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ASSEMBLY RESOLUTION No. 130

STATE OF NEW JERSEY

INTRODUCED APRIL 15, 1985

By Assemblymen PATERO, BOCCHINI, WATSON and NAPLES

AN ASSEMBLY RESOLUTION directing the Energy and Natural Resources Committee of the General Assembly to conduct an investigation of the efficacy of the regulation and protection of the Delaware and Raritan Canal by the Delaware and Raritan Canal Commission and the practices and plans of the New Jersey Water Supply Authority with regard to the completion of the Delaware and Raritan Canal dredging project, and to recommend whatever legislation or administrative action that it may deem appropriate.

1 WHEREAS, The Delaware and Raritan Canal and lands along the
2 canal banks, extending 63 miles and covering 3,125 acres, com-
3 prise the Delaware and Raritan Canal State Park created by
4 legislation in 1974, is of historic, ecological, and recreational value
5 to the citizens of New Jersey, as well as a vital source of water
6 supply; and

7 WHEREAS, As a part of New Jersey Water Supply Authority's on-
8 going dredging project of the Delaware and Raritan Canal to
9 increase its water carrying capacity, thousands of trees were
10 cut down along the northern canal area earlier this year to make
11 way for the dredging equipment, resulting in the unconscionable
12 destruction of an important component of the natural resources
13 of the area, as well as contributing to the rapidity with which
14 soil erosion and the consequent resiltng of the canal may take
15 place; and

16 WHEREAS, The historical arrangement to manage the canal and its
17 surrounding lands has been shaken by the soon-to-be completed
18 transfer of jurisdiction of the canal and the surrounding land

19 from the Division of Parks and Forestry in the Department of
 20 Environmental Protection to the New Jersey Water Supply Au-
 21 thority, a transfer which, while meeting certain objectives of ad-
 22 ministrative efficiency may subordinate recreation and conserva-
 23 tion objectives to secondary consideration; and

24 WHEREAS, The New Jersey Water Supply Authority, in pursuance
 25 of water supply objectives, has no authority to contravene the
 26 goals of conserving natural resources and providing recreational
 27 opportunity, public purposes which have been subject to voter
 28 approval repeatedly and overwhelmingly, most recently through
 29 the "Green Acres Bond Act of 1983"; and

30 WHEREAS, While under ordinary circumstances the Legislature
 31 would defer to the Executive concerning the administrative exe-
 32 cution of public policy, it is altogether fitting and proper for this
 33 House to direct that a study be conducted to help define the proper
 34 balance between genuine and desirable, albeit conflicting public
 35 policies; now, therefore,

1 BE IT RESOLVED *by the General Assembly of the State of New*
 2 *Jersey:*

1 1. The Energy and Natural Resources Committee is directed to
 2 investigate the efficacy of the regulation and protection of the canal
 3 by the Delaware and Raritan Canal Commission and practices and
 4 plans of the New Jersey Water Supply Authority with regard to
 5 the completion of the Delaware and Raritan Canal dredging project,
 6 including the use of herbicides in the area known as the Delaware
 7 and Raritan Canal Transmission Complex, the clear-cutting of
 8 trees along the canal, the restoration of areas already deforested,
 9 the protection of the recreational values of the canal environs under
 10 the authority's management, and the advisability of using funds
 11 appropriated, but not yet committed, to dredging projects.

1 2. The committee may meet and hold hearings at such place or
 2 places as it shall designate during the sessions or recesses of the
 3 Legislature, and shall report its findings and recommendations to
 4 the General Assembly, accompanying them with any legislative
 5 bills which it may desire to recommend for adoption by the Legis-
 6 lature.

STATEMENT

The purpose of this resolution is expressed in its title and pre-
 amble.

ASSEMBLYMAN ANTHONY S. MARSELLA (Chairman): I would like to call this hearing to order. We are here today to take testimony regarding the Delaware and Raritan Canal area that has been disturbed recently by some construction; that is, the cutting of some trees that I visualize were over 50 years old -- some were 100 years old -- and the total disruption of the entire length of the Canal route that we saw this morning. The entire network of trees was cut down in order for the Water Authority to do some type of dredging.

We are here today under an Assembly resolution sponsored by Assemblyman Patero, who is seated to my right, asking our Committee -- the Assembly Energy and Natural Resources Committee -- to look into this matter, and to take testimony from citizens and the departments regarding what is taking place out there, where we are going with this project, and how detrimental it is going to be to the Raritan Canal banks and slopes.

I am going to ask Joe Patero, who is the sponsor of the resolution directing our Committee to look into this matter, to give a statement.

ASSEMBLYMAN JOSEPH D. PATERO: Thank you very much. I am sorry we were late. We were coming back from the Canal area, and we weren't concentrating on the road, so we got lost. That is the reason why we were late.

I would like to say good afternoon to all of you, especially to Assemblyman Marsella, who came all the way up here from South Jersey to discuss an issue that is of great concern to the residents of my district. I know you are not from this area, so I will begin my remarks by describing the uniqueness of the Delaware and Raritan Canal Park, which is known in this area as the Towpath. The Towpath stretches for 63 miles along the banks of the old Delaware and Raritan Canal. It covers more than 3,000 acres. Since 1974, it has been a State park. Its historical, ecological, and recreational value is understood and appreciated by many. It is a vital resource to those in the area it serves. Many people from all over the State have enjoyed picnics, strolls, and jogs along the banks of the Canal. As I am sure many will testify, the beauty of this area in its natural state is extraordinary. I must tell you, it is beautiful.

Recently, much of the beauty was destroyed. As a part of the New Jersey Water Supply Authority's ongoing dredging project of the Canal, thousands of trees were cut down along the Canal to make way for dredging equipment. It is estimated that 2,000 trees have been removed. The trees have been sawed off at ground level, making it very difficult to remove the stumps in order to replant. The clear cutting of 2,000 trees has resulted in a terrible destruction of an important component of the Towpath's natural resources. Soil erosion and the resulting consequence to the Canal may occur, and the natural beauty of the park may never be replaced.

The Water Supply Authority, the Canal Commission, and the Department of Environmental Protection have pledged that the trees will be replaced. The trees may be replanted, but the character of the park cannot be replaced overnight.

It also has been suggested that the Canal State Park be transferred from the jurisdiction of the Department of Environmental Protection to the Water Supply Authority. The Authority thinks it needs to own the park in order to float the bonds necessary to finance its activities, but I disagree.

In 1974, the Legislature placed the responsibility for the Delaware and Raritan Canal State Park with the Department of Environmental Protection. The Department was to manage the land surrounding the Canal, and was to maintain the area for the use and enjoyment of the residents of the area and the State. The Legislature felt that the conservation and recreation aspects of the Canal must be given due consideration and that this historic arrangement might be shaken by a proposal to transfer the park land from DEP to the Water Supply Authority. This transfer, while meeting certain objectives of administrative efficiency, may hurt the recreation and conservation objectives of the Legislature.

I am pleased to note that DEP Commissioner, Bob Hughey, has indicated that he is in no hurry to approve this transfer. He has pledged to go slowly and to discuss the transfer with concerned citizens. I only hope that he reaches the same conclusion that I have -- that is, that it is inappropriate to transfer these valuable park

lands to an independent authority, with no mandate to preserve or protect them for recreational use.

This Committee, under your able leadership, Assemblyman Marsella, will investigate the current system, which is to regulate and protect the Delaware and Raritan Canal State Park. I know you will carefully review the practices and plans of the Water Supply Authority for the completion of this dredging project. I am sure you will investigate the clear cutting of the trees and the plans to restore those areas already cleared.

I requested this hearing to assure that the goals that the Legislature defined in 1974 are not overlooked in 1985. I know this Committee -- the Assembly Energy and Natural Resources Committee -- will help to protect one of the greatest natural resources in this area.

I am fully prepared to introduce whatever legislation might be necessary to safeguard this Canal. The recreation value of this area must be protected for future generations.

This is among the most rapidly growing areas in the State. It is necessary for us to stake out some area for conservation and recreation. The Delaware and Raritan Canal Towpath has always been one of these open-spaced areas, and we need to keep it that way.

I think, Mr. Chairman, that you will be impressed by the amount of time, energy, and work that some of the residents of this region have dedicated to this project. I would like to end now so that you can hear their views.

Thank you very much.

ASSEMBLYMAN MARSELLA: Thank you, Assemblyman Patero. The first witness I am going to call today is Donald Graham, Assistant Commissioner for Regulatory and Governmental Affairs from the Department of Environmental Protection. Donald asked to speak first because he has another meeting to attend, and I want to give the Assistant Commissioner that courtesy. Donald?

DONALD T. GRAHAM: Thank you, Assemblyman. I appreciate the invitation to come to North Jersey. I wanted to come here today to give you an overview of our feelings -- the Department's feelings -- on

the Delaware and Raritan Canal project specifically, and generally the relationship between the Department of Environmental Protection, the Delaware and Raritan Canal Commission, and the New Jersey Water Supply Authority.

For some time, the Commission has been working towards making this park, in its 66-mile length, a jewel in our park system. We have spent a lot of time and effort with the Commission.

I was previously the Assistant Commissioner for Natural Resources in our Department, and I had the pleasure of serving as the Department's representative on the D&R Canal Commission. It always seemed to me that the Canal Commission -- and the park itself, being a unique, linear park -- was never as successful as it should have been in competition for development funds, maintenance funds, and operational funds to adequately run this park.

Likewise, the deteriorating conditions of the waterway itself and the restrictive use of that waterway, because we couldn't draw the mandated gallonage per day that we were allowed to always had the ever-present conflict. Since the Water Supply Authority is in place, and with the Water Supply Authority going forward so that it will have a viable waterway, I think it will be advantageous to the ultimate benefit of the entire length of the park and every municipality that the park is situated in. I think it is a perfect marriage between the two.

I am here today to assure you that the oversight responsibility of the Department of Environmental Protection and these two entities -- the Water Supply Authority and the Canal Commission -- will work closely together to achieve our ultimate goal, and that is, to provide a recreational, as well as a water supply, resource for the residents of the State of New Jersey, one that we can be proud of. I can't stress that too much.

I am happy that you got a chance to look at the one specific problem you are here today to talk about. We weren't aware that you were going to look at it, and we would have liked to have been with you. I would invite you not only to look at the Lake Carnegie area, which is a beautiful area, but I would like to have you come to see the

entire length of the Canal, which I have done several times and which members of your Committee have done in the past. Believe me, it is quite an opportunity, and it is a beautiful trip to take. I invite you to do that at your convenience, and I would be happy to accompany you.

The other thing I would like to clear up -- I think there has been some confusion -- is, the transfer we are talking about is not transferring the Delaware and Raritan Canal Commission and the entire operation of the park to the New Jersey Water Supply Authority. In fact, the document submitted to the State House Commission simply states the fact, that is, for maintenance purposes and for purposes of capital investments by the Water Authority and for proper maintenance of the Canal, it is necessary that they have authority over it bank to bank. Rocco Ricci will go into that in greater detail. I want to make it clear that the Delaware and Raritan Canal Commission, which was created by law and has the operational mandate by legislation to run that park, will remain in its present condition.

I applaud the work that has been done by the citizens. Our concern is with a natural resource such as this, and we pledge every cooperation in working with the citizens to arrive at a good solution.

As you know, Assemblyman Paterno mentioned that Commissioner Hughey has said, on several issues, that he will take a wait-and-see attitude, and he has asked certain members of the community, as well as the Attorney General's office and our Department, to get together and sit down and discuss the different alternatives that are before us. We keep an open mind to that.

Basically, I just wanted to come here today to tell you that we are dealing with a tremendous natural resource. We are aware of it, and it is our Department's mandate. I don't want anyone to think that we are not paying very close attention to what is going on. In our opinion, the work being done by the New Jersey Water Supply Authority is not only essential, but it is being done very properly. To date, it has been done through the full public process, and it has complied in every respect with its legal mandate for public participation. We will go beyond that. We are here today to pledge our cooperation. Whatever you ask of us in the future, we will make

ourselves available to you, not only in this area of the Delaware and Raritan Canal Park, but hopefully, one day soon, we can all take a look at the entire linear park.

Thank you. I would be happy to answer any questions you may have.

ASSEMBLYMAN MARSELLA: Do you have any questions, Assemblyman?

ASSEMBLYMAN PATERO: Yes. First of all, the reason I am concerned about this is, it was Senator Lynch's and Senator Bateman's bill that I moved in the Assembly which created this as a State park. I know the Canal because I live in the Somerset County area, and the State should be commended. I think they have done a wonderful job restoring it, especially in my area where they have fixed the walls and everything else. It is really a beautiful area.

I think we are having this hearing because of the concerns of the citizens. As you can see, most of these people have taken the day off from work. We would like to see what the competition is going to be. There have been rumors that there will be no planting of trees because they will affect the slurry walls, etc. As I said, I must commend the Department for the excellent job it has done in trying to preserve that.

MR. GRAHAM: I appreciate that. The Delaware and Raritan Canal Commission is very unique in our park system. It was created by law with a separate cross-section of citizenry to oversee it. They are also in, but not of, our Department, and as such, they are part of our park system. We are very proud of that.

I am not here today to lobby for more funds, but as I said in my opening statement, the competition that the Canal Commission is in for revenue funds is very, very stiff. As you all know, operational funds in the State budget are very meager, and we have to stretch them out.

We have 25 people dedicated to the operational end of this park -- rangers, planners, secretaries, maintenance people, etc. We only wish there could be more. Hopefully in the future, there will be more. I think the relationship with the Water Supply Authority is

going to give us an opportunity to increase the operational capability of this park, and I think that is to the ultimate benefit of the entire area.

I told Assemblyman Marsella and his staff that I am here today to do what I am doing now, but Rocco Ricci, the Executive Director of the New Jersey Water Supply Authority, is here to go through a detailed explanation of this specific problem. Jim Amon, the Executive Director of the Delaware and Raritan Canal Commission, is here to talk to you about his mandate and his operational responsibilities.

ASSEMBLYMAN PATERO: I have just one question, Mr. Graham. I don't know if this is possible, but can the Canal Commission lease this to the Authority rather than give them the properties on both sides?

MR. GRAHAM: I think that is something that should be discussed with Rocco. As I said before, Commissioner Hughey has asked certain members of the community, the Attorney General's office, the Water Supply Authority, and the Commission to sit down and discuss certain alternatives. We have gone forward with an initiative and have put reasons forward legally as to why we feel it has to be done that way.

In response to citizens' input, we have said we will take an open mind to it, but it is something I think you are best advised to let Rocco Ricci and Jim Amon discuss. Through the community representatives participating with us after this hearing, we will discuss those alternatives.

ASSEMBLYMAN MARSELLA: Okay, thank you, Assistant Commissioner.

MR. GRAHAM: Thank you.

ASSEMBLYMAN MARSELLA: We have with us today Gail Firestone, who is representing Mayor Pike from Princeton. Gail, will you come forward, please?

GAIL FIRESTONE: Thank you.

ASSEMBLYMAN MARSELLA: Gail is also the Deputy Mayor of Princeton.

MS. FIRESTONE: Right. I am representing Mayor Pike and the Princeton Township Committee. We have grave concerns about what is being done on the other side of our beautiful Lake Carnegie. While we recognize that it is necessary to supply better water to the residents of this State, all one has to do is open the paper or try to get out of his driveway to realize that the effects of the mammoth growth in the Route 1 Corridor are going to affect us all more and more. In the middle of this Corridor, there is this lovely resource -- this wonderful historic space to breathe and get away from the stresses that we are all under.

When people look out of their windows on a Saturday or a Sunday, and all of a sudden, they find that this treasure has been raped very quickly and without any notification, they are very upset. Even more upsetting is the thought that the guardianship -- the stewardship -- of this very historic area will go to the Water Authority. An authority, by its very nature, does not have the kind of bending and listening to public input that you, our representatives, do.

We had a meeting in Princeton Borough regarding this questions, which the Senator attended. I heartily applaud his very speedy response on behalf of these concerns.

If I may, I would like to read a resolution to you, which was passed by the Princeton Township Committee on April 22. I have given you copies.

ASSEMBLYMAN MARSELLA: Sure, you may.

ASSEMBLYMAN PATERO: Have you given a copy to the reporters?

MS. FIRESTONE: Yes, I have.

ASSEMBLYMAN PATERO: Before you read that, I have one question. Was that problem resolved? I was at the hearing in Princeton when you said they cut trees in a park that were on Princeton Township's property. Is that true?

MS. FIRESTONE: Yes, that is true. The Township engineer told me that about 1,100 feet were decimated in a little over a day. It was done so quickly that we really had no time to react to it.

ASSEMBLYMAN PATERO: But, that was land that--

MS. FIRESTONE: (interrupting) That was land that belonged to Princeton Township. It was one of our new parks that we had hoped to keep in a more natural state. We are upset about that as well.

ASSEMBLYMAN MARSELLA: What you are saying is that the Township of Princeton had no knowledge that those trees were going to be discarded?

MS. FIRESTONE: Certainly not on our land. We realized there would be some trees removed to allow for dredging, but according to the contract, the trees that were to be removed were very carefully decided upon and there were supposed to be environmental factors taken into account. I think everyone was under the impression that everything was in good hands and that there would be a very careful job done. We were under the impression that the Water Authority understood the value and the beauty of that space. We were just horrified to find that obviously our expectations were not met at all.

ASSEMBLYMAN MARSELLA: Did anyone from the Department of Environmental Protection come to the Township Committee and explain exactly what was going to take place on the Canal?

MS. FIRESTONE: Let me defer to the Township engineer, who is here, to see if his office received any information. Mr. Kaiser?

ASSEMBLYMAN PATERO: Will you please state your name for the record?

MR. KAISER: (speaking from audience) Certainly. My name is Robert Kaiser, and I am the Princeton Township engineer. Regarding the question as to whether or not DEP paid any visit to the Township, no, I am not aware of any visit that the Department of Environmental Protection made.

ASSEMBLYMAN MARSELLA: Okay, thank you.

MS. FIRESTONE: The resolution reads as follows:

"WHEREAS residents of the Princeton area have long anticipated the development of the areas alongside the former Delaware and Raritan Canal as a State Park for their recreational use, and

"WHEREAS the recent cutting of trees in connection with the dredging of the Canal and the threat of spraying with toxic materials to control foliage growth have caused area residents to question the

State's commitment to fulfilling expectations for recreational usage along the Canal, and

"WHEREAS the Parks and Forests Department of the New Jersey Department of Environmental Protection is reported to be transferring its authority over the Delaware and Raritan Canal area to the New Jersey Water Supply Authority, an independent authority; now, therefore, be it

"RESOLVED the Township Committee of Princeton strongly opposes the transfer of the Canal to the New Jersey Water Supply Authority. Further, the Township Committee calls upon the Department of Environmental Protection, Department of Parks and Forests with public input, to develop strict performance standards for future construction and development projects within the Delaware and Raritan Canal and Lake Carnegie areas so such unfortunate incidents as have been detailed above can be avoided in the future. These standards should assure the following goals: to minimize disturbance to the natural resources, to respect the historic and environmental facts, and to protect water supply resources. Further legislation should be drafted to see that these goals are met; and be it further

"RESOLVED that authorities be required to notify municipal planning boards and governing bodies of proposed changes at least sixty (60) days before such changes are enacted; and be it further

"RESOLVED that copies of this resolution be forwarded to New Jersey Commissioner of Environmental Protection, Robert Hughey, Governor Thomas Kean, State Senator Gerald Stockman, Assemblymen Gerald Naples and John Watson, James Amon, Executive Director of the D&R Canal Commission, the Princeton Environmental Commission, the governing bodies of Princeton Borough, and Franklin, Lawrence, Plainsboro, South Brunswick, and West Windsor Townships, as well as the Delaware and Raritan Canal Coalition, the Canal Society of New Jersey, the Friends of Princeton Open Space, the Historical Society of Princeton, the MSM Regional Study Council, the New Jersey Conservation Foundation, Preservation New Jersey, the Princeton Battlefield Area Preservation Society, and the Stony-Brook Millstone Watersheds Association."

We all look forward to the Legislature preserving the public's interest in this very historic area, and we applaud your efforts in this area. Thank you very much.

ASSEMBLYMAN MARSELLA: Thank you, Ms. Firestone. The next witness I would like to call is Rocco Ricci, who I am sure can bring us up to date on exactly what is taking place at the site.

ROCCO D. RICCI: First of all, I would like to thank you for the opportunity to appear before this Committee to enter into the record the facts as they relate to our program of accumulated sediment from 32 miles of the Delaware and Raritan Canal. That is just about one-half the entire length of the Canal.

Due to the lack of adequate maintenance over many, many years, this vital water supply, which is the basic supply for 600,000 people in Central New Jersey, had its flow severely restricted, particularly during the spring, summer and fall of each year. The sediment and the resultant aquatic plant life, which accumulated during the warm period of the year, actually caused the flow to drop off to as little as 10 to 12 million gallons per day. This is far short of the 65 million gallons per day which the Canal must deliver to its customers.

Further, and equally important -- particularly when we are in a drought and recognize the importance of an adequate water supply -- this flow restriction prevented New Jersey from fully using its entitlement to 100 million gallons per day of Delaware River water, which was the result of a 1954 Federal Supreme Court decree.

In addition -- and this should not be overlooked -- the slow movement of water and the prolific aquatic plant life were severely detrimental in spots to the aesthetics of the waterway, which is really the centerpiece of this very valuable Delaware and Raritan Canal State Park.

I have just quickly attempted to give you an overview of the reasons behind the need for the dredging program itself. Now I would like to discuss some background as to the development of the project plans and the specifications for this \$20 million project.

Over the past several months, there have been a number of expressed concerns and conclusions by various citizen groups in the Princeton area, essentially to the effect that the current dredging program by the Authority has been ill-conceived and was insensitive to the needs to protect the Park's recreational and historic values. In the same vein, it has been stated that the development of the dredging program has not benefited from the professional input of DEP's Division of Parks and Forestry and also the professional staff of the Delaware and Raritan Canal Commission. There have also been statements regarding the alleged lack of opportunities for public involvement in the planning process that actually started towards the end of the 1970s. As a matter of fact, at this particular portion of my statement, I would like to address these particular matters.

Several years ago, the planning for the project was, in fact, started with the active participation of the Division of Parks and Forestry and the staff of the D&R Canal Commission. The initial effort was an extensive report by Rutgers University as to what was wrong with the Canal. Why was the fall being restricted, and what improvements had to be made in terms of its ability to carry the required amount of flow? It was during that work-- I'll refer you to Exhibit 1. There is a section there which gives you a quick overview of what happened at that particular point in time.

There was a programmatic environmental assessment report. By the way, I am reading from the announcement of a public information hearing that was held on January 31, 1984 where we outlined the background of the project -- where we were and where we were going to go forward. There was an Environmental Impact Assessment Report prepared by Rutgers University in August, 1981, and there were public information hearings on that preliminary Environmental Impact Assessment Report. Those were completed in 1982.

By the way, there was considerable press coverage and press releases, as well as invitations to attend a series of meetings.

Then, in the fall of 1981, the Authority, through the Department of the Treasury's Division of Building and Construction, engaged an engineering consultant -- the engineering consultant who is

on the job right now, PRC Harris. Their purpose was to design and prepare the plans and specs for the removal of the sediment from the Canal.

In February, 1982, the consultant, PRC Harris, actually produced a program document which was distributed to county and municipal government officials, the Authority's customers, public interest groups, and other interested parties. A series of three public information meetings were held on March 16, 17, and 18 of 1982, including meetings in the Trenton, Lambertville, and Princeton areas, to receive public input to this very early work. Keep in mind that there was a previous round of hearings on the Rutgers work, as well.

During these public information meetings, the Authority -- it wasn't the Authority; yes, I guess it was just the Authority about that time -- from the beginning of 1982, outlined what the proposed public information involvement program was to be as the contract documents were prepared. I just want to quickly outline those early efforts by DEP, which is where the Division of Water Resources' water supply operations were at the time, and then I would like to outline the creation of the Authority in 1981, and what the subsequent public involvement program was. It will lead up to what happened last year, if you'll bear with me. I think that--

ASSEMBLYMAN MARSELLA: (interrupting) Okay. When you went through the preliminary hearings regarding the project, do you have any documentation of who attended the hearings and what kind of testimony was taken?

MR. RICCI: The early meetings that I mentioned -- through 1982 -- are not in this packet.

ASSEMBLYMAN MARSELLA: But, do you have those available?

MR. RICCI: May I check with our Chief Engineer because he was there at the time? I was not there.

MICHAEL J. GALLEY: (speaking from audience) I might have the information available as far as public notices are concerned. In one or two cases, at some of those meetings, there was-- (Because witness was not near microphone, remainder of his testimony is inaudible).

MR. RICCI: We will provide you with the information that is available. By the way, that is Michael Galley, our Chief Engineer.

ASSEMBLYMAN PATERO: I have a question, Mr. Chairman. At the meeting I attended in Princeton -- that is where I received all of my information -- they said in regard to the environmental impact study, that there was no mention of trees. They mentioned fish and frogs and everything else, but there was no mention made of trees at that time. Is that correct?

MR. RICCI: Up through the point I just mentioned-- I'll get to that in a minute, and hopefully, we can address that question. If I don't, please press me for it.

I just want to give you the extensive background which goes back to the late 1970s and early 1980s. As I mentioned before, in 1981, PRC Engineering was engaged by the Division of Building and Construction to prepare the actual project environmental impact statement. The early one was just kind of a generalized impact statement prepared by Rutgers University.

ASSEMBLYMAN PATERO: What is the name of that company?

MR. RICCI: It is PRC Engineering now; at that time, it was PRC Harris.

Their further charge was to prepare the actual construction documents which would be used for purposes of receiving bids and going to construction.

During the course of this developmental work, several public information meetings were held. Before the plans and specs for the project-- That project is comprised of three major contracts.

ASSEMBLYMAN PATERO: Excuse me. You are saying now that PRC Engineering did the environmental impact study?

MR. RICCI: They are the ones who prepared it.

ASSEMBLYMAN PATERO: And, they also drew up the plans and specs for the bidding?

MR. RICCI: For bidding purposes. That is correct. Before these actual detailed plans and specifications were advertised for construction bids, they did, in fact, receive extensive input and approval from the Division of Parks and Forestry and the D&R Canal Commission.

All recreational and historical concerns were evaluated by these experts in their respective fields, and protected. As a matter of fact, parenthetically, I would also like to point out that the U.S. Army Corps of Engineers had to issue a permit for the dredging program under Federal statute.

In fact, a significant part of the project cost is directly related to the protection or enhancement of the cultural resources. There is only one full-time cultural resource inspector on the project to make sure damage is not done, and the cultural resource man from DEP is very much involved in the project.

Simply put, the law requires the Authority to obtain the approval of the D&R Canal Commission before we undertake any work, whether it be a major or a minor activity, which will affect the structures or the natural features of the Park. Further, we have always worked closely, and will certainly continue to work closely, with the Division of Parks and Forestry. I might say that this relationship establishes a more formal agreement, and it is specifically being defined in an agreement, which is in draft form right now. I have included a copy of that draft agreement in the information I handed out.

A review of the record will also show that there were three public meetings on Contract II, that is, the contract which is of great concern to you and the citizens in the area. It is the contract that goes through the Princeton area. Before the completion of the plans and specifications for Contract II by the consultants, two very important public meetings were held to elicit input to the project. I would call your attention again to Exhibit 1. You'll see as part of that exhibit an extensive mailing list, which is comprised of individual citizens, citizen groups, all of the local municipalities, county officials, and various other governmental agencies. Included in that, you will find copies of the notices of the two meetings I am referring to.

The first meeting was a meeting which was held on January 10, 1984. It was a meeting for county and municipal engineers, as well as environmental commissions. They had previously been furnished with

copies of the preliminary plans and specifications. Now, I think I'll get to the question that was asked earlier.

You'll find behind that invitation to attend the meeting, which as I said was held at the Maurice Hawk Elementary School in West Windsor -- it is actually West Windsor/Princeton Junction-- You'll find attached to the agenda a very general set of notes, which was taken by some of the staff at the time. You'll also find the types of questions posed at that meeting. You'll see, as an example, right at the bottom of that list of questions a question: "Trees, replacement?" That is an indication that that was discussed at the meeting. I would also like to say that off to the left of that handwritten summary, you'll see a note about the slurry wall. That was also discussed by the consultants at that time.

Unfortunately, if you'll look on the next page, despite all of the invitations that we sent out to local township engineers and environmental commissions--

ASSEMBLYMAN MARSELLA: (interrupting) I have to stop you. What page are you on?

MR. RICCI: Oh, I'm sorry, sir.

ASSEMBLYMAN MARSELLA: It is tough to follow. It is a big document, and we just received it today. I'm trying to follow. You are saying public hearings, etc.

MR. RICCI: All right, sir. There is a cover letter, which is entitled Exhibit 1.

ASSEMBLYMAN MARSELLA: Okay, I have that.

MR. RICCI: Immediately after that is a letter from Mrs. Blair -- I'm skipping over that one -- a letter to Dale Smith, and a couple of memos on herbicides. Right after that, there is an invitation dated December 20, 1983, Assemblyman.

ASSEMBLYMAN MARSELLA: December 20, okay.

MR. RICCI: December 20, 1983.

ASSEMBLYMAN MARSELLA: Mercer County and Middlesex County?

MR. RICCI: Yes, I have been referring to that. Behind that, you'll find the attached agenda, and immediately thereafter is a handwritten--

ASSEMBLYMAN PATERO: (interrupting) In regards to the March 12 letter from Mrs. Blair, it says, "Following our meeting at Harris' Kingston office on March 8 on the subject of restoration and replanting of the Canal, we discussed the lack of information in the Environmental Impact Statement on the clear cutting of the trees and herbicidal spraying. Would you please be good enough to suggest a solution to this information gap?" Is there anything-- I see a March 29 letter which is a response to your letter of March 12.

MR. RICCI: Assemblyman, in my testimony, I am going--

ASSEMBLYMAN PATERO: (interrupting) Is that for someone else?

MR. RICCI: No, I am going to try to get into that kind of discussion. As a matter of fact, in the cover letter of March 29 from Mike Galley -- which is Exhibit 1 -- he addresses some parts of Mrs. Blair's questions. Through my statement, I will attempt to cover it in greater detail.

ASSEMBLYMAN PATERO: Okay, so we are at December 12, 1983 now?

MR. RICCI: It is a December 20 invitation.

ASSEMBLYMAN PATERO: Yes, December 20.

MR. RICCI: Actually, I have been referring to the handwritten memo listing the questions that were posed, which were the subject of some discussion. Immediately behind that, Assemblyman--

By the way, I apologize for the lack of clarity in putting this together, but we only found out about this hearing very, very recently.

ASSEMBLYMAN MARSELLA: Okay. When something such as this took place on the Canal, as you know, Assemblyman Patero introduced a resolution in the Assembly. I know the expertise-- Your expertise is welcome here, but I know the speediness of having a hearing quickly. If we had waited too long, you may have already finished dredging the Canal, and maybe ripping down the other side of the woods. I thought it was incumbent upon myself, as Chairman, to have a speedy hearing--

MR. RICCI: (interrupting) I think that is perfect.

ASSEMBLYMAN MARSELLA: (continuing) --so that we could clear up some of the concerns of the citizens and some of the commissions involved here. That is why we called the hearing.

MR. RICCI: That wasn't meant as criticism.

ASSEMBLYMAN MARSELLA: I understand that.

MR. RICCI: It was just to try to apologize for the lack of organization of this thing.

ASSEMBLYMAN PATERO: We thank you for being available today. We really appreciate that.

MR. RICCI: I wanted to point out that despite those invitations, the making available of preliminary plans and specifications, the consultants and everyone else, you can see from the attendance list that only five individuals signed it.

We also had -- if you'll follow along with me -- a January 9, 1984 notice where we invited the general public to attend a public information meeting, which was held on January 31, 1984. Gentlemen, that was the letter I was paraphrasing before with regard to the background with Rutgers and everything else. Once again, that is followed by the agenda and some further background of the project. Attached is a list of the people who were in attendance at that meeting. That is followed by a handwritten summary of the kinds of questions that were discussed. I point that out, just by way of illustration, not only because of the early efforts that I referenced in terms of the Rutgers work and the public information meetings in 1982, but also to point out that when we were getting close to construction, we continued an aggressive attempt to inform the public and to elicit input and questions so they could scrutinize what we were doing.

Likewise, there were press releases and stories written in various papers about the proposed work.

Getting back to my prepared testimony-- I deviated somewhat. We had those two meetings I just mentioned, and during those meetings, the consultants presented and explained preliminary plans and specifications and included a discussion of the slurry wall. This slurry wall, which is to be installed within the embankment itself, is

necessary as a result of the recommendations of our consulting engineers for the stability of the wall when the Canal is drained. Under those conditions, we have a situation where Carnegie Lake would be at a higher elevation on one side of the earthen embankment. I understand you visited that area today. On the other side of the embankment, you would have an empty canal.

Under those conditions--

ASSEMBLYMAN MARSELLA: (interrupting) During the analysis-- Let's take this one step at a time. The consultant proposed the slurry wall to be installed prior to the dredging?

MR. RICCI: The consultant said that the slurry wall had to be in place before the Canal was drained for the dredging program.

ASSEMBLYMAN MARSELLA: Let me ask you another question. As far as the dredging of the Canal is concerned, to what depth would it be dredged?

MR. GALLEY: (speaking from audience) Down to the bottom of the Canal.

ASSEMBLYMAN MARSELLA: Do you have any idea how many feet we are talking about?

MR. RICCI: That varies from location to location, depending upon how the sediment accumulates. I would like to ask our Chief Engineer to give some general numbers.

ASSEMBLYMAN MARSELLA: We should have some general numbers -- five feet, three feet.

MR. GALLEY: (speaking from audience) The amount of sediment along the Carnegie Lake embankment-- The survey indicated it was anywhere from two to three feet deep. The removal of that sediment to a depth, depending on the type of operation of the Canal would be anywhere from six to seven feet.

ASSEMBLYMAN MARSELLA: Okay. I have another question. The dredging of the Canal is dry dredging, as I understand it. The plan is to drain -- and, I haven't seen the contract -- the Canal and dry dredge it.

MR. RICCI: That is correct.

ASSEMBLYMAN MARSELLA: That is the reason why we need the slurry wall. It is because they are afraid that the pressure from the Lake on the other side would push the embankment over.

MR. RICCI: That was for the immediate construction program. That is correct.

ASSEMBLYMAN MARSELLA: Was there any investigation into wet dredging the Canal with a drag line? I don't know how you are going to do the dry dredging.

MR. RICCI: No, it would not be with a drag line. Again, with your indulgence, I would like to ask Mike Galley to address that.

MR. GALLEY: (speaking from audience) The consultant was asked to look into both methods of dredging, not only this reach of the Canal, but the entire 32-mile reach of the Canal. The plans and specifications were so advertised that the work would be done by a contractor -- either dredging in the wet, or removal of the sediment in the dry. The contractors bid on those two alternatives.

It was recognized that the need for disposal areas in an immediate adjacent area was no longer available to a contractor to hydraulically dredge the resulting preferable option when he bid on removing the sediment in the dry.

There was still another option that was allowed for in the contract documents whereby the contractor could still hydraulically dredge certain regions, but he would use dry compartments in the Canal to deposit the material, either upstream from the part that he was hydraulically dredging, or downstream, but that would mean--

ASSEMBLYMAN MARSELLA: (interrupting) Why don't you come up here? The reporters can't hear you from the audience.

MR. GALLEY: That would mean he would have to handle the material at least twice to remove the sediment, and that would actually add to the cost.

ASSEMBLYMAN MARSELLA: Explain in layman's terms what type of procedure would take place in the dredging operation mechanically? Are you talking about a hydraulic back hoe? Are you talking about a crane or a dump truck? I think some of the citizens would like to know what is going to take place. Since we are into the dredging--

MR. GALLEY: (interrupting) As the contractor bids the job, and as the contract is presently being carried out, the contractor removes the sediment, in most areas along the entire 32-mile stretch, by working from either a towpath embankment, or upstream of Trenton, by utilizing the old Belvedere Railroad right-of-way and pulling the material up to the side of the embankment and then loading it on to trucks.

In certain other reaches of the Canal where shale or rock is fairly close to the invert of the Canal, it is possible for the contractor to work right down into the Canal and not have to disturb the Canal on either side.

In fact, in this contract -- Contract II -- upstream of the Princeton area, that is exactly what the contractor is doing. He constructed a road down the middle of the Canal, and then he removed the material and the road as he came back. He has several access points for the equipment to get back out.

In the Carnegie Lake area, access was limited to a relatively narrow embankment, and since the consultants identified the need for a slurry wall, it was also an advantage to utilize that embankment for the removal of the material in the dry. He has large back hoe equipment that reaches out -- literally reaches out -- and pulls the sediment in and up against the embankment. Then that material is loaded on the trucks, hauled out, and disposed of.

MR. RICCI: I think one of the questions you might ask, and perhaps this is part of your concern, is, would the slurry wall have been needed if hydraulic dredging were, in fact, used? Hydraulic dredging is a floating piece of equipment with mechanisms to remove the sediment from the bottom and pump it as a slurry or wet mixture to an area where it has to be dried out.

I'll answer that question in a minute, but I would like to give you some additional background regarding what Mike just mentioned.

In the planning stages of this, we looked at the possibility of using some Princeton University land. Indeed, we spent some money on borings to find out what the soil structure was below. We were concerned about possible contamination and that type of thing. We had

numerous discussions with the people from Princeton University, who were quite cooperative in seeing if there was something that could be worked out. Because of their own considerations, which are perfectly valid, it was judged -- and, I ask our Chief Engineer to correct me if I misstate it -- that one piece of land which was previously used for that very thing -- taking dredge material out of Carnegie Lake and drawing it out onto a piece of land -- would be available. But, the requirement was that we would have to remove it within a five-year period because of the needs of the University. Likewise, they, indicated that a smaller tract of land, which was also being looked at, would be available. But, we needed some local approvals on it, didn't we, Mike?

MR. GALLEY: No, there were two areas, and those were the two sediment disposal areas that were used by Princeton University when they hydraulically dredged Carnegie Lake a number of years ago. We investigated the possibility of utilizing those two sites. We removed the material that had been placed there from Carnegie Lake to make room for the Canal sediment. We did all the necessary investigations, and we tested the sediment. We had hoped to remove the sediment from that site, dispose of it at another location, and then fill up those sites with Canal hydraulically dredged material.

You have to envision that the greater percentage of this material, when it is being disposed of in an area like this, is liquid, and it has to be able to settle and dry out.

Princeton University advised that one area, which was located in Plainsboro Township, was no longer available to us. This was a decision that was made by Princeton University, and we honored their request not to pursue the use of that location anymore. They said we could utilize a similar disposal area they had in West Windsor Township near Washington Road. We felt that the area had to be expanded to be able to accommodate the total amount of material that had to be removed. We were talking upwards of 200,000 cubic yards of sediment material.

They put a further restriction on us: Once we placed the material in there, which would require the approval of the local

municipality to expand an existing disposal area, it would have to be removed within a period of five years.

So, lacking those types of options that were available, it became apparent to us that the method of removing the sediment was either in the dry, or by using this method of hydraulically dredging compartments in the Canal. The compartment idea, of course, just by the very nature of having to handle the sediment at least twice and having the need to construct coffer dams, made the project very expensive. So, the contractor then bid on the dry sediment removal method.

MR. RICCI: But, the key question, Assemblyman, is, would the slurry wall be needed if only hydraulic dredging was used, whether it be the option that Mike just mentioned, or if we had the option of--

ASSEMBLYMAN MARSELLA: (interrupting) Yes, that is what we were asking.

MR. RICCI: The answer is, absolutely yes. Once the consultant, PRC Harris, along with their soil expert -- we certainly are not experts in that area, and we relied upon their expertise -- analyzed that embankment, that is, the embankment which I showed you in the sketch, they told us if the Canal was drained of water, for whatever reason -- whether it is for construction, whether, in the future, it is for maintenance of the Canal, or whether it is the draining of the Canal as a direct result of flooding upstream or downstream of the Carnegie Lake area and the washing out of the embankment, thereby draining the Canal -- that that wall would be unstable and could wash away. Then it would be totally irresponsible of the Authority not to protect that embankment, not only for water supply--

ASSEMBLYMAN MARSELLA: (interrupting) I want to go back to one point. I understand their recommendation was that the slurry wall was needed. As I toured the site this morning with Assemblyman Paterno, there was no doubt in my mind that you now need a slurry wall after removing the entire network of trees that were along the Canal holding the embankment back.

MR. RICCI: If I may interject, sir, the trees had nothing to do with enhancing the stability of that embankment.

ASSEMBLYMAN MARSELLA: I disagree with that, but go ahead.

MR. RICCI: But--

ASSEMBLYMAN MARSELLA: (interrupting) I do.

MR. RICCI: Frankly, sir--

ASSEMBLYMAN MARSELLA: (interrupting) You have 100-year-old trees and 50-year-old trees with a root network as big as this table.

MR. RICCI: But, root networks actually help to create situations that could be dangerous if you have wind storms with very wet soil, particularly if they are shallow-rooted trees. As a matter of fact -- and, we are not advocating this; the record should show that -- if you look at pictures of that embankment when the Canal system was actually in operation, there, indeed, were no trees on that embankment. We have pictures as late as--

MR. GALLEY: (interrupting) It was 1946.

MR. RICCI: As late as 1946, but we are not at all suggesting that that is the way it should be. Soil experts have--

ASSEMBLYMAN MARSELLA: (interrupting) I'll have to defer to the soil experts.

MR. RICCI: As we did.

ASSEMBLYMAN MARSELLA: I can understand what you are saying -- that they recommended using the slurry wall.

MR. RICCI: It is because, if we didn't take that step and we did, in fact, sometime in the future have a flood which washed away some of the embankment -- we drained the Canal and we had a failure of that embankment -- then you could justifiably convene a hearing of this Committee and say, "Why did you act irresponsibly in view of what the experts told you?" So, the answer to the question of would we need it, if there was hydraulic dredging or not, is, in our judgment, yes.

By the way, I might say that Commissioner Hughey has asked the citizen groups to identify and meet with our consultants. There have been a number of individuals, and I think a professor from Princeton University. They have already received copies of the consultants' report; that includes the Princeton Township Engineer, Mr. Kaiser. That meeting is to take place next--

MR. GALLEY: (interrupting) May 15.

MR. RICCI: May 15. The consultants will present and discuss their analysis.

ASSEMBLYMAN PATERO: Mr. Chairman, if I may, for the record, I would like to state that Mayor Wright from Plainsboro has just come in, and I think we should thank her for the use of this hall. Thank you, Mayor.

ASSEMBLYMAN MARSELLA: It is a beautiful hall. (Mayor Wright acknowledges)

ASSEMBLYMAN PATERO: With regard to cost, would it be cheaper to wet dredge or to dry dredge? I know of some of the problems you brought up. In your experience, would it be cheaper to wet dredge or to dry dredge?

MR. GALLEY: On the average -- and, this is not a good way to state it -- normally hydraulic dredging, because of the need to pump this material some distance and then to acquire property and construct a disposal area -- requires permits to be obtained from the DEP. Usually the cost is higher for hydraulic dredging.

ASSEMBLYMAN PATERO: If you wet dredge?

MR. GALLEY: That is right.

ASSEMBLYMAN PATERO: Okay. Here we have a contract-- I don't think Tony and I are attorneys, but in the operation and maintenance section of the contract, I see no mention of trees. All I see is the mowing of the lawn, etc. The only time trees are mentioned is under the joint responsibility of the Department and the Authority. That is under Section C, column two.

MR. RICCI: Assemblyman, are you looking at the draft agreement?

ASSEMBLYMAN MARSELLA: I think so.

MR. RICCI: That is just a draft agreement between the Authority and the Division of Parks and Forestry. The purpose of that was to memorialize the respective roles, responsibilities, and accountability. Although we have been operating that way -- even when the Authority was created-- Because we wanted to make sure that there was no question as to who did what, we drafted this. It has not been signed, but in there, ultimately the question of the configuration of

trees, tree removal, whether it is by Parks and Forestry or the Authority, is certainly subject to the final decision of the D&R Canal Commission. That is clearly a fact.

ASSEMBLYMAN PATERO: It seems that the Environmental Impact Study did not mention anything about the trees and going to the original draft. The only thing it mentions is, "The parties will prepare a yearly tree removal and trimming plan in coordination with the Delaware and Raritan Canal Commission."

MR. RICCI: Again, sir, that is for our day-to-day operations. The impact statement you are referring to is for the project. I would like to ask Mike to try to explain that.

MR. GALLEY: The Environmental Impact Statement clearly refers to the environmental impact of the removal of vegetation. That is the terminology that is used. Vegetation includes trees, brush, bushes, grass, and what have you. It specifically states that there would be a serious environmental impact on the environment of the Canal if trees have to be removed. For that reason, the original design of this entire sediment removal project tried to minimize the removal of vegetation. It was assumed from the beginning that with dredging in the dry, or removal of the sediment in the dry, the contractors would be limited to areas where there would be the least amount of impact -- that is, taking into account all considerations: the cultural impact, the impact on the vegetative environment, etc. These were very specifically noted on plans and specifications. The contractor was not to use access to the Canal, other than those points that were located.

Once Contract I, which is the contract that covers 16 miles through the City of Trenton, both upstream and downstream, to the Lawrence Township area-- Once the contractor got under way, drained the Canal, and attempted to remove the material by just gaining access at those locations-- The material was very silty, and it just wouldn't dry out to allow him to get in there and, in fact, allow him to continue with the type of equipment he had to utilize. As the plan was originally designed, it would have caused very serious environmental harm to not only the historic impervious blanket, which the Canal has, but the Canal in many areas is lined with historic stone to protect the embankments.

Recognizing this problem, the contractor appealed to the Division of Building and Construction and the Authority and made a request to the D&R Canal Commission that the method of removal be changed to allow him to gain access at various locations along the embankments so he could remove the material by pulling up the side of the embankment. The Canal Commission so approved.

