know. Sitting here today, you can testify that you feared that line was running -- might be running underneath your steps?

A. I honestly cannot answer that today that way.

Q. All right. Well, let's look at the difference.

A. Okay.

Q. I'm not asking you to testify today that you knew that line ran underneath your steps.

A. I did not know it.

Q. That's not the question.

A. Okay.

Q. The question though is, there's no question sitting here today that you feared that it might be running underneath your steps in 2008?

A. I agree to that.

Q. Did you contact any company, builder, contractor, engineer in 2008 to analyze your steps or where that stormwater line was going?

A. No. I talked to nobody but the City.

three steps so I don't --

A. No.

Q. -- have this big long question.

A. Okay.

Q. You call the City to come look at it?

A. Yeah.

Q. They came out?

A. Trudy came out.

Q. And Tinkler came out?

A. No. They opened the drain. They looked at it, said it -- the pipe ran toward the steps. Toward it. They didn't say any more than that. Toward it.

Q. And --

A. Then Tinkler was two months later, or three months, going to run a storm line test, which he ended up running two days before Thanksgiving.

Q. Okay. So now with better information, let me do it again. So in 2008 --

A. Okay.

Q. -- you feared the line might be running underneath your steps and you called the City; correct?

A. Correct.

Q. Trudy came out. They pull the cover and

A. A foot from the right side.

Q. Did your brother do the architectural drawings?

A. No. I mean, there was a drawing of it.

Q. Do you know who built the house originally?

A. I think the Dunlaps did, but I'm not sure.

Q. Do you know about what year?

A. 1920s.

Q. 1920? I'm going to show you -- if you would pick up Exhibit 43. That's the sketch. I think it's right on top.

A. Okay.

Q. Can you describe for me the original footprint of the house?

A. It goes front porch, living room. Just right down this area. (Indicating.)

Q. All right. The right-hand edge, the living room, the den, the bedroom as listed, that's as it was?

A. Uh-huh.

Q. What was the back terminus of the original structure? Do you know?

A. The back what?

there at all?

A. Right.

Q. And then the bathroom and the bedroom and then the back wall?

A. Yeah. The only thing we added was the kitchen, the covered porch and the garage underneath.

Q. Okay. Do you believe that pipe was added to this property after the construction of the house?

A. I don't see how that pipe could go under. It's pretty deep.

Q. So it's your belief the pipe was laid in the property -- constructed on the property first and then the house was put on top of it?

A. I would think that that pipe was there before that house was built.

Q. Okay. You have no reason to believe the City built this home, do you?

A. No.

Q. You have no reason to believe that the City had any sort of permitting structure back in the '20s that the City even permitted the construction of this house?

A. I have no idea what went on back then.

Q. Well, I think I phrased it, you have no reason to think that they did?

A. I just know the City is in charge of these water drains, the drainage. It moves it out of the town.

Q. We'll talk a little bit about that in a minute. But for purposes of the construction of the house, you have no evidence or reason to believe the City had anything to do with the building of this house on this lot?

A. No. I do have no evidence of that.

Q. So the fact that the house sits on top of a storm drain, the City's not responsible for that and you have no reason to think they had any --

A. I do not think the City built the house.

Q. How long do you think water's been running through that pipe that runs through your property?

A. Over 92 years, because I think that's about the age of my house. Ninety years, 1920s.

Q. So you think the pipe predates 1920s?

A. I have no idea. Y'all would have better records than myself.

Q. Do you have any information or evidence as to who put that pipe in?

A. I do not know. I did not know that pipe was there.

Q. Do you have any information or evidence or have you seen any such that the City put that pipe in the ground?

A. I have no idea who put that pipe in the ground.

Q. Have you ever heard anyone describe that lot prior to the house being built on it?

A. No.

Q. Have you ever heard anyone describe that lot prior to that pipe being constructed?

A. No.

Q. There were homes in that general area prior to the 1910s; correct?

A. I have no idea.

Q. Okay.

A. You mean there was a home built where my mine is in 1910?

Q. Oh, no. I'm just talking about in the general College Avenue, downtown area?

A. Oh, I don't know. I don't know when that area started.

Q. Okay. Do you have any knowledge of when curbing was put in on College or Strait Avenues?

idea.

Q. I understand. But I'm just asking you. It's kind of which came first.

A. I have -- you're -- that's way out of my -- I have no expertise in this, junction boxes and pipes and all that.

Q. Let me ask you this way then.

A. Okay.

Q. Somebody in your chain of title -- well, let me start that over.

You have no evidence or reason to believe the City constructed the line that runs through your property, do you?

A. I have no idea who constructed that line. And, you know, I can't blame it on the City. I think the City uses it, but I don't -- cannot tell you who constructed it.

Q. Just as the City would have used any open ditch that predated this pipe?

A. Maybe so.

Q. Maybe so? If the City had pipes under its road that drop flow into an open ditch and someone in your chain of title converts the open ditch to an underground pipe and puts a house on top of it, is it your view that the City is responsible

Q. You would agree that if somebody connected something in that house to that pipe, then somebody in your chain of title knew about this line?

A. It's very, very possible that they knew about that one.

Q. Again, I'm not asking you to agree that someone connected to it; but if they connected to it, they had it know it was there?

A. Very possible that they knew it was there.

Q. Sitting here under oath, is that being possible the strongest, more accurate way you can answer that question?

A. I don't know how it was connected. I really don't. I mean, we never found anything that went to that pipe.

Q. I'm not asking you if it was connected because I understand you probably don't know.

A. Yeah.

Q. But if someone took a pipe and connected it to another pipe, don't they have to know the existence of both pipes?

A. Probably so.

Q. Probably?

STATE OF SOUTH CAROLINA)
IN THE COURT OF COMMON PLEAS
COUNTY OF YORK)

)
Lucille H. Ray,)
)
Plaintiff,)
)
-vs- 2012-CP-46-3928
)
)
The City of Rock Hill and South
)
Carolina Department of
)
Transportation,
)

Defendants.

DEPOSITION OF MICHAEL HUGHES LEONARD, PE
ROCK HILL, SOUTH CAROLINA
AUGUST 19, 2014

REPORTED BY: Cathy L. Young, CVR-M

A. We -- I can relate to this case a little more specifically because it helps, but we will get down to the foundation level where possibly we get to the points under the house, the structure, and we'll probe around footings to see if footings are there, and generally what size they are. If we see evidence of a failure, we'll actually dig and excavate around the footing to determine if it's an adequate footprint. But we're basically not just stopping at the frame of the floor from below, we're looking at the foundation elements themselves. And in some cases, we feel that there is a geotechnical study, in most cases not, but in some cases, we'll ask or recommend that. But at least we will probe the soil ourselves to see if it's relative -- the density -- the relative density of those critical points are nearby. Those on an exterior wall, for example, we have four-foot probing rods that we use.

Q. Now on that point, do you hold yourself out to be an expert in geotechnical science?

A. I do not.

Q. And that's why like in this case you would bring in someone like CESI to do the geotechnical analysis?

A. Yes, sir.

Q. So just for -- to a layman, your expertise starts at

the top of the house and goes to the bottom of the footing, and their expertise is from the top of the dirt down?

A. In general. We know the principles of soil mechanics. That's actually part of our program, but to be considered an expert in that, you'd almost have to work in it every day grading and testing the soil. We can form our early opinions, but we'll wait for the geotech when necessary to provide us with more scientific data or results.

Q. Okay. Did you compute the loads of any of the members of Ms. Ray's house?

A. I did. Most specifically where the areas of trouble have been seen inside the home.

Q. Did you write that down?

A. It's in my notes somewhere. I can't tell you -- I've given all my files to everybody over the period of time, and I don't know where they are.

Q. What -- is it just a sheet of paper with a bunch of writing on it?

A. Yeah, it would almost -- it'd be a pad probably with math on it.

Q. What did you compute the loads of in Ms. Ray's house?

A. If you don't mind, I'll have to go to a illustration

loca -- or if you locate that pier one foot or the other of any line you establish, your tributary changes by half that distance. So it really does not affect the structure as much as you may think to have one pier one foot further away could be an otherwise. I mean it's all hypothetical.

Q. A zone of influence from this subject pipe, it only goes to a certain border, correct?

A. That would be a geotechnical question, but in my experience, yes.

Q. You've actually prepared a document that shows that border, correct?

A. I believe I have.

Q. So you're now telling me that it doesn't matter if a pier is one foot inside or half a foot inside that border or half a foot outside that border?

A. Oh yes, that would make a difference in some cases.

Q. All right. I asked you -- we'll be very precise today. I'm going to ask you very specific questions and I'm looking for a very specific answer to that question alone. It's going to be a long day if we keep answering questions for every generalization for my question. My question to you is in your engineering world, can a one-foot movement of a pier make a material difference?

the Coke can, and the load-bearing wall is aligned directly above that pier, and the load of that wall transmits up and down this line, then this pier should be located under the center or the centroid of that load line. You can move it forward and rear somewhat and not have much of an impact if any at all, but if you move that pier, specifically F, left or right, it would no longer be under the bearing wall and it could make a difference. In this case, I believe it would.

Q. You keep answering my question based on structural science above the ground. I'm not asking you these questions based on what's above them. I'm asking you questions based on what's going on below it. Are you competent to answer those questions?

A. Competent?

Q. Yeah, do you consider yourself an expert in the field sufficient to answer my questions as to the zone of influence from the subject pipe?

MR. BRADFORD:

Objection.

WITNESS CONTINUES:

A. I'll put it this way. I understand the structure. I understand the loads that go into the ground, and I understand the mechanics of the soil below it, but

I'm not an expert about the soil below it.

Q. So when I ask you a question about placement of a pier, you're always going to answer the question, no matter how I stipulate the question, based on the loads coming from above as opposed to consolidation of soils from below?

A. I won't say always, but in the cases that you've been asking thus far about these piers close to the center line of this pipe -- closest to the center line of this pipe, I can tell you which piers you could move left, right, forward, or back --

Q. I just realized what's going on, and I apologize. You're answering questions based on structural loads from above. What I intend my questions to be probing is placement of piers in relation to the expected consolidation of soils from the subject pipe and the proper placement of fill. Do you consider yourself sufficiently knowledgeable in experience or in training to answer questions based on a one foot differential based solely on the consolidated -- the expected consolidation of soils from the subject pipe?

A. You asked about working with other engineers, I would rather answer that with Mr. Cummings input.

Q. I get it. All right, so you have no opinion, expert

know, most people if they decide not to hire you, they -- you never hear from them, so there are chances. I mean I've talked to plenty of clients that in preliminary discussions may not feel comfortable and we never hear from them again. We may even send them a proposal and never hear from them again. I've got a church in Concord right now, Concord, North Carolina, they've got roof problems, for example, and a contractor's involved. I gave them a cost and told them what I thought needed to be done, and I haven't heard from them. That was probably started in March, but that's an example of what I'm talking about.

Q. Well, I'm not -- I'm not really delving at, you know, whether someone -- their cost benefit analysis or whether they think they can afford to remedy, I'm saying have you ever been approached by someone who in a legal matter where your opinion did not support their legal position.

A. Not that I'm aware of.

Q. All right. For purpose of your opinion, are you relying on the work of anybody else?

A. In terms of the findings of this case, no, with the exception of Geotech.

Q. The fellow that ran the line, are you relying on his

accumulate, so I started with my storm water handbook and that was kind of a background start. And then that became secondary to my effort.

Q. On that point, you haven't done a hydrology study of this storm basin, this watershed area?

A. I have not.

Q. You haven't calculated sources of flows?

A. No, I have seen scattered documents, all that came through Ms. Ray, that quantify acreage, and in fact when I first walked the watershed of this pipe that I knew, I estimated it to be roughly 14 acres because I'm looking from ground level. I could tell it came from the school, but I did not know it came from further down Oakland towards the east -- I'm sorry, towards the west I believe it would be. So it was a much larger watershed than I estimated originally.

Q. All right. But you made no effort and have not calculated the flows from any particular source?

A. No, sir. There was a -- I approached that angle or that avenue of knowledge, or whatever the word would be, and that was in my mind it wasn't the critical fact or the critical purpose of me being involved.

Q. And so you have no opinions on relative source of the flows that go through the pipe?

A. Well, I have an opinion by looking at them, yes, but --
Q. An expert opinion?
A. No, sir.
Q. All right. And did you study the relevantensity of the flows and any sort of environmental event?
A. No, that would be a design parameter established by the municipality, in this case Rock Hill or the County, I'm not sure which -- the design parameter comes from the --
Q. I'm just asking you did you do any sort of engineering study of that -- of the rates of flow?
A. I did not.
Q. Or the magnitude based on different storm level events?
A. I don't remember whether I calculated, but I estimated one day based on 14 acres as to how much water would be coming straight up Ms. Ray's house if the drain clogged or if the pipe clogged. I was trying to estimate how big a water flow it would be, but I never formed a professional opinion in that.
Q. Did you study the before characteristics of any of these features? Did you look at any historical data?
A. No, sir.

Q. Did you study any before rates of flow or directions of flow?
A. I sought maps and specific engineering information from the City of Rock Hill, and I was never provided any of it.
Q. Did you perform any engineering studies of historic rates of flow or direction of flow?
A. No.
Q. In your examination of this project, do you have any information that leads you to believe that the City of Rock Hill built the subject pipe?
A. I have an opinion.
Q. Do you have any evidence of whether the City built it?
A. No, sir.
Q. Do you agree that the pipe was most certainly installed in that property before the house was built?
A. Yes.
Q. Do you agree with that statement?
A. I do.
Q. Do you also agree -- well, did you do any study as to where the water flowed prior to the creation of the pipe?
A. I studied the topography -- the current topography

A. Correct.
Q. Okay. Other than the study you did under the assumption it was a 14-acre watershed, did you do any sort of flow dynamics of the watershed above stream from Ms. Ray?
A. No, sir.
Q. Have you done any analysis of below stream from Ms. Ray?
A. No, sir.
Q. Have you studied any sort of changes in use within this watershed caused by the City of Rock Hill?
A. Caused by the City of Rock Hill?
Q. Yes.
A. I'm aware from photos and the appearances of new pavement and drainage structures that -- I need to refer to the map, if you don't mind, that I had here.
MR. BRADFORD:
I think he's talking about the City map that you handed him, I think, is that it over there?
MR. WHITE:
No. I think I took it out when I went to get the stuff.
EXAMINATION CONTINUES BY MR. WHITE:
Q. If you could, just --

opinion creates a tunnel vision effect and can impact the validity of their later work?

A. Yes, sir, that's a poor engineering practice.

Q. Poor engineering practice. A corollary of that poor engineering practice would be to formulate your testing methodologies to validate a suspected cause rather than generalized testing to identify cause or causes; is that accurate?

A. It can be.

Q. Do you agree that if engineering opinions are formed that result from either the tunnel vision effect or from a validation support effect only rather than identification of causes could be a suspect opinion?

A. Hypothetically yes. I can with certainty say that was not what happened in this case.

Q. Well, let's look at it. What opinions do you have as to the cause of any structural issues with Ms. Ray's house?

A. I believe it starts with the fact there's a pipe under her house in the first place, that it's never a good practice to put a water conveying component under any property, and primarily because of the backfill in that zone of the pipe, you've disturbed the soil. But more importantly in this case, because the pipe is in such poor condition, in

essence, in the process of failing actively, I believe that water is leaking, firmly believe with reasonable degree of engineering certainty that water is leaking from this pipe, and in a given storm even because it's backing up in the pipe from back pressure at the manhole behind her home, and it's eroding, the pipe is certainly leaking, and causing erosion around the pipe which further aggravates the soil conditions. And the visual evidence of distress in the home supports it.

Q. So it's your engineering conclusion that the structural damage to Ms. Ray's home is caused because the pipe's leaking? Is that one cause?

A. One, yes, sir.

Q. Another cause would be that fill placed on top of the pipe was improperly placed?

A. I didn't say improperly, no, sir. The fact that it is not virgin soil where the density was affected by placement compacted properly or improperly was up to the geotechnical side to determine.

Q. And what did he determine?

A. He determined that there was some impact from the soil density and bearing capacity atop the pipe or in the zone of the pipe trench.

Q. Is it your testimony today that any fill area will

always be a concern for settlement, not just improperly placed fill?

A. Just so I make sure I answer this properly, can you ask that question again?

Q. I didn't really understand your answer, so one inference is that you're saying the house has experienced structural damage because there's fill even had it been properly placed in its original instance that that would be causing this damage. You objected to the characterization from your geotech that it was improperly placed fill.

A. I never saw the word improperly placed.

Q. Well, I will observe for you, and Ms. Ray's Counsel is here, and I will give him an opportunity to speak up, but yesterday the geotech testified that the cause of all the damage to the home is from improperly placed fill on top of the line.

A. Okay.

MR. WHITE:

Did I misstate his testimony yesterday?

MR. BRADFORD:

I thought it was more than not just improperly placed but I thought he said poor soil compaction.

MR. WHITE:

Well, that would be improperly placed soil if it

isn't compacted.

MR. BRADFORD:

Okay, but --

MR. WHITE:

That's true. I don't have a problem with that.

MR. BRADFORD:

Okay.

EXAMINATION CONTINUES BY MR. WHITE:

Q. Under the hypothetical condition that the geotech that you retained, that is his professional opinion, does that alter your opinions at all?

A. As I think I've said this morning, that's certainly one component, but there's more than one. The condition of the pipe and the fact that it's leaking is to me the larger concern.

Q. And what -- well, I'll report to you that the geotech also testified that the water leaking out of the pipe is not a causing agent of what's going on with the house, but what evidence do you have that water coming out of the pipe is causing the structural manifestations on Ms. Ray's house?

A. Because the quality of the videos that we obtained from Ms. Ray of the pipe studies done prior to 2012, we had our own done, as you know, and that shows a substantial number of cracks, holes, offsets, and

voids in these pipes. Has infiltration seams -- or stains, excuse me, that also demonstrate that the pipe is -- there's water coming in and out of the pipe at various locations depending on the flow condition at the time. But we have observed a progression of structural movement and consolidation of fill typically reaches a point of equilibrium where settlement from poor compaction would usually stop or reach a point of no more movement.

Q. What do you site as authority for that statement?

A. Which one?

Q. The notion that improperly placed fill will manifest in the first few years and then stabilize.

A. The principles of soil mechanics, which I learned myself, and I've experienced in my career.

Q. Do you have any sort of manual or treatise or anything you can refer me to where I can read some sort of peer reviewed study that confirms that belief of yours?

A. I'll -- if necessary and if I'm asked, I would seek one, but I don't have one in my possession right now.

Q. All right. What are your other opinions as to the causation of structural issues with this home?

A. Well, the -- in relation to the pipe condition,

there's also a condition -- hydraulic condition that to me is accelerating this problem. Sometime since original placement of the pipe, the pipe has been altered behind the Ray dwelling starting from the manhole that is on her property and passing I'm going to say east towards Lucas Street. The pipe route was changed from going straight to approximately 40 degrees from the manhole to Lucas Street. Concrete pipe was used so we know that was altered since the original placement of the terracotta pipe. So that tells us that there's been a condition that caused this change. They needed to change it for some reason. We observed that early in the process. We've also observed, and in fact I believe Ms. Ray now has video, that water backs up in this manhole because the pipes are undersized, number one, most likely, I've not done the hydrology to prove that, but the obstruction of the manhole itself, and the fact that the water has to build up in the manhole in turn now to the new pipe creates a obstruction which creates backwater pressure in the line. And that backwater pressure will do everything it can to erode and seek its way out of this pipe. I've experienced that firsthand on multiple occasions, other projects. We have an

erosion factor, turbulence and erosion factor in the way it's hydraulically performing. So that's the third component.

Q. Do you have any other opinions?

A. About the cause, no.

Q. Are there any other causes affecting the structural integrity of the home?

A. Well, the home was built to common standards of the '20s. I'm estimating the date. I don't know the exact date, but we see many older homes built the way this one's built. The footings are brick. They're not concrete. They did not have ready-mix concrete back in that era. The type of footing can allow differential settlement. One pier may settle more than another. There's no doubt. The footings under a wall are brick. Where we examined and probed, they were brick, which at the time was common. They did not pour concrete trenches that you see in construction today. But this type movement or this type differential settlement that may occur by the process or the method of construction eventually seeks course and stops. That is -- truly we've examined more than in 6,000 homes, probably more than 8,000 homes, many of them older, and we find that settlement was common, but

it stopped. So here's what I'm getting around to. The time component is critical because this movement of the roof separation, the distresses in the walls of Ms. Ray's house, has been caused by something progressive underneath her house. The soil compaction has not changed from the way it was placed. That has not changed since it was installed. Nobody's been under there to loosen it, wet it down, anything. There's never been any top process to change the density of her soil -- the soil under her home. By logic, the water that's seeping from the pipe that we know is there, it would take actually probably a violation of City's practices to prove is the reason that the soil properties are changing, and I have a reasonable degree of engineering certainty about that.

Q. Are there any other causes that you examined to potentially explain the structural issues presented at the house?

A. By today's standards, floor joists under the living room are overspanned. So we took that into account. The rafters and the roof bracing don't follow current practices and building codes. It's because they did not exist when this home was built. From my experience, there were no building codes in South

Carolina or the County or anywhere else of that era. But again, that deflection in an overspanned member reaches a point and stops unless it's overloaded.

Q. You're combining two different thoughts there. You have the natural deflection of wood and you also have overspanning of members; is that correct?

A. Well, span relates to deflection.

Q. Right. But it's your testimony today that an overspanned member will exhibit stress and then stop?

A. If the loads, live loads dead load combined, are relatively the same over a period of time, that member will perform the same after it has deflected and formed what we call fibrous stress memory, it will become bent, but it will stay bent, and it will perform. There are some cases if it's overspanned too far, it would be a risk. That's not the problem in this house.

Q. And you did those measurements and calculations?

A. Yes, sir.

Q. And wrote them down somewhere?

A. The stress calculations in the wood, probably not. That's done in a computer.

Q. Did you perform those?

A. Yes.

Q. What would be the redline of where it would fail and below the line it would just bend but not break for, let's say, the living room in the front?

A. Well, there's a tensiled strength limit in pine that you do not want to exceed. And we did not -- I don't have it in front of me to refer to, but we did not find the span and deflection of this timber was a risk. That is not what is causing it to progressively change in structure.

Q. Did you perform the calculations for the floor joists in the living room?

A. Yes, sir.

Q. That would have been recorded somewhere, wouldn't it?

A. I do it in a software program.

Q. Did you delete it? Does it have a print function? Does it have results?

A. It has a print function. I could print what I have or recreate it if needed. I checked the fibrous stress, the tensile strength stress of that timber, yes.

Q. And it's your testimony that it is not overstressed and thus it should have bent to a certain point then stopped over 90 years?

A. The form deflection, yes. It will still bounce to

middle of the street.

Q. Do you have any information -- have you studied that area? You used to work for governing bodies in storm water, didn't you?

A. I worked for a consulting firm that did work for a municipality, yes.

Q. Have you done the type of work analyzing that line that you would do to establish whether it can be placed?

A. No, I'm just saying this was provided. At least they had looked at the option of moving this line. Till then, we had never seen a thing.

Q. Are you aware of whether the line that is shown is a proposed line can be constructed from a conflict standpoint?

A. I'm not aware of anything. I'd want to see the study that generated this and, I mean if I was responsible for that --

Q. I'm asking you, are you aware whether the line that is shown on this map is proposed is capable of being located there from a conflicts perspective?

A. I am not aware one way or the other.

Q. Are you aware to any other factor, whether it's topo or drop, as to whether that line can be placed there?

A. I'm not.
Q. Are you aware as to what the cost would be to place that line?
A. I am not.
Q. Have you done any study as to cost of rerouting -- avoiding the line that goes to the subject property?
A. No, sir, that's not on Ms. Ray's property.
Q. I understand. My question to you is have you studied in any form or to any degree what it would cost to route water not through the subject line?
A. I have not.
Q. Have you studied what route that route could be that would send water not to the subject line?
A. I have not studied it. I thought about it.
Q. While taking a shower? What do you mean you thought about it? I don't understand, I mean I'm deposing an expert witness and a professional engineer.
A. We're talking about something I have not studied, too.
Q. Well, that's my question. Have you done any engineering work such that you can testify as an engineer as to what it would take to send water not to the subject pipe?
A. And my answer was no, sir, but I have thought about it.

Q. And in your thinking about it, have you analyzed feasibility at all?
A. No.
Q. Have you analyzed cost?
A. No.
Q. Do you even know if what you thought about is even possible from a topography, fall lines, or even a conflicts perspective?
A. I believe it is possible from what I've observed on the ground out there on these streets.
Q. When you worked as a consultant, would you use the level of effort you've made and the degree of probity that you've made as far as what it would take to route the water around the subject pipe in any of the applications when you were working in that field?
A. Have I rerouted a pipe before?
Q. Based on information that you have on your theoretical reroute?
A. No. I mean that's a municipal system. I'm not there for that purpose.
Q. I'm not asking what your purpose is. I'm asking what do you know and to what degree do you know it? Can you testify as an engineer that the water in front of Ms. Ray's house can be sent anywhere else

other than under her house?
A. I am reasonably certain that it can be rerouted, yes, sir.
Q. And that's based on no analysis of the system?
A. I tried to gather that information.
Q. And it's based on no analysis of the conflicts in the areas, correct?
A. Correct. All those things have to be studied.
Q. And it's based on no analysis of any sort of cost swag?
A. Swag?
Q. Estimate, guess?
A. Well, that certainly enters the equation, yes, sir, you would find the most feasible route.
Q. And do you know the elevation of the point that the subject pipe begins and the point downstream where it ultimately goes? Do you know those relative heights?
A. No, sir.
Q. Do you know the height along the path that you've thought about and maybe could take?
A. I'm observing the City's street grade.
Q. Do you know what's under that grade already at any level of height?
A. You mean the pipe?

Q. Any pipes, any conflicts?
A. Well, there are lots of pipes in the College Avenue which is why in 2013 we were wondering why they were working on a pipe when it's pretty obvious they've got a bigger problem.
Q. All right. So my question to you is you believe you can testify to a reasonable degree of engineering certainty that this water could be reasonably routed around Ms. Ray's house based on what you know right now?
A. No, sir. I'm not testifying to that.
Q. So you would testify that based on what you know right now you could not testify, you don't have sufficient information to testify to an engineering certainty to what it would take to route the water around this house?
A. No, but I believe it can be done, and I believe there is a solution to it.
Q. What facts do you base the belief on?
A. Site observations and general practice, and here's a study that did that exact thing.
Q. Do you think this piece of paper evidences that it can be rerouted?
A. It shows me that somebody studied it.
Q. Right.

Ray's lot?

A. Sorry to ask this, but at which part of her lot are you referring to?

Q. Was it different?

A. Well, I've looked at it at the back -- the rear left.

Q. Okay.

A. Actually I should say the rear right. I looked at it at the front right corner. I looked at it over on the dining room side as close to the patio as possible. And of course I looked at it in front of the house along the sidewalk at two or three locations. Looking at it, meaning probed it, and at least one place I used the shovel.

Q. Did you see different kinds of soil types in those five or six locations?

A. No, generally the soil types were the same.

Q. What kind of soil type was it?

A. I'm not a geotechnical engineer, but I call it a silty, sandy clay.

Q. Kind of a clayey soil?

A. Yes.

Q. What would you expect to see from a clayey type soil which you saw out at Ms. Ray's lot for repeated wetting and drying?

A. No, in fact in the budget of our estimate there is an engineering estimate fee to do that level of work, but we are involved with a lot of structural repair work, and the point there is that you can form general estimates of scope as I've done and be reasonably close to what ends up being, only because you assess it piece by piece, which is what that -- those two estimates have done. I didn't just throw a dart at the wall, I actually piece by piece looked at it.

Q. How much of what you're repairing has occurred prior to, say, you're fixing things that occurred prior to 1985?

A. That is not entirely definable in my experience. I can relate to what's happened in the last -- since April 2012. So to attribute it as to date, it's very difficult other than what I've seen actively progressing since I've been involved.

Q. Do you have any ability to delineate how much of the cost is attributable to matters that have occurred from this date forward or that date back?

A. Do you have a specific date in mind that you're asking that question or is it --

Q. Say November 6th of 2009.

A. Okay. There is no scientific way to do it. There's

ways to legit -- logically think it out, but I've not done that.

Q. Is it accurate to state that of the entire amount you have expressed is needed to repair the house, that not all of it is resulting from manifestations since November 6th of 2009?

A. I'm sorry, again, I have to ask you a question. Was there an event on November 6th of 2009?

Q. I'm just asking you if you would -- can you state positively that not all of the $180 something thousand is caused by results after November 6 of 2009?

A. I don't know how I could do it other than logic and --

Q. Let's do it another way. Can you not affirmatively state that some of the repairs in the $180,000 are a result of matters that occurred prior to November 6th, 2009?

A. I really don't know that I can, because I didn't see this dwelling until 2012.

Q. All right. So you can testify neither yea nor nay as to whether the $180,000 you say is required to fix the house is a result of factors occurring after November 6th, 2009?

A. First I've never thought about it from that point of

reference, and secondly, it would take me some time to try to see if there's a way to differentiate between damages prior to and/or since. I don't know that there is. I don't know of one other than reference to her photographs, her testimony, and perhaps neighbors.

Q. Sitting here today you can't --

A. No, sir.

Q. -- tell me how much of the $180,000 pre-dated November 6th, 2009?

A. Not to any -- no, sir, I cannot.

Q. Let's break it up a different way. You have stated three causes of damage to the home. There is the placement of the fill on top of the line, there is this backcharge, and then there's leakage.

A. And the one time element I have since 2012.

Q. I believe you said the time was over the course of the house's existence on top of the pipe, and the fact it's been there 90 years has an impact on all three; is that accurate?

A. Yes, but for me to determine what happened prior to November 6th, 2009, I can't --

Q. I understand that. We've moved off of that. I'm not asking you -- can you differentiate for me which elements of damage to the house are the result of

improper placement of fill versus water leakage?
A. I believe I can provide the most likely cause a little closer than we may already have defined, only in the sense that this gets right back to that cone of influence. Pier A, because we know that we're sitting right on the cut line or right at the cut line, and he did not find saturated soil or any -- it's hard to say that that pier could be affiliated with leakage. I don't know. That's not up to me to determine.
Q. Well, I'm asking you sitting here today can you tell me how much of the $180,000 is a result of backcharge pressures versus leakage or between improper placement of fill versus leakage?
A. No, sir.
Q. Is that possible?
A. I would have to think about it further, but I don't know that it is.
Q. And much less to a reasonable degree of certainty?
A. Yes.
Q. In hindsight, there were things that could have been done at earlier periods in time which would have provided very meaningful and repeatable data that could explain or characterize some of these events; is that true? Stress gauges placed in 2005, 2008,

STATE OF SOUTH CAROLINA)
) IN THE COURT OF COMMON PLEAS
COUNTY OF YORK)

Lucille H. Ray,

Plaintiff,

-vs- 2012-CP-46-3928

The City of Rock Hill and South Carolina Department of Transportation,

Defendants.

DEPOSITION OF EDWARD STANTON CUMMINGS, III, P.E.

ROCK HILL, SOUTH CAROLINA

AUGUST 18, 2014

REPORTED BY: Cathy L. Young, CVR-M

that you're lacking that in your experience could be expected that would impact on your opinion?

A. No.

Q. Other than the handwritten notes that are in documents CESI 1 through 37 and the report, are there any documents you generated, created, or manipulated?

A. No.

Q. Is it your belief that the house was built prior to the installation of the pipe?

A. I have no idea.

Q. It is not your belief that the pipe was installed prior to the building of the house?

A. I'm sorry, the house -- obviously the pipe would have to be installed before the house was constructed?

Q. I could have said that better. That's what I'm trying to figure out. In studying the property, prior to the pipe, what was happening to the water in that area?

MR. FENNELL:

Objection.

WITNESS CONTINUES:

A. All right, one more time, please.

Q. Prior to the installation of the pipe, what was

pipe so that they could make other use to the property on top?

A. Yes.

Q. Did you see any evidence of that on this property?

A. Repeat the question, please.

Q. Did you see any evidence that some owner of the subject property installed the subject pipe to make other use to the top of the property that could not be made prior?

A. I don't understand the question.

Q. You have an open ditch going across a piece of property, you can't put a house on it, can you?

A. That's correct.

Q. If you put a pipe underground, you can put a house on top of it, can't you?

A. I tell all my customers do not do that.

Q. Isn't that what happened on this property?

A. Correct.

Q. So somebody put this pipe in and then put a house on top of it?

A. Correct.

Q. Are you aware there's nothing in the record of this case that evidences that the City had anything to do with the construction of this pipe?

MR. FENNELL:

Objection.
WITNESS CONTINUES:
A. Repeat the question, please.
Q. Do you have any evidence that the City of Rock Hill had anything to do with the construction of the pipe, subject pipe?
A. No, sir.
Q. Are you familiar with the government practice that if the government does take water off of roads, they generally do it through open ditches rather than subterraneal pipes?
MR. FENNELL:
Objection.
WITNESS CONTINUES:
A. I'm not aware of that policy.
Q. The catch basin at issue lies entirely within the road bed, correct?
A. The catch basin is in the road bed.
Q. What would happen if the City blocked the line running toward Ms. Ray's house? Where would that water go?
A. It would come out of the manhole and hopefully flow either up or down College Avenue.
Q. Have you looked at that?
A. I have looked inside the catch basin, yes, sir.

all the way through?
A. Yes, sir.
Q. When you were doing any borings, did you see any evidence of saturation or water?
A. No, sir.
Q. Are your test results such that they all support the conclusion or did you find countervailing evidence that actually does not support your conclusions?
A. No.
Q. All the physical evidence you saw in your professional engineering opinion support the conclusions that you've reached?
A. Yes.
Q. In looking over your report, do you see any errors?
A. No, sir.
Q. Have you had any experience with 85-year-old structures?
A. This is probably one of the oldest I've worked on.
Q. What type of stress or settlement would you expect to see in a house this age?
MR. FENNELL:
Objection.
WITNESS CONTINUES:
A. I would expect to see some slight deflection or settlement around the perimeter of the house.

A. Repeat the question, please.
Q. Assuming this lot -- this house is built on fill at Pier A, is that something you would expect that your testing would have revealed for you?
A. If I encountered it, yes.
Q. Assuming a hypothetical assumption is that it is, your tests would have shown you that?
A. Yes.
Q. But your tests didn't show you that?
A. No. It's that the fill is over the pipe.
Q. You think the only fill is where they put the pipe in and then put dirt on top of it?
A. Correct.
Q. Is it your expert -- your professional opinion that it's the improper compaction of that fill on top of the pipe that's causing these troubles?
A. Yes.
Q. In your experience, is the construction methodology of the section of the house from Pier B to the front wall consistent with proper load bearing practices?
A. I don't practice structural engineering, so I can't comment on that.
Q. You used to build houses, right?
A. Correct.
Q. Is that the way you'd spread out your loads in the

A. Typically on a forensic investigation, our first line of investigation is using the physical excavation of a footing to see what it's bearing on, observing that, and then performing the DCP underneath the footing.
Q. In your professional opinion, would performing these other tests provide greater information for you to make your conclusions?
A. When the soil -- when fill soil exhibits three or four blows, I have enough data to state that that soil was not properly compacted, it is not suitable for bearing without additional testing.
Q. My question to you is would the additional testing that we referred to provide greater information that would help you in the rendering of your conclusion as to causation?
A. No.
Q. Okay. When you did your testing, the soil around there was actually very dry; is that accurate?
A. Yes.
Q. If the pipe was cracking to a degree that it was leaking, wouldn't you expect there to be additional moisture or even saturation at that point?
A. Yes, sir.
Q. Does that lead you to the conclusion that the pipe

is not leaking at that point?
A. I did not dig down beside the pipe to look at the conditions of the soil below the pipe. I would say that the water would -- any water entering those loose soils would exhilarate the consolidation of those soils.
Q. And you would have identified that saturation before getting to the bottom of the pipe?
A. Yes.
Q. But you didn't find that?
A. No.
Q. And that leads you to the conclusion that the pipe is not leaking at that point; is that correct?
A. It was --
Q. You can say it, it's okay.
MR. FENNELL:
Objection.
WITNESS CONTINUES:
A. I did not dig to the bottom of the pipe because the difference between the top of the pier to the top of the pipe is five feet and, first of all, lack of money and safety, I did not dig to the bottom of the pipe.
Q. I understand you didn't dig to the bottom of the pipe. What I'm asking you is you dug far enough

sidewalk or the porch and investigate the soils over the pipe.

Q. Are there not tests you could perform without just deconstructing the front steps, directional or otherwise?

A. You could go to the side of the porch, but that would put you to one side of the pipe. Usually I focus on the worst area for an excavation and a hand auger boring.

Q. What other types of stresses could cause cracking on the front steps that you see?

A. Repeat the question, please.

Q. What other types of stress could cause the cracking you see in the front steps?

A. Possibly a plastic clay.

Q. All right. Anything else?

A. Poor compaction.

Q. Of the line --

A. Yeah.

Q. -- or of the area in general?

A. Of the fill over the line or poor compaction of soil.

Q. Assuming this house was built on fill?

A. Based on fill over the pipe.

Q. Talk about what other stresses other than the pipe

could cause the crack from seep -- are you aware of any type of stresses that could cause the step cracks other than the pipe or the filler of the pipe?

A. Poor compaction of fill soils.

Q. Are you aware of anything else?

A. No, sir.

Q. So it'd be accurate to state that you didn't take into account any other potential stresses in identifying the cause of the cracks in the steps?

MR. FENNELL:

Objection.

WITNESS CONTINUES:

A. Based on my observation of the pipe leading out of the manhole at College Avenue headed straight for that location, I maintain that the settlement over the -- of the sidewalk and porch steps is due to the backfill over the pipe.

Q. I understand that's your position. I'm trying to analyze -- inquire did you look to any other potential causes? Did you?

A. I reviewed them in my mind what else could possibly be this problem.

Q. What's the list you ran through in your mind?

A. Based on my observation, I had tested the fill over

the pipe because it was just obvious.
Q. I'm asking what other potential stress causation factors did you ponder before you latched on to that one to the exclusion of all other causes?
A. None.
Q. You see why I have to ask, don't you? All your evidence does not flow from your theory. You have to agree to that, don't you?
A. I don't understand.
Q. The piers at B, E, I, C and K do not support your theory that all the settlement issues are flowing from the backfill over the line. You do agree to that, don't you? I understand you still have your theory, but the fact that B, E, I, K and C do not have any sort of settlement issues, that's inconsistent with your theory.
A. I don't understand.
Q. You have a theory of what's going on here today?
A. Correct.
Q. You have a theory of what's going on with these steps?
A. Right.
Q. You have a theory of how that translates to all the other issues that are manifesting in the house?
A. Right.

Q. Did you see any damage that you can identify as being within the last ten years?
A. They stated -- or Ms. Ray stated to me that the front porch had been repaired before she purchased the house in 1985.
Q. So just it would be information you got from somebody else?
A. Correct.
Q. Did you analyze the surrounding storm water structures?
A. No.
Q. Did you -- well, you already said you didn't analyze that. Did you analyze the flow characteristics of the water coming through the pipe?
A. No. Well, I'm sorry, I did perform or did run water through the catch basin at College Avenue to determine the pipe physically runs underneath the house.
Q. Did you analyze any other subsurface utilities in the area?
A. I don't recall.
Q. Make sure I understand, is it your testimony that the fill over the entire pipe was improperly placed?
A. At that location.
Q. Just at that location?

A. Correct.
Q. Is it your -- and the zone of influence at that location would be ten feet in a circle, ten feet laterally on either side?
A. Correct.
Q. And even though you believe that water is leaking, it's your testimony and your opinion today that it's the placement of the backfill over that line that is causing the damage to the structure?
A. Yes, sir.
MR. WHITE:
Let's take a little break.
(OFF RECORD)
MR. WHITE:
For the record, we're going to put 1 through 37 in as Exhibit 3.
(Court Reporter marks Defendant's Exhibit Number 3, Documents Responsive to Subpoena, attached hereto.)
EXAMINATION CONTINUES BY MR. WHITE:
Q. Did you look at Mike Leonard's remediation plan?
A. No, sir.
Q. In your experience, have you ever been involved in a situation where you had an area of influence created by a pipe as you opine here and corrected it by dropping piers outside the zone of influence and

STATE OF SOUTH CAROLINA

COUNTY OF YORK

IN THE COURT OF COMMON PLEAS

Civil Action No. 12-CP-46-3928

Lucille H. Ray,

Plaintiff,

v.

