

ML - Morris County Fair Housing Council
v. Boonton

Jan. 31, 1980

Transcript of Deposition of Allen Dresden

ML 000915 ~~116~~

pgs 103

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MORRIS COUNTY
DOCKET NUMBER: L-6001-78 P.W.

MORRIS COUNTY FAIR
HOUSING COUNCIL, et al

Plaintiffs

vs.

BOONTON TOWNSHIP, et al

Defendants

TRANSCRIPT OF PROCEEDINGS

: DEPOSITION OF:

: ALLEN DRESDNER

January 31, 1980
Thursday, 11:00 A.M.

57 Union Place
Summit, New Jersey

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

STANLEY C. VAN NESS, Public Advocate
BY: KEITH A. ONSDORFF, ESQ.
Attorneys for the Plaintiffs

MESSRS: MATTSON, MADDEN & POLITO
BY: LYNNE M. McDERMOTT, ESQ.
Attorneys for Passaic Township

SUPERIOR COURT
MORRIS COUNTY
FILED

FEB 25 1980

BRIAN A. NEALEY
CLERK OF COURT
DEPUTY CLERK

Reporting Services Arranged Through:
ROSENBERG & ASSOCIATES
CERTIFIED SHORTHAND REPORTERS
769 Northfield Avenue
West Orange, New Jersey 07052
Phone: (201) 678-5650

1
2
3
4
5
6
7
8
9
ello
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I N D E X

Witness

Direct

ALLEN DRESDNER
By Mr. Onsdorff

2

E X H I B I T S

<u>No.</u>	<u>Description</u>	<u>In Iden.</u>
ADP-1	Analysis of the Relationship of Selected Environmental Characteristics and Land Suitability, Township of Passaic, dated September 1979, prepared by Dresdner & Assocs.	11
ADP-2	Copy of report submitted by Dresdner & Assocs. to the Township of Passaic re: Environmental Limitations to development	12
ADP-3	Map prepared by Dresdner & Assocs. of Passaic Township showing slopes greater than 12 percent colored in brown	30
ADP-4	Map of Passaic Township prepared by Dresdner & Assocs. showing qualified farmlands	31
ADP-5	Map of Passaic Township prepared by Dresdner & Assocs. showing the seasonal high water table from 0-1 1/2 feet and the seasonal high water table from 1 1/2 - 4 feet.	32
ADP-6	Map of Passaic Township prepared by Dresdner & Assocs. showing flood boundary and floodway	33

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

E X H I B I T S (contd.)

No.

Description

For
Iden.

ADP-7

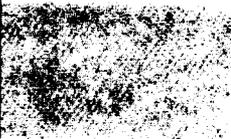
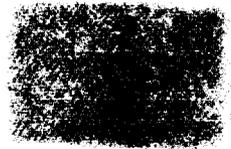
Map of Passaic Township prepared by Dresden & Assocs. showing vacant lands and agricultural lands outside the Great Swamp

33

ADP-8

Map of Passaic Township prepared by Dresden Assoc, showing vacant lands with no constraints

34



1 A L L E N D R E S D N E R, having been duly sworn,
2 testified as follows:

3
4 **DIRECT EXAMINATION**

5 BY MR. ONSDORFF:

6 Q Mr. Dresdner, as I'm sure you're aware,
7 my name is Keith A. Onsdorff and I'm one of the several
8 counsel for the plaintiffs in the Fair Housing Council
9 of Morris County versus Boonton Township, et al, in a
10 litigation involving a number of municipalities in Morris
11 County including the Township of Passaic, which, I believe,
12 you've done work for and we're going to discuss
13 today's deposition.

14 If, at any time, I ask a question that's not clear,
15 just indicate that and I'll try to clarify it so we know
16 that we're communicating at all times.

17 Could you very briefly state your area of expertise
18 as you see it?

19 A Yes.

20 I'm a land planner with experience in the area of
21 environmental planning.

22 I have an undergraduate degree in planning with
23 a minor in landscaping architecture, and a graduate degree
24 in planning and administration.

25 Q Briefly, you're professional experiences?

1 A Yes.

2 Between 1956-1971, approximately, I was employed,
3 for the most part, by the firm of Candeb, Feissig &
4 Associates. In that capacity I started as a junior planner
5 and rose to the position of chief of comprehensive planning
6 for the firm. At that time, it was one of the largest
7 planning firms in the country.

8 In my various positions over the years with the
9 firm I provided a variety of master plans for communities
10 in New Jersey as well as in Pennsylvania, Florida, Wisconsin,
11 Illinois and Ohio.

12 Additionally, I prepared development -- ~~land use~~ op-
13 ment regulations that would be zoning ordinances, subdivi-
14 sion regulations, planned unit developments for most of
15 the counties in the states that I mentioned.

16 I was also responsible for special studies includ-
17 ing regulation plans, feasibility studies, and the like.

18 During this period I took two leaves of absences.
19 One was in 1961 or 1962 where I was a research fellow for
20 the Interamerican Housing and Planning Center in Bogata,
21 Columbia, where I prepared open space and recreation stan-
22 dards for urbanizing areas of underdeveloped and undevelop-
23 ed nations in South and Central America.

24 Several years later I took another leave when I
25 was appointed a consultant of the Ministry of Housing of

1 the State of Israel. While there, I prepared a report on
2 the -- on an analysis of their New Towns Program in terms
3 of socioeconomic goals achievement. And, I directed a
4 multi-disciplinary team in the conceptual design of the
5 new town of Nazareth.

6 On or about 1971 or 1972 I joined the firm of
7 Dames and Moore, an international environmental consulting
8 firm. I was head of their environmental group in Cranford,
9 New Jersey, where we had a multi-disciplinary staff in
10 excess of 200 people, and was in charge of land planning
11 for the firm as a whole.

12 The firm had an employment ranging from 1,200
13 1,600 persons, depending upon the particular year and the
14 kind of jobs.

15 While with Dames and Moore I was a project manager
16 for a number of large and small multi-disciplinary environ-
17 mental studies. Among them included the environmental
18 impact of shopping center development, multi-family develop-
19 ment, barge area impacting activities -- coal mine, for
20 example, nuclear power plant, and so on.

21 I was with Dames and Moore for slightly less than
22 five years.

23 In August of 1977 I started my own firm, the firm
24 of Dresdner Associates which is a land planning and environ-
25 mental firm. Some of the work that we have -- we are

1 currently engaged in includes flood damage studies for the
2 US Corp of Engineers, litigation relating to the Fair
3 Share Housing suit in Morris County representing five
4 communities, preparation of an environmental statement
5 for an industrial park in Pennsylvania, a shopping center
6 in Dover Township.

7 We've recently completed a land use and housing
8 plan for the Borough of West Caldwell, and have also
9 completed a recreation plan for a 20 square mile lake,
10 the Brazos River in Texas.

11 Q In addition to those projects which you
12 enumerated, have you at any time done planning or construct-
13 ing work on the design of any least cost housing projects?

14 A Not to my knowledge, although I am Chairman of the
15 Housing Authority of the City of Summit and we have some
16 70 units of public housing of which 40 were built and
17 opened during my chairmanship -- 30 were built and opened
18 during my chairmanship.

19 Excuse me.

20 [REDACTED] Could you describe your role as pertaining
21 to these 30 units that have been built and opened during
22 your tenure?

23 A As Chairman of the Housing Authority, from that
24 of our director -- we have a director and he has been a
25 director for six or seven years and has an ongoing

1 responsibility for various functions of the Housing Authority.
 2 As Chairman of the Housing Authority it was my function to
 3 direct the executive director on the part of the Authority
 4 in the areas of policy and to support in public forum the
 5 activities of the Housing Authority, specifically with
 6 reference to the public housing.

7 I spoke before various local groups in support of the
 8 project.

9 Q In regards to these 30 units, would you describe what type of housing they are?
 10

11 A Well, they're publicly subsidized conventional
 12 housing at a density of, approximately, 10 units

13 They are comparable to garden apartments, although
 14 somewhat different than the standard or conventional garden
 15 apartment. They are not townhouses.

16 Q These garden apartments at 10 to the acre,
 17 are they on a contiguous three acre site or are they --

18 A Yes, they're on a single three acre site, in sum.

19 Q Do you recall the nature of the land on
 20 which these units were built?

21 A Oh, yes.

22 It's what we would call infill and it replaced an
 23 existing use. There was a property -- or properties that
 24 existed of a small abandoned -- or vacated gas station and
 25 a nursery, an orchid nursery. The land was sloping to the

1 streets. All the utilities were in the streets. It was
 2 bound on one side by two-family houses -- one and two
 3 family houses, on the other side by a volkswagen agency,
 4 on a third side by a high school playing field.

5 Q I believe you testified that it replaced a
 6 vacated gas station and an orchid nursery.

7 Was this an active agricultural use that was
 8 removed?

9 A We viewed it as -- it was in active use. And
 10 whether it was agriculture or commercial would depend on
 11 how you define either one.

12 Since we don't have any agricultural use
 13 we viewed it as a commercial use.

14 Q In a sense, it would not be totally inappro-
 15 priate to describe as agriculture if the orchids were
 16 grown on the site.

17 Is that correct?

18 A Well, it was all under glass. There were no field
 19 plants grown. It was solely orchids and it was a semi-
 20 mechanized operation, all under glass.

21 I think the definition of the operation depends in
 22 part on the character of the area that it's located in.

23 This was clearly a built up urban area, and if I
 24 were to prepare a land use map of the city, I would put
 25 it in commercial as I believe it was in the previous master

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2045

1 plan.

2 Q You also stated, I believe, that the site
3 was sloping to the street.

4 Do you recall the degree of that sloping land?

5 A It was a modest slope, less than -- it would be
6 less than 8 percent.

7 Q In addition to a number of other adjoining
8 properties, there were some single family houses next to
9 the site?

10 A Yes, it was a mixed area of commercial and primarily
11 two-family homes. There were -- there are some
12 family homes in the area, yes.

13 Q These were detached structures, the single
14 family and two-family houses?

15 A Yes, they were.

16 Q What we would know as conventional houses or
17 homes?

18 A That's correct.

19 Q The additional 40 units of public housing
20 which the Summit Housing Authority owns or operates, could
21 you describe their location in nature of what type of
22 dwellings they involve?

23 A Yes.

24 They're more dense -- more densely developed housing.
25 They are brick garden apartments located adjacent to the

1 downtown area and are replacement housing for existing
 2 high density slums that were on the site previously. The
 3 density is, as I recall, 20 units per acre. It is located,
 4 as I mentioned, adjacent and, indeed, considered part of
 5 the downtown area because it is bounded on at least two
 6 sides by commercial operations, a third side by a six to
 7 twelve story -- excuse me, six to twelve family building
 8 and then some two to four family homes.

9 As I recall, it is essentially nestled in a commer-
 10 cial area.

11 Q These 40 units are one other project
 12 essence?

13 A Yes, sir.

14 Q Could you briefly detail what professional
 15 relationship you've had with the Township of Passaic?

16 A This is the first professional relationship I've
 17 ever had with the Township of Passaic. I was contracted
 18 by the Township of Passaic to evaluate development oppor-
 19 tunities and constraints primarily in terms of environment-
 20 al conditions.

21 There are many other development opportunities and
 22 constraints related to other conditions: traffic, utilities,
 23 character of area.

24 We looked at, essentially, the environmental limita-
 25 tions to development.

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2048

1 Q When did you begin this work?

2 A We began to work during the summer of 1979, August
3 8, 1979, when we were authorized to initiate work.

4 Q When you say "we," is that an editorial or
5 did you have a staff assist you in this project?

6 A I meant it editorially and I did have a staff and
7 it included John Thonet, a hydrologist and flood plain
8 specialist.