To do this, it was required to remove trees at locations other than what were specified on the original plans and specifications.

ASSEMBLYMAN PATERO: Well, it looked to me like you just went down the road and cut down everything.

MR. GALLEY: You have to look at the Carnegie Lake embankment as being a separate specialized situation.

MR. RICCI: Yes, I think that is important. If you'll refer to the sketch I gave you, Assemblyman, you'll see that in order to construct the trench, which is the stretch, I guess, that you looked at this morning, you have to remove the trees that are on the embankment.

ASSEMBLYMAN PATERO: One other thing which concerns me is that we heard the Deputy Mayor say that 1,500 feet was cleared from property which was owned by Princeton Township. Are we liable to replace those trees, or is the contractor liable?

MR. GALLEY: Absolutely. In fact, the consultants who were acting as construction managers, the contractor, and Princeton Township have been negotiating for the restoration of that area, which will not only include the replanting of trees that have been cut down, but also some additional work that would help to improve the area. Not all of those trees that were removed were on Princeton Township property.

MR. RICCI: Right. As a matter of fact, I think the fence was located on-- Wasn't there a fence there in question?

MR. GALLEY: No.

MR. RICCI: Okay, I was thinking of something else.

ASSEMBLYMAN PATERO: It was a little disturbing when we heard the Princeton Township engineer state that they weren't notified, and they just came in and cut down the trees.

MR. RICCI: I think there was an acknowledgment that there was a mistake made in that particular area.

MR. GALLEY: There is no question that, in that particular area, the contractor became a little ambitious.

MR. RICCI: I think it is also important to point out -- because no one has mentioned this to date -- that back in January, 1984, when we had these hearings, one of the vital objectives of Princeton Township was to get the turning basin in Princeton Township dredged as part of our project. Our Board was anxious to cooperate in order to get the work included in the construction contracts. I daresay that originally there was a dispute because there was a wish that we actually would finance it, but we couldn't finance it.

The bottom line is that that turning basin is being dredged for Princeton Township by our contractor for the big sum of one dollar. So, there is going to be a plus to that activity. I'm not trying to excuse the mistake of cutting down trees that were not supposed to be cut down.

ASSEMBLYMAN MARSELLA: You said that PRC was the design engineer and also the construction manager for the project.

MR. RICCI: Yes, under the contract with DBC.

ASSEMBLYMAN MARSELLA: Who was the contractor?

MR. RICCI: Conti Construction, for this particular stretch.

ASSEMBLYMAN MARSELLA: What was the amount of that contract?

MR. RICCI: Mike?

MR. GALLEY: His contract was bid at--

MR. RICCI: (interrupting) Four million dollars? We have that information.

ASSEMBLYMAN MARSELLA: I just want to know what number we are talking about.

MR. RICCI: It was a little over \$4 million.

MR. GALLEY: It was \$4.6 million.

MR. RICCI: Is it all right if I continue, sir?

ASSEMBLYMAN MARSELLA: Sure.

MR. RICCI: Here is a summary of all the construction. Mike Galley has just summarized some of the problems that the contractor had for Contract I in terms of removing the silt and the request for the cutting of additional trees.

After construction of a demonstration reach, which was observed by the consulting engineer, the Division of Building and Construction, the cultural resource consultant, the Division of Parks and Forestry, and the D&R Canal Commission, the Canal Commission, at their July 17, 1984 public meeting, approved of the selected removal of additional trees with certain restrictions. I am going to introduce here the question of the use of herbicides, and I'll get back to this later. This is where it first started.

During that same public action, they also approved of the use of herbicides in tree stumps to prevent sprouting. You'll find in the minutes of their actions on that date, the following article: That is, specifically, Article 4, which says, "All trees that are to be removed are to be cut as close to ground level as possible, and the stumps are to be treated with an herbicide which will prevent sprouting. This herbicide is to be applied at least twice, with an interval of at least six months between applications. The type of herbicide to be used must be approved by an appropriate agency to assure that it will not contaminate the water in the D&R Canal."

Getting back to the trees, when subsequent construction difficulties were encountered, the formal process of selected tree removal, as directed by the Canal Commission, was followed on a case-by-case basis, not only for Contract III, which is the upper part that goes from Lambertville to Stockton, but also for Contract II, including the slurry wall area.

Prior to the actual start of work on Contract II, a public information meeting was held on December 1, 1984 at the West Windsor/Plainsboro High School. The purpose was to introduce Conti Construction to the general public, and also to receive input from the general public. Mr. Conti described his proposed construction methods and used colored slides of the before, during, and after work, that he had done in the Lambertville area. He elicited discussion and comment.

Now, I would like to change gears and discuss-- If there are any further questions regarding that, I would like to answer them now, or we can hold them in abeyance.

ASSEMBLYMAN PATERO: Are Phases II and III separate contracts?

MR. RICCI: Yes, there are three distinct contracts. The first contract is for about 16 miles, which goes from the general area of Washington Crossing State Park down to--

MR. GALLEY: (interrupting) Province Line Road.

MR. RICCI: (continuing) --Province Line Road in Lawrence Township. Contract II is the contract that we are talking about today. Contract III is the contract which goes from around the Stockton area, down close to Washington Crossing State Park.

Conti Construction had Contracts II and III.

Now I would like to discuss the protection of the recreational and historic values of the D&R Canal State Park. To put this into perspective in terms of the issues and concerns that have been expressed, I would like to quote a statement of a representative of the D&R Coalition: "The Agreement about to be signed by DEP and the Authority is ambiguous about protection of the D&R Canal. There is no clear reference to a set of criteria for Park projects, nor reference to a Master Plan to be precisely adhered to, or for public hearings on projects. There is no clear mechanism for resolution of disputes between the Authority and the interests of the Park. Under the present arrangement, there is a clear chain of command from the Department of Parks to the Commissioner of DEP and then to the Governor. This allows greater public participation and dispute resolution than may be practical under the Authority."

In response to that, we would like to reiterate that, by law, the Authority must obtain the approval of the D&R Canal Commission before it can take any action which will affect the structural, natural, or historic features of the Canal. The referenced draft agreement, which I have talked about here -- it is one of our exhibits -- if it is read carefully, has the aim of specifying the relationship between the Division of Parks and Forestry and the Authority, as well as their respective responsibilities and accountability. I would like to enter this into the record as Exhibit 2. There is a very clear chain of command with the same individual, the Commissioner of DEP, as Chief Executive for both DEP and the Authority. By statute, the Commissioner of DEP serves as Chairman of the Authority. The rest of

my bosses include six Authority members, each of whom is nominated by the Governor and confirmed by the Senate. I would hope that the record clearly establishes that we have conducted our business in an open and candid manner. As a matter of fact, we stand on our track record for our attempts at an effective public participation program.

The next subject I would like to get into -- I'll try to speed this up -- is the use of herbicides. To put it as directly as I can, I think there has been an attempt to distort the facts regarding this subject. Statements have been made that the Authority was spraying an "Agent Orange" type herbicide all over the area to prevent any future growth of any kind on the embankment adjacent to Carnegie Lake. The attempt appears to have been to paint a picture of irresponsible destruction and indiscriminate spraying of 2,4-D. By the way, I just read an article in last night's paper that said that EPA is looking at this 2,4-D, but they also stated that it is a common ingredient in most of the herbicides that we spray on our lawns for the destruction of dandelions. I can say categorically that 2,4-D has not been used by the Authority or its contractor anywhere within the Canal Park. From these erroneous statements of fact, it was concluded that the Authority was endangering the health of the citizens we serve. We would like to present the facts of the matter.

As indicated previously, the use of herbicides was approved by the D&R Canal Commission on July 14, 1984. I might add that the established need or desirability at that time was based on the input of not only our own staff, but also the Division of Parks and Forestry, as to what would be desirable to maintain the attractiveness and natural beauty of the Park. Mrs. Rosemary Blair, President of the D&R Canal Coalition, was in attendance when this matter was discussed before the D&R Canal Commission. Several other members of the Coalition and other interested parties routinely receive copies of the Commission meeting minutes.

Following the July 17, 1984 Canal Commission meeting, an extensive inquiry of experts and knowledgeable individuals resulted in the recommendation of two herbicides. One was Ammate, and the other was Weedone 170, with the indication that Ammate was the preferred

herbicide. I would like to refer you to Exhibits 3 and 4, which reference that the discussion of the respective materials specifically--

ASSEMBLYMAN MARSELLA: (interrupting) I want to try to speed this up. I know this is an important topic, but we were requested, as a Committee, to look into this. I was just talking to Assemblyman Paterno, who is the sponsor of the resolution. There was a change order issued. I am going to go back to the trees and an additional cutting of more trees along the area that we looked at this morning. I think that is what really prompted this hearing today. All through the process, yes, you did have meetings; yes, you did consult with people and those types of things. But, I think the change in the contract by cutting additional trees along that--

MR. RICCI: (interrupting) If I may interrupt, sir--

ASSEMBLYMAN MARSELLA: (interrupting) Correct me if I am wrong.

MR. RICCI: I don't agree with that because the change in the tree-cutting procedures predated Contract II.

ASSEMBLYMAN MARSELLA: Did it predate it?

MR. RICCI: Yes, it did. As I mentioned earlier, as part of Exhibit 1, the matter of tree removal was one of the questions raised at the meeting with the Environmental Commission and the Township engineers.

ASSEMBLYMAN MARSELLA: Rocco, what I am going to ask you to do-- I know the things you are telling us are very important, but it is also important for Assemblyman Paterno and myself to hear some of the citizen input. There are a couple of people who would like to speak, and they really have to get back to work. We probably should have had this hearing in the evening, but I chose to have it at one o'clock.

If you don't mind, as a courtesy to the chair, I would like to call on a couple of citizens because they have to leave.

MR. RICCI: I'm here at your pleasure, sir.

ASSEMBLYMAN MARSELLA: Okay. Can you just excuse yourself until we hear testimony from some of the citizens?

MR. RICCI: Sure.

ASSEMBLYMAN MARSELLA: Rick Henkel? Is he still here?

(affirmative response)

RICHARD HENKEL: I was brought into this situation after the fact. I did not attend any of the public hearings that were mentioned earlier.

After the cutting was done-- I am basically the person on the Planning Board who is responsible for the landscaping in town. They called me and said, "Rick, what do we do now?" We walked through this site with the engineer and a number of other interested people to see what could be done after the fact -- after the cutting. We tried to come up with a plan to take care of what happened -- not so much why it happened or anything else.

In turn, we got involved in why all the tree cutting was done. We asked the same questions you asked. The tree roots helped to stabilize the soil embankment that is there. It is a predetermined fact that any root system helps stabilize, and that is why in soil erosion areas, grass is sown, seeds are planted, and trees are grown to help to stabilize the soil. Therefore, the thought that the root system there is not important and actually hinders the stability of those banks, I think, is a questionable matter.

In the study of the slurry wall, I would like to have seen some wells drilled to see if there is movement of water through the embankment. It is quite a wide embankment, and I would like to have seen if there really is movement of water, especially when you consider the effects of the root system there. The root system absorbs an awful lot of moisture. Those were a couple of technical things I would like to have seen done, but they weren't done.

What can we do at this point? I was just seen with the Princeton Township engineer, and there have been comments made that there have been ongoing, working relationships with the Township engineer. The Township engineer has called me regarding specific things that happen landscaping-wise. So far, I think it has been pretty much a one-way communication. The Township has requested information, but it hasn't received an awful lot back. The Township engineer is here. We have walked the site together, and I would like to have him come up and answer questions with me, if you would like to ask us questions at the same time.

ASSEMBLYMAN PATERO: Excuse me. Are you an expert in landscaping? Why do they call you?

MR. HENKEL: I have been with Princeton Nurseries for 25 years, and I have lived here for 25 years. For clarification, my background is in horticulture. That is why I have been brought into this situation.

ASSEMBLYMAN MARSELLA: You also said you were cochairman of the Town Planning Board.

MR. HENKEL: It is the Princeton Regional Planning Board, yes.

The Township engineer and I have walked this site. One of the specific things we did when we walked the site-- At that point, the trees had been removed, and there were stumps about three feet high. We talked with one of the foremen at the site, asking him specifically not to clear cut. The plans could have been done then; we could have taken out the stumps, and we could have really worked out something. Within the next 36 or 38 hours after he promised that there would be no clear-cutting of the stumps, the stumps were clear cut.

These are some of the things that have been a one-way relationship.

I was called in to see what could be done. We have now hired a landscape architect -- Robert Wells out of New Jersey. He is a licensed landscape architect, and he is presently President of the Landscape Architect Association in the State. He is going to work with the Township to try to redevelop a park that we can live with. One of the ways is to let the stumps regrow, but this is a long-term operation.

We read the contract, and it specifies that all trees will be replaced with the same kind of trees. I don't want to tell the contractor what he has himself involved with, but it is almost impossible -- highly impossible -- to replace the same kind of trees. There were 20-inch caliper trees, 100-year-old trees, 75-year-old trees, 50-year-old trees, and 5-year-old trees cut down. You cannot replace them.

Yes, 2,000 trees have been removed, and 2,000 trees can be replanted. The value of 2,000 trees can be restored so that the whole Park system can be redone, but how do you come up with that value? A planted three-inch caliper tree costs maybe \$600 on the job, so 2,000 trees times that type of money means we are talking about a lot of money -- a lot of value in trees. That is just the replacement value of a small tree, but not the same kind.

The thought of replacing them, the thought of digging holes in the embankments, and the thought of removing the root system that is there is very unlikely. Therefore, we have to work with what we have.

The money for the damage done should be appropriated by the contractor or by some authority so that things can be worked out over the years.

If the trunks have not been treated with herbicide, and if we allow them to re-sucker, each trunk will send up maybe 15 or 20 suckers. An arborist has to be hired to come in the first year and trim them down to a cluster of about five or six good strong suckers. He has to do work on the tops of them. The next year he has to come back and rework them, re-trim them, and get them down to two or three good strong plants. The third year he comes back and works them down to one. So, you can see, it is a long-term cycle you are involved with.

The use of herbicides becomes an environmentalist's nightmare. Selective herbicides can be used; they have to be used, because what is going to happen with the sun on the banks is, we are going to have weed growth and poison ivy. A lot of plants are going to develop that are real nuisance plants; therefore, selective herbicides are a must. They have to be applied by a professional who has complete control over his application techniques. They cannot be broadcast. I don't think the broadcast of herbicides along those banks has ever been proposed, but it cannot be done.

There are things that can be done to right the wrong, but one thing is to find out about the responsibility and who is going to pay for it. Those are the things that I think we have to look at really hard. It has been done. Let's make the best of what we can do and make sure it doesn't continue.

I think the use of the slurry wall is very questionable, but I am not an engineer. I would have liked to have seen studies, and I would have liked to have seen our Township engineer -- or any engineer in the area -- called in for the special situation, walk the Canal at that point, and say, "This is where a slurry wall is going to go. This is what a slurry wall is going to do to this area."

I think, in hindsight, there should have been some things done, but we have a situation now where the slurry wall has not yet been constructed. I also think there are an awful lot of questions as to whether or not a slurry wall is really needed. Some of the engineers who can really study this should be called in, and we should have a session with them before we start to develop a slurry wall. As you know, in order to develop a slurry wall between Carnegie Lake and the Canal, it means cutting a ditch possibly 19 feet deep and two feet wide -- you can see that in the plans you have in front of you -- and filling the hole with concrete so that you develop a hard wall.

There has been conversation regarding the fact that we don't want to have trees growing. If a slurry wall is developed, we don't want to have trees growing there because the root system will affect the wall. Therefore, we don't want to have trees regenerated.

These are the types of things that have to be brought out in the open. If, in fact, they don't want to have trees planted, and if they will regenerate -- or allow regeneration at all -- because a slurry wall is going to be installed, I think the public has a right to know that. I think careful consideration has to be given.

Do tree roots really affect a two-foot-thick concrete wall? We see trees planted in Manhattan; we see them on all of our public streets. We know there are basements, and those trees really don't affect those basements.

A lot of work has to be done by the proper people before we permit the construction of a slurry wall and the removal of all the soil that goes into the slurry wall. The removal of that soil alone is a gigantic operation with the trucks running up and down the embankment, which is now a very fragile embankment.

I did not come with any prepared testimony.

ASSEMBLYMAN MARSELLA: That was fine, Rick. You did a good job.

ASSEMBLYMAN PATERO: I know an area where there is poison ivy, but do you feel it will grow wild and spread across the whole area?

MR. HENKEL: Yes.

ASSEMBLYMAN PATERO: So, there goes the recreational aspect of it.

ASSEMBLYMAN MARSELLA: When I heard slurry wall-- You know, we deal with some toxic waste issues in our Committee, and when I heard slurry wall, I thought we had some toxic pollutants that were coming across the Canal, and that was the need for the slurry wall. But, that is not the case in either Carnegie Lake or the Canal. I question the slurry wall, but the experts have said it is needed in order to hold the embankment. I don't disagree with you, Rick, that maybe some other engineers should take a look at that.

MR. HENKEL: Along that line, I have one other question. Mr. Flemmer -- the elder Mr. Flemmer who started the nursery -- can remember that when he was a child, they would drain the Canal every winter to do construction work. I mentioned to him the fact that they were putting in a slurry wall so that when they drain it, Carnegie Lake won't flow in. He looked at me in amazement and said, "Rick, I can remember as a little kid, they would drain it every winter and redo the stone work. They never had any problem at that point."

I think there are some questions.

ASSEMBLYMAN MARSELLA: Yes, comments from the Department were made that the general excavation would be between three and five feet. I could see it if they were going down 20 feet and making the Canal really deep. Then there could be a question as to whether or not the slurry wall would be needed. Doing a five- to six-foot excavation is still a question in my mind.

ASSEMBLYMAN PATERO: Has herbicide been used in the area already?

UNIDENTIFIED WITNESS IN AUDIENCE: No herbicide has been used in Contract II in the area in question.

ASSEMBLYMAN PATERO: All right. So, there is a possibility of the shoots coming up then, right?

MR. HENKEL: That is correct.

ASSEMBLYMAN PATERO: Those trees are the fast-growing trees?

MR. HENKEL: Is the question, "Are the trees fast-growing trees?"

ASSEMBLYMAN PATERO: I am talking about the shoots. How long does it take them to develop so that you know they are going to survive?

MR. HENKEL: Well, if, in fact, there is going to be healthy shoot development, we'll know within the next six weeks.

ASSEMBLYMAN PATERO: Okay.

MR. HENKEL: That is how close we are to being able to make proper decisions.

ASSEMBLYMAN MARSELLA: Thank you very much.

MR. HENKEL: Thank you.

ASSEMBLYMAN MARSELLA: The next witness I would like to call is Eugene McPartland.

UNIDENTIFIED PERSON FROM AUDIENCE: Mr. McPartland had to leave to attend another meeting at the University, but he gave me permission to enter into the record a letter he wrote to me some time ago in which he disputes the allegations.

ASSEMBLYMAN MARSELLA: Okay. We are going to enter Mr. McPartland's letter into the record. The next person I would like to call on is Mrs. Rosemary Blair. Excuse me, Mrs. Blair. The Mayor is here also, and out of courtesy to her, I would like to ask her to speak at this time.

MRS. BLAIR: Right. Also, I know some of the other people have appointments.

ASSEMBLYMAN MARSELLA: Mayor Wright?

MAYOR BARBARA WRIGHT: Why don't you hear from Mrs. Blair now?

MRS. BLAIR: I'll defer because I know you have a tight schedule.

ASSEMBLYMAN PATERO: It is your house, Mayor.

ASSEMBLYMAN MARSELLA: Mayor, it is my fault. This is your municipal building.

ASSEMBLYMAN PATERO: We didn't know you wanted to testify.

MAYOR WRIGHT: Good afternoon, Assemblyman Marsella, and welcome, Assemblyman Patero.

ASSEMBLYMAN PATERO: It is good to see you, Mayor.

MAYOR WRIGHT: It is nice to have you here.

ASSEMBLYMAN MARSELLA: Mayor, just for the record, will you state your name?

MAYOR WRIGHT: I am Barbara Wright, the Mayor of Plainsboro. I have a brief comment to make. With me is Henry Schaefer, who is a member of the Planning Board. As a member, he sits on our Shade Tree Committee. We would like to add to some of the things we have been hearing. Primarily, we will be addressing three areas: One is our basic opposition of the transfer of title from the Department of Environmental Protection to the New Jersey Water Supply Authority; the second is the herbicides; and, the third is the tree-cutting restoration.

I'll talk about our opposition, and then Mr. Schaefer will address the other two items.

We plan to adopt a resolution on Monday evening, May 13, at the Township Committee meeting, formally opposing this transfer. We discussed the basis for our decision in a previous agenda session. We think the Water Authority's interests could supersede those of the wider-range use of the Park, and we don't think it should be isolated in that way. It is not that we don't think water is extremely important, but we think the multiple use of the Park has just as high a priority.

We also believe that the DEP professionals already employed are very sensitive to the wide-range use of the historic sites, as well as the recreational uses of the Park.

We think the responsibility for the maintenance and care of the Delaware and Raritan Canal State Park, like the State park lands, should be vested in DEP.

Obviously, you don't need to hear any further remarks that we believe, just as the people who preceded us, that the New Jersey Water Supply Authority, during the dredging project, didn't demonstrate its

concern for the Park, and the engineering control standards did not protect the Park's recreational and historical values.

We believe that the transfer agreement did not reference the master plan for the Park. We think the New Jersey Water Supply Authority has a responsibility to supply water to the citizens of the State through the water companies, but while the Canal is an important water resource, its value as an historic site must not be forgotten.

We think that DEP can best protect the Park as both a recreational and historical site, while at the same time assuring access to the source of potable water.

That is really what we have in our resolution, and we expect to adopt it on Monday at our formal meeting. We will send that to you. Mr. Schaefer will address the other two areas that we are particularly concerned about.

ASSEMBLYMAN PATERO: Mayor, let me ask you one question. I know Princeton and Princeton Township have no objections. You don't have any objections to the dredging part; I think we are all aware of that.

MAYOR WRIGHT: We participated by responding to the request to dredge. We went through the dry, the wet, and what have you, and we were advised of what the problems were. So, we were aware of that, and we have not opposed that per se.

ASSEMBLYMAN PATERO: For the record, almost all of the communities go along with the dredging. I don't think that is a problem.

MAYOR WRIGHT: No, I don't think so either. We were just stunned by the implementation, and I think Henry will-- You need to give your name to the reporters, Henry.

HENRY SCHAEFER: I am Henry Schaefer. I would like to add that part of our response, initially, to the proposal to dredge was a strong recommendation for hydraulic dredging. The Township did not recommend dry dredging.

One other clarification mentioned earlier during the hearing is that one of the sites for the deposition of the sediments for

hydraulic dredging in Plainsboro was no longer available. If, in fact, that is the case, that was a decision made by the University, and the Township was not in any way involved in that decision. To my knowledge, as a planning member of the Township, the Township has not discussed that possibility with the Delaware and Raritan Canal Commission.

There is another minor point I would like to bring up, but it is indicative of the nature of the conduct surrounding the project. Recently, after the fact -- after the cutting of the trees -- Plainsboro indicated that it would be interested in planning the restoration of the area. In response to that indication, we were directed to give our input to the Delaware and Raritan Canal Coalition, which certainly is an organization I would like to commend. However, I think the Township was looking for a more direct line of communication with a government agency -- between that agency and the municipality -- instead of being routed through a coalition of mostly private organizations.

I understand from the Commission's point of view that they would like to hear a single voice, but, in this instance, it would behoove them to listen to as many voices as possible, considering the nature of this.

As a personal note -- and, this certainly is my own opinion -- I would be opposed to the transfer of the ownership of the Delaware and Raritan Canal.

ASSEMBLYMAN PATERO: Okay. Is the Canal the Township boundary line?

MR. SCHAEFER: No. That is a very good point, and I should clarify it. The Township line of Plainsboro is the middle of the Millstone River. That means that-- Right now, the Millstone River passes under the Canal through an aqueduct that is currently not recognizable as such, because when the dam was built to formulate Carnegie Lake, it raised the water level to the point where the service of the water is now up to the bottom of the aqueduct. You can't recognize it as a bridge over the river. The town line goes under that aqueduct into the center of Carnegie Lake, which, in reality, is the

Millstone River, and then it continues down the center of Carnegie Lake. The section of the towpath that is, I would say, northeast of the aqueduct all the way up to almost Kingston, is in Plainsboro. By the way, that is the section of the towpath that has experienced total clear cutting.

ASSEMBLYMAN PATERO: I was going to say, your side was good, knowing that you are on the other side of the Canal.

MR. SCHAEFER: No, no, not at all. Also, it should be noted that, I guess approximately 10 years ago -- I'm not sure of the date -- there was a very, very successful hydraulic dredging of Carnegie Lake. In light of that, it is indicative to me that a successful wet dredging of the Canal probably could have been accomplished.

I would like to add that I think the greatest need at this point would be the establishment of responsibility for the restoration of this area. In light of the fact that there has already been retainment of a landscape architect by a private organization and Princeton Township, I question whether those affected by this action should be those who have been retained -- the landscape architect -- to do the design work and the planning. A proposal for restoration should be made and the planning should be done by the Commission, with review and input from those interested organizations, rather than those interested organizations having to foot the bill.

ASSEMBLYMAN PATERO: Are you saying the Delaware and Raritan Canal Commission? Is that the Commission you are referring to, or is it the Water Authority you are referring to?

MR. SCHAEFER: The Canal Commission. Those responsible for the devastation should be responsible for the restoration.

ASSEMBLYMAN PATERO: Okay.

MAYOR WRIGHT: Thank you very much.

ASSEMBLYMAN MARSELLA: Thank you both.

ASSEMBLYMAN PATERO: Thank you, Mayor. Again, thank you for your facilities.

MAYOR WRIGHT: You are most welcome anytime. We'll give you more comfortable chairs next time. (laughter)

ASSEMBLYMAN MARSELLA: Mrs. Blair?

MRS. BLAIR: May I defer to one more person who has to leave? It will be a very quick statement. She is Mrs. Clark from the Princeton Historical Society. (Assemblyman Marsella acknowledges)

NANCY CLARK: My name is Nancy Clark, and I am a resident of Princeton. I am Director of the Historical Society of Princeton. I would just like to briefly state the concern and the alarm of the Historical Society and its membership regarding what is taking place along the Canal within our area.

We have long been interested in the Canal. Since the State Park was established, we have subsidized a master plan, and we have been involved in the interpretation of the Turning Basin area. We have recently installed signs in the Park in Princeton Township to enhance the understanding of the historical value of that area.

We certainly share the concern of everyone who is here regarding the issues we have discussed in detail. Our particular interest, of course, is with the remaining historic landmarks that line the Canal. Our special interests are those within the Canal communities that remain in our area, which extends the length of the Canal.

There are many things that remain which remind a careful observer of the importance and the activity which once filled this Canal -- the Canal houses, the locks, the stone work along the locks, the buildings and out-buildings associated with the Canal communities, the towpath, the towpath bridges, and the turning basins. There is much there that enhances the appreciation and enjoyment of the State Park.

We are vigorously opposed to the proposition that the title to the Park might be transferred to the Water Supply Authority. We feel that the preservation and use of these historic landmarks would be ill-served by the transfer of title, so we would oppose that move. I would like that to go in the record.

Thank you.

ASSEMBLYMAN MARSELLA: Thank you, Nancy.

MRS. BLAIR: I would also like to defer to Bob Kaiser, who has to attend another meeting. Bob is the Township engineer.

ASSEMBLYMAN MARSELLA: Okay. Bob?

ROBERT KAISER: My name is Robert Kaiser, and I am the Princeton Township engineer.

There are three points I would like to address. The first one is, as I listened to prior testimony, I became somewhat confused regarding dry dredging versus hydraulic or wet dredging.

I would like to point out a couple of items. One is, in January, 1984, there was apparently consideration given to hydraulically dredge a section of the Canal upstream from the earthen embankment. A report dated January 17, 1984 was prepared by PRC Engineering. It didn't offer any recommendation one way or the other to hydraulically wet dredge the Canal or to dry dredge it, but it presented the alternatives to the Water Supply Authority for consideration.

There are two methods they considered: One is labeled combined wet and dry excavation. This involves wet dredging a segment of the Canal, which is approximately 2.3 miles long, just upstream from the earthen embankment. If that particular section was wet dredged, there wouldn't be any immediate need to install a slurry wall. A description of the work is as follows: "The Canal sediment between Millstone Aqueduct and the Kingston Lock, a segment approximately 2.3 miles long, will be hydraulically dredged. The dredged sediment will be pumped up the Canal to an in-canal containment area approximately two miles long. This will result in approximately one and a half to two feet of sediment being deposited over the two-mile length. The dredged material will be allowed to settle. Upon completion of this process, that segment of the Canal will be de-watered and the Canal excavated to the design cross sections. All excavated material will then be disposed of into a licensed landfill, as covered."

The second alternative which was considered was dry excavation with a slurry wall. The description of the work is as follows: "The Canal will be compartmentalized, as in Contract I, by constructing impervious dikes, and the de-watering and the sediment excavated in the dry. Prior to de-watering the Canal between the Millstone Aqueduct and the Kingston Lock, a seepage cut-off wall or slurry wall will be installed."

The report indicates the advantages and disadvantages of both methods. Regarding the combined wet and dry excavation method, the advantage is primarily a cost one. The report indicates that approximately \$577,000 could be saved by this combined method, which would provide for hydraulically dredging the section of the Canal 2.3 miles upstream from the embankment, and then depositing the material into a landfill.

The method described in this report would not involve the use of Princeton University lands as was discussed previously.

Although there are disadvantages that are indicated with this method, the disadvantages are twofold: Construction may be delayed due to the time required for hydraulic sediment to settle out of suspension; and, there may be local environmental and engineering resistance to hydraulically dredge and dispose Canal sediment from one township to another. Although disadvantages are indicated, as far as I'm aware, it was never brought to Princeton Township's attention to consider these disadvantages -- the disadvantages, compared to the advantages, which are the cost savings of \$577,000, the elimination of the slurry wall, and the saving of the trees.

Regarding the dry excavation with the slurry wall, the advantages are improving the structure and integrity of the Canal embankment and allowing de-watering of the Canal in future programs. The disadvantages, of course, are the increased costs of an additional \$577,000 at the expense of the trees, and insufficient existing sub-surface data to adequately complete the final design of the slurry wall.

The second item I would like to address is the replacement of the trees on the Township's property. It was indicated that there are ongoing negotiations, and at this time, we have advised the Water Supply Authority as to the concept of the restoration that we would like to see in this particular area. There has been no indication or counter-offer from the Water Supply Authority as to whether this work will or will not be done. Also, there is no indication as to whether it is the responsibility of the contractor or the Water Supply Authority. We would certainly like to see that clarified one way or the other. Ultimately, of course, it will have to be clarified.

The third item I would like to address is the transfer of title. Princeton Township was involved, as Mr. Ricci indicated, in working to have the Turning Basin dredged a number of months ago -- even over a year ago. At that time, we were told that the dredging could not be justified because the water purveyors could not justify passing those costs along to the water customers.

I was in attendance at a meeting in Commissioner Hughey's office when the problem regarding the tree cutting was first discussed and brought to the attention of the Commissioner. Actually, it was a Water Supply meeting. At that time, one of the largest water purveyors got up and said, "We can't justify the replacement of these trees. We can't pass this cost along to our water customers." It seems to me that if the land is actually transferred to the Water Authority, we would continue to hear that argument from the water purveyors. Anything that does not involve, or does not directly benefit, the water customer or the water purveyor, of course, would be objected to by the water purveyor. Any time additional tree plantings are requested or if there is damage to the recreational aspects of the Canal, I'm sure we will continue to hear that argument. I think anything that can be done to avoid these conflicts would be beneficial.

That concludes my comments.

ASSEMBLYMAN PATERO: I have just one question. Using the hydraulics with the wet-- I know the Chairman is familiar with that method, but what is actually performed when they do this, when they dredge using the wet form?

MR. KAISER: The wet dredging is normally done by the use of a barge which actually sucks the material from the bottom of the Canal, and then the material is pumped hydraulically to a point where it is stored or temporarily stored.

In this particular case, temporary storage was recommended. Then, after the material was de-watered, in order for it to be suitable to haul by trucks, it would be disposed of at a licensed landfill.

ASSEMBLYMAN PATERO: Thank you very much.

MR. KAISER: Thank you.

ASSEMBLYMAN PATERO: Now we will hear from Mrs. Blair.

ROSEMARY BLAIR: Thank you. I am Rosemary Blair, and I am President of the Delaware and Raritan Canal Coalition. The Coalition is a citizen group. It is an association--

ASSEMBLYMAN PATERO: (interrupting) Mrs. Blair, excuse me. What is the difference between the Coalition and the Commission?

MRS. BLAIR: The Commission is a governmental body, and its members are appointed--

ASSEMBLYMAN PATERO: (interrupting) Appointed by the Governor.

MRS. BLAIR: (continuing) --by the Governor. We are a group that was founded by Margen Penick, who is sitting here with me, and Lee Bullitt in 1970 to work for the establishment of the Canal Park. I understand you were part of that process, Assemblyman Patero. As you well remember, the legislation was introduced and passed in the Legislature, and the Park was made a State Park.

Then the Coalition became less active because we felt that the governance and the concern of the Canal were in good hands. We have just stayed together as kind of a watchdog group, which from time to time springs to life when there happens to be an issue or a crisis.

It was in that light that we were called when, in January -- the coldest, darkest week of January -- suddenly, within two days, 2,000 trees were cut on the berm opposite Lake Carnegie. One of the members of our community, who is here today -- Mr. McRae -- was so horrified looking out his kitchen window at what he saw that he went over on skis to inspect the damage, and, in fact, there was not a tree left. We began to ask questions.

When I was interviewed earlier by Channel 52, there were allegations that I had attended meetings at which tree cutting was discussed. In fact, I did, and I spoke loudly at those meetings; Mrs. Ursula Buchanan and Mrs. Abigail Barrows were with me. We were constantly reassured that no trees over 16 inches in diameter would be cut, that small swaths of trees 30- to 50-feet in length might be cut to allow access for heavy equipment, and that we had nothing to worry about. The trees were being guarded. The Environmental Impact Statement states that they would be protected, and any trees that were removed would be replaced one-for-one.

ASSEMBLYMAN PATERO: That was from the Water Authority?

MRS. BLAIR: No, that was from the Commission. I think in the testimony that Mr. Ricci submitted to you, he refers to a particular July 17, 1984 meeting. I hope he had the courtesy to include my response to that letter. Mr. Ricci, is that included?

MR. RICCI: (speaking from audience) In response to what?

MRS. BLAIR: I sent a letter to you responding to my attendance--

MR. RICCI: (speaking from audience) I have not seen that letter, Mrs Blair.

MRS. BLAIR: That is remarkable. It was sent-- I will certainly get you a copy within the next day. It was sent to Mrs. Peggy Haskin, who was the person who questioned me directly about my attendance at those meetings.

In addition, it has been stated that there were public hearings dating back to 1982, and I would like to make the point that Mrs. Lawrence Norris-Kerr has been at those hearings, as well as James Gaffney, the Director of the Stony-Brook/Millstone Watershed Association. Mr. Gaffney's name is on the attendance sheet that was offered in testimony. They also, I think, can add to my statement that there was no clear-cutting of trees mentioned, nor was the use of herbicides mentioned at those public hearings.

I don't want to take your time or the audience's time by repeating anything that has been stated, but I would like to make the point that we perceive that parks are not land banks for any autonomous commercial authority. It would be quite extraordinary if the State of New Jersey perceived a public park that way.

Some of my children live in Vermont, and they quoted to me a statement that was made by the Governor of Vermont recently -- that if they didn't watch out, New Jersey vacation could happen to them too. We are a laughing stock nationally as far as our environmental policies are concerned.

ASSEMBLYMAN PATERO: It is not funny; it is sad.

MRS. BLAIR: It is tragic, and this is a tragic example of that.

We hope some questions will be asked. Shouldn't the Legislature look toward forbidding the pledging of a park to cover a debt service of the Water Authority or any public authority for future revenues? They have the means that were written into the establishment of the Authority to fund their own works and processes. We hope the New Jersey State Legislature recognizes that and understands the dichotomy that exists between the priorities or the values of an authority versus those of a park. They are clear and explicit, and I hope that has been brought out to each of you here today.

Our concern is that the Delaware and Raritan Canal Park remains in the ownership of the Division of Parks and Forestry in the Department of Environmental Protection where it is now.

If there are questions you would like to ask me, or if you would like clarification of any of these points-- As an example, we have submitted to you a statement which was developed by C. McKim Norton, who is Vice President of the Coalition, on the issue of the ownership of the Canal and why we do not believe it is necessary for the Water Authority to own the property.

Also, a point was made about how much of the property was being transferred. It was said that only the transmission complex is being transferred, but only the transmission complex goes from what is called "tow of the slope to tow of the slope," which is the outside of the towpath bank -- that is to say, into Lake Carnegie -- and it is 80% of the usable part of the Park. There is more land mass out there, but much of it is flood plain or it is undeveloped. It doesn't have trails or, in other ways, it is not a usable park. Eighty percent of the usable Park is, in fact, the towpath that people run, walk, and jog on, and the waterway itself.

As everyone who has come before you this afternoon has stated, we, in no way, objected to the dredging of the Canal, and we did not voice any loud objections as the process developed. This was because we assumed all was in good professional hands and prudent judgments were being made by scientific and professional analysis. It was only after we began to see the devastation -- the devastation of the trees, the fact that herbicides were going to be used -- and, even

then, we did not cry out until we contacted Congressman Florio's office. His office investigated the nature of the herbicides that were going to be used, and we became aware that those suggested for use, in fact, are toxic.

We would like to make the point that any restoration plan should not be dependent on the use of herbicides to control growth. For the long-range care of the Canal Park, we hope there will be other mechanisms -- the usual, old, traditional mechanisms -- for caring for park land, and not depend upon simply poisoning the roots and brush cover, which, as we all know, poisons the whole "eco" system -- the birds, the fish, the wildlife, and eventually who knows what the effects on man will be.

ASSEMBLYMAN PATERO: Well, you know, Mrs. Blair, in taking a look at some of those trunks, I think if they were to move, they would do more harm than anything else. They are huge trunks, and the roots alone--

MRS. BLAIR: (interrupting) Indeed they are. As Rick Henkel pointed out, these strong established trunks can draw up the strength of the water and the earth to put up new shoots. This will be the most successful reforestation of the Canal bank that is possible.

We would like to plant clusters of trees, low brush cover for the birds, intermediate cover, and then tall-towering trees, but it will not be practical in very many places along the Canal because of the width of the towpath. It is only where the configuration creates natural peninsulas or islands that this will be possible.

ASSEMBLYMAN PATERO: If I may ask you, Mr. Ricci--

MR. RICCI: (speaking from audience) Yes, sir.

ASSEMBLYMAN PATERO: If this property is deeded over to your Authority, you would have the right to put that off limits, right?

MR. RICCI: (speaking from audience) No, sir. In April of last year, the State House Commission, which is the only agency that is allowed to transfer State property, approved of the transfer of the transmission complex. This is what I was showing you in one of the sketches that we submitted in our packet. I have an Exhibit 7, which I would like to enter into the record. Exhibit 7 gives you a copy of that background document submitted to the State House Commission.

A very important feature of that transfer approval was that they provided for a perpetual deed to be retained by the DEP for the use of that transmission complex for recreational, historical, and cultural purposes.

In addition to that, of course, it is a very clear and distinct requirement that we not do anything by statute unless it is approved by the D&R Canal Commission, as well.

MRS. BLAIR: May I respond to that? I have in front of me a copy of the agreement for the development and maintenance operation of the Delaware and Raritan Canal. It is the memorandum of agreement that transfers the property. It is a draft.

MR. RICCI: (speaking from audience) That is not the document that perpetuates the transfer. The only document that has yet to be completed -- I think Commissioner Hughey said he was holding it in abeyance -- is the formal deed of transfer. That is simply a formal agreement which we proposed to enter into with the Division of Parks and Forestry. It, in no way, is an official document to perpetuate that transfer.

MRS. BLAIR: We received it from the Attorney General's office, and on Page 3 it refers to -- I'll submit a copy -- the repair and maintenance of chain link fencing and safety railing. It also says, "The Department shall be responsible for a security locking system of all gates for ingress and egress to the Delaware and Raritan Canal State Park." It is because of inclusions--

ASSEMBLYMAN PATERO: (interrupting) Where would that chain link fence be located?

MR. RICCI: (speaking from audience) May I address that?

MRS. BLAIR: Yes.

MR. RICCI: (speaking from audience) There appears to be a misconception. That kind of wording is proposing to fence in the entire Canal Park. The fact is, I think it was the Legislature back in the 1950s--

MR. COLNER: Excuse me, will you please use the microphone?

MR. RICCI: Oh, I'm sorry. Okay. At some point in the 1950s or the 1960s, the Legislature directed the State -- at that time, I

guess it was the Department of Conservation -- to install a fence along the Canal through the City of Trenton. That is the only chain link fence which has to be maintained. As a matter of fact, it was the period prior to when the Authority was created, due to the lack of adequate expenditures, that the fence was let go to disrepair. There was a tragic drowning, and the Authority has had an ongoing maintenance program to keep that chain link fence in operation.

Similarly, the Division of Parks and Forestry has a number of gates, which they put across the towpath to prevent vehicles from entering the towpath.

Those are the responsibilities which, I think, are referenced in that particular statement.

ASSEMBLYMAN PATERO: I know the people in Trenton are happy with that chain link fence because there have been robberies, etc.

MR. RICCI: Quite frankly, it is a big headache, an expensive headache, for us to keep it repaired because people keep destroying it.

There is one other Glen Afton association just to the north of the City proper where the association offices requested the consideration of the installation of another fence along the back yards. At the wishes of the offices -- we thought they represented the membership -- we prepared a set of plans and specifications, in conjunction with the D&R Canal Commission and the Division of Parks and Forestry, to install that.

Then there was a meeting of the association, which is something we wanted to have, and it was obvious from that meeting that there wasn't unanimity in the desire for a fence. If there is not unanimity, we are not going to build one.

There is only one other area that we have to discuss with everyone who is concerned, and that is, our insurance carriers, who quite frankly, have put us on notice that there is severe exposure at the locks. There is a very deep drop and a relatively low wall. We have to work out something that will be aesthetically acceptable, but at the same time, serve the purpose of protecting the general public.

Those are the problems, but the reference to the fence is basically that which is installed in Trenton right now.

MRS. BLAIR: I see. I will submit this. We wanted to ask one other question. Does the Authority intend to mortgage the transmission complex if it gets title?

MR. RICCI: Mortgage the-- Let me put it this way: If I may enter Exhibit 7 into the record, which will be our presentation before the State House Commission, it will lay out the various reasons for the supporting of the need to have the transfer of the transmission complex. One of the things to keep in mind is, the Authority has to be totally self-supporting. We cannot get general revenues from the State of New Jersey. In fact, the last assistance -- if it was assistance, and I guess it was -- was the use of the 1981 bond funds for the dredging program as a loan for construction purposes.

That was passed prior to the creation of the Authority. Perspectively, the Authority must be able to raise sufficient revenues to pay all of its debts. One has to keep in mind that the transmission complex is, in effect, a conduit that is formed out of the earth itself. From the information that we presented to the State House Commission, what we said, and they agreed -- perhaps there are other options -- is that in order for us to go out and borrow money for the improvement, repair, or rehabilitation of the earthen conduit, it just seems reasonable that we should have title to that so we would be able to borrow the money.

In the strictest sense, you would say that that is mortgaging the land, but I would also suggest to you that the minutes of the Authority-- No action can be taken by the Authority without the opportunity for the Governor to veto any single part of our minutes within 10 working days of the Authority Board members taking action.

Going even beyond that, the statute creating the Authority very specifically says that we can't even consider a short- or long-term debt unless we get the approval of the Treasurer or the Comptroller, and the Governor. I can assure you that that is an ample check to make sure we are not giving away State park land. That is the mechanism.

The other part of that -- the rationale, which is included in the submission to the State House Commission, which, as I said, was

approved in April of last year -- is with reference to us carrying proper insurance, both for property damage -- again, property damage on the conduit that is formed out of the earth -- and also the question of liability. There could very well be some cloudy issues regarding that.

I also want to say that Commissioner Hughey wrote a letter, which makes it clear that he wants a discussion to take place -- I don't know if a date has actually been set -- where alternatives are going to be explored. The Commissioner has also made it clear that he is not going to take any further action on the formalization of that deed of transfer until he hears the results of that meeting.

MRS. BLAIR: I would like to turn to one of the chairmen of the Transmission Complex Transfer Committee. Kim, would you like to speak to this now? This is C. McKim Norton, who is Vice President of the Delaware and Raritan Canal Coalition. He has researched this matter, and we have included a statement from him.

C. McKIM NORTON: My name is C. McKim Norton. I am a retired New York State attorney, and I have lived here for about 35 years. I am Vice President of the Delaware and Raritan Canal Coalition. I used to head the Regional Plan Association, so I knew this area as a part of the outer reaches of the New York region. I am also involved with MSM Regional Council; I am Vice President there. Since I mentioned that, I have a letter I would like to submit for the record. I would like you to be aware that they are asking the Governor to appoint a blue-ribbon commission to take a look at the governance of the Canal since 1974.

ASSEMBLYMAN PATERO: For the record, it shows that this letter is dated April 25, 1985.

MR. NORTON: I won't read this statement to you because time is marching on--

ASSEMBLYMAN MARSELLA: (interrupting) You're right.