City of Rock Hill, South Carolina, a Municipal Corporation, and South Carolina Department of Transportation, an agency of the State of South Carolina,

Defendants.

AFFIDAVIT OF LUCILLE RAY

FILED-RECEIVED
2014 MAY 29 PM 3:34
DAVID HAMILTON
C.C.C.P.&G.S.
YORK COUNTY, SC

Lucille Ray, being duly sworn, deposes and says:

1. I am over the age of 18, am competent to testify to these matters, and make this affidavit on personal knowledge.

2. I own a house and lot located at 330 College Avenue in Rock Hill. I bought it in 1985.

3. I have attached a photos of the house, which are respectively designated respectively as Exhibits A-1, A-2, A-3, and A-4.

4. I have also attached the survey of the property which was available when I bought the house as Exhibit B. It shows what I thought I was purchasing.

5. My house is experiencing significant problems. I hired an engineer in 2012 in order to help me investigate what was going on. His name is Mike Leonard. After investigating, he told me that there was a large pipe running from a drain on College Avenue through my yard and under my house. It is fed by several other pipes which channel stormwater from the surrounding area beneath my home to a spot in the

#1 LHR

rear yard. The water is then diverted through another pipe to Lucas Street. A map showing the stormwater pipes in the area of my house is attached as Exhibit C. Mike's original report dated September 4, 2012 and supplemental Project Memo dated November 30, 2012 report are attached respectively as Exhibits D-1 and D-2.

6. I did not know about the pipes before I bought my house. I did not know that the pipe ran under my house with any degree of certainty until the City confirmed it for me in late May 2011. I know that Mike wrote in some notes that I said I knew it in 2008. He was wrong, and has acknowledged as much. The City took a video in 2008, but would never tell me what it revealed.

7. My house did show some settlement over the years. For example, I did some roof shoring and had problems in the yard in the 1990s. I did not know about the pipe. There was always another explanation for the problems, and for a while, I didn't worry.

8. When damage started to get worse, I began to suspect that there was something beneath the house. I asked the City about it but was told many different things over the course of a few years. In April 2011 they admitted a pipe was on my property but told me definitively that it did not run under the house.

9. When it became obvious that the pipe ran beneath the house, I asked that they simply move it, or reroute the water. This took place in a face to face conversation. I was told plainly that "the pipe will never be moved." This was in 2011. As stated, I hired Mike when I realized I wasn't going to get anywhere with the City.

10. Mike asked for stormwater maps (in 2012) from the City in order to determine what was going on with my property. We finally received a map, but it turned out to be inaccurate. It is attached as Exhibit E.

#2 BAR

11. The City's position on their control of the pipe has been schizophrenic. My lawyer received the letter Defendant attached to its motion disavowing ownership of the pipe. As indicated above they told me that it had to stay where it was. I don't know how they get to have it both ways. Moreover, in late 2012, the City was performing work in front of my house and disconnected the feeder pipes from the one on my property. It was at that point that we knew for sure exactly where the water was coming from that flowed under my house. The pipes were old, clay pipes which were in bad shape. My lawyer wrote to them and told them not to reconnect. That letter is attached as Exhibit F. They did it anyway, and have made it plain that they don't think there is anything I can do about it.

12. I have since learned that the City has maps that show the pipe as part of their stormwater improvements that date back to 1941. One of their maps is attached as Exhibit G. We did not get it until I had to sue the City. They did not give it to me or Mike prior to that point. It shows that the direction of the pipe was altered, and that part of its system involved "abandoning" part of the pipe in the rear of my property. They have never abandoned the pipe that runs under my house, and continue to use it to manage a large amount of water which flows on their streets.

13. When I bought the property, I did not know that other parties were using it to help manage stormwater. I had no idea that the City would take the position that it could reconnect its pipes to this one even after I told them not to. I am involved in litigation with them that doesn't look like will go away anytime soon. I believe that a basic right that would go along with my ownership of this property is the right to decide that water collected from the road system of the City and State should not go under my house if I don't want it to, and that any subsequent purchaser will feel the same way.

#3 MR

14. On December 26, 2012, there was a significant rain in the Rock Hill area. At that point in time, I was still trying to determine the extent of the water that was feeding into the stormwater pipe running under my house. I walked up Strait Street to its intersection with Oakland Avenue. The southwest side of Oakland Avenue was flooded. A South Carolina Department of Transportation (hereinafter "SCDOT") vehicle was parked on the street, and I spoke with that employee, whose name I do not know. The employee confirmed that he was doing maintenance related to drainage, and that SCDOT owned and was responsible for Oakland Avenue roadway and storm drain maintenance on Oakland Avenue. On that date I was personally able to observe the water going into those storm drains, and I and my engineer Mike Leonard have determined that the water from the Oakland Avenue drains run into pipes that run downhill along Strait Street, and it ends up going into the stormwater pipe that runs directly under my house.

This 29th day of May, 2014.

Lucille Ray

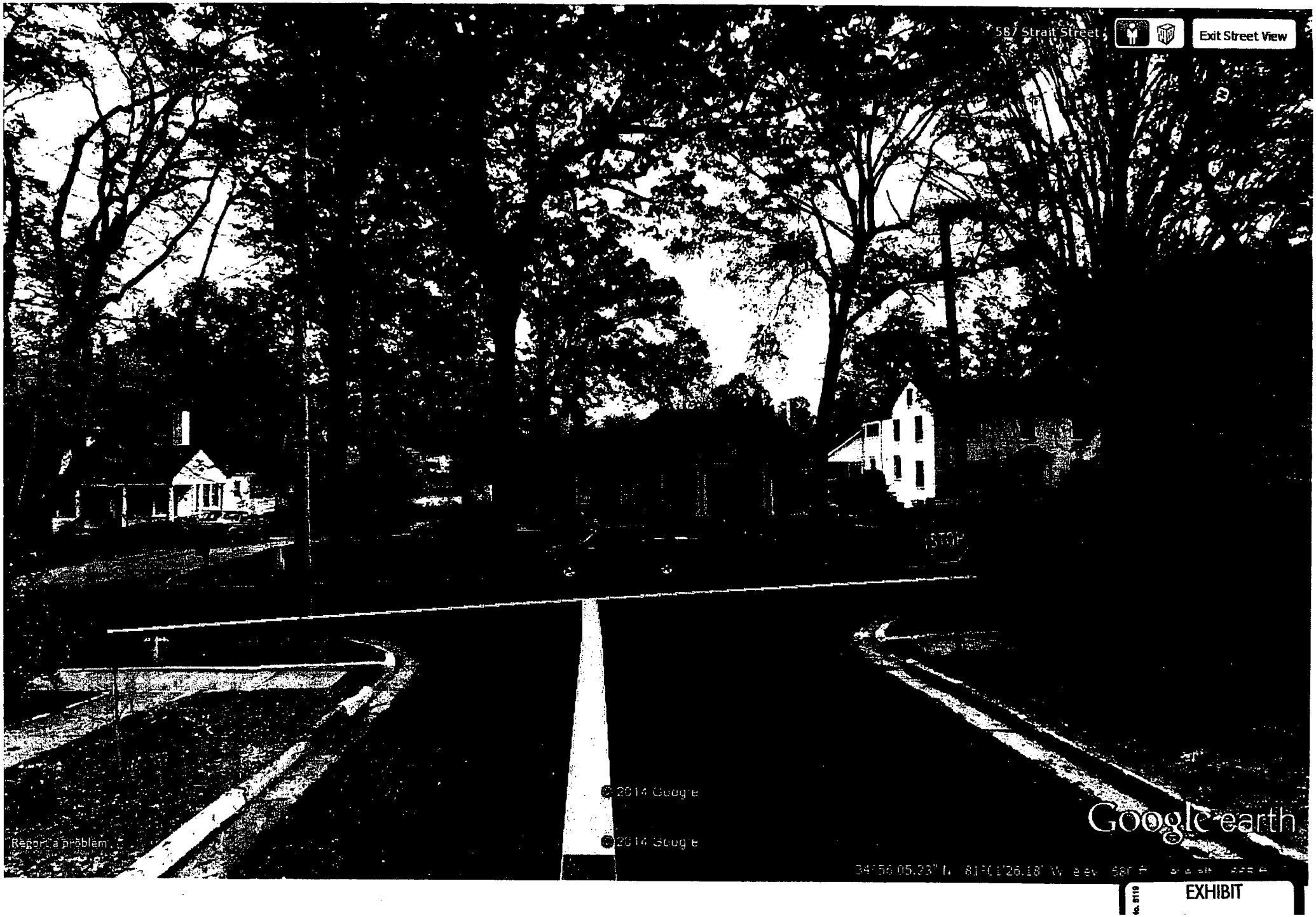
Sworn to and subscribed before me
this 29th day of May, 2014.

Notary Public, South Carolina
My commission expires: 2/16/21

#4

230 College Avenue
Exit Street View
Report a problem
Google earth

EXHIBIT


587 Strait Street
Exit Street View
STOP
2014 Google
2014 Google
Report a problem
Google earth
EXHIBIT

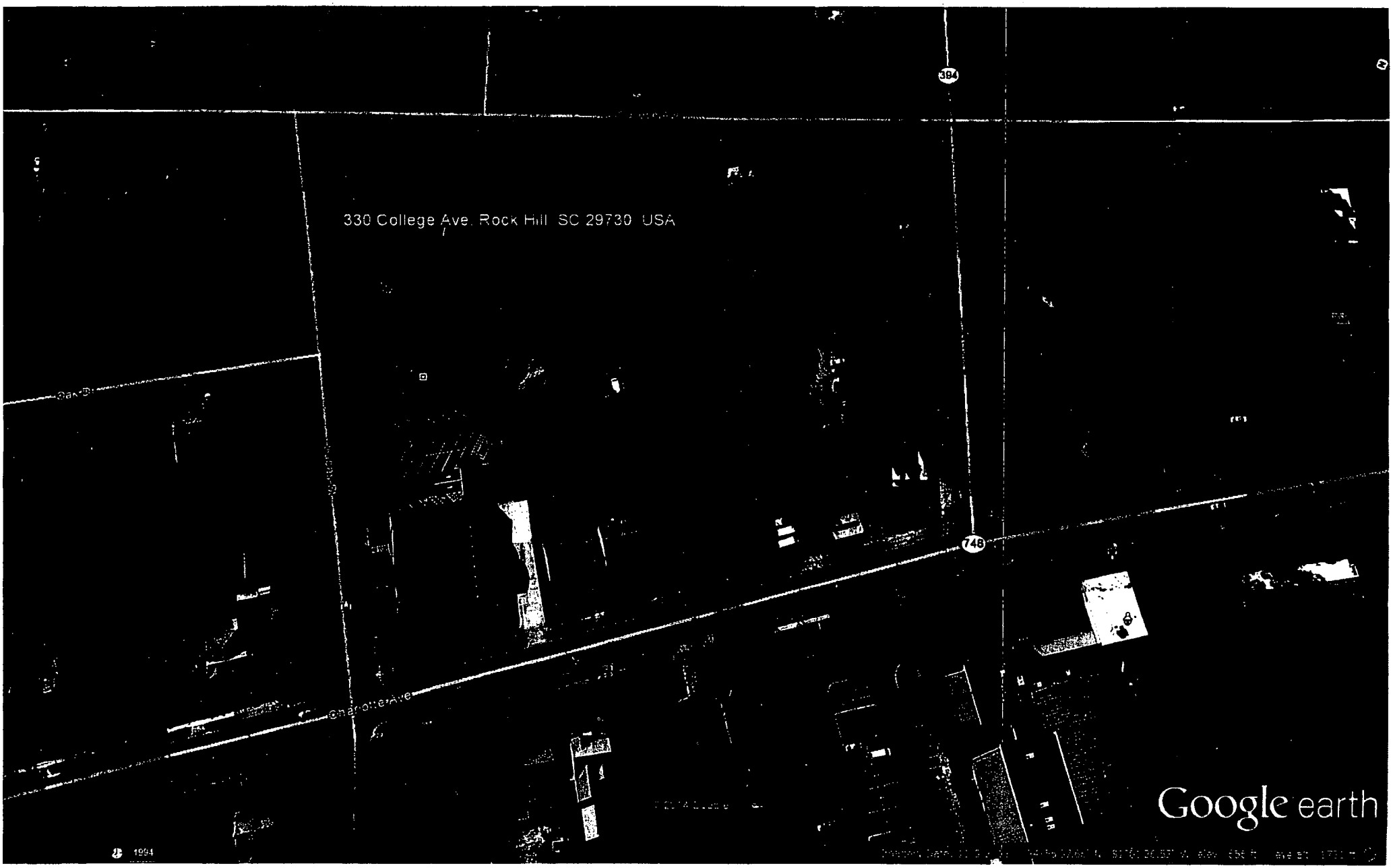
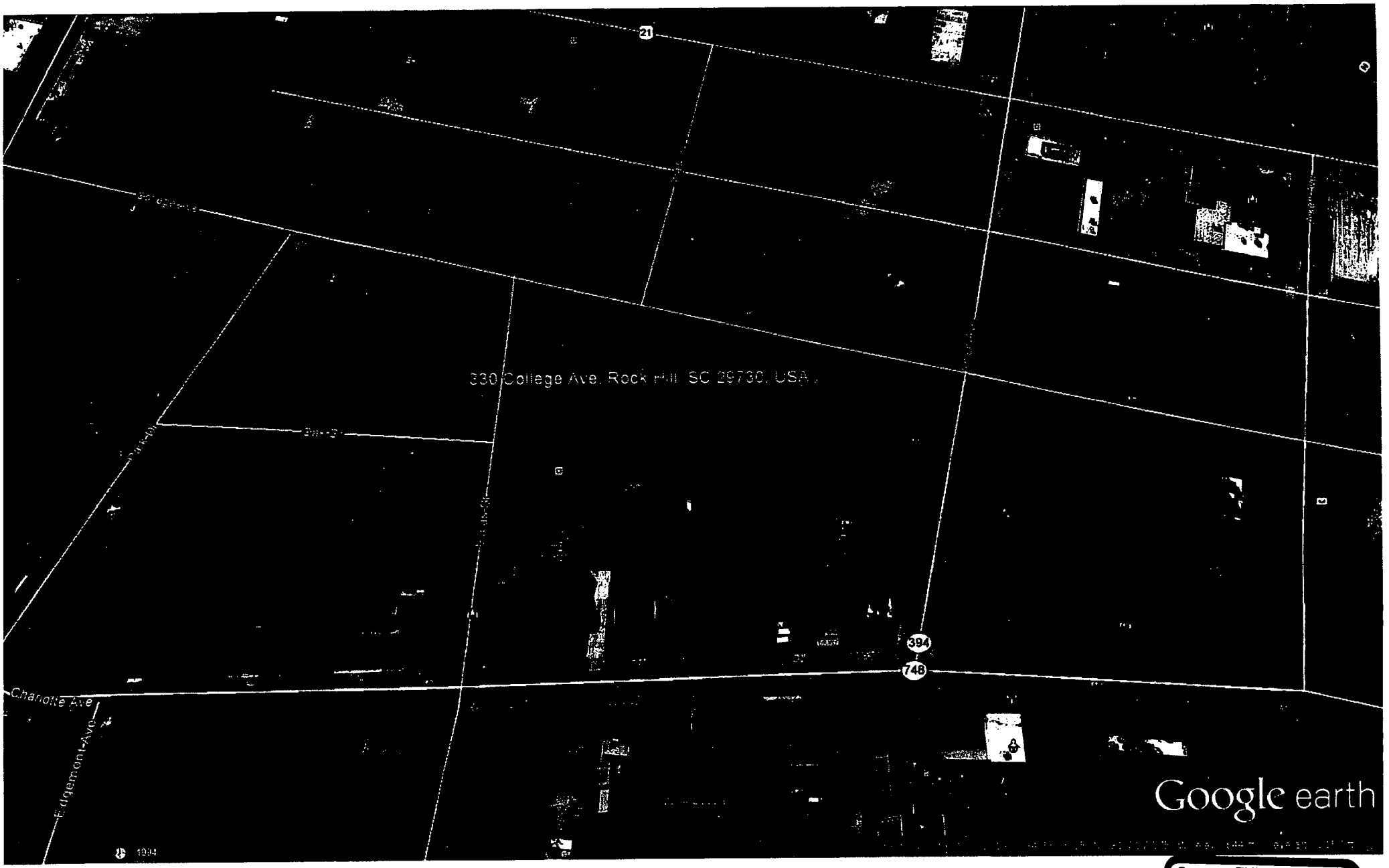


EXHIBIT
A-3

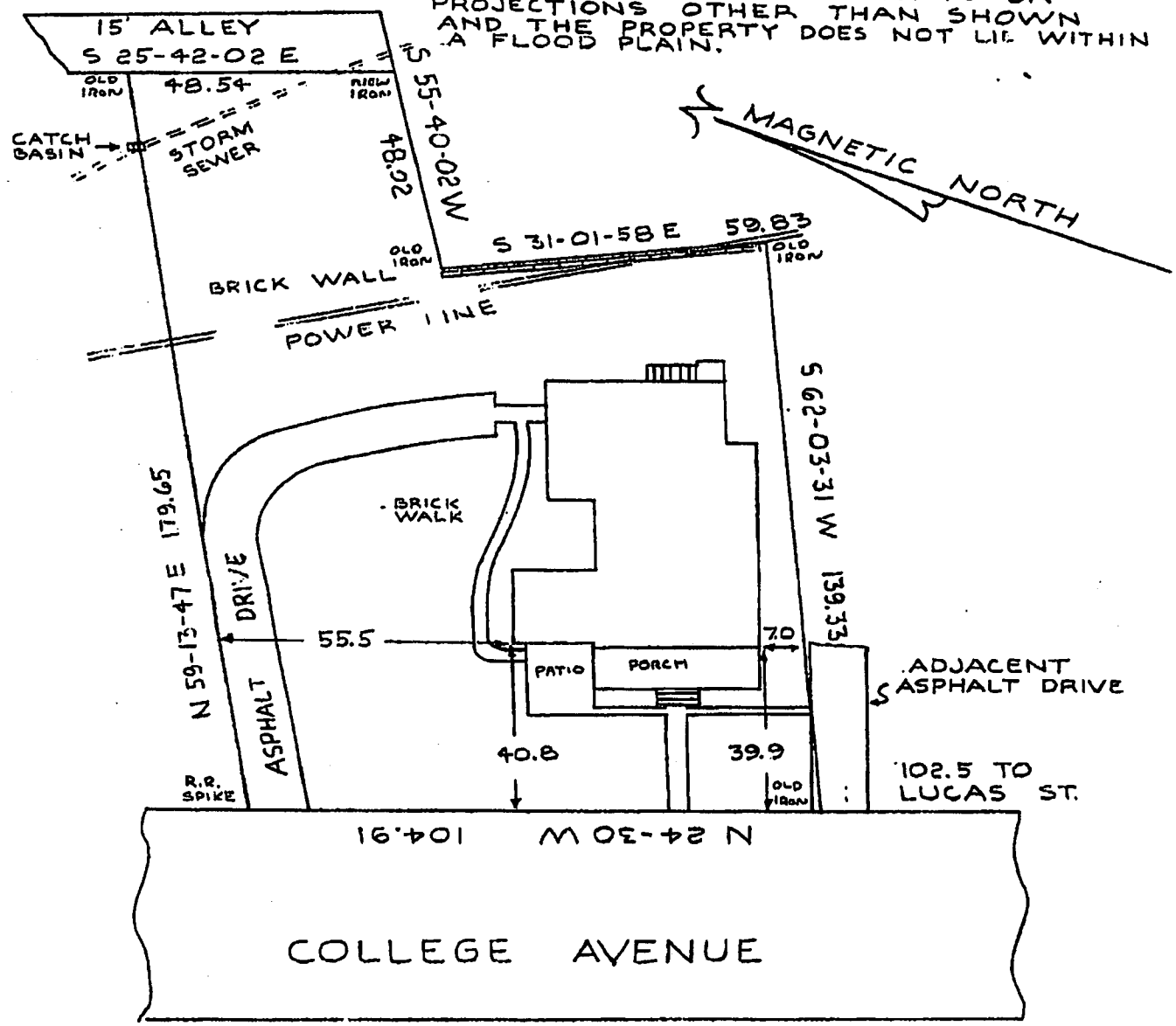

21
330 College Ave, Rock Hill, SC 29730, USA
394
748
Charlotte Ave
Edgemont Ave
Google earth

EXHIBIT

A-4

THIS BEING SHOWN AS LOT 10 AND PART OF 11 & 12 IN BLOCK 28 OF MAP OF PROPERTY OF ROCK HILL BUGGY CO., MADE BY J.L. STACY AND DATED APRIL, 1924. RECORDED IN PLAT BOOK 2, PAGE 200.

THIS IS TO CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY AND THAT THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN AND THE PROPERTY DOES NOT LIE WITHIN A FLOOD PLAIN.



MAP OF PROPERTY OF
LUCILLE RAY
330 COLLEGE AVENUE
ROCK HILL, S.C.

MAY 23, 1985

SCALE 1" = 30'

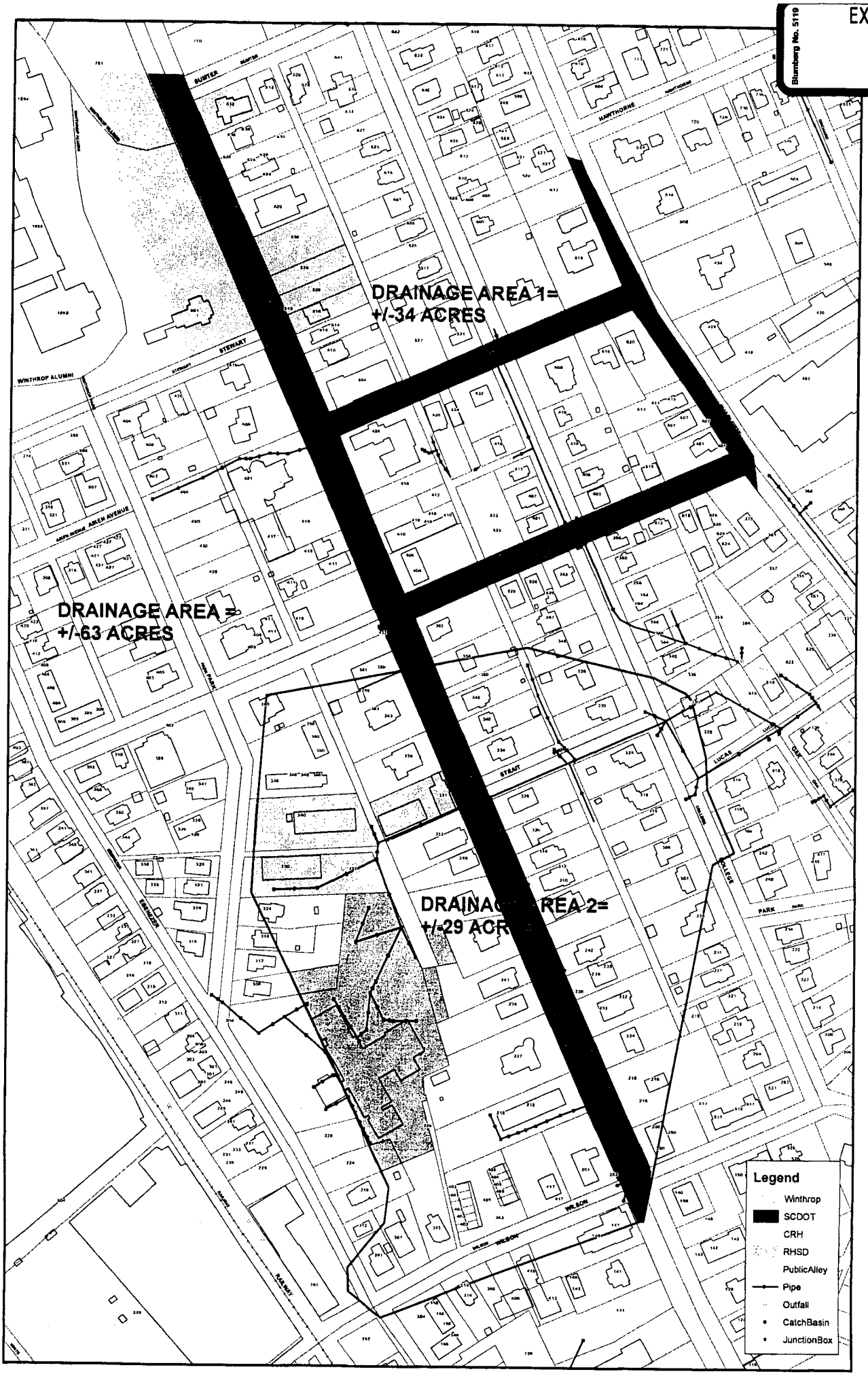
0 30 60 90

W.C. WHITE R.L.S. #1033
ROCK HILL S.C.

EXHIBIT
B

EXHIBIT
C

Blumberg No. 5119



M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

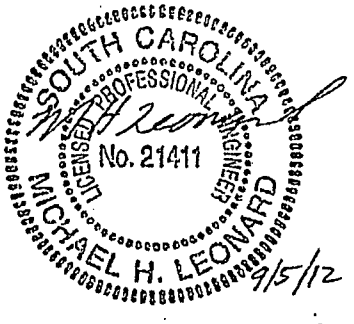
ENGINEERING EVALUATION

STRUCTURAL DAMAGES AND RECOMMENDED REPAIRS

Residence of:

Ms. Lucille Ray
330 College Ave
Rock Hill, SC

MHLCE Project # 12E9555.F
Date: September 5, 2012
By: Michael H. Leonard, PE



447 South Sharon Amity Road, Suite 201 Charlotte, N.C. 28211 Office (704) 333-2221 mhleonardengineering.com

EXHIBIT
D-1

RAY000461

1. Purpose

The purposes of this study include the following:

- To provide an engineering assessment of private residence to determine cause(s) of progressive structural damages.
- To determine the most feasible structural repairs of the dwelling and subgrade conditions now affecting the foundation.
- To estimate the costs of structural repairs and other remedial work.
- To determine the risks of long-term, progressive damages if remedial work is delayed or not done.

2. Timeline Summary

Ms. Lucille Ray has owned the home at 330 College Ave, Rock Hill, South Carolina since 1985. She has lived there and maintained the single-family residence continuously for 27 years. Over that time, various events or findings have led her to launch this investigation.

This is a timeline summary based on information provided:

- In about1992, while doing yard work in the rear yard, a gardener stepped into a hole up to his waist within 10 feet of the rear house foundation wall. It had developed suddenly. It was filled and considered surface erosion at that time.
- In 1995, Ms. Ray first found bending in her roof frame while in her attic and proceeded to add bracing in an attempt to stop it.
- In 2001 she renovated the home and added a kitchen, garage, and covered porch on the left side. She noticed unexplained settling of the front patio during construction, requiring additional work and expense.
- In 2007, she noticed separation in her roof frame between adjacent slopes and proceeded to add cross-bracing at the ridge level in an attempt to stop it.
- In 2008, she first noticed that her front entry steps were sinking. At that time she tried to determine potential causes and found that a city storm-water pipe extended (from public city street in front of her home) directly under the front entry of the dwelling. She requested City assistance to review the concern and after multiple attempts, she was finally put in contact with Rock Hill's Mr. Jason Tinkler. A pipeline study was done without shared results. After repeated calls over the next few months (to Tinkler), she was told that the video tape had been lost. He also told her the front steps were simply settling.
- In 2011, after repeated calls to the City, the camera study was done again on June 2 and 3, 2011. Ms. Ray watched the study and video results as the City confirmed that the storm water line extended directly under her home, although they never did excavate to find the rear-yard manhole found during video work. Tinkler informed her then that the pipeline was not a problem but that he would get back to her about it.
- Later in June 2011, Ms. Ray called Tinkler to discuss street flooding but he never called her back. Finally, in August 2011, she discovered that Mr. Tinkler did not work for the City any longer. No other City official has ever contacted Ms. Ray about the known pipeline problem despite repeated calls from her.
- In early 2012, the lack of responses and progress from the City led her to start an owner-investigation at her expense.

3. Executive Summary

On March 20, 2012, Ms. Lucille Ray contacted M.H. Leonard Consulting Engineers, PA to request engineering assistance regarding the problem. She shared her findings and a brief history of the property. We have proceeded to study the dwelling, the site, and the soil conditions around and under the home. We have also conducted simple water flow tests of the storm water piping that extends from Oakland Ave, along Strait Street, to College Avenue, and over to Lucas Street after passing directly under Ms. Ray's house.

After 3 site inspections, a geotechnical evaluation, and limited responses from City officials, this report will summarize our findings.

The investigation has provided evidence of the following facts and opinions:

1. There is a pattern of structural damage in the subject dwelling frame and foundation caused by foundation movement at ground level. These damages appear progressive and we consider them active.
2. An underground 24-inch public storm water pipe extends from the street in front of the home in a line directly under the specific zone of structural damages. There is evidence of multiple foundation piers dropping and leaning along the pipeline route.
3. The public storm water system records for this neighborhood have not been available despite requests to the City of Rock Hill. Those may not be accurate based on one small map obtained by the owner prior to our investigation. That does not show a public pipe on the subject site. ***See Attachment #2.*** Regardless, the old terra-cotta clay pipe is there and confirmed. It appears aged with cracks and is probably leaking. Those conditions are verified by the videos provided.
4. The storm water system serving this and surrounding lots appears to include a substantial area based on informal water testing completed. We determined that catch basins on Oakland Avenue and beyond are part of the network upstream from the pipe extending under the home. Unconfirmed estimates of the watershed size are 14 acres or more. The flow from that large an area is substantial and increases our concerns with the pipe capacity, flow leakage, and lack of serviceability (being under a private residence).
5. A geotechnical evaluation of on-site soil along the pipe route and under the home confirms that foundation piers and the front stoop, steps, and sidewalk have settled as the result of soft pipe fill soil. Further testing would be needed along the entire pipe route to determine if there are wash outs and voids around the pipe.
6. There are current and long-term risks that pipe failure will lead to soil erosion and substantial structural damages. If pipe failure is rapid enough, structural failure (sinking and partial collapse) is likely.
7. Public utilities require routine maintenance and access, which is why they typically align in public right-of-ways or dedicated easements on private property. Apparently this storm water pipe is not even known or recorded in public documents. The less known about the pipe and its maintenance record, the higher the risks that it is failing now.

Three options were considered to eliminate risks of further failure and to repair structural damages to date. In the best interests of Ms. Ray as property owner, the most feasible remedy includes the following:

a. re-route of the storm water pipe away from her property (requires independent storm water and hydrology study as City improvement),
b. abandonment of the existing storm pipe and filling it with a flowable slurry grout,
c. structural shoring of the existing foundation in pipe trench zone,
d. framing repairs to floor and roof systems,
e. replacement of front stoop, including steps and sidewalk,
f. interior and exterior repairs caused by structural settlement to date,
g. all general conditions, cleaning, building permits, and construction management.

We estimated the costs of those repairs based on local, prevailing rates of the region. That study was based on our experience as a General Contractor in new construction, renovations, and structural repairs.

The estimated cost to complete the remedial work described is

$147,711

Although there are alternative methods to shore the dwelling, the costs may vary by 2.5%, based on experience with other structural repair projects of this type.

Time is a critical factor moving forward.

⇒ If the existing pipe develops further leaks affecting soil conditions or causing subgrade damages below the home, the extent of structural repairs will rise substantially.

⇒ Although the house is nearly 90 years old, structural damages have developed since 1985 (estimated based on owner observations and existing site inspection). The damage appears to be active and risks are high that it is increasing at an unknown rate.

⇒ Based on site observations now, we believe the pattern of structural distress is relatively young. Based on video evidence of the storm water pipe in place, risks are high that it will degrade and eventually fail. Between now and then, leaking and effects of further pipe degradation will further damage the house foundation and frame.

The storm water design to re-route the system around this property will require expedited attention from public utilities. Since planning of that type utility project typically takes more than 12 months, risks of structural damage is substantial enough that we recommend a temporary pipe repair and re-lining of the 24-inch clay pipe as soon as possible.

The costs of temporary pipe repairs to reduce risks of short-term structural damages to the dwelling are NOT included in this report.

4. Property and Project History

Ms. Lucille Ray owns the current properties at 330 and 340 College Ave, Rock Hill, South Carolina. The 330 (subject) site includes a one-story, single-family home, including a 2-car garage, partial rear daylight basement, and two covered porch spaces. She purchased the property in 1985, approximately 27 years prior to the date of this report. See ***Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC dated May 23, 1985.***

The house is built with a masonry foundation, conventional wall, floor, and roof framing, and an asphalt/fiberglass shingle roof. The exterior walls are clad in wood and vinyl siding with a pier and curtain foundation wall, 8-inch all-brick foundation, and CMU foundation. The house includes a front masonry covered stoop and a left-rear covered porch.

Ms. Ray renovated the home in approximately 2001 with a kitchen, garage, and left-rear porch addition. Those areas bear on new foundation systems independently of the main, original home. None of those areas are within the concerns of this report.

In about 2008, Ms. Ray first observed evidence of structural distress in her home. The ceiling and roof frames visible in the attic had separated. She had braces added to prevent further separation. Ms. Ray also recalls similar roof frame repairs were necessary in 1995. She also indicated that a man stepped into a shallow hole in her back yard in about 1985 while helping her – sinking up to his waist. At that time, she did not suspect structural or soil concerns. She did recall the position of the ground hole noted within this report.

On March 20, 2012, Ms. Ray contacted M.H. Leonard Consulting Engineers, PA to evaluate the cause and extent of structural damages further. Since then, this firm has progressed as itemized below:

April 4, 2012
- Initial site review – field notes, investigation plan

April to June 2012
- City of Rock Hill, requests for storm water system mapping, information – log of inquiries
- June 6 – DVD review of pipe camera studies through Ms. Ray

June to July 2012
- Plan geotechnical study, quotes – CESI Ed Cummings, PE
- July 6 – MHLCE comprehensive site study of structure, damages, water hose test in storm pipes

August 2012
- CESI/Cummings geotechnical study
- CESI and MHLCE pipeline location under house - confirmation

5. Findings of Engineering Inspections

House Frame and Foundation:
Our investigation has included a structural inspection of the house frame and foundation, finding that there are patterns of distress caused by active structural movement. The roof frame has separated in two locations, the main level floor system is sloping where foundation piers have dropped from original support positions, and a geotechnical study has verified that the foundation movement has been caused by the excavation zone along the public storm water pipe route.

We observed the following specific damages:
Roof Frame Damages:

⇒ Separation of ridge and rafters at ridge beam spanning front-rear near front ridge spanning left-right. A metal cap was installed there to span over a 2-inch gap.

⇒ Separation of ceiling joists at ceiling girder beam – about 1¼ inch near middle of original house frame.

Interior Wall/Floor Conditions:

⇒ Floor distortion at front living room, center breakfast room, center hall. Slope varies from ¼ to 5/8 inch in 4 feet along axis extended to front entry door.
⇒ Corresponding wall and door distortion with cased opening headers or jambs ¼ to ¾ inch out of level and/or ½ to 5/8 inch out of plumb.
⇒ Stress cracking on hall walls and baseboard trim.
⇒ Stress cracking with shear pattern in center left bedroom, front wall.
⇒ Master bath/bedroom area – garden tub deck out of level with separation at floor.
⇒ Front door out of plumb/square.

Exterior Damages:

⇒ Front stoop and steps with masonry shear cracking. Front step dropping/settlement ¾ to 1¼ inches with shear zone near middle.
⇒ Front sidewalk – settlement and tilt to left side near front steps.
⇒ Rear yard open hole, approximately 14 inches deep near centerline of known storm-water pipe location.

Foundation Damages:

⇒ Miscellaneous stress cracks in front foundation wall.
⇒ 7 interior piers with separation at top or leaning from plumb.
⇒ 4 interior piers that have been shimmed with wood shims more than 1 inch in depth (multiple re-shimming).

The laundry cellar (forward of rear basement area) includes a slab elevated above the basement level, crawl space, and adjacent furnace cellar. We estimate that slab was used to cap over the known storm water line that appears to be within 32 inches of the top of slab. The pipe depth and clearances are only estimated except those verified during the geotechnical evaluation.

Storm Water System:

We studied a pipeline video camera recording obtained by Ms. Ray in 2008 and determined that 1 of the 3 segments of that recording were of the subject pipeline. The recording revealed that the 24-inch terra-cotta clay pipe is old with random stress cracking, joining a manhole directly behind Ms. Ray's home where a 24-inch RCP pipe extends further East and toward the right rear of her property and beyond.

The City of Rock Hill has denied our requests for access or copies of the public storm-water utility information regarding this location on 3 occasions (attempts logged). The only storm water map we were able to obtain in this study was provided by Ms. Ray (***Attachment #2: City of Rock Hill, Department of Planning & Development, dated 09 Dec 1998***). That map does not show the pipe that extends under 330 College Ave or across to Lucas St.

It does not reflect other pipe routes and pipe sizes observed during this study.

Ms. Ray also owns the property at 340 College Avenue (immediately west of the subject site). The map shows a 10-inch diameter pipe extending diagonally across and under that dwelling. In fact, the pipe is 30-inch dia clay with a partially collapsed catch basin in the rear yard of that site. There is no doubt that it does extend under the northeast corner (rear left) of that structure. *The effects and condition of this storm-water pipe line are not part of this study.*

Geotechnical Evaluation:

Concord Engineering Services Incorporated (CESI) performed a geotechnical evaluation at the site at our request. Mr. Ed Cummings, PE and Mr. Harold Eaves met us on site on August 2, 2012. Their work included confirmation of the existing storm water line under the house, locating and documentation of the rear yard manhole, effects of soil settlement at the front stoop, and the soil investigation under the home. Their findings are documented in a report (***Attachment #3: CESI Geotechnical Engineering Evaluation, Ray Residence, 330 College Ave, Rock Hill SC, dated August 8, 2012***).

6. Engineering Summary and Opinions

Based on our site study and the accompanying geotechnical evaluation, evidence indicates that the residential dwelling is in an active state of structural settlement caused by an active public storm water terra cotta pipe buried directly below the home. The 24-inch diameter pipe system is confirmed there and soil conditions in the trench in which it was placed are affecting the foundation elements of the structure. Movement of piers and other foundation elements is causing floor distortion, wall and door distortion, roof frame separation, and settlement of steps, patios, and other functional features. These damages are active and appear progressive based on owner input and historical information back to 1985. The causes of structural damages must be addressed soon to limit the magnitude of damage and costs to repair and restore the dwelling.

The storm pipe under the house serves a significant surface area by current estimates. However, City information has not been available for confirmation of actual drainage system fixtures and the general watershed area. By a limited topographical study, we have estimated that the subject 24-inch pipe is handling flow from up to 14 acres to the South of the subject property. Regardless of the flow rate, the presence of a public storm water pipe under a private residence is unusual – preventing public access for maintenance and repairs. Videos of the pipe indeed show it is old with cracking and other concerns that it may be leaking (not confirmed by this study). If it is leaking now, or in the future, the risks are substantial that it will damage the private dwelling further, eventually leading to partial catastrophic failure if certain conditions develop.

Repairs and stabilization of the building foundation must be considered soon to limit damage. Temporarily, the pipe must be maintained to control risks of leaks and related damage. An epoxy lining should be considered. Ultimately, the line must be moved or re-routed and the effects on the house foundation must be remediated to restore the structural integrity and value of the property. If not, the value and function of the home may be jeopardized – including the risk of full loss of value.

Limited responses from the City of Rock Hill seem to suggest the pipe does not belong to the City (***Attachment #4: Letter – Spencer & Spencer, Mr. Paul Dillingham to Mr. Charles S. Bradford, dated May 18, 2012***). We cannot verify ownership of the pipeline, but there is no doubt that it is not a private drain system. Since the City maintains the streets and other utilities from which the subject storm water pipe originates (recent addition of catch basins near Strait Street by City confirm this), and since the discharge and management of the water in this system are managed by the City, then it appears certain that they have overlooked a buried, old storm water pipeline that pre-dates the construction of the house on this site (estimated to be 90 years old).