9 Q After your authorization to begin work on
10 August 6, do you recall when you actually began this project?

11 A Probably on or about August 6.

12 Q As far as work product that you prepared
13 I show you this document and ask if you can identify it?

14 A This is -- this document which is undated, unfortun-
15 ately, but is -- has handwritten notes in it is the first
16 draft that I prepared for the Township of Passaic.

17 Q Do you know whose handwritten notes those
18 are?

19 A They are not mine, and if they were done in my office--
20 I believe they were -- they would be John Thonet's.

21 MR. ONSDORFF: Let us have this marked.

22 MS. McDERMOTT: The only thing I would like
23 to say for the record is that those marks I know
24 were done from someone from the Public Advocate's
25 office.

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2044

1 I submitted the figures by telephone which
2 were inserted into the draft of the report. A sub-
3 sequent report with the figures typed in was sent.

4 THE WITNESS: Here's a copy of this.

5 MR. ONSDORFF: I wasn't aware as to the source
6 of the handwritten notes.

7 MS. McDERMOTT: The original report submitted
8 to them had no figures, whatsoever.

9 THE WITNESS: Yes, that's correct.

10 MS. McDERMOTT: Right.

11 Q Did we recall a date of this as of yet,
12 Mr. Dresdner, as when that was submitted?

13 A I can give you an estimated month. It was September
14 1979 -- would be a reasonable month.

15 MR. ONSDORFF: Let us mark that ADP-1 for
16 identification.

17
18 (ADP-1 for identification is the analysis of
19 the Relationship of Selected Environmental Character-
20 istics and Land Suitability, Township of Passaic,
21 dated September 1979, prepared by Dresdner & Assocs.)

22

23 Q ADP-1 was then generated in some period of
24 time between one and two months, depending on when in
25 September that was completed.

1 Is that correct?

2 A That is correct.

3 MS. McDERMOTT: For the record, if you need
4 the date, I have it in my files in the office.

5 MR. ONSDORFF: Okay, check on that later, then.
6 Thank you.

7 Q This draft report was followed by a final
8 report.

9 Do you recall the date of your final report,
10 Mr. Dresdner?

11 A That would be during the month of November 1970

12 Q I show you a copy of this document
13 if you can identify it?

14 A This is a copy of the report that I submitted to
15 the Township of Passaic regarding the environmental limita-
16 tions to development.

17 MR. ONSDORFF: I would ask that that be
18 marked as ADP-2 for identification.

19
20 (ADP-2 for identification is a copy of a
21 report submitted by Dresdner & Assocs. to the
22 Township of Passaic, re: Environmental Limitations
23 to development.)

24
25 Q In comparing ADP-1 with ADP-2, I think you

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2046

1 mentioned before in the draft of the report you hadn't
2 put in the figures as to the various land categories.

3 [REDACTED] In addition to filling in those numbers, do you recall
4 whether there are any other substantive changes between the
5 draft of September and the final report issued in November?

6 Would it be fair to say from your inspection you
7 do not recall, offhand, your making a quick comparison?

8 A That's correct.

9 It should be essentially the same except for changes
10 or inclusion of numbers, any other -- any conclusions
11 should be the same.

12 Q In other words, your analysis and [REDACTED]
13 were essentially completed by September and the draft was
14 submitted and then compilations of the size of the categor-
15 ies were completed and put into the final report.

16 Is that accurate?

17 A Yes, that's accurate.

18 As I recall, the Public Advocate was to receive --
19 or the Judge was to receive reports by October 1. I seem

20 [REDACTED] that number. And, this report was put in in order
21 [REDACTED] that deadline, and subsequently gaps were filled in.

22 Q You were responding to time pressures, in
23 essence, in meeting a deadline?

24 A Yes.

25 Q Could you briefly summarize the nature of

1 the studies and analyses that you performed in preparing
2 ADP-1?

3 A Our studies involved two things. First, a literature
4 search, going through literature that applied specifically
5 and generally to the Township of Passaic: the Great Swamp,
6 to the environmental regime that was the Township of Passaic
7 and that acted on the Township.

8 Secondly, we conducted a reconnaissance survey of
9 the community, going through the community essentially in
10 a car and relating what we saw to the literature that we
11 had available, at that time; putting the literature as well
12 as our objectives together.

13 We prepared a series of draft maps which were in
14 part -- in large part the basis of our report. And, we
15 prepared the maps first and then the report, since so much
16 of the report depends on -- our analyses depends on spatial
17 and use relationships as well as measurements of area.

18 We were of the opinion that a logical approach
19 would be to develop the maps and from the maps our analyses
20 which would then be incorporated into the text.

21 Q The compilation or list of the literature
22 which you examined, is that recorded in the Appendix of
23 ADP-1 appearing on Page A1 - A2?

24 A Yes, sir, it is.

25 Q You mentioned that your survey of Passaic

1 was conducted by automobile.

2 Does this involve a continuous survey of the
3 ~~the~~ or was it at times you stopped the vehicle and
4 ~~traversed~~ it by foot over land?

5 A Well, the latter, although it was essentially the
6 former. That is, we very seldom got out of the car, but
7 occasionally did, perhaps to get a better view of the land
8 that was inaccessible from -- inaccessible visually from
9 the car. And, of course, much of the land was inaccessible,
10 anyway, by foot or car.

11 Q Do you recall any times when you left the
12 vehicle and actually went beyond the borders of a property
13 and entered it for an onsite inspection?

14 A Yes.

15 Q Do you recall what sites those were that
16 you inspected personally?

17 A Not so many sites, but rather areas.

18 I can indicate it by looking at a USGS map.

19

20 ~~(An off the record discussion is held.)~~
21

22 Q I am sorry, Mr. Dresdner, we got onto a
23 little sidebar there.

24 Have you had an opportunity to review your map?

25 A Yes.

1 On Long Hill Road between White Bridge Road and
2 Myersville, I recall stopping the car to get out and look
3 westerly across the Great Swamp lands.

4 Additionally, on Passaic Valley Road in the area to
5 the west of Sterling there is a swamp system through which
6 I believe, as I recall, a transmission corridor passes and
7 we went to look at that area.

8 In the area of White Bridge Road and Carlton Road
9 we went down a cul-de-sac, got out of the car and looked
10 across the swamps that are located to the east of the
11 cul-de-sac.

12 These were the areas that come to mind.

13 Q On any of these occasions did you take any
14 measurements or soil bearings or other physical tests of
15 the site conditions or ~~area~~ the area's physical characteristics?

16 A No, they were solely observations. They were in-
17 tended to confirm or deny descriptions that we had from
18 the National Resource Inventory or the USGS map.

19 Q Directing your attention to Page 1 of ADP-2,
20 the first full paragraph in this summary, it states in
21 the last complete sentence, "The purpose of these investi-
22 gations is to define the relationship of the above mention-
23 ed environmental characteristics to land development suit-
24 ability in the Township in order to identify the amount and
25 distribution of vacant lands or 'developable'."

1 Could you define what it was that you were endeavor-
2 ing to identify as far as vacant developable land?

3 A Yes.

4 Developable is in quotes and it represents my under-
5 standing of the New Jersey Department of Community Affairs's
6 definition of developable in their Fair Share Report from
7 1978.

8 Developable in their terms are vacant and agricultur-
9 al lands in excess of 12 percent slope, wetlands and quali-
10 fied farmland assessment lands. So, developable would be
11 vacant and agricultural, less those three items.

12 Q Do you concur in that definition of developable
13 lands?

14 MS. McDERMOTT: I would like to note for the
15 record that we didn't ask him for an opinion on that
16 particular topic. Our instructions were to do a
17 study based on the State's criteria. We were
18 directing our investigations in that area and did
19 not ask for further studies, although we did come
20 up with other additional comments.

21 MR. ONSDORFF: I wouldn't think it would be
22 important if in the context of this litigation
23 whether you have a personal opinion otherwise that
24 you're willing to stipulate for the terms of this
25 litigation that this would be the criteria for

1 determining this developable land.

2 MS. McDERMOTT: The only thing you made
3 certain observations about was the Great Swamp
4 with limitations in development. But, our defini-
5 tion -- what we have used throughout has been the
6 DCA definition of vacant developable land.

7 I will ask him if he has other comments about
8 it. I mean, if you want to ask him, that might
9 change with reference to Passaic Township that
10 definition. But, that's what our intention was.

11 MR. ONSDORFF: My only concern is if at
12 trial we're going to limit our analysis to these
13 lands in Passaic to these criteria, fine, I have
14 no interest in pursuing what other thoughts he has.
15 But, since the Great Swamp is in Passaic and he
16 feels that might be relevant to development deci-
17 sions, you might rely upon that at trial.

18 MS. McDERMOTT: The only thing, for purposes
19 of motion we may stipulate just to the DCA's de-
20 finition. But, if we go to trial we may go into
21 it further. If so, I will question him.

22 If you have any other comments regarding
23 our town other than the DCA definition, go ahead.

24 THE WITNESS: Oh, yes.

25 A (Continuing) Developable is a relative term. If

1 you take the extremes of development or nondevelopment,
2 there are other -- there are criteria other than environ-
3 mental which one would use to identify a site as being --
4 as one that should be undeveloped. What comes immediately
5 to mind is recreation lands which some types -- some types
6 of which have no relationship, whatsoever, to environmental
7 conditions, but rather relate to the pattern and distribu-
8 tion of population.

9 Q Let me just interrupt there.

10 As far as other concerns, I'm not asking this as
11 an academic exercise, solely limited to what would be
12 germane to making sensible and appropriate development
13 decisions within Passaic.

14 A Yes.

15 These three criteria would be reasonable for Passaic.

16 I would also add, though, that there are ranges of
17 development usually expressed in terms of density. That
18 would be low density to high density.

19 I think there are factors other than the three that
20 DCA has identified that in Passaic would effect density
21 as opposed -- or as contrasted to development. That is,
22 if there are certain areas which because of environmental
23 conditions not identified by DCA are desireable -- most
24 desireable as low density development than drastic and
25 high density development.

1 Q Could you elaborate on what are the factors
2 in addition to those identified by DCA which would lead you
3 to recommend certain densities for development which would
4 be considered for these properties within Passaic?

5 A Yes.

6 These would be the areas outside of the Great Swamp
7 National Wildlife Refuge, but within the drainage basin of
8 the Great Swamp, and characterized by lands which have a
9 high seasonal water table but are not considered flood
10 plains.

11 That is, you've got the swamp, you've got an area
12 that's part of and adjacent to the swamp that are wetlands
13 and flood plain. Then adjacent to that area as you move
14 higher up the slope or the elevations you've got an area
15 of soils that are characterized by a ground water table
16 that is from one and a half to four feet below the surface
17 of the land. This area is very much a part of the hydro-
18 geologic regime of the Great Swamp, and to the extent that
19 this area is effected, so is the Great Swamp. The Great
20 Swamp being a national wildlife refuge, being an environ-
21 mentally sensitive area and also a critical area --

22 And I distinguish between the two -- the adjacent
23 lands that effect the integrity of the Great Swamp are
24 extremely important.

25 Q In determining the boundaries of the lands

1 which effect the integrity of the Great Swamp, I believe
2 you testified that these were those areas outside of the
3 refuge but within the drainage basin, is that correct, of
4 the Great Swamp?