MR. NORTON: (continuing) --but, I think the question is, why should the title be transferred to the Authority? We know that it could be pledged as security for a bond issue, and if that should happen, then the Authority would be in a position to make covenants with its bondholders. In a sense, the kind of decision that is going to have to be made, which Mr. Ricci talked about, of doing things

nicely in the Park, and so on, will come under the scrutiny not only of the Water Supply seller companies, but also of the bondholders. The control of the Authority will be passed on, in effect, to its coveted bondholders until the bonds are paid.

This is a problem, and it seems to us that the whole thing has been turned upside down. It would be much better to keep title in the State and lease it to the Authority, but give them access to it. Keep title in the State and let it be in the Department of Environmental Protection to judge these different facets of this complex, historical Park.

I have done some homework on alternative ideas regarding financing. I don't want to get into that because I want to talk to Rocco Ricci about it, and we are arranging that. It seems as though there ought to be some way that the bonds for water supply that were voted on by the public in this State could be used to finance the Authority, and let the Authority pay off those bonds from the use of the water. What they really need is the use of the water in this conduit. They don't need title to the conduit; they need the water in order to sell it.

We also think it might be very advantageous to operate this under a lease. It is even conceivable that there might be a small amount of rent charged by the State for this conduit -- which it is actually giving to the Authority to use -- especially for the benefit of the historical aspects of the Park. There would be a little fund every year, just as there is in Morris and Essex Counties, coming from a steady input of money which could be spent by the Commissioner to do the things that are awfully hard to get done through the Legislature, as you heard from the first speaker.

These ideas are simply in development. We were a little bit surprised to be called upon on such short notice. You caught us a little bit in advance. I really want to talk to Rocco Ricci because I don't want our group to make mistakes and go off on a tangent. I want to talk it all through with him.

I am hoping that we are going to make some progress, and I am hoping that title will stay in the State. As I said at the meeting

which was held in Princeton, this could become the first self-liquidating park in the history of New Jersey.

ASSEMBLYMAN MARSELLA: Thank you very much.

MRS. BLAIR: I realize it is getting very late, and maybe you would like to move on. I would be happy to answer any questions. If you prefer, maybe you would like to go on to your other scheduled speakers.

ASSEMBLYMAN MARSELLA: Yes, I would like to do that, but I would like to make a comment first. In regard to your April 25 letter where you asked the Governor to appoint a blue-ribbon commission, I think that is probably a good idea so that we can have a working relationship. I am going to ask Len Colner to prepare some type of legislation so that we can create a blue-ribbon commission to help to understand the problems that have arisen in the Canal area. Maybe one member of the Legislature should be appointed to that, or maybe one member from the Assembly and one from the Senate, and then let the Governor appoint the people from this area. We are going to be working on that type of thing.

MRS. BLAIR: I want to thank you, Assemblyman Marsella and Assemblyman Patero, for calling this meeting and for that wonderful statement you just made. It is just splendid. (applause)

ASSEMBLYMAN PATERO: The reason we would rather have it by legislation is because by executive order, the Governor could put whomever he wishes on that commission. We'll make sure the Speaker of the House and the Senate President will each have one representative. The Governor can have all the others.

ASSEMBLYMAN MARSELLA: Mr. Amon? Mr. Amon is Executive Director of the Delaware and Raritan Canal Commission.

JAMES AMON: My name is James Amon. I am the Executive Director of the D&R Canal Commission. I would like to start by saying that it seems as though the attempts to resolve the problems that have been created have probably cut down more trees in order to produce paper than were cut down in order to dredge the Canal. We all seem to be spending a great deal of time writing memorandums to each other.

What I would like to do this afternoon is to very briefly introduce the Canal Commission, explain the background of the Commission's role with specific regard to this project, and then answer any questions you may have.

The Canal Commission was created as part of the Department of Environmental Protection in 1974 by the same legislation that created the Canal as a State Park. There were three very general directions or reasons for its existence.

The first was to plan for the development of a State Park along the entire length of the D&R Canal. The second was to review both public and private development within the area that could have harmful drainage or an aesthetic or ecological impact on the Canal Park. The third was to review State actions, or State permits for actions, that would occur within the Canal Park.

In 1977, the Canal Commission adopted a master plan, which is the first of the documents in a planning process. Subsequently, in 1982, a design guide was adopted, and presently a development plan was adopted, both of which articulate the information in the master plan.

With regard to the review of private and public development, the Commission, for five years, has been administering a review zone, which reviews all development and sets standards for them to comply so that development will not have a harmful impact.

The issue that is really at hand today, I think, is the role of the Commission with respect to its review of State agencies -- most specifically, with regard to the action in Plainsboro Township for the tree removal. The statute that created the Commission was very explicit in regard to the Commission's authority. It states, "The Commission shall review and approve, reject and modify, any State project planned, or State permits issued, in the Park, and submit its decision to the Governor."

The Commission's staff, over a period of three years, worked with the Water Supply Authority and other advisers they had in order to prepare the specifications and plans for the dredging project. Upon completion of those plans, they were presented to the Commission, and the Commission approved the contracts for the dredging -- the three separate contracts.

Shortly after the project began, as Mr. Ricci said, it proved impractical to do the dredging with the system that had been envisioned in the contracts. I'm afraid that once the water was out of the Canal, we found that things were not what we had assumed they were when the water was still in the Canal. A request was made to the Commission to change its policy.

The change has been described in part, but at a meeting on July 17, 1984, the Commission changed its policy regarding tree removal. Essentially, the policy was changed as follows: A demonstration mile within each of the three contracts would be set up within which trees would be removed in 30- to 50-foot stretches, leaving individual trees, or clumps of trees, between these blank gaps. The Commission also had an exception to this policy at the south end of Lambertville because the master plan called for the development of a Canal barge ride there, and a mule-pulled barge requires a rope between the water and the Canal. So, all trees in that section were authorized to be removed.

The policy also called for the application of an approved herbicide on those stumps to prevent their regrowth.

Upon inspection of the demonstration area, the Commission was satisfied that this policy produced the kind of landscape it wanted. The photographs I have attached to the paper I handed to you are of areas where the contract has been completed -- where the dredging has been completed, where trees were removed, and where replanting and reseeding of the land has taken place.

The Commission found that those areas were, in fact, highly desirable for the kind of park they had in mind. The response from the communities in which this occurs has been unanimously favorable to it. No one who lives in any of the areas where this has occurred has contacted my office with anything except praise, and a very large number of people have contacted me to tell me how much they like what was done there.

As has been said, we found that this policy was applied everywhere except south of Lambertville, and then when we got to the area of the slightly under two-mile stretch along Lake Carnegie, we

were informed by the Water Supply Authority, the contractor, and the engineer that in order to do the dredging job with the slurry wall, another modification would have to be made. That was to remove all of the trees.

Reluctantly, the Commission, the Division of Parks and Forestry, and Princeton University agreed to this. I include Princeton University because Lake Carnegie is owned by the University, and the western half of that embankment between the Lake and the Canal is part of their land. The contractor was informed that no State agency could authorize removal of the trees on the University's land, so he contacted them. It is my understanding, although I don't have a piece of paper that verifies it, that the University quite reluctantly agreed to have those trees on their side of the embankment removed, as well.

This removal was predicated upon an assurance that there would be extensive replanting and that the replanting would be done along guidelines that could be established by the Canal Commission, which had already been established. The guidelines were:

1. Any plants used would have to be native to the region and appropriate for the habitat; and,
2. There would be a mixture of trees that would reflect the aesthetic mixture that occurs naturally, and a planting pattern that would reflect a natural pattern.

The Commission preferred to have a variety so that a person traversing this area could experience both opened and closed environments. A person jogging could go from an area enclosed by vegetation to an open area, and then back into a closed one. These would be closely spaced and varying in length, but more or less, in the overall area, equal in total length.

I would like to emphasize the fact that the landscape we presently see along Lake Carnegie is not a landscape that pleases anyone. I don't think anyone is pleased with what is visible there now. It was not a landscape of choice, but a landscape for which no perceived alternative existed. Furthermore, it is a landscape that we assume will, as soon as construction is completed, be dramatically altered by restoration planting.

The Canal Commission has received the assurance of the Water Supply Authority that both they and community groups or community individuals who wish to participate will do so by putting together a plan of this sort. At a meeting with the Coalition, they suggested that their participation be through a landscape designer who they will select. They were assured that was a method that would be most satisfactory to all of us. Any other individual who wished to contribute was invited to do so, and articles appeared in the local papers inviting such contributions.

Furthermore, the proposal calls for the production of a tentative plan, which then could be presented at a community-wide meeting so that further input could be had from anyone who did initiate impact. Upon completion of that process, a final plan will be prepared and presented to the Canal Commission for its approval.

The Commission meetings are also public meetings. The Commission has a very good record of allowing community input on any issue in which there is a desire for this kind of input.

It is my expectation that this presently very unsatisfactory landscape will be restored, and it will be done so in a way that everyone will have a chance to contribute to.

ASSEMBLYMAN PATERO: Mr. Amon, when this part of the contract went to bid, was it determined then that the trees were going to be cut down on that 14-foot stretch, or was that decision made after the bids were awarded?

MR. AMON: I'm not 100% sure, but I believe it was after the contract was bid.

ASSEMBLYMAN PATERO: I see in this letter, based on the information supported by the contractor, the supervising engineer, and the Water Supply Authority, that the Canal Commission went along with it.

MR. AMON: Yes.

ASSEMBLYMAN PATERO: I personally think that was a bad move. I really don't know why the exception was given. I could see it if this was before the contract was awarded because everyone would have known about it. Just based on what the contractor and the supervising engineer said, I really don't see it.

The pictures you submitted are really beautiful. I can see the trees being cut down in the Hopewell Township/Mercer County area because that slopes down. When you look at the Hunterdon County area where there is a steep embankment, there are trees that still exist. With the trees, the area looks very beautiful.

As I said, I think the Commission has done an outstanding job in beautifying that section, but I think we are talking about an area where the bank is steep. The bank is only 14 feet wide, and I am really concerned about the decision to cut the trees after the award was made. That causes a question in my mind; it just doesn't seem right.

When the bid went out, I guess the slurry wall was already included. Is that right?

MR. AMON: Yes.

ASSEMBLYMAN MARSELLA: I guess no one knew at that time that the trees would have to be cut down.

MR. AMON: I cannot answer for everyone else. It is my recollection in reconstructing the process that it was not until after the contract was awarded that I became aware of the need to remove all of the trees.

ASSEMBLYMAN PATERO: I was just wondering if the contract went out, what we did now-- I was just wondering if the cost would have been much cheaper than what it really was if we had to do it from the beginning.

Again, as I said, these pictures are really beautiful. You know, you can not compare the Lake Carnegie area to the Hopewell Township/Mercer County area. I can see the trees being removed because it comes to a nice slope. There could be walking areas, picnics, and so forth.

But, when we talk about Lake Carnegie and the 14-foot width, the only things I can picture that for are jogging, walking, and people sitting on the side fishing. Again, in looking at the Canal, I have no problem with the Commission because I think it has done an outstanding job.

ASSEMBLYMAN MARSELLA: Is there anything else? (negative response) Thank you very much.

MR. AMON: Thank you.

ASSEMBLYMAN MARSELLA: Margen?

MARGEN PENICK: I am Margen Penick, and I am a resident of Princeton Borough. I was the founder, along with Lee Bullitt, of the Delaware and Raritan Canal Coalition in 1968. Our purpose was to have the Canal made into a park.

I am very glad that you liked the pictures of the Lambertville area. We have a set of pictures we would like to enter into the record, with explanations on the back of what is happening in our area.

Your Committee only had time today to look at the berm of Lake Carnegie, but there are some illustrations of other areas of cutting that are based on what the Canal Coalition feels is an erroneous design and a deviation from the master plan of the Canal Park. (Distributes pictures to Committee)

I am the Vice Chairman of the Princeton Regional Planning Board. I was the Chairman for five years, and I have been Vice Chairman off and on for five years. I was the Chairman of the Princeton Township Environmental Commission, and for two terms, I was President of the State Association of Environmental Commissions.

I have a few comments. The first comment is with regard to legislation. We understand that that is your power; that is what you can do. We are very grateful to Assemblyman Paterno for his original help in the work that made this Canal a park.

As you have heard, the Coalition is opposed to the transfer. We request that you consider the following suggestion: That, by legislation, you remove the Canal from the 1981 legislation, which would leave the structure of the New Jersey Water Supply Authority in place. The Authority would retain the ownership of all their other properties; however, we think the Canal is special and different enough from their other properties that it should not have been included in the 1981 legislation.

We would also like to have you examine the 1981 legislation because we feel that the intent of the 1974 legislation regarding the Canal was not carried over into 1981. We feel that this Canal, which is the oldest and longest fully watered canal in the United States, is not like the other properties of the Water Supply Authority. We don't feel it is appropriate for it to be included in the 1981 legislation.

We have heard reasons given by the Water Supply Authority as to why they have to own the Canal. One is, they want easements for repairs. Now, I put it to you, gentlemen, has anyone ever stopped them, under the 1974 legislation, from repairing the Canal? Has anyone ever stopped them? They have been repairing the Canal ever since the State owned it, perfectly nicely, and the Canal belonged to DEP.

The second issue is, they say they need to provide us with water, and the local citizens don't object to that. But, I would point out to you that under the 1974 legislation, the New Jersey Water Supply Authority has had control of every drop of water in the Canal, and it will continue to have control of every drop of water in the Canal. No one disputes that. However, we feel in the most densely populated State in the United States, in an area in which the population and office construction are far outgrowing and far outpacing municipal efforts to provide parklands and recreation areas, that this is an important parkland, especially combined with Lake Carnegie. We want to retain the multiple use.

There are a lot of pretty words; we have heard many pretty words about retaining recreation and multiple use. But, you only have to look at what has happened to remind yourself that the job of the Water Supply Authority is to give water to the water consumers at the lowest possible cost. The Canal Coalition has no objection. They have a single purpose, which is to provide clean water and good water at the cheapest cost. We don't quarrel with that. But, to have them own the Canal, with such an important recreational and historical use, we feel their other mandate must come first.

From the hearings we have attended-- For example, there was a person from the Middlesex Water Company, and a person from the Elizabethtown Water Company, who objected to requests for money for

repairs and recreation. We know the objections will go on constantly for any expenditures besides water supply, and, indeed, I think that is the Water Supply Authority's job. I don't object to that. But, they should not be the owners of the Canal.

Who should be the owners? In my long work with the Canal, who has been the most responsive? It has been the New Jersey Legislature. We ask you to keep control in the State so that the Legislature can enter if there is a problem. The second thing we ask for is that a percentage of the revenues be set aside for historic maintenance and recreation. We think that moneys will be expended for recreation, but the historic maintenance is expensive. It probably can't come out of parks; it hasn't been done for years. The historic stone structures will gradually go downhill.

We request that you enact the legislation that is in the Princeton Township resolution to require all authorities -- any authorities, not just the Water Supply Authority -- to notify affected municipalities 60 days in advance of undertaking projects in their municipality which involve construction. This has not been done, and we think this is important.

It has been suggested that there will be easements for DEP for recreational purposes when and if the Water Supply Authority becomes owner of the Canal. We think this is the cart before the horse. It ought to be the other way around. Let the Water Supply Authority have a permanent easement for repairs of the Canal Park, but it should not belong to them.

We have heard much regarding why the Water Supply Authority has to own this, but these have been value judgments. Their word "need" -- "We need it. We need it for this and that," -- doesn't give you the facts. The fact is, they want it to be the real property underlying the sale of bonds. To the average lay person, that is mortgaging. In the first place, we don't feel this is an appropriate precedent for New Jersey parklands. In the second place, we don't think the bonds would ever be defaulted, but if they should be, we would hate to see the Canal pass into other hands. We just don't think this is appropriate.

There has been reference made to the work done in the Lambertville area. I would like to say that that is a very different situation. I've looked at it, and it looks nice, but you have to remember that that belonged to a railroad for years, and the railroad used herbicides regularly to spray along the right-of-ways. So, there wasn't much growth anyway.

When I was over there four weeks ago, we saw a few tall tree trunks and a little grass seed underneath. It looked very nice for the front lawn of a development. You could picture shadow oaks on the Canal -- a few tree trunks with a few seeds underneath. That won't stay that way unless one of two things happen: Number one, we have squads of men with mowing machines who mow up and down the Canal. I don't think the State can afford that, and it shouldn't spend its money that way anyhow. Second is, unless herbicides are used to control growth on a regular basis-- We are opposed to that; we are not opposed to herbicides in general. We feel that the use of some of the herbicides on the land might be appropriate in certain situations, but a design that requires regular herbicide use is not appropriate in the water supply.

I won't go through some of my other comments because it is late, but I would like to enter our questions into the record. We have compiled a list of questions that we received from local citizens. We have five groups of citizens operating. One is the Transfer and Finance Team. We have very eminent people on it, such as McKim Norton, who was the former Chairman of the Regional Plan Association, and the President of the Princeton Bank. This problem has caused such distress in the Princeton area that we have very eminent citizens working on this team.

I ask you, Mr. Chairman, to help them get the appropriate appointments with people on the decision-making level so that when they take time away from their banks or their businesses -- lawyers have also volunteered -- they can go beyond informational exchanges and get to the decision-makers.

We have an engineering team that includes the Chairman of the Civil Engineering Department of Princeton University -- a very world-famous man. He is helping us look at the slurry wall issue.

We have some master plan and documents' questions about whether or not there has been a deviation from the master plan with the proposals that Jim Amon outlined to you. We think there has been. We don't think the master plan should be changed unless it is presented to citizens at a public hearing. The master plan in this area states that there will be rural and low-keyed areas. We don't think that just coming in and saying, "It is going to be prettier to have some areas of view and non-view," is going to be a substitute for a master plan.

We have some herbicide questions, and we think they are very important questions. We have put these in the form of questions because we don't have answers.

We are turning to the Legislature, and I would just like to say that over the years, I appreciate what the Legislature has done because you are the only people we have found who are truly responsive.

ASSEMBLYMAN MARSELLA: Thank you, Mrs. Penick. We will definitely take all of these questions into consideration.

ASSEMBLYMAN PATERO: Again, that is the reason why we drew up this legislation for this blue-ribbon committee. There will be some appointments by the Speaker and the Senate President so that we can get people who are willing to volunteer for this, rather than just giving it to the Governor's office for executive order.

ASSEMBLYMAN MARSELLA: Is Dale Smith still here?
(affirmative response) Dale, do you have a copy of the contract?

DALE SMITH: Yes, I do.

ASSEMBLYMAN MARSELLA: Will you come up so we can hear you?

ASSEMBLYMAN PATERO: Mrs. Penick, is this for the record?

MRS. PENICK: (speaking from audience) Yes, it is for the record.

ASSEMBLYMAN PATERO: Do you want these back?

MRS. PENICK: (speaking from audience) No, they are for you. The problem is, sir, unless you see it, you can't get a picture of the impact of it. As Chairman, you saw part of what we are talking about, but there is more. Those pictures are for other people to see.

MR. SMITH: My name is Dale Smith. I am a group project manager for the Division of Building and Construction.

ASSEMBLYMAN MARSELLA: You are here to answer any questions from Assemblyman Patero or myself?

MR. SMITH: That is correct.

ASSEMBLYMAN MARSELLA: Do you have a copy of the contract?

MR. SMITH: The contract -- and, I'm referring to Contract II -- for the Delaware and Raritan Canal dredging project consists of drawings, specifications with bulletins, and the actual written contract that was formalized subsequent to bids being received.

ASSEMBLYMAN MARSELLA: Okay. Were you also involved in the change? Is there also a change order in the contract for the trees?

MR. SMITH: There is no change order for the trees.

ASSEMBLYMAN MARSELLA: There was no change order issued for the trees?

MR. SMITH: No, there was not.

ASSEMBLYMAN MARSELLA: Are you prepared to enter those documents into the record?

MR. SMITH: You may have these documents if you desire them. They are public documents.

ASSEMBLYMAN MARSELLA: I am sure we will need them.

MR. SMITH: Very good.

ASSEMBLYMAN MARSELLA: Mr. Patero, do you have any questions?

ASSEMBLYMAN PATERO: You are from the State, right?

MR. SMITH: That is correct.

ASSEMBLYMAN PATERO: Okay. You are not affiliated with PRC Engineering.

MR. SMITH: They are under contract with us.

ASSEMBLYMAN PATERO: Oh, I see.

MR. SMITH: We contract for the services of the architect, the engineer, and the contractor.

ASSEMBLYMAN PATERO: Is it normal for the State to hire one person to do the Environmental Impact Study and then also have that person draw up the specifications for bid?

MR. SMITH: Yes.

ASSEMBLYMAN PATERO: That is the procedure?

MR. SMITH: Yes, it is.

ASSEMBLYMAN MARSELLA: Dale, I understand you were called late yesterday, so I appreciate your coming here to leave those documents with us.

MR. SMITH: I have just one or two clarifications that I would like to make at this time.

ASSEMBLYMAN MARSELLA: Go ahead.

MR. SMITH: There were several statements made that I don't think accurately reflect what transpired. One of the statements was that there was a major cost differential between dry excavation with a slurry wall and wet excavation. The original estimate by PRC Harris did indicate that, but with subsequent investigation, the bids were prepared in such a way that the contractor could bid either a wet excavation without the slurry wall, or a dry excavation with the slurry wall.

The differential in the lowest acceptable bid was \$1, so for the cost of \$1, the State got the dry excavation and the slurry wall versus the wet excavation without the slurry wall.

In addition, there was reference made in the letter quoted from PRC Harris that there was--

ASSEMBLYMAN MARSELLA: (interrupting) Let me stop you for just a second. The difference between wet excavation and dry excavation, you said, was \$1?

MR. SMITH: That is correct, with the slurry wall. The State got both the dry excavation and the slurry wall for \$1 more than it would have gotten with just the wet excavation.

ASSEMBLYMAN MARSELLA: That may be fine, but I don't know what is going to happen with regard to the re-landscaping of that area. That could cost us a lot. Go ahead; continue.

MR. SMITH: That was an issue that was raised before. I didn't think it was clear to the Committee regarding the way it was left.

Also, in my experience, there has been quite a bit of discussion about trees, roots, and the stability of embankments. The first issue that comes up when you are dealing with a dam or a similar structure is, there should not be trees on that embankment. That is

common engineering practice. You do not have trees on an embankment that is retaining water. The roots hold the soil when the trees are healthy. The problem is, the trees die, they blow over, and they create a void in the embankment. Then you get a washout. So, it is not normal practice to allow trees to grow on an embankment.

It was also mentioned that the Lake had been successfully wet excavated. It was successfully wet excavated because there were adjoining sites to deposit the material. That is no longer true; therefore, that is not a viable option at this time.

ASSEMBLYMAN MARSELLA: Thank you very much. Joe, do you have any questions?

ASSEMBLYMAN PATERO: No.

ASSEMBLYMAN MARSELLA: Okay. Will you please leave those papers for the record?

MR. SMITH: Yes.

ASSEMBLYMAN PATERO: Thank you very much for your comments.

MS. PENICK: (speaking from audience) May I just comment that Princeton University did offer to make their site available?

MR. SMITH: That was with certain conditions.

MS. PENICK: (speaking from audience) Yes, but it was available. We sort of got the impression that there was no place to put this, but there was a place.

MR. SMITH: As was mentioned before, the condition was that the spoils had to be removed within five years. That really ruled out that site.

ASSEMBLYMAN MARSELLA: We heard that from other testimony.

ASSEMBLYMAN PATERO: Again, what is sad is, it seems for a \$1 difference we devastated a nice towpath area. It looks terrible out there right now. I just hope it doesn't remain that way.

As you know, it has been said that there is going to be a replanting, and you said that they do not recommend replanting.

MR. RICCI: May I address that?

ASSEMBLYMAN PATERO: Mr. Ricci?

MR. RICCI: (speaking from audience) I would like to address the question of restoration because I didn't get a chance to discuss

that before. Without any equivocation, the Authority has said repeatedly that we are going to implement a restoration program for that embankment. There is absolutely no equivocation about that.

What was stated back in February at the first meeting with representatives of the D&R Canal Coalition was that we would like the Coalition to work with us collectively -- DEP, the Canal Commission, and the Authority -- to develop a proposed restoration program. Once that restoration is in place, and all of those parties feel that they are in agreement, there would be a public meeting of the general citizenry so that everyone would have an opportunity to give input to that plan.

Then it would go to the D&R Canal Commission because they have the ultimate approval for it.

That was what we committed ourselves to in February. It was reiterated just recently in a letter signed by Commissioner Hughey. The money is there; it is already a part of the existing construction contract. It is just a question of how we are going to use that pot of money. A restoration program will be implemented, and we just want to get on with that part of the job.

ASSEMBLYMAN MARSELLA: Okay. Mr. Wright?

HERBERT WRIGHT: I am Herbert Wright. I read about this in the paper, and I am happy to be here. I live in South Brunswick. I don't have any big-star credentials, but I have had experiences which were very helpful in coming to an understanding of the Canal. I have been interested in-- Let me just cite a few.

I am a teacher of agriculture involved with horticulture and landscaping. And, boy, if you want a spectrum, you get it teaching agriculture. In that respect, I have worked as a landscape foreman in helping to develop Parvin State Park. Some of the things I will refer to today are things that I think would be helpful, and which we used at Parvin State Park to keep costs low during the Depression. They worked, and they can work today. You don't need to buy \$75 or \$80 trees with a one and one-half inch caliper. You can collect things, and you can use duff to cover the slopes. You can shred it, and it will come back and look just like it did earlier. You can have it high

to get rid of the unwanted growth, but low enough to cut away the undesirable things.

Now I want to talk about some basic things. One, the Canal was a water canal for barges. It had intrusions of water from small watersheds. It did not have tight walls in its construction. They leaked, and there were many breakdowns of that dike in the early days during the use of the Canal. That Canal is there today to be a water conduit. It has to be tightened up, and the slurry wall will not only do what I heard today, but it will have the effect of reducing the loss of 100 million gallons per day, which we are entitled to. Is that the right figure -- 100 million gallons per day? I believe it is.

ASSEMBLYMAN PATERO: How are we going to lose this water?

MR. WRIGHT: Through the walls. I've already told you how they leak. The levels in Lake Carnegie are different.

ASSEMBLYMAN PATERO: I haven't heard anyone at this hearing say that it leaked.

MR. WRIGHT: I know you haven't, but it is so. You are going to have some shrinkage. One hundred million gallons per day will be enough to supply the domestic water uses of 80 million people per day. I don't mean--

ASSEMBLYMAN PATERO: We have the Water Authority here. Is that a correct statement, Mr. Ricci? Mr. Wright said that without this wall, we are going to lose 100 million gallons of water per day.

MR. WRIGHT: No, I didn't say that. I said we would save at least enough to take care of a population of one million people, plus or minus.

ASSEMBLYMAN PATERO: Oh, I'm sorry. I thought you said we were going to lose 100 million gallons.

MR. WRIGHT: Well, I did try to hurry, and I misstated something. I'll go back and try to put it in simpler terms.

Now, that is quite a lot of people. Right now, there are tens of thousands of people who are being harmed by the leaves from these trees. I don't know why no one has testified to that.

In New Brunswick and North Brunswick, periodically, the water is hardly fit to drink. I don't mean to say it is going to ruin your

health, or anything, but it is repulsive. I think it is due -- and, I have been told it is due -- to the vegetation that is decomposing and leaving the lower reaches of the Canal inky black. It is not runoff material of erosion; it is colloidal material that is in the process of decaying, which is because of the water plant in New Brunswick. I have been there and have seen it. It is just simply clouds of water, and it makes it rather disgraceful to drink.

I have submitted material to you which states that some things at the lower end of the Canal should be cleared up -- that is, the drinking water and the pumps at Lock #10; I think it is Lock #10. They can pump it in through the downstream New Brunswick area, or the upstream reaches of the Canal at Griggstown.

No one seems concerned about the quality of this water -- at least not the people who are interested in the Park because they are so leery about cutting down the trees--

I can't let you have this because it is my only copy (referring to book), but this is a book that shows pictures of the Canal. It shows very little vegetation. Actually, there are pictures in here which show that they cut back tree branches so that leaves aren't dropped into the locks. Leaves have been detrimental, and that gets-- I should have started here.

First the Canal was a water canal. Then it received designation as a historical landmark. That was in 1973, and that preceded its designation as a park. The historical aspects of the Canal have come before the Park development. I think that should be considered. I am ashamed to ride down Alexander Road, see beautiful massive places on the hill -- they look like high tech -- and, as you get down near the Canal, the old historic landmark that is shown in my book of the Steamboat and Railroad Hotel is in a shambles. No one is interested in historic stuff.

The Princeton Turning Basin has been closed off from the Canal. No one is interested in the historic maintenance there. I think that has to be considered, and if you do consider it, the trees have to come down and stay down along the towpath. You can't tow boats if trees are there.

That doesn't mean you can't have a beautiful park, and it doesn't mean you can't have something nice to ride on, walk on, or jog on. On the other hand, if you want a big canopy to come over the Canal and cover it with leaves, you can get the same thing down in some of the southern New Jersey parks.

ASSEMBLYMAN PATERO: So, you are recommending that all of the trees be cut down along the whole 63-mile length?

MR. WRIGHT: I didn't recommend that. I said that a good portion of it ought to be cut down, especially to restore the historical integrity of the Canal towpath. The towpath is only on one side, I believe. In some places, it may be on both sides, but I am not familiar with that.

The tree density that overhangs the Canal needs to be reduced to protect the large population that depends on this water, but they may resort to Round Valley if they find that the quality of water is not improved in the Canal. I am not making that statement as a promise; I have made that statement in my township, and I have pushed for other sources because of the present condition of the water in the Canal.

I guess that is enough said. I appreciate your having me here.

ASSEMBLYMAN MARSELLA: Thank you very much, Mr. Wright.

MR. WRIGHT: I think there are things that can be done, particularly with the number of people involved. There is a tremendous amount of people who need that water, and they need it in a better condition than it is today -- not the same condition, better. Thank you.

ASSEMBLYMAN MARSELLA: Okay. We still have a number of people who would like to testify. Is there anyone who feels he must testify in public? If there is, please raise your hand and identify yourself. If not, we will leave the record open for at least one week so that if anyone wants to submit written testimony, we will make it part of the hearing. Joe and I are here to listen to what you have to say, so if anyone feels he would like to testify, please raise your hand. Yes, ma'am?

UNIDENTIFIED PERSON FROM AUDIENCE: There is something I am supposed to read from the Executive Director of the Stony-Brook/Millstone Watershed Association. He wanted to come to speak today, but he was unable. I don't know if he would like--

ASSEMBLYMAN MARSELLA: (interrupting) If you have a prepared statement, why don't you enter it into the record?

UNIDENTIFIED PERSON FROM AUDIENCE: I can't because it is--

ASSEMBLYMAN MARSELLA: (interrupting) Then you can-- What I am saying is, we are going to keep the record open for a week. You can have his statement sent to the Assembly Energy and Natural Resources Committee, and we will enter it into the record.

UNIDENTIFIED PERSON FROM AUDIENCE: All right.

ASSEMBLYMAN PATERO: Is he in favor of or against the--

UNIDENTIFIED PERSON FROM AUDIENCE: (interrupting) He is in favor of not transferring.

ASSEMBLYMAN MARSELLA: Okay. That seems to be a big issue here today. Yes, sir?

CHARLES ALDEN: Mr. Chairman and ladies and gentlemen, my name is Charles Alden. I am a landscape architect.

I have been reading all the articles that appeared in the press, and I attended a presentation that Mr. Amon made in Washington Crossing. I have followed this issue with great interest.

I was born in Princeton and lived here for the first 20 years of my life. I attended New York State University College of Forestry at Syracuse University. I have had about 22 years' professional experience in master planning and park development.

I have taken more than two pages of notes here today. I am going away with a few answers, but I have a few additional questions. I have also thought of a few additional things I would like to relate to you, and I'll try to be brief.

I would like to call your attention to an event that occurred in Cambridge, Massachusetts in 1967, when the Metropolitan District Commission, which has the authority to regulate and manage the park district of the Boston metropolitan area and the parkways throughout that park system, elected to construct a major expressway along the

Cambridge side of the Charles River. They made an extensive analysis of the need for that expressway. They did all the necessary traffic calculations, and they determined that for the commuter rush-in and rush-out out of the city, it was absolutely essential that the expressway be constructed. As part of the construction, they proposed to move a row of trees that had been planted many years before. These trees were located on each side of Memorial Drive, and they typically had dimensions of 36 to 48 inches in diameter.

They retained engineers to prepare the construction plans for that highway, and they retained a firm of landscape architects to prepare drawings to allow them to have these trees relocated.

They were about to begin that work when the students at Harvard University realized that this was going to be done. The students went to Memorial Drive and literally chained themselves to the trees on a 24-hour basis, week after week, to prevent these trees from being cut.

The result was, in fact, that the trees were not cut. The highway was not constructed, and I think it is interesting to note that the City of Boston has been thriving economically ever since. There may be some difficulty getting into the City and exiting the City each day, but the fact is, they have not experienced a good lock of traffic. Traffic flows, and what had been so thoroughly and meticulously demonstrated as an absolutely essential need, in fact, turned out to be not quite so essential. The public has the benefit of that park without the construction of an expressway. The Cambridge neighborhood has access to the banks of the Charles River because that roadway was not constructed.

I think that was an important lesson to learn, and I wish I had been in the Princeton area earlier on to relate this story to the public at large so that they could have been alerted to look more closely at what was being proposed here.

ASSEMBLYMAN PATERO: I assume the trees are still standing there?

MR. ALDEN: The trees are still standing. They are magnificent, they are as fine as ever, and the park is still being enjoyed by the public.

ASSEMBLYMAN PATERO: Good.

MR. ALDEN: I would suggest that in the cost-benefit analysis that was done for this undertaking on the Delaware and Raritan Canal, perhaps no value whatsoever was assigned to the social, recreational, and environmental value of that parkland in its undisturbed condition. Perhaps if some economic value had been assigned, the differential between doing wet dredging or dry dredging would have been very, very substantially different.

I haven't made a detailed analysis of it, but I would suggest that perhaps if one were to attempt to develop a one-acre park, he might very well contemplate the expenditure of \$50,000 to \$100,000 in development costs. I don't think that would be unreasonable. If that kind of cost had been considered, as well as the abstract costs -- those which are more difficult to assess, which are the social, recreational, and environmental costs -- I don't think there would have been any question about which would have been the most economically viable and feasible alternative in this instance.

As a person who has taken far too many hours of courses in the natural sciences, including plant physiology, soil mechanics, and endless others, I would suggest that greater consideration should have been given to the reinforcing value of the root system of the trees that formally grew along the Canal dike between Lake Carnegie and the Delaware and Raritan Canal.

ASSEMBLYMAN PATERO: To tell you the truth, when we went down the towpath today, most of those trees seemed to be alive. I didn't see any trunks--

ASSEMBLYMAN MARSELLA: (interrupting) Well, you can see that by the pictures.

MR. ALDEN: Many of them will regenerate, assuming that the herbicides don't do permanent damage to them. But, I think it was correctly stated by the gentleman who spoke from the Plainsboro Planning Board that the sucker growth that comes up, of course, is, in itself, going to be a maintenance problem now. If, in fact, you can ever obtain a reasonable quality of trees from the suckers that remain after you have pruned the undesirable suckers, it will be just a formidable task and very questionable at best.

There appears to be some confusion relative to the depth of dredging as it was done, and as was testified to earlier this afternoon. There was, I believe, a suggested comparison between the five-foot dredging that may have occurred then and the 20-foot -- or 19-foot -- depth that would now be required for the slurry.

Just for the record, I would like to clarify that the dimension of the slurry wall, as I understand it, is from the top of the towpath -- that is, the dike between Lake Carnegie and the Canal. The dimension then is measured from the top, down to 19 feet. I don't know for sure, but diagrammatically, at least in sketching it out, it seemed to me that the depth of that may be no greater perhaps than the five-foot excavation that might have occurred historically in the annual dredging of the Canal, which was done in the dry fashion -- if, in fact, that occurred on an annual basis.

It has been said by some people who testified here today that there was no disposal site for the dredged material, and by others, including a gentleman from Princeton University, who was speaking to the press and the television cameras in the lobby earlier this afternoon, that a site was available. I believe we have heard conflicting testimony in that regard.

For the moment, even if we do assume there was a site available and that the material had to be relocated in a subsequent five-year period, I would raise the question -- I don't know the answer -- of whether or not that cost of relocation of the soil was contemplated in the alternative bids between the wet excavation and the dry excavation.

Again, I would suggest that even if it had not been considered and there would be an additional cost difference beyond the \$1 differential, that if we were still to take into account the historic, social, recreational, and environmental factors and assign a dollar value to those, they would, indeed, have compensated for the relocation of the dredged material in a five-year period.

From the questions I've heard, I think there is some concern about whether or not there is a conflict of interest between assigning a contract to an engineering firm to do an environmental assessment

study, and then subsequently assigning that same firm the contract to prepare engineering services. I don't know if, in fact, there is a legal conflict of interest, but in terms of my own professional ethics and my understanding of professional ethics, it is very clear to me that that should have been prohibited. Whether or not it is done on a routine basis, I think there is a built-in incentive to justify the proposed construction by any consultant who may be retained by a public agency, if, in fact, that consultant has reason to believe that he or she may receive a construction contract from that agency. I have very serious concerns about the ethical question, if not the legal question.

That pretty much concludes my questions and concerns. I greatly appreciate the fact that this hearing has been conducted. It has given the citizens of this region an ample opportunity to be heard. Thank you.

ASSEMBLYMAN PATERO: Very good testimony. Is Gary Hoodzow here? (affirmative response) I have one brief question. Do you have the Environmental Impact Study with you, or is it possible for us to get a copy of it?

GARY HOODZOW: I don't have a copy of it with me, but a copy could be made available.

ASSEMBLYMAN PATERO: Okay. I haven't seen it, but as I said, I was at a meeting in Princeton, and they said that in the Impact Study, there was no mention made of trees. Is that normal -- that you would not put the effect of the trees in the Impact Study?

MR. HOODZOW: I was not involved in the preparation of that document. I have only taken a quick glance at it. I'm involved from the construction management end of the project, and I can't comment on that.

ASSEMBLYMAN PATERO: Okay. Mr. Chairman, the only thing I would like to see is a copy of the Impact Study.

ASSEMBLYMAN MARSELLA: That is fine. Will you provide our Committee with that within the next few days?

MR. HOODZOW: Sure.

ASSEMBLYMAN MARSELLA: Thank you very much. Ruth Birkhead?

RUTH BIRKHEAD: I am Ruth Birkhead, Executive Director of the Delaware and Raritan Girl Scout Council. Obviously, our Council was named after the Delaware and Raritan Canal. About 90% of the Canal falls within our jurisdiction.

We own 120 acres along the banks of the Canal in Somerset County. Therefore, we are extremely concerned about the preservation of the Canal. We certainly have no objections to the dredging, and we look to our legislators to provide strong legislation and strong enforcement of that legislation to protect not only the historical and recreational facility that the Canal represents, but the ecological balance that has been established along the Canal, while at the same time preserving the value of the water supply, which we know is extremely important to the State of New Jersey.

Thank you very much.

ASSEMBLYMAN MARSELLA: Thank you, Ruth. Joe, do you have anymore questions?

ASSEMBLYMAN PATERO: No.

ASSEMBLYMAN MARSELLA: This will conclude today's hearing of the Assembly Energy and Natural Resources Committee. I will sit down with the Committee, examine the testimony, and then report back to the Legislature. Thank you very much.

ASSEMBLYMAN PATERO: Mr. Chairman, I think we should make a request that we get the transcript of this hearing as soon as possible.

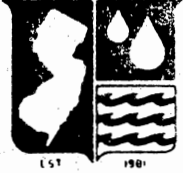
ASSEMBLYMAN MARSELLA: (speaking to hearing reporter) Could you, please?

HEARING REPORTER: I will pass that request along to my supervisor.

ASSEMBLYMAN MARSELLA: Okay, fine. Enter that into the record.

(HEARING CONCLUDED)

APPENDIX



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-6121

Statement at May 8, 1985 Public Hearing on Canal Dredging Project
Conducted by Assembly Energy and Natural Resources Committee

Introduction and description of necessity of project

The New Jersey Water Supply Authority (NJWSA) welcomes the opportunity to enter into the record of this hearing the facts related to our program to remove accumulated sediment from 32 miles of the Delaware and Raritan Canal. Due to the lack of adequate maintenance over many years of this vital water supply for 600,000 people in central New Jersey, the flows were severely restricted during the spring, summer and early fall. The sediment and the aquatic plant life caused flows during these periods to drop to as low as 10 to 12 million gallons per day. This is far short of the 65 million gallons per day which is required to satisfy the demands of the Authority's customers. Further, the flow restriction prevented New Jersey from using its full 100 million gallon per day entitlement for diversion of waters from the Delaware River. In addition, the slow movement of water and the aquatic plant life were detrimental to the aesthetics of the waterway, the centerpiece of the highly valued D&R Canal State Park. This information has been provided as a quick overview as to the need for the dredging program.

Development of project plans and public information programs

Over the past several months, there have been a number of expressed concerns and conclusions by various citizen groups in the Princeton area to the effect that the current dredging program by the NJWSA was ill-conceived and insensitive to the need to protect the Park's recreational and historic values. In the same vein it has been stated that the development of the dredging program had not benefited from the professional input and oversight of the Division of Parks and Forestry and the Delaware and Raritan Canal Commission. There have been statements regarding the alleged lack of opportunities for public involvement in the planning process prior to the award of construction contracts. The following portions of this section of my statement address these matters.

Several years ago the planning for this project was started with the active participation of the Division of Parks and Forestry and the staff of the D&R Canal Commission. Starting with the work which was completed by Rutgers University, there were a number of public information meetings to discuss the proposed work. In 1981 PRC Engineering was engaged by the State Division of Building and Construction to prepare an environmental impact assessment and to prepare the necessary plans and specifications. During the course of this work, several public information meetings were held.

Before the plans and specifications were advertised for construction bids, they received the benefit of input and the approval of the Division of Parks and Forestry and the D&R Canal Commission. All recreational and historical concerns were evaluated and protected. In fact, a significant part of the project cost is directly related to protection or enhancement of the cultural resources.

Simply put, the law requires the NJWSA to obtain the approval of the D&R Canal Commission before we undertake any work which will affect the structures or natural features of the park. Further, we have always and will continue to work closely with the Division of Parks and Forestry. The relationship is more specifically being defined in an agreement which is now in draft form.

A review of the record will also show that there were three public meetings on Contract II, which includes the work in the Princeton area. Before the completion of the plans and specifications for Contract II by the consultants, two important public meetings were held to solicit input to the project. The consultants presented and explained the preliminary plans and specifications and included a discussion of the slurry wall. This wall is to be installed within the embankment and therefore required the removal of trees. This slurry wall was determined by the consultants to be necessary to prevent a collapse of the embankment whenever the canal was drained for maintenance or as a result of an embankment washout due to flooding upstream or downstream of Princeton. With your permission, I would like to enter into the record a copy of a letter (Exhibit 1) dated March 29, 1985 from our Chief Engineer to Mrs. Rosemary Blair, President, Delaware and Raritan Canal Coalition. This letter provides a very detailed description of the information which I have just outlined and includes a copy of the extensive mailing list which was used to inform local officials and concerned citizens about the project.

Shortly after the start of work under Contract I (Trenton area) the contractor, D'Annunzio Constructors, Incorporated encountered difficulties which were not fully anticipated in the "designed" method, and requested a change. The contractor requested that he have continuous access along certain reaches of the canal and also that he be allowed to use the towpath or abandoned railroad bed as a haul road, and for this purpose needed to cut additional trees.

After construction of a "demonstration reach," observed by the Consultant Engineer, Division of Building and Construction, the Cultural Resources Consultant, the Division of Parks and Forestry and Mr. James C. Amon of the Delaware and Raritan Canal Commission, the Canal Commission at their July 17, 1984 public meeting approved the selected removal of additional trees with certain restrictions. They also approved of the use of an herbicide on the tree stumps to prevent sprouting. The following article was included in this approval:

"FOURTH, all trees that are to be removed are to be cut as close to ground level as possible and the stumps are to be treated with an herbicide which will prevent sprouting. This herbicide is to be applied at least twice with an interval of at least six months between application. The type of herbicide to be used must be approved by an appropriate agency to assure that it will not contaminate the water in the D&R Canal."

When subsequent construction difficulties were encountered, the formal process of selected tree removal, as directed by the Canal Commission, was followed (on a case by case basis) for Contract III and for Contract II, which includes the slurry wall.

Prior to the actual start of work on Contract II, a public information meeting was held on December 1, 1984 at the West Windsor-Plainsboro High School in West Windsor Township for the purpose of introducing Conti Construction to the general public and to receive comment.

Nate Conti, President of Conti Construction, described his proposed construction methods and used colored slides of before-and-after work accomplished upstream in the Contract III (Stockton through Lambertville) reach of the canal.

Protection of the recreational and historic values of the Delaware and Raritan Canal State Park

A representative of the D&R Canal Coalition expressed concerns about this issue by stating:

"The Agreement, about to be signed by DEP and NJWSA, is ambiguous about protection of the D&R Canal. There is no clear reference to a set of criteria for Park projects, nor reference to a Master Plan to be precisely adhered to, or for public hearings on projects.

"There is not a clear mechanism for resolution of disputes between NJWSA and the interests of the Park. Under the present arrangement, there is a clear chain of command from the Department of Parks to the Commissioner of DEP and then to the Governor. This allows greater public participation and dispute resolution than may be practical under NJWSA."

In response, it must be pointed out that, by law, the NJWSA must obtain the approval of the D&R Canal Commission before it can take any action which will affect the structural, natural or historic features of the canal. The referenced draft agreement, if it is read carefully, specifies the relationship between the Division of Parks and Forestry and the NJWSA as well as their respective responsibilities. I would like to enter a copy of this draft agreement into the record as Exhibit 2. There is a very clear chain of command with the same individual, the Commissioner of DEP, as Chief Executive for both the DEP and the Authority. By law, the Commissioner of DEP serves as Chairman of the Authority. The Governor appoints the other six members of the Authority with consent of the Senate. The Authority has always conducted its business in an open and candid manner. Its track record for effective public participation speaks for itself.