7. Recommendations

Options to remedy the problem include:

A. Removal of home and foundation for adequate ROW for the pipe and to allow access and maintenance.
B. Re-route the storm water pipe away from the property, abandoning the existing pipe and repairing the dwelling and foundation. At this stage, the magnitude of damage allows this option. As the pipe continues to degrade and if soil erosion in the underground trench is compromised, this option will become less feasible.
C. Reline the pipe, maintain it as positioned, shore and repair the foundation and frame of the dwelling, and confirm the pipe capacity for further risk assessment regarding the home.

⇒ Option C is NOT recommended from a structural engineering view point. Risks remain for pipe failure despite any maintenance practices adapted. There may also be substantial legal concerns with a private structure located atop a public utility.
⇒ Option B is considered the most feasible and only option if the house remains over the current pipe section.

We recommend the following scope of repairs to re-route of the storm water pipe, cap and fill the abandoned pipe, and restore the structural integrity and function of the dwelling and foundation.

1. Excavation and cap of pipe at front and rear exterior of home footprint. Structural fill of the pipe cavity with slurry mix flowable fill.
2. Deep foundation shoring devices under house foundation walls and interior foundation piers along pipeline route, any elements within 10 feet of the trench zone. (* See alternative soil densification.)
3. Re-build foundation walls, piers, and front stoop as needed to restore function and integrity.
4. Jacking and leveling of main level floor system with reinforcement of frame girders affected by damages to date.
5. Repair and brace of roof frame, including installation of structural cross-ties and rafter tie-downs.
6. Interior repairs of plaster walls, millwork, trim, and flooring affected by structural damages to date.

The general conditions, cleaning, debris hauling, building permits, insurances, and construction management must be included. Engineering design of structural repairs will be required. A reasonable General Contractor's fee must also be included.

We have estimated the costs of this work as itemized in ***Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence, 330 College Ave, Rock Hill, SC, dated August 21, 2012.***

We estimate the costs to cap and fill the pipe, to shore and repair the house foundations, and to repair the house frame is **$ 147,711**, including Contractor overhead and profit margins and a 2.5% contingency budget.

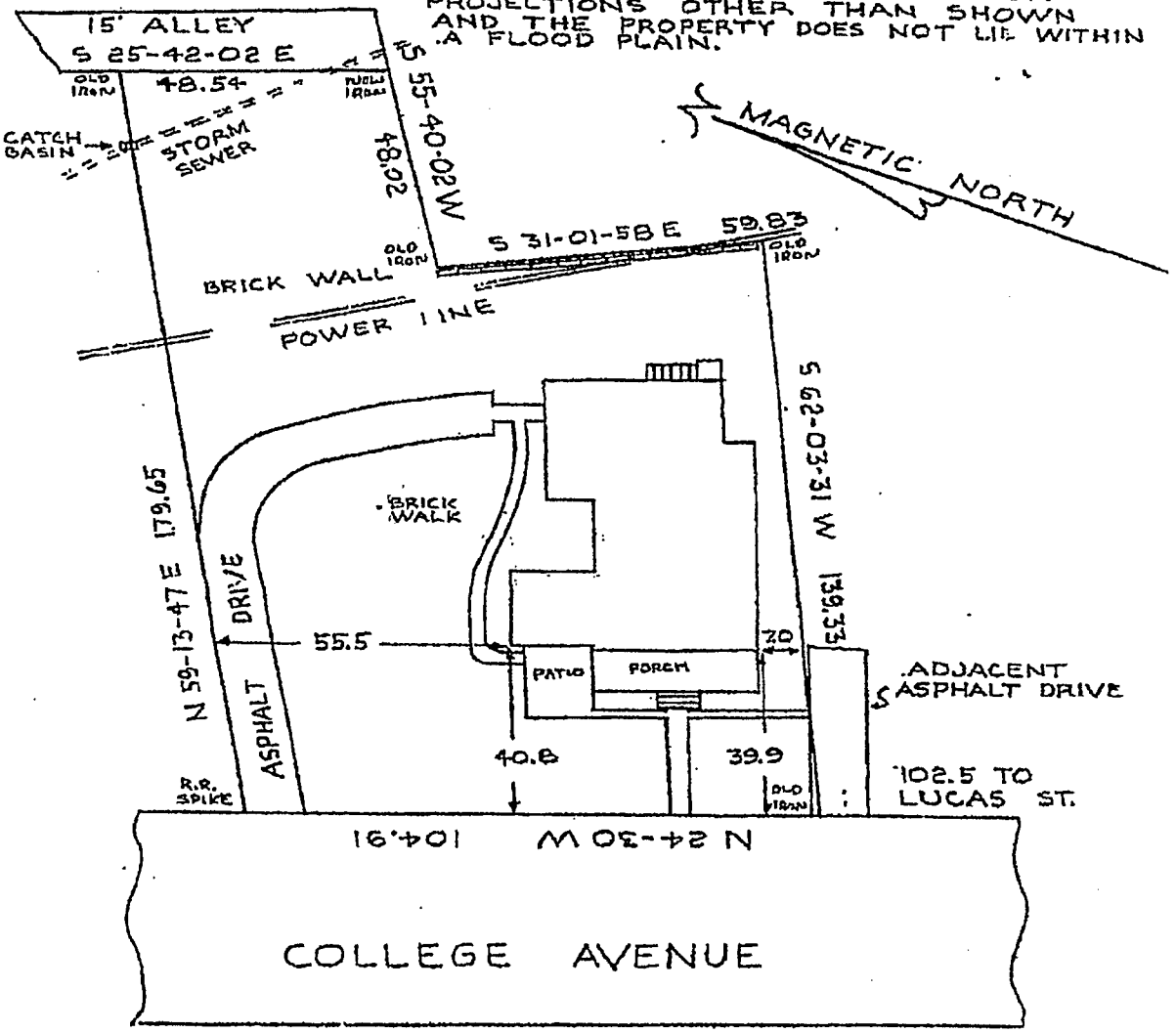
This scope and cost estimate is based on assumptions and conditions as follows:

⇒ Repair work is based on status of damages as of August 2, 2012. Time may allow more damage and add to costs.
⇒ The cost for engineering includes structural repairs and pipe capping and fill on the subject property. No other part of the existing pipe or future pipe is included.
⇒ The pipe fill is only between the existing catch basin at the front and the existing buried manhole at the rear of 330 College Ave. The existing 24-inch diameter RCP that extends between the buried manhole behind the subject house and Lucas Street is not part of this cost estimate for capping and fill.
⇒ Existing storm water piping has been re-routed and completed prior to this scope.
⇒ Costs for temporary pipe repairs, linings, and/or provisions prior to this scope are not included.
⇒ Transportation and fuel costs are included based on rates in place at the time of the estimate.
⇒ Water and electricity are provided by the owner during construction work.
⇒ A landscape repair allowance is included ($1200).

Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC Dated May 23, 1985

THIS BEING SHOWN AS LOT 10 AND PART OF 11 & 12 IN BLOCK 28 OF MAP OF PROPERTY OF ROCK HILL BUGGY CO., MADE BY J.L. STACY AND DATED APRIL, 1924. RECORDED IN PLAT BOOK 2, PAGE 200.

THIS IS TO CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY AND THAT THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN AND THE PROPERTY DOES NOT LIE WITHIN A FLOOD PLAIN.



MAP OF PROPERTY OF
LUCILLE RAY
330 COLLEGE AVENUE
ROCK HILL, S.C.

MAY 23, 1985 SCALE 1" = 30'

0 30 60 90

W.C. WHITE R.L.S. #1037
ROCK HILL S.C.

CESI

Land Development Services

August 8, 2012

Mr. Mike Leonard P.E.
M.H. Leonard Consulting Engineers, PA
447 South Sharon Amity Road
Suite 201
Charlotte, North Carolina 28211

Reference: Geotechnical Engineering Evaluation
Ray Residence
330 College Avenue
Rock Hill, South Carolina
CESI Project Number 120755.000

Mr. Leonard:

CESI has performed a geotechnical engineering evaluation of the storm drain under the Ray Residence in Rock Hill, South Carolina. We completed these services in accordance with your verbal authorization. This report summarizes our Findings, Conclusions and Recommendations.

FINDINGS

On August 2, 2012, CESI's Geotechnical Engineer, Edward S. Cummings III P.E., met Michael Leonard P.E. and Ms. Lucille Ray at her residence in Rock Hill, South Carolina. Ms. Ray indicated her observation of the settlement of the brick sidewalk and stairs at the front porch initiated the structural investigation of the house by Mike Leonard. The purpose of the meeting was to allow our Geotechnical Engineer to observe the storm drain under Ms. Ray's home and the resulting settlement problems as observed by Mr. Leonard and Ms. Ray. Ms. Ray said her residence is 90 years old and was purchased in 1985.

The following specific areas were observed:

- Storm drain catch basin in College Avenue;
- Storm drain manhole in rear yard;
- Loose brick piers in crawl space;
- Settlement of front brick sidewalk and stairs;
- Previous hardwood floor repair by former owner (pre 1985) in entrance foyer directly above and inline with the storm drain.

Facing the Ray Residence, a 24" terra cotta pipe was observed leaving the catch basin and heading toward the center of Ms. Ray's house. See photographs 6 and 7. A 36" terra cotta pipe enters the

catch basin from across College Avenue. An 18" reinforced concrete pipe enters the catch basin from the right. See Photograph 8. A video survey of the 24" terra cotta storm drain pipe was previously performed under Mike Leonard's direction. Mr. Leonard indicated the terra cotta pipe under the residence has cracks.

The geotechnical investigation began with removal of 2.5 feet of fill soil over the storm drain manhole lid in the rear yard. The lid was removed exposing the manhole. See Photographs 1 and 2 in the Appendix. A cracked 24" terra cotta pipe was observed entering the catch basin from the direction of the house. See Photographs 3 and 4. A 24" reinforced concrete pipe was observed leaving the catch basin to the east. See Photograph 5. A drain test was performed by Mike Leonard by placing water in the catch basin on College Avenue in front of the Ray Residence with a garden hose. See photographs 6 and 7. A few minutes later water was observed flowing through the storm drain manhole in the rear yard. See Photograph 4. Mike Leonard pointed out voids in the rear yard along the subject storm drain alignment.

Next, CESI's Geotechnical Engineer entered the crawlspace area to observe the brick piers supporting the wood framed floor system. The brick piers were tapped and observed for looseness between the top of the pier and the floor system. Piers "B", "C", "D", "E", "I", "J" and "K" (as noted in our Hand Auger Location Plan) are in contact with the floor system. The following piers have the observed conditions:

- Brick pier "A" is loose and appears to have been shimmed with a 2"x2" piece of wood at the interface with the floor joist system;
- Brick pier "F" is tilting toward the storm drain line. The pier has been shimmed with a 2"x2" wood shim at the interface with the floor joist system. The wood shim is under great stress. It was also noted that additional wood framing was installed to resist pier overturning;
- Brick piers "G" and "H" are loose and appear to be a retrofit. A 4"x6" wood beam has been placed on and spanning slightly past piers "G" and "H". The wood beam is also loose.

CESI's geotechnical engineer began the subsurface exploration by excavating adjacent to brick pier "A" to determine the footing bearing level and the storm drain location. No concrete footing was observed for the brick pier, however, a brick footing larger than the pier was present. Next, a hand auger boring, HA-1, along with dynamic cone penetrometer (DCP) testing was performed to determine the soil bearing conditions directly beneath the brick pier. The brick pier is bearing on red fine sandy silt (ML) residual soil at HA-1. Soil consistency as measured by DCP testing was stiff 2" below the bearing surface of the brick pier "A" and very stiff 14" below brick pier "A".

The dynamic cone penetrometer is a portable testing device used to estimate penetration resistance of the soil samples, as outlined in Sowers and Hedges paper "Dynamic Cone for Shallow In-Situ Penetration Testing". The device has a 1.5-inch diameter, 45-degree cone point with a surface area of 3.9 inches which is driven with a 15-pound steel weight on a guide rod. After the cone point was completely embedded at the test depth it was driven an additional $1^{3}/_{4}$ inches by the steel weight falling 20 inches onto a steel anvil. The number of hammer blows required to drive the cone the $1^{3}/_{4}$-inch increment was recorded as the "penetration resistance" in units of blows per increment. Penetration resistance, when properly evaluated, is an index to the soil's strength.

Hand auger boring HA-2 was located and performed approximately 22" from the centerline of brick pier "A" and 19'-3" from the right sidewall of residence. This is also the location of the 24" terra cotta storm drain line coming from College Avenue. See Photograph 6. Soft fill soils were observed at 28"

and 48" below the bearing surface of the brick pier. The 24" terra cotta storm drain pipe was encountered at 58" below the bottom of the pier. See Photographs 9 and 10. Brick pier "A" is bearing on the transition zone between residual soils and the storm drain backfill soils. The pier appears to be settling as a result of the soft storm drain back fill soils.

The brick sidewalk and stairs at the front of the residence have settled. Horizontal measurements indicate that the settlement is directly above the storm drain line. See Photographs 11, 12, 13, 14 and 15. The front stairs have settled approximately 1-1/8". The stairs have horizontally displaced 1-1/2" by the consolidation of the storm drain backfill soils. Michael Leonard indicated that he observed in the attic separation in the front porch framing members. Ms. Ray understood the former owner had replaced the brick front stairs prior to 1985.

CONCLUSIONS

Based on our site observations and geotechnical findings, the 24" terra cotta storm drain pipe under the subject residence and the soft storm drain back fill soils have caused the following conditions:

- The settlement of brick pier "A";
- The settlement of brick pier "F";
- The settlement of the front brick sidewalk and stairs:
- Any wall or pier footing within 6 feet of the storm drain pipe is subject to long term settlement due to the consolidation of the underlying storm drain backfill soils.
- The cause of the looseness of the brick piers "G" and "H" at the 4"x6" wood beam interface cannot be explained at this time.

RECOMMENDATIONS

CESI recommends the following:

- Pier and wall footings within 10 feet of the storm drain should be underpinned to adequate bearing soils;
- The 24" terra cotta pipe should be lined underneath the subject residence.

Please contact us if you have any questions regarding this report or if we may be of further service.

Respectfully submitted,
CESI

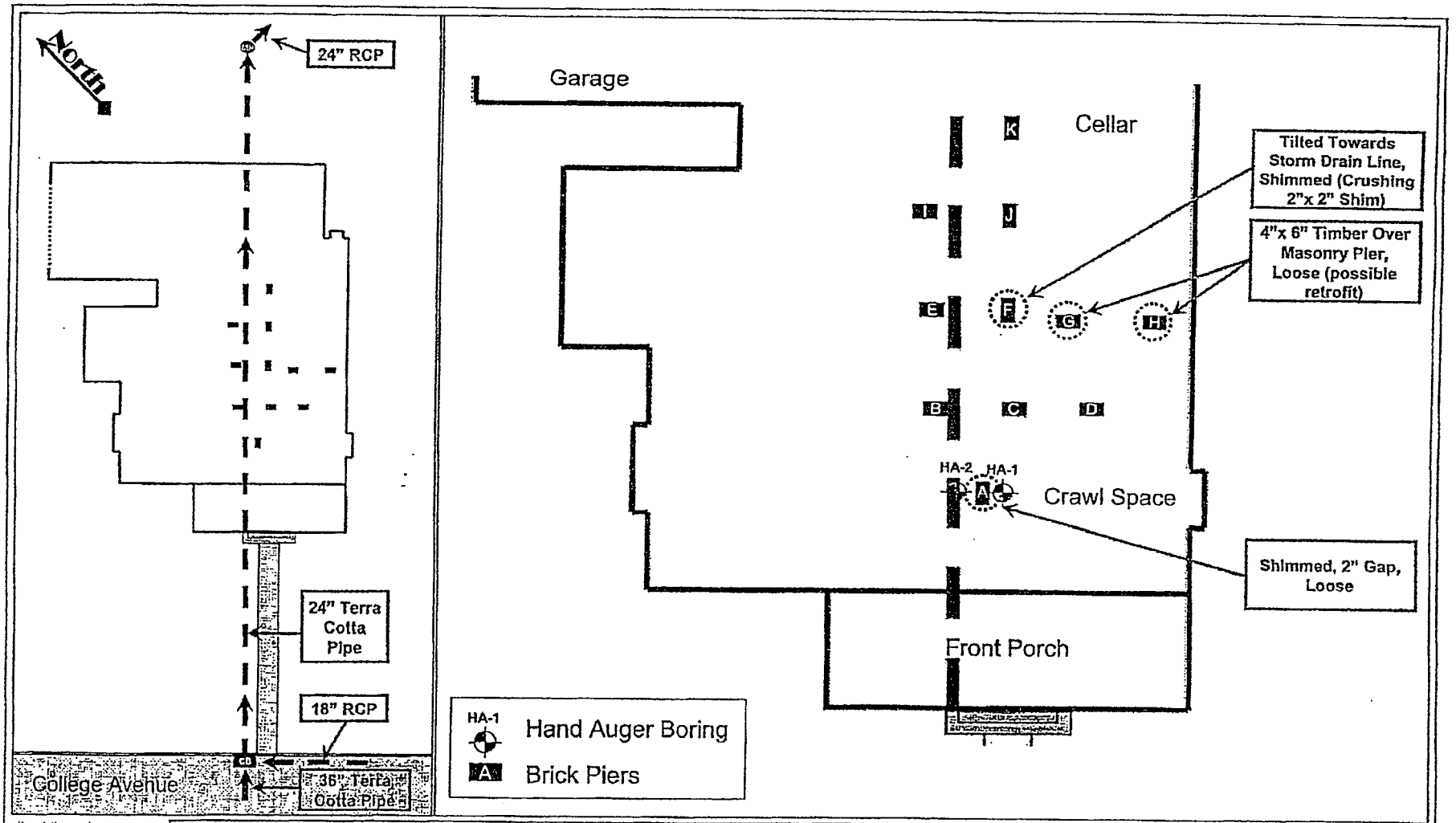
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21001 EDWARD S. CUMMINGS III

8/8/12

Edward S. Cummings III PE
Geotechnical Engineer
S.C. Registration Number 21001

James G. Eaves III, PE
Division Manager
S.C. Registration Number 25575

Enclosures: Hand Auger Location Plan
Log of Hand Auger Borings (HA-1, HA-2)
Site Photographs



CESI

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Concord, North Carolina, 28026-0218
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Fax: (704) 786-7454
www.cesinc.com SC License # 090591

RAY RESIDENCE
HAND AUGER LOCATION PLAN
330 College Avenue
Rock Hill, South Carolina

DATE:	8-3-12
DRAWN BY:	JGE
PROJECT #:	120755.000
SCALE:	NTS
DRAWING NO.:	1

RAY000473

CESI
Land Development Services

Date: 8/3/12 | Job No.: 120755.000
Project Name : Ray Residence
Street Address : 330 College Avenue
City : Rock Hill, South Carolina | CESI Engineer: Ed Cummings

LOG OF HAND AUGER BORING

Test Number	Location	Material Description	Depth Below Existing Grade (in.)	Depth Below Bottom of Pier (in.)	Penetrometer Blows per 1.75" Footing Width (ft.)	1st	2nd	3rd	Average 2nd & 3rd
HA-1	See Hand Auger Location Plan	Residuum - Red and yellow fine sandy silt (ML)	8	2		10	13	15	14
		Red and yellow fine sandy silt (ML)	22	14		12	19	21	20
HA-2	See Hand Auger Location Plan	Fill - Red fine sandy silt (ML)	34	28		5	3	4	3.5
		Fill - Red fine sandy silt (ML)	54	48		5	5	4	4.5
		Top of 24" terra cotta pipe	64	58		-	-	-	-

RAY000474

Photo 1: Manhole in rear yard

Photo 2: Manhole in rear yard

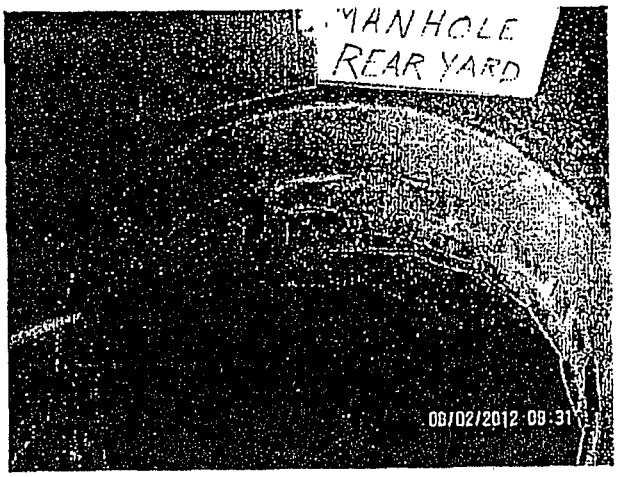

Photo 3: Manhole in rear yard

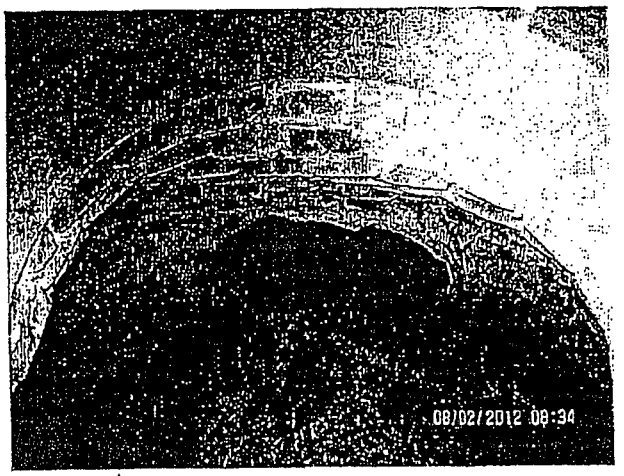

Photo 4: Manhole in rear yard

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Fax: (704) 786-7454
http://www.cesilds.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	1

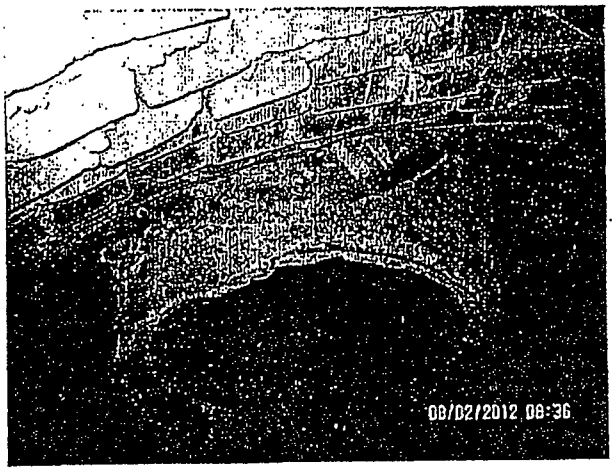

Photo 5: Manhole in rear yard

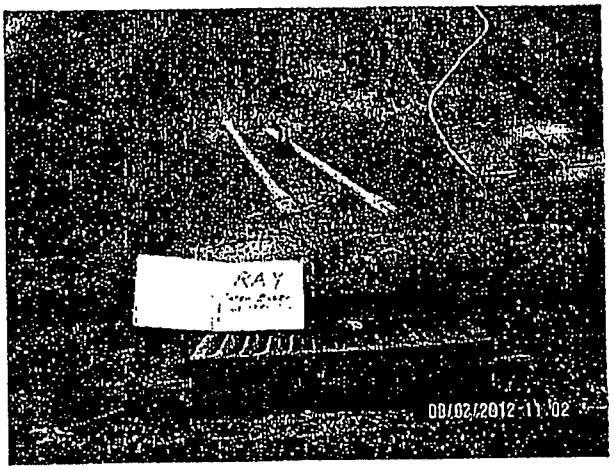

Photo 6: Catch basin at College Avenue

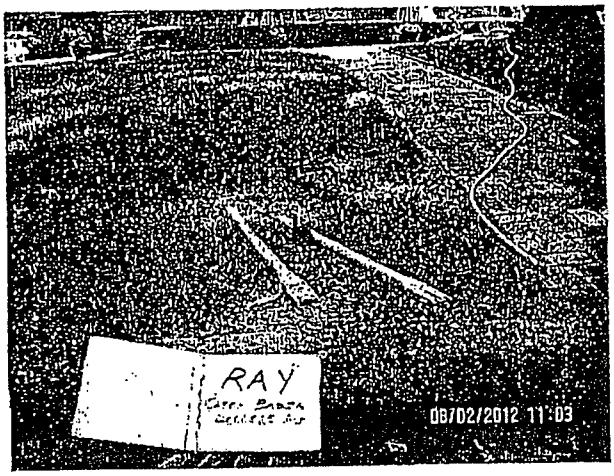

Photo 7: Catch basin at College Avenue

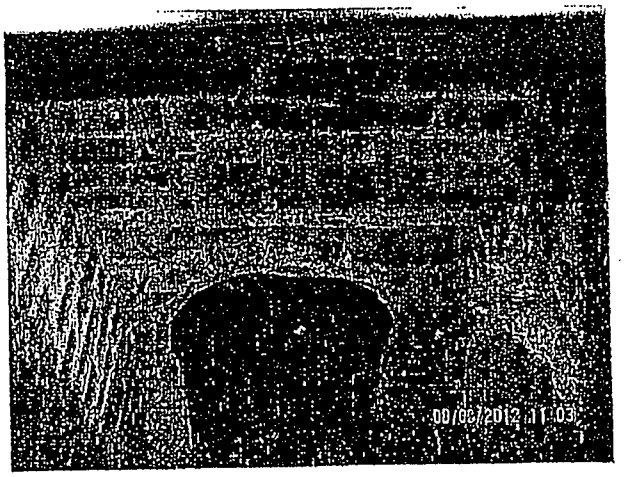

Photo 8: Catch basin at College Avenue

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SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	2

Photo 9: Hand auger HA-2 at brick pier 'A'

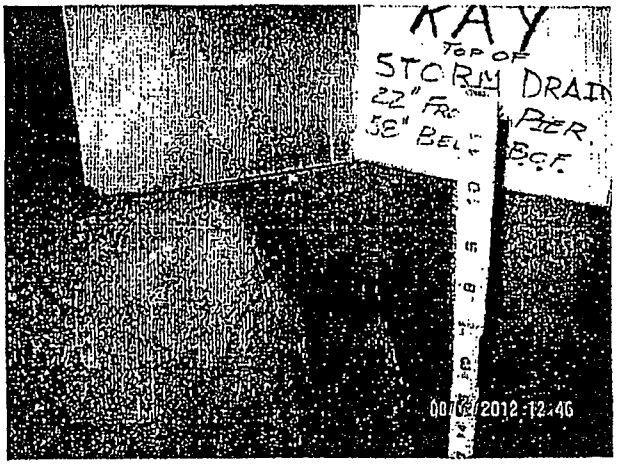

Photo 10: Hand auger HA-2 at brick pier 'A'

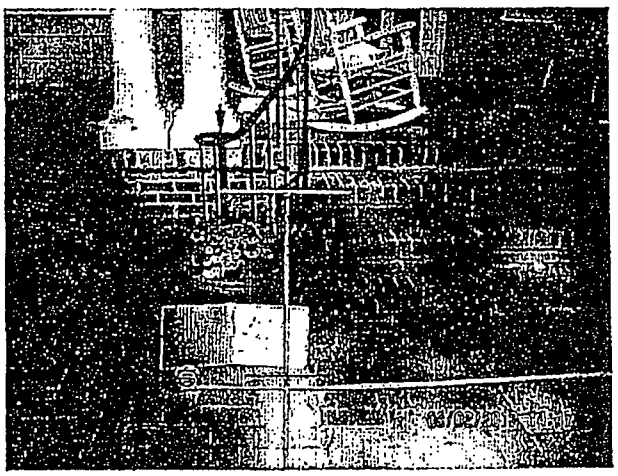

Photo 11: Front sidewalk and steps - Probe rod represents measured alignment of storm drain line.

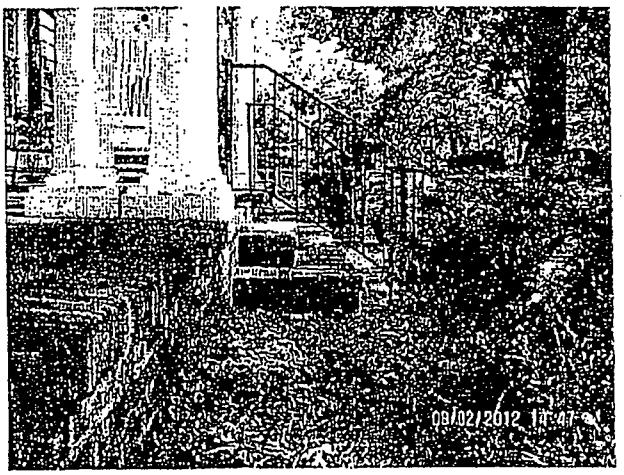

Photo 12: Front sidewalk and steps

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SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	3

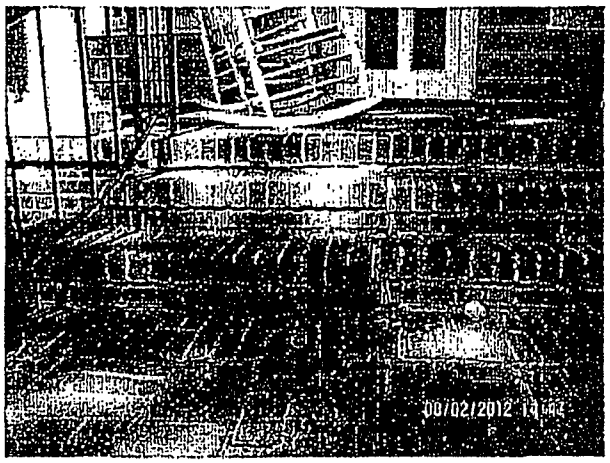

Photo 13: Front sidewalk and steps

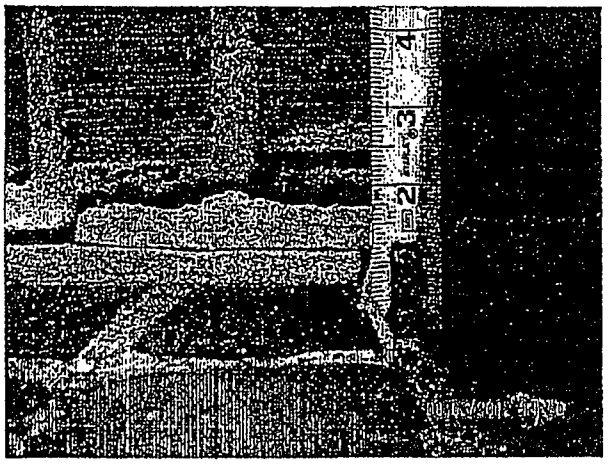

Photo 14: Settlement at front steps

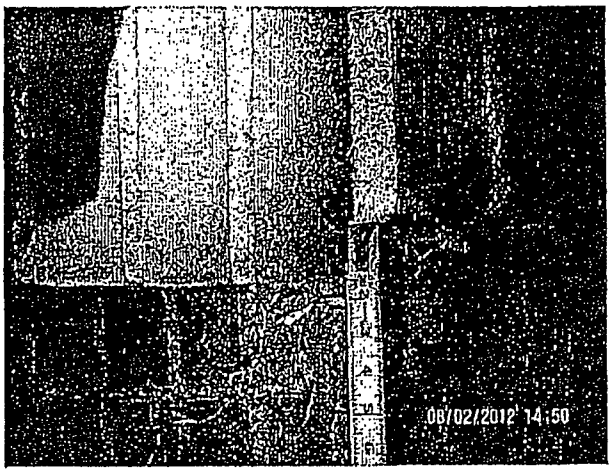

Photo 15: Horizontal movement at front steps

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DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	4

Attachment #4: Letter
Spencer & Spencer, Mr. Paul Dillingham to
Mr. Charles S. Bradford
Dated May 18, 2012

SPENCER & SPENCER
PROFESSIONAL ASSOCIATION
Attorneys and Counselors at Law

C.E. SPENCER (1849-1921)
C.W.F. SPENCER (1876-1956)
C.W.F. SPENCER, JR. (1911-1985)
W.C. SPENCER †
WILLIAM L. "RED" FERGUSON †
EMIL W. WALD †
PAUL W. DILLINGHAM
W. MARK WHITE*
W. CHAPLIN SPENCER, JR.*
R. ALEXANDER SULLIVAN*
R. BRENT THOMPKINS*
JEREMY D. MELVILLE*

† Of Counsel
* Also admitted in NC

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ROCK HILL, S.C. 29731-6790

Telephone
803-327-7191

Telecopier
803-327-3868

Email Address
pauldillingham@spencerfirm.com

May 18, 2012

Charles S. Bradford
P. O. Box 977
York, SC 29745

RE: Lucille H. Ray
330 College Avenue ("Property")

Dear Charles:

I represent the City of Rock Hill ("City"), which has forwarded your letter dated February 24, 2012, to me for a response.

Our firm has also completed a title search of the Property taking the chain back to the deed recorded June 18, 1920 from the Estate of W. E. Lucas to the Rock Hill Buggy Company to confirm the information in your letter. We did not find a right-of-way or easement in favor of the City for the stormwater line running across the Property. My understanding is that the City does not wish to accept this line as a City maintained utility. Do you have any evidence to suggest that the City owns this line?

Thank you for bringing this to my attention.

Sincerely,

SPENCER & SPENCER, P.A.

Paul W. Dillingham

100101.1

Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence 330 College Ave, Rock Hill, SC Dated August 21, 2012

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

MHLCE COST ESTIMATE - STRUCTURAL REPAIR, SHORING, AND RESTORATION
MS. LUCILLE RAY RESIDENCE, 330 COLLEGE AVE, ROCK HILL, SC
21-Aug-12 ***MHLCE Project # 12E9555.F*** ***Michael H. Leonard, PE***

Section/Item	Scope			Units	Cost/Unit	Cost	Extension	Cumulative	Total
Section 1	**Abandon, Cap Existing 24-inch Pipe**								
a	Survey, locate pipe on Site						650		
b	Demolition and Excavation						3170		
	Remove/front sidewalk at curb, to front stoop, front steps					1350			
	OSHA box, staging					1820			
c	Cap pipe						3300		
	Bulkheads (2), structural reinforcement			4	650	2600			
	Downhill vent			1	700	700			
d	Slurry fill - 2 stages	130 lf, 24in dia		21	420	8820	10320		
	pumping, vibration			2	750	1500			
e	Sidewalk Replacement	200 sf		220	7	1540	1540		
f	Grade, drainage repairs front, rear yards					640	640		
g	Landscape repairs		allowance			1200	1200		
								20820	
Section 2	**Foundation Shoring**								
a	Interior foundation piers	8 each in zone					12280		
	footings			8	185	1480			
	helical piles			8	1350	10800			
b	Front Foundation Wall	14 lf in zone					4752		
	footings			14	18	252			
	helical piles			3	1500	4500			
c	Front Stoop Walls, Steps	14+8+8 lf					7725		
	footings	steps only		3	175	525			
	helical piles			6	1200	7200			
d	Cellar Foundation Wall	14 lf					4500		
	footings			extg					
	helical piles			3	1500	4500			
e	Rear Foundation Wall						3600		
	footings	14 lf		extg					
	helical piles			3	1200	3600		32857	
Section 3	**Re-build Foundations, Piers**								
a	Front Steps	65 lf		65	15	975	975		
b	4 Interior Piers	4 ea		4	335	1340	1340		
c	Cumulative Foundation Voids	misc				700	700		
								3015	
Section 4	**Main Floor Frame Repairs, Leveling**								
a	Laser level study			6	225	1350			
b	Crib, bracing, jacks					850			
c	Leveling and bracing			24	35	840			
d	Reinforcement	mil	240	8	35	520			
e	6 new piers			6	450	2700			
								6260	

RAY000480

Section 5	**Roof Frame Repairs**							
a	Ridge Bracing, joining	mtl	450	12	35	870		
b	Rafter Cross-ties	mtl	200	6	35	410		
c	Rafter Tie-downs	mtl	780	15	35	1305		
d	Shingle damage/repairs		12 sq	12	180	2160		
e	Venting, repairs		90 lf	90	12	1080		
							5825	
Section 6	**Interior Restoration**							
a	Door, C/O repairs		8 units	24	45	1080		
b	Millwork removal, reset ref. floor leveling		240 lf	18	45	810		
c	Wall, ceiling repairs - plaster, GWB			80	38	3040		
d	Hardware adjustments		12 units	18	45	810		
e	Painting, cleaning			72	28	2016		
f	Floor finishes		1850 sf	1850	4.75	8788		
g	Final Cleaning			3200	1.15	3680		
h	Trim Mil					950		
							21174	
Section 7	**General Conditions**							
a	Design, Drawings - engineering		24 hr S/E	24	160	3840		
b	Building Permits					400		
c	Sanitary Facilities			3	150	450		
d	Debris - hauling, disposal		loads	4	350	1400		
e	Transportation		10 weeks	10	180	1800		
f	Tools & Equipment			10	120	1200		
g	Communication			3	65	195		
h	Site Supervision		12 wk, 38	456	36	16416		
i	General Labor		10 weeks	8	25	200		
							25901	
			SUBTOTAL					115852
			CONTRACTORS FEES					
			GENERAL OVERHEAD			15%		17378
			PROFIT			10%		11585
			CONTINGENCY			3%		2896
			TOTAL COST ESTIMATE					147711

RAY000481

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

Project Memo

To: Lucille Ray
Charles Bradford
From: Mike Leonard, PE – M.H. Leonard Consulting Engineers, PA
Subject: Lucille Ray Residence – Storm Water System and Structural Damages
330 College Ave, Rock Hill, SC
MHLCE Project # 12E9555.F
Date: November 30, 2012

This will confirm recent discussions and a site visit on November 29 with Ms. Ray regarding ongoing sanitary sewer work on College Avenue and Strait Street, being done by the City of Rock Hill.

We are concerned with an increase in risks to the structural integrity of Ms. Ray's home based on developments during that work and visible indicators now on site.

Our previous field observations and review of camera inspection DVDs obtained from the City show the pipes on her property are damaged. (See previous MHLCE Report # 12E9555.F, dated September 5, 2012.) During the sanitary sewer pipe work in front of her home on College Avenue, she took photos of this same storm-water pipe while exposed for repairs. The City has needed to replace storm water piping on Strait Street and College Ave because of damages to the line. We believe that the same pipe under her home is damaged and slowly reaching a point of failure with risk of substantial structural damage. ***Furthermore, by repairing/replacing storm-water pipes in the same line along Strait Street and upstream of the pipe under her home, the increased flow in the system will increase risks of progressive pipe damage and eventually could lead to additional structural damages.***

The most substantial risk of all to her home is the loss or erosion of soil around the existing underground storm water pipe, which would lead to consolidation of uncontrolled magnitude, possibly creating a sink hole directly under her foundation bearing elements. We are already concerned with the potential for voids there and we have confirmed soil-bearing problems during geotechnical assessments. ***On November 29, 2012, we measured the front step settlement and found that it had progressed 3/8 to ½ inch more than found in August. Interior stress cracks along the walls and ceilings are also appearing – in line with the known underground storm-water pipe below her dwelling.*** Shrinkage cracks in a wood-framed home tend to increase during the heating season, but these are beyond normal frame shrinkage.

We talked to the General Contractor hired to re-work the sanitary sewer line for the City. He indicated that numerous lines had been found during this work, with undocumented locations and damages. They also have verified that another storm water line extends down and under the dwelling at 340 College Ave (also owned by Ms. Ray).

We observed photographs taken by Ms. Ray during the ongoing sanitary sewer line project. The drop-inlet in front of Ms. Ray's home (330 College Ave) is fed from multiple storm-water pipes. The one utility map we have obtained of this area (provided by Ms. Ray) shows a single pipe adjoining this point, from the line that extends along Straight Street. Furthermore, because the old pipelines are typically clay, the new concrete (RCP) pipes being used to repair the lines do not fit the clay pipe radii. They have been 'fitted' by pouring concrete around the junctures to 'seal' the fits. In our experience, ***this is not a water-tight fit, leaving increased risk of line seepage, erosion, and damages downstream of the fit – under Ms. Ray's home.***

Based on our original study and report, and with these new developments, we request access to specific information from the City as follows:

1. Storm water system map of the existing pipe systems, manholes, and junctures currently in place regarding the system that services the public right-of-way around Ms. Ray's property at 330 College Ave. Our previous requests for this information were not granted as documented in previous reports.
2. Storm water and hydrology studies of the same areas of Item 1.
3. Hydraulic profiles of the storm water pipe system in the areas of Item 1.
4. Street maintenance and repair records of Strait Street, College Ave, and any other right-of-way areas above this specific storm water system piping loop – within the last 10 years.