5 A Yes.

6 Portions of it may be within the refuge, but I
7 dealt with the entire refuge as a nondevelopable area.

8 Q Would drainage basin be synonymous with the
9 Great Swamp water shed area?

10 A Yes, it would be comparable to that, yes.

11 Q Can you define or delineate the boundaries
12 of the Great Swamp water shed area?

13 A Within Passaic I can, and it generally follows a
14 line located along the ridge of Long Hill.

15 Long Hill is a ridge that extends, generally, north-
16 east to the southwest through Passaic Township along which --
17 along the top of which is located Long Hill Road.

18 On the north side of Long Hill water drains largely
19 into the Great Swamp. On the south side of Long Hill
20 water drains largely into the Passaic River.

21 Now, the Great Swamp also eventually drains into
22 the Passaic River, but it's a separate sub-basin.

23 Q I missed that last area that you discussed
24 as far as being a separate sub-basin.

25 A The Great Swamp eventually drains into the Passaic

1 River, but the Great Swamp -- within Passaic is considered
2 a separate sub-basin of the Passaic River.

3 Q In terms of the south side of Long Hill
4 which you indicated drains the Passaic River, those lands
5 outside of the Great Swamp water shed would not be included
6 within your additional development consideration as to
7 having impacts on the integrity of the Great Swamp environ-
8 mental regime.

9 Is that correct?

10 A That's correct.

11 If I can just repeat it to make sure that we do
12 both understand what I'm saying -- and that is, in addi-
13 tion to the three DCA criteria for nondevelopable land,
14 a fourth relates to the Great Swamp, and that fourth which
15 is a high ground water table is located on the north side
16 of the Long Hill rather than the south side.

17 And, I think you understand what I was saying, but
18 I wanted to make sure.

19 Q What I'm trying to pin down for those lands
20 south of Long Hill, you're applying just the three DCA
21 criteria in making the development determinations.

22 Is that correct?

23 A That's correct.

24 Q Can you place an estimate on how much land
25 falls on either side of the hill and how many lands are

1 in these two categories of development criteria?

2 A I do not believe I can for the three criteria that
3 DCA has. For the fourth criteria that I included, I do
4 believe I have a figure. And if I do, I will give it to
5 you.

6 I apparently do not have that figure for the season-
7 ally high ground water table that is not a wetland but is
8 in the Great Swamp.

9 In terms of developable area, I dealt only with
10 three DCA criteria. I developed the seasonally high water
11 table primarily to show there are areas within the Town-
12 ship that although developable should be developed at
13 low densities rather than high densities.

14 Q These are these lands impacted with the
15 high water table?

16 Is that correct?

17 A Yes.

18 Q Could you elaborate briefly on why you feel
19 it's more appropriate to develop such lands at lower
20 densities?

21 A Yes.

22 There's a hydrogeologic or hydrolic relationship
23 between these lands and the Great Swamp. There is also
24 a cultural and natural interface along these lands. That
25 is, these lands generally separate the wild and undeveloped

1 Great Swamp from the developed areas of the Township.

2 For the most part, these lands with high water table
3 have not been developed because of environmental constraints
4 as reflected in construction costs. These are not the most
5 desirable lands for development.

6 There are other lands in the Township that are much
7 more developed. So, over the years these have not been
8 developed but are now because of development pressures
9 elsewhere in the Township and the general area, have become
10 financially or economically more suitable for development,
11 and that puts pressures in this area.

12 Over the years they've represented a buffer between
13 the built up residential areas in the Township and the
14 open and undeveloped areas in the Great Swamp. This buffer
15 was used to a great extent by animal species of the Great
16 swamp than they were by man.

17 As these areas become developed the conflict of
18 the -- between animal and man increases. Usually in this
19 area, to the detriment of the natural species. That is,
20 there are none in there particularly dangerous to man.
21 A bear is not going to attack a man because there are no
22 bears in there. Deer will retreat further into the swamp.
23 However, to the extent that there is this conflict, the
24 animal species suffer the most.

25 It also creates nuisances to urban development.

1 That is, skunks, chipmunks, squirrels, raccoon, tend to
2 invade backyards and become nuisances to the extent that
3 this conflict can be reduced.

4 We feel both urban development and the Great Swamp
5 gains.

6 In addition to this, I can think of a conflict --
7 perhaps more seriously the change in the hydrologic environ-
8 ment or regime.

9 That is, as development occurs, as land is built up,
10 areas that traditionally and previously have been used as
11 a flood detention basin now comes out of the flood detention
12 basin and increases surface water runoff into other areas
13 creating downstream flooding conditions. As the ground
14 water table in these areas that have a high seasonal ground
15 water are reduced, because of the development, the reservoir
16 in the lands -- the subsurface reservoir, as it were in
17 lands adjacent to the Great Swamp, are depleted and the
18 Great Swamp loses its surface and ground water volumes
19 during low flow periods, which is during the summer.

20 In order for a swamp to maintain a reasonable year-
21 round characteristic they must be supported by adjacent
22 lands outside of the swamp. There has to be a subsurface
23 reservoir of ground water constantly feeding in during the
24 entire year in order to keep the water in the swamp at a
25 reasonable elevation for swamp conditions. When this

1 ground water reservoir is reduced or eliminated, then the
2 source of water during low flow periods for a swamp is
3 lost and that year-round swamp characteristic is lost,
4 also.

5 Q As far as the boundary lands outside the
6 swamp which support the hydrologic regime of the under-
7 ground reservoir, are these lands restricted to those in
8 Passaic or are there areas in and about the swamp in other
9 communities, as well?

10 A In other communities? Absolutely.

11 Q Development that may take place and displace
12 open areas which now act as aquifer recharge, do you know
13 whether or not the densities or the development which is
14 permitted under the current zoning ordinances of these
15 municipalities are consistent with the preservation of
16 the hydrological regime of the Great Swamp?

17 A Are you speaking generally or Passaic?

18 Q Well, generally, because you indicated that
19 the swamp is supported by lands beyond Passaic.

20 A Generally speaking, these areas are of a relatively
21 low density.

22 Q The present development, you mean?

23 A No, the present zoning ordinance of Harding Township,
24 Chatham, Passaic Township -- Morris Township may even be
25 in there. I'm not sure about Morris, but Chatham, Passaic

1 and Harding do zone these areas generally low density.

2 Q Have you done any quantitative analyses or
3 have you reviewed any quantitative analyses which indicate
4 the amount of ground water replenished?

5 That is, required to maintain the integrity of the
6 Great Swamp and compared it to the amount of water present-
7 ly entering the swamp and further compared it to develop-
8 ment densities authorized under the current zoning ordinances
9 in Harding Township, Chatham and Passaic in order to evalu-
10 ate whether or not these environmental interests in the
11 hydrological regime of the swamp is threatened or preserved
12 by the current zoning ordinances?

13 MS. McDERMOTT: Before you answer that, I
14 think you have at least three different questions
15 within that.

16 If you can't answer the entire thing, answer
17 it partly, because you may have done some of the
18 studies and other ones you may not. So --

19 A Well, actually, one answer will suffice, and that
20 is: no, I have not done those things.

21 Q As far as Passaic is concerned, would it
22 be conceivable that Passaic could allow, say, no develop-
23 ment whatsoever in its drainage basin leading to the Great
24 Swamp because of development policies of these other commun-
25 ities which also border on the swamp, that the hydrologic

1 regime in the swamp would be severely impacted irrespective
2 of Passaic's actions in terms of preserving this ground
3 water replenishment?

4 A Absolutely.

5 Q You mentioned that these lands in the buffer
6 area were appropriate for lower density development. Can
7 you be more specific as to what densities you're talking
8 about?

9 A Well, I could only talk in ranges rather than a
10 specific density. And, it would depend in part on the
11 utility available and the coverage. But, I would recommend
12 to those areas that densities should be less than -- at
13 least less than half an acre per lot. By that, I mean
14 it should be one-half an acre lot or larger in the area.

15 Q Would it make any difference as far as
16 environmental interests that you have identified if the
17 total land area in the buffer zone was quantified and the
18 one-half acre lots were divided into that to give you a
19 total number of dwellings, and then rather than spreading
20 those dwellings out on individual half-acre lots throughout
21 this total of the buffer area, these dwellings were built
22 in clusters at higher densities while maintaining the
23 overall coverage which you've identified as dwellings of
24 one-half acre lot sizes?

25 A Clustering would generally be preferable. That way,

1 you would have much greater design flexibility to incorpor-
2 ate protective measures.

3 Q In addition to the incorporation of protective
4 measures as to mitigating offsite impacts, would it addi-
5 tionally be possible to cluster in those areas which are
6 the farthest away or have the least impacts upon the swamp?

7 A Yes, it would be -- it would be a desirable aspect
8 of the possibility.

9 MR. ONSDORFF: Off the record.

10
11 (An off the record discussion takes place.)

12
13 Q I believe you mentioned that you prepared
14 certain maps prior to actually drafting your substantive
15 report.

16 Do you recall what maps those were that you prepared?

17 A Yes, they were prepared under my direction, and I
18 can put them out now.

19 I would like them labelled, also.

20 Q Let's take a look at them and I think we
21 probably will.

22 A The first map is a slope overlay at a scale of one
23 inch equals 800 feet. And, it shows all of the slopes
24 that are greater than 12 percent, and those slopes are
25 colored in brown.

1 MR. ONSDORFF: I think we're up to ADP-3.

2

3 (ADP-3 for identification is a map prepared
4 by Dresdner & Assocs. of Passaic Township showing
5 slopes greater than 12 percent colored in brown.)

6

7 MS. McDERMOTT: These are going to be made.
8 We're going to have different maps for trial.

9 THE WITNESS: I mentioned earlier that they
10 were drafts.

11 MR. ONSDORFF: Let me ask a question on that
12 because I don't know how many opportunities we are
13 going to have to view this.

14 Q As far as the substantive delineations of
15 the lands impacted by slopes in excess of 12 percent,
16 what you're talking about is superimposing this on a
17 finished product.

18 Is that correct?

19 A That's correct, and tracing.

20 Q The actual substantive work has been completed
21 as shown on this?

22 A That's correct, and this is it.

23 Q The areas shown in brown which appear to
24 bisect the municipality on a generally east to west axis,
25 is it, in essence, the Long Hill ridge?

1 A That's correct.

2 Q Those areas on the top of the ridge which
3 are level are not colored in brown.

4 Is that correct?

5 A Well, they are not in excess of 12 percent and they
6 are not colored in brown.

7 There are portions of the ridge -- and, of course,
8 the very top of the ridge very often is rounded but not
9 steep.

10 Q What is the next map that you have prepared?

11 A The next map shows qualified farmlands in the
12 Township.

13 Q Those are displayed with a green color code?

14 A Yes, sir.

15 There are certain green shapes that are crossed
16 out and these are agricultural lands that were not quali-
17 fied farmlands. So, only the qualified farmlands which
18 are fewer than agricultural lands are included here and
19 are measured.

20 MR. ONSDORFF: We'll mark this as ADP-4.

21

22 (ADP-4 for identification is a map of
23 Passaic Township prepared by Dresdner & Assocs.
24 showing qualified farmlands.)
25

1 Q Your next map, Mr. Dresdner?

2 A The next map of the Township of Passaic shows the
3 seasonal high water table in two colors. The high water
4 table that is generally from zero to one and a half feet
5 deep based on soil maps is shown in red, and the seasonal
6 high water table from one and a half to four feet -- again,
7 based on the soil maps, is shown in green.

8 MR. ONSDORFF: That's ADP-5.

9
10 (ADP-5 for identification is a map of
11 Passaic Township prepared by Dresdner & Assocs.
12 showing the seasonal high water table from 0-1 1/2
13 feet and the seasonal high water tables from 1 1/2
14 to 4 feet.)

15
16 Q Your next map, sir?