Use of herbicides

There has been an apparent attempt to distort the facts regarding this subject. Statements have been made that the Authority was spraying an "agent orange" type herbicide all over the areas to prevent any future growth of any kind on the embankment adjacent to Carnegie Lake. The attempt appears to have been to paint a picture of irresponsible destruction and indiscriminate spraying of "2,4-D." "2,4-D" has not been used by the Authority or its contractor anywhere within the Canal Park. From these erroneous statements of fact, it was concluded that the Authority was endangering the health of the citizens we serve. The following are the facts:

1. As indicated previously, the use of herbicides was approved by the D&R Canal Commission on July 14, 1984. Mrs. Rosemary Blair, President of the D&R Canal Coalition, was in attendance when this matter was discussed. Several other members of this Coalition and other interested parties routinely receive copies of the D&R Canal Commission meeting minutes. Therefore, it is incorrect to indicate that this decision was unknown to the public. In fact, it was eight months before anyone made any comments on the matter.

2. Following the July 17, 1984 Canal Commission meeting, an extensive inquiry of experts and knowledgeable individuals resulted in the recommendation of two herbicides: "Ammate" and "Weedone 170" - with "Ammate" the clear preference (Exhibits 2 and 4). The Water Supply Authority decided that only "Ammate" was to be used - and with specific restrictions. This was recently confirmed by the enclosed letter from Ms. Fredrika Moser, Research Scientist, Office of Science of Research, DEP, (Exhibit 5) who contacted Mrs. Peggy Haskin, an Authority Commissioner, after reading an article in the "Princeton Packet." A sub-contract for the use of "Ammate" by a licensed applicator was authorized on November 29, 1984 (Exhibit 6). It was actually used for the contract which cleared the sediment from Prallsville Lock to Moores Creek. Its use was considered for use on the tree stumps on the Princeton towpath, but no sub-contracts were let. In response to the current concerns, which are without any factual basis, "Ammate's" use has been completely stopped. It should be reiterated that "Ammate" is approved by knowledgeable professionals for the indicated use.

Careful review of the facts with regard to the use of herbicides clearly establishes that the Authority has acted prudently in this matter. We are well aware of our responsibilities for assuring the protection of this vital water supply and the environment.

Restoration plans for area affected by construction

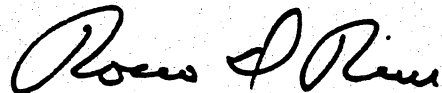
The Authority has always stated the position that we would implement a restoration program for the Carnegie Lake, Delaware and Raritan Canal towpath embankment.

At the March 4, 1985 meeting of the New Jersey Water Supply Authority, representatives of the D&R Canal Coalition were informed that the Authority staff had agreed at a February 22, 1985 meeting to work with a committee of the Delaware and Raritan Canal Coalition and residents of Princeton in developing such a plan. An initial planning meeting was held by the Authority staff with a committee on March 8, 1985 in the field offices of PRC Engineering in Kingston. At that meeting, Michael J. Galley, Chief Engineer of the Authority, pointed out that the plans and specifications for Contract II require replanting and restoration and that the contractor is required to undertake such work as part of his contract. Once a plan is agreed upon and put to paper, the Authority will schedule a public information meeting in the Princeton area. The purpose of that public information meeting is to gather final public input before the plan is submitted to the Delaware and Raritan Canal Commission for formal approval.

In addition to the Authority staff, Jim Amon, Executive Director, Delaware and Raritan Canal Commission, the Division of Parks and Forestry, the Division of Building and Construction and PRC Engineering will participate in the outlined planning and approval process. PRC Engineering has engaged a licensed landscape architect to prepare the formal final plans which will then be submitted to the Canal Commission for approval. These plans are to be prepared after the final public input.

It was unfortunate that trees had to be removed to accommodate the Sediment Removal Project. However, it is now important that we get on with the job of completing the replanting and restoration plan without delay.

Respectfully submitted,



Rocco D. Ricci, P.E.
Executive Director



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-6121

March 29, 1985

Mrs. Rosemary M. Blair, President
Delaware and Raritan Canal Coalition
1108 Princeton-Kingston Road
Princeton, NJ 08540

Dear Mrs. Blair:

This is in response to your letter of March 12, 1985 making reference to our March 8, 1985 meeting and the lack of information in the Delaware and Raritan Canal Sediment Removal Project Environmental Impact Statement on the clear cutting of the trees and herbicidal spraying. Further, you request a suggested solution to this information gap and, additionally, ask the question: "Are there any other aspects of the work which are not included in the EIS?"

To better understand the project and the relationships of the agencies involved, the following background information is provided:

On behalf of the NJWSA, the Division of Building and Construction, Department of the Treasury engaged PRC Engineering to prepare the Environmental Impact Assessment and the design, and also to provide the construction management for the Delaware and Raritan Canal Sediment Removal Project. The design and construction, involving 32 miles of canal, was divided into Contract I (Trenton area), Contract III (up through Lambertville to Stockton) and Contract II (downstream of Trenton to Kingston).

The Contract II bidding documents allowed for the removal of the sediment in the "dry" (a dewatered canal) or in the "wet" (hydraulic dredging by section with discharge into dry canal section compartments). An "alternate" to the bid called for the dredging of the turning basin within Princeton Township's Turning Basin Park adjacent to the canal at Alexander Road near Princeton. In their design work, leading up to the preparation of final plans and specifications, PRC Engineering made an analysis and determined that because of the instability of the embankment between the canal and Lake Carnegie, the installation of a

Mrs. Blair
March 29, 1985
Page 2

"slurry wall" in that 10,000 foot long embankment would be required. In the last 25 years the canal has experienced a number of major embankment washouts both upstream and downstream, causing water levels to drop. The consultants' analysis found that when the canal was in a dewatered state due to a washout or other cause, the stability of the embankment would be in jeopardy because of the higher water level in adjacent Carnegie Lake. The embankment in this situation acts like an earthen dam. I might add, that while this slurry wall will safeguard the lake and the canal during construction, the Authority would have acted irresponsibly if it did not also recognize its need as a prudent long term structural improvement to the important Canal Water Supply System which provides water for up to 600,000 citizens of New Jersey.

The slurry wall is constructed by excavating a trench up to 24 inches wide in the Canal/Carnegie Lake earthen embankment. The trench excavation is made to a depth of approximately 16 to 20 feet below the top of the embankment. While the trench is being excavated by means of a large backhoe, a cement-bentonite mixture is simultaneously fed into the trench. The cement-bentonite mixture will be fed to the trench by means of a 4 inch diameter pipe from portable mixing plants which will be located first at the Carnegie Aqueduct and then at the Kingston Lock areas of the canal. Once the installation of the slurry wall is completed, a sheet of construction filter fabric will be placed over it with 12 inches of compacted soil cover, and then topped off with a sandy type soil to provide a surface similar to other towpath areas of the canal.

Once constructed, the very dense and impervious slurry wall will have a compressive strength much greater than the earthen embankment. The slurry wall will prevent seepage from penetrating through and weakening the embankment when the canal is in a dewatered state.

On September 20, 1984 bids were received for Contract II for the removal of an estimated 190,000 cubic yards of sediment from 6.00 miles of canal between Duck Pond Run near Provinceline Road, Lawrence

Mrs. Blair
March 29, 1985
Page 3

Township, Mercer County downstream to the Kingston Lock in South Brunswick Township, Middlesex County.

The contract was awarded to Conti Construction Company on October 26, 1984 in the amount of \$4,767,768.00, with a bid of \$1.00 for the work at the Princeton Township Turning Basin. Conti proposed to do the work in the "dry," and his work commenced in December 1984.

I want to thank you again for our meeting on March 8, together with representatives of the Division of Building and Construction, PRC Engineering, Conti Construction, Division of Parks and Forestry and also with Jim Amon of the Delaware and Raritan Canal Commission, in order to jointly develop the best possible restoration and replanting plan for the towpath embankment. As you are aware, I and the representatives noted above met with Mayor Winthrop S. Pike of Princeton Township on March 6 to start developing a similar restoration and replanting plan for the canal towpath and embankment at the township's adjacent Turning Basin Park at Alexander Road.

However, subsequent to our March 8 meeting, there appears to have been considerable misinformation and misunderstanding generated about the intended purpose and the proposed use of an herbicide to treat remaining tree stumps, especially as noted in some of the local Princeton newspapers.

In order to resolve this issue, the Authority has directed that the Division of Building and Construction and PRC Engineering immediately stop and discontinue the use of the recommended herbicide or any other chemicals to treat tree stumps by any contractor or subcontractor involved in the 32 mile Canal Sediment Removal Project. A copy of my letter to Dale Smith is enclosed.

The following is the background on how the proposed use of an herbicide to treat remaining tree stumps developed:

You are correct in noting that the Environmental Impact Statement (EIS) did not mention the use of an herbicide. In fact, neither did the Contract Document Plan and Specifications. The recommendation developed after the actual start of work under Contracts I and III when it was recognized by the personnel of both the Division of Parks and Forestry and the Authority that serious maintenance and aesthetic problems would result when uncontrolled brushy regrowth took over along the beautifully restored sections of the canal. One has to travel

Mrs. Blair
March 29, 1985
Page 4

upstream of Trenton through the Ewing, Hopewell, Lambertville and Stockton areas along Route 29 to appreciate the newly restored reaches of the canal to understand this concern. Recognizing the environmental hazards in the indiscriminant use of just any treatment, professional advice was sought. (Enclosed are copies of two internal memoranda dealing with this matter.) Although two herbicides were recommended for use around reservoirs or water, we preferred the "Ammate." Enclosed is a copy of the Division of Building and Construction's subcontractor approval noting that Ammate was to be used in Contract III.

In its early development stages, the Canal Sediment Removal Project moved ahead on the basis of several possible design concepts. The EIA process then made a generalized evaluation of all major identifiable impacts of the alternative design concepts.

Although the EIS did recognize the need for the clearing of vegetation, it also makes the following reference on Page 2-59: "... an adverse impact will occur in both wetland and upland areas if extensive vegetation removal is required for construction equipment access."

The final plans and specifications, in recognition of not only that reference in the EIS but also in consideration of other aesthetic, environmental, historical and cultural factors, limited construction access into the canal for sediment removal. However, it must be noted that the original consultant design assumed that the dry excavation method removal could be easily accomplished by pushing/transporting the sediment within the canal bed to a designated access point for loading onto trucks, and then hauled for disposal.

Before the finalization of the plans and specifications for Contract II by the Consultants, two important public meetings were held to solicit input to the project. The Consultants presented and explained the preliminary plans and specifications, which included the slurry wall.

On January 10, 1984 a Public Meeting with County and Municipal Engineers, Environmental Commissioners and Interested Parties was held at the Maurice Hawk Elementary School in West Windsor Township to receive review and comment on the Environmental Impact Assessment and preliminary plans and specifications which were previously provided to the aforementioned.

On January 31, 1984 a Public Information Meeting was held at West Windsor Township Municipal Building to review and receive comment on the presented plans from the general public.

Mrs. Blair
March 29, 1985
Page 5

At the June 12, 1984 Monthly Public Meeting of the Canal Commission, representatives of PRC Engineering explained the plans and specifications for Contract II in detail. Upon appropriate motion, the plans and specifications were unanimously approved by the Commissioners.

With reference to the need to cut additional trees, shortly after the start of work under Contract I the contractor, D'Annunzio Constructors, Inc. encountered difficulties which were not fully anticipated in the "designed" method, and requested a change. The contractor requested that he have continuous access along certain reaches of the canal and also that he be allowed to use the towpath or abandoned railroad bed as a haul road, and for this purpose needed to cut additional trees. After construction of a "demonstration reach," observed by the Consultant Engineer, DBC, the Cultural Resources Consultant, the Division of Parks and Forestry and Mr. Amon, the Delaware and Raritan Canal Commission at their July 17, 1984 Public Meeting approved the selected removal of additional trees with certain restrictions.

When subsequent construction difficulties were encountered, the formal process of selected tree removal, as directed by the Canal Commission, was followed (on a case by case basis) for Contract III and for Contract II, which includes the slurry wall.

Prior to the actual start of work on Contract II, a Public Information Meeting was held on December 4, 1984 at the West Windsor-Plainsboro High School in West Windsor Township for the purpose of introducing Conti Construction to the general public and to receive comment.

Nate Conti, President of Conti Construction, described his proposed construction methods and used colored slides of before-and-after work accomplished upstream in the Contract III reach of the canal.

I've enclosed copies of all three Public Meeting notices mentioned above, together with agendas, registration and notes taken by hand by a member of my staff. In addition to a broad mailing of the above notices, news releases were made to many of the local newspapers.

As you can see from the above, every reasonable effort was made to notify and involve the public in developing the final plans and specifications for Contract II of the Canal Sediment Removal Project.

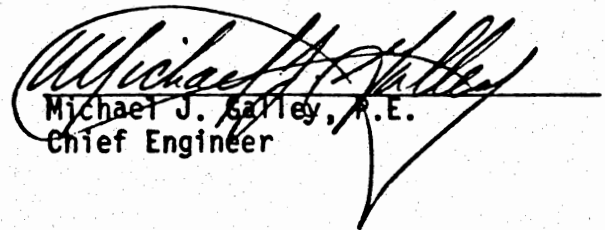
Mr. Conti estimates that his sediment removal work will be completed by August 1985 and that replanting and restoration can take place in the September-October time frame.

Mrs. Blair
March 29, 1985
Page 6

To meet this schedule and take advantage of the fall planting season, it would be important for us to finalize our joint replanting-restoration plan as soon as possible.

We would appreciate it if you would share this letter with other members of the D&R Canal Coalition and the Friends of Princeton Open Space. If there are any further questions, please let me know.

Very truly yours,



Michael J. Galley, R.E.
Chief Engineer

MJG:kn

Enclosures

cc: R. E. Hughey, Commissioner, Dept. Environmental Protection
P. Haskin, NJWSA Member
R. D. Ricci, Executive Director ✓
J. C. Amon, Executive Director, D&R Canal Commission
G. A. Marshall, Dept. Environ. Prot./Div. Parks & Forestry
D. B. Smith, Dept. Treas./Div. Building & Construction
bcc: E. McPartland, Princeton University
NJWSA file



Delaware & Raritan
Canal Coalition

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March 12, 1985
1108 Princeton-Kingston Rd.
Princeton, NJ 08540

Mr. Michael Galley, Chief Engineer
N. J. Water Supply Authority
P. O. Box 5196
Clinton, NJ 08809

Dear Mr. Galley:

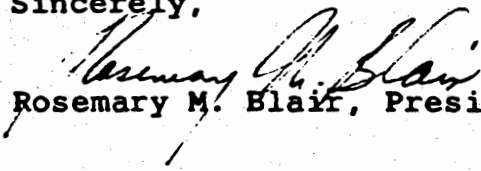
Following our meeting at PRC Harris' Kingston office on March 8th at 4 p.m. on the subject of restoration and replanting of the Canal, we discussed the lack of information in the Environmental Impact Statement on the clear cutting of the trees and herbicidal spraying.

Would you please be good enough to suggest a solution to this information gap. We have tried to inform ourselves by reading the EIS but spraying and clear cutting were not included. Are there any other aspects of the work which are not included in the EIS?

Please be good enough to send us any and all material you have relating to the herbicidal spraying and clear cutting of trees, including the decision to build the slurry wall. We want to cooperate with the Water Authority in this important work but feel handicapped in this effort when we are without all the relevant information prior to the work being accomplished.

We look forward to planning in concert with you and interested citizen groups the replanting of the D&R Canal State Park.

Sincerely,


Rosemary M. Blair, President

cc: James Amon

Associated Organizations

- Blackwells Mills Canal House
Historical Society
- Canal Society of New Jersey
- Delaware River Mill Society
- Franklin Citizens for Orderly
Planning
- Friends of Princeton Open Space
- Griggstown Historical Society
- Historical Society of Princeton
- Lambertville Historical Society
- Lawrence Historical Society
- MSM Regional Study Council, Inc.
- New Jersey Audubon Society
- New Jersey Conservation
Foundation
- Preservation New Jersey
- Princeton Battlefield Area
Preservation Society
- Rockingham Association
- Stony Brook-Millstone Watershed
Association



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5198 • CLINTON, N.J. 08809 • (201) 6

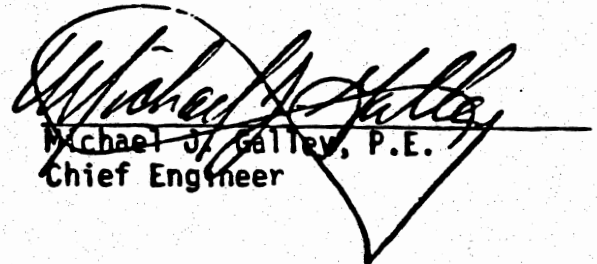
March 15, 1985

Mr. Dale B. Smith
Group Project Manager
Division of Building and Construction
Department of Treasury
CN 235
Trenton, NJ 08625

Dear Mr. Smith:

This will confirm my verbal request to Gary Hoodzow on Wednesday, March 13, 1985 and to you on March 14, 1985 that any further use of the recommended herbicide to treat tree stumps, by any Contractor or Sub-Contractor, be immediately stopped and discontinued along the entire 32 mile length of the Delaware and Raritan Canal Sediment Removal Project.

Very truly yours,


Michael J. Galley, P.E.
Chief Engineer

MJG:kn

cc: P. Haskin, NJWSA Member
R. D. Ricci, Exec. Dir.
G. Hoodzow, PRC Engr.
J. C. Amon, D&R Canal Comm.
P. Stern, D&R Canal St. Pk.
A. G. Chase, Oper. & Maint.
NJWSA file

MEMO

6/12

TO Greg Chase
FROM Paul Stern DATE July 26, 1984
SUBJECT Treating of Tree Stumps with Herbicides

I have contacted Mr. Richard Oble of the Monmouth County Agricultural Extension Service, Ms. Claire Sterapani of the Somerset County Agricultural Extension Service, and Dr. John Mead of the State Weed Control Office at Rutgers University, and have discussed with them the treating of the tree stumps left as a result of the removal of trees in connection with the dredging operation. Their recommendations are as follows:

Mr. Richard Oble: Paint newly cut stumps with 2,4,D mixed with water or diesel fuel. Repeat treatment may be necessary on surviving sprout growth.

Ms. Claire Sterapani: Paint stumps with 2,4,D and water. Repeat treatment as necessary to control surviving sprout growth.

Dr. John Mead: Treat stumps with "Estron BK" (2,4,D and Triclorpene), "Weedone 170" or "Weedone UC" (2,4,D). Dr. Mead prefers the use of Estron BK due to its good kill rate. Another possibility is the use of "Ammate". Use of this compound will require repeat applications to kill surviving sprout growth.

More detailed information on the herbicides mentioned above can be obtained by contacting the following companies or referring directly to the product labels.

2,4,D Dow Chemical Corporation
Ammate Dupont Chemical Corporation
Estron BK Dow Chemical Corporation
Weedone Union Carbide Corporation

Paul Stern

PS:dem

TO: Donald Kroeck, Senior Project Engineer
Division of Engineering

FROM: Richard R. Famularo, ^{PK} Project Engineer II
Division of Operations and Maintenance

SUBJECT: Treating of Tree Stumps with Herbicides

DATE: August 9, 1984

On August 1, 1984, we received a memorandum from Paul Stern, Division of Parks and Forestry, Delaware and Raritan Canal State Park, specifying a list of herbicides which may be useful for the treatment of tree stumps. In order to ascertain the most useful herbicide with the least possible affects on the canal system environment, we contacted Mr. Ralph Smith, New Jersey Department of Environmental Protection Laboratory - Pesticide and Herbicide Section.

Mr. Smith researched the labels on each product listed in Paul Stern's July 26, 1984 memorandum. Mr. Smith concluded from his research that the best herbicide product would be Ammate manufactured by Dupont Chemical Corporation. Ammate is suggested for use around reservoir systems and poses no danger to the canal environment if used properly. Ammate has a residual which remains present in the soil for approximately two months. Mr. Smith's second choice was Weedone "170" manufactured by Union Carbide Corporation.

We recommend that Ammate be used by the dredging contractors for treating tree stumps. All applications of the herbicide should be made at least two months before water is returned to the canal. Please be advised that herbicides must be applied by a certified commercial applicator with operators licensed to do commercial applications.

at

cc: MJG

AGC ✓ 

APPROVAL SUBCONTRACTOR,
MATERIAL

FORM DEC-12 7-78

STATE OF NEW JERSEY *176 C*
DEPARTMENT OF THE TREASURY *etc*
DIVISION OF
BUILDING & CONSTRUCTION

Form No. DBC-12 is to be prepared
by contractor and submitted to the A
in an original and five (5) copies.

REQUEST FOR APPROVALS

- (X) Sub-Contractor
- () Material

Date **11-29-84**
Control No. **DBC-P415**
Account No.

- Trade: _____ General Const
- _____ Structural Steel
- _____ Electrical
- _____ Plumbing
- _____ Heating & Ven
- X Dredge/S
- _____
- _____

To: Division of
Building & Construction
CN-235
Trenton, N. J. 08625

Contractor: [Conti Construction Co., Inc.
3001 South Clinton Avenue
South Plainfield, NJ 07080

Project: [D & R Canal
Waterway Maintenance Program
Contract III
Mercer & Hunterdon County

In accordance with your letter dated July 12, and August 17,
1984 (10-1235-16/17), we propose to subcontract herbicide spraying,
using Ammate, to the following licensed commercial applicator:

Foster Agricultural Services
R.D. 3 Manners Road
Ringoos, NJ 08551

Architect's or Engineer's Recommendations: (Must be completed. Attach additional data if necessary.) Attachments (

Reason did for approval

Approved: - Allowances checked

Architect or Engineer *AGHagan* PE *11/29/84*
Date

DBC _____
Date

Rejected:

Architect or Engineer _____

DBC _____

Original - Contractor
cc: Architect
cc: DBC - Project Inspector

cc: - DBC - District Engineer
cc: - DBC - File *18x*

609-466-3888

DIVISION OF
BUILDING & CONSTRUCTION

REQUEST FOR APPROVAL

To:

Division of
Building & Construction
C.N. 235
Trenton, N. J. 08625

() Sub-Contractor
(x) Material

Date 11-29-84
Control No. DBC-Pl
Account No.

Contractor:

Conti Construction Co., Inc.
3001 South Clinton Avenue
South Plainfield, NJ 07080

Trade: _____ General:
_____ Structu
_____ Electr
_____ Plumb
_____ Heatin
 Dre

Project:

D & R Canal
Waterway Maintenance Program
Contract III
Mercer & Hunterdon County

Material:
Ammate for herbicide spraying

Material Supplier: Foster Agricultural Services
Rd. 3 Manners Road
Ringoos, N. J. 08551

Architect's or Engineer's Recommendations: (Must be completed. Attach additional data if necessary.) Attached

Recommended for approval

Approved: - Allowances checked ()

Architect or Engineer

A. G. [Signature] 11/29/84
Date

DBC _____

Date

Rejected:

Architect or Engineer _____

DBC _____

Original - Contractor

cc: Architect

cc: DBC - Project Inspector

cc: DBC - District Engineer

cc: DBC - File



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-6121

December 20, 1983

County and Municipal Engineers
Environmental Commissioners and
Interested Parties

Mercer County
Lawrence Township
West Windsor Township
Princeton Township

Middlesex County
Plainsboro Township
South Brunswick Township

Re: Delaware and Raritan Canal
Waterway Maintenance Program
Sediment Removal and Disposal Project
Prallsville Lock, Hunterdon County to
Kingston Lock, South Brunswick Township, Middlesex County

Construction CONTRACT II:

DUCK POND RUN (Quakerbridge Road,
West Windsor Township, Mercer
County) to KINGSTON LOCK (South
Brunswick Township, Middlesex
County)

PUBLIC PARTICIPATION
PROGRAM

Conference January 10, 1984 at
Maurice Hawk Elementary School
Clarksville Road at 8:00 P.M.
Near West Windsor--Plainsboro High
School (Princeton Junction)
West Windsor Township

Review and Comments on: (1)
Environmental Impact Assessment;
(2) Construction Specifications,
Plans and Cross-Sections

Gentlemen:

The New Jersey Water Supply Authority recently received the Draft Final Submission of: (1) the Environmental Impact Assessment, (2) Construction Specifications and Construction Plans and Cross-Sections for CONTRACT II. These items are currently being reviewed by the Authority's staff and the State of New Jersey's Departments of the Treasury and Environmental Protection

As part of the Authority's PUBLIC PARTICIPATION program for this project: (1) the Environmental Impact Assessment; (2) Construction Specifications; and (3) applicable sheets of the Construction Plans for your municipality are herein transmitted to you. You are requested to review these documents and be present (or represented by your staff) at a:

COUNTY/MUNICIPAL—ENGINEERS/ENVIRONMENTAL COMMISSIONERS CONFERENCE
January 10, 1984 8:00 p.m. - 10:00 p.m.
Maurice Hawk School
Near West Windsor-Plainsboro High School
Clarksville Road
Princeton Junction

During this conference the Authority's Engineering staff and its Consulting Engineers, PRC Harris, Inc. of Woodbridge, New Jersey, will be present to receive your comments, questions, and advice. It would be appreciated if you would submit written statements of your review and concerns, either prior to or at the start of the meeting.

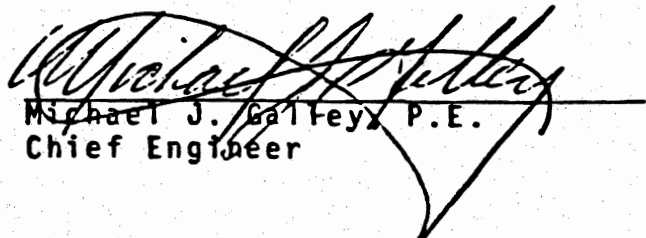
A General PUBLIC INFORMATION MEETING is scheduled for CONTRACT II on January 31, 1984, 7:30 p.m. at the West Windsor Municipal Building, North Post Road & Clarksville Road, Princeton Junction at 7:30 p.m.

Our current tentative ACTIVITIES SCHEDULE for Construction CONTRACT II is as follows:

Early Mar. 1984	Construction Bid Advertisement
Late May 1984	Award Construction Contractor

This is an ambitious schedule, requiring considerable coordination and your cooperation is appreciated. If you have any questions in advance of the meeting, please call me at (201)638-6121.

Very truly yours,


Michael J. Gaffey, P.E.
Chief Engineer

s1
Enc.

cc: R. D. Ricci, NJWSA Exec. Dir.
P. Haskin, NJWSA Member
J. G. Ton, NJWSA Member
D. J. Kroeck, NJWSA Sr. Proj. Engr.
PRC Harris, J. M. Dionisio, J. P. Talerico
SNJ/DEP/BCI, Roland Spressart
SNJ/DoTr/DBC, D. Smith, F. Bonas
County and Municipal Clerks
County Freeholder Director
County Executive Director
Municipal Mayors

2/x

NEW JERSEY WATER SUPPLY AUTHORITY

DELAWARE AND RARITAN CANAL WATERWAY MAINTENANCE PROGRAM
SEDIMENT REMOVAL AND DISPOSAL PROJECT

Prallsville Lock, Hunterdon County to Kingston Lock, Middlesex County

CONSTRUCTION CONTRACT II

DUCK POND RUN (Quakerbridge Road, West Windsor Township, Mercer County) to
KINGSTON LOCK (South Brunswick Township, Middlesex County)

COUNTY/MUNICIPAL ENGINEERS
CONFERENCE

Maurice Hawk Elementary School
Clarksville Road
(Princeton Junction) West Windsor Township
January 10, 1984

A G E N D A

- 8:00- 8:15 p.m. ° REGISTRATION (Please register)
- 8:15 p.m. ° Call to Order, Greetings, and Introductions
Rocco D. Ricci, Executive Director
New Jersey Water Supply Authority
- ° Background and Present Status of Project
Michael J. Galley, Chief Engineer
New Jersey Water Supply Authority
- ° Presentation of Environmental Impact Assessment,
Construction Plans and Specifications
John P. Talerico, Senior Vice President and
John M. Dionisio, Project Manager; Staff of
PRC Harris, Inc. Woodbridge, New Jersey
- ° Statements by County/Municipal Environmental
Commissions and Environmental Public Interest
Groups
- ° Responses by PRC Harris and
New Jersey Water Supply Authority Staff
- ° Discussion
- ° Summation

1/10/88 @ West Windsor/Maurice Hawk School

D & R Cont'l W WMP PL-KL

CONTRACT II Duck Pond Run to Kruskal Co
County/Municipal Engineers/Environmental Comms
& Public Interest Groups

Princeton/Twp Eng

- Q = Contracts working simultaneously? Yes
- Q = Landfills for Contract II? Yes, DEP Regs.

Princeton/Princeton

- Q = Use of Princeton Univ Sites? No!
- Q = Landfills accept sediment for capacity? Yes, DEP Regs.
- Q = 190,000 cfs translates to how many trucks?
- Q = Hours of operation? Sats & Suns?
- Q = Estimate of leak proof container capacity? ±
- Q = Excess road weight limits? No, DEP Regs.
- Q = Assurance on leak proof container?
- Q = When close the roads? What equipment?
- Q = Degree/Duration of "Daily Leaking"
- Q = Can water levels (Mills Pond Aqueduct - Chambers Falls Dam) ^{VIDEO}
- Q = Road repairs? ^{VIDEO} TAPE of Existing Conditions
- Q = Clay Liner - Borrow Pit locations?
- Q = VIDEO TAPE COPY TO TOWNSHIP? & Observers? Yes!
- Q = Lowest Bidder? Yes
- Q = ACOX AND/OR ROAD TRAFFIC LOAD PATTERN - 8 AM & 4 PM
WHAT CONTROLS? (UNIFORMED TRAFFIC DIRECTOR?)
- Q = Duck Pond Run - WHAT HAPPENS?
- Q = TURNING BASIN TO BE DREDGED? How By Contracts?
- Q = Tests - Replacement?

SCREY WILL
TO PROTECT ABOUT 18'
BELOW LOW WATER



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-61

January 9, 1984

Subject: Delaware and Raritan Canal Waterway Maintenance Program
Sediment Removal and Disposal Project
Prallsville Lock, Stockton Borough, Hunterdon County to
Kingston Lock, South Brunswick Township, Middlesex County
CONTRACT II: DUCK POND RUN to KINGSTON LOCK (Quakerbridge
Road, West Windsor Township, Mercer County to Kingston
Lock, South Brunswick Township, Middlesex County)

PUBLIC INFORMATION MEETING - Plans and Specifications

January 31, 1984 7:30 P.M.
West Windsor Municipal Building
Clarksville and North Post Roads
West Windsor, N.J.

The Delaware and Raritan Canal serves as a transmission facility to deliver raw water of up to 75 MGD under long term contracts to major potable water purveyors serving 600,000 residents of New Jersey, and various irrigational and industrial water users along its 60 mile length. Over the years silt and debris have accumulated, significantly decreasing its ability to transport water. The decreased flow capacity not only impacts on the ability of the Canal to meet current contractual commitments but also on its potential to utilize additional flows from the Delaware River.

A Programmatic Environmental Impact Assessment Report for the subject project was completed by Rutgers University in August 1981. Public Information Hearings on this EIA Report were completed in January 1982.

In the late fall of 1981, the New Jersey Water Supply Authority, through the Division of Building and Construction, Department of Treasury, engaged an Engineering Consultant, PRC Harris, Incorporated of Woodbridge, New Jersey, to design and prepare plans and specifications for the removal and disposal of sediments from a 32 mile section of the Delaware and Raritan Canal from the Prallsville Lock in Hunterdon County to the Kingston Lock in Middlesex County.

By February 1982, the Consultants had produced a PROGRAM DOCUMENT which was freely distributed to the County and Municipal Governments, the Authority's water customers, Public Interest Groups and other personages. A series of three Public Information Meetings were held on March 16, 17 and 18, 1982 in the Trenton, Lambertville and Princeton areas to receive public input. During those Public Information Meetings, the on going Public Participation Program was outlined by the NJWSA staff. The continuing program consisted of: (1) review of the Project's Draft Environmental Assessment, Construction Drawings and Specifications by County/Municipal Engineers/Environmental Commissions and Public Interest Groups; (2) Public comment in conjunction with the U.S. Army Corps of Engineers' Project Public Notice of Permit Application; (3) a Public Information Meeting at the start of the actual construction.

for CONTRACT I - MOORES CREEK (Belle Mountain, Hopewell Township, Mercer County) to DUCK POND RUN (Quakerbridge Road, West Windsor, Township, Mercer County), meetings were held on January 26 and February 17, 1983 respectively, with the County/Municipal Engineers and the County/Municipal Environmental Commissions and Public Interest Groups. As a result of those conferences, several changes and mitigations to the Program were made.

On January 13, 1983, the Permit Application was made to the U.S. Army Corps of Engineers, Philadelphia District. The U.S. Corps of Engineers then went through their Project Public Notice Process. This Notice Process was closed on June 17, 1983 with no adversarial respondents. The U.S. Corps of Engineers has completed its work and the requirements of the Permit were incorporated in the Authority's Construction Plans and Specifications. CONTRACT I was competitively bid in October 1983 and construction started December 5, 1983, to be completed by July 31, 1985.

For CONTRACT III - PRALLSVILLE LOCK (Stockton Borough, Hunterdon County) to MOORES CREEK (Belle Mountain, Hopewell Township, Mercer County), meetings were held on November 17, 1983 with the County/Municipal Engineers/Environmental Commissions and Public Interest Groups. A Public Information Meeting was held on December 7, 1983 to present the Final Plans and Specifications for CONTRACT III and the changes/mitigations suggested by the Engineers and Environmentalists. Construction should be underway in early Spring 1984.

For CONTRACT II - DUCK POND RUN (Quakerbridge Road, West Windsor Township, Mercer County) to the KINGSTON LOCK (South Brunswick Township, Middlesex County), a meeting is to be held on January 12, 1984 with the County/Municipal Engineers and the County/Municipal Environmental Commissions and Public Interest Groups. As a result of those conferences, changes and mitigations will be made for CONTRACT II as appropriate.

NEW JERSEY WATER SUPPLY AUTHORITY
DELAWARE AND RARITAN CANAL WATERWAY MAINTENANCE PROGRAM
SEDIMENT REMOVAL AND DISPOSAL PROJECT

Prallsville Lock in Hunterdon County
to the
Kingston Lock in Middlesex County

PUBLIC INFORMATION MEETING
for
CONTRACT II

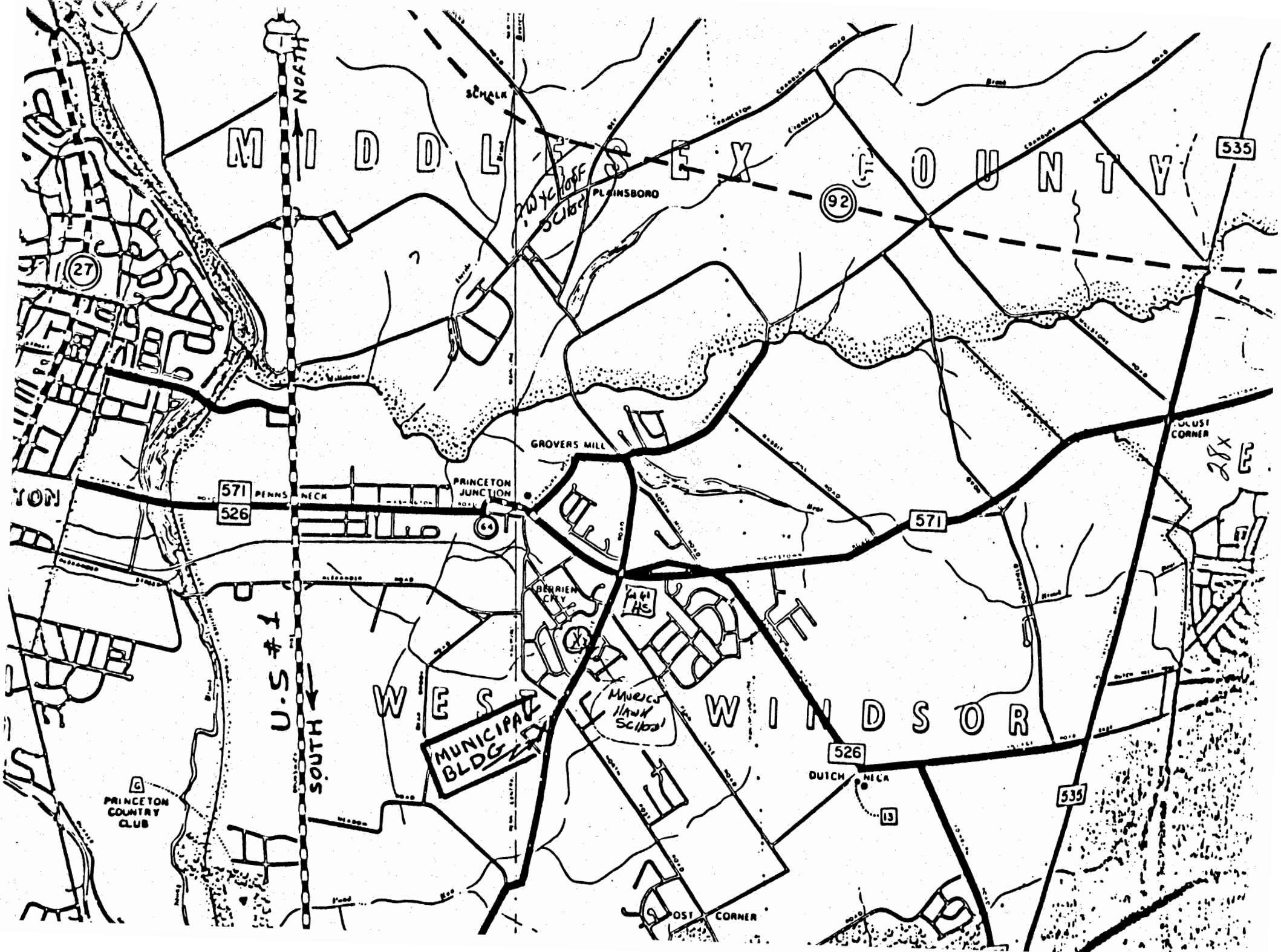
DUCK POND RUN (Quakerbridge Road, West Windsor Township, Mercer County)
to KINGSTON LOCK (South Brunswick Township, Middlesex County)

Princeton - West Windsor Area
West Windsor Municipal Building
Clarksville and North Post Roads
West Windsor, New Jersey

Tuesday
January 31, 1984

A G E N D A

- 7:00 - 7:30 p.m. - REGISTRATION (Please sign at the Register)
- 7:30 p.m. - CALL TO ORDER, Greetings and Introductions
Rocco D. Ricci, Executive Director
New Jersey Water Supply Authority
- Background of Investigations and Future Activities
Michael J. Galley, Chief Engineer
New Jersey Water Supply Authority
- Details of the Dredging Designs
John P. Talerico and John M. Dionisio
Senior Vice President and Project Manager
PRC Harris, Inc., Woodbridge, New Jersey
- Local Officials Project Review and Advisories
Donald J. Kroeck, Senior Project Engineer
New Jersey Water Supply Authority
- Discussion
The Public
- Summation
Executive Director Ricci



M I D D L E S E X C O U N T Y

535

92

WINDSOR SCHOOLS
PLAINSBO

GROVERS MILL

PRINCETON JUNCTION

571

526

PENNS NECK

571

POST CORNER

28x E

U.S. #1
NORTH
SOUTH

W E S T W I N D S O R

MUNICIPAL BLDG

MUNICIPAL BLDG

526

DUTCH NECK

13

535

PRINCETON COUNTRY CLUB

POST CORNER

NEW JERSEY WATER SUPPLY AUTHORITY

DELAWARE & RARITAN CANAL WATERWAY MAINTENANCE PROGRAM
SEDIMENT REMOVAL AND DISPOSAL PROJECT

Prallsville Lock in Hunterdon County to Kingston Lock in Middlesex Count

Public Information Meeting

CONTRACT II - DUCK POND RUN TO KINGSTON LOCK

January 31, 1984

Background on
Local Officials Project Review and Advisories

At the completion of our Public Information Meetings in March 1982, the Authority and PRC Harris engineering staffs knew that a considerable period of in-depth investigation was necessary, particularly with regard to the disposal of the sediment.

By mid-October 1982, the resolution to the major problems seemed to be in-hand and the 32 mile Project was broken down 3 Projects with a priortiy given to what is now known as CONTRACT I - MOORES CREEK to DUCK POND RUN, which is the middle 16 miles of the Prallsville Lock to Kingston Lock Reach.

On January 10, 1983, PRC Harris, Inc. delivered the Draft Environmental Impact Assessment and the Construction Plans and Specifications for CONTRACT I. This action set in motion the Public Participation Process with Local Governments and Environmental Interest Groups, outlined at our March 1982 Meetings.

On January 18, 1983, the Draft Assessment Plans and Specifications for CONTRACT I were transmitted to the Mercer County Engineer and the Engineers for Hopewell, Ewing, Trenton, Hamilton, Lawrence, Princeton and West Windsor calling for a joint conference with the Authority and PRC Harris staffs on January 26, 1983. Copies of our

Letter of Notification were also forwarded to the Mayors and Environmental Commissions of those Municipalities and to the Environmental/Public Interest Groups indicating our intent to have a similar meeting with them on February 17, 1983.

Both conferences were well attended. Each group discussion was enlightening to all parties and several issues were raised which eventually required further investigation by PRC Harris and other consultants to the Authority. Both groups, however, were impressed with the depth of the details investigated and the solutions that had been developed.

Some of the major factors brought out by the Local Engineering Group for CONTRACT I were:

1. Fire protection for the Titusville area of Hopewell Township: The Delaware River is to become their substitute "fire hydrant".
2. if the excavation is to be done "In the Dry", then the work in the Titusville area should be shifted to the winter-early spring months to avoid possible air pollution and loss of business to the local boat rental agency.
3. The Contractors working hours should be limited to 8:00 a.m. to 4:00 p.m.

4. The requirement that certain roads not be utilized for haul routes by the Contractor's trucks.
5. Control of equipment access sites from local streets to the Project work area.
6. Control of dust and mud on local streets.

Some of the major factors brought out by the Local Environmental Commissions and Public Interest Groups for CONTRACT I:

1. If the Dry Excavation Method is used, which would stop the flow through the Canal from the Delaware River, then there should be water quality testing of the alternate water supplies made available to customers down-Canal of the Project.
2. Improved methods of notification to adjoining property owners when construction starts.
3. If the Wet Excavation Method is used, turbidity barriers should be installed to reduce/prevent Down-Canal Sediment transport.
4. Additional procedures for the testing of the sediment to determine the concentration of contaminants--if any-- and that the disposal of these sediments would not be a public health hazard.

At the time of the Local Government/Environmental Interest Group Meetings, the U.S. Army Corps of Engineers, Philadelphia District, was beginning its Public Hearing process for the Authority's Permit Application which was filed on January 13, 1983. The Corps Project

Public Notice occurred on May 17, 1983. No adversarial commentary was received from the Public at that time and the Corps concluded that phase of issuing their Permit for the Project. The Formal Permit was released on October 6, 1983

CONTRACT I went to Construction competitive bidding on September 20, 1983. Seven bids were received on October 27, 1983 and after due process, the Construction Contract was signed on November 29, 1983.

During the September to November 1983 period PRC Harris, Inc. completed the DRAFT FINAL Construction Plans and Specifications for CONTRACT III - PRALLSVILLE LOCK to MOORES CREEK, which is the upstream 7.5 miles of the Prallsville Lock to Kingston Lock Reach. These were delivered to the NJWSA on November 4, 1983 and they were transmitted to the Engineers and Environmental Commissions for Hunterdon and Mercer County and the Municipalities of Boro of Stockton, City of Lambertville and the Townships of Delaware, Kingwood, Hopewell and West Amwell and the Delaware River Joint Toll Bridge Commission calling for a joint conference with the Authority and PRC Harris staffs on November 17, 1983.

Regrettably both meetings were sparsely attended. However, one important factor brought out by the Engineer for the City of Lambertville was that in the event the Construction Contractor were to utilize the dry excavation method of dredging, particularly through Lambertville, the Specifications should be changed from

"a daily cleaning of any spillage or vehicle tracked material from road-bed surfaces" to a "continuous cleaning of road-bed surfaces. That change has been made to the Specifications.

CONTRACT III went to Construction Competitive Bidding on January 1984. The competitive bids are to be received on 1984.

Also during the September through December 1983 period PRC Harris completed the DRAFT FINAL Construction Plans and Specifications for CONTRACT II - DUCK POND RUN to the KINGSTON LOCK, which is the down-stream 6.0 miles of the Prallsville Lock to Kingston Lock Reach. These were delivered to the NJWSA on December 1983, and they were delivered to the Engineers and Environmental Commissions for Mercer and Middlesex Counties and the Municipalities of West Windsor, Princeton, Plainsboro and South Brunswick Townships calling for a joint conference with the Authority and PRC Harris staffs on January 10, 1984.