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5. Storm water system maintenance records regarding the same loop of Items 1 and 4.
6. For similar reasons, we request the same information for existing storm water systems and public right-of-ways for the system that crosses the rear quadrant of 340 College Ave where there is visible damage to the catch basin and piping exposed in the private yard area of that property.

Please call if needed to clarify these latest concerns.

Sincerely,
M.H. Leonard Consulting Engineers, PA

Michael H. Leonard, PE
Principal Engineer
Project Manager – Ray Investigation

"Datko, Sue G." <sgd@spencerfirm.com>
FW: Stormwater data...
May 15, 2012 2:10:17 PM EDT
<lhooperray@comporium.net>
"Dillingham, Paul W." <pauldillingham@spencerfirm.com>
1 Attachment, 5.0 MB

This e-mail message has been scanned for Viruses and Content and cleared by

Partial Stormwater College Ave

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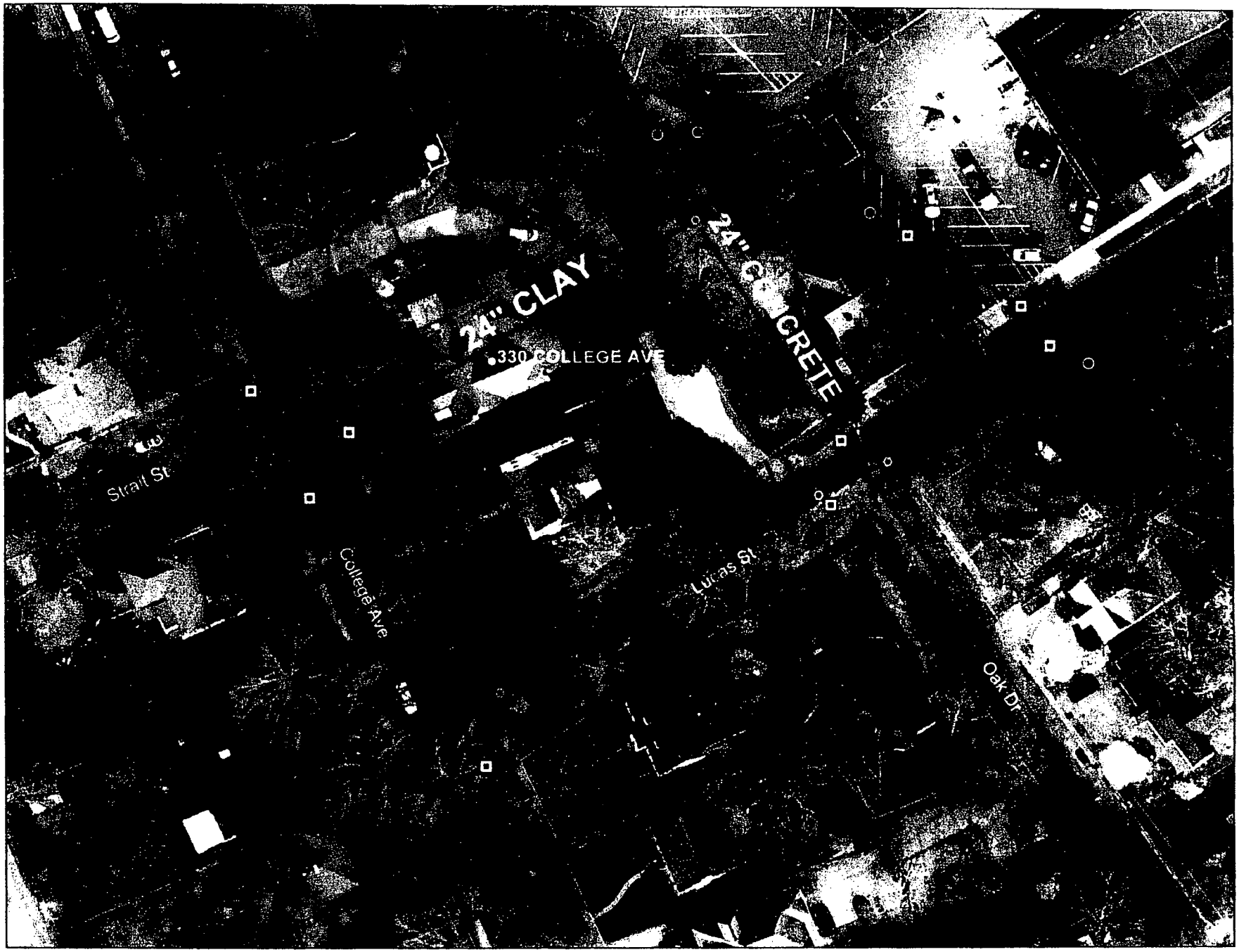
Partial Stormwater - College Ave.



LEGEND

- Inlet
- JunctionBox
- EndTreatment
- Drainage
- creeks

1 inch = 67 feet

Feet

Map Date: 05/01/2018 9:58:47 AM EDT
Projection: NAD 1983 StatePlane North Carolina FIPS 3200 (US Feet)
This map was created by the City of Rocky Mount Stormwater

City of Rocky Mount
Geographic Information System

Charles S. Bradford, P.A.
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YORK, SOUTH CAROLINA 29745

November 13, 2012

Paul W. Dillingham, Esquire
Spencer and Spencer
P.O. Box 790
Rock Hill, SC 29731-6790

VIA FIRST CLASS MAIL
& VIA EMAIL

Re: Lucille Ray/330 College Avenue, Rock Hill, SC

Dear Paul:

I am drafting this letter on Monday, November 12. I have just spoken to my client Lucille Ray. As you know, the City is doing some major sewer and storm water work in the College Avenue area.

Ms. Ray advises me that three large pipes, which she estimates to be 36" in diameter have been exposed and severely damaged by the work going on College Avenue. One of the pipes is on Strait Street, and runs down the hill into College Avenue in front of Ms. Ray's house. The other two come from each direction on College Avenue. She says that these three large pipes have all been broken, and it appears that the City is most likely going to replace these damaged or broken pipes. All three of these pipes were depositing water which enters into the 24' storm drain pipe which goes directly under Ms. Ray's house, and which is the subject of the recent lawsuit we have filed against the City.

On behalf of the City, please be advised that Ms. Ray does not consent to allowing any replacement pipes to be connected so as to deposit water into the 24' storm water pipe running underneath her house. Since the City does not claim to own the pipe, the City needs my client's permission or a right-of-way to connect these pipes to the pipe going under her house for purposes of future water discharges.

Please advise the City Utility Department not to connect any new pipes or replacement pipes to the pipe going under my client's house. I have advised my client to deny them permission to connect the new pipes to the pipe running underneath her house, and we will consider any such efforts to connect those pipes to be in violation of my client's rights. I will further advise my client

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regarding obtaining a temporary restraining order if the City makes any efforts to rebuild those pipes, and to connect them to the system which deposits water which goes into the pipe that runs under my client's house.

If you have any questions, or if you would like to discuss this situation further, do not hesitate to contact me.

Sincerely,

Charles S. Bradford

CSB/bgb
CC: Lucille Ray

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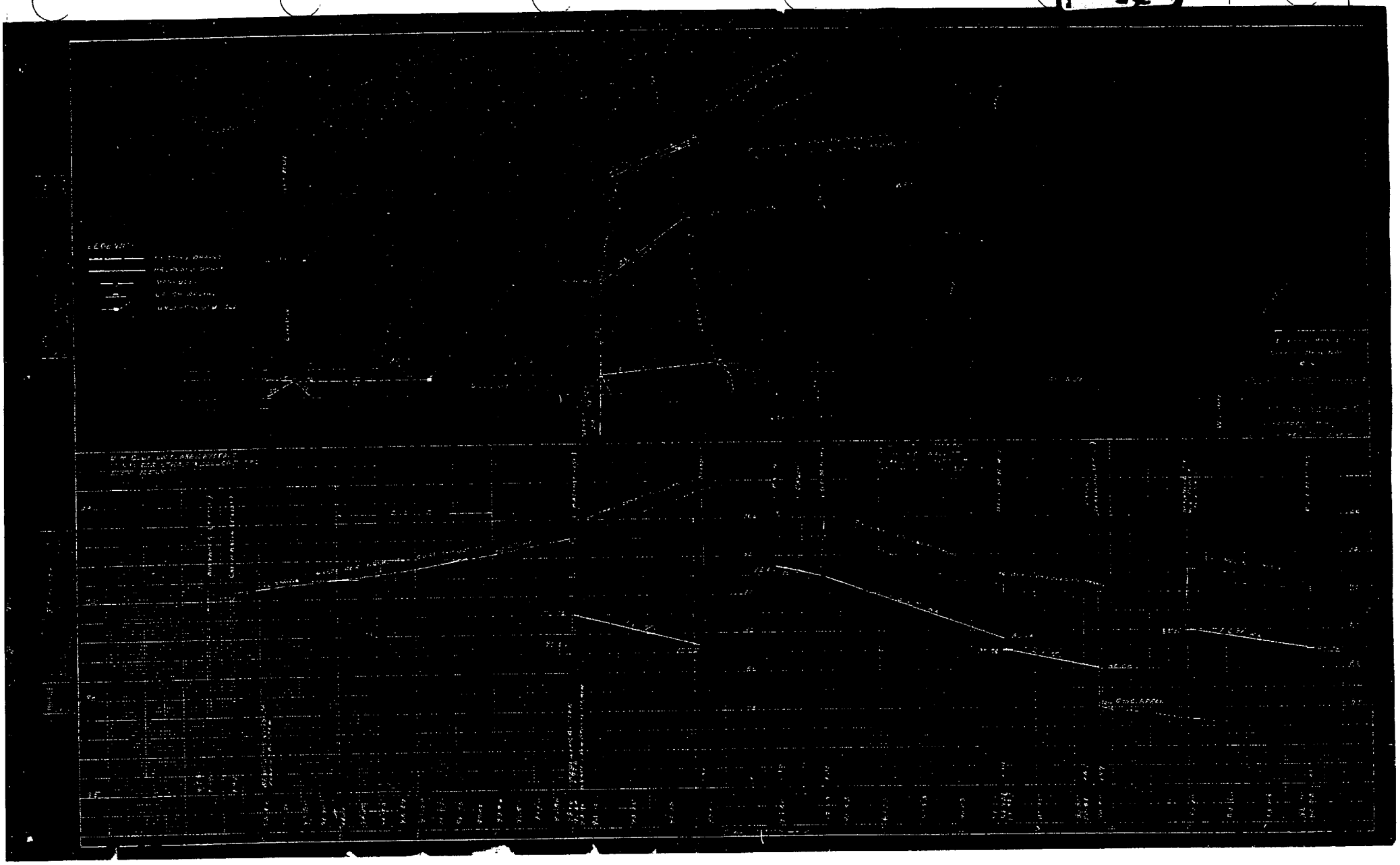


STATE OF SOUTH CAROLINA

COUNTY OF YORK

IN THE COURT OF COMMON PLEAS

Civil Action No. 12-CP-46-3928

LUCILLE H. RAY,

Plaintiff,

vs.

COMMONWEALTH LAND, TITLE INSURANCE COMPANY, Successor In Interest to Industrial Valley Title Insurance Company,

Defendants.

AFFIDAVIT OF MICHAEL H. LEONARD

FILED-RECEIVED
2014 MAY 30 PM 2:44
DAVID HAMILTON
C.C.C.P. & G.S.
YORK COUNTY, SC

Michael H. Leonard, being duly sworn, deposes and says:

1. I am over the age of 18, am competent to testify to these matters, and make this affidavit on personal knowledge.

2. I am the founder of and a principal in the engineering firm known as M.H. Leonard Consulting Engineers, PA. The firm was incorporated in 2003. Prior to that, I worked as a sole proprietor. I am also the founder of and a principal in the construction firm known as M.H. Leonard Construction Co., Inc. That firm was incorporated in 1985.

3. I am a licensed professional engineer, and a licensed general contractor.

4. I received my degree in civil engineering from North Carolina State University.

5. I have worked in the construction and engineering fields for thirty-five (35) years.

6. My firm specializes in construction management, structural engineering, moisture and thermal protection and drainage and stormwater systems. One of my early jobs out of college was an engineer specializing in storm drainage and public utilities.

7. Lucille Ray hired me in March 2012 to perform an assessment of her house in Rock Hill. It was showing damage usually associated with settlement.

8. The house, however, was about ninety (90) years old when I began my study. Most settlement damage takes place within a few years after the home was built, so this one presented interesting challenges.

9. I have personally been to the site many times. I have examined the dwelling, the soil conditions around and under the home, and the surrounding neighborhood. There is a stormwater pipe that extends from Oakland Avenue along Strait Street to a junction point directly in front of Ms. Ray's house. There is a grate there which catches even more water as it flows down Strait as well as College. Other stormwater pipes feed into the same spot. The pipe continues on directly under the house to a manhole in her rear yard. I have both conducted and witnessed water flow tests and confirmed that the pipe is active and that stormwater drains through it. This is problematic for a number of reasons, and can lead to damage to the house. My initial reports summarizes some of these problems. It is attached to this affidavit as Exhibit 1. There is a mistake in it. I stated in a timeline that Mrs. Ray knew in 2008 that the pipe at issue ran under her house. I have checked my notes. That date should be 2011. I have noted the error on my report.

10. The pipe is old, and is made out of Terra Cotta. It is about twenty four inches (24") in diameter. A number of videos have been taken of the pipe, and reveal significant problems with it.

11. I tried to get records for the stormwater system, but was unable to, at least initially. I was eventually provided with a Rock Hill City Stormwater map which has turned out to be incorrect. This is attached to my affidavit as Exhibit 2.

12. I learned a lot about the physical condition of the pipe at issue in late 2012. The City was doing some work on the sanitary sewer system on College Avenue. In the process, several sections of pipe were disconnected from the pipe section running under Ms. Ray's house.

13. The catch basin on College is part of an upstream network that serves a watershed area of twenty-nine (29) acres.

14. When the street was excavated for sanitary sewer work, we found the storm water pipes I have described to be old and badly deteriorated. They indeed channeled water that had been collected from other locations through the pipe which runs under Ms. Ray's house. I generated a supplemental report during these repairs. It is attached to my affidavit as Exhibit 3.

15. The City was told by Ms. Ray not to reconnect those lines. It did so anyway.

16. I have reviewed maps produced by the City in its litigation with Ms. Ray. Those documents are attached to this affidavit as Exhibit 4. Those maps show that the pipe was recognized as part of the City's system of stormwater improvements as far back as 1941. The pipe system was modified so that the section of pipe running into Ms. Ray's back yard is now shorter than it was initially with a "relief line" which travels over to Lucas Street. That indicates to me that the City has exercised control over this line for over seventy (70) years. There is also a manhole on Ms. Ray's property which shows that others maintain the pipe.

17. The water does not have to run under Ms. Ray's house. You could bury a pipe in deep enough so that it ran downhill towards Lucas, or otherwise diverted around her house.

18. I have attached my estimate of repair costs as Exhibit 5.

This 30th day of May, 2014.

Michael H Leonard

Michael H. Leonard

Sworn to and subscribed before me
this 30 day of May, 2014.

Christian S. Courtney

Notary Public, Christian S. Courtney

My commission expires: 07/01/2016

CHRISTIAN S. COURTNEY NOTARY PUBLIC MECKLENBURG COUNTY, N. C.

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

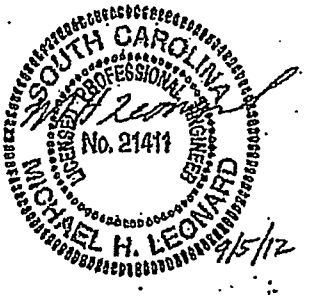
ENGINEERING EVALUATION

STRUCTURAL DAMAGES AND RECOMMENDED REPAIRS

Residence of:

Ms. Lucille Ray
330 College Ave
Rock Hill, SC

MHLCE Project # 12E9555.F
Date: September 5, 2012
By: Michael H. Leonard, PE



447 South Sharon Amity Road, Suite 201 Charlotte, N.C. 28211 Office (704) 333-2221 mhleonardengineering.com

EXHIBIT

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1. Purpose

The purposes of this study include the following:

- To provide an engineering assessment of private residence to determine cause(s) of progressive structural damages.
- To determine the most feasible structural repairs of the dwelling and subgrade conditions now affecting the foundation.
- To estimate the costs of structural repairs and other remedial work.
- To determine the risks of long-term, progressive damages if remedial work is delayed or not done.

2. Timeline Summary

Ms. Lucille Ray has owned the home at 330 College Ave, Rock Hill, South Carolina since 1986. She has lived there and maintained the single-family residence continuously for 27 years. Over that time, various events or findings have led her to launch this investigation.

This is a timeline summary based on information provided:

- In about1992, while doing yard work in the rear yard, a gardener stepped into a hole up to his waist within 10 feet of the rear house foundation wall. It had developed suddenly. It was filled and considered surface erosion at that time.
- In 1995, Ms. Ray first found bending in her roof frame while in her attic and proceeded to add bracing in an attempt to stop it.
- In 2001 she renovated the home and added a kitchen, garage, and covered porch on the left side. She noticed unexplained settling of the front patio during construction, requiring additional work and expense.
- In 2007, she noticed separation in her roof frame between adjacent slopes and proceeded to add cross-bracing at the ridge level in an attempt to stop it.
- In 2008, she first noticed that her front entry steps were sinking. At that time she tried to determine potential causes and found that a city storm-water pipe extended (from public city street in front of her home) directly under the front entry of the dwelling. She requested City assistance to review the concern and after multiple attempts, she was finally put in contact with Rock Hill's Mr. Jason Tinkler. A pipeline study was done without shared results. After repeated calls over the next few months (to Tinkler), she was told that the video tape had been lost. He also told her the front steps were simply settling.
- In 2011, after repeated calls to the City, the camera study was done again on June 2 and 3, 2011. Ms. Ray watched the study and video results as the City confirmed that the storm water line extended directly under her home, although they never did excavate to find the rear-yard manhole found during video work. Tinkler informed her then that the pipeline was not a problem but that he would get back to her about it.
- Later in June 2011, Ms. Ray called Tinkler to discuss street flooding but he never called her back. Finally, in August 2011, she discovered that Mr. Tinkler did not work for the City any longer. No other City official has ever contacted Ms. Ray about the known pipeline problem despite repeated calls from her.
- In early 2012, the lack of responses and progress from the City led her to start an owner-investigation at her expense.

3. Executive Summary

On March 20, 2012, Ms. Lucille Ray contacted M.H. Leonard Consulting Engineers, PA to request engineering assistance regarding the problem. She shared her findings and a brief history of the property. We have proceeded to study the dwelling, the site, and the soil conditions around and under the home. We have also conducted simple water flow tests of the storm water piping that extends from Oakland Ave, along Strait Street, to College Avenue, and over to Lucas Street after passing directly under Ms. Ray's house.

After 3 site inspections, a geotechnical evaluation, and limited responses from City officials, this report will summarize our findings.

The investigation has provided evidence of the following facts and opinions:

1. There is a pattern of structural damage in the subject dwelling frame and foundation caused by foundation movement at ground level. These damages appear progressive and we consider them active.
2. An underground 24-inch public storm water pipe extends from the street in front of the home in a line directly under the specific zone of structural damages. There is evidence of multiple foundation piers dropping and leaning along the pipeline route.
3. The public storm water system records for this neighborhood have not been available despite requests to the City of Rock Hill. Those may not be accurate based on one small map obtained by the owner prior to our investigation. That does not show a public pipe on the subject site. *See Attachment #2.* Regardless, the old terra-cotta clay pipe is there and confirmed. It appears aged with cracks and is probably leaking. Those conditions are verified by the videos provided.
4. The storm water system serving this and surrounding lots appears to include a substantial area based on informal water testing completed. We determined that catch basins on Oakland Avenue and beyond are part of the network upstream from the pipe extending under the home. Unconfirmed estimates of the watershed size are 14 acres or more. The flow from that large an area is substantial and increases our concerns with the pipe capacity, flow leakage, and lack of serviceability (being under a private residence).
5. A geotechnical evaluation of on-site soil along the pipe route and under the home confirms that foundation piers and the front stoop, steps, and sidewalk have settled as the result of soft pipe fill soil. Further testing would be needed along the entire pipe route to determine if there are wash outs and voids around the pipe.
6. There are current and long-term risks that pipe failure will lead to soil erosion and substantial structural damages. If pipe failure is rapid enough, structural failure (sinking and partial collapse) is likely.
7. Public utilities require routine maintenance and access, which is why they typically align in public right-of-ways or dedicated easements on private property. Apparently this storm water pipe is not even known or recorded in public documents. The less known about the pipe and its maintenance record, the higher the risks that it is failing now.

Three options were considered to eliminate risks of further failure and to repair structural damages to date. In the best interests of Ms. Ray as property owner, the most feasible remedy includes the following:

a. re-route of the storm water pipe away from her property (requires independent storm water and hydrology study as City improvement),
b. abandonment of the existing storm pipe and filling it with a flowable slurry grout,
c. structural shoring of the existing foundation in pipe trench zone,
d. framing repairs to floor and roof systems,
e. replacement of front stoop, including steps and sidewalk,
f. interior and exterior repairs caused by structural settlement to date,
g. all general conditions, cleaning, building permits, and construction management.

We estimated the costs of those repairs based on local, prevailing rates of the region. That study was based on our experience as a General Contractor in new construction, renovations, and structural repairs.

The estimated cost to complete the remedial work described is

$147,711

Although there are alternative methods to shore the dwelling, the costs may vary by 2.5%, based on experience with other structural repair projects of this type.

Time is a critical factor moving forward.

⇒ If the existing pipe develops further leaks affecting soil conditions or causing subgrade damages below the home, the extent of structural repairs will rise substantially.

⇒ Although the house is nearly 90 years old, structural damages have developed since 1985 (estimated based on owner observations and existing site inspection). The damage appears to be active and risks are high that it is increasing at an unknown rate.

⇒ Based on site observations now, we believe the pattern of structural distress is relatively young. Based on video evidence of the storm water pipe in place, risks are high that it will degrade and eventually fail. Between now and then, leaking and effects of further pipe degradation will further damage the house foundation and frame.

The storm water design to re-route the system around this property will require expedited attention from public utilities. Since planning of that type utility project typically takes more than 12 months, risks of structural damage is substantial enough that we recommend a temporary pipe repair and re-lining of the 24-inch clay pipe as soon as possible.

The costs of temporary pipe repairs to reduce risks of short-term structural damages to the dwelling are NOT included in this report.

4. Property and Project History

Ms. Lucille Ray owns the current properties at 330 and 340 College Ave, Rock Hill, South Carolina. The 330 (subject) site includes a one-story, single-family home, including a 2-car garage, partial rear daylight basement, and two covered porch spaces. She purchased the property in 1985, approximately 27 years prior to the date of this report. See *Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC dated May 23, 1985.*

The house is built with a masonry foundation, conventional wall, floor, and roof framing, and an asphalt/fiberglass shingle roof. The exterior walls are clad in wood and vinyl siding with a pier and curtain foundation wall, 8-inch all-brick foundation, and CMU foundation. The house includes a front masonry covered stoop and a left-rear covered porch.

Ms. Ray renovated the home in approximately 2001 with a kitchen, garage, and left-rear porch addition. Those areas bear on new foundation systems independently of the main, original home. None of those areas are within the concerns of this report.

In about 2008, Ms. Ray first observed evidence of structural distress in her home. The ceiling and roof frames visible in the attic had separated. She had braces added to prevent further separation. Ms. Ray also recalls similar roof frame repairs were necessary in 1995. She also indicated that a man stepped into a shallow hole in her back yard in about 1985 while helping her – sinking up to his waist. At that time, she did not suspect structural or soil concerns. She did recall the position of the ground hole noted within this report.

On March 20, 2012, Ms. Ray contacted M.H. Leonard Consulting Engineers, PA to evaluate the cause and extent of structural damages further. Since then, this firm has progressed as itemized below:

April 4, 2012
- Initial site review – field notes, investigation plan

April to June 2012
- City of Rock Hill, requests for storm water system mapping, information – log of inquiries
- June 6 – DVD review of pipe camera studies through Ms. Ray

June to July 2012
- Plan geotechnical study, quotes – CESI Ed Cummings, PE
- July 6 – MHLCE comprehensive site study of structure, damages, water hose test in storm pipes

August 2012
- CESI/Cummings geotechnical study
- CESI and MHLCE pipeline location under house - confirmation

5. Findings of Engineering Inspections

House Frame and Foundation:
Our investigation has included a structural inspection of the house frame and foundation, finding that there are patterns of distress caused by active structural movement. The roof frame has separated in two locations, the main level floor system is sloping where foundation piers have dropped from original support positions, and a geotechnical study has verified that the foundation movement has been caused by the excavation zone along the public storm water pipe route.

We observed the following specific damages:
Roof Frame Damages:
- ⇒ Separation of ridge and rafters at ridge beam spanning front-rear near front ridge spanning left-right. A metal cap was installed there to span over a 2-inch gap.
- ⇒ Separation of ceiling joists at ceiling girder beam – about 1¼ inch near middle of original house frame.

Interior Wall/Floor Conditions:

⇒ Floor distortion at front living room, center breakfast room, center hall. Slope varies from ¼ to 5/8 inch in 4 feet along axis extended to front entry door.
⇒ Corresponding wall and door distortion with cased opening headers or jambs ¼ to ¾ inch out of level and/or ½ to 5/8 inch out of plumb.
⇒ Stress cracking on hall walls and baseboard trim.
⇒ Stress cracking with shear pattern in center left bedroom, front wall.
⇒ Master bath/bedroom area – garden tub deck out of level with separation at floor.
⇒ Front door out of plumb/square.

Exterior Damages:

⇒ Front stoop and steps with masonry shear cracking. Front step dropping/settlement ¾ to 1¼ inches with shear zone near middle.
⇒ Front sidewalk – settlement and tilt to left side near front steps.
⇒ Rear yard open hole, approximately 14 inches deep near centerline of known storm-water pipe location.

Foundation Damages:

⇒ Miscellaneous stress cracks in front foundation wall.
⇒ 7 interior piers with separation at top or leaning from plumb.
⇒ 4 interior piers that have been shimmed with wood shims more than 1 inch in depth (multiple re-shimming).

The laundry cellar (forward of rear basement area) includes a slab elevated above the basement level, crawl space, and adjacent furnace cellar. We estimate that slab was used to cap over the known storm water line that appears to be within 32 inches of the top of slab. The pipe depth and clearances are only estimated except those verified during the geotechnical evaluation.

Storm Water System:

We studied a pipeline video camera recording obtained by Ms. Ray in 2008 and determined that 1 of the 3 segments of that recording were of the subject pipeline. The recording revealed that the 24-inch terra-cotta clay pipe is old with random stress cracking, joining a manhole directly behind Ms. Ray's home where a 24-inch RCP pipe extends further East and toward the right rear of her property and beyond.

The City of Rock Hill has denied our requests for access or copies of the public storm-water utility information regarding this location on 3 occasions (attempts logged). The only storm water map we were able to obtain in this study was provided by Ms. Ray (*Attachment #2: City of Rock Hill, Department of Planning & Development, dated 09 Dec 1998*). That map does not show the pipe that extends under 330 College Ave or across to Lucas St.

It does not reflect other pipe routes and pipe sizes observed during this study.

Ms. Ray also owns the property at 340 College Avenue (immediately west of the subject site). The map shows a 10-inch diameter pipe extending diagonally across and under that dwelling. In fact, the pipe is 30-inch dia clay with a partially collapsed catch basin in the rear yard of that site. There is no doubt that it does extend under the northeast corner (rear left) of that structure. *The effects and condition of this storm-water pipe line are not part of this study.*

Geotechnical Evaluation:

Concord Engineering Services Incorporated (CESI) performed a geotechnical evaluation at the site at our request. Mr. Ed Cummings, PE and Mr. Harold Eaves met us on site on August 2, 2012. Their work included confirmation of the existing storm water line under the house, locating and documentation of the rear yard manhole, effects of soil settlement at the front stoop, and the soil investigation under the home. Their findings are documented in a report (*Attachment #3: CESI Geotechnical Engineering Evaluation, Ray Residence, 330 College Ave, Rock Hill SC, dated August 8, 2012*).

6. Engineering Summary and Opinions

Based on our site study and the accompanying geotechnical evaluation, evidence indicates that the residential dwelling is in an active state of structural settlement caused by an active public storm water terra cotta pipe buried directly below the home. The 24-inch diameter pipe system is confirmed there and soil conditions in the trench in which it was placed are affecting the foundation elements of the structure. Movement of piers and other foundation elements is causing floor distortion, wall and door distortion, roof frame separation, and settlement of steps, patios, and other functional features. These damages are active and appear progressive based on owner input and historical information back to 1985. The causes of structural damages must be addressed soon to limit the magnitude of damage and costs to repair and restore the dwelling.

The storm pipe under the house serves a significant surface area by current estimates. However, City information has not been available for confirmation of actual drainage system fixtures and the general watershed area. By a limited topographical study, we have estimated that the subject 24-inch pipe is handling flow from up to 14 acres to the South of the subject property. Regardless of the flow rate, the presence of a public storm water pipe under a private residence is unusual – preventing public access for maintenance and repairs. Videos of the pipe indeed show it is old with cracking and other concerns that it may be leaking (not confirmed by this study). If it is leaking now, or in the future, the risks are substantial that it will damage the private dwelling further, eventually leading to partial catastrophic failure if certain conditions develop.

Repairs and stabilization of the building foundation must be considered soon to limit damage. Temporarily, the pipe must be maintained to control risks of leaks and related damage. An epoxy lining should be considered. Ultimately, the line must be moved or re-routed and the effects on the house foundation must be remediated to restore the structural integrity and value of the property. If not, the value and function of the home may be jeopardized – including the risk of full loss of value.

Limited responses from the City of Rock Hill seem to suggest the pipe does not belong to the City (*Attachment #4: Letter – Spencer & Spencer, Mr. Paul Dillingham to Mr. Charles S. Bradford, dated May 18, 2012*). We cannot verify ownership of the pipeline, but there is no doubt that it is not a private drain system. Since the City maintains the streets and other utilities from which the subject storm water pipe originates (recent addition of catch basins near Strait Street by City confirm this), and since the discharge and management of the water in this system are managed by the City, then it appears certain that they have overlooked a buried, old storm water pipeline that pre-dates the construction of the house on this site (estimated to be 90 years old).

7. Recommendations

Options to remedy the problem include:

A. Removal of home and foundation for adequate ROW for the pipe and to allow access and maintenance.
B. Re-route the storm water pipe away from the property, abandoning the existing pipe and repairing the dwelling and foundation. At this stage, the magnitude of damage allows this option. As the pipe continues to degrade and if soil erosion in the underground trench is compromised, this option will become less feasible.
C. Reline the pipe, maintain it as positioned, shore and repair the foundation and frame of the dwelling, and confirm the pipe capacity for further risk assessment regarding the home.

⇒ Option C is NOT recommended from a structural engineering view point. Risks remain for pipe failure despite any maintenance practices adapted. There may also be substantial legal concerns with a private structure located atop a public utility.
⇒ Option B is considered the most feasible and only option if the house remains over the current pipe section.

We recommend the following scope of repairs to re-route of the storm water pipe, cap and fill the abandoned pipe, and restore the structural integrity and function of the dwelling and foundation.

1. Excavation and cap of pipe at front and rear exterior of home footprint. Structural fill of the pipe cavity with slurry mix flowable fill.
2. Deep foundation shoring devices under house foundation walls and interior foundation piers along pipeline route, any elements within 10 feet of the trench zone. (* See alternative soil densification.)
3. Re-build foundation walls, piers, and front stoop as needed to restore function and integrity.
4. Jacking and leveling of main level floor system with reinforcement of frame gliders affected by damages to date.
5. Repair and brace of roof frame, including installation of structural cross-ties and rafter tie-downs.
6. Interior repairs of plaster walls, millwork, trim, and flooring affected by structural damages to date.

The general conditions, cleaning, debris hauling, building permits, insurances, and construction management must be included. Engineering design of structural repairs will be required. A reasonable General Contractor's fee must also be included.

We have estimated the costs of this work as itemized in *Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence, 330 College Ave, Rock Hill, SC, dated August 21, 2012.*

We estimate the costs to cap and fill the pipe, to shore and repair the house foundations, and to repair the house frame is **$ 147,711**, including Contractor overhead and profit margins and a 2.5% contingency budget.

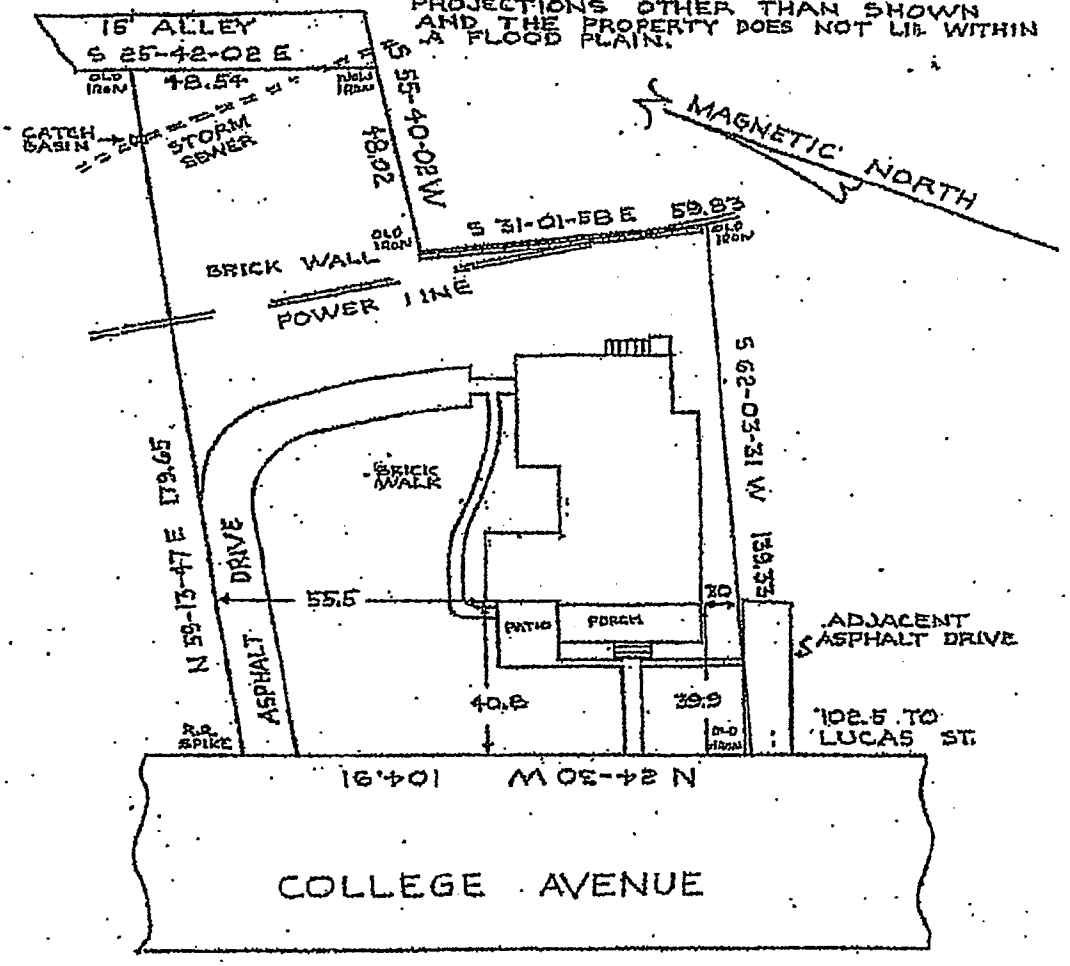
This scope and cost estimate is based on assumptions and conditions as follows:

⇒ Repair work is based on status of damages as of August 2, 2012. Time may allow more damage and add to costs.
⇒ The cost for engineering includes structural repairs and pipe capping and fill on the subject property. No other part of the existing pipe or future pipe is included.
⇒ The pipe fill is only between the existing catch basin at the front and the existing buried manhole at the rear of 330 College Ave. The existing 24-inch diameter RCP that extends between the buried manhole behind the subject house and Lucas Street is not part of this cost estimate for capping and fill.
⇒ Existing storm water piping has been re-routed and completed prior to this scope.
⇒ Costs for temporary pipe repairs, linings, and/or provisions prior to this scope are not included.
⇒ Transportation and fuel costs are included based on rates in place at the time of the estimate.
⇒ Water and electricity are provided by the owner during construction work.
⇒ A landscape repair allowance is included ($1200).

Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC Dated May 23, 1985

THIS BEING SHOWN AS LOT 10 AND PART OF 11 & 12 IN BLOCK 28 OF MAP OF PROPERTY OF ROCK HILL BUGGY CO., MADE BY J.L. STACY AND DATED APRIL, 1924. RECORDED IN PLAT BOOK 2, PAGE 200.

THIS IS TO CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY AND THAT THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN AND THE PROPERTY DOES NOT LIE WITHIN A FLOOD PLAIN.



MAP OF PROPERTY OF
LUCILLE RAY
330 COLLEGE AVENUE
ROCK HILL, S.C.

MAY 23, 1985

SCALE 1" = 30'

0 30 60 90

W.C. WHITE R.L.S. #1033
ROCK HILL S.C.

RAY000469

CESI

Land Development Services

August 8, 2012

Mr. Mike Leonard P.E.
M.H. Leonard Consulting Engineers, PA
447 South Sharon Amity Road
Suite 201
Charlotte, North Carolina 28211

Reference: Geotechnical Engineering Evaluation
Ray Residence
330 College Avenue
Rock Hill, South Carolina
CESI Project Number 120755.000

Mr. Leonard:

CESI has performed a geotechnical engineering evaluation of the storm drain under the Ray Residence in Rock Hill, South Carolina. We completed these services in accordance with your verbal authorization. This report summarizes our Findings, Conclusions and Recommendations.

FINDINGS

On August 2, 2012, CESI's Geotechnical Engineer, Edward S. Cummings III P.E., met Michael Leonard P.E. and Ms. Lucille Ray at her residence in Rock Hill, South Carolina. Ms. Ray indicated her observation of the settlement of the brick sidewalk and stairs at the front porch initiated the structural investigation of the house by Mike Leonard. The purpose of the meeting was to allow our Geotechnical Engineer to observe the storm drain under Ms. Ray's home and the resulting settlement problems as observed by Mr. Leonard and Ms. Ray. Ms. Ray said her residence is 90 years old and was purchased in 1985.

The following specific areas were observed:

- Storm drain catch basin in College Avenue;
- Storm drain manhole in rear yard;
- Loose brick piers in crawl space;
- Settlement of front brick sidewalk and stairs;
- Previous hardwood floor repair by former owner (pre 1985) in entrance foyer directly above and inline with the storm drain.

Facing the Ray Residence, a 24" terra cotta pipe was observed leaving the catch basin and heading toward the center of Ms. Ray's house. See photographs 6 and 7. A 36" terra cotta pipe enters the

RAY000470

catch basin from across College Avenue. An 18" reinforced concrete pipe enters the catch basin from the right. See Photograph 8. A video survey of the 24" terra cotta storm drain pipe was previously performed under Mike Leonard's direction. Mr. Leonard indicated the terra cotta pipe under the residence has cracks.

The geotechnical investigation began with removal of 2.5 feet of fill soil over the storm drain manhole lid in the rear yard. The lid was removed exposing the manhole. See Photographs 1 and 2 in the Appendix. A cracked 24" terra cotta pipe was observed entering the catch basin from the direction of the house. See Photographs 3 and 4. A 24" reinforced concrete pipe was observed leaving the catch basin to the east. See Photograph 5. A drain test was performed by Mike Leonard by placing water in the catch basin on College Avenue in front of the Ray Residence with a garden hose. See photographs 6 and 7. A few minutes later water was observed flowing through the storm drain manhole in the rear yard. See Photograph 4. Mike Leonard pointed out voids in the rear yard along the subject storm drain alignment.