17 A The next map is a flood boundary and floodway map
18 of the Township which shows in orange the 100 year flood
19 plain based on the HUD Flood Insurance Maps. Certainly,
20 all of the flood plain is the flood fringe and only a small
21 portion primarily along the Passaic River is in the flood-
22 way portion of the flood plain.

23 Q Are these all the maps?

24 A I have another map of the vacant --

25 Q Before we go on, we need to mark the

1 previous one as ADP-6.

2
3 (ADP-6 for identification is a map of
4 Passaic Township prepared by Dresdner & Assocs.
5 showing flood boundary and floodway.)
6

7 Q Please continue.

8 A I have a map which shows in green the vacant lands
9 in the Township. These would be vacant and agricultural
10 lands outside of the Great Swamp.

11 MR. ONSDORFF: That would be marked as ADP-7.

12
13 ADP-7 for identification is a map of
14 Passaic Township prepared by Dresdner & Assocs.
15 showing vacant lands & agricultural lands outside
16 of the Great Swamp.)
17

18 Q Finally, one last exhibit?

19 A This is the vacant lands with no constraints. And,
20 this shows the vacant lands which have neither the con-
21 straints that DCA places on undeveloped lands nor the
22 constraints -- the fourth constraint that I had earlier
23 mentioned. That is, seasonally high ground water tables
24 within the flood-- within the water shed of the Great
25 Swamp.

1 This map was not to be used for calculations, but
2 merely to give us an idea of where lands laid.

3 MR. ONSDORFF: We'll mark that as ADP-8
4 for identification.

5
6 (ADP-8 for identification is a map of
7 Passaic Township prepared by Dresdner & Assocs.
8 showing vacant lands with no constraints.)

9
10 Q I believe you mentioned in regards to making
11 development decisions an addition to onsite environmental
12 characteristics, particularly vacant parcels. Additionally,
13 there were many other considerations in determining appro-
14 priate densities for development: traffic, adjacent pro-
15 perties, character and development in the area, and these
16 types of factors.

17 Is that correct?

18 A Yes, sir.

19 Q But as far as environmental factors effecting
20 the vacant lands within Passaic Township, Exhibit ADP-8
21 indicates there are no abnormal or unusual environmental
22 restraints on high density development being placed on
23 these sites which you've identified as vacant with no
24 constraints.

25 Is that correct?

1 A Subject to whatever high density means.

2 These are the lands that we would consider most
3 suitable for development.

4 MR. ONSDORFF: Let us break now for lunch.

5

6 (A luncheon recess is taken.)

7

8 Q I believe, Mr. Dresdner, just before we
9 broke for lunch I asked you as to the suitability of these
10 lands which you have designated as vacant land with no
11 constraints for development at high densities. And you
12 answered that, in essence, these were the lands which were
13 best suited for development in the municipality and it
14 depended upon how we define high density housing.

15 Let me rephrase the question.

16 Do you know of any reasons that would limit the
17 density that can be placed on dwelling units for these
18 locations?

19 A Yes.

20 It's usually preferable to locate your higher den-
21 sity areas on major traffic streets closer and to have
22 access to public water and sewer. Also, the shape and
23 size of the lot itself.

24 Q The factors limiting development densities
25 that you mentioned, to my mind they don't refer to the

1 onsite characteristics: the traffic, streets and the
2 accessibility to the public water and sewers. We're
3 limiting our consideration of density to the environmental
4 characteristics of these sites.

5 Would there be any limiting factors to the densities
6 placed upon them?

7 A Generally, no. But, again, it's -- this site specific.

8 For example, the soil conditions may be such that
9 they lack the bearing capacity for higher density building.
10 That can be mitigated and corrected, but that's at addition-
11 al cost.

12 The quality of vegetation might be such that you
13 would want to preserve it.

14 Those are two things -- two onsite considerations
15 that come to mind.

16 Q As far as doing the actual very site specific
17 analyses that would be required to give a definitive or
18 comprehensive answer, you have not done that type of work?

19 A That's right.

20 Q With respect to your other criteria for
21 density decisions, have you done any analysis of the streets
22 which are in the vicinity of these sites on ADP-8 to deter-
23 mine whether or not they have the capacity to serve any
24 additional level of housing density?

25 A No, sir, I have not.

1 Q You also mentioned sites being close into
2 community facilities.

3 Have you done an analysis of the sites to determine
4 their proximity to any of the facilities you're referring
5 to in that criteria?

6 A I haven't done any site suitability or feasibility
7 analysis of any of the sites regarding low, moderate or
8 high density.

9 Q In respect to the availability of public
10 water and sewer, are you aware of whether or not these
11 utilities are available to any of the vacant areas within
12 the municipality of Passaic Township?

13 A Yes.

14 They're available to at least some of the vacant
15 lands in the Township.

16 Q As to these particular sites, have you done
17 any analysis of their availability to these sites?

18 A No, I have not.

19 Q Directing your attention to Page 2 of your
20 final report of November, the Table 1, the Liability
21 Distribution of Land, Township of Passaic, 1979, and the
22 last figure under the column of acres is 409 for vacant
23 developable land.

24 Are these the lands which have been mapped on
25 Exhibit ADP-8?

1 A Yes, sir -- oh, one second.

2 No, they are not the lands that are noted on ADP-8.
3 The lands noted on ADP-8, as I recall, do not include that
4 fourth category of environmental constraints which is high
5 lands characterized by a seasonally high water table outside
6 of the Great Swamp, but within the Great Swamp water shed.

7 These would be less than 409 -- 409 acres.

8 The lands that are on ADP-8 are less than 409 acres.

9 Q In other words, from the vacant developable
10 lands shown in Table 1, to get to your bottom line figure
11 as to lands not subject to any unusual environmental limita-
12 tions you would have to additionally subtract those lands
13 within the water shed of the Great Swamp which have the
14 high water table that you referred to previously.

15 Is that correct?

16 A No, I consider those lands developable in terms of
17 the Township of Passaic. It's just that low densities -- and
18 they are developable lands in DCA's criteria.

19 Q Why don't we take each of your map exhibits
20 one at a time in the order that we initially identified
21 them?

22 The brown coloration on Exhibit 3 which delineates
23 slopes in excess of 12 percent, could you indicate in what
24 manner the boundaries of those environmental lands were
25 calculated?

1 A Yes.

2 It was taken from the USGS map and consisted of
3 USGS USDA for Chatham and Bernardsville.

4 Q Do you know the scale of the USDA quad?

5 A One inch equals 2,000 feet.

6 Q Would there be a standard deviation from
7 that mapping scale which would be applicable to the lands
8 which you have mapped as in excess of 12 percent slopes?

9 A There wouldn't be a standard deviation from scale
10 to scale. The land shown as being greater than 12 percent
11 is a gross showing. That is, the USGS map has the contour
12 lines at 50 foot intervals. So, between one interval and
13 another of elevation, there can be considerable modulation
14 of slope. And, what this represents are the steep slopes
15 based on this 20 foot interval.

16 I'm of the opinion that it evens out. We have
17 areas included in here which are less than -- which have
18 a less than 12 percent slope and are equally left out
19 areas which have a greater than 12 percent slope.

20 But insofar as planning for communities is concern-
21 ed, the USGS maps are a perfectly reasonable tool to use
22 to prepare this kind of a slope map.

23 More accurate, of course, would be one or two foot
24 intervals. But, that level of detail is ordinarily used
25 in site planning and not in comprehensive planning of a

1 community.

2 Q What was the date of the USGS quad sheet
3 which you relied upon?

4 A The date is 1970. And, that includes revisions
5 from 1955. So, the original was in 1955 and the update
6 was to 1970.

7 Q The next exhibit you prepared, I believe,
8 was a Qualified Farmland Map?

9 A Yes, it was.

10 Q In what manner were the lands so delineated--
11 determined as to their location and size and configuration?

12 A These lands were taken from the Township's -- Town-
13 ship's tax assessor's records and they were noted on the
14 tax map then transferred to this map.

15 Q On Table 1 on your final report those lands
16 of slopes in excess of 12 percent are shown to be 127 acres.

17 Is that correct?

18 A Yes.

19 Q Your Exhibit 3, those areas shown in brown
20 comprise 127 acres.

21 Is that correct?

22 A (No response.)

23 Q Do you recall the pending question?

24 A No.

25 MR. ONSDORFF: Please read that back.

1 (The Court Reporter reads the requested question:
2 Your Exhibit 3, those areas shown in brown comprise
3 127 acres.

4 Is that correct?)

5

6 A That's correct.

7 Q On your Exhibit 4, it depicts the qualified
8 farmlands --

9 A If I can interrupt and qualify that.

10 They do not include the 127 acres -- does not include
11 those portions of the steep slopes that are in the qualified
12 farmlands.

13 Q As to Exhibit 4, these depict those tracts
14 of lands which are qualified farmlands and comprise 614
15 acres as reported on your final report?

16 A Yes, sir.

17 Q On a number of the parcels initially colored,
18 apparently they have been x'd out.

19 In what manner were these delineations made?

20 A As I recall, the original parcels were submitted
21 to us by Carl Lindbloom. Subsequently, there was concern
22 expressed by Carl as to whether they were the right parcels,
23 whether they were over inclusive or included both qualified
24 farmlands and agricultural lands.

25 We went back to the tax assessor and eliminated those

1 areas which were not qualified farmlands.

2 Q In regards to municipal land use controls on
3 the development of these tracts of land, what limitation
4 or restrictions on the development exist in the Township of
5 Passaic, to your knowledge?

6 A Only those limitations that are included in the
7 zoning ordinance, comparable to other vacant lands.

8 Q As far as you know, their tax status does
9 not effect their development potential.

10 Is that correct?

11 A That's correct.

12 Q In Table 1, in the footnote you have noted
13 that out of the 614 acres of qualified farmlands, 383 are
14 also limited by slopes in excess of 12 percent or by
15 flooding.

16 Do you know the breakdown as far as what portion of
17 these lands are impacted by excessive slopes as opposed to
18 beingsusceptible to flooding?

19 A No, I don't.

20 I was going through the records this morning to get
21 that information. I don't seem to have it.

22 John Thonet, my associate, is not in today and I
23 went through the records that he had but was not able to
24 get them in there. There may be records -- and there
25 should be, and if you want me to follow up and get that

1 information back to you, I will.

2 MR. ONSDORFF: I would appreciate that.

3 Q As far as the flood hazard in the context
4 of that statement, do you recall, offhand, as to what parti-
5 cular flood category was being referred to?

6 A The 100 year flood plain.

7 Q In this instance, what particular delineation
8 of that 100 year flood plain did you rely upon?

9 A The Department of Housing and Urban Development's
10 Flood Insurance Maps.

11 Q Do those HUD Flood Insurance Maps in addition
12 to the 100 year flood plain also delineate a 500 year flood
13 fringe area?

14 A Yes, they do.

15 Q Since you limited your analysis to the 100
16 year flood plain as opposed to the 500 year flood fringe,
17 is that reflective of a determination on your part that
18 the lands denoted as flood fringe were not significantly
19 impacted by development limitations by that inclusion in
20 that category?

21 A I am sorry, I don't understand the question.

22 Q In your delineation of lands impacted by
23 development controls it would appear to me that you char-
24 acterize lands as being within the flood plain as being
25 so impacted.

1 By that apparent exclusion of lands within the flood
2 fringe, have you reached a conclusion of their not being
3 significantly impacted by a development limitation as a
4 result of flood hazard on the 500 year frequency level?

5 A I think there's a question of terminology: the
6 flood fringe in the 100 year flood plain and the flood
7 fringe in the 500 year flood plain.