1/31/84

@ West Windsor Municipal Building

D&R Canal WWMP SR/DP PL to KL

CONTRACT II - Duxford Run to Kingston Lock

Public Information Meeting

- Q DR CHERRY: No pumping of sediment over Coffey Dams: explain
- Q DUBIEL: Explain the de-watering sequence in detail
- Q BORANTOWN: Material has been tested? OK for lead, oil, etc. in stream.
- Q FORRESTAL: ? on turbidity, bacteria? Replace? (concrete?)
- Q DUBIEL: What is capacity of hydraulic dredges (50 cft/hour or more)?
- Q DR CHERRY: Outline history of project to date
- Q DR CHERRY: " " " Water supply to Princeton W Co?
- Q DR CHERRY: " " " How PWCo supplies water not pumping up Canal?
- Q DR CHERRY: " " " How about WQ testing of Duxford Run water to Princeton Water Co?
- Q BENGMAN: ? Knowledge of points sources that affect Duxford Run
DR CHERRY: No E. Coast (BENGMAN BOIS)
- Q BENGMAN: ? What measures on keeping rock cover and alternate traffic arrangements? Uniform traffic?
- Q KAISER/PTB: Princeton Turning Basin; PTB outreach who contacted with DEP and told that PTB would be part of this project.
- Q AMMO: There was an agreement between Div Parks & GC across that PTB could be dredged as part of project.
No commitment but consideration
- Q _____: Are there plans to divert water from Cranston?
- Q DUBIEL: Turning Basin is in yourself as is.

Contract EWG →
done as to testing



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-6121

November 19, 1984

Subject: Delaware and Raritan Canal Waterway Maintenance Program
Sediment Removal and Disposal Project
Prallsville Lock, Stockton Borough, Hunterdon County to
Kingston Lock, South Brunswick Township, Middlesex County
CONTRACT II: DUCK POND RUN (West Windsor Township, Mercer County)
to KINGSTON LOCK (South Brunswick Township, Middlesex
County)

PUBLIC INFORMATION MEETING - Presentation of CONTRACTING FIRM

7:00 P.M. December 4, 1984 at West Windsor-Plainsboro High School
Commons 3
North Post and Clarksville Roads
West Windsor, New Jersey

On January 10, 1984, the New Jersey Water Supply Authority and its Consultant, PRC Engineering, Woodbridge, New Jersey, hosted a PUBLIC INFORMATION MEETING at the Maurice Hawk School, West Windsor, New Jersey, to present the final plans and specifications for Delaware and Raritan Canal Sediment Removal and Disposal Project, CONTRACT II - DUCK POND RUN to KINGSTON LOCK.

On October 26, 1984, the Division of Building and Construction, on behalf of the New Jersey Water Supply Authority, awarded a contract to Conti Construction Company, Inc. of South Plainfield, New Jersey. Work is expected to start shortly.

As part of its continuing Public Information/Participation Program, the Authority has scheduled a meeting to introduce the Contractor, the project managers and inspectors to the public.

The public meeting will be held at 7:00 P.M. on December 4, 1984 at:

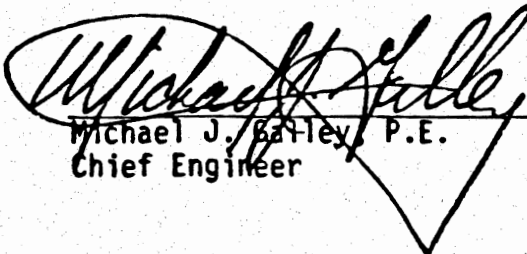
West Windsor-Plainsboro High School
Commons 3
North Post and Clarksville Roads
West Windsor, New Jersey

Related construction schedules and activities will be discussed prior to the start of construction that is necessary to restore the Canal's hydraulic transmission

capacity and deliver raw water to major water purveyors serving over 600,000 residents of New Jersey, and various irrigational and industrial water users along its 60 mile length.

You are cordially invited to attend this PUBLIC INFORMATION MEETING.

Very truly yours,



Michael J. Bailey, P.E.
Chief Engineer

s1

Attach: AGENDA

cc: R. D. Ricci, NJWSA Exec. Dir.
P. Haskin, NJWSA Member
Col. J. G. Ton, NJWSA Member
D. J. Kroeck, NJWSA Sr. Proj. Engr.
PRC Engr./J. M. Dionisio, J. P. Talerico
SNJ/DEP/BCI/R. Spressart
SNJ/DoTr/D. Smith, F. Bonas
County and Municipal Clerks
County Freeholder Director
County Executive Director
Municipal Mayors

NEW JERSEY WATER SUPPLY AUTHORITY
DELAWARE AND RARITAN CANAL WATERWAY MAINTENANCE PROGRAM
SEDIMENT REMOVAL AND DISPOSAL PROJECT
Prallsville Lock, Hunterdon County to Kingston Lock, Middlesex County

PUBLIC INFORMATION MEETING
for
CONSTRUCTION CONTRACT II

DUCK POND RUN (West Windsor Township, Mercer County) to
KINGSTON LOCK (South Brunswick Township, Middlesex County)

West Windsor-Plainsboro High School
Commons 3
North Post and Clarksville Road
West Windsor, New Jersey
Tuesday, December 4, 1984
7:00 P.M. - 10:00 P.M.

A G E N D A

7:00 - 7:30 P.M.

REGISTRATION (Please sign at the Register)

7:30 P.M.

CALL TO ORDER Greetings, and Introductions

Rocco D. Ricci, Executive Director
Michael J. Galley, Chief Engineer
New Jersey Water Supply Authority

Details of the Dredging Designs

John M. Dionisio, Project Manager
PRC Engineering

Introduction of the Construction Inspection Staff
Messrs. Galley and Dionisio

Introduction of and Presentation by the Contractor
Conti Construction Company, Inc.

Construction Schedule

PRC Harris, Inc. & Conti Construction Company,
Inc.

Discussion

The Public

Closing Summation

Mr. Galley

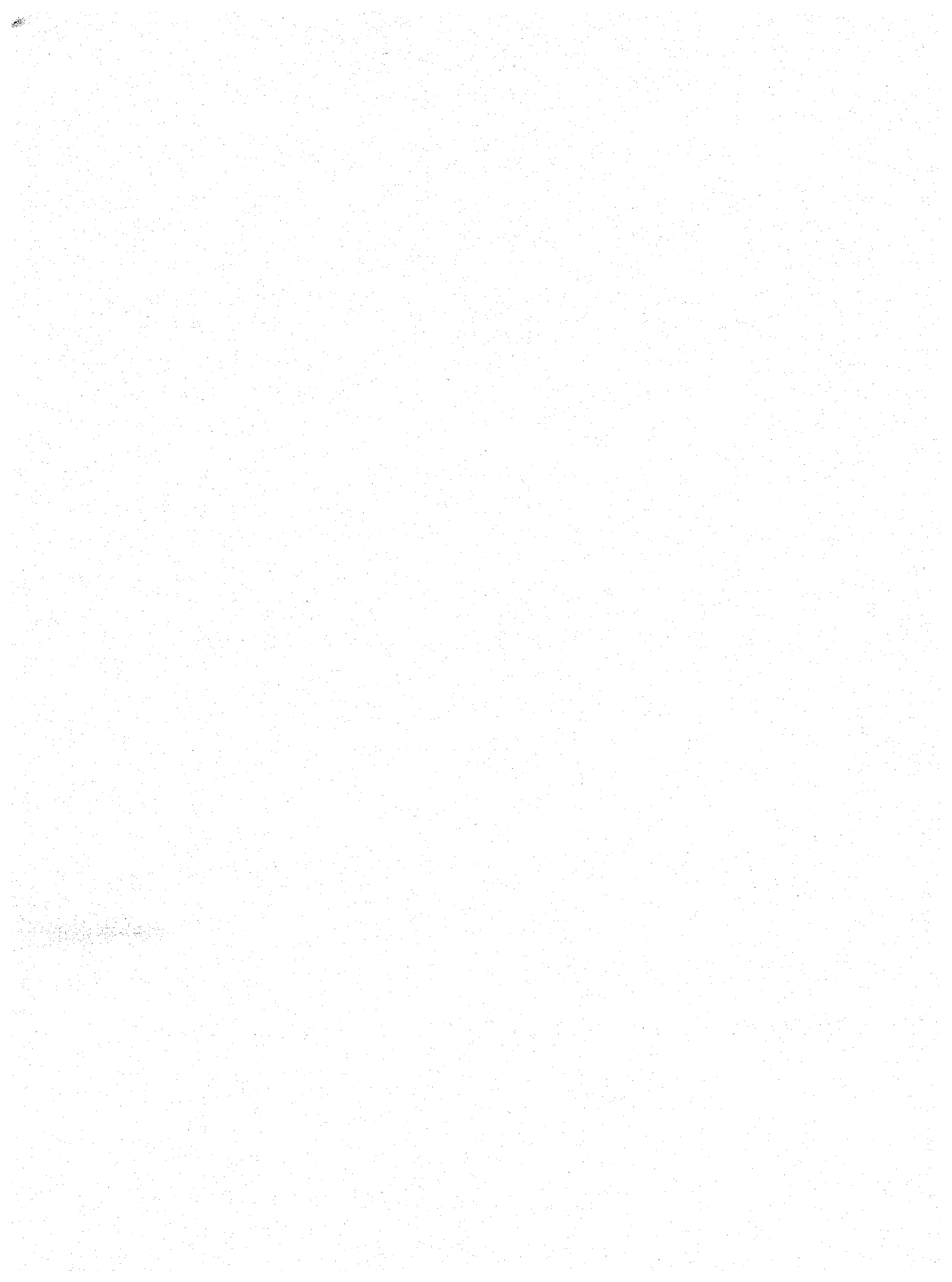
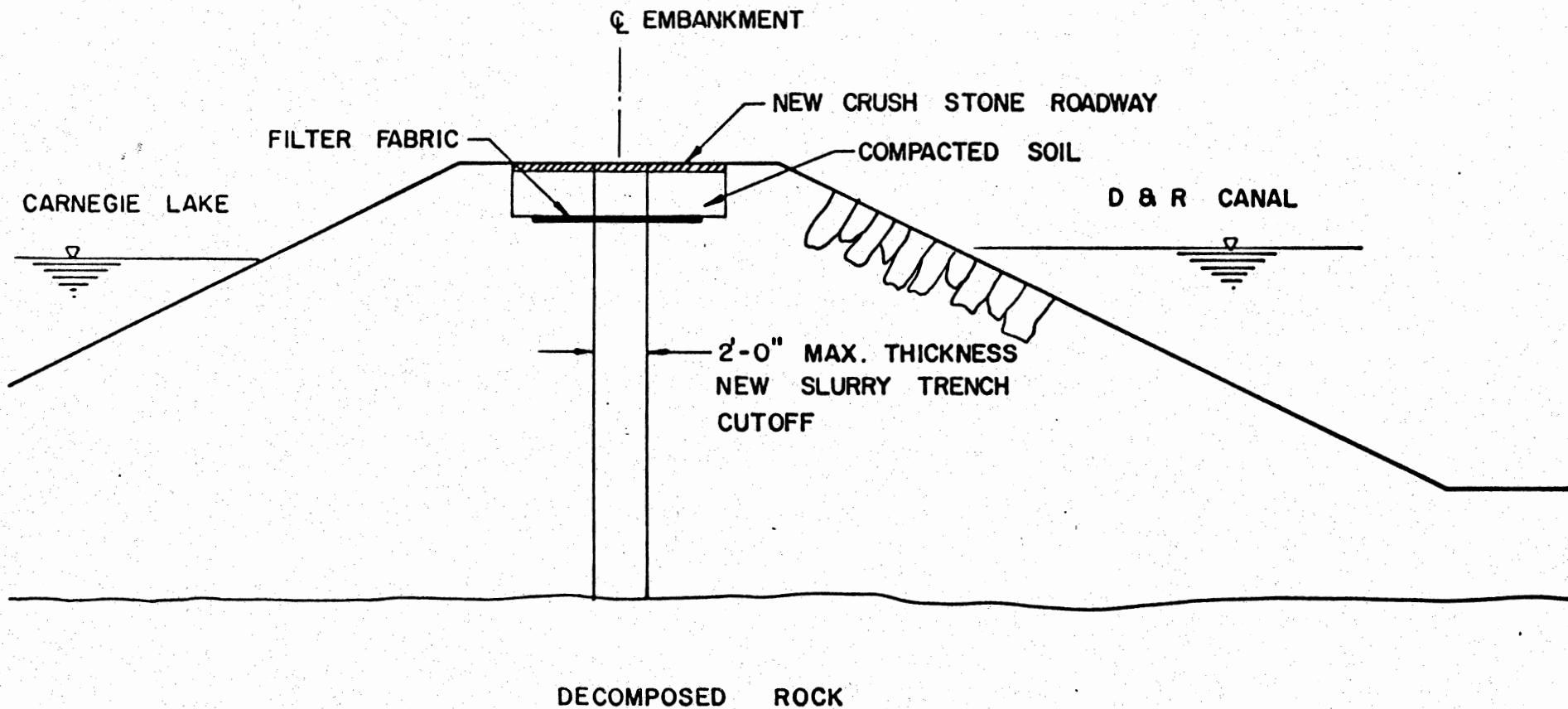


EXHIBIT 2

93x



95x

FIGURE 7

DRAFT

AGREEMENT FOR THE DEVELOPMENT,
MAINTENANCE AND OPERATION OF
THE DELAWARE AND RARITAN CANAL
TRANSMISSION COMPLEX AS A
WATER SUPPLY FACILITY AND
FOR PUBLIC RECREATION, CONSERVATION
AND HISTORIC PURPOSES AS PART OF THE
DELAWARE AND RARITAN CANAL STATE PARK

THIS AGREEMENT, made the _____ day of _____ in
the year One Thousand Nine Hundred and Eighty-four (1984)

BETWEEN THE NEW JERSEY WATER SUPPLY AUTHORITY,
a public body corporate and politic of
the State of New Jersey
CLINTON, NEW JERSEY

, hereinafter referred to as the Authority,

AND THE STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
JOHN FITCHWAY PLAZA
TRENTON, NEW JERSEY

, hereinafter referred to as the Department.

WHEREAS, since the State of New Jersey acquired title to the Delaware and Raritan Canal in 1934, pursuant to N.J.S.A. 13:13-1 et seq., the Canal has been maintained and operated by the Department of Conservation and Economic Development and its successor, the Department of Environmental Protection, both as a water supply source and for recreational purposes in accordance with N.J.S.A. 13:13-12.1;

WHEREAS, in 1974, the State Legislature declared in N.J.S.A. 13:13A-1 et seq. that the Canal is a vital source of water supply and is of historic, ecological and recreational value to the public and thereby created the Delaware and Raritan Canal State Park consisting of the canal and State-owned lands along the canal banks and empowered the Department, subject to the approval of the Delaware and Raritan Canal Commission, to take such measures as may be necessary to preserve, maintain and operate the Park for public recreation and conservation purposes;

WHEREAS, subsequent to the creation of the Delaware and Raritan Canal State Park, the Department administered the Canal through the Division of Water Resources for water supply purposes and through the Division of Parks and Forestry for recreation and conservation purposes with the Division of Water Resources retaining administration of the Delaware and Raritan Canal Transmission complex consisting of the canal waterway, embankments, flood guard banks, flood guard dikes, hydraulic and flow control structures, and land necessary to operate and maintain the Delaware and Raritan Canal as a water supply facility;

WHEREAS, the State Legislature created the New Jersey Water Supply Authority pursuant to N.J.S.A. 58:1B-1 et seq. and empowered the Authority to operate and manage the Delaware and Raritan Canal Transmission Complex as a water supply facility pursuant to the same statutory authorizations enabling the State to operate and manage the facility;

WHEREAS, by deed dated _____ the State of New Jersey, Department of Environmental Protection transferred to the Authority title to all the land and improvements comprising the Delaware and Raritan Canal Transmission Complex (hereinafter referred to as the Transmission Complex) as delineated on a series of two hundred and eighty-two (282) topographic maps;

WHEREAS, the Department has retained by the same deed a perpetual easement on the Transmission Complex for management, maintenance, development and operation as part of the Delaware and Raritan Canal State Park all land, facilities and structures within the Transmission Complex related to the historical, natural and recreational use of the Canal;

WHEREAS, it is in the best interests of the public for the Authority and the Department to define their respective responsibilities to ensure the continued development, maintenance and operation of the Transmission Complex as both a water supply facility and for recreation, conservation and historic purposes in accordance with pertinent statutory authority.

NOW THEREFORE, the Authority and the Department hereby covenant and agree as follows:

I. OPERATION AND MAINTENANCE

- A. The Authority shall exercise the following operation and maintenance responsibilities in a manner that preserves, protects and recognizes the historic, natural and recreational purposes of the Canal and Park.
1. Repair, construction and reconstruction of embankments, dams, waterway, drainage and hydraulic structures, towpaths, maintenance buildings and flow control structures as required for water supply purposes.
 2. Removal and proper disposal of large amounts of debris and silt from the Canal waterway and natural streams and drainage ditches adjacent and tributary to and under the Canal as required for water supply purposes.
 3. Removal and disposal of all floating debris and trash from within the water conduit. The operation and maintenance of all hydraulic control structures within the Transmission Complex to assure proper operating levels, uninterrupted water supply and the structural integrity of the Canal.
 4. The control and maintenance of all improvements required for the water supply operation of the Canal within the Transmission Complex.
 5. The coordination of repairs and maintenance of culverts maintained jointly with County and Local Government agencies or New Jersey Department of Transportation.
 6. The control of all abandoned railroad bridges and non-recreational pedestrian bridges within the Transmission Complex unless the Department rehabilitates same. Unless specifically required for water supply purposes, the Authority will not improve said bridges. The Department shall have the right to use any abandoned railroad bridge for recreation purposes. The Authority shall not remove any of said bridges that are under its control without first obtaining the written approval of the Delaware and Raritan Canal Commission and giving the Department written notice of its intent at least sixty (60) days before commencing removal.
 7. The repair and maintenance of chain link fencing or safety railing within the Transmission Complex.
 8. The mowing of all areas within the Transmission Complex except those areas adjacent to the towpath and recreational nodes.
 9. All snow removal and other snow/ice control measures necessary within the Transmission Complex except for recreational and historical areas and towpaths, trails or paths.
 10. All aquatic weed control in the Transmission Complex.

B. The Department shall exercise the following maintenance and operation responsibilities in a manner that is consistent with the use of the Transmission Complex by the Authority as a water supply facility.

1. The operation, maintenance and development of designated historic, natural and recreation areas of the Delaware and Raritan Canal State Park within the Transmission Complex.
2. The collection and disposal of all debris and garbage from all designated recreation, natural and historic areas within the Transmission Complex, excluding the water surface.
3. The maintenance of all pedestrian bridges within the Transmission Complex which are primarily for recreational use.
4. Mowing and weed control within the Transmission Complex adjacent to the towpath and within designated recreation and historic areas.
5. All snow removal and other snow/ice control measures in all designated recreation and historic areas except for towpaths, trails or paths.

C. Joint Responsibilities of the Department and the Authority.

1. Whenever activities by either the Department or the Authority cause damage to the Transmission Complex, the designated recreational, historical and natural areas therein maintained and operated by the Department pursuant to this Agreement, and adjoining State-owned property, administered by the Department, as part of the Delaware and Raritan Canal State Park, the party causing said damage, shall repair and restore the damaged area in a manner which recognizes, protects and is consistent with the historic, ecological and recreational significance of the Canal and Park and is consistent with the maintenance and operation of the Transmission Complex as a water supply facility. In the event that the damage is not repaired in a timely manner, the party causing said damage shall, upon receipt of written notice from the party sustaining the damage, or from the Delaware and Raritan Canal Commission, repair the damaged area within thirty (30) days after receipt of said notice. If it is anticipated by the party receiving notice that the damage will not be repaired within thirty (30) days after receipt of said notice or if the damage is not repaired within said period, the party receiving notice must give the party sustaining the damage and the Delaware and Raritan Canal Commission a written schedule for completion of the repairs. If the damage is not repaired within the scheduled period, the party sustaining the damage may make the repairs at the cost and expense of the other party, which cost and expense the other party agrees to pay upon demand.
2. The parties will prepare a yearly tree removal and trimming plan in coordination with the Delaware and Raritan Canal Commission. The omission of a new plan being prepared in any one year shall imply that the prior year's plan will remain in effect for an additional year.

II. ACCESS

- A. The Authority shall have the right to enter and exit the Transmission Complex for the purpose of operations, maintenance and security on a daily basis via all existing points routinely maintained by the Department for access. Except for emergency conditions, the Authority must coordinate with the Superintendent of the Delaware and Raritan Canal State Park before crossing any parkland for access to the Transmission Complex.
- B. In the event of an emergency condition, such as an embankment washout, culvert failure or any other threatening or deteriorating condition which may lead to a public emergency due to disruption in the transmission of water through the Canal, the Authority shall have the right to enter onto Department's lands to correct said condition. The Authority shall immediately notify the Superintendent of the Delaware and Raritan Canal State Park.
- C. Department shall have the right of access to the towpath by vehicle or otherwise to provide daily repairs, maintenance and security.
- D. The Authority shall not interfere with the continuity and use of the Delaware and Raritan Canal Towpath throughout the Transmission Complex for recreational purposes, but the Authority reserves the right to temporarily disrupt the towpath for maintenance of the Transmission Complex. Except for emergency conditions, the Authority must first coordinate with the Superintendent of the Delaware and Raritan Canal State Park before any disruption of the towpath. In the event of an emergency, the Authority shall immediately notify the Park Superintendent and the Delaware and Raritan Canal Commission. In the event of any disruption of the towpath, the Authority shall be responsible for security of the disturbed area.
- E. Department shall be responsible for the security locking system of all gates for ingress and egress to the Delaware and Raritan Canal State Park and shall provide the Authority with adequate keys for use by authorized employees of the Authority and authorized Authority contractors. Department regulations governing key distribution shall apply.
- F. Department shall be responsible for the installation and repair of security gates within the Transmission Complex. The Authority will share in the cost of the security locks and gates by providing a proportionate share of cost and/or materials required to Department.

III. LIABILITY

- A. The Authority shall assume liability for all claims resulting from its maintenance and operation of the Transmission Complex as a water supply facility. The Department shall assume liability for all claims resulting from its maintenance and operation of the Transmission Complex for authorized recreational purposes.

IV. PROPERTY USE AGREEMENTS

- A. Unless specifically identified separately, all structures, leases and special use permits within the Transmission Complex are to be maintained and administered by the Authority except for recreational concession agreements, leases and special use permits which shall remain under the administration of the Department. The Authority will transfer all leases and special use permits to the Department which are not within the Transmission Complex. In the event that the property which is the subject of a lease or special use permit is located in both the Transmission Complex and the Delaware and Raritan Canal State Park, the agreement shall be administered by the Department. The Department shall require that all concessionaires, tenants and permittees pursuant to agreements administered by the Department, indemnify and save harmless the Authority and name the Authority as an additional insured.
- B. The Authority will retain administration of all agreements for pipeline crossings of the Canal which affect the structural integrity of the Transmission Complex. No such agreement may be amended, modified or revised and the pipeline may not be replaced, revised or additional pipelines installed without first obtaining the written approval of the Department based upon a determination by the Department that the proposed amendment, modification or revision of the agreement and/or the proposed repair, replacement or revision of the pipeline will not adversely impact on the recreational and historical aspects of affected property within the Transmission Complex and adjoining State-owned property comprising part of the Delaware and Raritan Canal State Park.
- C. Except for agreements for pipeline crossings, the Department shall administer all easements and other right-of-way agreements which affect the designated areas within the Transmission Complex managed by the Department for recreation, conservation or historic purposes and/or adjoining State-owned property comprising part of the Delaware and Raritan Canal State Park. No such agreement may be amended, modified or revised without first obtaining the written approval of the Authority based upon a determination by the Authority that the proposed amendment modification or revision will not adversely affect the structural integrity of or the maintenance and operation of the Transmission Complex as a water supply facility.
- D. No lease, special use permit, easement or any other agreement pertaining to use of any property or improvement within the Transmission Complex shall be executed without first obtaining written approval thereof by both the Department and the Authority.

V. LAW ENFORCEMENT

- A. The Department shall be responsible for enforcement of pertinent statutes and regulations within those designated areas of the Transmission Complex managed by the Department for recreation and conservation purposes pursuant to this Agreement.

VI. PLAN FOR IMPLEMENTATION OF THIS AGREEMENT

- A. The Department and the Authority and the Delaware and Raritan Canal Commission shall within six (6) months after the effective date of this Agreement mutually agree to a plan for implementation of this Agreement. Said plan shall include but not be limited to the following:
1. Identification of all designated land and water areas and improvements within the Transmission Complex that are to be managed by the Department for natural, recreational and historical purposes.
 2. Identification of the specific land areas and improvements within the Transmission Complex in which each party will perform its maintenance and operation responsibilities set forth in Paragraph I of this Agreement.
 3. Identification of existing Department access points for routine use by the Authority for access to the Transmission Complex across land administered by the Department as part of the Delaware and Raritan Canal State Park.
 4. Identification of improvements outside of the Transmission Complex within the Delaware and Raritan Canal State Park that are to be managed by the Authority.
 5. Identification of all leases, special use permits, easements and other agreements pertaining to the use of land and improvements within the Transmission Complex that are to be administered by the Authority and the Department.

As agreed upon by the Authority, the Department and the Commission, said plan shall be attached to and made a part of this Agreement as Schedule A and neither the Authority nor the Department can amend, modify revise or deviate from said plan without first obtaining the written approval thereof by the other party and the Commission.

VII. COORDINATION

- A. Prior to the commencement of or letting of any contract for construction within the Transmission Complex or on adjoining State-owned property comprising part of the Delaware and Raritan Canal State Park which will affect the Transmission Complex, the Department shall include the Authority in the review and development of plans and specifications and shall obtain written approval from the Authority of the final plans and specifications. Approval by the Authority shall be based solely on a determination of whether the proposed construction will adversely affect the structural integrity of the Transmission Complex or whether it will significantly interfere with the ability of the Authority to manage, develop, maintain and operate the Transmission Complex as a water supply facility.
- B. Prior to the commencement or letting of any contract for construction within the Transmission Complex, which will affect the management, maintenance development and operation of the Transmission Complex by the Department for recreation, conservation and historic purposes, the Authority shall include the Department in the review and development of plans and specifications and shall obtain written approval from the Department of the final plans and specifications. Approval by the Department shall be based solely on a determination of whether the proposed project will adversely affect the ability of the Department to manage, maintain, develop and operate the Transmission Complex for public recreation, conservation and historic purposes.
- C. All proposed encroachments within the Transmission Complex such as pipelines, foot bridges, docks, vehicle bridges, power lines, and drainage facilities shall be subject to prior written approval by the Authority and the Department.
- D. The removal of large trees and all landscaping within the Transmission Complex shall be subject to prior approval by the Authority, Department and the Delaware and Raritan Canal Commission.
- E. The Authority and the Department shall advise each other and the Delaware and Raritan Canal Commission of all proposed property acquisitions.
- F. The Department in coordination with the Authority shall prepare and disseminate public relations materials, historical data and other promotional material pertaining to the Canal and shall prepare a detailed program for the standardization of all signs within the Delaware and Raritan Canal State Park.
- G. The Authority and the Department shall develop and insure distribution of adequate instructions to contractor(s) advising of the water supply, recreation, conservation and historic aspects of the Canal which must not be impaired during work on any project(s) and insure that contractors are informed of these requirements and enforce same.

Authority shall include the Department

- H. The Authority and the Department shall negotiate repairs to those bridges which serve both a water supply and a recreation function with the determination of cost to each party based upon the relative use of the structure.
- I. The Department and Authority shall establish a committee which shall meet at least once every six (6) months for the purpose of coordinating the implementation and performance of this Agreement and to discuss proposed maintenance and construction projects. Said committee shall include a representative of the Delaware and Raritan Canal Commission.
- J. The Authority and the Department shall periodically instruct their employees on the terms and conditions of this Agreement to assure that they understand their responsibilities hereunder.

VIII. STATUTES AND REGULATIONS

- A. The Department and the Authority shall implement their respective responsibilities under this Agreement consistent with all statutes pertaining to the development, maintenance and operation of the Delaware & Raritan Canal as a water supply facility and as a State Park and the regulations promulgated pursuant thereto.

This Agreement shall not be terminated, modified or rescinded without the express written consent of both the Department and the Authority.

This Agreement represents the entire agreement between the parties; all negotiations, oral agreements and understandings are merged herein.

All rights and liabilities herein given to or imposed upon either of the parties hereto shall extend to the successors and assigns of such party.

IN WITNESS WHEREOF, the said parties have duly executed this Agreement the day and year first above written.

NEW JERSEY WATER SUPPLY AUTHORITY

Witness

ROCCO D. RICCI
Executive Director

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Witness

ROBERT E. HUGHEY
Commissioner

This Agreement has been reviewed
and approved as to form by:

IRWIN I. KIMMELMAN
Attorney General of New Jersey

By: _____
Alan B. Rothstein
Deputy Attorney General

This Agreement prepared by:
DONALD J. STOUT

Legal Services & Real Estate

EXHIBIT 3

106x

TO... Greg Chase, New Jersey Water Supply Authority

FROM Paul Stern DATE July 26, 1984

SUBJECT Treating of Tree Stumps with Herbicides

I have contacted Mr. Richard Oble of the Monmouth County Agricultural Extension Service, Ms. Claire Sterapani of the Somerset County Agricultural Extension Service, and Dr. John Mead of the State Weed Control Office at Rutgers University, and have discussed with them the treating of the tree stumps left as a result of the removal of trees in connection with the dredging operation. Their recommendations are as follows:

Mr. Richar Oble: Paint newly cut stumps with 2,4,D mixed with water or diesel fuel. Repeat treatment may be necessary on surviving sprout growth.

Ms. Claire Sterapani: Paint stumps with 2,4,D and water. Repeat treatment as necessary to control surviving sprout growth.

Dr. John Mead: Treat stumps with "Estron BK" (2,4,D and Triclorpere), "Weedone 170" or "Weedone UC" (2,4,D). Dr. Mead prefers the use of Estron BK due to its good kill rate. Another possibility is the use of "Amate". Use of this compound will require repeat applications to kill surviving sprout growth.

More detailed information on the herbicides mentioned above can be obtained by contacting the following companies or referring directly to the product labels.

2,4,D Dow Chemical Corporation
Amate Dupont Chemical Corporation
Estron BK Dow Chemical Corporation
Weedone Union Carbide Corporation

PS:dem

Paul Stern

EXHIBIT 4

108x

Donald March, Senior Project Engineer, N.J. Water Supply Auth.
Division of Engineering

DATE: August 9, 1984

Richard A. Famularo, ^{exh} Project Engineer II
Division of Operations and Maintenance, New Jersey Water Supply Authority

RE: Treating of Tree Stumps with Herbicides

On August 1, 1984, we received a memorandum from Paul Stern, Division of Parks and Forestry, Delaware and Raritan Canal State Park, specifying a list of herbicides which may be useful for the treatment of tree stumps. In order to ascertain the most useful herbicide with the least possible effects on the canal system environment, we contacted Mr. Ralph Smith, New Jersey Department of Environmental Protection Laboratory - Pesticide and Herbicide Section.

Mr. Smith researched the labels on each product listed in Paul Stern's July 26, 1984 memorandum. Mr. Smith concluded from his research that the best herbicide product would be Ammate manufactured by Dupont Chemical Corporation. Ammate is suggested for use around reservoir systems and poses no danger to the canal environment if used properly. Ammate has a residual which remains present in the soil for approximately two months. Mr. Smith's second choice was Weedone "170" manufactured by Union Carbide Corporation.

We recommend that Ammate be used by the dredging contractors for treating tree stumps. All applications of the herbicide should be made at least two months before water is returned to the canal. Please be advised that herbicides must be applied by a certified commercial applicator with operators licensed to do commercial applications.

at
cc: MJG
AGC ✓

109x

New Jersey State Library

EXHIBIT 5

116A



State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF SCIENCE AND RESEARCH
CN 402, TRENTON, N.J. 08626

OMAS A. BURKE, M.P.H.
DIRECTOR

March 20, 1985

Ms. Peggy Haskin
645 Randolphville Road
P.O. Box 157
Piscataway, NJ 08854

Dear Ms. Haskin:

In response to our phone conversation on March 15, I am sending you some materials on the herbicides we discussed. After reading a statement in the press about the planned use of herbicides along the Delaware and Raritan Canal our office became concerned about possible public health risks. The toxicity of herbicides varies greatly, and it was critical that care should be taken in choosing an herbicide to use adjacent to a potable water source.

The afternoon of our phone call I spoke with Mike Galley to find out what herbicides might be used for retarding growth on tree stumps beside the D and R Canal. The two compounds recommended to him by Ralph Smith (NJDEP) were Ammate and Weedone 170.

My understanding now is that no herbicide will be applied along the section of the canal that borders Lake Carnegie. However, if in the future the D and R Canal Commission contemplates using herbicides I would recommend only using Ammate and not Weedone 170. I discussed potential health risks involved with using this compound with our chemist and although 2,4-D is not a known carcinogen we think it would be wiser not to use a chlorinated organic herbicide. If, in the future, application of an herbicide was necessary Ammate would be the best choice.

I hope this is helpful, I enjoyed talking with you.

Sincerely,


Fredrika Moser

FM/gm

c: Mike Galley
Bob Tucker

112X

DIVISION OF
BUILDING & CONSTRUCTION

REQUEST FOR APPROVAL

(X) Sub-Contractor
() Material

EXHIBIT 6

Date 11-29-84

Control No. DBC-P45

Account No.

Trades: General

Structure

Electrical

Plumbing

Heating

Dredging

To:

Division of
Building & Construction
CN-235
Trenton, N. J. 08625

Contractor:

Conti Construction Co., Inc.
3001 South Clinton Avenue
South Plainfield, NJ 07080

Project:

D & R Canal
Waterway Maintenance Program
Contract III
Mercer & Hunterdon County

In accordance with your letter dated July 12, and August 1, 1984 (10-1235-16/17), we propose to subcontract herbicide spray using Ammate, to the following licensed commercial applicators:

Poster Agricultural Services
R.D. 3 Manners Road
Ringoos, NJ 08551

Architect's or Engineer's Recommendations: (Must be completed. Attach additional data if necessary.) Attachme

Reason did for approval

Approved: - Allowances checked

Architect or Engineer

[Signature]
Date

DBC

Date

Rejected:

Architect or Engineer

DBC

Original - Contractor

cc: Architect

cc: DBC - Project Inspector

cc: - DBC - District Engineer

cc: - DBC - File

113x

609-446-3888

721

Engineering & Construction
Trenton, N. J. 08628

Contractor:

Conti Construction Co., Inc.
3001 South Clinton Avenue
South Plainfield, NJ 07080

() Sub-Contract
(x) Materials
Date 11-29
Control No. D
Account No.
Trade: _____

Project:

D & R Canal
Waterway Maintenance Program
Contract III
Mercer & Hunterdon County

Material:

Ammate for herbicide spraying

Material Supplier:

Poster Agricultural Services
Rd. 3 Manners Road
Ringoes, N. J. 08551

Architect's or Engineer's Recommendations: (Must be completed. Attach additional data if necessary.)

Recommend for approval

Approved: - Allowances checked ()

Architect or Engineer

A. H. ...
Date *11/29/64*

DBC _____

Date

Rejected:

Architect or Engineer _____

DBC _____

Original - Contractor

cc: Architect

cc: DBC - Project Inspector

cc: i DBC - District Engineer

cc: - DBC - File

- 114x ...

STATEMENT OF FACTS, BACKGROUND AND
NECESSITY FOR PROPOSED TRANSFER OF
DELAWARE AND RARITAN CANAL AND SPRUCE
RUN/ROUND VALLEY RESERVOIRS REAL PROPERTIES
TO THE NEW JERSEY WATER SUPPLY AUTHORITY

The New Jersey Water Supply Authority owns, operates and maintains the Delaware & Raritan Canal Transmission Complex and the Spruce Run/Round Valley Reservoir Complex. These facilities provide the source of water for 1,200,000 people in central New Jersey. As indicated in more detail below, the Attorney General has stated that the enabling law creating the Authority did not transfer the real property for these facilities to the Authority. This is an application to the State House Commission for a transfer of the real property associated with these vital water supplies. The following information is provided in support of this application:

A. Background

The New Jersey Water Supply Authority Act (58:1B-1 et seq.), effective October 7, 1981, created the New Jersey Water Supply Authority (hereinafter referred to as the "Authority") and empowered it to acquire, finance construct and operate water systems pursuant to the Act's provisions. The Act transferred to the Authority all present and future water supply facilities of the State of New Jersey, specifically including by name the existing Delaware and Raritan Canal Transmission Complex as well as the Spruce Run/Round Valley Reservoir Complex. The operative language "water supply facilities" was understood by the Authority to include real property within the above referenced transmission complexes.

A formal request was made of the Attorney General to resolve the question of the ownership of mineral rights beneath the Spruce Run/Round Valley Reservoir Complex. This inquiry resulted from a request by a private firm for a lease to explore for gas reserves beneath Round Valley Reservoir lands. By letter of August 14, 1983 (Enclosure 1), an official opinion was issued by Theodore A. Winard, Assistant Attorney General, which, going further than the original request, determined that "...the New Jersey Water Supply Authority did not acquire legal title to reservoir and canal real properties by operation of the New Jersey Water Supply Authority Act..." and concluded that said ownership remains in the State Department of Environmental Protection (hereinafter referred to as "DEP").

The Authority's request for the transfer of the real property for the Delaware & Raritan Canal Transmission Complex and the Spruce Run/Round Valley Reservoir Complex is consistent with the opinion of Mr. Winard. The opinion stated that ownership of the real property was not permanently precluded by the Legislature from the Authority. Rather, a specific provision was enacted in the Water Supply Authority Act NJSA 58:1B-16 to provide for the transfer of ownership from DEP to the Authority.

115x

Prior to the submission of this request for transfer of the property, agreements have been reached with the Division of Parks and Forestry (hereinafter referred to as "D,P & F), Division of Fish and Game, Division of Water Resources and the Delaware and Raritan Canal Commission. These agreements cover the lands to be transferred and the respective responsibilities for operation and maintenance.

The Authority, D,P & F and the D & R Canal Commission have reached agreement on the delineation of the proposed property to be transferred as shown on a series of two hundred and eighty-two (282) topographic maps for the D & R Canal Transmission Complex from Bulls Island to the Raritan River (See general Map of Canal, Enclosure 2.) The land proposed for transfer generally is defined as that area from toe of slope to toe of slope along the length of the Canal. (See typical canal cross section Enclosure 3.) Enclosure 4 is a proposed perpetual easement to assure the continued availability of the Canal for recreational and historical purposes as part of the D & R Canal State Park.

Similar land transfer agreements have been reached with the D,P & F and the Division of Fish and Game with reference to the Spruce Run/Round Valley Reservoir Complex. The enclosed series of maps before the Commission delineate the reservoir lands which are proposed for transfer to the Author

B. Necessity for Transfer of Lands

The Authority is required to effectively operate and maintain the Delaware and Raritan Canal Transmission Complex and the Spruce Run/Round Valley Reservoir Complex. Basic to the effective management of these facilities, which provide a water supply for 1,200,000 people in central New Jersey, is the ability to properly plan and finance needed improvements rehabilitation programs and emergency repairs for the two water supplies. The Authority must be able to finance all such programs and must therefore establish itself as a sound financial investment for prospective investors and as a responsible utility. The following are several important considerations in this regard:

1. The land is an integral part of the actual water supply facilities, as for example the reservoirs which are formed from the land mass and the earthen dams which carefully integrate the underlying soils into the actual earth dam structure. The 60 mile long Delaware & Raritan Canal Water Supply Transmission Complex is essentially a conduit shaped from the land itself. The earthen conduit is always vulnerable to washouts due to flooding along its length which can require immediate emergency repairs

to maintain this vital water supply to 600,000 people. Therefore, many costly future investments for improvement, rehabilitation or repair of the water supply facilities will require the expenditure of funds for construction which involves the land mass including the reservoirs, dams and the earthen walls and bottom of the Delaware and Raritan Canal.

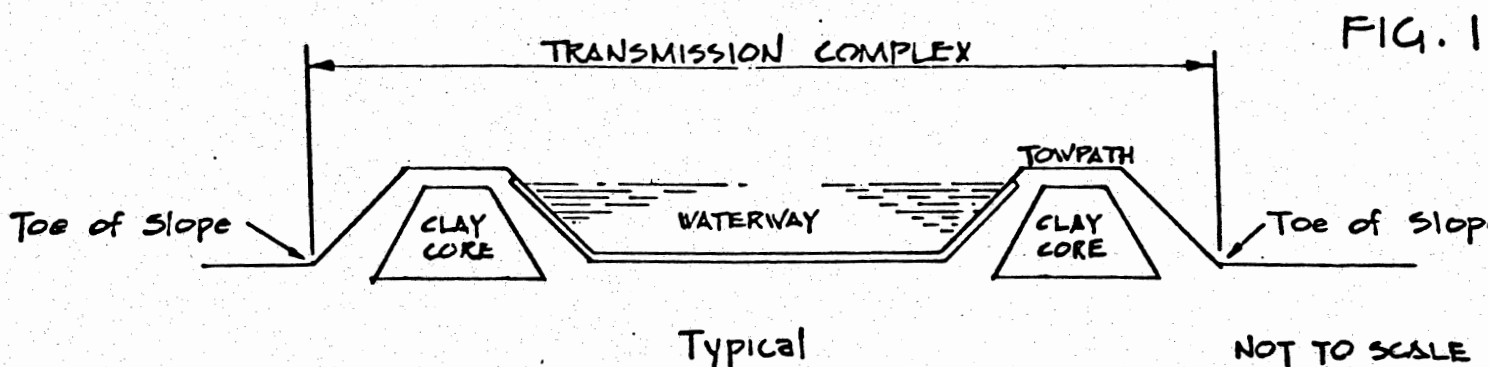
The Authority must therefore be able to show ownership of the land in order to be able to obtain short and long-term financing in the public marketplace.

2. The audited financial statements of the Authority describes its fiscal health and helps to establish its credit worthiness for prospective investors in the Authority's short and long-term borrowings. Approximately \$6 million of the Authority's Utility Plant originally valued at \$58,000,000 is associated with the value of the land. Deletion of the land value would result in 10% reduction in the Authority's assets.
3. The Authority must carry appropriate liability and property damage insurance. As indicated previously, the land as shaped to form the water supply facilities represents a large portion of the facilities covered by the property damage insurance. Lack of ownership of this land, especially the earthen walls and bottom of the Canal, creates an uncertainty as to the property damage coverage by the Authority's insurers. A similar problem exists due to the joint ownership of the facilities relative to the liability insurance carried by the Authority
4. Since the Authority's management of its facilities is so closely tied to the use of the land, it is imperative that the Authority own the property to be able to make timely and effective decisions regarding emergency repairs or planned improvements and rehabilitation programs.
5. All of the Spruce Run/Round Valley Reservoir Complex lands and other facilities were financed from the 1958 Water Bond Act and the 1969 Water Conservation Bond Act. The Authority's water customers are currently repaying the remaining debt service on these Bonds consistent with an agreement between the Authority and the State Treasurer. A portion of this debt service repayment is associated with the original cost of the acquisition of the land.

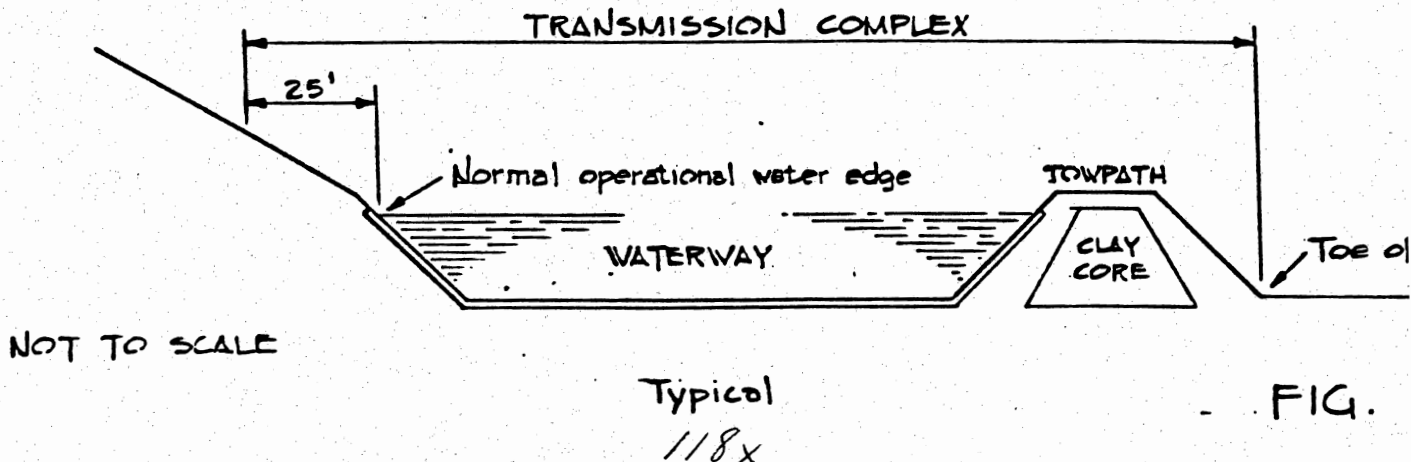
THE D & R CANAL WATER TRANSMISSION COMPLEX -
LANDS TO BE TRANSFERRED

Description: The D & R Canal Water Transmission Complex "facilities" shall include the waterway, embankments, flood guard banks, hydraulic and flow control structures, and land necessary to operate and maintain the Canal as a water supply system. The limits of the property "taking line" for the Transmission Complex shall be defined by the following Conditions and Special Conditions and shown on the delineation maps.

Condition I: The D & R Canal Transmission Complex property "taking Line" shall include the waterway and embankments from "toe of slope" to "toe of slope" assuming that it is entirely within State property (fig. 1).



Condition II: Where a "toe of slope" does not exist at one or both embankment then the Transmission Complex property "taking line" shall be limited to a distance of ± 25 feet perpendicular from normal operational water edge on that side(s) (fig. 2, 3, & 4).