Next, CESI's Geotechnical Engineer entered the crawlspace area to observe the brick piers supporting the wood framed floor system. The brick piers were tapped and observed for looseness between the top of the pier and the floor system. Piers "B", "C", "D", "E", "I", "J" and "K" (as noted in our Hand Auger Location Plan) are in contact with the floor system. The following piers have the observed conditions:

- Brick pier "A" is loose and appears to have been shimmed with a 2"x2" piece of wood at the interface with the floor joist system;
- Brick pier "F" is tilting toward the storm drain line. The pier has been shimmed with a 2"x2" wood shim at the interface with the floor joist system. The wood shim is under great stress. It was also noted that additional wood framing was installed to resist pier overturning;
- Brick piers "G" and "H" are loose and appear to be a retrofit. A 4"x6" wood beam has been placed on and spanning slightly past piers "G" and "H". The wood beam is also loose.

CESI's geotechnical engineer began the subsurface exploration by excavating adjacent to brick pier "A" to determine the footing bearing level and the storm drain location. No concrete footing was observed for the brick pier, however, a brick footing larger than the pier was present. Next, a hand auger boring, HA-1, along with dynamic cone penetrometer (DCP) testing was performed to determine the soil bearing conditions directly beneath the brick pier. The brick pier is bearing on red fine sandy silt (ML) residual soil at HA-1. Soil consistency as measured by DCP testing was stiff 2" below the bearing surface of the brick pier "A" and very stiff 14" below brick pier "A".

The dynamic cone penetrometer is a portable testing device used to estimate penetration resistance of the soil samples, as outlined in Sowers and Hedges paper "Dynamic Cone for Shallow In-Situ Penetration Testing". The device has a 1.5-inch diameter, 45-degree cone point with a surface area of 3.9 inches which is driven with a 15-pound steel weight on a guide rod. After the cone point was completely embedded at the test depth it was driven an additional $1^3/_4$ inches by the steel weight falling 20 inches onto a steel anvil. The number of hammer blows required to drive the cone the $1^3/_4$-inch increment was recorded as the "penetration resistance" in units of blows per increment. Penetration resistance, when properly evaluated, is an index to the soil's strength.

Hand auger boring HA-2 was located and performed approximately 22" from the centerline of brick pier "A" and 19'-3" from the right sidewall of residence. This is also the location of the 24" terra cotta storm drain line coming from College Avenue. See Photograph 6. Soft fill soils were observed at 28"

and 48" below the bearing surface of the brick pier. The 24" terra cotta storm drain pipe was encountered at 58" below the bottom of the pier. See Photographs 9 and 10. Brick pier "A" is bearing on the transition zone between residual soils and the storm drain backfill soils. The pier appears to be settling as a result of the soft storm drain back fill soils.

The brick sidewalk and stairs at the front of the residence have settled. Horizontal measurements indicate that the settlement is directly above the storm drain line. See Photographs 11, 12, 13, 14 and 15. The front stairs have settled approximately 1-1/8". The stairs have horizontally displaced 1-1/2" by the consolidation of the storm drain backfill soils. Michael Leonard indicated that he observed in the attic separation in the front porch framing members. Ms. Ray understood the former owner had replaced the brick front stairs prior to 1985.

CONCLUSIONS

Based on our site observations and geotechnical findings, the 24" terra cotta storm drain pipe under the subject residence and the soft storm drain back fill soils have caused the following conditions:

- The settlement of brick pier "A";
- The settlement of brick pier "F";
- The settlement of the front brick sidewalk and stairs;
- Any wall or pier footing within 6 feet of the storm drain pipe is subject to long term settlement due to the consolidation of the underlying storm drain backfill soils.
- The cause of the looseness of the brick piers "G" and "H" at the 4"x6" wood beam interface cannot be explained at this time.

RECOMMENDATIONS

CESI recommends the following:

- Pier and wall footings within 10 feet of the storm drain should be underpinned to adequate bearing soils;
- The 24" terra cotta pipe should be lined underneath the subject residence.

Please contact us if you have any questions regarding this report or if we may be of further service.

Respectfully submitted,
CESI

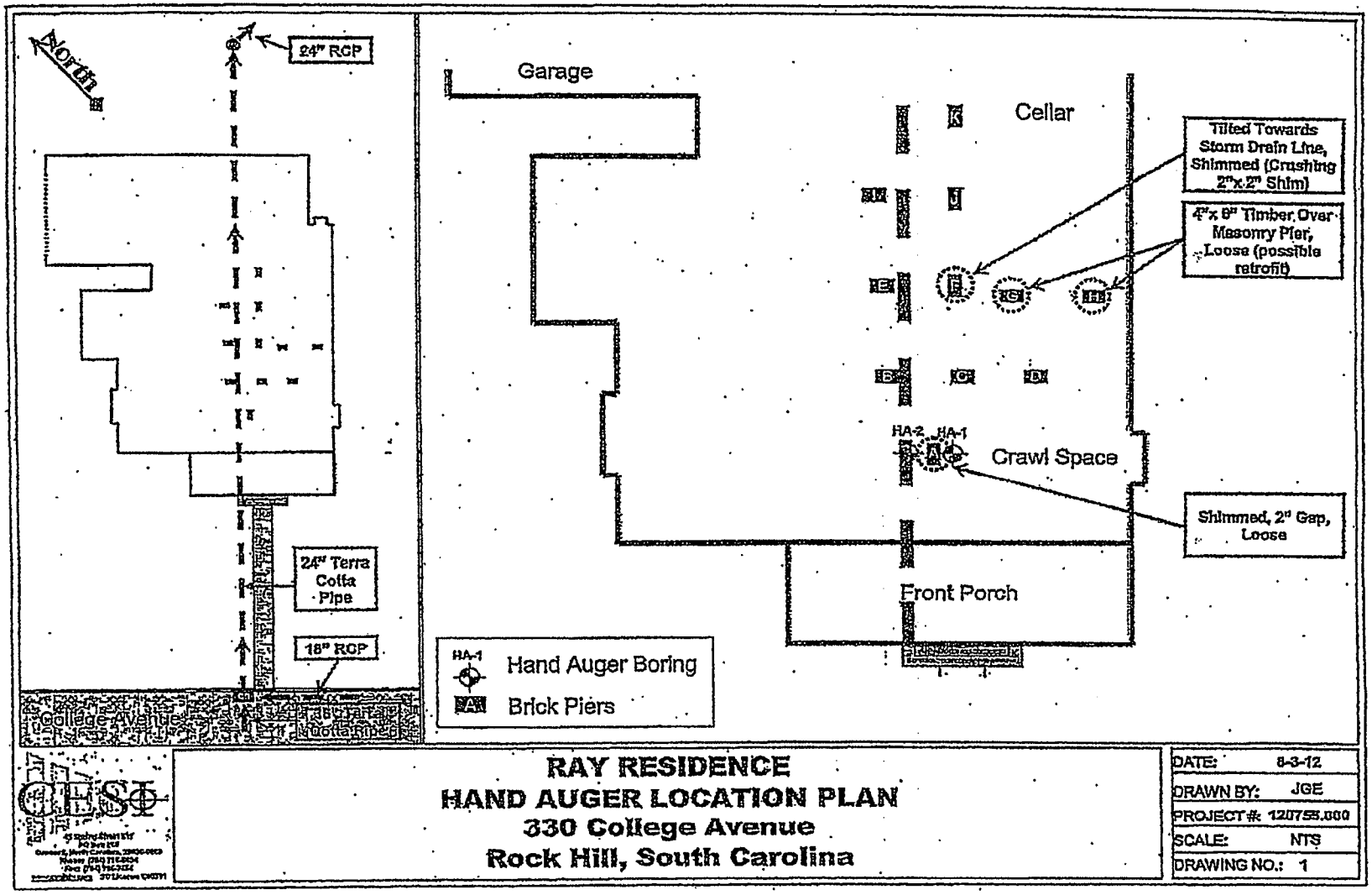
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 21001 REGISTERED EDWARD S. CUMMINGS III

8/8/12

Edward S. Cummings III PE
Geotechnical Engineer
S.C. Registration Number 21001

James G. Eaves III, PE
Division Manager
S.C. Registration Number 25575

Enclosures: Hand Auger Location Plan
Log of Hand Auger Borings (HA-1, HA-2)
Site Photographs


North
24" RCP
24" Terra Cotta Pipe
18" RCP
College Avenue
Garage
Cellar
Tilted Towards Storm Drain Line, Shimmed (Crushing 2"x 2" Shim)
4"x 8" Timber Over Masonry Pier, Loose (possible retrofit)
HA-2
HA-1
Crawl Space
Shimmed, 2" Gap, Loose
Front Porch
HA-1 Hand Auger Boring
BA Brick Piers
RAY RESIDENCE
HAND AUGER LOCATION PLAN
330 College Avenue
Rock Hill, South Carolina
DATE: 8-3-12
DRAWN BY: JGE
PROJECT #: 120755.000
SCALE: NTS
DRAWING NO.: 1

RAY000473

CESI
Land Development Services

Date: 8/3/12 | Job No.: 120755.000
Project Name : Ray Residence
Street Address : 330 College Avenue
City : Rock Hill, South Carolina | CESI Engineer: Ed Cummings

LOG OF HAND AUGER BORING

Test Number	Location	Material Description	Depth Below Existing Grade (in.)	Depth Below Bottom of Pier (in.)	Penatrometer Blows per 1.75"				
					Footing Width (ft)	1st	2nd	3rd	Average 2nd & 3rd
HA-1	See Hand Auger Location Plan	Residuum - Red and yellow fine sandy silt (ML)	8	2		10	13	15	14
		Red and yellow fine sandy silt (ML)	22	14		12	19	21	20
HA-2	See Hand Auger Location Plan	Fill - Red fine sandy silt (ML)	34	28		5	3	4	3.5
		Fill - Red fine sandy silt (ML)	54	48		5	5	4	4.5
		Top of 24" terra cotta pipe	64	58		--	-	-	-

RAY000474

Photo 1: Manhole in rear yard

Photo 2: Manhole in rear yard

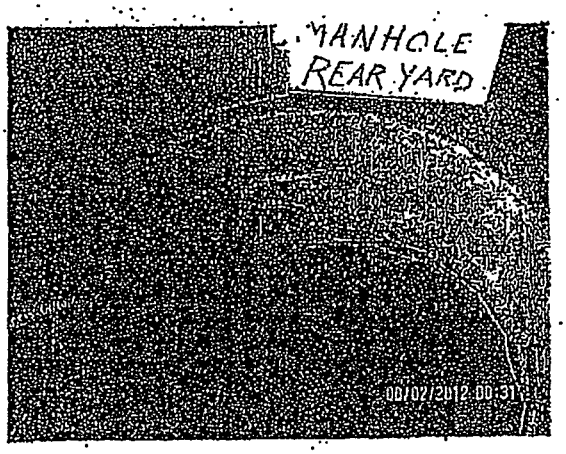


Photo 3: Manhole in rear yard

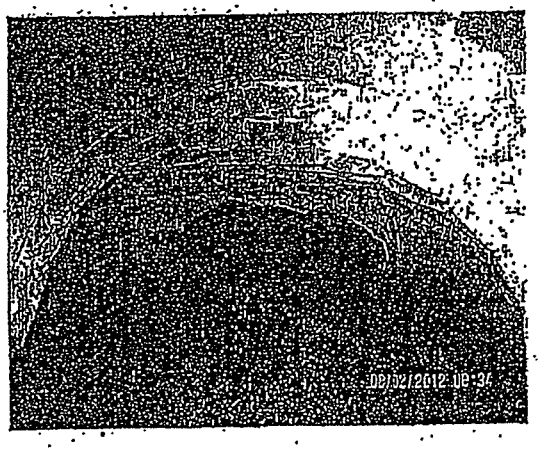


Photo 4: Manhole in rear yard

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45 Spring Street SW
PO Box 268
Concord, North Carolina, 28026
Phone: (704) 788-5104
Fax: (704) 786-7454
http://www.cesi2ds.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	1

RAY000475

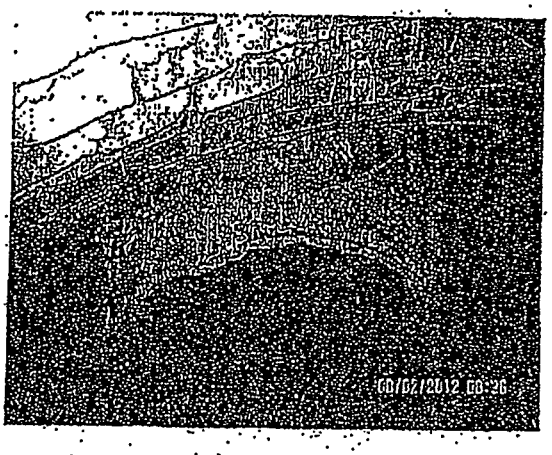

Photo 5: Manhole in rear yard

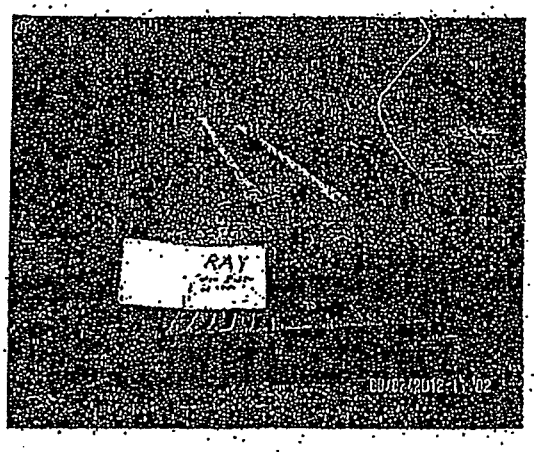

Photo 6: Catch basin at College Avenue

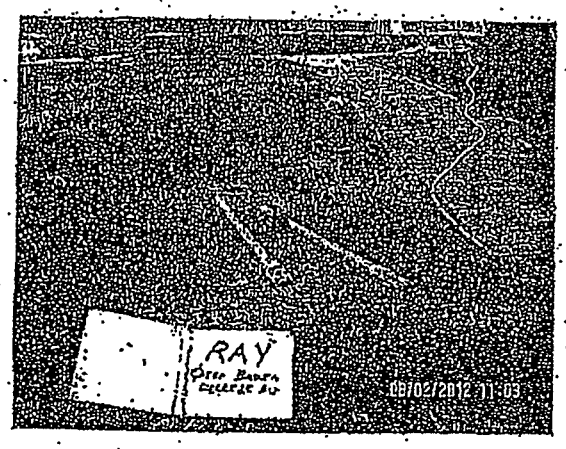

Photo 7: Catch basin at College Avenue

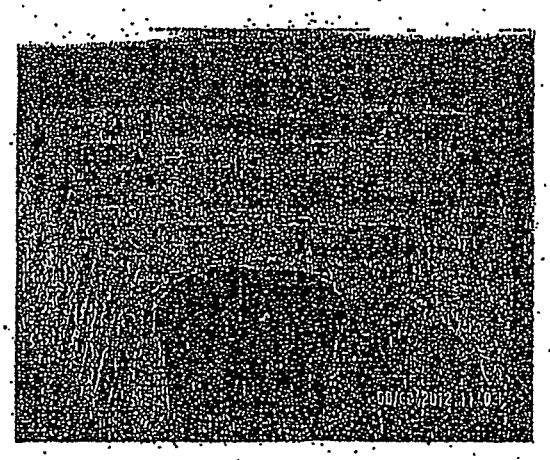

Photo 8: Catch basin at College Avenue

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SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	2

RAY000476

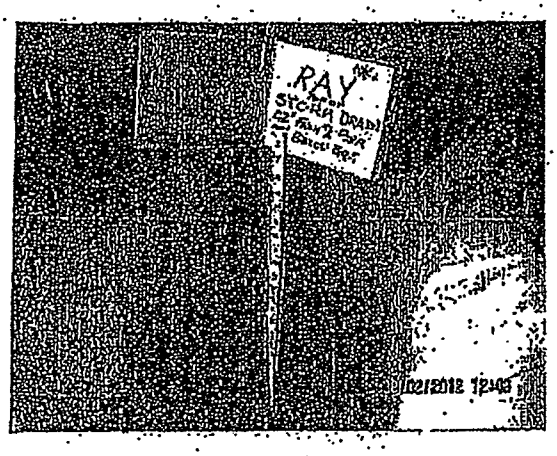

Photo 9: Hand auger HA-2 at brick pier 'A'

Photo 10: Hand auger HA-2 at brick pier 'A'

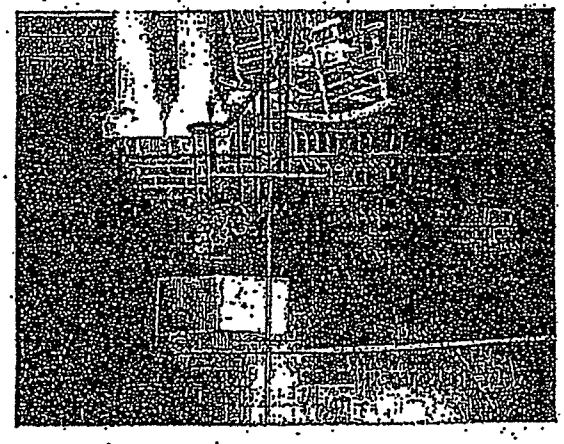

Photo 11: Front sidewalk and steps - Probe rod represents measured alignment of storm drain line.

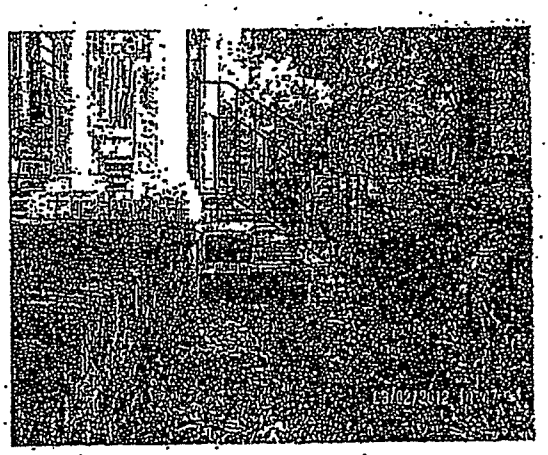

Photo 12: Front sidewalk and steps

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SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-08-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	3

RAY000477

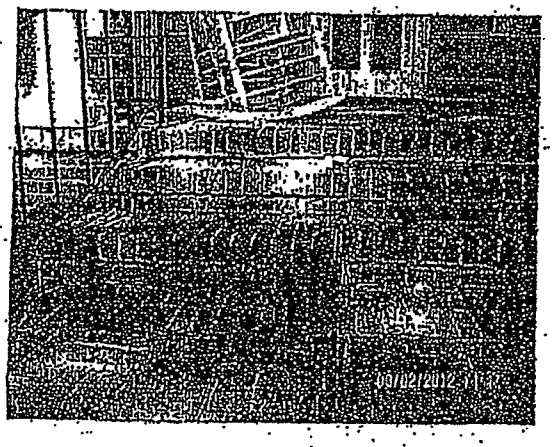

Photo 13: Front sidewalk and steps

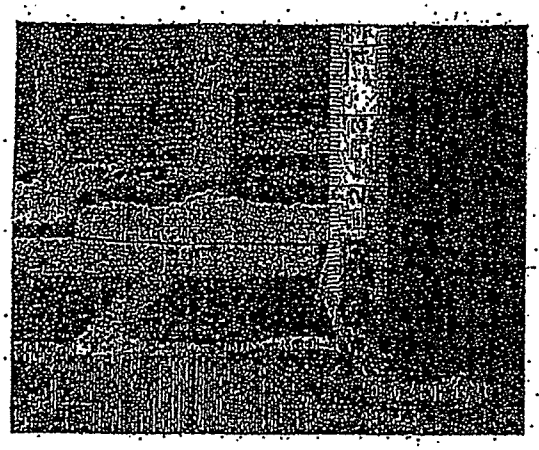

Photo 14: Settlement at front steps.

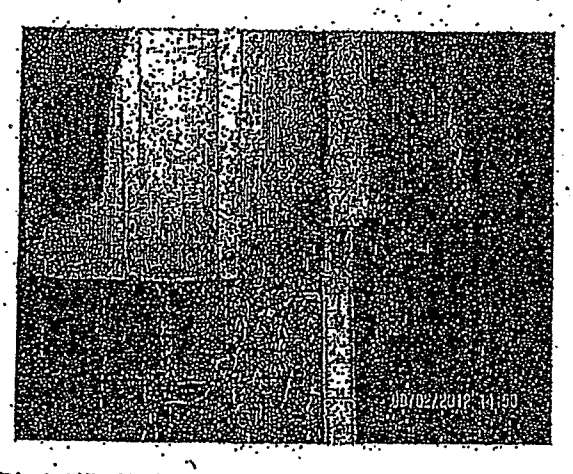

Photo 15: Horizontal movement at front steps.

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Fax: (704) 786-7454
http://www.cesijds.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-08-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	4

RAY000478

Attachment #4: Letter
Spencer & Spencer, Mr. Paul Dillingham to
Mr. Charles S. Bradford
Dated May 18, 2012

SPENCER & SPENCER
PROFESSIONAL ASSOCIATION
Attorneys and Counselors at Law

C.E. SPENCER (1849-1921)
C.W.F. SPENCER (1876-1956)
C.W.F. SPENCER, JR. (1911-1985)
W.C. SPENCER †
WILLIAM L. "RED" FERGUSON †
EMIL W. WALD †
PAUL W. DILLINGHAM
W. MARK WHITE*
W. CHAPLIN SPENCER, JR.*
R. ALEXANDER SULLIVAN*
R. BRENT THOMPKINS*
JEREMY D. MELVILLE*

† Of Counsel
* Also admitted in NC

SUITE 200
226 EAST MAIN STREET

P.O. BOX 790
ROCK HILL, S.C. 29731-6790

Telephone
803-327-7191

Telecopier
803-327-3868

Email Address
pauldillingham@spencerfirm.com

May 18, 2012

Charles S. Bradford
P. O. Box 977
York, SC 29745

RE: Lucille H. Ray
330 College Avenue ("Property")

Dear Charles:

I represent the City of Rock Hill ("City"), which has forwarded your letter dated February 24, 2012, to me for a response.

Our firm has also completed a title search of the Property taking the chain back to the deed recorded June 18, 1920 from the Estate of W. E. Lucas to the Rock Hill Buggy Company to confirm the information in your letter. We did not find a right-of-way or easement in favor of the City for the stormwater line running across the Property. My understanding is that the City does not wish to accept this line as a City maintained utility. Do you have any evidence to suggest that the City owns this line?

Thank you for bringing this to my attention.

Sincerely,

SPENCER & SPENCER, P.A.

Paul W. Dillingham

100101.1

RAY000479

Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence 330 College Ave, Rock Hill, SC Dated August 21, 2012

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

MHLCE COST ESTIMATE - STRUCTURAL REPAIR, SHORING, AND RESTORATION
MS. LUCILLE RAY RESIDENCE, 330 COLLEGE AVE, ROCK HILL, SC
21-Aug-12 *MHLCE Project # 12E9555.F* *Michael H. Leonard, PE*

Section/Item	Scope		Units	Cost/Unit	Cost	Extension	Cumulative	Total
Section 1	**Abandon, Cap Existing 24-inch Pipe**							
a	Survey, locate pipe on Site					550		
b	Demolition and Excavation					3170		
	Removal front sidewalk at curb, to front stoop, front steps				1350			
	OSHA box, staging				1820			
c	Cap pipe					3300		
	Bulkheads (2), structural reinforcement		4	650	2600			
	Downhill vent		1	700	700			
d	Slurry fill - 2 stages	130 lf, 24in dia	21	420	8820	10320		
	pumping, vibration		2	750	1500			
e	Sidewalk Replacement	200 sf	220	7	1540	1540		
f	Grade, drainage repairs front, rear yards				840	840		
g	Landscape repairs	allowance			1200	1200		
							20820	
Section 2	**Foundation Shoring**							
a	Interior foundation piers	8 each in zone				12280		
	footings		8	185	1480			
	helical piles		8	1350	10800			
b	Front Foundation Wall	14 lf in zone				4752		
	footings		14	18	252			
	helical piles		3	1500	4500			
c	Front Stoop Walls, Steps	14+8+8 lf				7725		
	footings	steps only	3	175	525			
	helical piles		6	1200	7200			
d	Cellar Foundation Wall	14 lf				4500		
	footings		edg					
	helical piles		3	1500	4500			
e	Rear Foundation Wall					3600		
	footings	14 lf	edg					
	helical piles		3	1200	3600		32857	
Section 3	**Re-build Foundations, Piers**							
a	Front Steps	65 lf	65	15	975	975		
b	4 Interior Piers	4 ea	4	335	1340	1340		
c	Cumulative Foundation Voids	misc			700	700		
							3015	
Section 4	**Main Floor Frame Repairs, Leveling**							
a	Laser level study		6	225	1350			
b	Crib, bracing, jacks				850			
c	Leveling and bracing		24	35	840			
d	Reinforcement	mil 240	8	35	520			
e	6 new piers		6	450	2700			
							6250	

RAY000480

Section 5 Roof Frame Repairs								
a Ridge Bracing, joining	mll	450	12	35	870			
b Rafter Cross-ties	mll	200	6	35	410			
c Rafter Tie-downs	mll	780	15	85	1305			
d Shingle damage/repairs		12 sq	12	180	2160			
e Venting, repairs		90 lf	90	12	1080			
							5825	
Section 6 Interior Restoration								
a Door, C/O repairs		8 units	24	45	1080			
b Millwork removal, reset ref. floor leveling		240 lf	18	45	810			
c Wall, ceiling repairs - plaster, GWB			80	38	3040			
d Hardware adjustments		12 units	18	45	810			
e Painting, cleaning			72	28	2016			
f Floor finishes		1850 sf	1850	4.75	8788			
g Final Cleaning			3200	1.15	3680			
h Trim Mill					950			
							21174	
Section 7 General Conditions								
a Design, Drawings - engineering		24 hr S/E	24	160	3840			
b Building Permits					400			
c Sanitary Facilities			3	150	450			
d Debris - hauling, disposal		loads	4	350	1400			
e Transportation		10 weeks	10	180	1800			
f Tools & Equipment			10	120	1200			
g Communication			3	65	195			
h Site Supervision		12 wk, 38	456	36	16416			
i General Labor		10 weeks	8	25	200			
							26901	
SUBTOTAL								116852
CONTRACTORS FEES								
GENERAL OVERHEAD						15%		17378
PROFIT						10%		11586
CONTINGENCY						3%		2898
TOTAL COST ESTIMATE								147711

RAY000481

From: "Datko, Sue G." <sgd@spencerfirm.com>
Subject: **FW: Stormwater data...**
Date: May 15, 2012 2:10:17 PM EDT
To: <lhooperray@comporium.net>
Cc: "Dillingham, Paul W." <pauldillingham@spencerfirm.com>
1 Attachment, 5.0 MB

Attached is GIS stormwater map sent to the engineer last week

Sue Datko
Spencer & Spencer, P.A.
226 East Main Street, Suite 220
P. O. BOx 790
Rock Hill, SC 29731
suedatko@spencerfirm.com
803-327-7191 (Telephone)
803-327-7494 (Fax)

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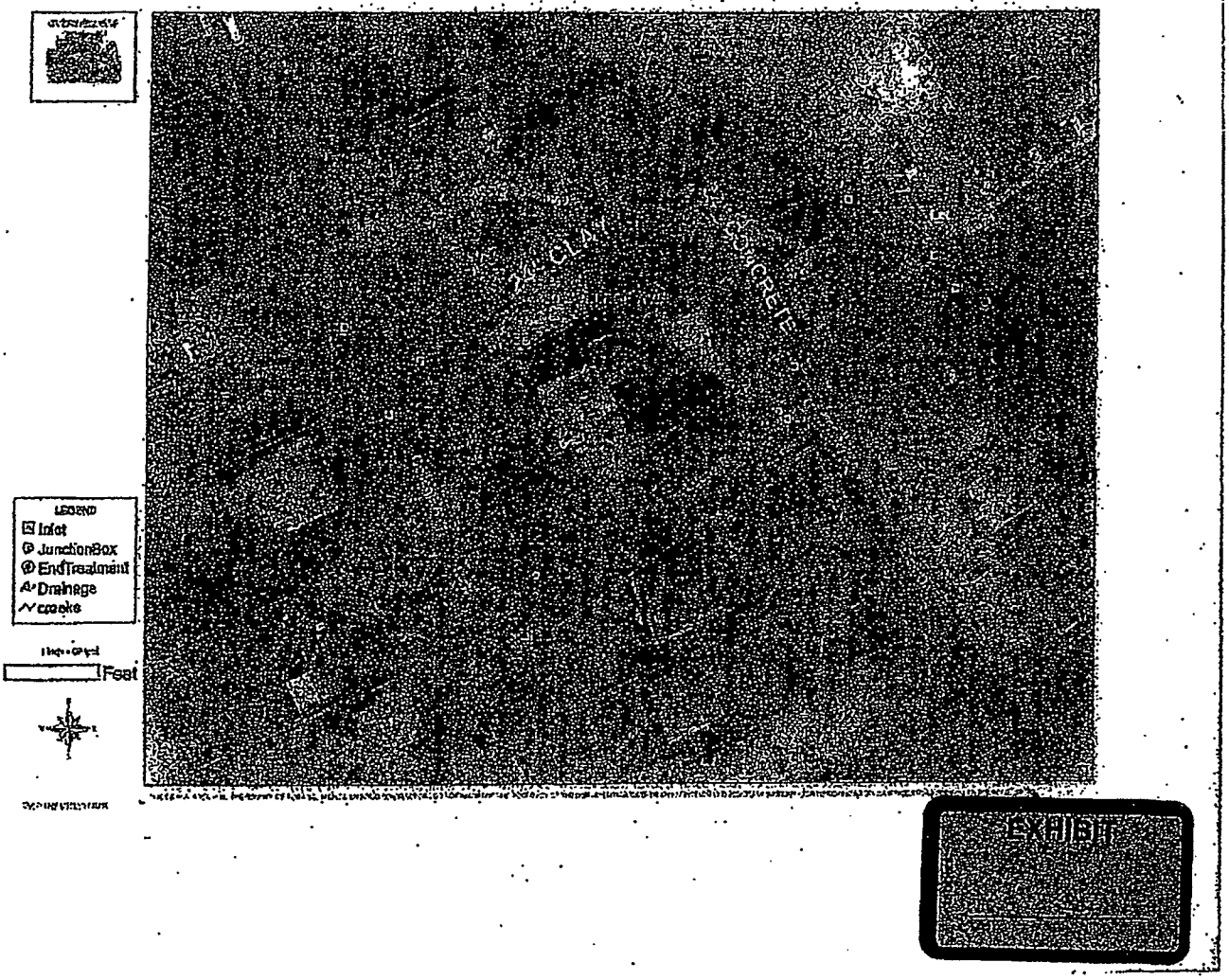
Partial Stormwater - College Ave.



EXHIBIT

Partial Stormwater - College Ave.

THE CITY OF ROCK HILL, THE COUNTY OF YORK SC, AND ITS MAPPING CONTRACTORS DO NOT GUARANT THE ACCURACY OF THE DISPLAYED INFORMATION AND SPECIFICALLY DISCLAIM ANY WARRANTY FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

MAP INFORMATION
Map Date: 05:07:57 AM on Thursday, May 10, 2012
Map Name: COLLEGE.MXD
This map was created by the City of Rock Hill Stormwater.

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

Project Memo

To: Lucille Ray
Charles Bradford
From: Mike Leonard, PE – M.H. Leonard Consulting Engineers, PA
Subject: Lucille Ray Residence – Storm Water System and Structural Damages
330 College Ave, Rock Hill, SC
MHLCE Project # 12E9555.F
Date: November 30, 2012

This will confirm recent discussions and a site visit on November 29 with Ms. Ray regarding ongoing sanitary sewer work on College Avenue and Strait Street, being done by the City of Rock Hill.

We are concerned with an increase in risks to the structural integrity of Ms. Ray's home based on developments during that work and visible indicators now on site.

Our previous field observations and review of camera inspection DVDs obtained from the City show the pipes on her property are damaged. (See previous MHLCE Report # 12E9555.F, dated September 5, 2012.) During the sanitary sewer pipe work in front of her home on College Avenue, she took photos of this same storm-water pipe while exposed for repairs. The City has needed to replace storm water piping on Strait Street and College Ave because of damages to the line. We believe that the same pipe under her home is damaged and slowly reaching a point of failure with risk of substantial structural damage. *Furthermore, by repairing/replacing storm-water pipes in the same line along Strait Street and upstream of the pipe under her home, the increased flow in the system will increase risks of progressive pipe damage and eventually could lead to additional structural damages.*

The most substantial risk of all to her home is the loss or erosion of soil around the existing underground storm water pipe, which would lead to consolidation of uncontrolled magnitude, possibly creating a sink hole directly under her foundation bearing elements. We are already concerned with the potential for voids there and we have confirmed soil-bearing problems during geotechnical assessments. *On November 29, 2012, we measured the front step settlement and found that it had progressed 3/8 to ½ inch more than found in August. Interior stress cracks along the walls and ceilings are also appearing – in line with the known underground storm-water pipe below her dwelling.* Shrinkage cracks in a wood-framed home tend to increase during the heating season, but these are beyond normal frame shrinkage.

We talked to the General Contractor hired to re-work the sanitary sewer line for the City. He indicated that numerous lines had been found during this work, with undocumented locations and damages. They also have verified that another storm water line extends down and under the dwelling at 340 College Ave (also owned by Ms. Ray).

We observed photographs taken by Ms. Ray during the ongoing sanitary sewer line project. The drop-inlet in front of Ms. Ray's home (330 College Ave) is fed from multiple storm-water pipes. The one utility map we have obtained of this area (provided by Ms. Ray) shows a single pipe adjoining this point, from the line that extends along Straight Street. Furthermore, because the old pipelines are typically clay, the new concrete (RCP) pipes being used to repair the lines do not fit the clay pipe radii. They have been 'fitted' by pouring concrete around the junctures to 'seal' the fits. In our experience, *this is not a water-tight fit, leaving increased risk of line seepage, erosion, and damages downstream of the fit – under Ms. Ray's home.*

Based on our original study and report, and with these new developments, we request access to specific information from the City as follows:

1. Storm water system map of the existing pipe systems, manholes, and junctures currently in place regarding the system that services the public right-of-way around Ms. Ray's property at 330 College Ave. Our previous requests for this information were not granted as documented in previous reports.
2. Storm water and hydrology studies of the same areas of Item 1.
3. Hydraulic profiles of the storm water pipe system in the areas of Item 1.
4. Street maintenance and repair records of Strait Street, College Ave, and any other right-of-way areas above this specific storm water system piping loop – within the last 10 years.

EXHIBIT 1

5. Storm water system maintenance records regarding the same loop of Items 1 and 4.
6. For similar reasons, we request the same information for existing storm water systems and public right-of-ways for the system that crosses the rear quadrant of 340 College Ave where there is visible damage to the catch basin and piping exposed in the private yard area of that property.

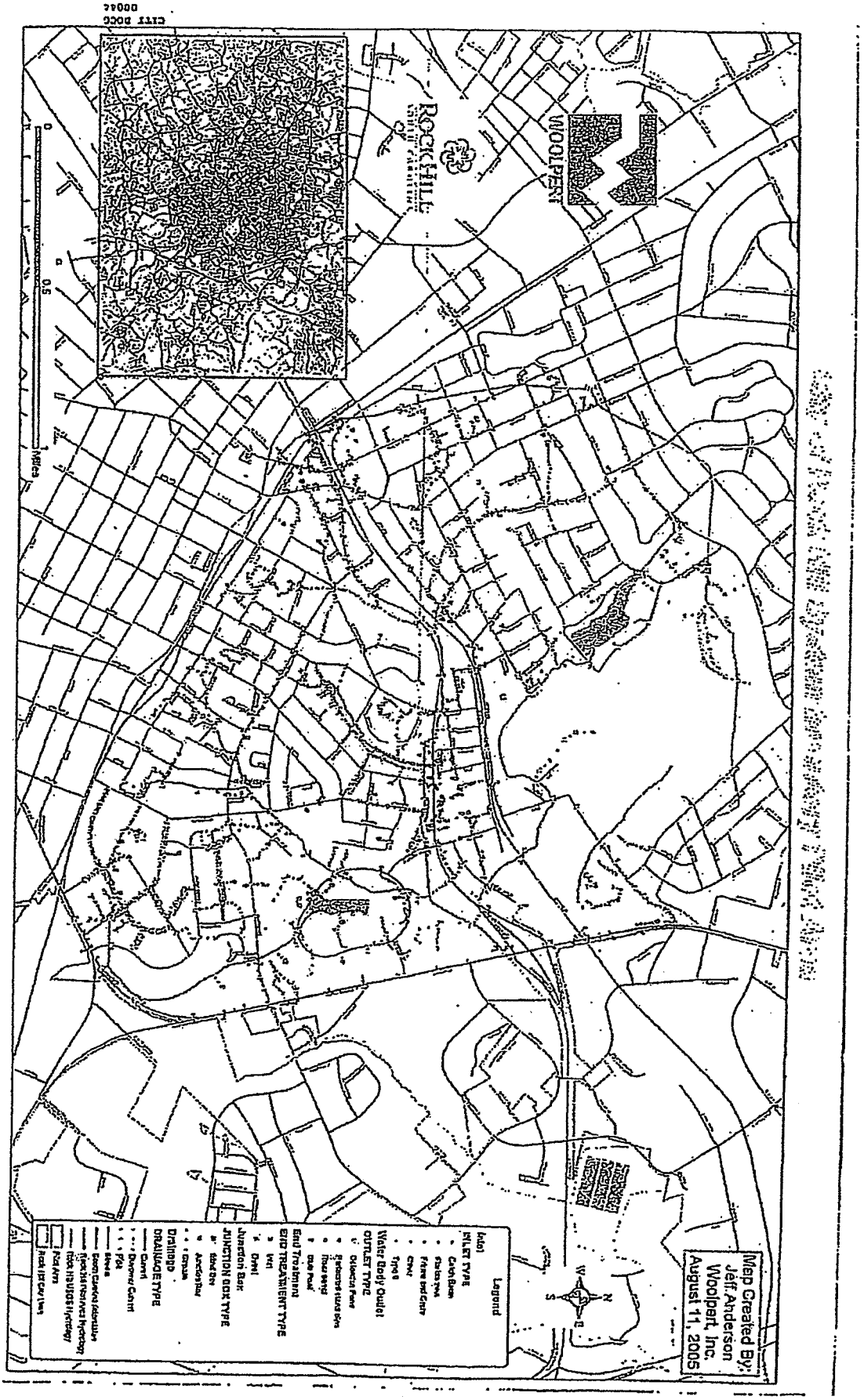
Please call if needed to clarify these latest concerns.