8 I believe you're asking me if -- why I didn't include
9 the increment between the 100 and 500 year flood plain?

10 Q That's correct.

11 Those lands outside the 100 year elevation and the
12 500 year flood elevation.

13 A Including the 100 year flood plain, it's more con-
14 servative -- is not as conservative as including the 500
15 year flood plain.

16 Traditionally, the 100 year flood plain has been
17 the design year for general planning purposes. And, that's
18 the reason I included the 100 year rather than the 500
19 year.

20 I might add that in terms of health -- specifically,
21 in terms of health and safety, it's the floodway that's
22 most important. And, the floodway in a 500 year storm
23 or flood plain would not exceed the flood plain limits of
24 a 100 year flood. So, the 100 year elevation would include
25 the floodway of a 500 year flood.

1 Q Are you aware of any land use controls adopted
2 by Passaic Township regulating construction within the lands
3 found within the 100 year flood plain?

4 A None other than what the limitations the State would
5 impose on this kind of land.

6 Passaic may have more stringent controls, but I'm
7 not familiar with them.

8 Q Are you aware of any controls that the muni-
9 cipality may have placed upon development within that incre-
10 mental portion of the lands from the 100 year flood eleva-
11 tion to the 500 year flood elevation?

12 A None other than what is shown in the zoning ordinance.

13 I thought you were referring to a specific flood
14 plain regulation.

15 I am familiar with the zoning ordinance map, but
16 not with any text that imposes regulations on the flood
17 plain that are more stringent than the State requirements
18 in the flood plain.

19 Q When you say you're familiar with the zoning
20 map and the zoning controls, you're / referring to the zoning
21 provisions as they apply to the entire zone, portions of
22 which may fall within or without the delineated flood plain.

23 Is that correct?

24 A That's correct, yes.

25 Q I was interested in any specific land use

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2048

1 controls of Passaic Township that may have imposed speci-
2 fically on lands delineated either in the floodway of the
3 100 year storm or the lands within the 500 year flood fringe?

4 A As I said, I'm not familiar with any that are over
5 and above what the State requires.

6 Q In the instance of the State regulation, what
7 is your knowledge as to the State provisions pertaining to
8 construction or development within flood hazard areas?

9 A Well, essentially, there's no construction, dredging
10 or fill permitted within the floodway. And, the flood
11 fringe construction is permitted so long as the elevation
12 of the 100 year flood is not exceeded by two-tenths of a
13 foot. And, the first floor elevation must be one foot
14 above the elevation of the 100 year flood.

15 Q The State requirements, are they premised
16 upon State delineations of the floodway and the 100 year
17 storm? Does the State rely upon the HUD delineations?

18 A Well -- insofar as the delineations are concerned,
19 they use the best that is available.

20 For example, if there is no HUD or State delineation
21 of a flood plain, then a developer who is coming in must
22 demonstrate to the DEP that he's not in the flood plain;
23 or if so, his first floor elevation will be one foot above
24 the 100 year flood elevation; that he must develop that
25 elevation and prove to DEP that that is the elevation.

1 If they're using -- if there is an adopted HUD Flood
2 Insurance Map, then that would be the basis for the town
3 reviewing an application for construction within or without
4 the flood plain.

5 Q Are you aware of any DEP delineation of a
6 flood hazard area in the Township of Passaic?

7 A As contrasted with the HUD? The flood insurance?

8 Q We've discussed the HUD delineation. I was
9 wondering if independently DEP had delineated a flood
10 hazard area?

11 A The Corp of Engineers has. That's not in answer
12 to your question, though.

13 I just don't recall if DEP is updating the HUD maps.
14 That's generally the order in which it occurs.

15 That is, HUD has prepared the maps and DEP updates
16 them. So, I wouldn't know whether DEP has updated them.

17 Q I believe your next exhibit, in fact, is the
18 high water table map.

19 Is that correct?

20 A Yes.

21 Q Number 5?

22 A Yes.

23 Q In this instance, I believe ^{the} seasonal high
24 water table found from the surface to one and a half feet
25 below has been noted by a red color, and from one and a

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2045

1 half through four foot of depth is shown in the green color.

2 Is that correct?

3 A Yes, sir, it is.

4 Q In what manner were these areas so impacted
5 and delineated?

6 A They were based on the Soil Conservation, the Morris
7 County Soil Conservation Service, Soil Survey, and the
8 various soils were taken from the map, blown up and trans-
9 posed onto a map of this scale. Then, those soils which
10 were identified by the Soil Survey as having a depth to
11 a seasonal high ground water of zero to one and a half
12 feet were mapped, and these are shown on this Exhibit 5
13 in red. And, those soils which have the depth of season-
14 ally high ground water table from one and a half to four
15 feet deep were similarly mapped and shown on this map as
16 green.

17 Q Does this exhibit incorporate the entire
18 municipality?

19 A Yes, sir.

20 Q In your report on Page 2, your Table 1,
21 did you not include a category listing those lands within
22 the municipality restricted by the existance of high
23 ground water?

24 A I'm sorry, what was that question, again?

25 Q Is there any category which reflects the

1 work in this map shown in your map?

2 A Yes.

3 That would be flood prone and wetlands.

4 Q The land areas delineated in red and green
5 on Exhibit 5 consists of 794 acres.

6 Is that correct?

7 A No, the green includes those areas which I would
8 not include in the DCA criteria. That is, these are the
9 lands that are hydrologically related to the Great Swamp,
10 but not subject to flooding.

11 The areas that are subject to flooding are taken
12 from Map 6 which shows the 100 year flood plain.

13 Q My concern is: You have flood prone and
14 wetlands. Now, your Exhibit 6 would be your flood prone
15 areas, I would imagine, if that's correct?

16 A Right.

17 Q Then your wetlands are shown on this Exhibit
18 5?

19 A No, this Exhibit 5 was prepared as one of several
20 maps. This was based on -- this was based on soil condi-
21 tions and we prepared -- we prepared this to compare it
22 with the HUD delineated flood plain, and that was the
23 purpose for preparing this map.

24 However, it's the HUD delineated flood plain that
25 would show the lands that are within the 100 year flood

1 plain. There's a similarity between the two.

2 Q As far as the additional information gleaned
3 from Exhibit 5 as opposed to Exhibit 6, those lands in
4 green are the ones that may impact upon the hydrological
5 regime of the Great Swamp?

6 A That's correct.

7 Q Those lands beyond the Long Hill ridge were
8 not within the water shed of the Great Swamp and, therefore,
9 did not influence the ground water or surface waters drain-
10 ing into the water shed. Was that understanding correct?

11 A No, I think that's a misunderstanding.

12 There's a ridge line that runs generally along
13 Long Hill Road. And, on the north side of Long Hill Road
14 all surface water drains into the Great Swamp. And the
15 green areas that are shown on the north side of Long Hill
16 Road -- or the railroad are part of the hydrologic regime
17 of the Great Swamp.

18 The green areas shown on the south side of the --
19 between the Passaic River and the Great Swamp drain into
20 the Passaic River.

21 Q Those areas shown on Exhibit 5 in green
22 which are essentially south of the ridge line or the rail-
23 road do not drain or impact the hydrologic regime of the
24 Great Swamp.

25 Is that correct?

1 A That's correct.

2 Q What is the significance, then, of those
3 green areas shown on this exhibit south of the Long Hill
4 ridge as far as environmental impacts of their development
5 might be?

6 A I don't consider them particularly significant.
7 They're in a different basin.

8 They may have some micro significance in terms of
9 the immediate surrounding areas, but they do not relate
10 to the Great Swamp and it's the Great Swamp that I consider
11 the critical natural feature in the Township.

12 MS. McDERMOTT: I want to ask you a question.
13 Off the record.

14
15 (An off the record discussion takes place.)
16

17 MS. McDERMOTT: None of the information on
18 this map is reflected in any of the numbers that
19 are contained on Table 1 of his report. This was
20 just for the additional layouts, information that
21 he wanted to bring out regarding the additional
22 lands that could impact on the Great Swamp.

23 I didn't think they were included.

24 MR. ONSDORFF: I appreciate the clarification
25 because I'm trying to work within the context of the

1 report, and that was a deadline for submitting
2 information as part of the preparation of the
3 defense.

4 MS. McDERMOTT: We've been consistent with
5 the DCA's definition. So, this wetland is not
6 part of this, it's not part of the numbers.

7 MR. ONSDORFF: That's a little extra bonus
8 thrown in, so I'm trying to get it clarified as we
9 go along.

10 Q Since, at least, to the portion to the south
11 of the railroad -- and you're not including it as a signi-
12 ficant environmental limitation on development, then it's
13 not a new factor that I have to consider?

14 A Nor is this considered, as Ms. McDermott mentioned,
15 part of the vacant but nondevelopable land.

16 Q My understanding of what ~~you're~~ saying is:
17 You're directing, just for the record, those green areas
18 north of the Long Hill ridge which are also developable
19 lands in those areas where they are vacant?

20 A Based on DCA criteria.

21 Q You agree with that?

22 Your only question, if I understood your prior
23 answer, ^{was} as to the density of development that would be
24 appropriate?

25 A That's correct.

1 Q Your next exhibit is number 6. This bears
2 a legend of Flood Boundary and Floodway Map with the river
3 channel shown. I guess that would be a purple color, and
4 the floodway and flood fringe of the 100 year flood plain
5 shown in orange.

6 Is that correct?

7 A That is correct.

8 The area of the floodway itself is located between
9 the dashed black line and the purple channel of the Passaic
10 River.

11 Q The manner in which this delineation is
12 arrived at -- if you could point that out?

13 A This was taken from the HUD Flood Insurance Maps
14 and enlarged on this scale.

15 Q Do you have a copy of that HUD Insurance
16 Map, by any chance, available?

17 A Yes.

18 I have a copy of the Flood Insurance study.

19 Q I just want to have an opportunity to refer
20 to that when we get a break, but not right at this moment.

21 Do these lands delineated correspond to any of the
22 columns or categories shown in Table 1 of your report of
23 November 1979, Exhibit 2?

24 A Yes.

25 These would be the flood prone and wetlands,

1 794 acres.

2 I would have to go -- find the records and go back
3 into them to see what percent or what acreage is included
4 in qualified farmlands, as well.

5 In other words, the 794 acres is the minimum.
6 There may be additional flood plain or wetlands in the
7 qualified farmlands which bring the qualified farmlands
8 up to a total of 614, or something.

9 Q If we overlayed the exhibit with the quali-
10 fied farmlands on top of this one -- this Exhibit 6 map
11 or the flood prone areas, these qualified farmlands
12 would then show up as portions of this flood prone area.

13 Would it not?

14 A Yes, that's correct.

15 Q So that the total is 794 acres, portions
16 of which may be -- may be now actively farmed?

17 A No, some 794 acres do not include active farms,
18 portions of which are flood plain.

19 Q I believe we said the same thing, just
20 coming at it from the other side.

21 A Did we?

22 Q I'm trying to ascertain: Out of the 794
23 acres of flood hazard lands, some of those lands are right
24 now qualified farmlands or in an agricultural use?

25 A No.

1 Of the 614 acres of qualified farmlands, a portion
2 of that includes flood prone and wetlands that are not
3 included in the 794 acres.

4 MS. McDERMOTT: Off the record.

5
6 (An off the record discussion takes place.)

7
8 Q I think we have successfully cleared that up.

9 The 794 does not include some qualified farmlands
10 that are flooded. However, Exhibit 6 which shows all the
11 flood delineated lands is greater than 794 because it
12 includes all of the flood prone areas. And in making your
13 table you broke out the flood prone areas and kept them
14 in that category and listed those in the qualified farmlands
15 in that category.