Condition II (Continued):

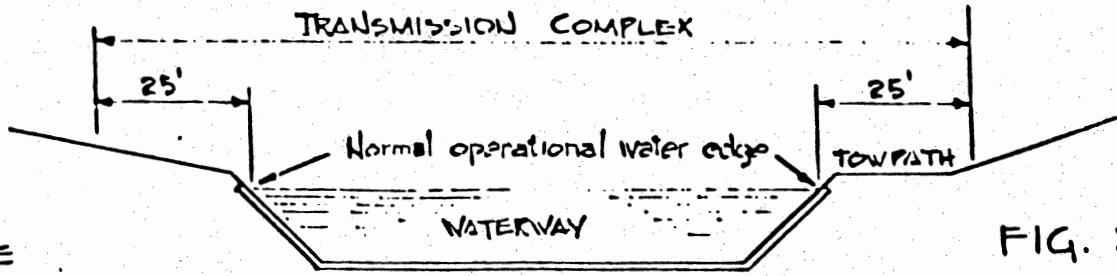


FIG. 3

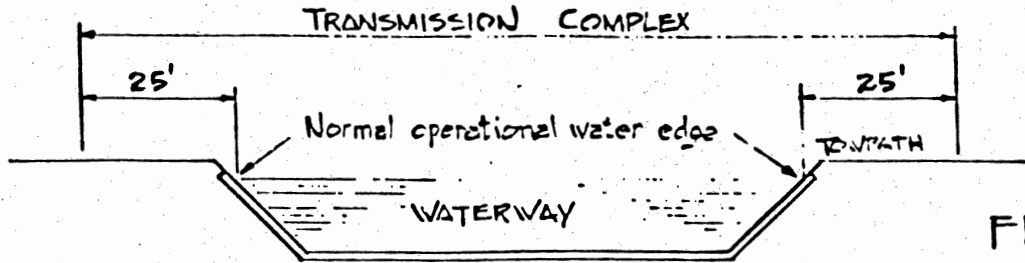
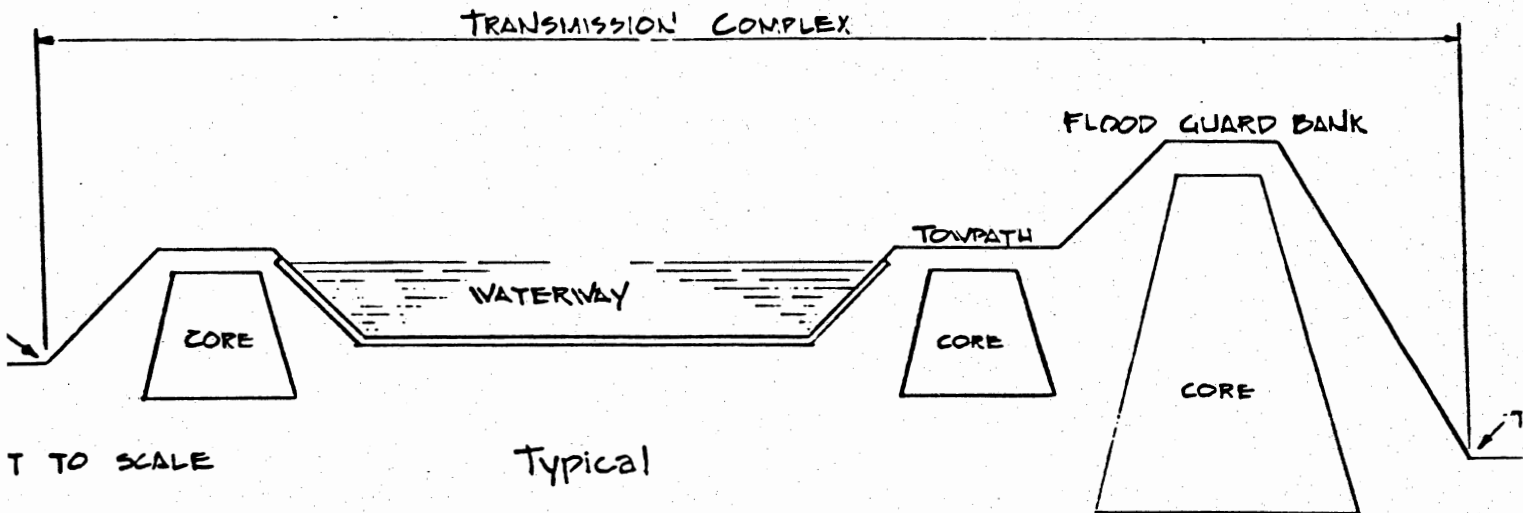


FIG. 4

Typical

Condition III: Where a flood guard bank exists concurrently with the towpath, the limit shall include the flood guard bank to "toe of slope" assuming that it is entirely within State property (fig. 5).



Typical

FIG. 5

Special Conditions: Where any of the following Special Conditions occur before reaching the proposed limit line as described by the preceding Conditions, then the limit of the property "taking line" would end at the applicable closest Special Condition.

- (a) The State property line
- (b) a roadway right-of-way
- (c) the multi-use trail on the abandoned RR line on the non-towpath side, north of Prallsville. (At the request of P & F.)
- (d) 10 feet from a State-owned dwelling unless otherwise indicated on delineation maps (at the request of P & F). (See fig. 6, 7, & 8)

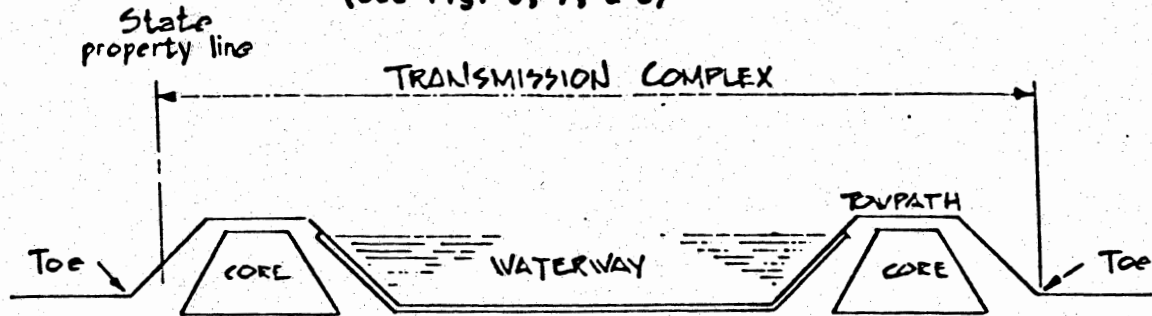


FIG.

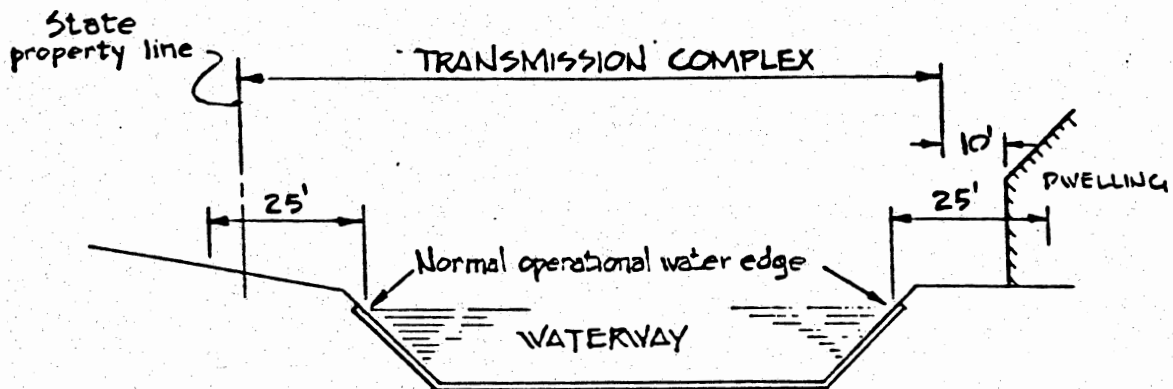


FIG.

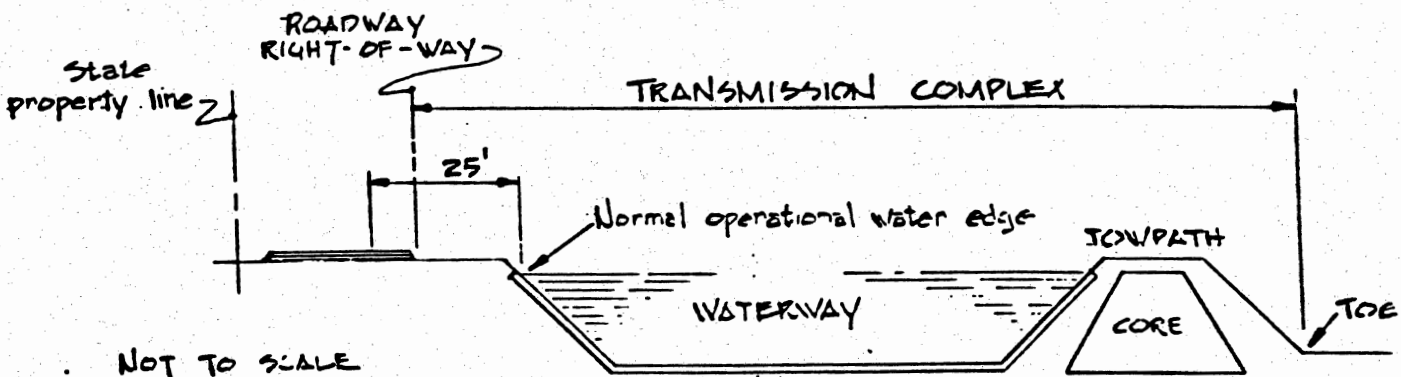


FIG.

NOT TO SCALE

Additionally, in conformance with the applicable descriptions noted here land on the discharge side of spillways and waste gates to the State property line shall also be transferred as part of the Transmission Complex property.

Where small land segments, impractical to separately administer and maintain are created by the application of the limits described herein, the "taking line" shall then be extended to include these lands.

THE ISSUE OF TRANSFER OF TITLE OF THE
DELAWARE & RARITAN CANAL " TRANSMISSION COMPLEX"

Tonight, title to the Delaware and Raritan Canal Park (including the Canal itself) belongs to the New Jersey State Department of Environmental Protection.

We believe it should stay there.

The N. J. Water Supply Authority, however, has urged that title to lands which they describe as the "water transmission complex" (i.e. the Canal and its embankments, one of which is the towpath) be transferred from the State Department of Environmental Protection to the Water Authority.

Such transfer includes full title, "forever", to the entire 60 mile towpath which is the Canal Park's principal recreational asset. The State reserves only an easement for recreation and historic purposes on lands presently used for such purposes.

Why should the State of New Jersey sell any part of its unique Delaware and Raritan Canal park to its Water Supply Authority, an operating agency set up, among other essential jobs, to take in Delaware River water at Bull's Island, near Stockton, and carry it across the State for sale to water consumers?

The Authority maintains it needs title to the Canal, or earthen conduit through which the water it sells flows, for three reasons.

First: to be able to show ownership of the land in order to sell its bonds in the public market place. This implies that the Authority intends to mortgage park lands to secure bonds - as it would have full power to do. This would mean that, if the Authority ever defaulted on its bonds, the Canal (less the towpath easement) could be sold to the highest bidder. We are unalterably opposed to such an idea. If, however, as the Authority's auditors point out, "the Authority derives most of its revenues from user charges and is considered to be an enter-

prise fund" then the Authority needs only the use of the Canal as an earthen conduit. Such use could be assured to the Authority by an easement or a lease without the need to surrender any park land to it.

Second: the Authority wants, and doubtless needs, the right to be able to enter the Canal park property on short notice to make timely and effective emergency repairs or planned improvements and rehabilitation programs. Again such privileges could and should readily be granted to the Authority by the State by easement or lease.

Third: the Authority maintains that lack of ownership creates an uncertainty as to property and liability damage coverage by its insurers. Such uncertainties could surely be resolved by contractual agreements not involving transfer of title. Indeed, the water transmission complex is insured right now while title remains in the State and water management is provided by the Authority.

In short, it seems to us that this matter has been turned topsy turvy. Would it not be much more in the public interest to keep the title to this historic part in the sovereign state of New Jersey, granting to its water agency the easements or leases it needs to carry on its essential water supply works? Authority bonds could be financed from water revenues without putting ownership of park land at risk.

It must always be remembered that the Delaware and Raritan Canal Park has many aspects - recreational, environmental and historic as well as a conduit for water. These mixed uses, as we have learned recently in the Lake Carnegie tragedy carry inevitably seeds of conflict which should be resolved by the State either in the manner established by the Delaware & Raritan Canal Park Act of 1974 or by amendments to this basic act.

Great power flows from title to land. Such power over a unique State park and historic district should not be given away lightly by the sovereign state to one of its revenue producing agencies. Rather the state should lease its canal to the Water Authority for a reasonable annual fee to be dedicated to purposes of recreation, conservation and historic preservation in the Delaware and Raritan Canal State Park.

C. McKim Norton
Senior Vice President
Delaware & Raritan
Canal Coalition

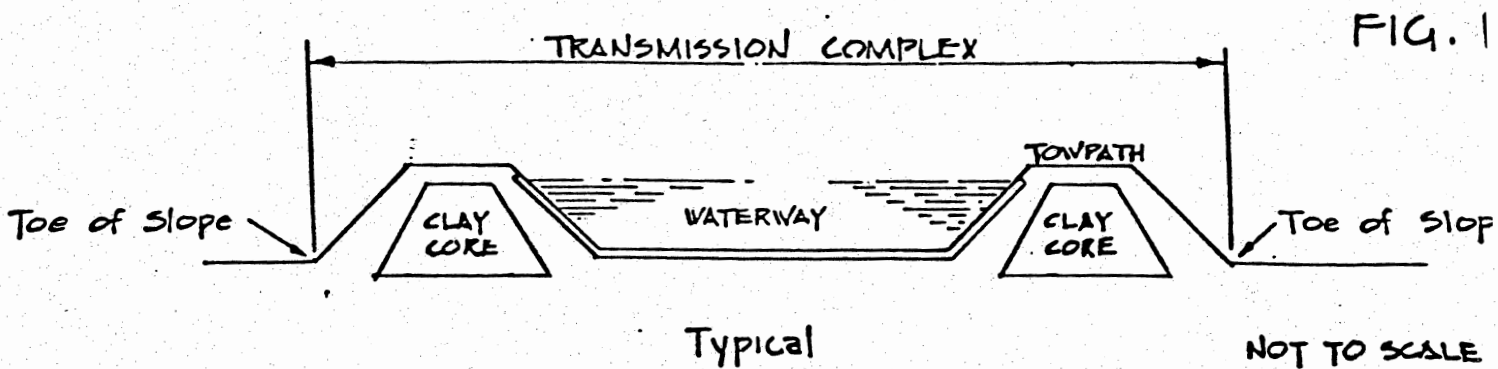
April 23, 1985

Princeton Borough Hall

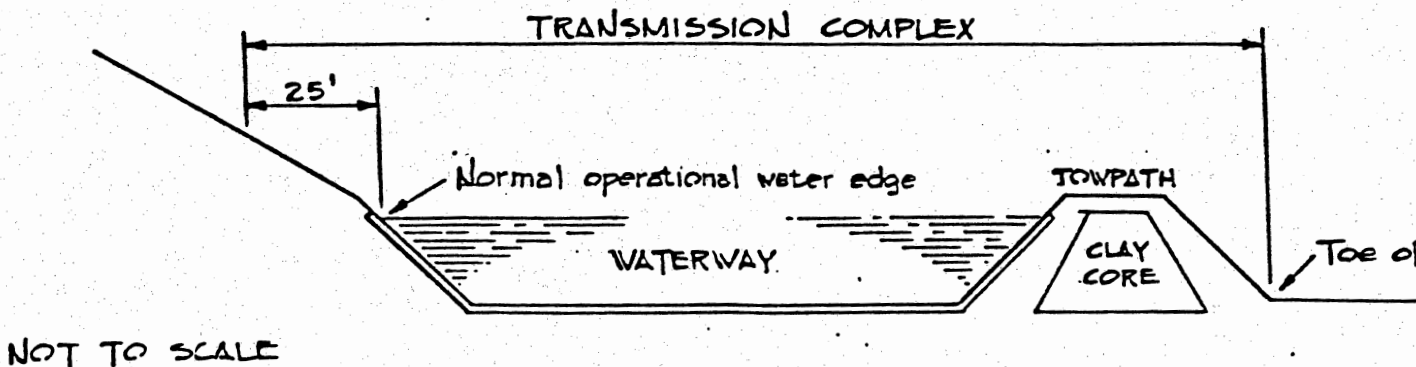
THE D & R CANAL WATER TRANSMISSION COMPLEX -
LANDS TO BE TRANSFERRED

Description: The D & R Canal Water Transmission Complex "facilities" shall include the waterway, embankments, flood guard banks, hydraulic and flow control structures, and land necessary to operate and maintain the Canal as a water supply system. The limits of the property "taking line" for the Transmission Complex shall be defined by the following Conditions and Special Conditions and shown on the delineation maps.

Condition I: The D & R Canal Transmission Complex property "taking Line" shall include the waterway and embankments from "toe of slope" to "toe of slope" assuming that it is entirely within State property (fig. 1).



Condition II: Where a "toe of slope" does not exist at one or both embankment then the Transmission Complex property "taking line" shall be limited to a distance of ± 25 feet perpendicular from normal operational water edge on that side(s) (fig. 2, 3, & 4).

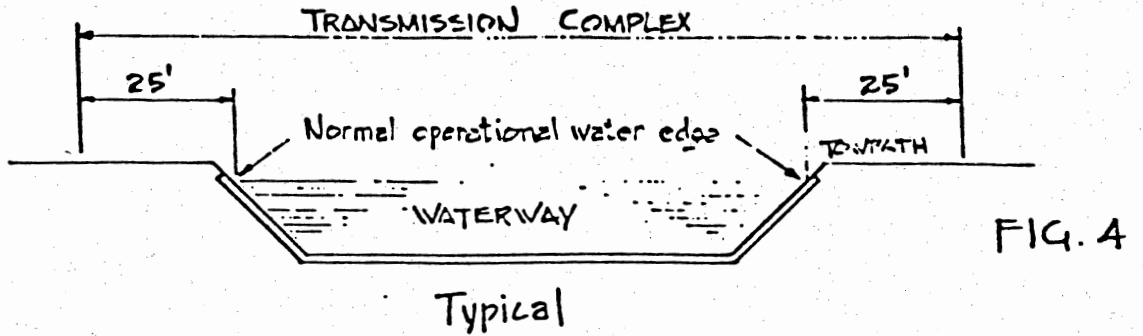
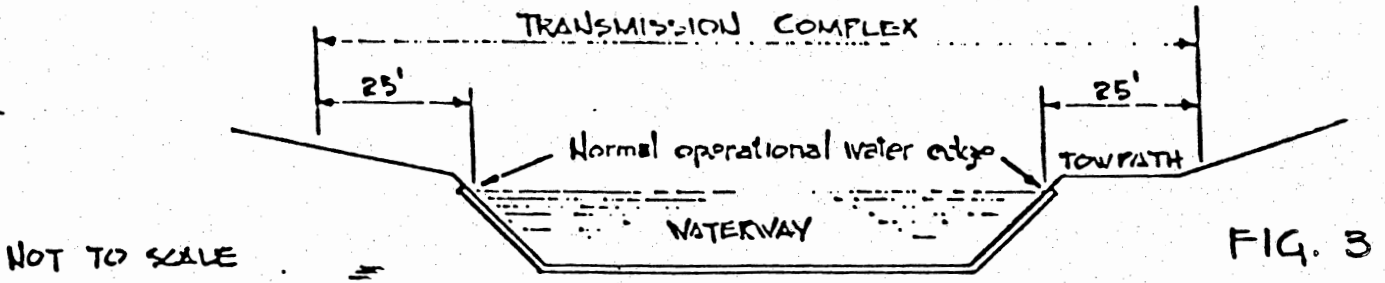


Typical

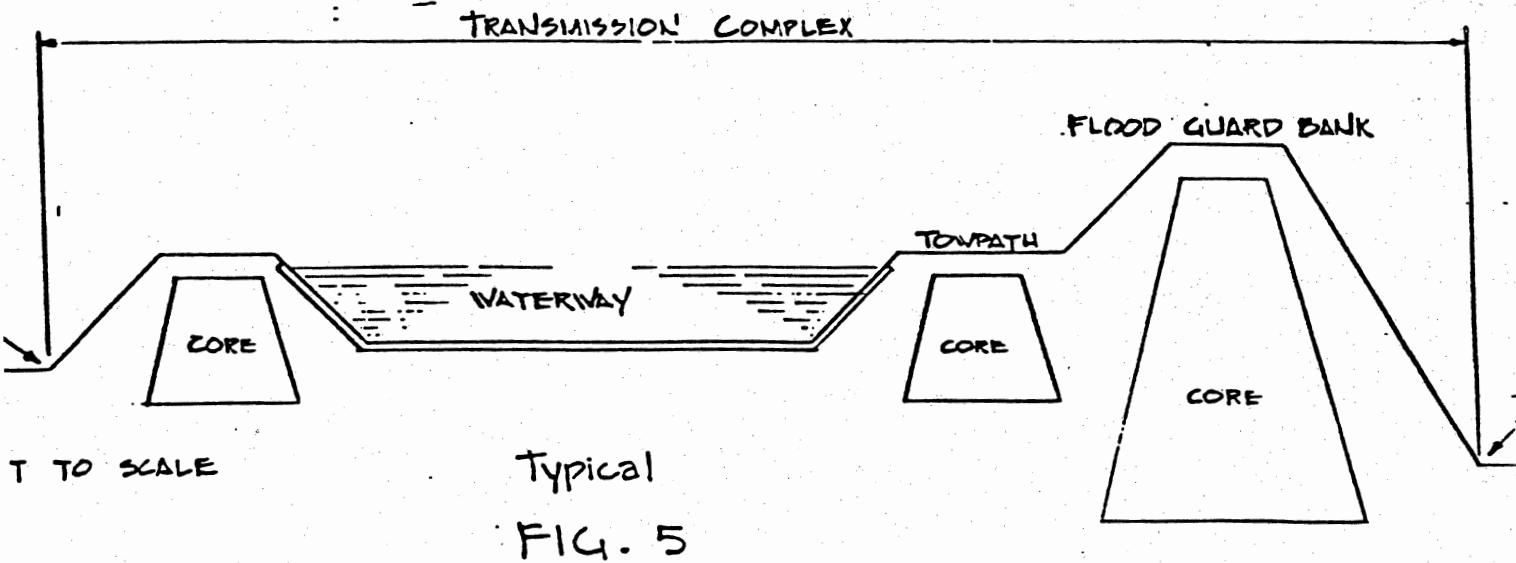
1/25x

FIG.

Condition II (Continued):



Condition III: Where a flood guard bank exists concurrently with the towpath, the limit shall include the flood guard bank to "toe of slope" assuming that it is entirely within State property (fig. 5).



Special Conditions: Where any of the following Special Conditions occur before reaching the proposed limit line as described by the preceding Conditions, then the limit of the property "taking line" would end at the applicable closest Special Condition.

- (a) The State property line
 - (b) a roadway right-of-way
 - (c) the multi-use trail on the abandoned RR line on the non-towpath side, north of Prallsville. (At the request of P & F.)
 - (d) 10 feet from a State-owned dwelling unless otherwise indicated on delineation maps (at the request of P & F).
- (See fig. 6, 7, & 8)

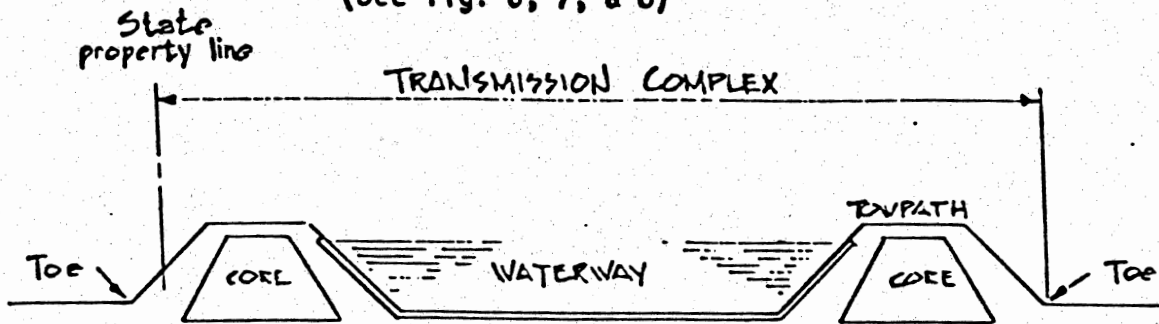


FIG.

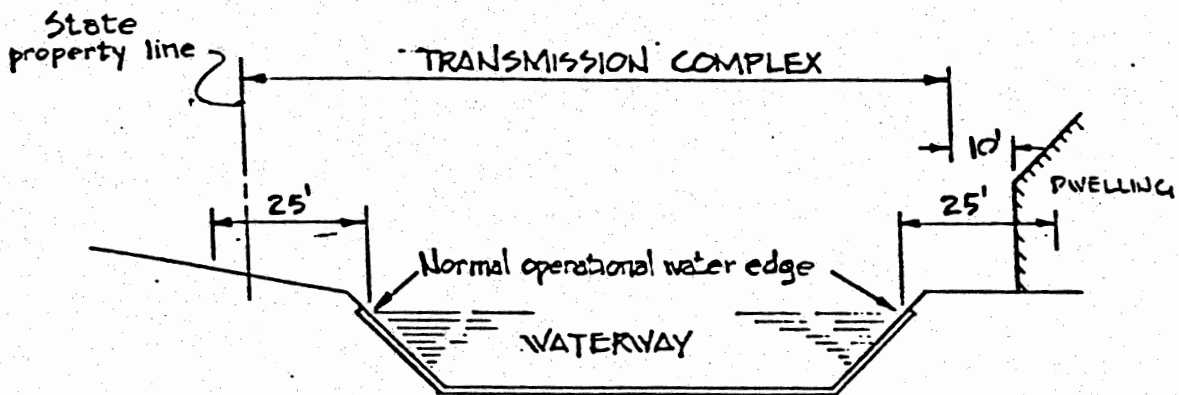


FIG.

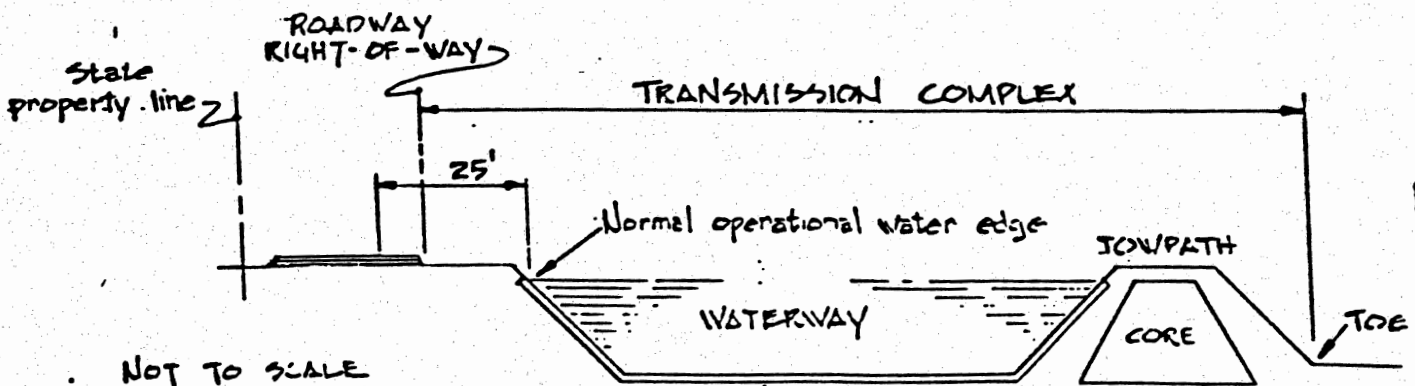


FIG.

NOT TO SCALE

Additionally, in conformance with the applicable descriptions noted here land on the discharge side of spillways and waste gates to the State property line shall also be transferred as part of the Transmission Complex property.

Where small land segments, impractical to separately administer and maintain are created by the application of the limits described herein, the "taking line" shall then be extended to include these lands.



NEW JERSEY SENATE

GERALD R. STOCKMAN
SENATOR, DISTRICT 15 (MERCER)
176 WEST STATE STREET
TRENTON, NEW JERSEY 08608
609-392-1117

April 17, 1985

Hon. Robert E. Hughey
Commissioner
Department of Environmental Protection
Labor & Industry Building
CN 402 - Room 802
Trenton, New Jersey 08625

Dear Commissioner Hughey:

I have been made aware by the Delaware and Raritan Canal Coalition that there exists a draft agreement between the New Jersey Department of Environmental Protection and the New Jersey Water Supply Authority permitting the transfer, under the authority of N.J.S.A. 58:1B-5, of the title to certain State park property, the Delaware and Raritan Canal Transmission Complex, to the authority for water supply purposes.

The Coalition has advised me that on the basis of certain recent activities undertaken in the Delaware and Raritan Canal State Park, such as the cutting down of hundreds of trees from Lake Carnegie in Princeton Township to the Kingston dam to make room for dredging bulldozers, the actual transfer of title to the park may not be in the best interests of the citizens of this region. The Coalition is concerned that the title transfer will significantly alter the maintenance and preservation plan for the park and will make the park a less than desirable recreational resource. Considering that the park supports approximately 500,000 users each year, it is important that public input be obtained before any agreement between the department and the authority is finalized.

Therefore, I am respectfully requesting that no action be taken to finalize the transfer of title agreement between the Department of Environmental Protection and the New Jersey Water Supply Authority concerning the Delaware and Raritan Canal Legislature. I am in the process of studying the concerns of the Coalition and intend to introduce legislation at the next Senate session which will empower the Legislature to address these concerns and permit the public airing thereof.

Very truly yours,

GRS:kfr

GERALD R. STOCKMAN

cc: Mr. James Amon, Executive Director
Delaware & Raritan Canal Commission

Ms. Rosemary M. Blair, President
Margen Penick
Delaware & Raritan Canal Coalition

128x

PRC Engineering
Parkway Towers
Office Building B
485 U S Route One South
Iselin, NJ 08830
201-636 4990

Planning Research Corporation

September 18, 1984

10-1235-14/15

D'Annunzio Constructors Corp.
550 Jerusalem Road
Lambertville, N.J. 08530

Attention: Mike Tavorario
Project Manager

Project: D & R Canal - Contract I
DBC Project P-413

Reference: Tree Removal

Gentlemen:

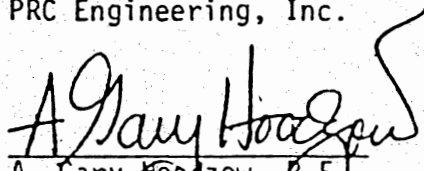
In reference to the above and to our discussion on Friday, September 14, 1984 involving herbicides which may be safely used to treat tree stumps to prevent further growth, the Engineer has been advised by the New Jersey Water Supply Authority and the Department of Environmental Protection Laboratory - Pesticide and Herbicide Section that the following products may be used:

- Ammate as manufactured by Dupont Chemical Corporation
- Weedone 170 as manufactured by Union Carbide Corporation

You are further advised that the herbicide must be applied by a certified commercial applicator with operators licensed to do commercial applications.

Very truly yours,

PRC Engineering, Inc.


A. Gary Hoodzow, P.E.
Resident Engineer

AGH/as

cc: D. Smith, DBC
J. Guertin, DBC
D. Kroeck, WSA ✓
J. Dionisio, PRC Engineering, Inc.

130x



KVK

Donald Kroeck, Senior Project Engineer
Division of Engineering

DATE: August 9, 1984

Richard R. Famularo, Project Engineer II
Division of Operations and Maintenance

CT: Treating of Tree Stumps with Herbicides

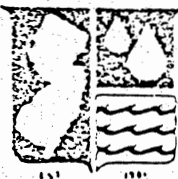
On August 1, 1984, we received a memorandum from Paul Stern, Division of Parks and Forestry, Delaware and Raritan Canal State Park, specifying a list of herbicides which may be useful for the treatment of tree stumps. In order to ascertain the most useful herbicide with the least possible affects on the canal system environment, we contacted Mr. Ralph Smith, New Jersey Department of Environmental Protection Laboratory - Pesticide and Herbicide Section.

Mr. Smith researched the labels on each product listed in Paul Stern's July 26, 1984 memorandum. Mr. Smith concluded from his research that the best herbicide product would be Ammate manufactured by Dupont Chemical Corporation. Ammate is suggested for use around reservoir systems and poses no danger to the canal environment if used properly. Ammate has a residual which remains present in the soil for approximately two months. Mr. Smith's second choice was Weedone "170" manufactured by Union Carbide Corporation.

We recommend that Ammate be used by the dredging contractors for treating tree stumps. All applications of the herbicide should be made at least two months before water is returned to the canal. Please be advised that herbicides must be applied by a certified commercial applicator with operators licensed to do commercial applications.

at

cc: MJG
AGC ✓



NEW JERSEY WATER SUPPLY AUTHORITY

P.O. BOX 5196 • CLINTON, N.J. 08809 • (201) 638-612

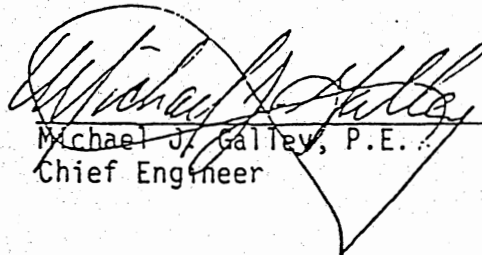
March 15, 1985

Mr. Dale B. Smith
Group Project Manager
Division of Building and Construction
Department of Treasury
CN 235
Trenton, NJ 08625

Dear Mr. Smith:

This will confirm my verbal request to Gary Hoodzow on Wednesday, March 13, 1985 and to you on March 14, 1985 that any further use of the recommended herbicide to treat tree stumps, by any Contractor or Sub-Contractor, be immediately stopped and discontinued along the entire 32 mile length of the Delaware and Raritan Canal Sediment Removal Project.

Very truly yours,



Michael J. Galley, P.E.
Chief Engineer

MJG:kn

cc: P. Haskin, NJWSA Member
R. D. Ricci, Exec. Dir.
G. Hoodzow, PRC Engr.
J. C. Amon, D&R Canal Comm.
P. Stern, D&R Canal St. Pk.
A. G. Chase, Oper. & Maint.
NJWSA file

JAMES J. FLORIO
1ST DISTRICT, NEW JERSEY

2162 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-6501

1 COLBY AVENUE, #16-17
STRATFORD, NEW JERSEY 08084
(609) 627-8222

FIELD OFFICES:
WOODBURY, N.J.
CAMDEN, N.J.

Congress of the United States

House of Representatives

Washington, D.C. 20515

April 8, 1985

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HEALTH AND LONG-TERM CARE
SUBCOMMITTEE

Mrs. Rosemarie Blair, Chairman
Delaware-Raritan Canal Coalition
1108 Kingston Road
Princeton, New Jersey 08540

Dear Mrs. Blair:

Thank you for having contacted my office to inform me of the possible contamination of the Delaware-Raritan Canal, which provides drinking water for over three million New Jerseyans. I was distressed to learn that the New Jersey Water Supply Authority's dredging operation involved the use of the chemical 2,4-D, whose long-term effects are largely unknown.

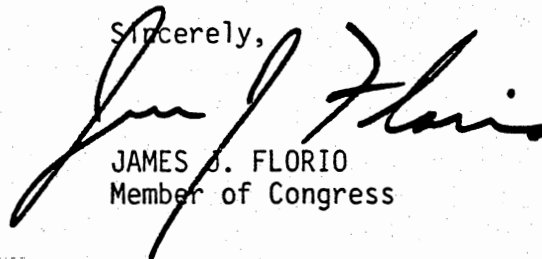
I have contacted the Environmental Protection Agency and was informed that the agency has been conducting studies on 2,4-D since 1980. Two studies dealing with cancer and reproduction are still outstanding. A 1981 EPA study on cancer indicated that 2,4-D contained cancer causing agents; however, that study's data base has since been invalidated. But until all the studies are completed, it is impossible to assess the long-term effects of 2,4-D.

According to the New Jersey Water Supply Authority, use of both 2,4-D and ammate was suspended permanently two weeks ago. However, I am concerned that the decision was made only after public outcry. For this reason, I have written to Department of Environmental Protection Commissioner Robert Hughey to request an explanation of DEP's actions concerning this matter. I wanted to share with you the enclosed copy of my letter. Additionally, I am enclosing some information on both 2,4-D and ammate which I hope you will find useful.

I hope you will continue to keep me informed of any developments in this matter. If I can be of further assistance, please let me know.

With best wishes,

Sincerely,



JAMES J. FLORIO
Member of Congress

JJF:7
Enclosures

133x

PLEASE RESPOND TO:

WASHINGTON ()

STRATFORD ()

Mr. Anthony Marsella, Chairman
State of New Jersey Assembly Energy and Natural Resources
Committee
State House Annex
Trenton, N.J. 08625

Dear Chairman Marsella,

I wish to express to your committee my concern over the recent actions, undertaken by contract to the New Jersey State Water Authority, which have had a dramatic impact on the Delaware and Raritan Canal State Park. The canal, particularly the stretch along Lake Carnegie, is not a narrow strip of land to be improved by the removal of all that grew on its' surface. Due to its' size and configuration it is a unique environment, the only one of its' kind in New Jersey. It represents a double transition community of plants and animals; from water to dry land, and from field to woodland. Such ecotomes are the most biologically diverse to be found in the state. The openness to sunlight from both sides encourages a great undergrowth of wildflowers and berries. Water courses separated the shelter this growth provided from the normal predators found in the area. Lake Carnegie is on the eastern flyway for migratory birds which made great use of this fact.

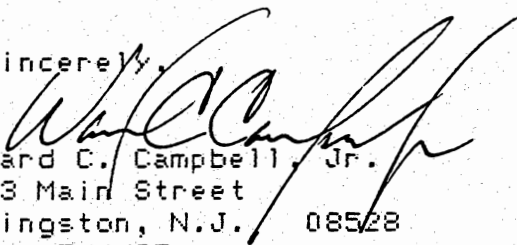
Indigenous growth on the towpath stabilized the banks, preventing erosion. Overstory trees shaded the canal which helped to limit the amount of vegetative growth in its' course.

These resources were amazingly diverse and offered much to the many different types of people who frequented the area. Birds to delight the ornithologist, solitude for thinkers, paths for runners, shaded walkways for families and their children, great beauty for photographers could all be found there. To lose all this in an area already short of public spaces, and the lack of sensitivity or responsibility to the wildlife challenges a reasonable persons ability to understand, why? The environmental impact statements filed as part of the projects' plan specifically state, "Development should respect and enhance the existing environment" and "...the Canal is not only a water supply transmission facility. It is a vital part of the Canal Park, which provides numerous recreational benefits to the people of New Jersey and is listed in the National and State Registers of Historic Places. The State of New Jersey, through the various agencies having jurisdiction over the Canal have been presented with an opportunity to work in

conjunction with the SWSA to not only restore the water-carrying capacity of the Canal, but also to restore its' recreational and historic value" These goals sound so ironic in light of the actions undertaken in seeming disregard of the expressed objectives for the canal.

As a resident of Kingston, a citizen of New Jersey, and a person who has grown to know the Canal intimately for many years, I hope that all actions undertaken for the development of the transmission complex in the future will have a greater regard for the potential offered for meeting the diverse but coinciding needs of the people in the area. Careful development and maintenance of the Delaware and Raritan State Park including its' vegetation and physical character can improve the flow of water through the canal, not impede it and concomitantly provide for a marvelous environment. The Delaware and Raritan Canal State Park was created to preserve and manage its' many resources. This purpose is not fulfilled by allowing a single purpose state agency to usurp the responsibility placed upon the Department of Environmental Protection by the legislature and the people of New Jersey.

Sincerely,



Ward C. Campbell, Jr.
43 Main Street
Kingston, N.J. 08528
5/6/85



Delaware & Raritan Canal Coalition

May 13, 1985

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Lambertville Historical Society
Lawrence Historical Society
MSM Regional Study Council
New Jersey Conservation
Foundation
Preservation New Jersey
Princeton Battlefield Area
Preservation Society
Stony Brook-Millstone Watersheds
Association

Mr. Anthony S. Marsella, Chairman,
Assembly Energy and Natural
Resources Committee of the
State of New Jersey
CN-042
State House Annex
Trenton, New Jersey 08625

Dear Mr. Marsella:

We appreciated very much the activity of your committee in investigating the destruction of the Delaware and Raritan Canal Park.

The central points of my testimony on behalf of the citizens of our area, and on behalf of the D & R Canal Coalition are as follows:

- 1) We are opposed to mortgaging our Parklands in New Jersey. We are opposed to the transfer of the Canal for the purpose of mortgaging it:
 - a. It is a very poor precedent, possibly setting a precedent for other Parks in the future.
 - b. Should the bonds fail to be repaid, the Canal would pass into private hands.

- 2) We want a fixed percent of the operating revenues set aside on a yearly basis for historic maintenance purposes primarily, and for recreational uses secondarily. This money should go to the Canal Commission.

- 3) We request legislation to require all Authorities in New Jersey to notify affected municipalities 3 months in advance of the commencement of any building, construction, or any other project involving physical changes such as tree-cutting, earth-moving, etc. Further, all Authorities should be required to show in writing that they have consulted about plans with affected municipalities in advance of the 3-month notification date.

cont'd

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Further, I wish to amend my testimony as given on Wednesday, May 8, 1985, in the Plainsboro Municipal Hall, by the following two items:

- 1) We request that your committee request written statements from the Canal Commission and New Jersey Water Supply Authority in regard to their policies - past, present, and future - on the use of herbicides adjacent to, or in the water of the "Transmission Complex" of the D & R Canal (not just the "Park"). We request that following receipt of such documents, you hold a public hearing on this issue if necessary.
- 2) That a lawyer, or someone expert in the requirement of the writing of Environmental Impact Statements, examine carefully the statement regarding the dredging of the D & R Canal. We think that certain items are omitted, such as:
 - a. appropriate species lists for trees, shrubs, wildflowers;
 - b. mention of the use of herbicides to effect the slurry wall project;
 - c. adequate discussion of the destructive effects of dry dredging.

Respectfully submitted,

Margen Penick

Margen Penick, Trustee,
D & R CANAL COALITION



Delaware & Raritan Canal Coalition

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- Historical Society of Princeton
- Lambertville Historical Society
- Lawrence Historical Society
- MSM Regional Study Council
- New Jersey Conservation Foundation
- Preservation New Jersey
- Princeton Battlefield Area Preservation Society
- Stony Brook-Millstone Watersheds Association

MASTER PLAN AND DOCUMENTS QUESTIONS

Problem: What do the documents tell us about how well NJWSA has adhered to the written standards? In relation to:

1. Deviation from the Master Plan by the Canal Commission or NJWSA?

2. Deviation from the recommendation of the Environmental Impact Statement under the present contract for dredging?

3. Who in the State of New Jersey bureaucracy was responsible for accepting and paying for an incomplete and insufficient Environmental Impact Statement? What price was paid for the Statement? (There is no tree list, no vegetation list, ^{in the SP listings} no comments on these issues.)

4. Should the author of the Statement give a refund to the State of New Jersey, due to serious omissions?

5. What are the operating standards for future projects? Are they in writing?

6. Will there be public hearings if changes are made to important documents? (A meeting of the Canal Commission at its own headquarters is not an appropriate substitute for a public hearing in an affected municipality.)

5/7/85
RB/al

cc: Tom Barrows
Ed Beckerman, Co-Chairman
Duggan Kimball, Planning Director, Prctn.Reg.Planning Bd.
David McRae, Co-Chairman

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HERBICIDES

Problem: The D & R Canal Coalition is opposed to a maintenance plan for the Canal that requires a regular and on-going use of herbicides. Even though any given herbicide might be fairly mild compared to other herbicides, we think that the landscape design of the Park should not depend on their use. A second problem is the substances which may be put into the water to control aquatic growth should be considered in relation to the Park design and maintenance plan. (Water temperature will be raised where trees are removed, perhaps causing increased aquatic growth; effect on growth of increased sunlight, etc.)

1. Commissioner Hughey has stated that there will be no herbicides used in the "Park". Since NJWSA has identified the Canal as the "Transmission Complex", and is transferring it out of the Parks Department, does this ban include the "Transmission Complex"?

2. Michael Galley has stated that herbicides will not be used in this contract. How about other areas of the Canal which are not under this contract? What happens as soon as "this contract" is terminated?

3. Obtaining the records of the NJWSA may show the pattern of herbicide use in the feeder canal area where dredging work and restoration have been completed. Is regular spraying used to produce the present appearance of that area? How often? (We believe that the issue of the use of herbicides is related to Park design and maintenance.)

4. What substances will be put into the water directly? How often? Could the amount of this substance be modified through growth of trees along the Canal's banks?

5. Do all purchasers of Canal water have the equipment to remove substances put into the water to control aquatic growth?

5/7/85
RB/al

cc: Members:
Diane Graves Walker
Nicholas Wright, M.D.

139x



Delaware & Raritan Canal Coalition

May 7, 1985

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Preservation Society
- Stony Brook-Millstone Watersheds
Association

Assembly Energy and Natural
Resources Committee of the
State of New Jersey

CN-042
State House Annex
Trenton, New Jersey 08625

Gentlemen:

The Delaware & Raritan Canal Coalition members think that the following issues need to be pursued to clarify some of the problems relating to the D & R Canal.

This list is not intended to be all-inclusive, as some questions will lead to others, and other issues may emerge. They represent a starting point.

Sincerely,

Rosemary Blair, President
D & R CANAL COALITION

RB/al

140x



Delaware & Raritan Canal Coalition

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TO THE TRANSFER AND FINANCE TEAM

Problem: the nature of the D & R Canal will change soon - or has changed in some areas - under the proposed new status of ownership under NJWSA. The problem areas seem to be 1) ownership, 2) insurance, and 3) historic maintenance. The Canal Coalition is opposed to the transfer, and seeks another method to assure NJWSA's interests without transferring Parkland.