Sincerely,
M.H. Leonard Consulting Engineers, PA

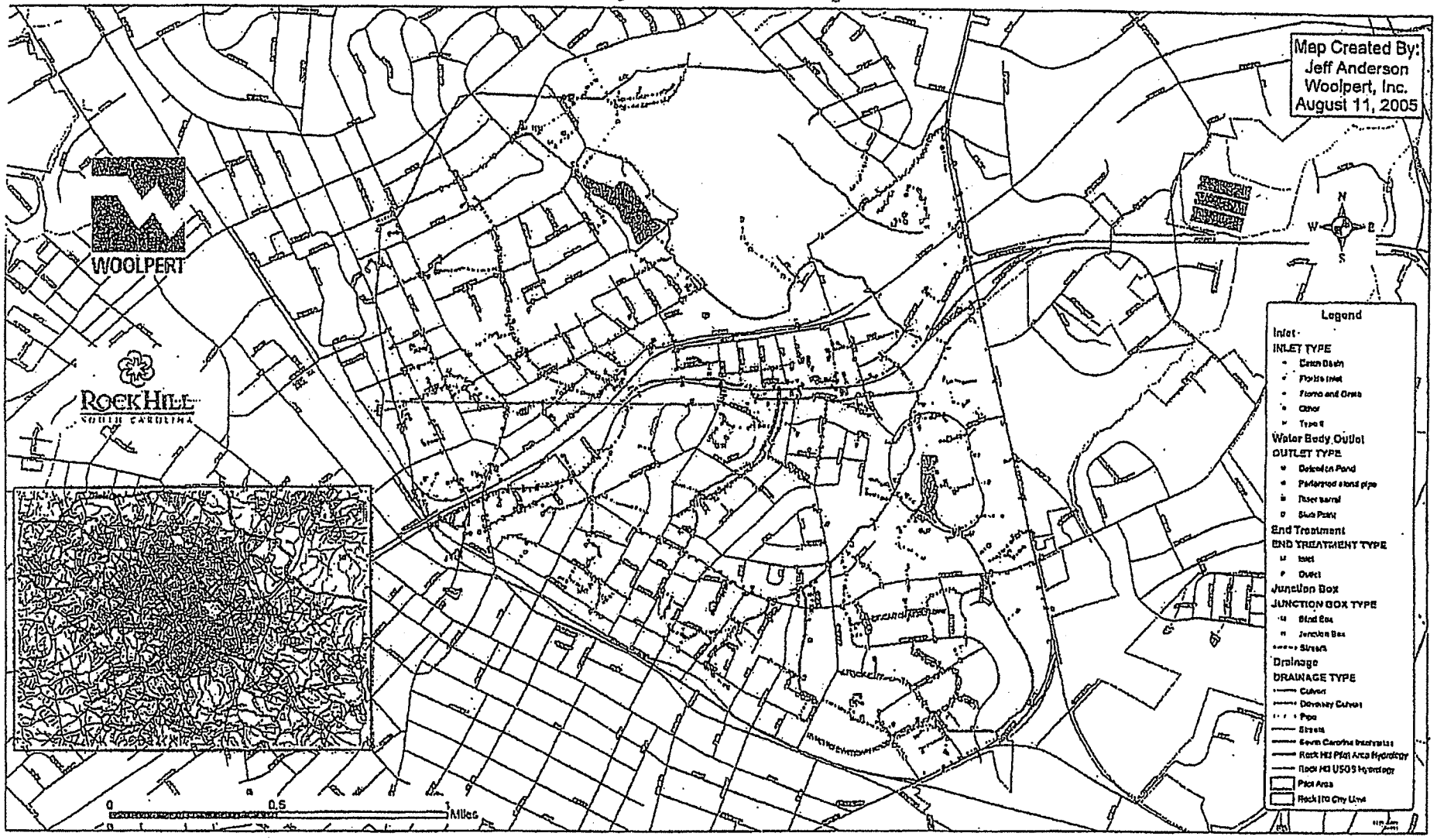
Michael H. Leonard, PE
Principal Engineer
Project Manager – Ray Investigation

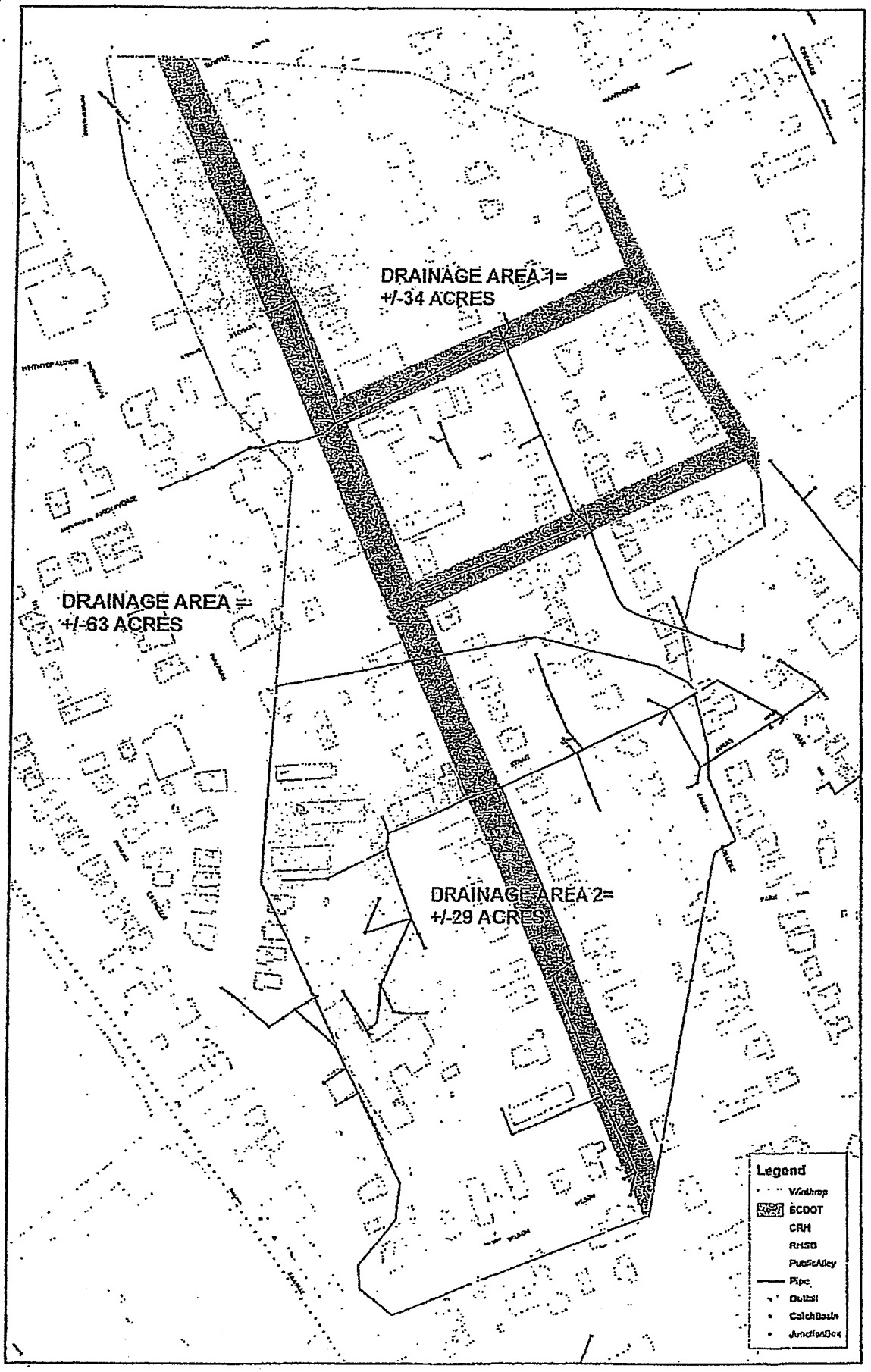
EXHIBIT

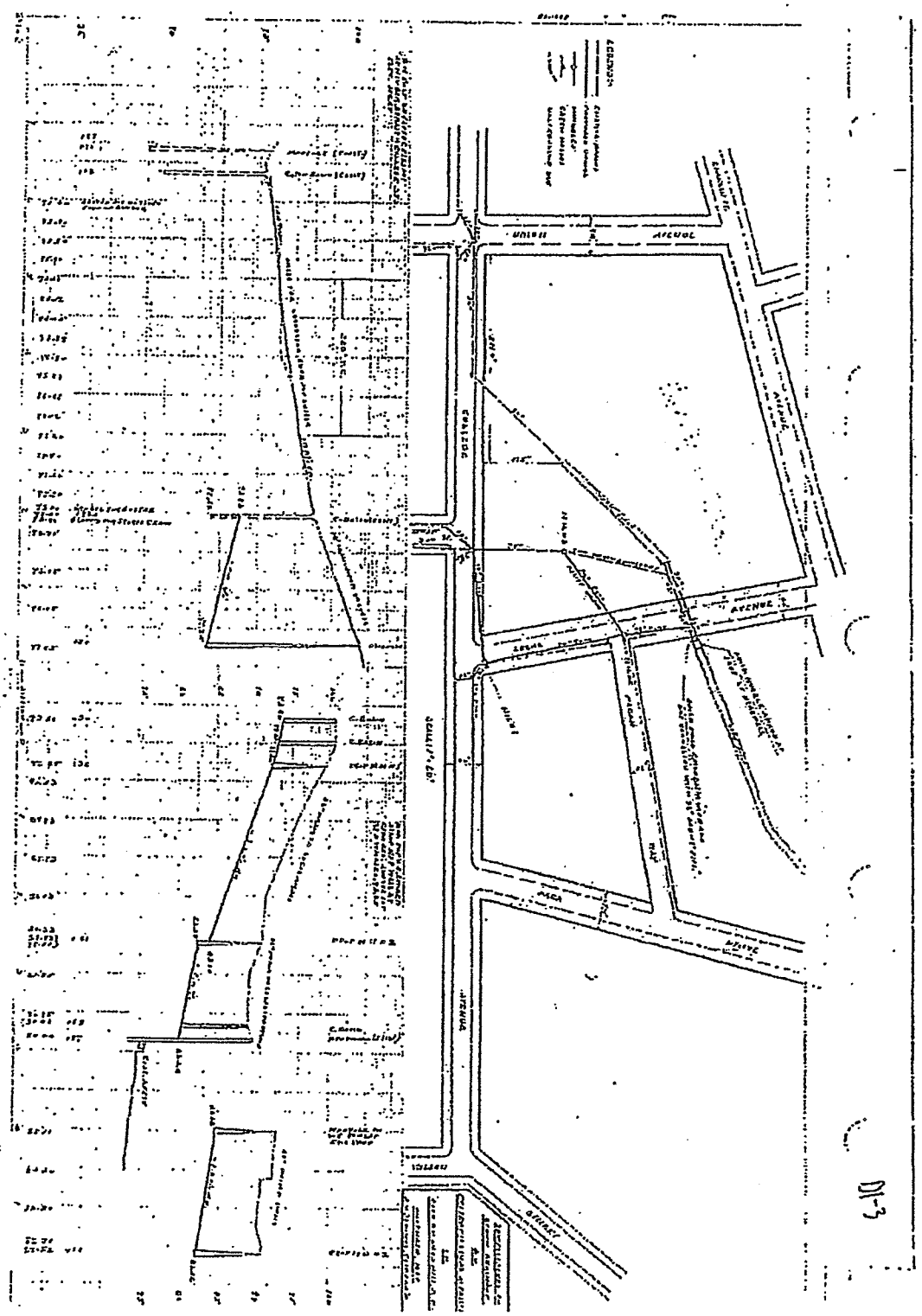
CITY DOCS
00057


WOODPORT
ROCKHILL
Map Created By:
Jeff Anderson
Woodport, Inc.
August 11, 2005
Legend
Inlet
INLET TYPE
Water Body Outlet
OUTLET TYPE
END TREATMENT TYPE
JUNCTION BOX TYPE
DRAINAGE TYPE
Drainage
Culvert
Roads
Rock Hill Reservoir Protection
Rock Hill Reservoir Protection
Railroad
Municipal Boundary
0
0.5
1 Miles

City of Rock Hill System Inventory Pilot Area

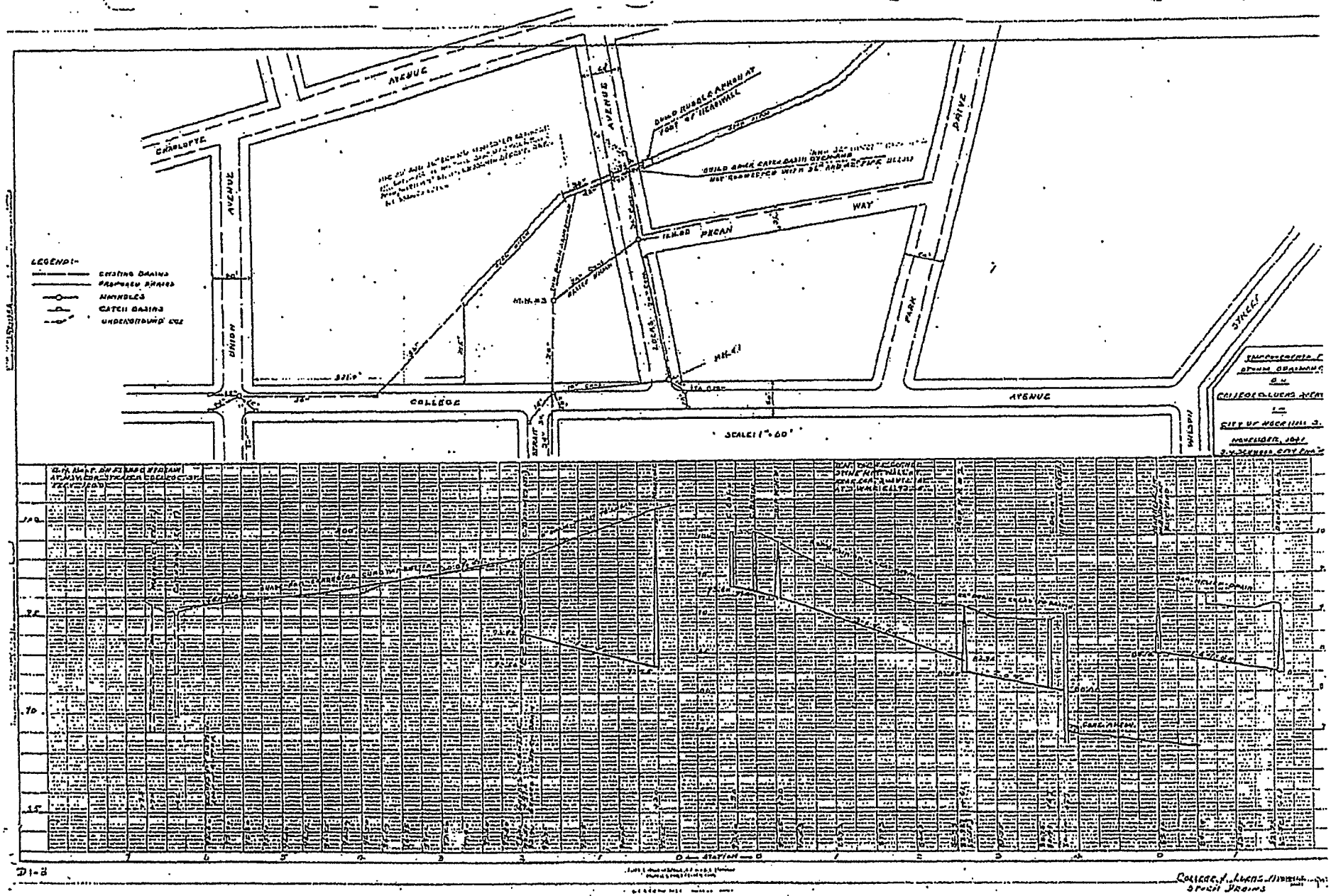



DRAINAGE AREA 1=
+/-34 ACRES
DRAINAGE AREA =
+/-63 ACRES
DRAINAGE AREA 2=
+/-29 ACRES
Legend
Windhrop
SCDOT
CRH
RHSD
PublicAlley
Pipe
Outfall
CatchBasin
JunctionBox



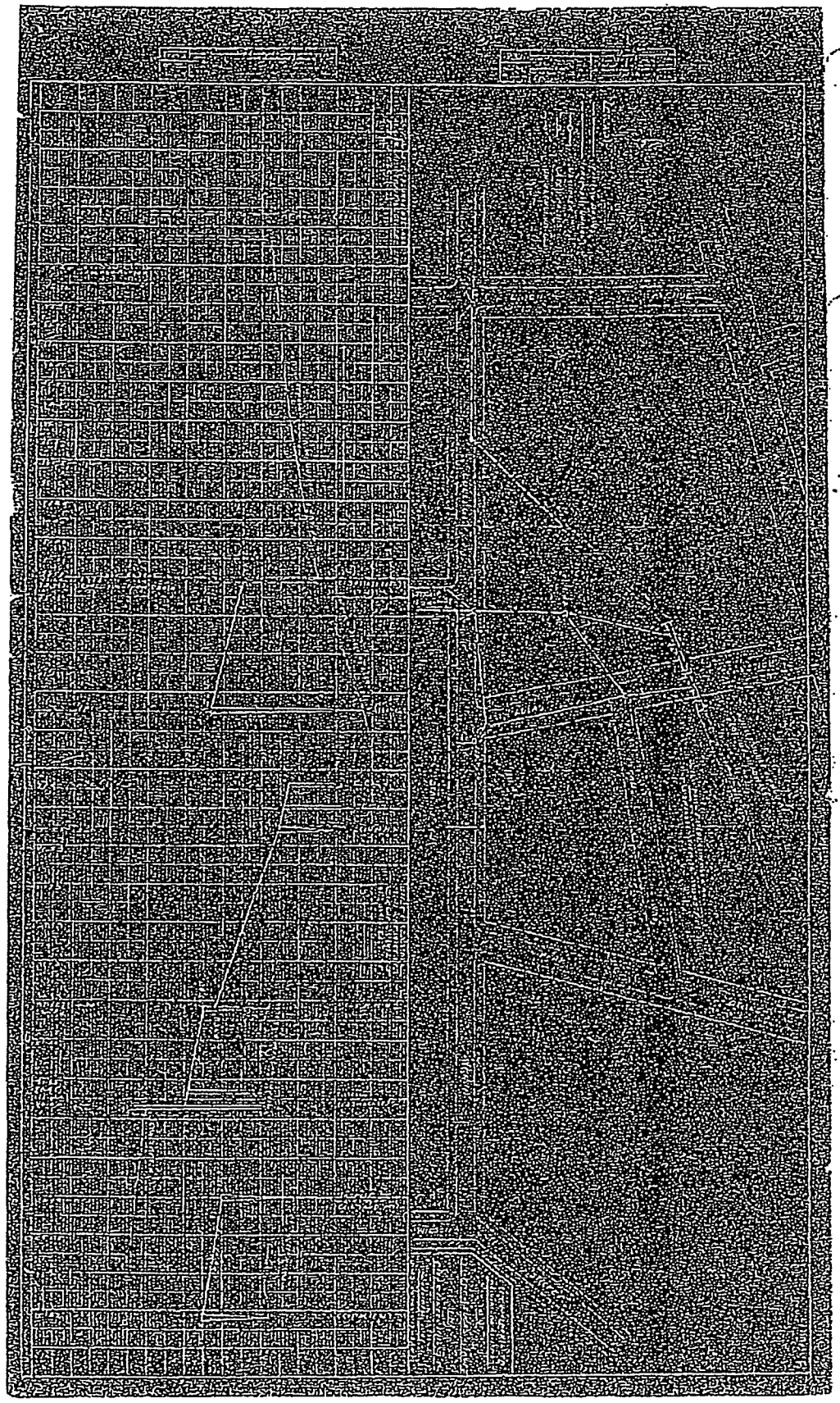
CITY DOCS
000046

D1-3

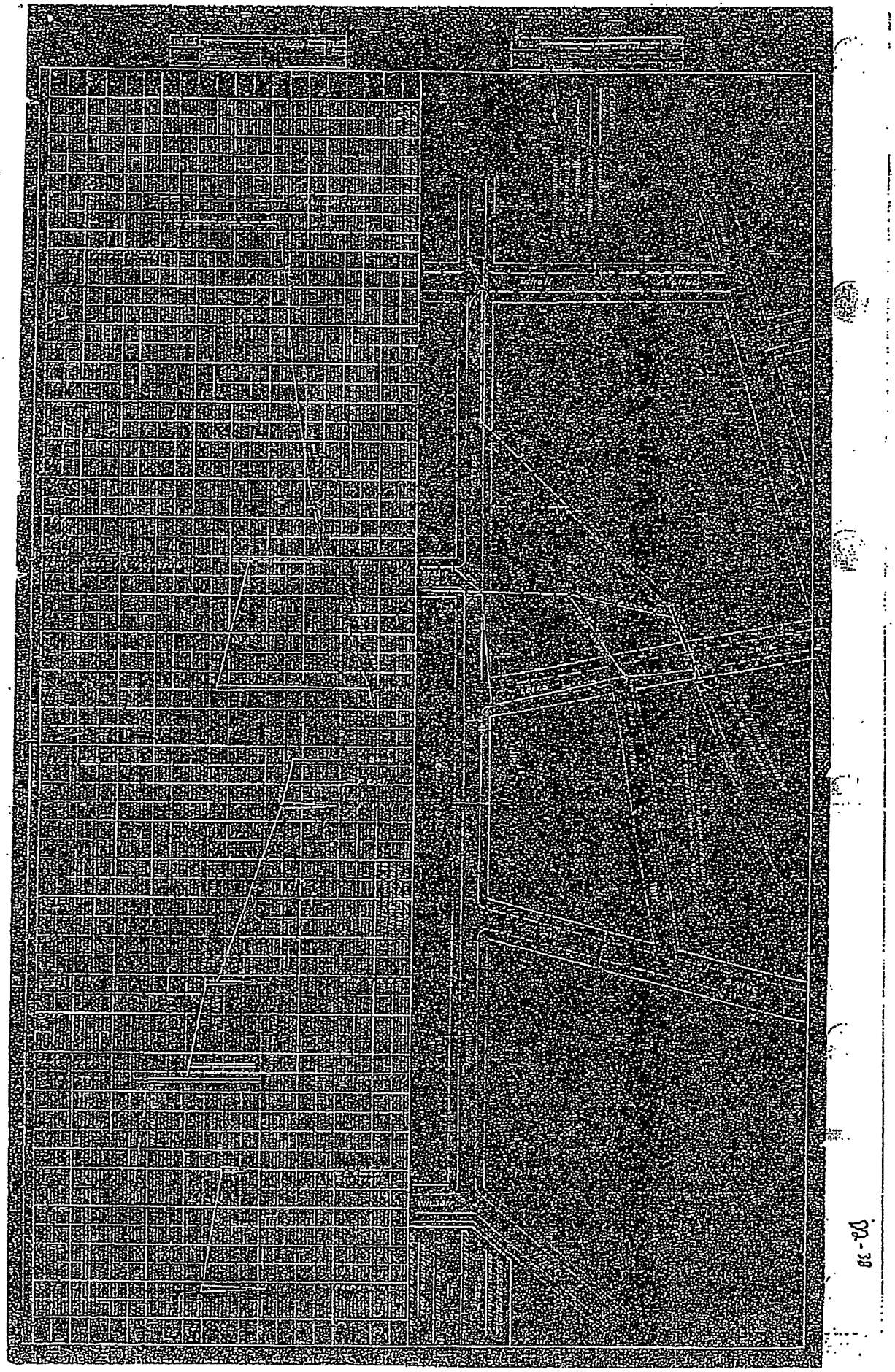

AVENUE
CHARLOTTE
AVENUE
UNION
AVENUE
DRIVE
WAY
PECAN
PARK
STREET
COLLEGE
AVENUE
WILSHI
LEGEND:-
EXISTING DRAINS
PROPOSED DRAINS
MANHOLES
CATCH BASINS
UNDERGROUND GAS
SCALE: 1"=60'
STATION

D1-3

-873-



CITY DOCS
00045



EXHIBIT

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

MHLCE COST ESTIMATE - STRUCTURAL REPAIR, SHORING, AND RESTORATION
MS. LUCILLE RAY RESIDENCE, 330 COLLEGE AVE, ROCK HILL, SC

21-Aug-12 — MHLCE Project # 12E09568.F — Michael H. Leonard, PE
Revised March 10, 2014

Section/Item	Scope		Units	Cost/Unit	Cost	Extension	Rev.1	Cumulative	Rev 1	Total	Rev 1 Notes
Section 1	**Abandon, Cap Existing 24-Inch Pipe**										
a	Survey, locate pipe on Site					650	650				no change
b	Demolition and Excavation					3170					
	Remove front sidewalk at curb, to front stoop, front steps				1350		1480				9% increase
	OSHA box, staging				1820		2225				22% increase
c	Cap pipe					3300					
	Bulkheads (2), structural reinforcement		4	650	2600		3175				22% increase
	Downhill vent		1	700	700		855				22% increase
d	Slurry fill - 2 stages	130 lf, 24in dia	21	420	8820	10320	9700				10% increase
	pumping, vibration		2	750	1500		1850				22% increase
e	Sidewalk Replacement	200 sf	220	7	1540	1540	1805				17% increase
		pavers	220	8.35	0		1837				Scope correction = add pavers
f	Grade, drainage repairs front, rear yards				640	640	700				9% increase
g	Landscape repairs	allowance			1200	1200	1200				no change
								20820	25477		
Section 2	**Foundation Shoring**										
a	Interior foundation piers	8 each in zone				12280					
	footings		8	185	1480		1805				22% increase
	helical piles		6	1350	10800		10800				no change
b	Front Foundation Wall	14 lf in zone				4752					
	footings		14	18	252		4050				Original error ($185) + 22% increase
	helical piles		3	1500	4500		4500				no change
c	Front Stoop Walls, Steps	14+8+8 lf				7725					
	footings	steps only	3	175	525		640.5				22% increase
	helical piles		6	1200	7200		7200				no change
d	Cellar Foundation Wall	14 lf				4500					
	footings		extg								
	helical piles		3	1500	4500		10500				Add 4 h/piles
e	Rear Foundation Wall					3600					
	footings	14 lf	extg								
	helical piles		3	1200	3600		6000	32857	45496		Add 2 h/piles
Section 3	**Re-build Foundations, Piers**										
a	Front Steps	65 lf	65	15	975	975	1189.5				22% increase
b	4 Interior Piers	4 ea	4	335	1340	1340	3269.6				4 Additional piers + 22% increase
c	Cumulative Foundation Voids	misc			700	700	854				22% increase
								3015	5313		
Section 4	**Main Floor Frame Repairs, Leveling**										
a	Laser level study		6	225	1350		1471.5				9% rate increase
b	Crib, bracing, jacks				850		994.5				17% rate increase
c	Leveling and bracing		24	35	840		1008				$7/hr rate increase
d	Reinforcement	mil 240	8	35	520		616.8				$7/hr rate increase + 9% increase
e	6 new piers		6	450	2700		2889				9% rate increase
								6260	6980		

Section 5	**Roof Frame Repairs**										
	a Ridge Bracing, joining	mtl	450	12	35	870		994.5			9% increase + $7/hr rate increase
	b Rafter Cross-ties	mtl	200	6	35	410		470			9% increase + $7/hr rate increase
	c Rafter Tie-downs	mtl	780	15	35	1305		1480.2			9% increase + $7/hr rate increase
	d Shingle damage/repairs		12 sq	12	180	2160		2736			26% matl + labor increase
	e Venting, repairs		90 lf	90	12	1080		1360.8			26% matl + labor increase
									5825	7042	
Section 6	**Interior Restoration**										
	a Door, C/O repairs		8 units	24	45	1080		1177.2			$4/hr rate increase
	b Millwork removal, reset ref. floor leveling		240 lf	18	45	810		882			$4/hr rate increase
	c Wall, ceiling repairs - plaster, GWB			80	38	3040		3313.6			9% rate increase
			materials					125			add materials, previous error
	d Hardware adjustments		12 units	18	45	810		882			$4/hr rate increase
	e Painting, cleaning			72	28	2016		2197.44			9% rate increase
	f Floor finishes		1850 sf	1850	4.75	8788		9897.5			$0.60 rate increase
	g Final Cleaning			3200	1.15	3680		4011.2			9% increase
	h Trim Mtl					950		1111.6			17% increase
									21174	23597	
Section 7	**General Conditions**										
	a Design, Drawings - engineering		24 hr S/E	24	160	3840		3960			$5/hr rate increase
	b Building Permits					400		400			no change
	c Sanitary Facilities			3	150	450		555			$35/mo. rate increase
	d Debris - hauling, disposal		loads	4	350	1400		2135			1 added load + 22% rate increase
	e Transportation		10 weeks	10	180	1800		2106			17% rate increase
	f Tools & Equipment			10	120	1200		1404			17% rate increase
	g Communication			3	65	195		228.15			17% rate increase
	h Site Supervision		12 wk, 38	456	36	16416		19152			$6/hr rate increase
	i General Labor		10 weeks	8	25	200		2180			Previous error: 8hr/wk x 10 wk + 9% rate+
									25901	32120	Rev 1
	SUBTOTAL									115852	146024
	CONTRACTORS FEES										
	GENERAL OVERHEAD						15%			17378	21904
	PROFIT						10%			11585	14602
	CONTINGENCY						3%			2896	3651
	TOTAL COST ESTIMATE									147711	186181

STATE OF SOUTH CAROLINA

COUNTY OF YORK

IN THE COURT OF COMMON PLEAS

Civil Action No. 12-CP-46-3928

LUCILLE H. RAY,

Plaintiff,

vs.

CITY OF ROCK HILL, SOUTH CAROLINA, A Municipal Corporation, and SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION, an agency Of the State of South Carolina,

Defendants.

CORRECTION TO AFFIDAVIT OF MICHAEL H. LEONARD

Plaintiff files the following correction to the Affidavit of Michael H. Leonard, and shows as follows:

1. Michael H. Leonard's affidavit was filed and served on opposing counsel on May 30, 2014.

2. The affidavit has the correct Civil Action Number. The caption, however, is in error. It should read Lucille H. Ray, Plaintiff v. City of Rock Hill, a Municipal Corporation, and the South Carolina Department of Transportation, an agency of the State of South Carolina Defendants.

3. The affidavit should remain, in all respects, the same.

JAMES, McELROY & DIEHL, P.A.

By: _____

Richard B. Fennell
S.C. Bar No. 10467
rfennell@jmdlaw.com
600 South College Street
Charlotte, NC 28202
(704) 372-9870
(704) 333-5508 (facsimile)

Dated: June 13, 2014
Charlotte, North Carolina

STATE OF SOUTH CAROLINA COUNTY OF YORK Lucille H. Ray, Plaintiff, vs. City of Rock Hill, South Carolina a Municipal Corporation, and South Carolina Department of Transportation, an agency of the State of South Carolina, Defendants.	IN THE COURT OF COMMON PLEAS SIXTEENTH JUDICIAL CIRCUIT **AFFIDAVIT OF JAMES G. BAGLEY, JR.** C.A. No. 12-CP-46-3928

PERSONALLY APPEARED before me James G. Bagley, Jr. who, being duly sworn, deposes and says that:

1. He is a Professional Engineer employed by the City of Rock Hill ("City") as Deputy City Manager. He has been employed by Rock Hill for more than 20 years.

2. As Deputy City Manager he oversees, among other departments, Utilities and Public Works for the City.

3. In his capacity as Deputy City Manager and Professional Engineer, he has personal knowledge of the matters contained herein.

4. There is drainage infrastructure located within the Watershed[1] that is owned by many different public entities and private landowners.

[1] Capitalized terms not otherwise defined herein shall have the meanings set forth in the Memorandum in Support of City's Motion for Summary Judgment.

5. Based on the City's review and analysis of the Watershed, the City approximates that the surface area within the Watershed is owned as follows: the City owns 8%; SCDOT owns 8.6%; Winthrop University owns 6.9%; Rock Hill School District owns 11%; private landowners own 62%; and public alleys comprise 3.4%. (An annotated GIS map showing the Watershed is attached hereto as Exhibit A.)

6. The City does not own, maintain or assume control over stormwater infrastructure unless the infrastructure was constructed by the City; or was dedicated by a landowner and accepted by the City; or the City was granted fee simple title or a right of way by the landowner.

7. The Subject Pipe is not located on City-owned property or within a City right-of-way.

8. The Subject Pipe was not dedicated to the City and the City has not accepted any ownership or control over the Subject Pipe.

9. A four-inch diameter pipe ("Tap Pipe") taps into the Subject Pipe. This Tap Pipe is located directly under the Plaintiff's home.

10. Any engineering opinion as to whether the existing flow can be reasonably diverted from the Subject Pipe would first necessitate sufficient facts be developed by engineering studies, mapping, planning and analysis at a minimum as to the following:

the amount of flow through the Subject Pipe; the type, material and specifications of the rerouted infrastructure; the path of the rerouted infrastructure, the existing ownership and cost to acquire any necessary private property through the rerouted path, conflict avoidance with existing infrastructure (e.g., College Avenue has extensive existing infrastructure at multiple depths); the location, depth and adequacy of downstream infrastructure.

Further, the Affiant sayeth naught.

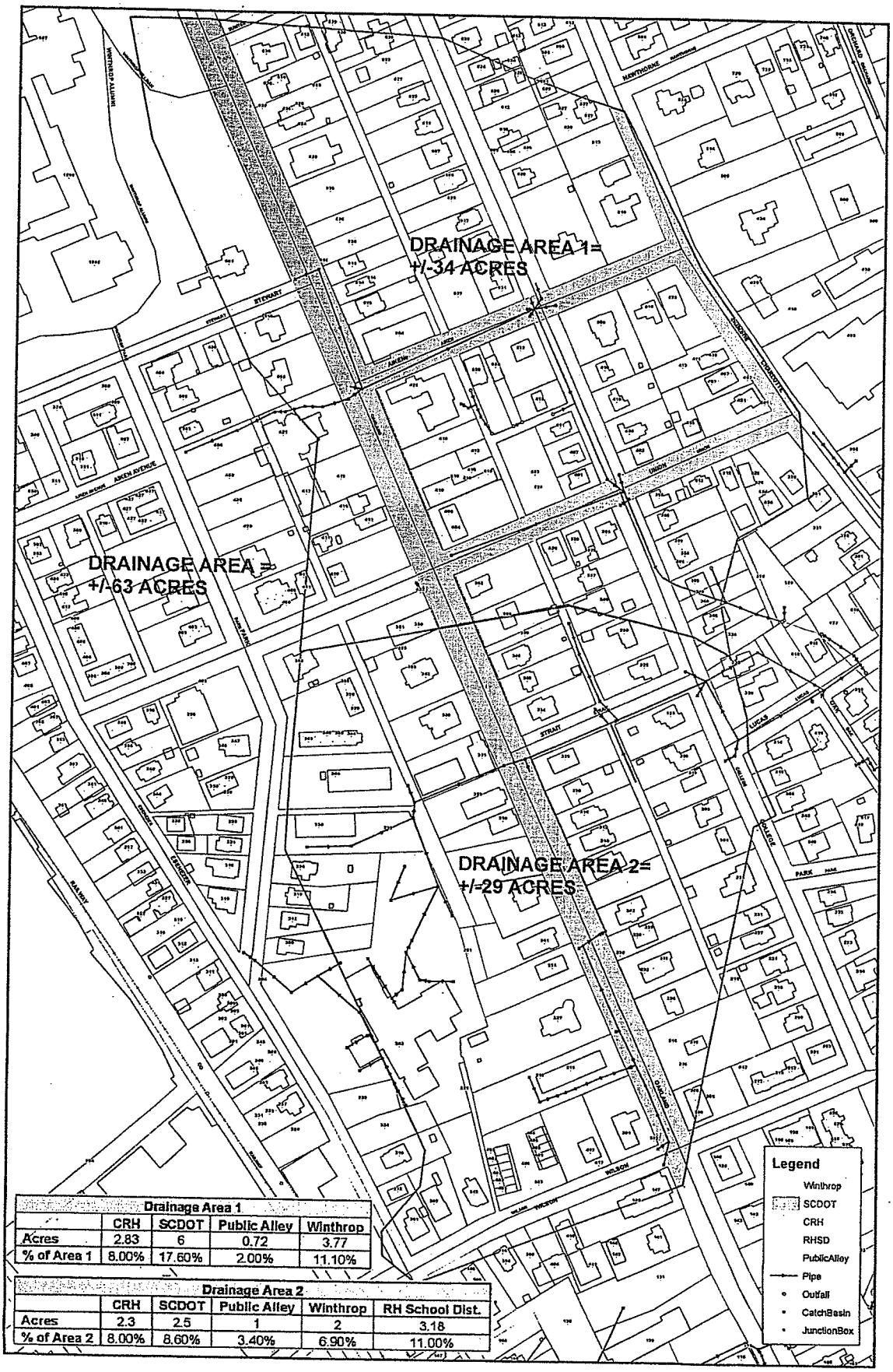
Date: 6/18/14

James G. Bagley, Jr., P.E.
Deputy City Manager
City of Rock Hill, SC

Sworn to before me this 18th day of June, 2014.

Notary Public for South Carolina
My Commission Expires: 8/23/21

Exhibit A



Drainage Area 1				
	CRH	SCDOT	Public Alley	Winthrop
Acres	2.83	6	0.72	3.77
% of Area 1	8.00%	17.60%	2.00%	11.10%

Drainage Area 2					
	CRH	SCDOT	Public Alley	Winthrop	RH School Dist.
Acres	2.3	2.5	1	2	3.18
% of Area 2	8.00%	8.60%	3.40%	6.90%	11.00%

STATE OF SOUTH CAROLINA	)	
	)	IN THE COURT OF COMMON PLEAS
COUNTY OF YORK	)	
	)	
Lucille H. Ray,	)	
	)	
Plaintiff,	)	**AFFIDAVIT OF LUCILLE RAY**
	)	
vs.	)	
	)	C.A. No. 2014 CP-46-4100
City of Rock Hill, South Carolina, a Municipal Corporation,	)	
	)	
Defendant.	)	

FILED-RECEIVED
2015 SEP 17 PM 3:18
DAVID HAMILTON
C.C.C.P. & G.S.
YORK COUNTY, SC

Lucille Ray, being duly sworn, deposes and says:

1. I am over the age of 18, am confident to testify to these matters, and make this affidavit on personal knowledge.

2. I own a house and lot located at 330 College Avenue in Rock Hill. I bought it in 1985.

3. I previously submitted an affidavit in this case dated May 29, 2014. I have reviewed the affidavit, and reaffirm its accuracy.

4. I am familiar with the order partially granting the City's motion for summary judgment in this case.

5. I have also reviewed the City's motion for summary judgment. I believe it claims that I cannot present evidence occurring within the statutory limitations period prior to the filing of the complaint.

6. Most of the damage inside the house began in the 2011-2012 time period. It has accelerated over the last couple of years. The number and severity of the cracks in the walls has increased, and my floors are sloping.

This 9 day of September, 2015.

Lucille Ray

Sworn to and subscribed before me
this 9 day of September, 2015.

Notary Public, Christian S. Courtney
My commission expires: 07/01/2016

CHRISTIAN S. COURTNEY
NOTARY
PUBLIC
MECKLENBURG COUNTY, N.C.

STATE OF SOUTH CAROLINA

COUNTY OF YORK

IN THE COURT OF COMMON PLEAS

Civil Action No. 12-CP-46-3928

Lucille H. Ray,

Plaintiff,

v.

City of Rock Hill, South Carolina, a Municipal Corporation, and South Carolina Department of Transportation, an agency of the State of South Carolina,

Defendants.

AFFIDAVIT OF LUCILLE RAY

FILED-RECEIVED
2014 MAY 29 PM 3:34
DAVID HAMILTON
C.C.C.P.&G.S.
YORK COUNTY, SC

Lucille Ray, being duly sworn, deposes and says:

1. I am over the age of 18, am competent to testify to these matters, and make this affidavit on personal knowledge.

2. I own a house and lot located at 330 College Avenue in Rock Hill. I bought it in 1985.

3. I have attached a photos of the house, which are respectively designated respectively as Exhibits A-1, A-2, A-3, and A-4.

4. I have also attached the survey of the property which was available when I bought the house as Exhibit B. It shows what I thought I was purchasing.

5. My house is experiencing significant problems. I hired an engineer in 2012 in order to help me investigate what was going on. His name is Mike Leonard. After investigating, he told me that there was a large pipe running from a drain on College Avenue through my yard and under my house. It is fed by several other pipes which channel stormwater from the surrounding area beneath my home to a spot in the

#1 LHR

rear yard. The water is then diverted through another pipe to Lucas Street. A map showing the stormwater pipes in the area of my house is attached as Exhibit C. Mike's original report dated September 4, 2012 and supplemental Project Memo dated November 30, 2012 report are attached respectively as Exhibits D-1 and D-2.

6. I did not know about the pipes before I bought my house. I did not know that the pipe ran under my house with any degree of certainty until the City confirmed it for me in late May 2011. I know that Mike wrote in some notes that I said I knew it in 2008. He was wrong, and has acknowledged as much. The City took a video in 2008, but would never tell me what it revealed.

7. My house did show some settlement over the years. For example, I did some roof shoring and had problems in the yard in the 1990s. I did not know about the pipe. There was always another explanation for the problems, and for a while, I didn't worry.

8. When damage started to get worse, I began to suspect that there was something beneath the house. I asked the City about it but was told many different things over the course of a few years. In April 2011 they admitted a pipe was on my property but told me definitively that it did not run under the house.

9. When it became obvious that the pipe ran beneath the house, I asked that they simply move it, or reroute the water. This took place in a face to face conversation. I was told plainly that "the pipe will never be moved." This was in 2011. As stated, I hired Mike when I realized I wasn't going to get anywhere with the City.