16 Is that correct?

17 A That's correct.

18 Q On your Table 1 on Page 2 of Exhibit 2 you
19 apparently make a distinction between flood prone lands and
20 wetlands. But, based on your description of this exhibit
21 you seem to indicate that all these lands of the 794 are
22 flood prone and add there are more flood prone.

23 Why was the description "flood prone and wetlands"
24 used for your table?

25 A The flood prone and wetlands include only flood prone

1 lands.

2 I included wetlands more as a connection with the
3 DCA term "wetland".

4 Perhaps, it would have been better to put down
5 flood prone (wet lands).

6 Q So the wetlands category is assumed in the
7 HUD Flood delineated areas.

8 Is that what you're saying?

9 A Yes.

10 Q You just happened to pick up the phraseology
11 used by DCA?

12 A Yes.

13 Q I believe your next exhibit is Number 7:
14 Vacant Agricultural Lands.

15 Is that correct?

16 A Yes, Vacant and Agricultural Lands.

17 Q In what manner was this map prepared?

18 A This map was prepared from information provided us
19 by Carl Lindbloom, the Township's consultant planner.

20 Q What was the purpose of depicting these lands?
21 What was the reason for making this map?

22 A Well, partially to get a picture of the type and
23 the distribution of vacant lands and -- vacant and agri-
24 cultural lands; and secondly, to use this as the basis for
25 determining what, in fact, were vacant and developable,

1 using developable in terms of DCA's criteria.

2 Q From my examination of Exhibit 7 there are
3 a number of different parcels of lands shown within the
4 Township which are colored green and subsequently have been
5 numbered in some fashion.

6 Is that correct?

7 A That's correct.

8 Q Would you explain the numbering system?

9 I assume each individual parcel is a separate
10 tract in active farming?

11 A As I recall, they were code or reference numbers
12 for the acreage.

13 However, I don't have any tables relating to that.
14 But, that's what I recall it as.

15 Q It would appear to me, and correct me if
16 I am wrong, that from looking at the individual parcels
17 they have just been numbered chronologically.

18 You have, in essence, some 71 separate and distinct
19 tracts of land.

20 Would that be incorrect?

21 A Well, yes, they are not numbered in order.

22 The purpose of the numbering, as I recall, was to
23 key in acres with sites so that if this were three acres
24 we would know the three acres relate to 39. Then to the
25 extent that this may or may not be in an environmentally

1 constrained area, we would be able to assign that three
2 acres in its entirety or in part to a developable or non-
3 developable category.

4 Q The numbers, themselves, have no significance.
5 They were used to identify different tracts?

6 A Yes.

7 Q These are vacant, inactive or vacant in
8 the sense of not having structures and being used for
9 farming?

10 Correct?

11 A That's correct.

12 Q Do you know the total acreage involved in
13 the 71 separate parcels of land?

14 A It would be 1,561 acres.

15 Q As shown on Table 1?

16 A Yes.

17 Q As far as municipal land use controls, are
18 you aware of any which limit the development that may
19 take place in addition to the zoning ordinance itself as
20 to these vacant lands within the municipality?

21 A None, whatsoever.

22 MS. McDERMOTT: I note for the record
23 that he hasn't, again, done site specific analyses
24 of each particular tract.

25 MR. ONSDORFF: I would just note that some

1 of these tracts appear to be adjacent to the
2 Passaic River and some, apparently, within the
3 flood hazard area of the Great Swamp.

4 Q There would be some state controls on their
5 development.

6 Correct?

7 A If they are within any flood plain there would be
8 State controls on the development.

9 Q In addition to those State controls, as
10 pertaining to flood plains, would you know of any other
11 governmental limitations from any subdivision of govern-
12 mental entity restricting development of these properties?

13 A Not to my knowledge, other than the standard
14 subdivision and zoning regulations of the Township.

15 Q I guess that brings us to your final exhibit,
16 Number 8, the vacant lands with no constraints.

17 Could you briefly outline in what manner these
18 particular areas are shown?

19 A This was a sketch map that was done to give us an
20 idea of what lands remain after you take away -- what vac-
21 ant lands remain after you take away the slopes, the flood
22 plains and the environmentally -- and the lands that are
23 within the Great Swamp basin that have a high water table.
24 And, it was done through a process of elimination of over-
25 lays.

1 Q The vacant lands with no constraints categories
2 are delineated by a black boundary with no color inside
3 them.

4 Is that correct?

5 A That's correct.

6 Q Separate areas are shown as qualified farm-
7 lands with no constraints with a purple boundary with
8 straight lines going through them.

9 Is that correct?

10 A That's correct.

11 Q From your Table 1 would it be correct to
12 say that the vacant developable lands shown in the black
13 boundaries comprise 409 acres?

14 A No, sir, it would --

15 These comprise less than 409 acres because they
16 include -- they do not include lands that are environment-
17 ally sensitive, but developable.

18 Nevertheless, in DCA's terms that would be those
19 vacant lands which are neither qualified farmlands, have
20 slopes less than 12 percent or located outside of the
21 flood plain but have a high ground water table. So,
22 those lands are not shown on the map but they are included
23 in the 409 acres.

24 Q You've added your additional density limit-
25 ing factor: the high wetlands -- excuse me, the high

PENGAD CO., BAYONNE, N.J. 07002 · FORM 2045

1 water table to the delineation of this map getting an
2 ultimate bottom line as to higher density development which
3 is shown in the black areas.

4 Is that correct?

5 A That's -- yes, I think that's correct.

6 Q As to these lands shown in black, have you
7 made an acreage estimate as to how many lands we're talk-
8 ing about?

9 A No, sir.

10 Q Do you anticipate, at any time, making that,
11 as far as an acreage estimate?

12 A I had not anticipated that.

13 MS. McDERMOTT: I note for the record that
14 it depends on the results of our motion.

15 If we go to trial he may have to make a
16 few calculations as to the amount of this.

17 Q In addition to the vacant lands with no
18 constraints, the qualified farmlands as shown in the purple
19 marking, do you know the acreage involved in these lands
20 which also, apparently, have no unusual environmental
21 constraints?

22 A That would be the lands that are surrounded by the
23 black lines?

24 Q No, these are the qualified farmlands.

25 A Oh.

1 Q Which are delineated with your purple
2 marking?

3 A No, I don't have that figure.

4 Q Based upon a very rough estimate just from
5 observing the map and your knowledge of the scale at which
6 it was drawn, would it be accurate to say that these
7 lands would be in excess of 50 acres?

8 A Yes.

9 Q Could you say whether they were greater
10 than 100 acres?

11 MS. McDERMOTT: Rather than having him guess,
12 I could have him make a calculation and
13 to you for the qualified farmlands and
14 vacant lands with constraints.

15 MR. ONSDORFF: I agree that would be
16 preferable.

17 MS. McDERMOTT: Rather than trying to guess
18 we can give that to you.

19 I wasn't aware of this particular map.

20 MR. ONSDORFF: I would certainly think that
21 would expedite the resolution of this, if we can
22 pin down how much acreage we're talking about.

23 Let us take a five minute break.

24

25

(A short recess is taken.)

1 Q Mr. Dresdner, just one further question in
2 clarifying on ADP-7, all those lands shown in the green
3 color are either totally vacant-- That is, having no struc-
4 tures or are in agricultural use.

5 Is that correct?

6 A That's correct.

7 MS. McDERMOTT: Can I just note for the
8 record that it's what the tax assessor's maps
9 say are vacant or agricultural because maybe they
10 have some structure on it. I don't know. But,
11 that's what they're listed as in the tax assessor's
12 office.

13 Q Mr. Dresdner, in addition to those lands
14 there may be additional lands within Passaic Township
15 which have one structure, either a dwelling or otherwise
16 surrounded by -- from one to how ever many acres.

17 The single ownership which pursuant to the subdivi-
18 sion code of the municipality could be susceptible to
19 further development.

20 Couldn't that be true?

21 I don't know. I don't know whether Carl Lindbloom
22 included those excess areas or not as vacant lands.

23 MR. ONSDORFF: Ms. McDermott, would you be
24 able to clarify the record on that basis from our
25 prior discussions?

1 MS. McDERMOTT: The information that's
2 contained on ADP-7 was supplied by Carl Lindbloom
3 from his initial study on vacant lands. That inform-
4 ation was obtained from the Passaic Township tax
5 assessor's roles.

6 The categories of land that -- approximately,
7 seven are vacant or agricultural as determined by
8 the tax assessor's roles. These areas do not include
9 any large lots which have a structure on it or have
10 any kind of developed status by the tax assessor's
11 roles.

12 Mr. Lindbloom has done a separate
13 of large lots with a single dwelling on
14 that is not reflected in Mr. Dresdner's study.

15 Q Mr. Dresdner, have you done any analysis of
16 any existing development within the flood hazard areas of
17 Passaic Township to ascertain what, if any, adverse environ-
18 mental impacts have occurred as a result of development going
19 forward in this environmentally sensitive area?

20 Not for the Township of Passaic, I haven't.

21 In the context of any other work, have you
22 done some?

23 A We're in the process of doing flood damage studies
24 for the Corp of Engineers for the Crab Island area on the
25 Raritan River, and will shortly do much more extensive

1 flood damage studies in the Hackensack River basin, a
 2 portion of the Meadowlands, where we'll ascertain the
 3 extent of damages to residential and industrial structures
 4 from past flooding and from projected future floods.

5 Q In the context of that work, would that
 6 incorporate an evaluation of lands within Passaic Township?

7 A No, no. I thought I made that clear.

8 I haven't done that kind of study for Passaic
 9 Township.

10 Q Not for Passaic Township, but of lands within
 11 Passaic Township for whatever entity you may be doing the
 12 study for?

13 A No, I'm not doing anything in Passaic Township.

14 Q As far as the other environmentally sensitive
 15 lands which you have delineated, the lands containing
 16 slopes in excess of 12 percent, have you done any quanti-
 17 tative analysis or qualitative analysis of existing develop-
 18 ment patterns within the Township of Passaic to determine
 19 to what extent adverse environmental impacts have occurred
 20 as a result of development on these lands with excessive
 21 slopes?

22 A No, I haven't.

23 Q Have you done any quantitative or qualitative
 24 analysis of existing development of lands impacted by
 25 high ground water table within the Township of Passaic and

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2045

1 to determine whether or not adverse environmental impacts
2 have occurred as a result of these development -- in these
3 environmentally sensitive lands?

4 No, I haven't.

5 Q At any time, have you performed any analysis
6 of suitability of reliance upon alternative systems for
7 providing sewer and water services to future development
8 within the Township of Passaic? That is, alternatives
9 to public water and sewer services?

10 A No, I haven't prepared any studies of that sort.

11 Q In what manner have you identified areas of
12 the Township as having severe development limitations
13 respect to a septic tank properly functioning?

14 A That would be based on the Soil Survey Maps where
15 all soils have development or construction limitations.

16 One of the limitations that are reviewed by the
17 Soil Conservation Service would be limitations relating
18 to septic tanks.

19 Generally speaking, when you have a ground water
20 table that's within four feet of the surface, the Soil
21 Conservation Service assigns those soils to a severe
22 category for limitations to septic tanks.

23 Q Does the municipality protect the construc-
24 tion of dwelling units with septic tanks on lands which
25 have water tables at depths shallower than four feet?

1 A They don't prohibit it as such. Their provisions
2 or permissions are related to performance standards.
3 That is, it's relating to the specific percolation
4 capabilities of the soil on the site as well as to the
5 ground water table on the site.