OWNERSHIP

Problem: NJWSA and its customers (Elizabethtown Water, Middlesex, etc.) have a single purpose: delivering water at the lowest possible cost. We have no quarrel with that. However, the present condition of the Canal in the Princeton area seems to demonstrate a future in which the multiple uses projected in the '74 legislation are overwhelmed by reverting to a single use predominating, though some other uses may be admitted.

Question: What other method can be devised to assure NJWSA of their goals (funding, water supply), yet retaining some control by the legislature or the Department of Parks and DEP?

Question: Is mortgaging parklands a suitable precedent?

INSURANCE

Now, the Canal is insured under the New Jersey Tort Claims Act. Under new ownership, private insurance will be necessary. This in itself will bring many changes to our use of the Canal. The proposed insurer has already written to NJWSA to put chain-link fences around the locks, and perhaps to cut off access to the towpath at certain hours through access gates. Other fencing may follow, for example, all along the Mt. Laurel housing bordering on the Canal in West Windsor. We foresee the public's use being curtailed, as well as destruction to the visual and historic enjoyment of the Canal.

cont'd

14/x

Question: Perhaps an inquiry into the percent of insurance increase and the costs will give us information on the issue of transfer?


HISTORIC MAINTENANCE

Problem: Water purchasers (Elizabethtown, Middlesex, etc.) oppose all expenditures except for water supply. Mention is made in various documents and conversations of funds for recreation, but historic maintenance is not emphasized. The recreational uses of the Park are low-cost to the State of New Jersey, but the historic stone work and some lockhouses have been minimally maintained. The Coalition seeks a method where a fixed percent of the income of the Canal could go first for historic maintenance, and secondly for recreational uses.

Question: How can this be done?

RB/al

cc: Allen Porter, Esquire
Aristides Georgantas
C. McKim Norton
Gerald Skey, Esq.



Delaware & Raritan Canal Coalition

ENGINEERING ISSUES

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Problem: The cutting of trees in preparation for the proposed construction of the slurry wall has caused much of the destruction to the Canal and has seriously affected the appearance of Lake Carnegie. The D & R Canal Coalition seeks a method which will allow existing stumps to sprout on the bank separating Lake Carnegie and the Canal. We are also concerned about future plans we may not have heard of yet. Our engineering team will no doubt remember that the Canal was drained every winter until 1932 for repairs, which did not cause the bank to collapse from the weight of water in Lake Carnegie. Lake Carnegie was completed around 1905 by damming the existing stream with little excavation of the adjoining land. Farmlands sloped up toward the Canal bank. This slope is still the floor of Lake Carnegie.

Issues: 1. Did the engineering firm who did the analysis on the need for a slurry wall also get the contract to do this work? Is this standard procedure for State contracts? Did NJWSA analyze the suggested engineering? What are the criteria and methods to analyze recommendations for such large expenditures?

2. Is the slurry wall necessary? Is there a seepage problem? If there is a seepage problem, can another, less destructive, method be used to accomplish the same results?

3. Is the proposed berm in Princeton Township along Stony Brook necessary? Why is it proposed to remain free from trees? Is this a proven requirement?

4. What other future engineering projects are being discussed which affect the future of the Canal?

5. Why not require wet dredging for future dredging projects?

6. Can the size of equipment be controlled for future projects and for routine maintenance? What performance specifications should be in place about size and type of equipment to be purchased for future maintenance by NJWSA?

7. What sort of controls ought to be written into future contracts to prevent destruction of the scenic, historic, and recreational values of the Park?

8. How can we protect the towpath against becoming primarily a truck road?

cont'd

143x

9. If the roots and vegetation are removed from the Canal banks, will erosion increase? Don't the tree roots help hold the historic rip-rap in place?

10. Will the towpath be returned to the original height where it has been raised?

11. Are the projected "access roads" on the non-towpath side of the Canal over-designed?

12. Allowing the contractor to cut more trees than the originally designated "access areas" had a dollar value. Who ascertained this dollar amount? What public benefit was given in exchange for this dollar value?

RB/al

cc: Members:

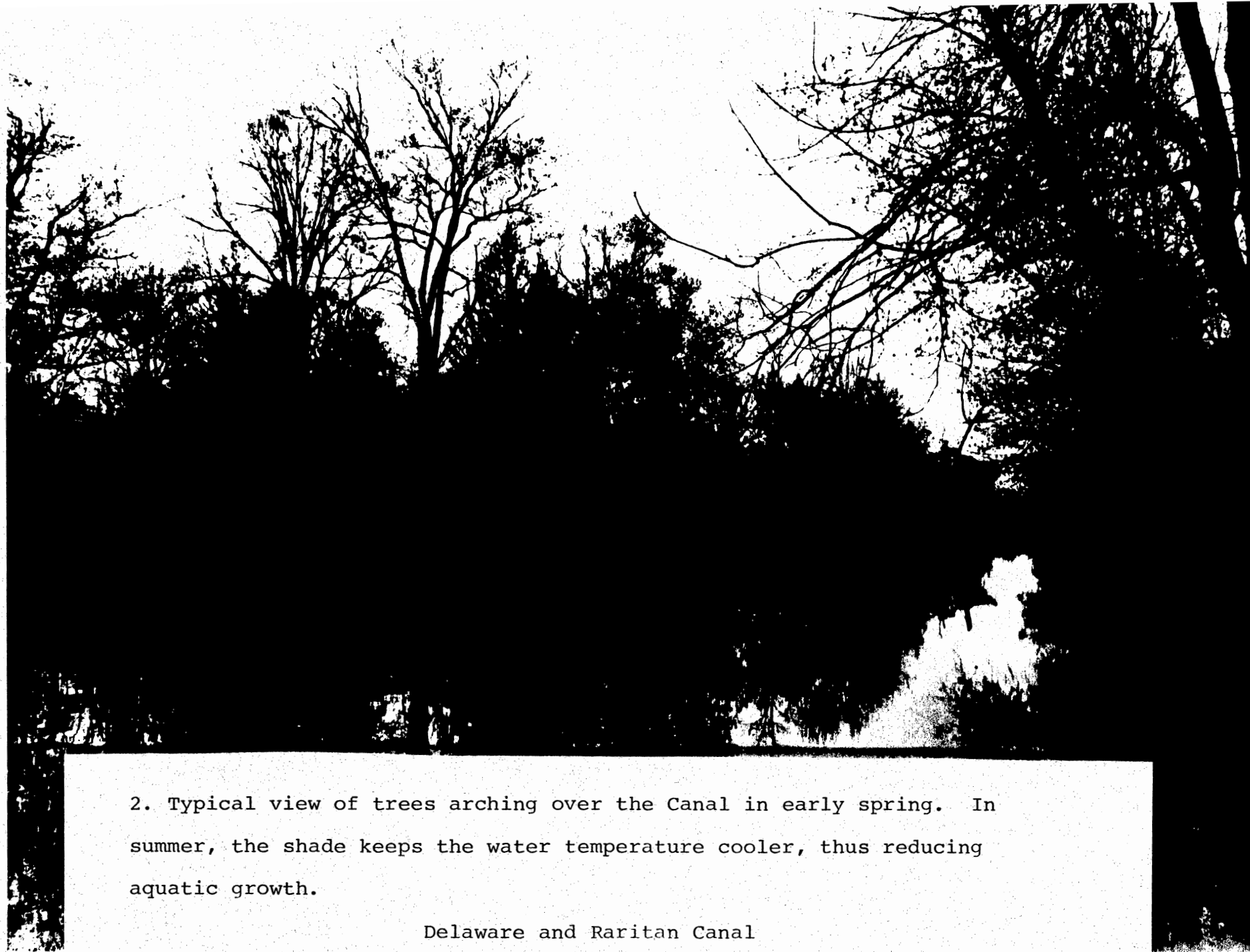
David W. Blair
Robert V. Kiser
George Pindar
William P. Starr
Ian Walker, Chairman



1. Typical towpath scene before destruction: clay surface, with trees arching over the towpath.

Delaware and Raritan Canal Towpath

145x



2. Typical view of trees arching over the Canal in early spring. In summer, the shade keeps the water temperature cooler, thus reducing aquatic growth.

Delaware and Raritan Canal

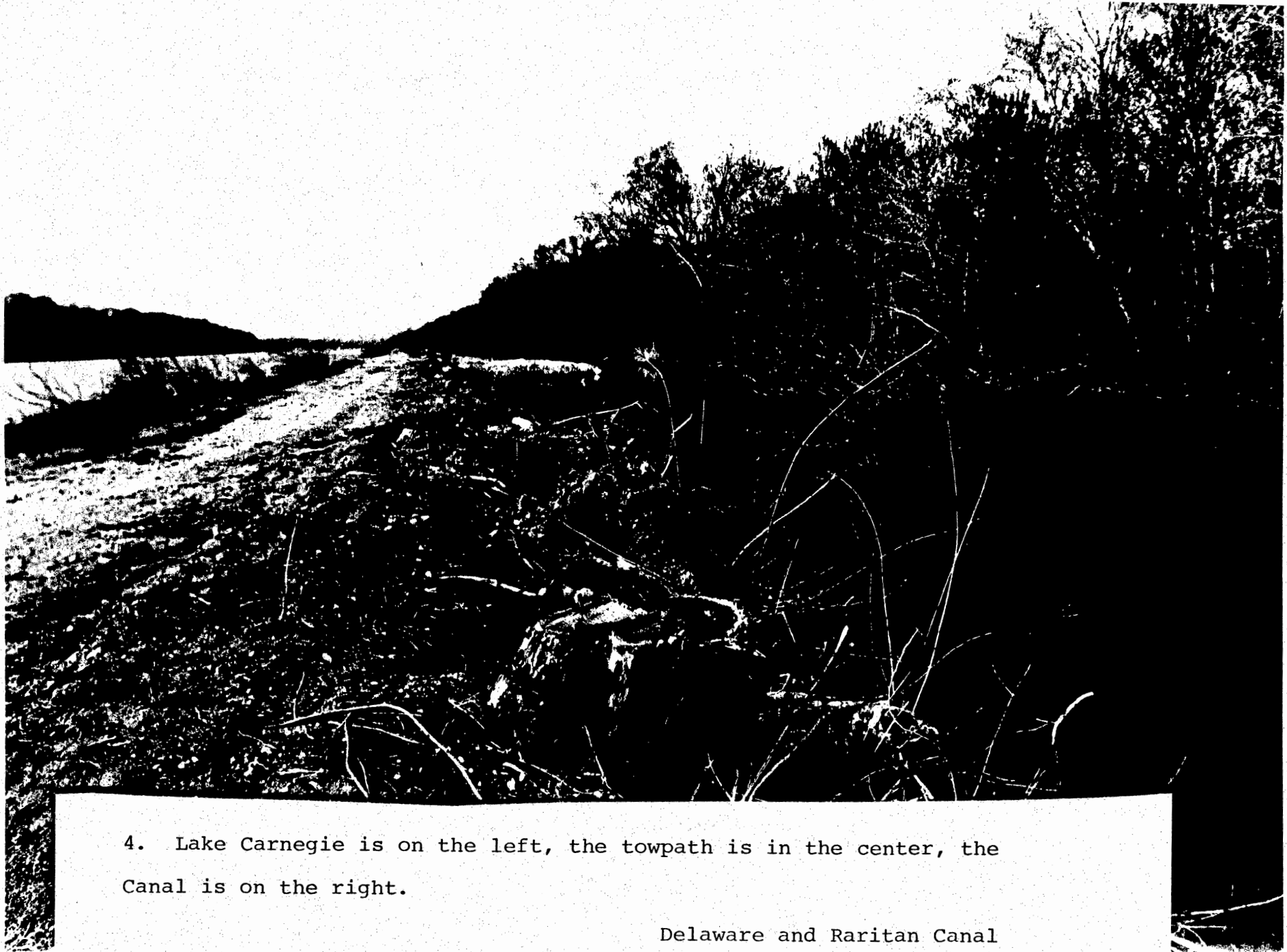
146x



3. Trees lining the edge of the towpath and branching toward the Canal,
in early spring before the leaves are out.

Delaware and Raritan Canal

147x



148x

4. Lake Carnegie is on the left, the towpath is in the center, the Canal is on the right.

Delaware and Raritan Canal



5. Many trees this size were cut on both sides of the towpath, all the way from Port Mercer to Kingston, though the contract states no trees over 4" diameter will be cut.

Lake Carnegie - on left.

Delaware and Raritan Canal - on right.

149x



150x

6. Typical scene the length of the project from Port Mercer to Kingston
(except for where Canal is the bank of Lake Carnegie)

Delaware and Raritan Canal



7. An example of the idea to "open up" the canal to view, this "open park" concept is a deviation from the Master Plan.

Delaware and Raritan Canal.



152x

8. The towpath today, (Near Alexander Road, Princeton)

Delaware and Raritan Canal



*Please enclose
letter with the record
of the hearing on the
D&R canal State Park
title transfer + tree
cutting along Lake Carnegie*

1108 Princeton-Kingston Road
Princeton, New Jersey 08540
April 30, 1985

Hon. Peggy Haskins, Commissioner
N. J. Water Supply Authority
P. O. Box 5196
Clinton, New Jersey 08809

Dear Peggy:

Thank you for sharing with me a copy of your letter of April 11, 1985, addressed to Anne Morris and with copies to many others. In that letter you decry the "continuing misinformation being disseminated concerning the dredging of the D&R Canal" and the cutting of trees caused by the dredging operations. Regarding the use of herbicides along the canal, you also suggest that my attendance at the July 17, 1984, meeting of the D&R Canal Commission somehow evidenced my approval of the herbicide spraying -- and therefore imply that I have no cause to speak out against it now.

These statements have the unfortunate effect of strongly suggesting that the D&R Canal Coalition -- not to be confused with the Commission -- has no right to protest the destruction we have seen, because we knew of these plans in advance and acquiesced or approved of them. This implication is not borne out by the record of the Commission meetings that I attended.

At the crucial July 17, 1984, meeting, I objected vigorously to the proposed cutting of trees along the Canal. The Commission then gave its assurance that all large trees (over 16 inches in diameter) would be spared and that, in fact, Mr. Amon, Executive Director of the Commission, would physically and specifically mark trees for preservation. While my opposition on behalf of the Coalition is not reflected in the written minutes of that meeting, I am sure that if you listen to the tapes of that meeting -- assuming they are still available -- you will hear my verbal efforts to prevent the destruction we have now witnessed.

153x

of Trustees
ary M. Blair, President
cKim Norton, Vice President
il Barrows, Vice President
nd Vice President
Davison, Vice President Emeritus
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ra F. Thomas, Secretary
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ation New Jersey
on Battlefield Area
ervation Society
gham Association
brook-Millstone Watersheds
ociation

The minutes also show that the Commission disapproved of the blanket clear-cutting that has in fact taken place. After hearing that the contractors for the dredging operation had "requested approval for extensive tree removal," the Commission heard from Maara, Dionisio and Hoodzow of PRC Engineering that it "was not absolutely necessary for the Commission to go along with it." Park Superintendent Stern then proposed "a selective tree removal plan" as an alternative. In this form the motion failed on a tie 3 to 3 vote; in a more explicit form it passed unanimously.

The motion which passed permitted very strict and limited tree removal. For example, cuts in the tree line were to be no more than "thirty to fifty feet" wide, "individual trees" were to be retained in the 30-50 foot gaps, and there would be a tree-by-tree selection and marking of those to be cut. Truly, what the Commission approved that day -- when I was in attendance and after my protests -- bears scant resemblance to the massive swaths of denuded parkland that now confront us along so much of the Canal.

In short, your basic premises are in error, and therefore the implication of the Coalition's or my prior knowledge and acquiescence in the clear-cutting are also in error. The clear-cutting that has drawn such united condemnation was considered and voted down by the Commission last July. Thus, while you may feel that the Water Supply Authority has been "completely up-front and open with everyone - the public, our customers and other agencies," the record speaks for itself. It shows that we opposed the plan then, the Commission adopted an alternative plan, and yet promiscuous tree cutting has in fact gone forward -- undertaken by contractors in the service of the Authority. Where then is the "continuing misinformation" that you find "on the letterhead of the Delaware and Raritan Canal Coalition"? It would seem that a fair reading of our efforts shows we have been scrupulous in our rendering of the facts.

As for the decision to apply herbicides to the towpath once it has been rendered treeless -- which the Authority later suspended following public protest -- you quote from a paragraph of the July 17 Commission meeting which shows that no decision was made on the specific type of herbicide to use. ("The type of herbicide to be used must be approved by an appropriate agency to assure that it will not contaminate the water...") Thus, we can hardly be said to have approved or acquiesced in the aborted decision to use Ammate and 2,4-D.

What we have protested was the decision to use herbicides which may not meet that very general standard laid down by the Commission. In particular, 2,4-D and Ammate are defoliantes that remain under cancer study at the Environmental Protection Agency -- apparently because the EPA found that the data-base for their certification should be invalidated. (Please see the attached letter of Congressman Florio to Commissioner Hughey, dated April 4, 1985, discussing this topic.) We were, therefore, very pleased when the Authority chose to suspend further use of these questionable defoliantes -- clearly the prudent course given the proximity of their use to a potable water supply.

I hope that this letter clarifies the record of the Coalition's long-standing opposition to the proposed practices which tragically have become a reality. The questions now must be turned to preventing these tragedies from recurring elsewhere and again, to restoring the damage that has been done to the fullest possible extent, and at the same time assuring the public of the continued multiple use of the Canal and parkland which they have been promised ever since the passage of the 1934 Act which transferred the defunct D&R Canal Co. to the State for safe-keeping as a public trust.

Given the priorities demonstrated by the Water Supply Authority in this construction contract, we believe that the priorities of a park for public use have taken second place. Therefore, we are opposed to the transfer of ownership of the "transmission complex," which consists of the towpath, the Canal itself, and the opposite bank to the bottom of its outside slope. Additional contiguous land remaining as park is, in many cases, not available for public use, either because it is leased to private users for farm pasturage or private homes or is floodplain that has not been developed. Therefore, the public interest we believe would be better served if the entire Park remained in the ownership of the Division of Parks and Forestry with a lease or easement granted to the Water Supply Authority for their purposes in water transmission, as now exists.

I look forward to our working together to fulfill that promise of multiple use -- where recreation, aesthetics and wildlife values can flourish even as New Jersey's water supply is augmented and protected.

Sincerely,

D&R CANAL COALITION



Rosemary M. Blair, President

cc: Coalition Associated Organizations
Commissioner Robert Hughey, DEP
James C. Amon, D&R Canal Commission
Rocco Ricci, NJWSA Exec. Dir.
Carmen Saginario, Governor's Asst. Counsel
Senator Gerald Stockman
Assemblymen Patero, Watson, Naples, and Bocchini



April 25, 1985

The Honorable Thomas H. Kean
Governor, State of New Jersey
State House
Trenton, NJ 08625

Dear Governor Kean:

We are writing to urge you to appoint a "blue ribbon" commission to review the administration of the D & R Canal State Park since its establishment in 1974 and to make recommendations, if found necessary or advisable, for its improvement.

This request grows out of our increasing concern about the future of the Park. The D & R Canal State Park is the spine of New Jersey's historic central corridor. Its bordering lowlands and tributary stream corridors are the principal features of our open space network. With the increasing pressure of regional development, the Park's value for outdoor recreation and as a water supply facility have become more important to us.

There are conflicts inherent in the management of one resource with four important public values - history, outdoor recreation, environment, water supply. Inherent conflict, as well as the potential impact of land development in the environs of a state park sixty miles long and rarely more than a few hundred feet wide were the reasons for the Delaware and Raritan Canal State Park Law of 1974. Created by this statute, the D & R Canal Commission has been a constructive state agency with a large task and a slim budget. The Commission has produced exemplary publications; it has publicized the Canal; it has produced model stormwater management regulations; and it has exerted its statutory powers to review and amend public and private plans within its jurisdiction.

MSM has supported the Commission's program and continues to do so. However, we have also observed the increasing difficulty that the Commission finds in exercising its statutory responsibilities. We particularly note the Commission's inability to exercise its full jurisdiction over land development; its failure to control preparation of the Master Plan for the Canal Park; and its apparent lack of results in attempting to harmonize the conflicting interests of the State Water Supply Authority and the Division of Parks.

A small but representative "blue ribbon" panel staffed by your office and created by executive order would be a constructive action at this time. The panel would be charged with a review and recommendations regarding the

management of the Canal Park (including the water transmission complex) as well as the jurisdiction of the D & R Canal Commission. The panel should be composed of private citizens of experience and stature who have a real stake in the future of central New Jersey and of the D & R Canal State Park. Public meetings, both early and late in the review, should be provided to allow a range of public opinion to be heard. We hope and expect that this review will result in a strengthening of the D & R Canal Commission's program in accord with the original intent of the statute.

We trust that you will give this request favorable consideration. By doing so, we believe, you will be making an important contribution to protecting, enhancing, and expanding the value of the D & R Canal State Park in this growing region for future generations of New Jerseyans.

Sincerely,

W. Henry Sayen
President

cc: R. Hughey
R. Ricci
B. Kirkland
D & R Canal Coalition
I. Reed

Princeton University Office of the Vice President
 for Facilities
 The MacMillan Building
 Princeton, New Jersey 08544

April 11, 1985

Mrs. Rosemary M. Blair
Chair of the D&R Canal Coalition
and
President of Friends of Princeton
Open Space
1108 Princeton-Kingston Road
Princeton, NJ 08540

Dear Mrs. Blair:

I am responding to your letter of March 12, 1985, regarding dredging of the Delaware and Raritan Canal. I regret that a combination of my travel schedule coupled with very late delivery of your letter by the postal service delayed my reply.

Statements that Princeton University refused to allow the spoils of wet dredging operations to be stored on University land and that Princeton University was opposed to wet dredging are categorically incorrect. The truth of the matter is that the University offered a license to store spoil materials from the canal on the site between Washington Road and Alexander Road which was used previously for dredging Lake Carnegie. In essence, the Water Authority was offered the opportunity to remove the lake spoil which presently resides at that location and to place wet canal spoil materials in its stead for a period of up to sixty months. We at the University felt that this would permit wet rather than dry dredging and in turn the lands, after five years, would be capable of receiving additional lake spoil material. Thus, the facts are in direct opposition to the statements to which you refer.

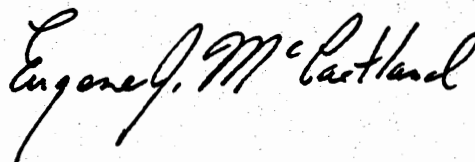
It is true that an additional lake spoil area in Plainsboro was not considered a viable site by the University since we had recently sold land immediately adjacent to that area for family housing. We felt that it would in the first instance be unfair to those to whom we had sold the land (not knowing of the Water Authority's plans) and in the second instance obtaining approvals over homeowner protests would not be practical.

Letter to Rosemary M. Blair
April 11, 1985
Dredging
Page 2

Parenthetically, the only use of University land discussed prior to award of the contract was for access to the canal park through University lands at three points at Harrison, Washington, and Alexander; formal licenses for these but for no other University properties were obtained from us by the Water Authority prior to the start of work.

I trust you will contact me if further clarification is needed.

Sincerely,

A handwritten signature in cursive script that reads "Eugene J. McPartland". The signature is written in dark ink and is positioned to the right of the typed name.

Eugene J. McPartland

EJMcP/eg

cc: Commissioner Robert Hughey
Peggy Haskin
Michael Galley
James Amon

158x

April 9, 1985

R E S O L U T I O N
on
D & R Canal Jurisdiction Transfer

WHEREAS residents of the Princeton area have long anticipated the development of the areas alongside the former Delaware and Raritan Canal as a State Park for their recreational use, and

WHEREAS the recent cutting of trees in connection with the dredging of the Canal and the threat of spraying with toxic materials to control foilage growth have caused area residents to question the State's commitment to fulfilling expectations for recreational usage along the Canal, and

WHEREAS the Parks and Forests Department of the N.J. Department of Environmental Protection is reported to be transferring its authority over the Delaware and Raritan Canal area to the New Jersey Water Supply Authority, an independent authority; now, therefore, be it

RESOLVED that the Mayor and Council of Princeton Borough call upon the State of New Jersey to retain the Delaware and Raritan Canal State Park under the jurisdiction of the Department of Parks and Forests and not transfer such jurisdiction to the N.J. Water Supply Authority; and be it further

RESOLVED that the DEP Department of Parks and Forests develop performance standards for future construction and development projects within the D & R Canal and Lake Carnegie areas so as to minimize disturbance to natural resources, respecting the historic, environmental, and water supply resources to be protected; and be it further

RESOLVED that copies of this resolution be forwarded to N.J. Commissioner of Environmental Protection Robert Hughey, Gov. Thomas Kean, State Senator Gerald Stockman, Assemblymen Gerard Naples and John Watson, James Amon, executive director of the D & R Canal Commission, the Princeton Environmental Commission, the mayors and committees of Princeton, Franklin, Lawrence, Plainsboro, South Brunswick, and West Windsor Townships, as well as the Delaware & Raritan Canal Coalition, the Canal Society of New Jersey, the Friends of Princeton Open Space, the Historical Society of Princeton, the MSM Regional Study Council, the N.J. Conservation Foundation, Preservation New Jersey, the Princeton Battlefield Area Preservation Society, and the Stony Brook-Millstone Waterheds Association.

-- adopted by Princeton Borough Council
April 9, 1985

159x

Memo. Meeting - April 6, 1985
Plainsboro

Assembly
to Committee on Energy & Natural Resources -

From - Friends of Princeton Open Space
by Lawrence Norman Kern, Vice Pres - 924-0656

The Friends of Princeton Open Space are
in accord with the statement entitled "The Issue
of transfer of Title of the Delaware and Raritan
"Transmissible Complex"
Canal, delivered at Princeton Borough Hall April 29
1985 by C. McKim Norton, Senior Vice President
of the Delaware Raritan Canal Coalition.
We believe that, ^{title to} the D + R Canal Park
should remain in New Jersey, ^{State} Department
of Environmental Protection to protect the interest
of all parties concerned. The lease to the
New Jersey Water Supply Authority should
provide adequate protection to the authority
to make adequate repairs. We would also
like to see the canal from the authority dedicated
to purpose of recreation, conservation and historic
preservation in the D + R Canal State Park.

REPORT
April 29, 1985

SAVE THE CANAL FOR SAFE WATER AND HAVE AN APPROPRIATE PARK TOO

Cutting trees along the Delaware and Raritan Canal is regrettable.

Thirty years ago Oak trees were cut out of Deans Woods near my home leaving four foot diameter stumps and holes in the woods. Counting the growth rings, placed those trees there before the Pilgrim landed. Cutting trees is always regrettable, but time has healed those wounds in the woods.

Remember that a continuing active canal after the boat traffic stopped, secured "Grandfather" rights to 100 million gallons per day of Delaware River water for New Jersey. We must continue to use and preserve those water rights and zealously guard the quality of water in the open D&R Canal conduit as an essential regional resource.

Remember also that the canal dredging contract is being paid for ~~by the state of New Jersey, not an authority, to restore the 100~~ M.G.P.D. capacity to N.J. State property.

The Canal ownership should be retained by the state and managed by mechanisms that assure priority to operations for safe and secure water distribution.

Conflict between the essential Water Supply Authority, and the bounds of responsibility and privilege for the Division of Parks and Forestry, must be avoided by clarification of existing legislation or the adoption of administrative guidelines.

I believe both agencies are or should be required to maintain the historical integrity of the canal. The single most important step in this direction would be to remove all trees between the tow paths and the canal water line. The leaves from these trees, and others to a lesser degree, are lodging in the canal in increasing quantities. In periods of rapid decay, the magnitude of the unpleasant by-products cause intolerably disgusting water to be consumed intermittently by te

of thousands of people in New Brunswick and the North Brunswick areas.

The park canal grandeur and the historic impact will be evident when flanked by restored tow paths.

The inside banks of the canal should be planted with dwarf native shrubs such as Sweet Fern, *Viburnum pennsylvanica*, and low Bush Blueberry as well as ferns and myraids of native low plants which should be encouraged. These banks could be mowed high late in the season to control unwanted high vegetation. The dense low shrubs could reduce the quantity of leaves blowing into the canal and discourage visitors causing wear and tear on the banks.

The outside banks of the canal should be planted with carefully selected trees with minimum leaf problems and with other special features. (i.e. White Oaks, impressively strong large trees with large spreading branches could give a canopy affect over the tow paths and Willow Oak, with fine textured leaves showing yellow autumn color which would readily get lost in the natural woodland ground cover.)

The canal along the eastern shore of Carnegie Lake presents the greatest restoration challenge with the greatest potential rewards of beauty, function and water fowl habitat. The finished view will be far more interesting than the green wall prior to cutting the trees.

The area between the canal and lake, with open spaces preserved for viewing all seasons activities on the lake, could be planted with a great variety of choice native species not to exceed 20 feet in height. Forget the flowering crab apples and flowering cherries. Save them for city parks.

The list should include: Sumac, Clethra, red and white Rugosa Roses, Fringe tree, Sweet Bay Magnolia, American Holly, Deciduous hollies, Shadblow, Dogwood, Fothergilla, and low growing *Salix Caprea* at the waters edge for habitat. The billowy form with light and shadow patterns of these willows associated with water have intrigued landscape artists for centuries.

Planted in large well spaced groups, splashes of color and fragrance would be created. With large tree species on the east side of the canal for background, the view from the west side of the lake, will be a changing symphony of visual pleasure. With the prevailing air movements, the fragrance will add pleasure to those enjoying the canal and tow path.

Such a restoration, with time, will create a local treasure without degradation of the regional treasure--raw drinking water.

Herbert Wright

HW/stm

REPORT TO THE ASSEMBLY ENERGY AND NATURAL RESOURCES COMMITTEE

Summary and Clarification of May 8 Testimony

May 13, 1985

The Princeton and local area park and tree enthusiasts certainly dominated the hearing on Assembly Resolution No. 130 at Plainsboro on May 8, 1985.

This was unfortunate because it did not give your committee a balanced view of the geographical spectrum involved in the Greenway ribbon across New Jersey. The water and historical aspects of the D & R Canal were not represented by the public opinion to guide Assembly action. That action should deal with the conflicting interests of:

1. the transmission of better quality water in the rehabilitated efficient water supply system begun in 1944.
2. recognition of the 1973 D & R Canal status and responsibilities as an entry on the National Register of Historic Places, and
3. the D & R State Park created in 1974. Many thought a theme park enhancing the water and the historical aspects of the D & R Canal was most appropriate.

The claim of park buffs that the D & R Canal is a greenway ribbon demonstrates a lack of understanding that the canal is first a 100 million gallon per day open aqueduct for raw drinking water sufficient to accommodate at least 1 million people.

Reference to The Delaware and Raritan Canal, A Pictorial History by William J. McKelvey Jr., 98 Webb Ave., Bloomfield, N.J. 07003, will clearly show that trees on the tow path do not exist and on the opposite bank there are very few near the water.

Historically, the east bank of the canal from Rocky Hill through the abandoned Coal Port rail yard in Trenton and on to Bordentown was the rail bed for segments of three railroads, some of which were operating before the Canal opened. These prevented tree growth on the canal bank opposite the tow path.

Under the terms and conditions of the National Register of Historic Places the historical integrity must not be violated. The D & R Canal Coalition has a great opportunity to sponsor reconstruction of a sample of tracks for this old rail line in conjunction with the canal aqueduct trunk. The abutments appear to be in sound condition over the Millstone River at the Scudders Mill site.

An accurate visual understanding of these two modes of early travel is important for young people to see before they are lost in a ribbon of green trees.

Some early towns in New Jersey have gone back to the greenery of nature by accidents. The lobbying efforts to destroy the historical integrity of the D & R Canal and the vestiges of the adjacent railroad operation by a deliberate program of having these features enveloped by trees is an unworthy cause for influential organizations.

The insistence that the volunteer trees cut on the tow path be replaced is comparable to an old railroad on the National Register of Historic Places having trees planted between the tracks.

The disregard of the tree spokespersons for the water supply needs and the canal history causes me to believe these prior existing canal functions will suffer under primary control of the present state agency ownership of the canal.

I abhor free wheeling authorities such as the New York Port Authority. The up front controls which assure a fair shake for historical and park interests along with the main purpose of water supply justifies the Canal Title transfer to the Water Supply Authority. This would be in the best interests of a much larger segment of the central New Jersey population than the present direction of management.

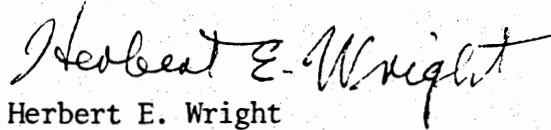
There is little room for trees to dominate on the canal banks without the risk of impairing the water supply in the canal by detrimental action of the roots on the canal banks. Serious cumulative water losses by translocation within the trees and evaporation from the leaves in large tree populations near the canal will occur. Let that be the canal's contribution to the park trees thoughtfully selected and located.

Losses of canal water and quality of same due to the open canal limitations and the nature of the conduit are best understood and managed by the Water Supply Authority. The authority is in the best position to secure the water supply system from damage by vandals, saboteurs, and the modern threat, "mid-night dumpers". The authority must not be hampered or outranked by park personell in such matters.

The problem of leaves in the canal is very serious. I doubt that anyone would

drink from his or her well after dumping their yard leaves in the well. Certainly tens of thousands of canal water users should drink as well.

I appreciate you reading this and hope that it will be useful in your deliberations. That green ribbon must become a compatible mix of water, history and green.



Herbert E. Wright
1321 Georges Road
Monmouth Junction, N.J. 08852
(201)-329-6531

A Report and Suggestions for Compatible Adjustments of the
Established Uses of the Delaware and Raritan Canal

The public hearings and "Dredging the Delaware and Raritan Canal Program Report" on restoring the 100 million gallons per day diversion capacity of the canal do not provide sufficient assurances to justify the implementation of the full program. After the programmed improvements are in place, the canal-aqueduct and its water supply are expected to slowly regress to their present inadequate condition.

With increasing public concern for the security and the quality of public water supplies, the canal and park, north of Trenton may never be able to deliver acceptable raw Delaware River water which with normal treatment will be of drinking water quality.

The D&R Canal has uses established by the original design as a boat canal which are incompatible when mixed with more recent legislated add-on uses.

Now there is an opportunity for planning to resolve these incompatibilities and inadequacies before the expensive proposed patches are applied and the conflicts between several established uses are only partially and temporarily resolved.

In 1834 the Delaware and Raritan Canal became operational for the passage of boat traffic between the Delaware River and Raritan River. As designed and constructed the canal used 100 million gallons per day of Delaware River water to move the boats on and operate the locks. This diversion was confirmed in later interstate compacts.

The canal was designed to use surface runoff from numerous lesser watersheds throughout its length as well as storm drain water from several towns and the city of Trenton. These established uses conflict very seriously with the aqueduct use of the canal. This is a very costly conflict to resolve, but it could be avoided largely in a program suggested later.

In 1934 after abandonment by the Pennsylvania Railroad, the state of New Jersey took the canal over and sold untreated water to industrial plants along the canal.

In 1944 the state legislated a series of projects to make major repairs and to begin rehabilitation of the canal toward an aqueduct function for delivering raw Delaware River water along the entire canal.

In 1974 the D&R Canal State Park was created with a commission to control adjacent land use and "Grandfather" rights to run surface water into the canal as originally designed and used.

The Park and Recreation use is a threat to the security and quality of water in the prior established use of the canal as an aqueduct of questionable standards.

All of these uses are established and deserving, but they are incompatible. Some are more deserving than others. Some have established rights prior to others. Some have more vocal advocates than others.

A planned approach would suggest that the canal could serve all of the existing uses by using segments of the canal most adapted for the various uses without any destruction or dewatering of the canal.

The following suggestions are offered for the purpose of advancing a harmonious and effective blending of existing uses to achieve the greatest enduring potential of the D&R Canal.

Retain the 100 million gallon per day diversion right to Delaware River water by bringing it to the Trenton area in the feeder canal. A major share of this water should serve the nearby New Jersey Delaware River basin area. Water which would be needed to maintain the canal flow integrity should be released through Trenton. Any necessary diversion of contaminating flows into the feeder canal, west of Trenton, should be done. Controls or restrictions of recreation

activities which could be a threat to the quality or security of the water supply should be developed.

That portion of the canal from Trenton to lock #9 near the bottom of the hill at Copper Mine Road has features and a locale to serve park and recreation functions very well. Surface water flowing into this midsection of the canal would not be detrimental.

Lock #10 is conveniently located where the Millstone and Raritan Rivers meet which is upstream from suspect point sources of pollution. River water or released water from the Raritan River reservoir can be diverted to the upside of Lock #10 and flow back to Lock #9, and thus be a source of raw water for rapidly developing areas in Franklin Township and portions of southern Middlesex County. Ground water supplies are inadequate to supply the needs of development under existing zoning in South Brunswick.

Safe raw river water or released water from the reservoirs can provide large volumes of new water to both sides of Lock #10 to serve existing and expanding needs in the areas now served by water from the presently distressed canal source.

Such controls or restrictive measures as are needed on such uses as park, recreation, and discharges of surface water into the canal should be imposed or constructed from Lock #9 to New Brunswick.

Raritan River basin water is needed in the Raritan River basin and should not be removed to dilute or augment the Passaic River. Reservoirs on the Passaic and other flooding rivers in the northern counties are essential to solve their water problems of supply and flooding.

Herbert Wright

169x

13 South Main Street
Cranbury, NJ 08512
May 9, 1985

Hon. Tony Marsella, Committee Chairman
Energy and Natural Resources Committee
N. J. State Legislature
State House Annex, CN 042
Trenton, NJ 08625

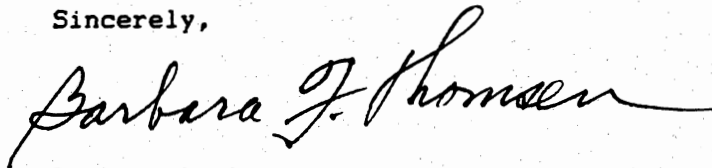
Dear Mr. Marsella:

Would you please be good enough to include in the official record that I am strongly opposed to the transfer of the title of the D&R Canal State Park into the insensitive hands of the N. J. Water Supply Authority.

The Water Supply Authority, a single purpose entity, has demonstrated little regard for environmental, historic, and recreational values. The horror that has been committed along Lake Carnegie is clear evidence of what the future might hold should the Water Authority take complete and unaccountable charge.

Water has been supplied to N. J. residents from the Canal for many years under arrangement with the DEP and Parks and Forestry. Let us await recommendations from a Blue Ribbon panel to see if they think the arrangement needs changing.

Sincerely,



Barbara F. Thomsen

My name is Dolly Minis. I am a resident of Princeton and a retired biologist at Princeton University. I am speaking for the Trenton Naturalist Club of which I am Conservation Chair. We have had many memorable bird walks in all seasons along the towpath, especially between Port Mercer and Alexander Road.

We are concerned for the rehabilitation of this devastated area, so that it will again provide food and cover for animals and shade and beauty for people.

We do understand that it may be necessary to keep the area between the path and the canal in grass or low vegetation for easy access and repairs, and to prevent disruption of the bank of the canal by large tree roots. However, the other side of the towpath (away from the canal) is quite another matter. We urge that here the stumps of cut trees be allowed to regenerate, that trees be replanted where necessary, and, most important, that shrubs be planted to rapidly provide food, shelter and shade. Herbaceous plants, which have always been a notable spring show along the path, can be reintroduced as soon as adequate shade prevails.

We also urge that native plant materials (trees, shrubs, vines, ground cover) be used. These are hardy, disease-resistant, and appropriate for this area.

Thank you for the opportunity to make this statement.

541 Lake Drive
Princeton NJ 08540
May 15 1985

Anthony S. Marsella, Chairman,
Assembly Energy and Natural
Resources Committee,
State House Annex,
Trenton NJ 08625.

Dear Mr. Marsella,

I attended the hearing at Plainsboro Town Hall last Wednesday and would like to have this letter entered into the record of the hearing.

The questions I wish to refer to are the following: the need to determine the value of trees; the status of the Master Plan of May 1977; the preferences of park users; herbicides; removal of access roads; care taken in cutting back some trees; firewood cutting.

Mr. Allen, the landscape architect who spoke at the end of last Wednesday's hearing, made a highly important point: trees are valuable, especially those along a beloved and much-frequented towpath, and their value could and should have been expressed in financial terms during preparations for the dredging project. If a value had been calculated for them, it would doubtless have exceeded the cost of removing the dredged material from University land after five years.

Real-estate agents, who are quite a down-to-earth and unsentimental as engineers, invariably attach a financial value to trees, especially when they're 50 to 100 years old. "Mature landscaping" adds thousands of dollars to the price of a property.

In any future dredging or other maintenance operations along the still unspoilt sections of the towpath north of Kingston, an accounting of the value of the trees must be entered into any calculations made.

When referring to the 1977 Master Plan, Mr. Amon mentioned two later documents which modified that plan. One of them, the D & R Canal State Park Historical and Recreational Development Plan (DBC 3 of September 1984), talks of the "gradual removal of all trees" along the canal side of the towpath, unless I am mistaken, throughout the entire length of the canal. Can the substance of the Master Plan be amended so easily, and is any account being taken of the wishes of the public in the process of modification of the plan?

The truth is that the users of the towpath overwhelmingly prefer trees, a clay/dirt towpath as hitherto, and a natural appearance; they do not want a bare, sterilized towpath and embankment, covered in gravel with occasional patches of grass, as can be seen along much of the feeder canal, where dredging has been completed. Such an exposed place is hotter than blazes in summer and arctic cold in winter; it also has a distinctly industrial air about it, since it is in fact a truck road, as can be seen from the photographs below.

Is this the kind of landscape which is planned for the whole of the rest of this beautiful state park?

The use of toxic herbicides in a much-frequented park, and particularly along a drinking water conduit seems to ~~be~~ such a fantastic idea that I can hardly imagine it being seriously discussed at all.

However, herbicides and mechanized cutting are not the only way to accommodate the Water Supply Authority's need for access to the canal from the towpath. Stretches of trees could alternate with more open areas planted with low shrubs and bushes and other suitable vegetation, which would make the place look and feel more natural, while at the same time sustaining what's left of the local wildlife. ~~This~~ This compromise arrangement, together with the wider arch formed by the rows of trees along the far side of the canal and the side of the towpath furthest from the canal, would provide a pleasant and more natural setting of the sort that recreational users of the towpath and canal value so much.

In order to fully restore the natural setting of the park, and protect it from further industrial encroachment, all access roads, including those built across the canal, should be removed once the dredging operation is completed.

In the midst of all this destruction, some of which was clearly necessary, it is most reassuring to see the care which has been taken by the contractors in cutting back dead and overhanging trees on the far side of the canal, opposite the towpath. I have noticed a number of places south of Lake Carnegie and also along the feeder canal where great care has evidently been taken to cut only the strict minimum from these trees. Those responsible for this work should know their efforts are appreciated.

The towpath between Kingston and the Millstone Aqueduct, on which all trees were clear-cut in January, was a place of great natural beauty which was dearly loved and highly valued by thousands of people from this area and beyond. In the 1977 Master Plan it was classified as 'rural'. Here is the definition of the 'rural environment' given on page 7 of the Master Plan:

"In a rural environment there are unobtrusive signs of man's impact but natural conditions dominate the area. The most common rural environment in the Canal Park is one in which there is a lightly used road bordering one side of the canal, with intermittent houses on the other side of the road. Rural environments offer the widest range of appropriate recreational development."

I see no reason why this definition should not hold good in the future. If the dredging operation had been conducted in the wet, as it could have been, the water flow would have been increased without the destruction of this valuable natural environment, few people would ever have heard of the transfer of title over the canal to the Water Supply Authority, and fewer still would have been upset at the prospect of such a transfer. But as things stand now, many people feel that protecting the natural beauty of this wonderful park comes very low indeed on the Authority's scale of priorities, and the transfer of title would be against the interests of the users of the park.

Lastly I wish to raise the question of cutting trees along the towpath for firewood, even though it does not come under the heading of the dredging operation. About 345 tree trunks are marked with blue along the west side of the towpath between Griggstown and Blackwells Mills. About a third of these are dead, as far as can be seen but many of the rest are healthy young maples which provide shade for the towpath. Trees which could fall across the towpath or into the canal should clearly be cut, together with those interfering with the growth of others. As this stretch of the canal is classified 'natural' (=wilderness) in the 1977 Master Plan, and represents one third of all the wilderness areas in the park as a whole, it would be unfortunate, and at variance with the Master Plan, if it were to become manicured and artificial. After all, even dead trees, provided they stand away from the towpath and pose no danger to people, are a habitat for wildlife such as owls and woodpeckers. In a natural environment, such as this has been designated, they should be allowed to fall, rot and regenerate the soil, as they have always done. In short, it seems to me the amount of cutting envisaged may be excessive.

I would like to thank you and Assemblyman Patero for taking the time and trouble to hold this hearing, and hope your Committee finds my remarks of some interest.

Yours sincerely,


David MacRae

Annex: 3 photographs of the towpath along the feeder canal near Lambertville.

ANNEX: Pictures of the towpath along the feeder canal near Lambertville after completion of the dredging project.

Even before the dredging project, there were generally fewer trees along the towpath of the feeder canal than along the main canal. The landscape was already, therefore, more open in many places than it is, for example, at Griggstown. However, it is worthwhile comparing these pictures with the kinds of landscape which exist or could exist along the canal.



Looking upstream along the towpath near Lambertville. The embankment is covered with coarse crushed stone and some grass; the towpath is covered with fine crushed stone.



Two more views of the towpath of the feeder canal near Lambertville, looking downstream. Top picture: coarse crushed stone on embankment and towpath. Bottom: grass on embankment, fine crushed stone on towpath.