10. Mike asked for stormwater maps (in 2012) from the City in order to determine what was going on with my property. We finally received a map, but it turned out to be inaccurate. It is attached as Exhibit E.

#2 BKR

11. The City's position on their control of the pipe has been schizophrenic. My lawyer received the letter Defendant attached to its motion disavowing ownership of the pipe. As indicated above they told me that it had to stay where it was. I don't know how they get to have it both ways. Moreover, in late 2012, the City was performing work in front of my house and disconnected All of the feeder pipes from the one on my property. It was at that point that we knew for sure exactly where the water was coming from that flowed under my house. The pipes were old, clay pipes which were in bad shape. My lawyer wrote to them and told them not to reconnect. That letter is attached as Exhibit F. They did it anyway, and have made it plain that they don't think there is anything I can do about it.

12. I have since learned that the City has maps that show the pipe as part of their stormwater improvements that date back to 1941. One of their maps is attached as Exhibit G. We did not get it until I had to sue the City. They did not give it to me or Mike prior to that point. It shows that the direction of the pipe was altered, and that part of its system involved "abandoning" part of the pipe in the rear of my property. They have never abandoned the pipe that runs under my house, and continue to use it to manage a large amount of water which flows on their streets.

13. When I bought the property, I did not know that other parties were using it to help manage stormwater. I had no idea that the City would take the position that it could reconnect its pipes to this one even after I told them not to. I am involved in litigation with them that doesn't look like will go away anytime soon. I believe that a basic right that would go along with my ownership of this property is the right to decide that water collected from the road system of the City and State should not go under my house if I don't want it to, and that any subsequent purchaser will feel the same way.

#3 MR

14. On December 26, 2012, there was a significant rain in the Rock Hill area. At that point in time, I was still trying to determine the extent of the water that was feeding into the stormwater pipe running under my house. I walked up Strait Street to its intersection with Oakland Avenue. The southwest side of Oakland Avenue was flooded. A South Carolina Department of Transportation (hereinafter "SCDOT") vehicle was parked on the street, and I spoke with that employee, whose name I do not know. The employee confirmed that he was doing maintenance related to drainage, and that SCDOT owned and was responsible for Oakland Avenue roadway and storm drain maintenance on Oakland Avenue. On that date I was personally able to observe the water going into those storm drains, and I and my engineer Mike Leonard have determined that the water from the Oakland Avenue drains run into pipes that run downhill along Strait Street, and it ends up going into the stormwater pipe that runs directly under my house.

This 29th day of May, 2014.

Lucille Ray

Sworn to and subscribed before me
this 29th day of May, 2014.

Notary Public, South Carolina
My commission expires: 2/16/21

#4

330 Coll ne Avenue
Exit Street View
© 2014 Google
Report a problem
Google earth
EXHIBIT
A

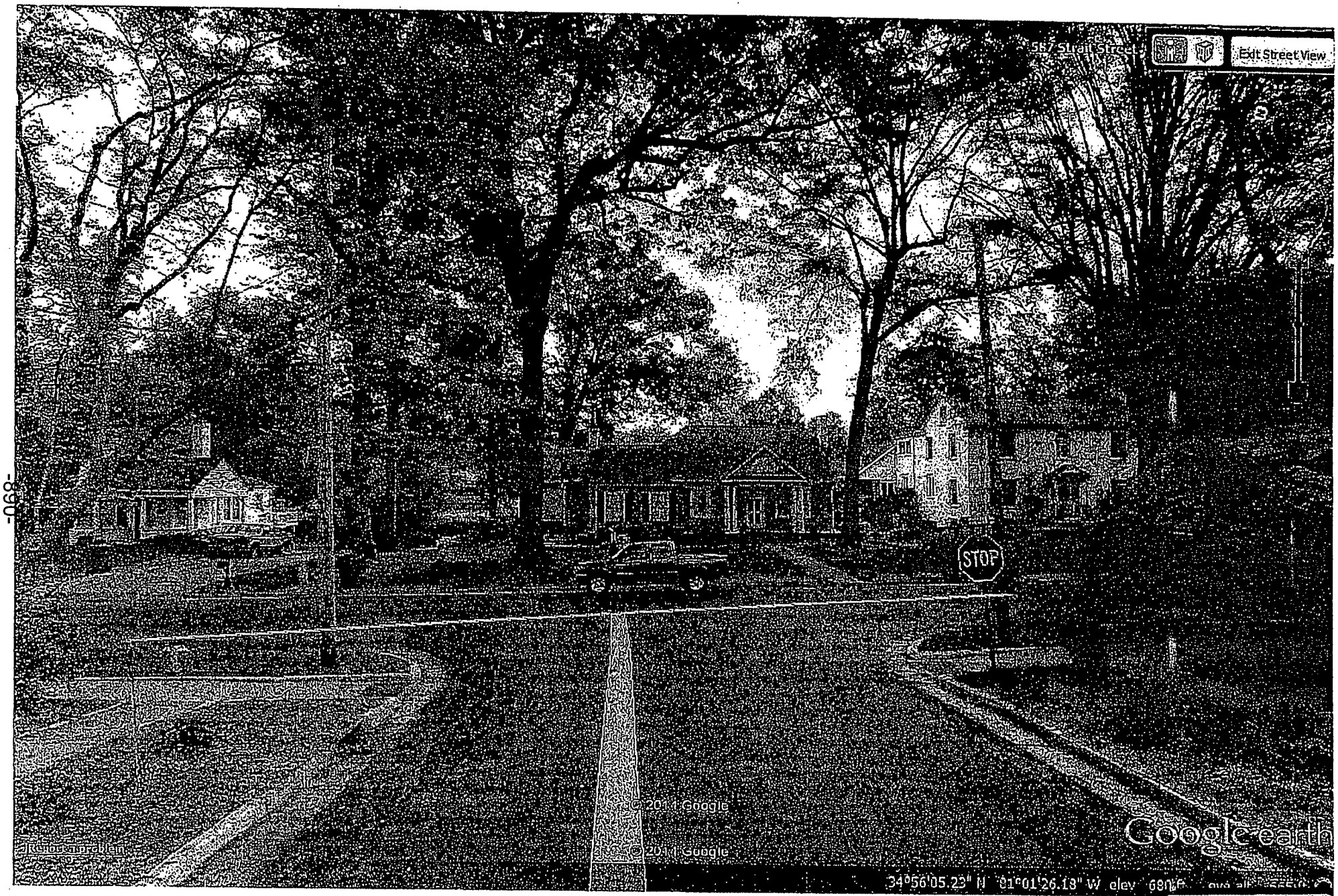


EXHIBIT
A-2

-868-

330 College Ave, Rock Hill, SC 29730, USA
College Ave
Oak Dr
Lucas St
Charlotte Ave
321
746
© 2014 Google
Google earth
1994
Image Date: 11/9/2013 34°56'07.66" N 81°01'26.53" W elev 656 ft eye alt 1731 ft

EXHIBIT
A-3

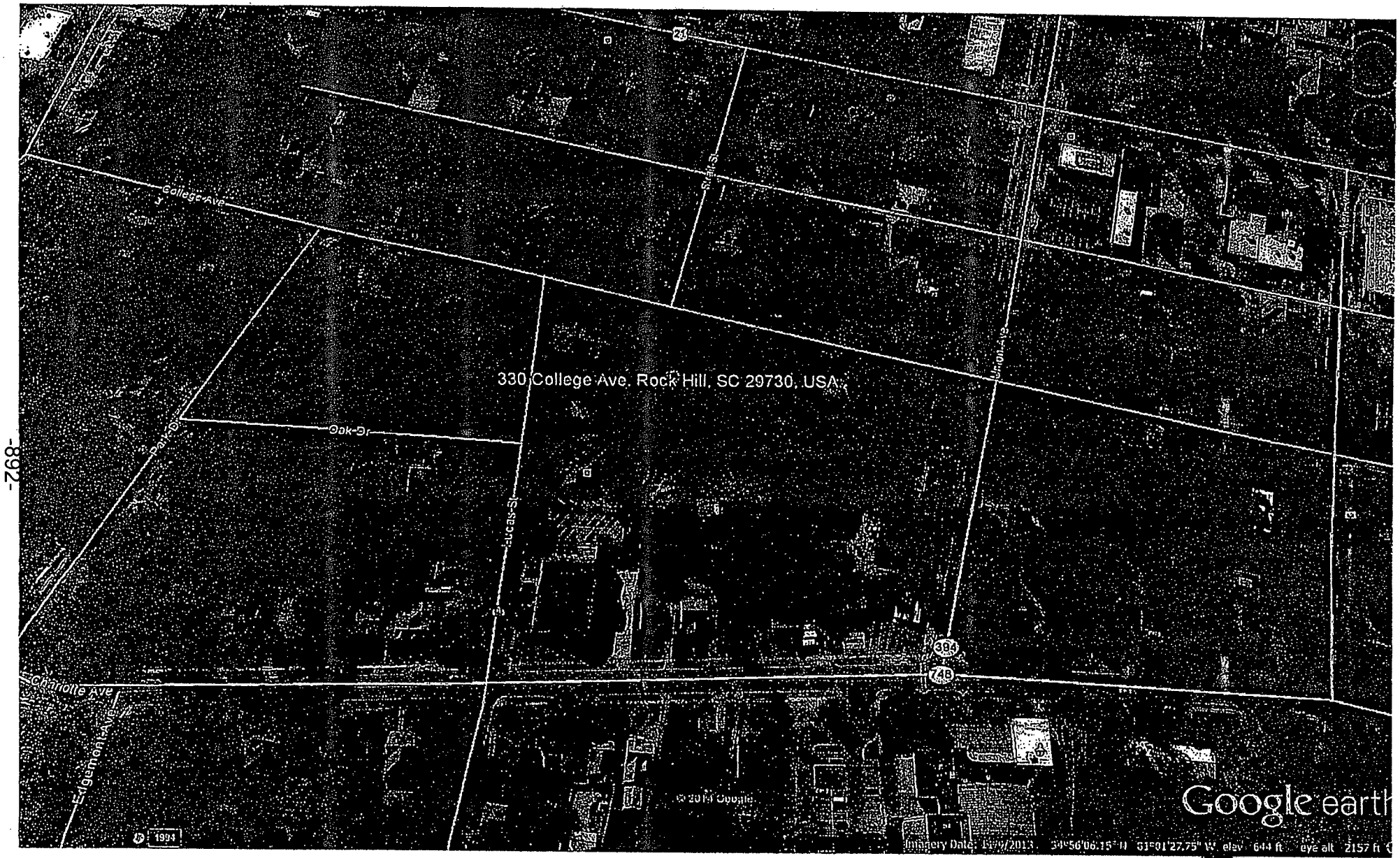
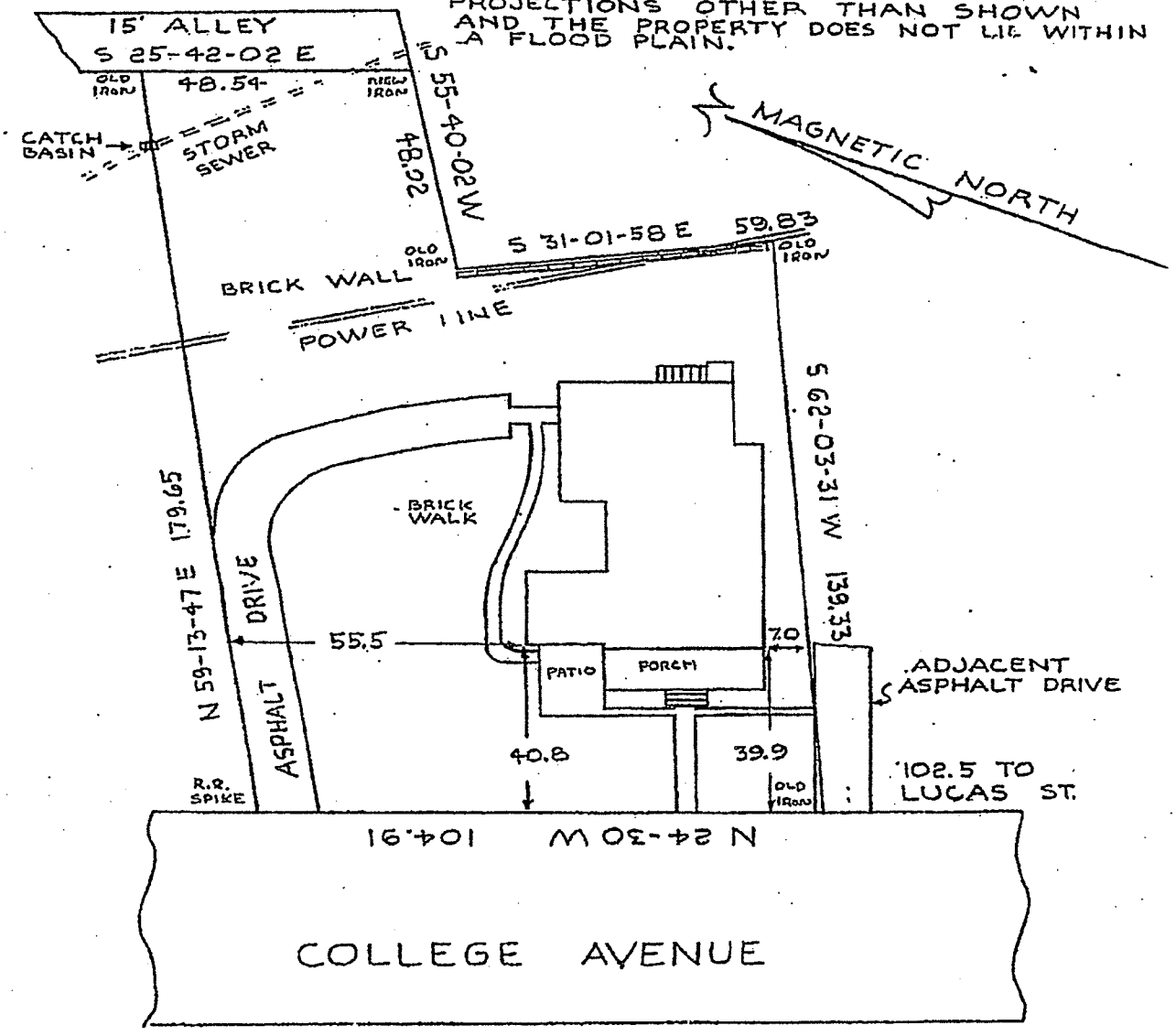

College Ave
Oak Dr
Oak Dr
Cherry St
Cherry St
330 College Ave, Rock Hill, SC 29730, USA
Charlotte Ave
Edgemont Ave
Google earth

EXHIBIT
A-4

THIS BEING SHOWN AS LOT 10 AND PART OF 11 & 12 IN BLOCK 28 OF MAP OF PROPERTY OF ROCK HILL BUGGY CO., MADE BY J.L. STACY AND DATED APRIL, 1924. RECORDED IN PLAT BOOK 2, PAGE 200.

THIS IS TO CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY AND THAT THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN AND THE PROPERTY DOES NOT LIE WITHIN A FLOOD PLAIN.



MAP OF PROPERTY OF
LUCILLE RAY
330 COLLEGE AVENUE
ROCK HILL, S.C.

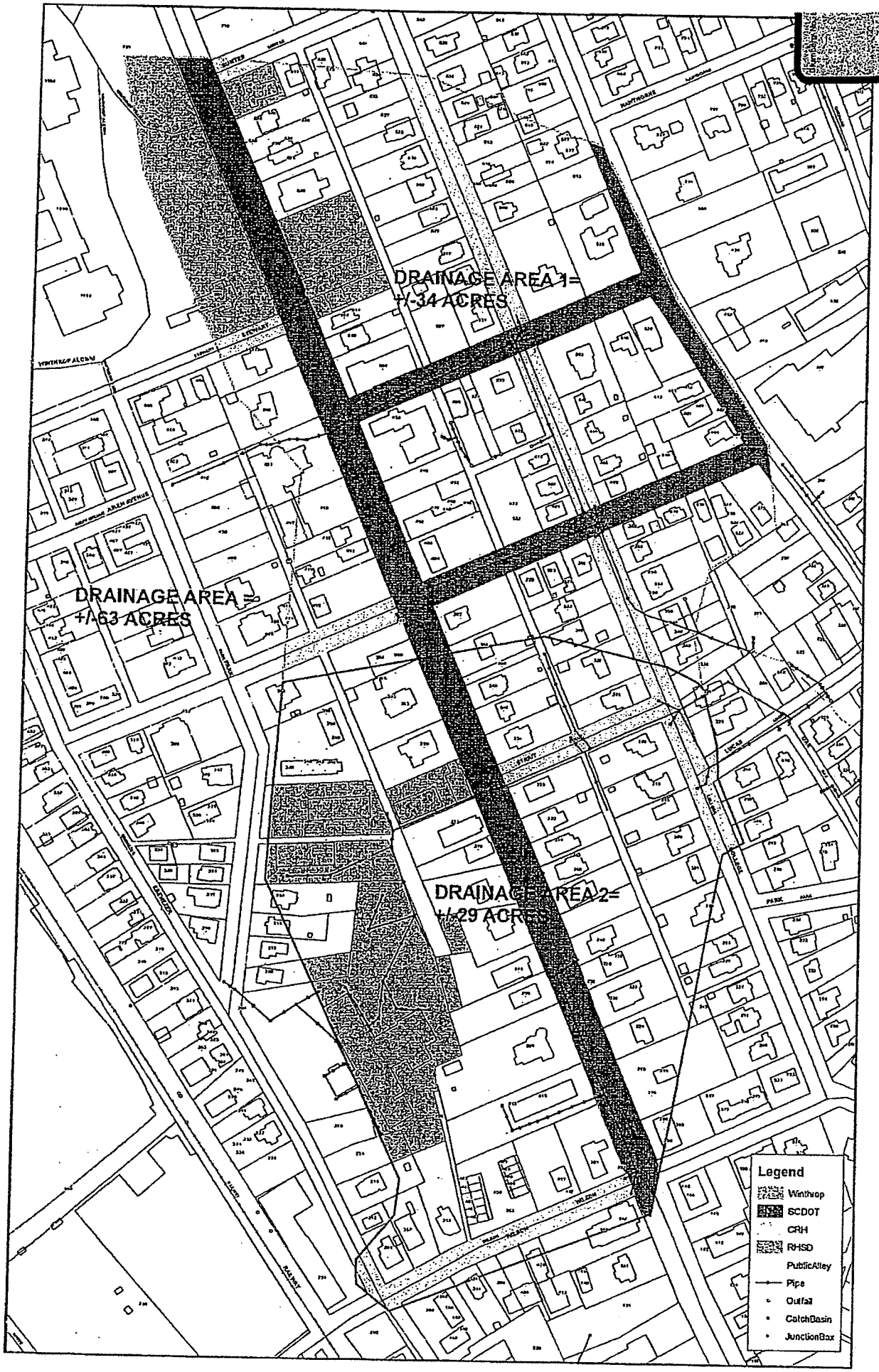
MAY 23, 1985

SCALE 1" = 30'

0 30 60 90

W.C. WHITE R.L.S. #1033
ROCK HILL S.C.

EXHIBIT B


DRAINAGE AREA 1=
+/-34 ACRES
DRAINAGE AREA 2=
+/-29 ACRES
DRAINAGE AREA 3=
+/-63 ACRES
Legend
Winthrop
SCDOT
CRH
RHSD
PublicAlley
Pipe
Outfall
CatchBasin
JunctionBox

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

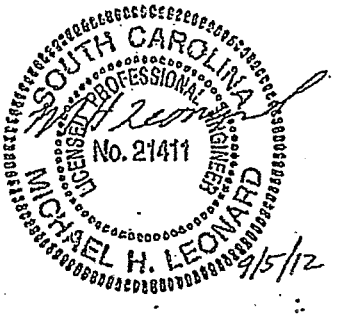
ENGINEERING EVALUATION

STRUCTURAL DAMAGES AND RECOMMENDED REPAIRS

Residence of:

Ms. Lucille Ray
330 College Ave
Rock Hill, SC

MHLCE Project # 12E9555.F
Date: ***September 5, 2012***
By: ***Michael H. Leonard, PE***



447 South Sharon Amity Road, Suite 201 Charlotte, N.C. 28211 Office (704) 333-2221 mhleonardengineering.com

EXHIBIT
D-1

RAY000461

1. Purpose

The purposes of this study include the following:

- To provide an engineering assessment of private residence to determine cause(s) of progressive structural damages.
- To determine the most feasible structural repairs of the dwelling and subgrade conditions now affecting the foundation.
- To estimate the costs of structural repairs and other remedial work.
- To determine the risks of long-term, progressive damages if remedial work is delayed or not done.

2. Timeline Summary

Ms. Lucille Ray has owned the home at 330 College Ave, Rock Hill, South Carolina since 1985. She has lived there and maintained the single-family residence continuously for 27 years. Over that time, various events or findings have led her to launch this investigation.

This is a timeline summary based on information provided:

- In about1992, while doing yard work in the rear yard, a gardener stepped into a hole up to his waist within 10 feet of the rear house foundation wall. It had developed suddenly. It was filled and considered surface erosion at that time.
- In 1995, Ms. Ray first found bending in her roof frame while in her attic and proceeded to add bracing in an attempt to stop it.
- In 2001 she renovated the home and added a kitchen, garage, and covered porch on the left side. She noticed unexplained settling of the front patio during construction, requiring additional work and expense.
- In 2007, she noticed separation in her roof frame between adjacent slopes and proceeded to add cross-bracing at the ridge level in an attempt to stop it.
- In 2008, she first noticed that her front entry steps were sinking. At that time she tried to determine potential causes and found that a city storm-water pipe extended (from public city street in front of her home) directly under the front entry of the dwelling. She requested City assistance to review the concern and after multiple attempts, she was finally put in contact with Rock Hill's Mr. Jason Tinkler. A pipeline study was done without shared results. After repeated calls over the next few months (to Tinkler), she was told that the video tape had been lost. He also told her the front steps were simply settling.
- In 2011, after repeated calls to the City, the camera study was done again on June 2 and 3, 2011. Ms. Ray watched the study and video results as the City confirmed that the storm water line extended directly under her home, although they never did excavate to find the rear-yard manhole found during video work. Tinkler informed her then that the pipeline was not a problem but that he would get back to her about it.
- Later in June 2011, Ms. Ray called Tinkler to discuss street flooding but he never called her back. Finally, in August 2011, she discovered that Mr. Tinkler did not work for the City any longer. No other City official has ever contacted Ms. Ray about the known pipeline problem despite repeated calls from her.
- In early 2012, the lack of responses and progress from the City led her to start an owner-investigation at her expense.

3. Executive Summary

On March 20, 2012, Ms. Lucille Ray contacted M.H. Leonard Consulting Engineers, PA to request engineering assistance regarding the problem. She shared her findings and a brief history of the property. We have proceeded to study the dwelling, the site, and the soil conditions around and under the home. We have also conducted simple water flow tests of the storm water piping that extends from Oakland Ave, along Strait Street, to College Avenue, and over to Lucas Street after passing directly under Ms. Ray's house.

After 3 site inspections, a geotechnical evaluation, and limited responses from City officials, this report will summarize our findings.

The investigation has provided evidence of the following facts and opinions:

1. There is a pattern of structural damage in the subject dwelling frame and foundation caused by foundation movement at ground level. These damages appear progressive and we consider them active.
2. An underground 24-inch public storm water pipe extends from the street in front of the home in a line directly under the specific zone of structural damages. There is evidence of multiple foundation piers dropping and leaning along the pipeline route.
3. The public storm water system records for this neighborhood have not been available despite requests to the City of Rock Hill. Those may not be accurate based on one small map obtained by the owner prior to our investigation. That does not show a public pipe on the subject site. *See Attachment #2.* Regardless, the old terra-cotta clay pipe is there and confirmed. It appears aged with cracks and is probably leaking. Those conditions are verified by the videos provided.
4. The storm water system serving this and surrounding lots appears to include a substantial area based on informal water testing completed. We determined that catch basins on Oakland Avenue and beyond are part of the network upstream from the pipe extending under the home. Unconfirmed estimates of the watershed size are 14 acres or more. The flow from that large an area is substantial and increases our concerns with the pipe capacity, flow leakage, and lack of serviceability (being under a private residence).
5. A geotechnical evaluation of on-site soil along the pipe route and under the home confirms that foundation piers and the front stoop, steps, and sidewalk have settled as the result of soft pipe fill soil. Further testing would be needed along the entire pipe route to determine if there are wash outs and voids around the pipe.
6. There are current and long-term risks that pipe failure will lead to soil erosion and substantial structural damages. If pipe failure is rapid enough, structural failure (sinking and partial collapse) is likely.
7. Public utilities require routine maintenance and access, which is why they typically align in public right-of-ways or dedicated easements on private property. Apparently this storm water pipe is not even known or recorded in public documents. The less known about the pipe and its maintenance record, the higher the risks that it is failing now.

Three options were considered to eliminate risks of further failure and to repair structural damages to date. In the best interests of Ms. Ray as property owner, the most feasible remedy includes the following:

a. re-route of the storm water pipe away from her property (requires independent storm water and hydrology study as City improvement),
b. abandonment of the existing storm pipe and filling it with a flowable slurry grout,
c. structural shoring of the existing foundation in pipe trench zone,
d. framing repairs to floor and roof systems,
e. replacement of front stoop, including steps and sidewalk,
f. interior and exterior repairs caused by structural settlement to date,
g. all general conditions, cleaning, building permits, and construction management.

We estimated the costs of those repairs based on local, prevailing rates of the region. That study was based on our experience as a General Contractor in new construction, renovations, and structural repairs.

The estimated cost to complete the remedial work described is

$147,711

Although there are alternative methods to shore the dwelling, the costs may vary by 2.5%, based on experience with other structural repair projects of this type.

Time is a critical factor moving forward.

⇒ If the existing pipe develops further leaks affecting soil conditions or causing subgrade damages below the home, the extent of structural repairs will rise substantially.

⇒ Although the house is nearly 90 years old, structural damages have developed since 1985 (estimated based on owner observations and existing site inspection). The damage appears to be active and risks are high that it is increasing at an unknown rate.

⇒ Based on site observations now, we believe the pattern of structural distress is relatively young. Based on video evidence of the storm water pipe in place, risks are high that it will degrade and eventually fail. Between now and then, leaking and effects of further pipe degradation will further damage the house foundation and frame.

The storm water design to re-route the system around this property will require expedited attention from public utilities. Since planning of that type utility project typically takes more than 12 months, risks of structural damage is substantial enough that we recommend a temporary pipe repair and re-lining of the 24-inch clay pipe as soon as possible.

The costs of temporary pipe repairs to reduce risks of short-term structural damages to the dwelling are NOT included in this report.

4. Property and Project History

Ms. Lucille Ray owns the current properties at 330 and 340 College Ave, Rock Hill, South Carolina. The 330 (subject) site includes a one-story, single-family home, including a 2-car garage, partial rear daylight basement, and two covered porch spaces. She purchased the property in 1985, approximately 27 years prior to the date of this report. See *Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC dated May 23, 1985.*

The house is built with a masonry foundation, conventional wall, floor, and roof framing, and an asphalt/fiberglass shingle roof. The exterior walls are clad in wood and vinyl siding with a pier and curtain foundation wall, 8-inch all-brick foundation, and CMU foundation. The house includes a front masonry covered stoop and a left-rear covered porch.

Ms. Ray renovated the home in approximately 2001 with a kitchen, garage, and left-rear porch addition. Those areas bear on new foundation systems independently of the main, original home. None of those areas are within the concerns of this report.

In about 2008, Ms. Ray first observed evidence of structural distress in her home. The ceiling and roof frames visible in the attic had separated. She had braces added to prevent further separation. Ms. Ray also recalls similar roof frame repairs were necessary in 1995. She also indicated that a man stepped into a shallow hole in her back yard in about 1985 while helping her – sinking up to his waist. At that time, she did not suspect structural or soil concerns. She did recall the position of the ground hole noted within this report.

On March 20, 2012, Ms. Ray contacted M.H. Leonard Consulting Engineers, PA to evaluate the cause and extent of structural damages further. Since then, this firm has progressed as itemized below:

April 4, 2012
- Initial site review – field notes, investigation plan

April to June 2012
- City of Rock Hill, requests for storm water system mapping, information – log of inquiries
- June 6 – DVD review of pipe camera studies through Ms. Ray

June to July 2012
- Plan geotechnical study, quotes – CESI Ed Cummings, PE
- July 6 – MHLCE comprehensive site study of structure, damages, water hose test in storm pipes

August 2012
- CESI/Cummings geotechnical study
- CESI and MHLCE pipeline location under house - confirmation

5. Findings of Engineering Inspections

House Frame and Foundation:
Our investigation has included a structural inspection of the house frame and foundation, finding that there are patterns of distress caused by active structural movement. The roof frame has separated in two locations, the main level floor system is sloping where foundation piers have dropped from original support positions, and a geotechnical study has verified that the foundation movement has been caused by the excavation zone along the public storm water pipe route.

We observed the following specific damages:
Roof Frame Damages:
- ⇒ Separation of ridge and rafters at ridge beam spanning front-rear near front ridge spanning left-right. A metal cap was installed there to span over a 2-inch gap.
- ⇒ Separation of ceiling joists at ceiling girder beam – about 1¼ inch near middle of original house frame.

Interior Wall/Floor Conditions:

⇒ Floor distortion at front living room, center breakfast room, center hall. Slope varies from ¼ to 5/8 inch in 4 feet along axis extended to front entry door.
⇒ Corresponding wall and door distortion with cased opening headers or jambs ¼ to ¾ inch out of level and/or ½ to 5/8 inch out of plumb.
⇒ Stress cracking on hall walls and baseboard trim.
⇒ Stress cracking with shear pattern in center left bedroom, front wall.
⇒ Master bath/bedroom area – garden tub deck out of level with separation at floor.
⇒ Front door out of plumb/square.

Exterior Damages:

⇒ Front stoop and steps with masonry shear cracking. Front step dropping/settlement ¾ to 1¼ inches with shear zone near middle.
⇒ Front sidewalk – settlement and tilt to left side near front steps.
⇒ Rear yard open hole, approximately 14 inches deep near centerline of known storm-water pipe location.

Foundation Damages:

⇒ Miscellaneous stress cracks in front foundation wall.
⇒ 7 interior piers with separation at top or leaning from plumb.
⇒ 4 interior piers that have been shimmed with wood shims more than 1 inch in depth (multiple re-shimming).

The laundry cellar (forward of rear basement area) includes a slab elevated above the basement level, crawl space, and adjacent furnace cellar. We estimate that slab was used to cap over the known storm water line that appears to be within 32 inches of the top of slab. The pipe depth and clearances are only estimated except those verified during the geotechnical evaluation.

Storm Water System:

We studied a pipeline video camera recording obtained by Ms. Ray in 2008 and determined that 1 of the 3 segments of that recording were of the subject pipeline. The recording revealed that the 24-inch terra-cotta clay pipe is old with random stress cracking, joining a manhole directly behind Ms. Ray's home where a 24-inch RCP pipe extends further East and toward the right rear of her property and beyond.

The City of Rock Hill has denied our requests for access or copies of the public storm-water utility information regarding this location on 3 occasions (attempts logged). The only storm water map we were able to obtain in this study was provided by Ms. Ray (*Attachment #2: City of Rock Hill, Department of Planning & Development, dated 09 Dec 1998*). That map does not show the pipe that extends under 330 College Ave or across to Lucas St.

It does not reflect other pipe routes and pipe sizes observed during this study.

Ms. Ray also owns the property at 340 College Avenue (immediately west of the subject site). The map shows a 10-inch diameter pipe extending diagonally across and under that dwelling. In fact, the pipe is 30-inch dia clay with a partially collapsed catch basin in the rear yard of that site. There is no doubt that it does extend under the northeast corner (rear left) of that structure. *The effects and condition of this storm-water pipe line are not part of this study.*

Geotechnical Evaluation:

Concord Engineering Services Incorporated (CESI) performed a geotechnical evaluation at the site at our request. Mr. Ed Cummings, PE and Mr. Harold Eaves met us on site on August 2, 2012. Their work included confirmation of the existing storm water line under the house, locating and documentation of the rear yard manhole, effects of soil settlement at the front stoop, and the soil investigation under the home. Their findings are documented in a report (*Attachment #3: CESI Geotechnical Engineering Evaluation, Ray Residence, 330 College Ave, Rock Hill SC, dated August 8, 2012*).

6. Engineering Summary and Opinions

Based on our site study and the accompanying geotechnical evaluation, evidence indicates that the residential dwelling is in an active state of structural settlement caused by an active public storm water terra cotta pipe buried directly below the home. The 24-inch diameter pipe system is confirmed there and soil conditions in the trench in which it was placed are affecting the foundation elements of the structure. Movement of piers and other foundation elements is causing floor distortion, wall and door distortion, roof frame separation, and settlement of steps, patios, and other functional features. These damages are active and appear progressive based on owner input and historical information back to 1985. The causes of structural damages must be addressed soon to limit the magnitude of damage and costs to repair and restore the dwelling.

The storm pipe under the house serves a significant surface area by current estimates. However, City information has not been available for confirmation of actual drainage system fixtures and the general watershed area. By a limited topographical study, we have estimated that the subject 24-inch pipe is handling flow from up to 14 acres to the South of the subject property. Regardless of the flow rate, the presence of a public storm water pipe under a private residence is unusual – preventing public access for maintenance and repairs. Videos of the pipe indeed show it is old with cracking and other concerns that it may be leaking (not confirmed by this study). If it is leaking now, or in the future, the risks are substantial that it will damage the private dwelling further, eventually leading to partial catastrophic failure if certain conditions develop.

Repairs and stabilization of the building foundation must be considered soon to limit damage. Temporarily, the pipe must be maintained to control risks of leaks and related damage. An epoxy lining should be considered. Ultimately, the line must be moved or re-routed and the effects on the house foundation must be remediated to restore the structural integrity and value of the property. If not, the value and function of the home may be jeopardized – including the risk of full loss of value.

Limited responses from the City of Rock Hill seem to suggest the pipe does not belong to the City (*Attachment #4: Letter – Spencer & Spencer, Mr. Paul Dillingham to Mr. Charles S. Bradford, dated May 18, 2012*). We cannot verify ownership of the pipeline, but there is no doubt that it is not a private drain system. Since the City maintains the streets and other utilities from which the subject storm water pipe originates (recent addition of catch basins near Strait Street by City confirm this), and since the discharge and management of the water in this system are managed by the City, then it appears certain that they have overlooked a buried, old storm water pipeline that pre-dates the construction of the house on this site (estimated to be 90 years old).

7. Recommendations

Options to remedy the problem include:

A. Removal of home and foundation for adequate ROW for the pipe and to allow access and maintenance.
B. Re-route the storm water pipe away from the property, abandoning the existing pipe and repairing the dwelling and foundation. At this stage, the magnitude of damage allows this option. As the pipe continues to degrade and if soil erosion in the underground trench is compromised, this option will become less feasible.
C. Reline the pipe, maintain it as positioned, shore and repair the foundation and frame of the dwelling, and confirm the pipe capacity for further risk assessment regarding the home.

⇒ Option C is NOT recommended from a structural engineering view point. Risks remain for pipe failure despite any maintenance practices adapted. There may also be substantial legal concerns with a private structure located atop a public utility.
⇒ Option B is considered the most feasible and only option if the house remains over the current pipe section.

We recommend the following scope of repairs to re-route of the storm water pipe, cap and fill the abandoned pipe, and restore the structural integrity and function of the dwelling and foundation.

1. Excavation and cap of pipe at front and rear exterior of home footprint. Structural fill of the pipe cavity with slurry mix flowable fill.
2. Deep foundation shoring devices under house foundation walls and interior foundation piers along pipeline route, any elements within 10 feet of the trench zone. (* See alternative soil densification.)
3. Re-build foundation walls, piers, and front stoop as needed to restore function and integrity.
4. Jacking and leveling of main level floor system with reinforcement of frame girders affected by damages to date.
5. Repair and brace of roof frame, including installation of structural cross-ties and rafter tie-downs.
6. Interior repairs of plaster walls, millwork, trim, and flooring affected by structural damages to date.

The general conditions, cleaning, debris hauling, building permits, insurances, and construction management must be included. Engineering design of structural repairs will be required. A reasonable General Contractor's fee must also be included.

We have estimated the costs of this work as itemized in *Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence, 330 College Ave, Rock Hill, SC, dated August 21, 2012.*

We estimate the costs to cap and fill the pipe, to shore and repair the house foundations, and to repair the house frame is $ 147,711, including Contractor overhead and profit margins and a 2.5% contingency budget.

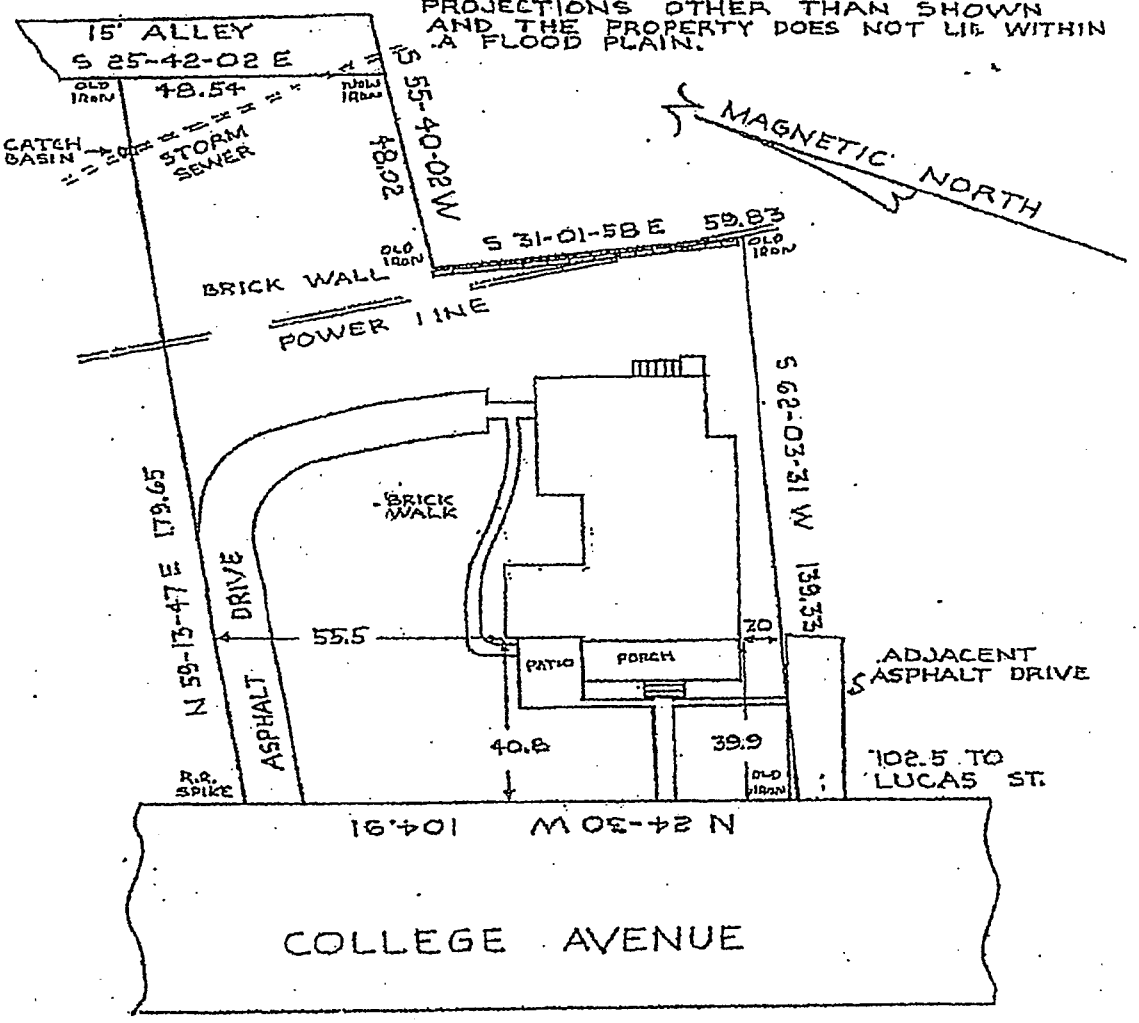
This scope and cost estimate is based on assumptions and conditions as follows:

⇒ Repair work is based on status of damages as of August 2, 2012. Time may allow more damage and add to costs.
⇒ The cost for engineering includes structural repairs and pipe capping and fill on the subject property. No other part of the existing pipe or future pipe is included.
⇒ The pipe fill is only between the existing catch basin at the front and the existing buried manhole at the rear of 330 College Ave. The existing 24-inch diameter RCP that extends between the buried manhole behind the subject house and Lucas Street is not part of this cost estimate for capping and fill.
⇒ Existing storm water piping has been re-routed and completed prior to this scope.
⇒ Costs for temporary pipe repairs, linings, and/or provisions prior to this scope are not included.
⇒ Transportation and fuel costs are included based on rates in place at the time of the estimate.
⇒ Water and electricity are provided by the owner during construction work.
⇒ A landscape repair allowance is included ($1200).