6 A septic tank must be located at least one foot
7 above the ground water table. So, with a ground water --
8 a -- if the property has a ground water table at four feet
9 below the surface and a septic tank has to be located three
10 feet -- no greater than three feet below the surface, there
11 are real problems in terms of septic tank operations, parti-
12 cularly in the winter when the freeze occurs.

13 We have an average depth of freezing in this area
14 of two and a half feet, and that's how far foundations go
15 down. So, if you have septic effluent at two and a half
16 to three feet below the surface, there's an excellent
17 probability of it freezing during the winter.

18 Q Rather than relying upon soils classifications
19 to the depth of ground water, the municipality requires on-
20 scientific tests to verify the suitability of placement
21 of utilities of a septic system?

22 A That's correct, and properly so.

23 Q What is it properly so?

24 A Well, because the Soil Survey Maps are broad and
25 generalized, and within the areas -- within the areas of

1 a single soils type as shown on the map there may be what
2 the Soil Conservation Service calls. That is, other soil
3 areas too small to measure.

4 Additionally, subsurface conditions could be variable
5 also. So, for general planning purposes the soil maps are
6 adequate and desirable. But for site specific conditions
7 you should have a developer -- at least should have site
8 specific information.

9 Q On Page 6 of ADP-2 you began a somewhat
10 detailed discussion of the hydrologic functions of the
11 Great Swamp and additional environmental benefits derived
12 from this resource.

13 Is that correct?

14 A That's correct.

15 Q I believe you indicate that the water shed
16 drainage area of the swamp encompasses some 55.4 square
17 miles. This is a large land area far in excess of the
18 boundaries of the Township of Passaic.

19 Is it not?

20 That's correct.

21 Are you aware of the specific municipalities
22 situated within this 55 square mile drainage area?

23 A Well, many of them, but not all of them.

24 Q As far as Morris County municipalities what
25 would they be?

1 A Well, there would be Madison, Borough of Chatham,
2 Passaic, Harding Township, Chatham Township, Morris Town-
3 ship, Morristown, The Township of Mendham, Borough of
4 Mendham. I believe that's as far west as it goes in
5 Morris County.

6 Q Morris County?

7 A Morris County, right.

8 Q As far as the environmental benefits derived
9 from the existence of the Great Swamp, you list a number,
10 and I believe that two that you give particular importance
11 to are its capability in assimilating pollutants
12 upstream and as a reservoir or retention area for
13 waters.

14 Is that correct?

15 A Yes.

16 That's two of three that come to mind, the third
17 being the cultural benefits.

18 Q As far as the simulative capacities of the
19 swamp to purify the waters which pass through it and enter
20 the lower Passaic River for drinking purposes, have you
21 performed any quantitative analysis as to the extent of
22 this simulative capacity of the swamp lands?

23 A No, I haven't.

24 Q Are you aware of any entity which has perform-
25 ed any such study?

1 A Well, not offhand.

2 However, I'm confident I have, if not in my office
3 I can find it quickly in the library, studies of that sort
4 which relates specifically to the Great Swamp and generally
5 to swamp areas. But, I can't mention a name right now.

6 Q In the context of the work that you've done
7 for the Township of Passaic, you've indicated that low
8 density development on areas within the water shed of the
9 Great Swamp are appropriate in order to preserve the simu-
10 lative capacity of the swamp.

11 Have you not?

12 A Yes.

13 Q There is a direct correlation, to your mind,
14 between the activities of man altering the natural char-
15 acteristics of this water shed and the function presently
16 served by the swamp as a purative mechanism for the waters
17 that flow across it.

18 Is that correct?

19 A That's correct.

20 In regards to the appropriateness of the
21 housing densities established for the Township of Passaic,
22 would it not be necessary to know the simulative capacity
23 of the swamp, it being finite, and correlate that with all
24 the land use controls of the other municipalities within
25 the water shed of the swamp to determine what the overall

1 contribution of pollutants to the swamp would be over the
2 course of development that will take place under the zoning
3 regime of the various municipalities to determine what each
4 municipality should limit its development to as its indivi-
5 dual contribution to this finite total?

6 A Not necessarily.

7 There are many other factors which are considered
8 in planning and zoning. What it is -- what's more import-
9 ant to know and to recognize is the sensitivity of the
10 swamp to development within its water shed. Recognizing
11 that, it's much easier to generally control densities
12 towards the lower rather than the higher end.
13 nizing so many communities are involved in contributing
14 water to the Great Swamp, a model such as you propose
15 would be an exercise in theory but not in reality or
16 practicality.

17 The proper approach, in my opinion, would be to
18 have this environmental sensitivity recognized on the part
19 of municipalities and for them to key their zoning in
20 such a manner to protect the water quality in this area.

21 I think, would be much more important than develop-
22 ing this model and not have the -- and not having the
23 regulations to have those low densities.

24 Q What I'm trying to determine: At a certain
25 point as development goes forward it is conceivable that

1 simulative capacity of a swamp will be reached and it will
2 no longer be able to remove pollutants from the water that
3 flows through it.

4 A. Yes, absolutely.

5 Q If that were to occur at any point in time,
6 would then the densities of development which occurred
7 after that limit was already reached in Passaic Township
8 have absolutely no impact on this one environmental func-
9 tion of the swamp because it had already been completely
10 used up?

11 A You can't separate that environmental function from
12 its role as a flood detention basin because once it reaches
13 its simulative capacity certain conditions have occurred
14 within the swamp which also effect its flood detention
15 capability. And, that's primarily the area of sedimentation.
16 So, as the swamp fills up, its ability --its sponge like
17 characteristics for water are lost and that water instead
18 of being detained and retained in the swamp then rushes
19 south and north along the Passaic River to increase the
20 flooding potential of Passaic.

21 Q I wanted to get to the flood retention capa-
22 bilities of the swamp in a moment.

23 My only interest in focusing on the limited specula-
24 tive capacity of the swamp was if it could be shown that
25 under the current zoning ordinance of the many municipalities

1 within the water shed area, that when these lands are
2 developed within however many years they will completely
3 overwhelm the simulative capacities of the swamp to remove
4 pollutants. Then, the low densities in and of themselves
5 have not accomplished the function that you have establish-
6 ed as a basis for keeping them at these low densities.

7 Wouldn't that be correct?

8 A If you thought of it in terms of only a single
9 purpose -- function, then once the swamp loses the ability
10 to perform that function then what happens outside of the
11 swamp again in relation to that particular function doesn't
12 really matter. You are adding no return point.

13 However, as I said before, these things are very
14 much interrelated.

15 Q The flood retention capabilities of the
16 swamp, have you performed any analysis as to the capabili-
17 ties of these lands to hold back flood waters?

18 A The -- in the Great Swamp?

19 Q That's correct.

20 A No original studies.

21 But in observing the condition of the Great Swamp
22 its current water retentive capacity -- viewing the USGS
23 maps and other reports -- it's very clear that the Great
24 Swamp is a major storm water detention basin in Northeast
25 Jersey.

1 Q That's certainly a qualitative analysis and
 2 one that I would certainly think would be universally
 3 ~~STOLL COA~~ accepted.

4 As far as any analysis that you may have done or
 5 examined which endeavors to quantify the amount of storm
 6 water runoff that are retained in this resource, have you
 7 done or inspected any studies of this nature?

8 A No, the studies we've looked at related more to the
 9 Passaic River and to the Great Swamp.

10 Q I believe in your report of November, ADP-2,
 11 you made a correlation between development and increased
 12 runoff of storm waters into the swamps. 

13 Is that correct?

14 A That's correct.

15 Q Have you performed any quantitative analyses
 16 of the amounts of additional storm water runoff which will
 17 flow into the Great Swamp as a result of development at
 18 full densities currently allowed in the zoning ordinances
 19 of the numerous municipalities within the water shed of the
 20 Great Swamp?

21 No, I haven't.

22 Q Then you would not be in a position to render
 23 an opinion as to whether or not full development of these
 24 water shed municipalities in accordance with the current
 25 zoning regimes applicable to these lands would be able to

1 be achieved within the finite limits of the flood retention
2 capabilities of the Great Swamp?

3 **Q**

Would that be correct?

4 Well, I would -- and would give the opinion as to
5 the extent that there is development upstream of the
6 Great Swamp, and within its immediate water shed its flood
7 detention capability is reduced.

8 But, quantitatively, I couldn't say now -- or could
9 I say unless I did a study of the area --

10 Q What I'm trying to ascertain is: At some
11 point in time as waters come in they reach a certain level
12 that the sponge, as you described it, is totally
13 and its detention capabilities are exhausted and
14 waters will flow through. And, my concern is whether or
15 not we have any handle on whether the current development
16 controls within the water shed would exceed that retention
17 capability of the swamp so that densities that might be
18 constructed, say, in the Township of Passaic, would really
19 be irrelevant to that detention capability if it had been
20 [redacted] d?

21 Well, there is always an increment that is added
22 by new development. So, even if the retention capabilities
23 were exhausted within the swamp -- and it's not quite the
24 same as having a barrel full of water and then a drop
25 coming in and another drop leaving, but to -- we do

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2048

1 recognize that a flooding condition does exist downstream.
2 That flooding condition in Lodi and Hackensack and Florham
3 Park is mitigated by the conditions -- by the -- in the
4 Great Swamp now to the extent that the Great Swamp detention
5 capabilities is reduced, or to the extent that additional
6 storm water is generated upstream. Then, the downstream
7 conditions would be exacerbated.

8 Q What you're saying is once the detention
9 capabilities of the swamp have been exhausted this pass
10 through increment will just go on irrespective of the
11 distance of the swamp for that particular land feature
12 being there. It's a question of the incremental
13 that additional development will add to the already exist-
14 ing flood waters.

15 Is that correct?

16 A Well, not totally because the retentive capacity
17 of the water is never completely filled. What happens
18 is the water goes higher and you increase flooding condi-
19 tions in the immediate vicinity. So, the Great Swamp will
20 always -- unless it's paved over, have a retention -- and
21 detention function.

22 Right now, there's generally a buffer around the
23 Great Swamp and this -- those lands with a shal-- or high
24 seasonal high ground water within zero to four feet within
25 the surface. As the waters in the Great Swamp rise these

1 lands become inundated.

2 As I said before, now it's a buffer. If development
3 is permitted in there flood damages will occur to these
4 structures.

5 Q In the terms of adding additional flood waters
6 to the swamp, would it not be preferable to develop a higher
7 density cluster housing project which because of economy
8 of scale and their density configuration can utilize things
9 such as onsite retention ponds as opposed to a scattered
10 site single family homes which are not easily incorporated
11 with such local water retention facilities?

12 A Yes.

13 On smaller lots single family homes can't
14 those detention facilities. As you get the larger lots
15 they can. And surely, higher density development does
16 permit detention basins.

17 However, you've got to keep in mind that to the
18 extent that these offsite detention basins are constructed,
19 you're talking about the lower range of higher densities.

20 For example, garden apartment densities may range
21 to 24 units per acre. At 24 units per acre you've
22 got no open space for your detention basin. At 10, 12,
23 possibly 14 units per acre you will have the open space
24 to provide this detention basin capability. But, then,
25 you're not talking about least cost housing, you're talking

1 about relatively expensive apartments.

2 Q Would it not be possible in situations where
3 you want to build at higher densities that there may be
4 areas of land which are vacant, unrestrained -- or uncon-
5 strained lands which you have identified that are situated
6 adjacent to lands having certain environmental constraints
7 which would be probably be dedicated as open spaces, and
8 any type of mitigating facilities could be within the areas
9 of the open spaces, so that the higher density housing would
10 go on those lands which are more suitable for the higher
11 density housing and the appurtenances to mitigate offsite
12 consequences can go on these lands with the environmental
13 constraints on their development.