177x

Carol A. Welsch
3-14 Hunters Glen Drive
Plainsboro, New Jersey 08536

The Honorable Thomas Kean,
Governor of New Jersey
State House
Trenton, New Jersey

Dear Sir:

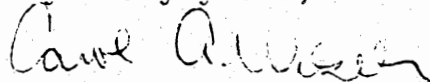
I am writing you to express my concern that the title of the Delaware Raritan Canal may be transferred from the Department of Environmental Protection to the New Jersey Water Authority. I am opposed to this transfer and I hope you will do everything in your power to prevent it.

My husband and I spent many nappy hours walking along the canal towpath. Our favorite part of the canal was the stretch along Lake Carnegie. Imagine our horror when every tree, over 2,000 in total, along that part of the canal was razed, at the direction of the New Jersey Water Authority. The towpath is now an eyesore, stripped of its beauty and useless as a recreational area. I also understand the stumps of the trees were treated with a herbicide to prevent them from sprouting.

Now, the New Jersey Water Authority is proposing that title to the canal and its embankments (one of which is the towpath) be transferred to it. The Authority, through the Lake Carnegie tragedy, has demonstrated its complete insensitivity to environmental concerns and to the recreational uses and the historical value of the canal. Are there worse hands in which to place the stewardship of this precious resource? The conservator of this property must recognize that the canal has multiple uses, recreational, environmental, historic as well as a conduit for water. The New Jersey Water Authority is blind to all but one use of the canal. It is not a suitable conservator for the canal.

Finally, how can I explain the sadness I feel for the loss of beauty along the Lake Carnegie towpath? The thought that the entire canal would be turned over to an Authority who is capable of doing such a thing, is heartbreaking.

Very truly yours,



Carol A. Welsch

cc: See Distribution List

CONTRACT

THIS AGREEMENT, made this 26 day of October, 19 84

by and between The State of New Jersey, herein called "owner," (Corporate Name of Owner)

acting herein through its Director, Division of Building and Construction, and (Title of Authorized Official)

STRIKE OUT INAPPLICABLE TERMS CONTI CONSTRUCTION CO. INC.

(a corporation) (a corporation) of 3001 S. Clinton Ave., County of Middlesex, and State of New Jersey So. Plainfield hereinafter called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

CONTROL NO. DBC-P440 - DREDGING WATERWAY MAINTENANCE PROGRAM CONTRACT II DUCK POND RUN TO KINGSTON LOCK D & R CANAL

LUMP SUM BID. \$ 4,767,767.00 ADD ALT. #1B. 1.00 NET AWARD \$ 4,767,768.00

ALTERNATES: Accept Add Alt. No. 1B: Dredging of Princeton Turning Basin w/disposal of material at Princeton S.O.C. landfill at River Road, Princeton Township in the amount of \$1.00. Reject Add Alt. No. 1A. Reject Deduct Alternates Nos. 1, 2 and 3. Include as part of this contract.

UNIT PRICES: Accept Unit Prices as shown on Proposal Page 4 of 9 of DBC Proposal P440 dated 8/22/84. Include as part of this contract.

* Refer to page 3. FOUR MILLION SEVEN HUNDRED SIXTY SEVEN THOUSAND hereinafter called the project, for the sum of SEVEN HUNDRED SIXTY EIGHT Dollars (\$ 4,767,768.) and all extra work in connection therewith, under the terms as stated in the General and Special Conditions of the Contract Specifications, and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions, Supplementary General Conditions and Special Conditions of the Contract Specifications, the plans, which include all maps, plats, blue prints, and other drawings and printed or written explanatory matter thereof, the specifications and contract documents therefor as prepared by PRC Harris, Inc., herein entitled the Architect/Engineer, and as enumerated in Paragraph 1 of the Supplementary General Conditions, all of which are made a part hereof and collectively evidence and constitute the contract.

The contractor hereby agrees to commence work under this contract on October 26, 1984 and to fully complete the project within 450 consecutive calendar days thereafter. Time is of the essence for the completion of this contract. The contractor further agrees to pay, as liquidated damages, the sum of \$2,383.89 for each consecutive calendar day thereafter as hereinafter provided in Article 8.6 of the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the contract, subject to additions and deductions, as provided in the General Conditions of the Contract Specifications, and to make payments on account thereof as provided in Article 10 of the General Conditions.

Handwritten initials and date: 10/23

"The Contract shall comply with the provisions of Chapter 33, of Title 52 of the Revised Statutes (R.S. 52:33-1 et seq.) requiring that preference be given to the use of domestic materials or as same may be governed by Federal Law or Regulation."

This contractor shall conform to all provisions of "Law Against Discrimination" (C127, L, 1975) and as provided shall:

"During the performance of this contract, the contractor agrees as follows:

- a. The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status or sex. The contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status or sex. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause;
- b. The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status or sex;
- c. The contractor or subcontractor where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment."

IN WITNESS WHEREOF, the parties to these presents have executed this contract in four (4) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

ATTEST:

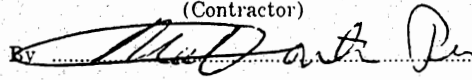
.....
(Secretary)
.....
(Witness)
.....
(Seal)

.....
(Secretary)
.....
(Witness)


.....
Director, Division of Building and Construction

By JAMES G. TON
..... DIRECTOR
..... (Title)

.....
CONTI CONSTRUCTION CO., INC.
(Contractor)

By 
.....
PRESIDENT
.....
(Title)

.....
3001 S. CLINTON AVE., SO. PLAINFIELD,
(Address) NJ 07080

180x

WARRANTY:

It is hereby certified and warranted by the undersigned contractor and by the undersigned principals or officers thereof, for said Contractor and for themselves, personally and individually, that no person has been employed to solicit or secure this Contract in violation of the provisions of Section 10, Chapter 48 of the Laws of 1954, N.J.S.A. 52:34-15, or in violation of any other laws of the State of New Jersey; and it is further warranted that all applicable laws and regulations shall be complied within the performance of this contract.

(Seal)

.....CONTI CONSTRUCTION CO., INC.....
(Contractor)

By [Signature] Pres

(Secretary)
[Signature]
~~(Witness)~~

.....PRESIDENT.....
(Title)

3001 S. CLINTON AVE., SO. PLAINFIELD,
(Address) NJ 07080

This contract conforms to the standard form approved by the Attorney General.

IRWIN KIMMELMAN
ATTORNEY GENERAL OF NEW JERSEY

*SPECIFICATIONS: Dated 8/84. Specifications for Alt. 1A & 1B dated 8/84. Include as part of this contract.

Current Wage Rates dated 9/4/84 are acknowledged and included as part of this contract.

"THE MINORITY PERCENTAGE GOAL REQUIREMENT FOR THIS CONTRACT IS 25% PER SKILLED CRAFT."

AFFIRMATIVE ACTION REGULATIONS P.L. 1975, c. 127 EXHIBIT B, CONSTRUCTION CONTRACT, MANDATORY LANGUAGE, ALTERNATIVE 1 AND AMENDMENT TO AFFIRMATIVE ACTION REGULATIONS DATED MAY 16, 1979 ARE INCLUDED AS PART OF THIS CONTRACT.

ALLOWANCES: Of \$100,000.00 for protection of existing structures. See Section 11F pages 1-8 of DBC P440 Specifications dated 8/84. Include as part of this contract.

BULLETINS: "A" dated 8/22/84, "B" dated 9/11/84, "C" dated 9/14/84. To be included as part of this contract.

DRAWINGS: Nos. 1 thru 69 dated 8/84. Drawings for Alt. 1A & 1B, TB-1 thru TB-7 dated 8/84. Include as part of this contract.

181x

PROPOSAL FORM
State of New Jersey
DEPARTMENT OF THE TREASURY
Division of Building and Construction

This proposal is to be returned in the self-addressed envelope.

Date: 22 August 1984

All inquiries and correspondence to be addressed to:

Attn: JOSEPH PERONE
Division of Building and Construction
CN-235
Taxation Building, W. State and Barrack Streets
Trenton, N.J. 08625

DBC #:P440

This proposal will be accepted no later than 2 p.m. September 20, 1984 after which time all proposals will be publicly opened and read.

* Firm Conti Construction Co., Inc.
* Name 3001 S. Clinton Ave
***** So. Plainfield, NJ 07080

* Project - D & R Canal
* Location

The undersigned propose to furnish all labor and materials as called for in the specifications for:

Waterway Maintenance Program
Prallsville Lock to Kingston Lock
Contract II - Duck Pond Run to Kingston Lock

INSERT "X" OPPOSITE TRADE:

() Dredging/Sitework

() TOTAL SINGLE BID 4,767,767. (From Page 2 of 8)

Specification Dated: August, 1984

Drawing No.-See Specifications: Sheets 1 thru 69 dated August, 1984 (D&R Canal)
Sheets 1 thru 7 dated August, 1984 (Princeton Turning Ba

Calendar Days: 446 450

Pricing to hold good through 60 days after bid due date

**The contractor must complete required information on the original and all supplemental pages of this proposal. If the information is not properly completed and is not received on time, the bid proposal will not be read and will be rejected.

SUBMIT ONLY ONE BID PROPOSAL AND BID BOND FORM.

Refer to DBC NUMBER in all Correspondence

PLEASE NOTE: (X) Certified Check or Bid Bond in amount of 5% of base bid required.
CERTIFIED CHECK \$ _____ BID BOND \$ 5% of bid () Check or Bond not required

CONTRACTOR MUST SUBMIT PRICES FOR ALL ALTERNATES (OR OTHER BASE BIDS) WHEN REQUESTED, OTHERWISE THE BID WILL BE CONSIDERED NON-RESPONSIVE.

- * IT IS MANDATORY THAT ALL ELECTRICAL CONTRACTORS SUBMIT WITH THEIR PROPOSAL A COPY OF THEIR VALID INDIVIDUAL ELECTRICAL LICENSE AS WELL AS THE BUSINESS LICENSE. THIS IS A PART OF THE BIDDING REQUIREMENTS. NO LICENSE IS REQUIRED WHEN WORK IS BELOW 10V.
- * LICENSE MUST BE SUBMITTED BY OTHER CONTRS. FOR SUB-CONTRACT ELECT. FIRMS WHEN REQUIRED

SINGLE BID FORM

1) LUMP SUM BID

LUMP SUM BID

\$ 4665,407.-

2) UNIT PRICE ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>PAY UNIT</u>	<u>UNIT PRICE</u>	<u>QUANTITY ABOVE LUMP SUM PRICES</u>	
A	Excavation (Lump Sum Quantity 190,000 C.Y.)	C.Y.	<u>.01.-</u>	<u>30,000</u>	<u>300</u>
B	Restore Clay Liner (Lump Sum Quantity=0)	C.Y.	<u>20.-</u>	<u>100</u>	<u>200</u>
C	Embankment Stone (Lump Sum Quantity=0)	Each	<u>.01</u>	<u>6,000</u>	<u>60</u>
Subtotal Unit Price Items				<u>2360.-</u>	

3) ALLOWANCE ITEMS

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>ALLOWANCE AMOUNT</u>
1	Protection of Existing Structures	\$100,000

TOTAL SINGLE BID (1+2+3) : \$ 4,767,767.-

NOTE : Contract award will be based on the lowest total single bid as determined above.

NOTE: QUANTITY STATED UNDER DESCRIPTION IS TO BE INCLUDED IN LUMP SUM BID.

183x

LANDFILL PROPOSAL SHEET

D & R Canal
Waterway Maintenance Program
DBC P440

September 13, 1984

The bidder must submit with the bid proposal the space indicated below the name and location of the licensed landfill or landfills to which the spoils will be taken. The State by accepting a bid makes no representation or warranty that the landfill will accept the material. The State will pay no additional compensation in the event the named landfill or landfills are unable or unwilling to accept the spoils material. Submission of this documentation in no manner relieves the contractor from the contractual obligations of Section IIC paragraph 3.12 and Section IIIA of the Specifications.

This document shall not be construed to prevent the contractor from using substitute licensed landfills which may become available during the course of the contract.

Landfill Name: Princeton S.O.C.
Address: River Road

Contact Person: R. Kiser & M. Doorman
Telephone: 609-921-7077 & 609-924-3281

Quantity of spoils to be accepted by this landfill: Possible to take some

Landfill Name: South Brunswick Land Fill
Address: East New Road
South Brunswick, NJ


Contact Person: A. Bifulco & E. Amron
Telephone: 201-329-4000

Quantity of spoils to be accepted by this landfill: Possible to take some

Landfill Name: _____
Address: _____

Contact Person: _____
Telephone: _____

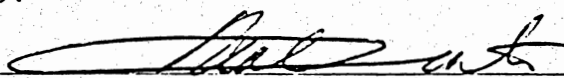
Quantity of spoils to be accepted by this landfill: _____

Bidder Signature: 
Natale G. Conti

Having examined the plans and specifications with related documents and the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the price stated. The price is to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part

Bidder hereby agrees to commence work under this contract on or before a date to be specified in written "Notice to Proceed" of the Owner and to fully complete the project within the specified consecutive calendar days thereafter as stipulated in the specifications. Bidder further agrees to pay as liquidated damages, a sum for each consecutive calendar day thereafter provided in Art. 8.6 of the General Conditions.

Bidder acknowledges and affirms that he has personal knowledge of or has obtained and reviewed a copy of the valid prevailing wage rates for all trades involved in the project at the geographical location of the project as issued by the Commissioner of the Dept. of Labor & Industry, Trenton, N.J. 08625 (609) 292-2259.



Signature of Principal
Natale G. Conti

Bidder acknowledges receipt of the following Bulletins:

BULLETIN NUMBER	DATE OF BULLETIN
"A"	22 August 1984
"B"	11 Sept 1984
"C"	14 Sept 1984

185x

PROJECT: D&R Canal
 Waterway Maintenance Program
 Prallsville to Kingston Lock
 Contract II - Duck Pond Run to Kingston Lock

UNIT PRICES : SEPARATE BID AND SINGLE BID

- (a) Unit Prices: Govern addition to or deduction from quantity included in the Lump Sum Bid and amounts actually installed on job.
- (b) Where existing work is indicated, price includes removal and replacing.
- (c) Unit prices shall include all labor, materials, equipment, bailing, shoring, removal, supervision, overhead, profit, insurance, bond, etc., required to complete work specified.
- (d) All quantities shall be verified by the Director's representative.
- (e) Changes shall be processed in accordance with Article 14 of the General Conditions.
- (f) There shall be no more than a 15% differential between add and deduct unit prices.
- (g) Deduct prices apply only if quantities are 15% or more below quantities stated the drawings or in the specifications.
- (h) Refer to IB4.4 of Instructions to Bidders for conditions.

<u>UNIT PRICES:</u> <u>ITEM NO.</u>	<u>DESCRIPTION OF ITEM</u>	<u>PAY UNIT</u>	<u>UNIT PRICE</u>
1.	* Excavation	C.Y.	<u>.01</u>
2.	* Restore Clay Liner	C.Y.	<u>20.-</u>
3.	* Embankment Stone	Each	<u>101</u>
4.	Turbidity Barrier	L.F.	<u>20.-</u>
5.	Crushed Stone #1	C.Y.	<u>40.-</u>
6.	Fertilizing & Seeding	S.Y.	<u>2.-</u>
7.	Topsoil	C.Y.	<u>18.-</u>
8.	Clearing	S.Y.	<u>3.-</u>
9.	Surface Course	C.Y.	<u>35.-</u>
10.	Crushed Stone #2 or #3	C.Y.	<u>30.-</u>
11.	Stabilization Fabric	S.Y.	<u>1.80</u>
12.	Slurry Wall	S.F.	<u>5.-</u>
13.	Masking Agent	Gal.	<u>75.-</u>
14.	Excavation Princeton Turning Basin (disposal at licensed landfill)	C.Y.	<u>25.-</u>
15.	Excavation - Princeton Turning Basin (disposal at Princeton S.O.C. landfill)	C.Y.	<u>20.-</u>

*NOTE : Unit Prices will be as shown on Page 20F9

CONTRACTOR MUST SUBMIT PRICES FOR ALL ALTERNATES (OR OTHER BASE BIDS) W
REQUIRED OTHERWISE THE BID WILL BE NON-RESPONSIVE.

PROJECT:

FOR SEPARATE BID ONLY

ALTERNATE PROPOSALS: DEDUCTIVE
(See Specifications & Drawings for full Descriptions)

Alternate No. 1: Eliminate slurry wall and use wet excavation from Millstone Aquaduct to Kingston Lock

Deduct the sum of One dollar (\$ 1.-)

Alternate No. 2: Eliminate excavation from Millstone Aquaduct to Kingston Lock but include slurry wall

Deduct the sum of Six hundred thirty thousand (\$ 630,000.-)

Alternate No. 3: Eliminate slurry wall and eliminate excavation from Millstone Aquaduct to Kingston Lock

Deduct the sum of One million one hundred fifteen thousand (\$ 1,115,000.-)

Alternate No. 4: DOES NOT APPLY

Deduct the sum of _____ (\$ X)

ALTERNATE PROPOSALS: ADDITIVE

Alternate No. 1A: Dredging of Princeton Turning Basin w/disposal of material at a licensed landfill.

Add the sum of One hundred ten thousand (\$ 110,000.-)

Alternate No. 1B: Dredging of Princeton Turning Basin w/disposal of material at at Princeton S.O.C. landfill at River Road, Princeton Township

Add the sum of One dollar (\$ 1.-)

Alternate No. 3A: DOES NOT APPLY

Add the sum of _____ (\$ X)

Alternate No. 4A: DOES NOT APPLY

Add the sum of _____ (\$ X)

ALLOWANCES

The Bidder agrees that the following allowances have been included in his proposal.

Description	Amount
1. <u>Protection of Existing Structures</u>	<u>\$100,000</u>
2. <u>DOES NOT APPLY</u>	<u>X</u>
3. <u>DOES NOT APPLY</u>	<u>✓</u>

The Bidder Agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for bids.

Upon receipt of written notice of the acceptance of this bid, Bidder will execute the formal contract within 10 days and deliver a Performance and Payment Bond as required by Instructions to bidders, Paragraph IB7, Page 4 of the Instruction to bidders.

The bid security attached in the sum of 5% of bid (\$ 238,388.35) is to become the property of the State in the event the contract and bond are not executed within the time set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

I certify that our firm is classified by the Division of Building and Construction in the approved amount of \$ 15,000,000 for *Concrete & Masonry, (trade), until 9/30/84 (expiration date). I further certify that the amount of this bid proposal, including all outstanding incomplete contracts, does not exceed my prequalification dollar limit.

Respectfully submitted,

(Seal-If bid is by a corporation)

By: Conti Construction Co., Inc.

(Name of firm)

- *Road Construction & Paving
- ! Sewage & Water Treatment
- Site Work
- Underground Water & Utilities
- Demolition
- Waste Disposal
- Dewer (Piping) & Storm Drains

Natale G. Conti
(Signature)

Natale G. Conti
President

(Title)

3001 S. Clinton Ave.

(Business Address)

So. Plainfield, NJ 07080

Phone No. 201-561-7600

FEDERAL IDENTIFICATION NO.

160573

SOCIAL SECURITY NO.

221-685-122

() Any change in ownership information since YES

filing your current financial/experience

(x) statement? If yes, attach explanation. NO

188x

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF BUILDING AND CONSTRUCTION

NON-COLLUSION AFFIDAVIT

Project: D&R Canal DBC NO. P440
Waterway Maintenance Program
Prallsville Lock to Kingston Lock Bid Due
Contract II - Duck Pond Run to Kingston Lock Date 09/20/84 2:00 P.M.

STATE OF NEW JERSEY [
 [ss:
 COUNTY OF Middlesex [

I, Natale G. Conti of the City of So. Plainfield
in the County of Middlesex and the State of New Jersey
of full age, being duly sworn according to law on my oath depose and say that:

I am President
of the firm of Conti Construction Co., Inc.

the bidder making the Proposal for the above named project, and that I execute the
said Proposal with full authority so to do; that said bidder has not, directly or
indirectly, entered into any agreement, participated in any collusion, or otherwise
taken any action in restraint of free, competitive bidding in connection with the
above named project; and that all statements contained in said proposal and in this
affidavit are true and correct, and made with full knowledge that the State of New
Jersey, relies upon the truth of the statements contained in said Proposal and in the
statements contained in this affidavit in awarding the contract for the said project.

Subscribed and sworn to

before me this 20th day

of September 1984

Edna K. Darling
Notary Public of

My Commission expires

, 19

EDNA K. DARLING
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Nov. 20, 1988

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF BUILDING AND CONSTRUCTION

Notice To All Bidders

Re: Classification & qualification of bidders

The following statutes are hereby included as a condition for acceptance of contractor's proposal and should be followed very carefully in order to avoid problems arising at time of bid openings and subsequent award to low bidder in accordance with statute, N.J.S.A. 52:35 (CLASSIFICATION OF BIDDERS):

1. (52:35-2) All prospective bidders on public work must submit financial statement under oath.
2. (52:35-8) In order to bid on any contract this statement must be filed within a period of 7 months preceding the date of opening of such bids.
3. (52:35-3) DBC shall classify all such prospective bidders as to the character and amount of public work on which they shall be qualified to submit bids; and bids shall be accepted only from persons qualified in accordance with such classification. Immediate notice of such classification shall be sent to the prospective bidders by registered mail within a period of 8 days after the receipt of the statement in response to the questionnaire.

NOTE: Until and unless a bidder has received a classification, he is not eligible or entitled to have his bid opened and read.
4. (52:35-4) Prospective bidders dissatisfied with their classification or with the classification of other bidders may request in writing a hearing before an official of DBC and will be permitted to present satisfactory evidence pertaining to change of such classification. This written request must be made 20 days preceding the final day of submission of bids and notice of the action by DBC sent by registered mail to the parties directly affected thereby at least 12 days prior to the date fixed for the opening of bids.
5. (52:35-5) Upon classification and reclassification by the DBC official, prospective bidders may then appeal to a board of review which shall consist of the following:
 - (a) a State official of DBC;
 - (b) the Attorney General or one of his deputies designated by him;
 - (c) the Secretary of State or one of his assistants/deputies designated by him.
6. (52:35-6) The board of review may consider both the statement and any additional information given at the hearing pertaining to the change or retention of the classification. Notice of request for hearing before a board review must be filed not less than 10 days prior to the final day of submission of bids and must be acted upon by the board not less than 3 days prior to the opening of such bids.
7. (52:35-7) DBC has the right to reject a bid at any time prior to the actual award where there have been developments subsequent to the qualification and classification of such bidders which in the opinion of the awarding official would affect the responsibility of the bidder. Before taking such action, the State official shall notify the bidder and give him an opportunity to present additional information.
8. (53:35-12) No action for damages out of any court shall lie against any State official because of any action taken under this Act.

NOTE: BID DOCUMENTS WILL NOT BE RELEASED TO CONTRACTORS UNLESS THEY ARE PRE-QUALIFIED

James G. Ton, Director

INSTRUCTIONS FOR COMPLETING
PROPOSAL FORMS

Because of multiple bidding laws of the State, bid proposals are solicited two ways:
(1) Separate Bids and (2) Single Bids (Lump Sum all trades).

- (a) Contractors prequalified for and desiring to bid on more than one trade must submit a separate set of proposal forms for each trade.
- (2) Single Bid means Lump Sum all trades combined. Proposal form(s) shall be checked for Single Bid (Lump Sum all trades) and pricing entered opposite Single Bid (Lump Sum all trades) designation.
 - (a) The total number and types of trades shall be as set forth in the job specifications. A Single Bid (Lump Sum) will be recognized only when it is less than the aggregate sum of Separate Bid proposals.
 - (b) Subcontractors for Single Bids (Lump Sum) must be prequalified and listed on Proposal Page 2, unless noted otherwise.

Certain projects will be solicited for both Separate Bid and Single Bid (Lump Sum). This is a requirement on alterations or where new public buildings are involved. Qualified contractors have the option to submit either a Separate Bid or a Single Bid (Lump Sum all trades) or both according to the above instructions.

When work to be done by individual trades is too small to be bid separately, the State will solicit separate bids or Single Bids (Lump Sum) as appropriate. This will be so stated in the job specifications and the State will modify the proposal form to insure that appropriate Bids are being requested.

CONTRACTOR MUST SUBMIT PRICES FOR ALL ALTERNATES (OR OTHER BASE BIDS) WHEN
REQUIRED OTHERWISE THE BID WILL BE NON-RESPONSIVE.



POWER OF ATTORNEY

SAFECO INSURANCE COMPANY OF AMERICA
GENERAL INSURANCE COMPANY OF AMERICA
HOME OFFICE: SAFECO PLAZA
SEATTLE, WASHINGTON 98185

3196

No. _____

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

-----DANIEL J. CULNEN; CARL M. JORDAN; GERALD QUARTAROLO;
JANE CALLAREMI, Bloomfield, New Jersey-----

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this _____ 18th _____ day of _____ July _____, 19 _____ 80

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA
and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. — FIDELITY AND SURETY BONDS . . . the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business . . . On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA
and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,
(i) The provisions of Article V, Section 13 of the By-Laws, and
(ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
(iii) Certifying that said power-of-attorney appointment is in full force and effect,
the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, W.D. Hammersla, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 20th day of Sept., 19 84



GENERAL INSURANCE COMPANY OF AMERICA
FINANCIAL STATEMENT — DECEMBER 31, 1983

Assets		Liabilities	
Cash and Bank Deposits	\$ 4,655,168	Unearned Premiums	\$123,428,212
*Bonds — U.S. Government	2,864,000	Reserve for Claims and Claims Expense	228,951,442
*Other Bonds	332,317,517	Reserve for Dividends to Policyholders	2,004,800
*Stocks	153,149,342	Additional Statutory Reserve	1,773,546
Real Estate	20,298,990	Reserve for Commissions, Taxes and Other Liabilities	36,313,930
Agents Balances or Uncollected Premiums ..	30,455,367	Total	392,471,930
Accrued Interest and Rents	10,038,336	Capital Stock	\$ 2,500,000
Other Admitted Assets	13,373,070	Paid in Surplus	2,391,058
		Unassigned Surplus	169,788,802
		Surplus to Policyholders	174,679,860
Total Admitted Assets	\$567,151,790	Total Liabilities and Surplus	\$567,151,790



*Bonds are stated at amortized or investment value; Stocks at Association Market Values.
Securities carried at \$40,213,018 are deposited as required by law.

I, DON H. STAY, senior vice president of General Insurance Company of America, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 1983, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 6th day of March, 1984.

Don H. Stay

Senior Vice President

Date: May 16, 1979

AMENDMENT TO AFFIRMATIVE ACTION REGULATIONS

I Article 7.4 (b) has been amended as follows:

"The contractor agrees to complete monthly Project Manning Reports on forms provided by the Affirmative Action Office or in the form prescribed by the Affirmative Action Office and submit an initial copy of said form no later than three (3) days after signing a construction contract; provided however, that the Public Agency may extend in a particular case the allowable time for submitting the initial form to no more than fourteen (14) days; and to submit a copy of said form once a month thereafter for the duration of this contract to the Affirmative Action Office and to the Public Agency Compliance Officer, provided however, that for construction projects with a total cost of less than \$50,000 the initial and monthly Project Manning Reports shall not be submitted except when requested by the Affirmative Action Office. The contractor agrees to cooperate with the Public Agency in the payment of budgeted funds, as is necessary, for on-the-job and off-the-job programs for outreach and training of minority trainees employed on the construction projects."

The above amendment effective May 30, 1979 revises the procedures for awarding construction projects as follows:

1. Contractors will no longer be required to complete initial Project Manning Reports AA201-A (Construction) or AA201-B (Heavy Equipment) and the monthly Project Manning Reports AA202-A (Construction) or AA202-B (Heavy Equipment) for construction contracts when the total project cost is less than \$50,000.
2. Public Agencies must still include the appropriate mandatory affirmative action language in all contracts of \$2,500. or more.
3. The initial and monthly Project Manning Reports are still required for construction contracts of \$50,000. or more.

II If your agency has not notified the Affirmative Action Office of the designation of your Public Agency Compliance Officer, your agency is in violation of Article 3.5 of the Affirmative Action Regulations and subject to a penalty.

To avoid a penalty, you should notify the Affirmative Action Office at once of the name, business address and telephone number of your Public Agency Compliance Officer.



STATE OF NEW JERSEY
DEPARTMENT OF TREASURY
DIVISION OF BUILDING AND CONSTRUCTION

ENVIRONMENTAL IMPACT ASSESSMENT
FOR
NEW JERSEY WATER SUPPLY AUTHORITY

DELAWARE AND RARITAN CANAL
WATERWAY MAINTENANCE PROGRAM

FROM PRALLSVILLE LOCK
TO KINGSTON LOCK
DBC P-353

JUNE 1983

PRC Harris

Division of PRC Engineering

Iselin, New Jersey

(PLEASE CONTACT THE APPROPRIATE AGENCY REGARDING THE AVAILABILITY OF THIS DOCUMENT.)

197x

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF BUILDING AND CONSTRUCTION
AND
NEW JERSEY WATER SUPPLY AUTHORITY

SPECIFICATIONS FOR
ALTERNATE 1A & 1B
DREDGING OF PRINCETON TURNING BASIN

DELAWARE AND RARITAN CANAL
WATERWAY MAINTENANCE PROGRAM
PRALLSVILLE LOCK TO KINGSTON LOCK
CONTRACT II
DUCK POND RUN TO KINGSTON LOCK
PROJECT P-440

Located In
PRINCETON TOWNSHIP, NEW JERSEY

August, 1984
PRINCETON TOWNSHIP ENGINEERING DEPT.
PRINCETON, N. J.

(PLEASE CONTACT THE APPROPRIATE AGENCY REGARDING THE AVAILABILITY
OF THIS DOCUMENT.)

STATE OF NEW JERSEY

DELAWARE AND RARITAN CANAL WATERWAY MAINTENANCE PROGRAM PRALLSVILLE LOCK TO KINGSTON LOCK

CONTRACT II

DUCK POND RUN TO THE KINGSTON LOCK DBC P 440 SPECIFICATIONS

FINAL SUBMISSION AUGUST 1984

HONERABLE THOMAS H. KEAN, GOVERNOR

DEPARTMENT OF THE TREASURY
MICHAEL M. HORN, STATE TREASURER

DIVISION OF BUILDING AND CONSTRUCTION
JAMES G. TON, DIRECTOR
ALFRED W. WENSLEY, STATE ARCHITECT

DEPARTMENT OF ENVIRONMENTAL PROTECTION
ROBERT E. HUGHEY, COMMISSIONER

NEW JERSEY WATER SUPPLY AUTHORITY
ROBERT E. HUGHEY, CHAIRMAN
ROCCO D. RICCI, EXECUTIVE DIRECTOR

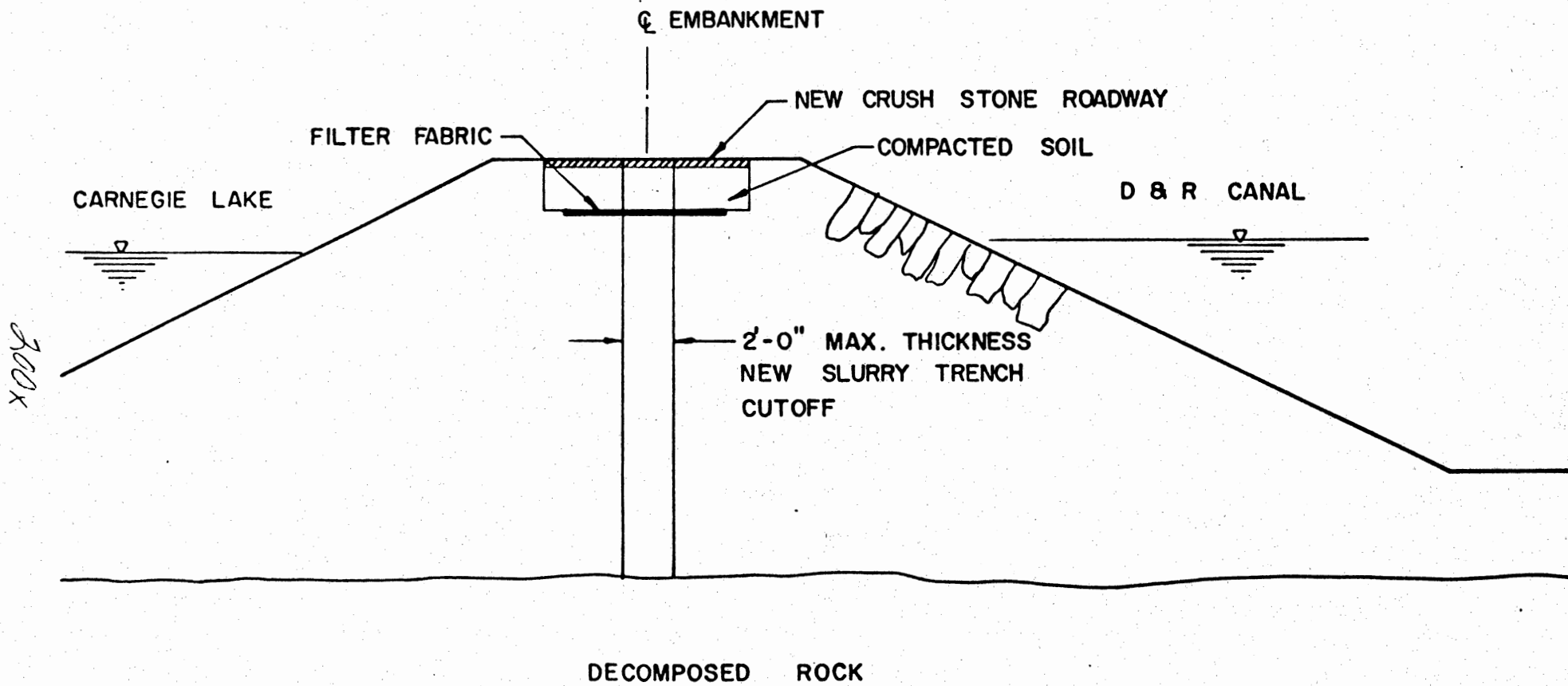
NOTE: SEE ALTERNATE I SPECIFICATIONS FOR PRINCETON TURNING
BASIN EXCAVATION

PRC Harris

**Division of PRC Engineering
Iselin, New Jersey**

(PLEASE CONTACT THE APPROPRIATE AGENCY REGARDING THE AVAILABILITY OF THIS
DOCUMENT.)

199x



300x

FIGURE 7



TYPICAL SLURRY WALL CROSS SECTION

201x

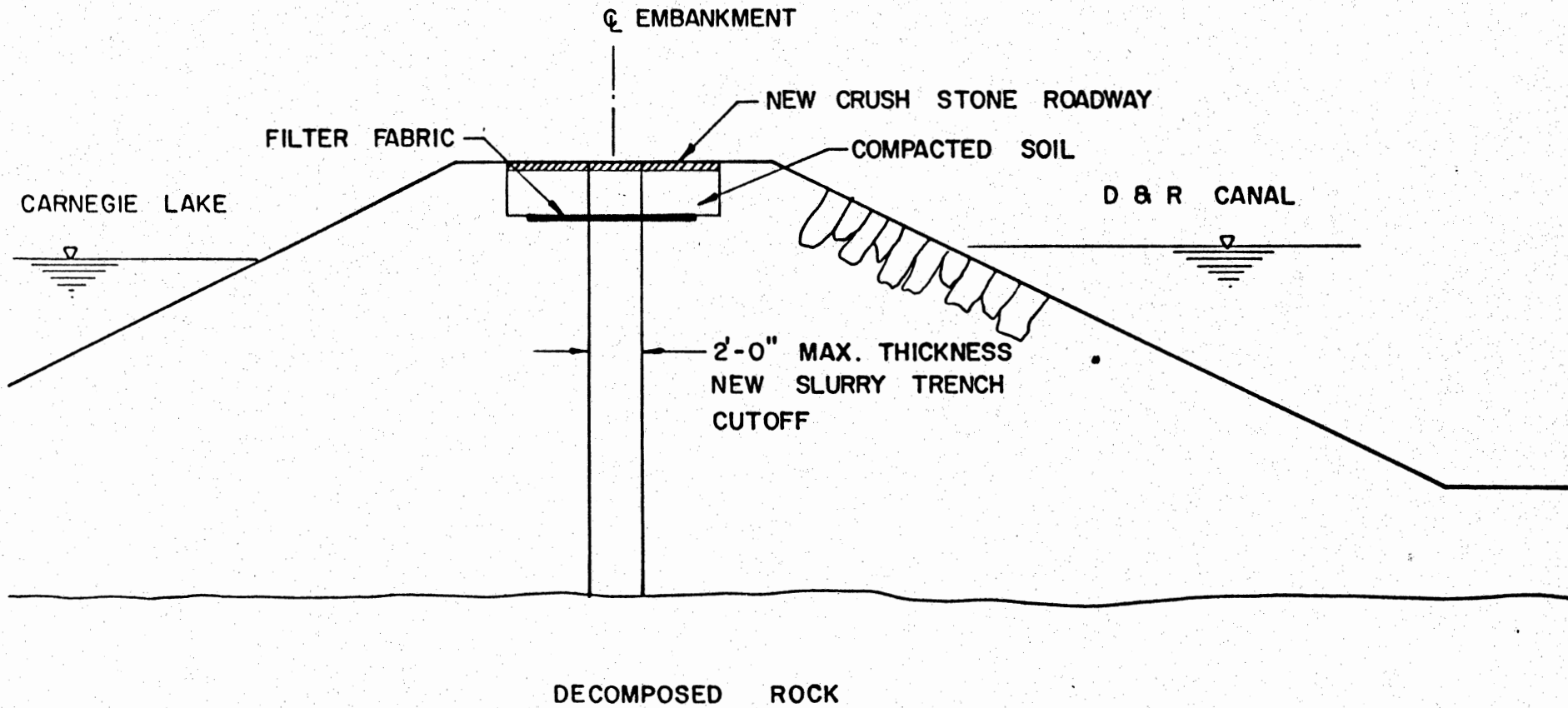


FIGURE 7

STATEMENT TO ASSEMBLY ENERGY AND NATURAL RESOURCES
ON CANAL DREDGING PROJECT

8 May 1985

The Delaware and Raritan Canal Commission was established in 1974 by passage of the Delaware and Raritan Canal State Park Law of 1974 (c.13:13A-1 et seq.). It was created in order to fulfill three principle duties:

1. To plan for the development of a State Park along the entire length of the D & R Canal.
2. To review development on lands in the vicinity of the Canal Park in order to prevent a harmful impact on the park.
3. To review State actions in the Canal Park or State permits for actions in the park.

In 1977 the Canal Commission adopted a MASTER PLAN, the first of several documents seen by the Commission as part of the planning process. In 1980 a DESIGN GUIDE was adopted, and the Commission is presently in the process of adopting a DEVELOPMENT PLAN, both of which articulate the program set forth in the MASTER PLAN.

With respect to a program to review private development, the Commission has administered a regulatory program for five years that has effectively protected the Canal Park. Our stormwater management standards have received national attention and have been duplicated by the Department of Environmental Protection for a State-wide program.

The issue at hand today, however, relates to the Commission's authority to review all State actions in the Canal Park. The Commission's enabling statute is clear on this point:

The Commission shall review and approve, reject or modify, any State project planned or State permits issued in the park, and submit its decision to the Governor. (c.13:13A-13d.)

Over a period of three years the Commission staff participated in the preparation of plans and specifications for the dredging project. These plans were then presented to the Commission and approved by them. Included in the plans was a method of tree removal which proved impractical once the contractor emptied the canal of water and began excavating sediment.

Upon a request to change the tree removal policy, the Commission adopted the following resolution at its meeting of 17 July 1984:

FIRST, the general guideline to be followed in selecting trees for removal is that gaps of thirty to fifty feet may be opened in which all trees are removed. Between these gaps should be retained individual trees, small clumps of trees, or even clumps up to twenty-five to thirty feet in length.

SECOND, within the section between the Lambertville lock (station #381) and the farmer's bridge at station #488 all trees between the railroad right-of-way and the canal may be removed.

THIRD, a group of people comprised of the Commission's Executive Director, the Canal Park Superintendent and any staff he may wish to join him, the Engineer (PRC Harris representative) and the Contractor shall jointly inspect approximately one mile in each contract to select trees or clumps of trees that are to remain. The contractor may then clear the remaining trees within this section. Upon completion of the clearing, the same group shall examine the area to determine what criteria should be applied to the remaining lengths of each contract.

FOURTH, all trees that are to be removed are to be cut as close to ground level as possible and the stumps are to be treated with an herbicide which will prevent sprouting. This herbicide is to be applied at least twice with an interval of at least six months between applications. The type of herbicide to be used must be approved by an appropriate agency to assure that it will not contaminate the water in the D & R Canal.

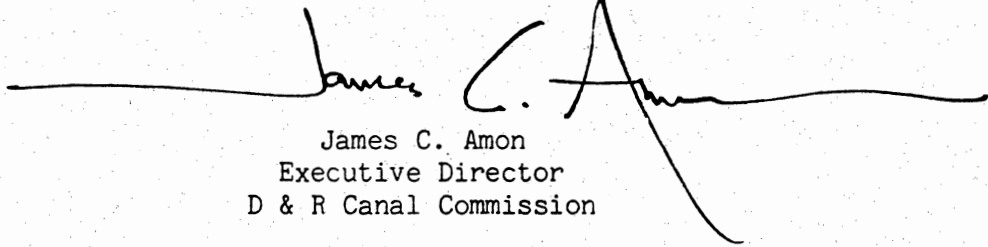
FIFTH, the resident engineer shall continue to keep a count of all trees greater than four inches in diameter (DBH). Representatives of the Commission and the State Park Service may request that compensatory tree planting take place upon the conclusion of the construction project. This compensatory planting may be requested for areas other than between the towpath (or railroad right-of-way) and the canal but it shall be in the immediate vicinity. It is anticipated that the number of trees to be planted will be far less than the number removed, but in no case shall the number to be planted exceed the number removed.

Upon inspecting demonstration areas (as called for in the third condition of the Commission's resolution of approval) the Commission was satisfied that this policy would result in an attractive and useful Canal Park. Photographs are attached to this statement which show sections of the Canal Park where this policy was executed and restoration has been complete. Not only were the Commissioners satisfied with this effect, but residents from communities where this work was carried out have repeatedly contacted the Commission office to compliment the new appearance of the Canal Park. The Commission has not received a single complaint from people who live in this area.

An exception to this policy had to be made in the area along Lake Carnegie. Because of the special needs of the dredging project in this area, and because this is a narrow, fourteen foot wide strip of land, it was determined that all of the trees in this section would have to be removed. This information was supported by the contractor, the supervising engineer, and the Water Supply Authority. The Canal Commission, like the State Division of Parks and Forestry and Princeton University (who own the western half of this strip of land) reluctantly accepted this decision with an assurance that extensive replanting with valuable native hardwood and decorative trees and shrubs would follow the dredging project.

I would like to emphasize that while the Commission and others are pleased with the appearance of the Canal Park in other areas, the present appearance of the Lake Carnegie section pleases no one. It is a landscape for which there was no perceived alternative, not a landscape of choice. The Commission staff is working with the Water Supply Authority, however, to create a restoration plan that will help this area recapture its former beauty.

Respectfully Submitted,

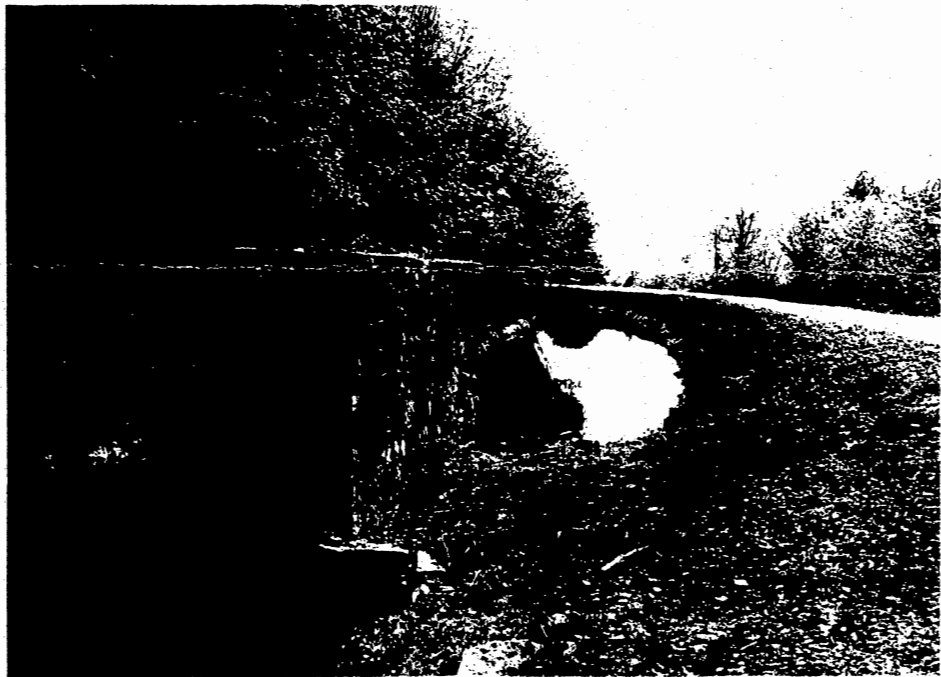
A handwritten signature in black ink, appearing to read "James C. Amon". The signature is written in a cursive style with a long horizontal line extending to the left and a large, sweeping flourish that extends downwards and to the right.

James C. Amon
Executive Director
D & R Canal Commission

JCA:pg



Stockton, Hunterdon County



West Amwell, Hunterdon County

205x



Hopewell Township, Mercer County



Hopewell Township, Mercer County

206x



Hopewell Township, Mercer County



Ewing Township, Mercer County

14

207x