Attachment #1: W.C. White, RLS Survey of 330 College Ave, Rock Hill, SC Dated May 23, 1985

THIS BEING SHOWN AS LOT 10 AND PART OF 11 & 12 IN BLOCK 28 OF MAP OF PROPERTY OF ROCK HILL BUGGY CO., MADE BY J.L. STACY AND DATED APRIL, 1924. RECORDED IN PLAT BOOK 2, PAGE 200.

THIS IS TO CERTIFY THAT THIS IS A TRUE AND ACCURATE SURVEY AND THAT THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN AND THE PROPERTY DOES NOT LIE WITHIN A FLOOD PLAIN.



MAP OF PROPERTY OF
LUCILLE RAY
330 COLLEGE AVENUE
ROCK HILL, S.C.

MAY 23, 1985

SCALE 1" = 30'

0 30 60 90

W.C. WHITE R.L.S. #1033
ROCK HILL S.C.

RAY000469

CESI

Land Development Services

August 8, 2012

Mr. Mike Leonard P.E.
M.H. Leonard Consulting Engineers, PA
447 South Sharon Amity Road
Suite 201
Charlotte, North Carolina 28211

Reference: Geotechnical Engineering Evaluation
Ray Residence
330 College Avenue
Rock Hill, South Carolina
CESI Project Number 120755.000

Mr. Leonard:

CESI has performed a geotechnical engineering evaluation of the storm drain under the Ray Residence in Rock Hill, South Carolina. We completed these services in accordance with your verbal authorization. This report summarizes our Findings, Conclusions and Recommendations.

FINDINGS

On August 2, 2012, CESI's Geotechnical Engineer, Edward S. Cummings III P.E., met Michael Leonard P.E. and Ms. Lucille Ray at her residence in Rock Hill, South Carolina. Ms. Ray indicated her observation of the settlement of the brick sidewalk and stairs at the front porch initiated the structural investigation of the house by Mike Leonard. The purpose of the meeting was to allow our Geotechnical Engineer to observe the storm drain under Ms. Ray's home and the resulting settlement problems as observed by Mr. Leonard and Ms. Ray. Ms. Ray said her residence is 90 years old and was purchased in 1985.

The following specific areas were observed:

- Storm drain catch basin in College Avenue;
- Storm drain manhole in rear yard;
- Loose brick piers in crawl space;
- Settlement of front brick sidewalk and stairs;
- Previous hardwood floor repair by former owner (pre 1985) in entrance foyer directly above and inline with the storm drain.

Facing the Ray Residence, a 24" terra cotta pipe was observed leaving the catch basin and heading toward the center of Ms. Ray's house. See photographs 6 and 7. A 36" terra cotta pipe enters the

catch basin from across College Avenue. An 18" reinforced concrete pipe enters the catch basin from the right. See Photograph 8. A video survey of the 24" terra cotta storm drain pipe was previously performed under Mike Leonard's direction. Mr. Leonard indicated the terra cotta pipe under the residence has cracks.

The geotechnical investigation began with removal of 2.5 feet of fill soil over the storm drain manhole lid in the rear yard. The lid was removed exposing the manhole. See Photographs 1 and 2 in the Appendix. A cracked 24" terra cotta pipe was observed entering the catch basin from the direction of the house. See Photographs 3 and 4. A 24" reinforced concrete pipe was observed leaving the catch basin to the east. See Photograph 5. A drain test was performed by Mike Leonard by placing water in the catch basin on College Avenue in front of the Ray Residence with a garden hose. See photographs 6 and 7. A few minutes later water was observed flowing through the storm drain manhole in the rear yard. See Photograph 4. Mike Leonard pointed out voids in the rear yard along the subject storm drain alignment.

Next, CESI's Geotechnical Engineer entered the crawlspace area to observe the brick piers supporting the wood framed floor system. The brick piers were tapped and observed for looseness between the top of the pier and the floor system. Piers "B", "C", "D", "E", "I", "J" and "K" (as noted in our Hand Auger Location Plan) are in contact with the floor system. The following piers have the observed conditions:

- Brick pier "A" is loose and appears to have been shimmed with a 2"x2" piece of wood at the interface with the floor joist system;
- Brick pier "F" is tilting toward the storm drain line. The pier has been shimmed with a 2"x2" wood shim at the interface with the floor joist system. The wood shim is under great stress. It was also noted that additional wood framing was installed to resist pier overturning;
- Brick piers "G" and "H" are loose and appear to be a retrofit. A 4"x6" wood beam has been placed on and spanning slightly past piers "G" and "H". The wood beam is also loose.

CESI's geotechnical engineer began the subsurface exploration by excavating adjacent to brick pier "A" to determine the footing bearing level and the storm drain location. No concrete footing was observed for the brick pier, however, a brick footing larger than the pier was present. Next, a hand auger boring, HA-1, along with dynamic cone penetrometer (DCP) testing was performed to determine the soil bearing conditions directly beneath the brick pier. The brick pier is bearing on red fine sandy silt (ML) residual soil at HA-1. Soil consistency as measured by DCP testing was stiff 2" below the bearing surface of the brick pier "A" and very stiff 14" below brick pier "A".

The dynamic cone penetrometer is a portable testing device used to estimate penetration resistance of the soil samples, as outlined in Sowers and Hedges paper "Dynamic Cone for Shallow In-Situ Penetration Testing". The device has a 1.5-inch diameter, 45-degree cone point with a surface area of 3.9 inches which is driven with a 15-pound steel weight on a guide rod. After the cone point was completely embedded at the test depth it was driven an additional $1^{3}/_{4}$ inches by the steel weight falling 20 inches onto a steel anvil. The number of hammer blows required to drive the cone the $1^{3}/_{4}$-inch increment was recorded as the "penetration resistance" in units of blows per increment. Penetration resistance, when properly evaluated, is an index to the soil's strength.

Hand auger boring HA-2 was located and performed approximately 22" from the centerline of brick pier "A" and 19'-3" from the right sidewall of residence. This is also the location of the 24" terra cotta storm drain line coming from College Avenue. See Photograph 6. Soft fill soils were observed at 28"

and 48" below the bearing surface of the brick pier. The 24" terra cotta storm drain pipe was encountered at 58" below the bottom of the pier. See Photographs 9 and 10. Brick pier "A" is bearing on the transition zone between residual soils and the storm drain backfill soils. The pier appears to be settling as a result of the soft storm drain back fill soils.

The brick sidewalk and stairs at the front of the residence have settled. Horizontal measurements indicate that the settlement is directly above the storm drain line. See Photographs 11, 12, 13, 14 and 15. The front stairs have settled approximately 1-1/8". The stairs have horizontally displaced 1-1/2" by the consolidation of the storm drain backfill soils. Michael Leonard indicated that he observed in the attic separation in the front porch framing members. Ms. Ray understood the former owner had replaced the brick front stairs prior to 1985.

CONCLUSIONS

Based on our site observations and geotechnical findings, the 24" terra cotta storm drain pipe under the subject residence and the soft storm drain back fill soils have caused the following conditions:

- The settlement of brick pier "A";
- The settlement of brick pier "F";
- The settlement of the front brick sidewalk and stairs;
- Any wall or pier footing within 6 feet of the storm drain pipe is subject to long term settlement due to the consolidation of the underlying storm drain backfill soils.
- The cause of the looseness of the brick piers "G" and "H" at the 4"x6" wood beam interface cannot be explained at this time.

RECOMMENDATIONS

CESI recommends the following:

- Pier and wall footings within 10 feet of the storm drain should be underpinned to adequate bearing soils;
- The 24" terra cotta pipe should be lined underneath the subject residence.

Please contact us if you have any questions regarding this report or if we may be of further service.

Respectfully submitted,
CESI

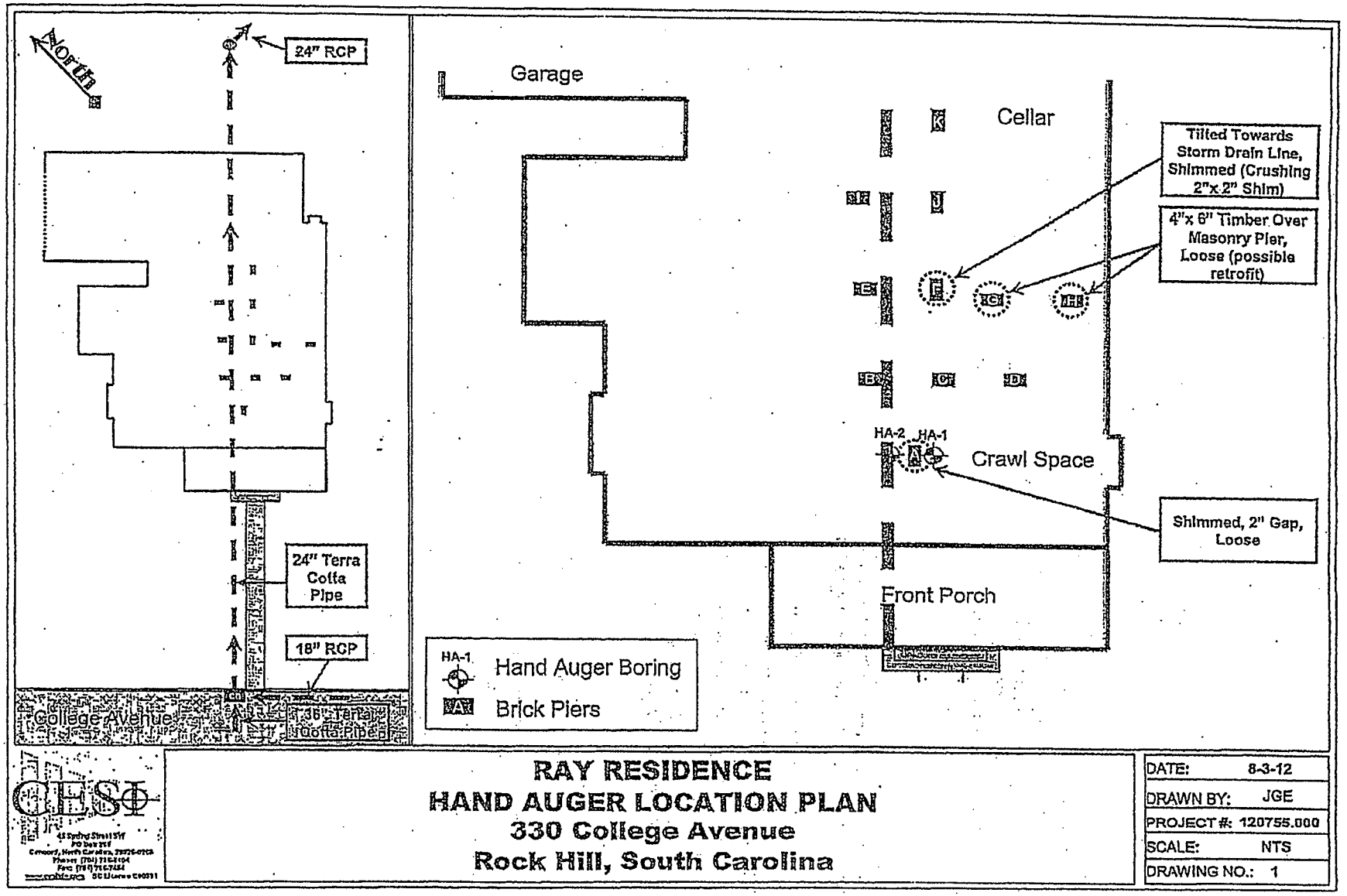
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER EDWARD S. CUMMINGS III No. 21001

8/8/12

Edward S. Cummings III PE
Geotechnical Engineer
S.C. Registration Number 21001

James G. Eaves III, PE
Division Manager
S.C. Registration Number 25575

Enclosures: Hand Auger Location Plan
Log of Hand Auger Borings (HA-1, HA-2)
Site Photographs


NORTH
24" RCP
24" Terra Cotta Pipe
18" RCP
College Avenue
Garage
Cellar
Tilted Towards Storm Drain Line, Shimmed (Crushing 2"x 2" Shim)
4"x 6" Timber Over Masonry Pier, Loose (possible retrofit)
HA-2
HA-1
Crawl Space
Shimmed, 2" Gap, Loose
Front Porch
HA-1 Hand Auger Boring
Brick Piers
RAY RESIDENCE
HAND AUGER LOCATION PLAN
330 College Avenue
Rock Hill, South Carolina
DATE: 8-3-12
DRAWN BY: JGE
PROJECT #: 120755.000
SCALE: NTS
DRAWING NO.: 1

CESI
Land Development Services

Date: 8/3/12 | Job No.: 120755.000

Project Name : Ray Residence

Street Address : 330 College Avenue

City : Rock Hill, South Carolina | CESI Engineer: Ed Cummings

LOG OF HAND AUGER BORING

Test Number	Location	Material Description	Depth Below Existing Grade (in.)	Depth Below Bottom of Pier (in.)	Penetrometer Blows per 1.75"				
					Footing Width (ft.)	1st	2nd	3rd	Average 2nd & 3rd
HA-1	See Hand Auger Location Plan	Residuum - Red and yellow fine sandy silt (ML)	8	2		10	13	15	14
		Red and yellow fine sandy silt (ML)	22	14		12	19	21	20
HA-2	See Hand Auger Location Plan	Fill - Red fine sandy silt (ML)	34	28		5	3	4	3.5
		Fill - Red fine sandy silt (ML)	54	48		5	5	4	4.5
		Top of 24" terra cotta pipe	64	58		-	-	-	-

RAY000474

Photo 1: Manhole in rear yard

Photo 2: Manhole in rear yard

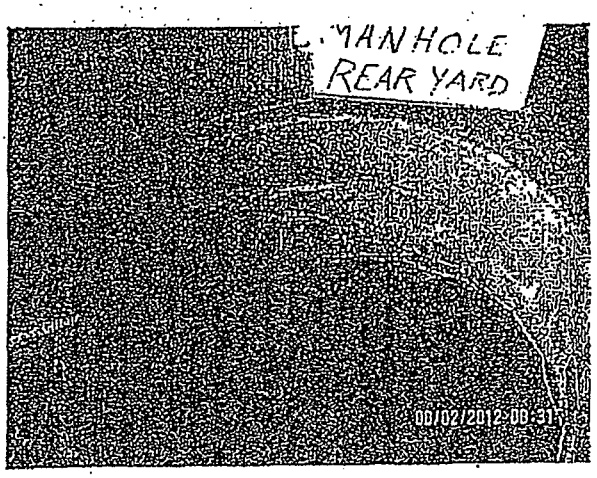


Photo 3: Manhole in rear yard

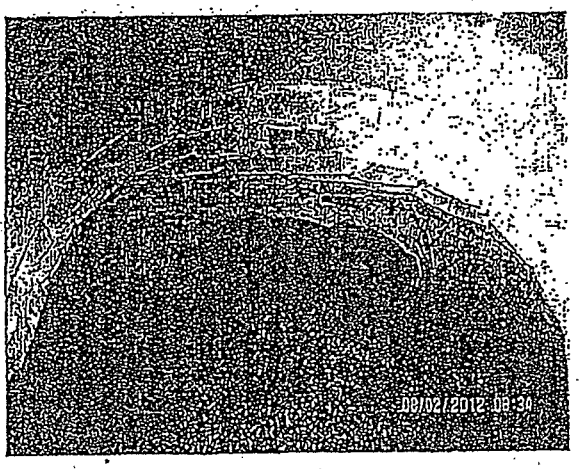


Photo 4: Manhole in rear yard

CESI ...exceeding our clients' expectations 45 Spring Street SW PO Box 268 Concord, North Carolina, 28026 Phone: (704) 786-5404 Fax: (704) 786-7454 http://www.cesilds.com	**SITE PHOTOGRAPHS** **RAY RESIDENCE** **330 College Avenue** **Rock Hill, South Carolina** **CESI SC License C-00591**	DATE: 08-06-12 PHOTOS BY: ESC PROJ. NO.: 120755.000 SCALE: N/A SHEET NO.: 1

RAY000475

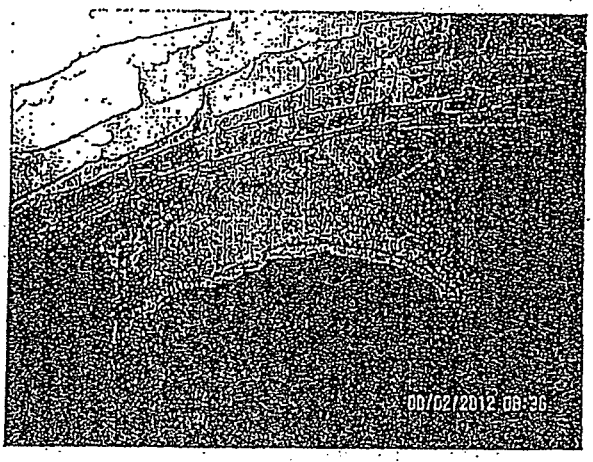


Photo 5: Manhole in rear yard

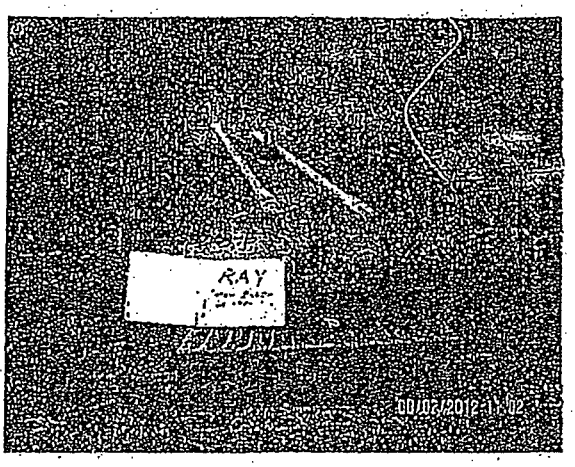


Photo 6: Catch basin at College Avenue

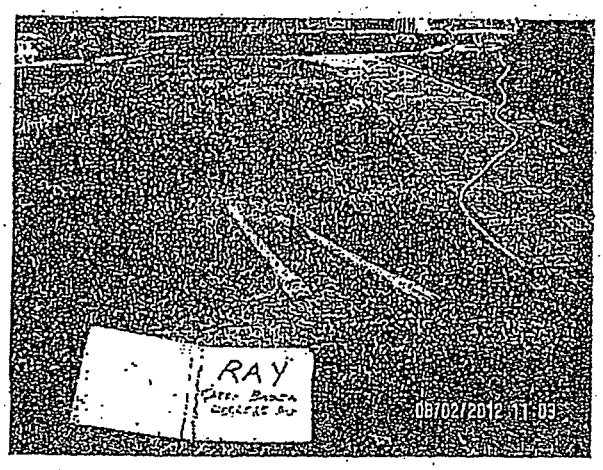


Photo 7: Catch basin at College Avenue

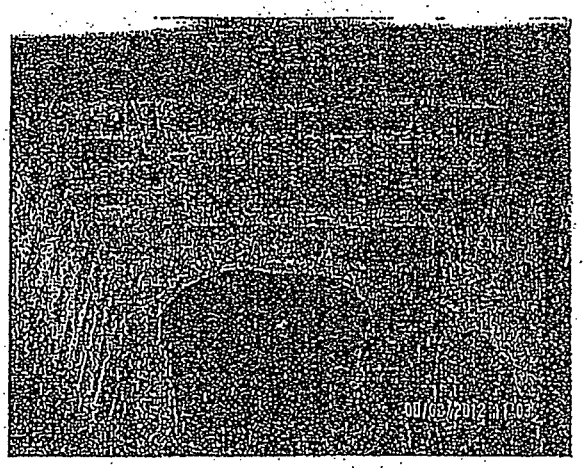


Photo 8: Catch basin at College Avenue

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Phone: (704) 786-5404
Fax: (704) 788-7454
http://www.cesisc.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	2

Photo 9: Hand auger HA-2 at brick pier 'A'

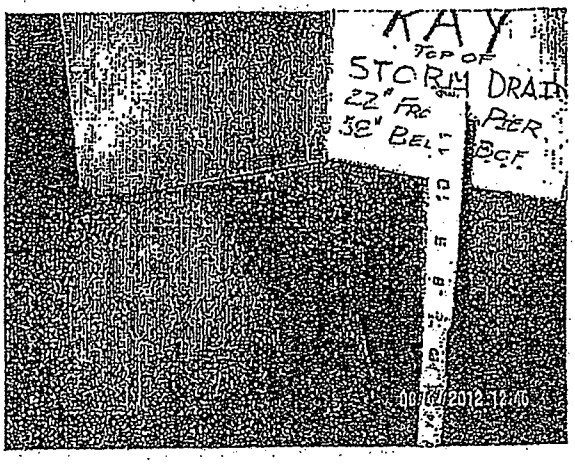

Photo 10: Hand auger HA-2 at brick pier 'A'

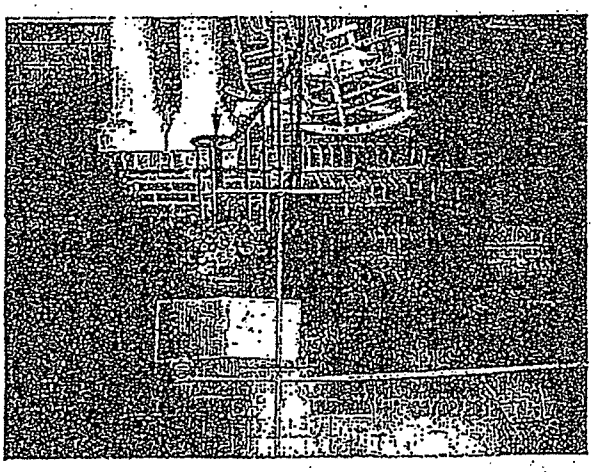

Photo 11: Front sidewalk and steps - Probe rod represents measured alignment of storm drain line.

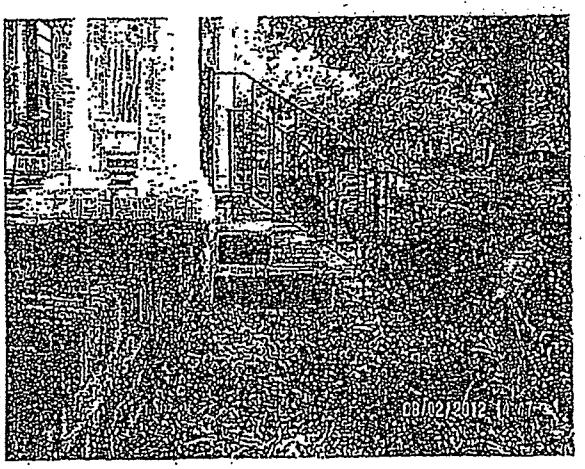

Photo 12: Front sidewalk and steps

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Fax: (704) 786-7454
http://www.cesilds.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	3

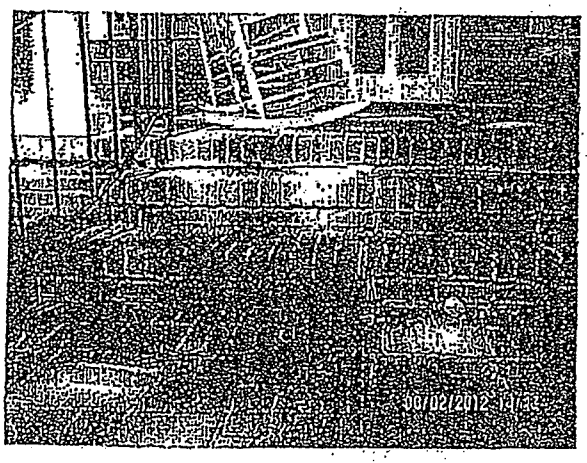

Photo 13: Front sidewalk and steps

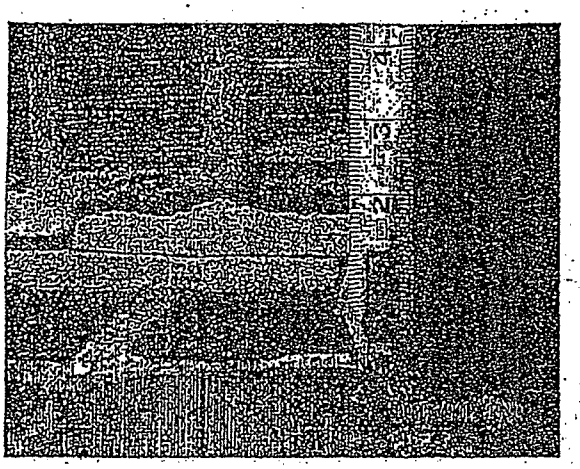

Photo 14: Settlement at front steps

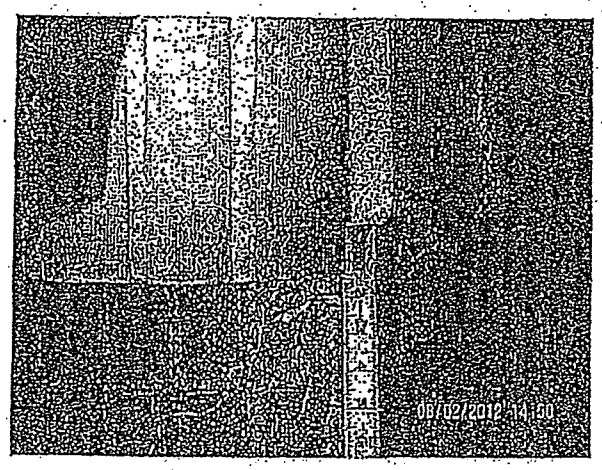

Photo 15: Horizontal movement at front steps

CESI
...exceeding our clients' expectations
45 Spring Street SW
PO Box 268
Concord, North Carolina, 28026
Phone: (704) 786-5404
Fax: (704) 786-7454
http://www.cesillc.com

SITE PHOTOGRAPHS
RAY RESIDENCE
330 College Avenue
Rock Hill, South Carolina
CESI SC License C-00591

DATE:	08-06-12
PHOTOS BY:	ESC
PROJ. NO.:	120755.000
SCALE:	N/A
SHEET NO.:	4

Attachment #4: Letter
Spencer & Spencer, Mr. Paul Dillingham to
Mr. Charles S. Bradford
Dated May 18, 2012

SPENCER & SPENCER
PROFESSIONAL ASSOCIATION
Attorneys and Counselors at Law

C.E. SPENCER (1849-1921)
C.W.F. SPENCER (1876-1956)
C.W.F. SPENCER, JR. (1911-1985)
W.C. SPENCER †
WILLIAM L. "RED" FERGUSON †
EMIL W. WALD †
PAUL W. DILLINGHAM
W. MARK WHITE*
W. CHAPLIN SPENCER, JR.*
R. ALEXANDER SULLIVAN*
R. BRENT THOMPKINS*
JEREMY D. MELVILLE*

† Of Counsel
* Also admitted in NC

SUITE 200
226 EAST MAIN STREET

P.O. BOX 790
ROCK HILL, S.C. 29731-6790

Telephone
803-327-7191

Telecopier
803-327-3868

Email Address
pauldillingham@spencerfirm.com

May 18, 2012

Charles S. Bradford
P. O. Box 977
York, SC 29745

RE: Lucille H. Ray
330 College Avenue ("Property")

Dear Charles:

I represent the City of Rock Hill ("City"), which has forwarded your letter dated February 24, 2012, to me for a response.

Our firm has also completed a title search of the Property taking the chain back to the deed recorded June 18, 1920 from the Estate of W. E. Lucas to the Rock Hill Buggy Company to confirm the information in your letter. We did not find a right-of-way or easement in favor of the City for the stormwater line running across the Property. My understanding is that the City does not wish to accept this line as a City maintained utility. Do you have any evidence to suggest that the City owns this line?

Thank you for bringing this to my attention.

Sincerely,

SPENCER & SPENCER, P.A.

Paul W. Dillingham

100101.1

Attachment #5: MHLCE Cost Estimate – Structural Repair, Shoring, and Restoration of Ray Residence 330 College Ave, Rock Hill, SC Dated August 21, 2012

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

MHLCE COST ESTIMATE - STRUCTURAL REPAIR, SHORING, AND RESTORATION
MS. LUCILLE RAY RESIDENCE, 330 COLLEGE AVE, ROCK HILL, SC
21-Aug-12 — MHLCE Project # 12E9555.F — Michael H. Leonard, PE

Section/Item	Scope		Units	Cost/Unit	Cost	Extension	Cumulative	Total
Section 1	**Abandon, Cap Existing 24-inch Pipe**							
a	Survey, locate pipe on Site					650		
b	Demolition and Excavation					3170		
	Removal front sidewalk at curb, to front stoop, front steps				1350			
	OSHA box, staging				1820			
c	Cap pipe					3300		
	Bulkheads (2), structural reinforcement		4	650	2600			
	Downhill vent		1	700	700			
d	Slurry fill - 2 stages	130 lf, 24in dia	21	420	8820	10320		
	pumping, vibration		2	750	1500			
e	Sidewalk Replacement	200 sf	220	7	1540	1540		
f	Grade, drainage repairs front, rear yards				840	840		
g	Landscape repairs	allowance			1200	1200		
							20820	
Section 2	**Foundation Shoring**							
a	Interior foundation piers	8 each in zone				12280		
	footings		8	185	1480			
	helical piles		8	1350	10800			
b	Front Foundation Wall	14 lf in zone				4752		
	footings		14	18	252			
	helical piles		3	1500	4500			
c	Front Stoop Walls, Steps	14+8+8 lf				7725		
	footings	steps only	3	175	525			
	helical piles		6	1200	7200			
d	Cellar Foundation Wall	14 lf				4500		
	footings		extg					
	helical piles		3	1500	4500			
e	Rear Foundation Wall					3600		
	footings	14 lf	extg					
	helical piles		3	1200	3600		32857	
Section 3	**Re-build Foundations, Piers**							
a	Front Steps	65 lf	65	15	975	975		
b	4 Interior Piers	4 ea	4	335	1340	1340		
c	Cumulative Foundation Voids	misc			700	700		
							3015	
Section 4	**Main Floor Frame Repairs, Leveling**							
a	Laser level study		6	225	1350			
b	Crib, bracing, jacks				850			
c	Leveling and bracing		24	35	840			
d	Reinforcement	mil 240	8	35	520			
e	8 new piers		8	450	2700			
							6260	

RAY000480

Section 5 Roof Frame Repairs								
a Ridge Bracing, joining	mll	450	12	35	870			
b Rafter Cross-ties	mll	200	6	35	410			
c Rafter Tie-downs	mll	760	15	35	1305			
d Shingle damage/repairs		12 sq	12	180	2160			
e Venting, repairs		80 lf	90	12	1080			
							5825	
Section 6 Interior Restoration								
a Door, C/O repairs		8 units	24	45	1080			
b Millwork removal, reset ref. floor leveling		240 lf	18	45	810			
c Wall, ceiling repairs - plaster, GWB			80	38	3040			
d Hardware adjustments		12 units	18	45	810			
e Painting, cleaning			72	28	2016			
f Floor finishes		1850 sf	1850	4.75	8788			
g Final Cleaning			3200	1.15	3680			
h Trim MU					950			
							21174	
Section 7 General Conditions								
a Design, Drawings - engineering		24 hr S/E	24	180	3040			
b Building Permits					400			
c Sanitary Facilities			3	150	450			
d Debris - hauling, disposal		loads	4	350	1400			
e Transportation		10 weeks	10	180	1800			
f Tools & Equipment			10	120	1200			
g Communication			3	65	195			
h Site Supervision		12 wk, 36	456	36	16416			
i General Labor		10 weeks	8	25	200			
							25901	
SUBTOTAL								115852
CONTRACTORS FEES								
GENERAL OVERHEAD						15%		17378
PROFIT						10%		11585
CONTINGENCY						3%		2896
TOTAL COST ESTIMATE								147711

RAY000481

M.H. LEONARD
CONSULTING ENGINEERS, P.A.
INSPECTION • DESIGN • INVESTIGATION

Project Memo

To: Lucille Ray
Charles Bradford
From: Mike Leonard, PE – M.H. Leonard Consulting Engineers, PA
Subject: Lucille Ray Residence – Storm Water System and Structural Damages
330 College Ave, Rock Hill, SC
MHLCE Project # 12E9555.F
Date: November 30, 2012

This will confirm recent discussions and a site visit on November 29 with Ms. Ray regarding ongoing sanitary sewer work on College Avenue and Strait Street, being done by the City of Rock Hill.

We are concerned with an increase in risks to the structural integrity of Ms. Ray's home based on developments during that work and visible indicators now on site.

Our previous field observations and review of camera inspection DVDs obtained from the City show the pipes on her property are damaged. (See previous MHLCE Report # 12E9555.F, dated September 5, 2012.) During the sanitary sewer pipe work in front of her home on College Avenue, she took photos of this same storm-water pipe while exposed for repairs. The City has needed to replace storm water piping on Strait Street and College Ave because of damages to the line. We believe that the same pipe under her home is damaged and slowly reaching a point of failure with risk of substantial structural damage. *Furthermore, by repairing/replacing storm-water pipes in the same line along Strait Street and upstream of the pipe under her home, the increased flow in the system will increase risks of progressive pipe damage and eventually could lead to additional structural damages.*

The most substantial risk of all to her home is the loss or erosion of soil around the existing underground storm water pipe, which would lead to consolidation of uncontrolled magnitude, possibly creating a sink hole directly under her foundation bearing elements. We are already concerned with the potential for voids there and we have confirmed soil-bearing problems during geotechnical assessments. *On November 29, 2012, we measured the front step settlement and found that it had progressed 5/8 to ½ inch more than found in August. Interior stress cracks along the walls and ceilings are also appearing – in line with the known underground storm-water pipe below her dwelling.* Shrinkage cracks in a wood-framed home tend to increase during the heating season, but these are beyond normal frame shrinkage.

We talked to the General Contractor hired to re-work the sanitary sewer line for the City. He indicated that numerous lines had been found during this work, with undocumented locations and damages. They also have verified that another storm water line extends down and under the dwelling at 340 College Ave (also owned by Ms. Ray).

We observed photographs taken by Ms. Ray during the ongoing sanitary sewer line project. The drop-inlet in front of Ms. Ray's home (330 College Ave) is fed from multiple storm-water pipes. The one utility map we have obtained of this area (provided by Ms. Ray) shows a single pipe adjoining this point, from the line that extends along Straight Street. Furthermore, because the old pipelines are typically clay, the new concrete (RCP) pipes being used to repair the lines do not fit the clay pipe radii. They have been 'fitted' by pouring concrete around the junctures to 'seal' the fits. In our experience, *this is not a water-tight fit, leaving increased risk of line seepage, erosion, and damages downstream of the fit – under Ms. Ray's home.*

Based on our original study and report, and with these new developments, we request access to specific information from the City as follows:

1. Storm water system map of the existing pipe systems, manholes, and junctures currently in place regarding the system that services the public right-of-way around Ms. Ray's property at 330 College Ave. Our previous requests for this information were not granted as documented in previous reports.
2. Storm water and hydrology studies of the same areas of Item 1.
3. Hydraulic profiles of the storm water pipe system in the areas of Item 1.
4. Street maintenance and repair records of Strait Street, College Ave, and any other right-of-way areas above this specific storm water system piping loop – within the last 10 years.

EXHIBIT D-2

1

5. Storm water system maintenance records regarding the same loop of Items 1 and 4.
6. For similar reasons, we request the same information for existing storm water systems and public right-of-ways for the system that crosses the rear quadrant of 340 College Ave where there is visible damage to the catch basin and piping exposed in the private yard area of that property.

Please call if needed to clarify these latest concerns.

Sincerely,
M.H. Leonard Consulting Engineers, PA

Michael H. Leonard, PE
Principal Engineer
Project Manager – Ray Investigation

From: "Datko, Sue G." <sgd@spencerfirm.com>
Subject: **FW: Stormwater data...**
Date: May 15, 2012 2:10:17 PM EDT
To: <ihooperray@comporium.net>
Cc: "Dillingham, Paul W." <pauldillingham@spencerfirm.com>
1 Attachment, 5.0 MB

Attached is GIS stormwater map sent to the engineer last week

Sue Datko
Spencer & Spencer, P.A.
226 East Main Street, Suite 220
P. O. BOx 790
Rock Hill, SC 29731
suedatko@spencerfirm.com
803-327-7191 (Telephone)
803-327-7494 (Fax)

This e-mail message has been scanned for Viruses and Content and cleared by Netfx MailMarshal

Partial Stormwater - College Ave.

EXHIBIT 5

Partial Stormwater - College Ave.

MAP INFORMATION
Map Date: 08:07:50 AM on Thursday, May 10, 2012
Map Name: COLLEGE.MXD
This map was created by the City of Rock Hill Stormwater.

THE CITY OF ROCK HILL, THE COUNTY OF YORK SC, AND ITS MAPPING CONTRACTORS DO NOT WARRANT THE ACCURACY OF THE DISPLAYED INFORMATION NOR SPECIFICALLY DISCLAIM ANY WARRANTY FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

City of Rock Hill
Geographic Information System

Charles S. Bradford, P.A.
ATTORNEYS AT LAW
POST OFFICE BOX 977
YORK, SOUTH CAROLINA 29745
TELEPHONE 803-684-4888
FACSIMILE 803-684-4488
WWW.CHARLESBRADFORDLAW.COM

CHARLES S. BRADFORD

DANIEL H. HAIGHAW

PHYSICAL ADDRESS
4 EAST LIBERTY STREET
YORK, SOUTH CAROLINA 29745

November 13, 2012

Paul W. Dillingham, Esquire
Spencer and Spencer
P.O. Box 790
Rock Hill, SC 29731-6790

VIA FIRST CLASS MAIL
& VIA EMAIL

Re: Lucille Ray/330 College Avenue, Rock Hill, SC

Dear Paul:

I am drafting this letter on Monday, November 12, I have just spoken to my client Lucille Ray. As you know, the City is doing some major sewer and storm water work in the College Avenue area.

Ms. Ray advises me that three large pipes, which she estimates to be 36" in diameter have been exposed and severely damaged by the work going on College Avenue. One of the pipes is on Strait Street, and runs down the hill into College Avenue in front of Ms. Ray's house. The other two come from each direction on College Avenue. She says that these three large pipes have all been broken, and it appears that the City is most likely going to replace these damaged or broken pipes. All three of these pipes were depositing water which enters into the 24' storm drain pipe which goes directly under Ms. Ray's house, and which is the subject of the recent lawsuit we have filed against the City.

On behalf of the City, please be advised that Ms. Ray does not consent to allowing any replacement pipes to be connected so as to deposit water into the 24' storm water pipe running underneath her house. Since the City does not claim to own the pipe, the City needs my client's permission or a right-of-way to connect these pipes to the pipe going under her house for purposes of future water discharges.

Please advise the City Utility Department not to connect any new pipes or replacement pipes to the pipe going under my client's house. I have advised my client to deny them permission to connect the new pipes to the pipe running underneath her house, and we will consider any such efforts to connect those pipes to be in violation of my client's rights. I will further advise my client

S:\Appeals\HAIGHAW\CSBFILES\11-HAIGHAW\Ray Lucille\Paul Dillingham letter 2.wpd

EXHIBIT F

regarding obtaining a temporary restraining order if the City makes any efforts to rebuild those pipes, and to connect them to the system which deposits water which goes into the pipe that runs under my client's house.

If you have any questions, or if you would like to discuss this situation further, do not hesitate to contact me.

Sincerely,

Charles S. Bradford

CSB/bgb
CC: Lucille Ray