14 Wouldn't that be feasible?

15 A Yes, but you're talking about densities still. And,
16 there's no question that the more environmentally constrain-
17 ed a piece of land is the more expensive it is to develop,
18 which works out very nicely for higher income or higher rent
19 housing.

20 there are any number of amenities that are provided
21 in higher income housing which can be included in flood
22 plain lands or in adjacent lands, whether flood plain or
23 otherwise. But, when you're talking about lower income
24 housing, you have to -- or should have range along with
25 least cost housing, least cost sites. And, environmentally

1 constrained sites just are not least cost sites.

2 Q My question was referenced in developing
3 sites without constraints of the higher densities which
4 you indicated could be up to, in garden apartments, 24
5 units per acre. But, as you indicated, when you place that
6 many dwelling units on an acre you don't have the open
7 spaces for the facilities.

8 What I'm suggesting is that there may be lands
9 adjacent to those which, because of their environmental
10 constraints, are appropriate to be left open and undeveloped
11 but could hold detention ponds and other facilities for
12 mitigating offsite environmental impacts?

13 A It would depend on the size of the site and how
14 much land is in flood plain or nonflood plain.

15 For example, again, if you have 24 units per acre,
16 that's essentially a three story garden apartment which
17 is relatively efficient. By the same token, you have got
18 to provide a substantial amount of parking for that kind
19 of apartment. So, the -- although you're going higher up
20 and adding density without increasing the footprint of the
21 building, you are increasing the area that you will have
22 covered for parking.

23 These trade-offs don't always work out so neatly.

24 Generally speaking, and according to some HUD studies
25 on garden apartments, the higher the density the higher the

1 land coverage, until there's a jump where you go into
2 elevator apartments.

3 Q There's no hard and fixed rule as to how
4 many parking spaces must be constructed in connection with
5 any particular apartment development, though, is there?

6 A No.

7 Generally speaking, if you're located in the close
8 end to a community and you have fewer off street parking --
9 if you're located further out, if there is no public trans-
10 portation, for example, then you increase the area. A
11 good portion of it relates to proximity, to potential
12 places of employment and availability or accessibility to
13 public transportation.

14 Q Have you done that type of analysis in re-
15 gards to the vacant sites in the Township of Passaic as
16 to their accessibility to employment centers and their
17 accessibility to public transportation?

18 A Well, I'm generally familiar with the area as well
19 as the region, and employment opportunities are essentially
20 located outside of Passaic, not inside Passaic, and there
21 is no commuter station in Passaic. And, I believe there
22 are no buses in Passaic.

23 Q But as far as, say, on this Exhibit 7, if
24 I selected any one of the 71 individual sites, you have
25 not done a study in order to offer an opinion as to the

1 parking dwelling unit area that would be appropriate.

2 Did you?

3 A That's correct.

4 Q On Page 8 of your report you make reference
5 to the Black Brook and the low flows which are experienced
6 three of four times every ten years over a consecutive
7 seven day period, is that correct, on the top of the page?

8 A Yes.

9 Q And you discuss this in the context of the
10 effluent being discharged by a sewage treatment plant
11 located in Chatham.

12 Is that correct?

13 A Yes, sir.

14 Q What is the source of your information
15 regarding the sewage treatment effluent emanating from
16 the plant in Chatham?

17 A That would be the Guillaudeu report.

18 Q I am sorry?

19 A That would be the Guillaudeu report referenced or
20 noted on Page 8.

21 Q In what manner does the discharge of that
22 effluent violate the State's FW-2 stream classification?

23 A It violates it in terms of the use of the water.

24 I don't know whether it violates it in terms of
25 the quality of water, although I suspect it does if it is

1 only waste water effluent. But, the use of the water as
2 a -- specifically as a potable water supply or for typical
3 ~~and~~ natural aquatic biota is not possible under those
4 conditions.

5 Q Are you aware of any actions the State has
6 taken in regards to this violation of its FW-2 stream
7 classification in regards to the sewage treatment plant?

8 A There's an Upper Passaic Water Shed Group which had
9 prepared a 201 facilities plan for all of the Upper Passaic
10 communities. As of several months ago this plan was still
11 being revised and negotiated through EPA and the DEP. But,
12 that's been going on for a number of years.

13 Q In regards to development and appropriate
14 densities for the lands within Passaic Township, what is
15 the relevance of this sewage treatment plant in Chatham?

16 A The sewage treatment plant in Chatham, in and of
17 itself, had little relevance to development in Passaic. It
18 is upstream of Passaic.

19 However, it is one of the several contributing
20 ~~tributaries~~ tributaries to the Great Swamp, and to the extent that
21 ~~the~~ Black Brook situation or condition is reproduced in
22 Passaic through over and/or improper development, the
23 water conditions -- or water supplies that enter the
24 Great Swamp will be considerably degraded.

25 Q To the extent that development goes forth

1 in the Township of Passaic, those sewage flows that are
2 generated thereby and are disposed of through public sani-
3 tary sewer systems, that would not go to Chatham. Would
4 it?

5 A No, no, they would go into the Passaic River.

6 Q After treatment at the Township's own sewage
7 treatment plant?

8 A That's correct.

9 Q Do you know where their discharge point is
10 on the Passaic River?

11 A I don't recall from this map. I do have the informa-
12 tion on another map that I can check.

13 Q The specific location is not really too
14 greatly important. But, as far as its location generally
15 as concerning any impacts on the Great Swamp hydrological
16 regime, how would it relate to that?

17 A The sewage treatment plant would be located below
18 the Great Swamp, and in those terms its effluent would not
19 be related to the Great Swamp. What does relate to the
20 Great Swamp, though, is sewerage.

21 When you have waste water treated through septic
22 tanks there's recharge of the ground water. When you have
23 septic tanks -- or excuse me, waste water treated through
24 a sewage treatment plant, that water -- that ground water
25 is outfalled into the Passaic River and lost to the ground

1 water supply, essentially forever.

2 Through extensive sewerage of the Township of
3 ~~of the~~ the end result is a lowering of the down water
4 taken, and to the extent that that occurs within the
5 Great Swamp basin, you lower the water table of the Great
6 Swamp thereby reducing the surface water flow and volume
7 and eventually destroying it as a swamp.

8 Q In any fashion, is this effect counter bal-
9 anced by the action of the development which is publicly
10 sewerage generating additional runoff which is opposed to
11 having the septic which replenish the aquifer essentially --
12 ultimately runs into the swamp, and as it infil
13 wouldn't the aquifer be replenished in that manner

14 A When you have that level of development -- when you
15 have an area which is treated -- that has public waste
16 water systems, it's invariably accompanied by storm sewers.
17 And, these storm sewers may or may not outfall into the
18 swamp. If they do outfall into the swamp the water that
19 outfalls is of a lower quality than water that would drain
20 over land into the swamp under natural conditions.

21 They're much heavier in hydrocarbons and various
22 types of nutrients than surface water ordinarily is that
23 flows overland under natural conditions.

24 Q Directing your attention to the middle
25 paragraph on Page 8 the statement appears, "Unless strict

1 housing density and development controls are observed,
2 the beneficial natural resources of the Great Swamp can
3 ~~be expected~~ to continue to deteriorate at an accelerated
4 ~~rate.~~ These densities and development controls must be
5 based on the physical capabilities of these sites to
6 support development without jeopardizing the integrity of
7 the Great Swamp resources."

8 What is the geographic area that you feel must have
9 the strict density and development controls, which is
10 essentially that they be based on physical capabilities
11 of the land areas without jeopardizing the Great Swamp?

12 A In the Township of Passaic it would be the ~~area~~
13 within the Great Swamp water shed.

14 Q Without making any distinction or artificial
15 municipal boundaries?

16 A Well, I would hesitate to go beyond the Township
17 of Passaic. I would recommend, ~~for example,~~ the Township
18 of Chatham which is very closely related geographically
19 and hydrologically to the Township of Passaic. But, as a
20 ~~general~~ statement, it could be applied across the entire
21 ~~Great Swamp~~ water shed which would include all of these
22 other communities.

23 Q Are you aware of any municipalities which
24 have, in fact, adopted standards for development of these
25 sites which impact the integrity of the Great Swamp

1 resources?

2 A I believe the Township of Mendham, possibly the
3 Township of Mendham, have aspects of these performance
4 standards.

5 For example, zero increase in peak rate of runoff,
6 whereby the peak rate of runoff for a parcel of land should
7 not be increased after development over that -- that which
8 existed prior to development. And, the physical way of
9 controlling this is through a detention basin.

10 That's one aspect of it.

11 Q I'm sure there are a number of ways of
12 controlling the offsite environmental impacts. You
13 just illustrated one.

14 As far as Passaic Township is concerned, do they
15 have, to your knowledge, any such environmental performance
16 standards?

17 A I don't know.

18 Q Further down on that same page, Page 8, you
19 refer to, "The common and unavoidable consequences of urban-
20 ization in Passaic Township."

21 In that context what is your meaning of "urbanization"?

22 A That's development: residential, commercial and/or
23 industrial that occurs usually at a density which requires
24 either public water and/or public sewers.

25 Q Directing your attention to Page 9 of your

1 report, the second full paragraph in that page discusses
2 development of regulations for areas surrounding the Great
3 Swamp in order to provide a buffer from the wild rural
4 swamp lands to suburban densities.

5 Have you calculated or determined the appropriate
6 boundaries and size of such a buffer from the rural to the
7 suburban densities?

8 A No, I haven't.

9 I was speaking here essentially -- theoretically,
10 and reflecting generally accepted planning practice whereby
11 you have your built up center and your progressively lower
12 densities as you go further and further out.

13 Q What densities did you have in mind in
14 context of your descriptive phrase "suburban densities"?

15 A Well, suburban densities can range anywhere from
16 one-quarter to half an acre lots up to apartments, non-
17 elevator apartments, usually.

18 Q Garden apartments?

19 A Yes.

20 Q Is there a town center or other area of the
21 Township of Passaic which is developed at these suburban
22 densities currently?

23 A At the lower end of the suburban densities. There
24 are no apartments that I know of in Passaic.

25 Myersville would be one area, Gillette or Sterling

1 may be in Passaic.

2 I don't recall.

3 MS. McDERMOTT: Yes.

4 (Continuing) But, they would be --

5 MS. McDERMOTT: The three of them are all
6 in Passaic.

7 I'd like to define for the record: when you
8 say that there are no apartments in Passaic, what
9 do you mean by "apartments" in that context?

10 THE WITNESS: I'm not talking about two
11 or four family houses, I'm talking about buildings
12 usually two and three stories in height. ~~Sp~~
13 cally here where -- which have common entrances,
14 common walls.

15 MS. McDERMOTT: That's sufficient.

16 Q Further down on Page 9 you began a discussion
17 of certain additional environmental resources found within
18 the Great Swamp in its wildlife population. And, there is
19 a discussion, apparently, of the swamp as a major breeding
20 ~~ground~~ ground for mosquitos and other insects.

21 Would it be correct to say that this discussion
22 of the mosquito population of the swamp does not reflect
23 a value judgment on your part that insects are more import-
24 ant than providing housing opportunities for all income
25 levels?

1 A Well, this paragraph doesn't address that particular
2 balance.

3 MS. McDERMOTT: Yes.

4 A (Continuing) What I'm saying in that paragraph is
5 that as man and nature come closer together, what is part
6 of the natural eco system becomes a nuisance and a pest
7 to man and in order to control those pests the eco system
8 is unbalanced by man's efforts.

9 There is no question in my mind that low and moder-
10 ate income housing can exist along with the Great Swamp.
11 It's just a question of where that low and moderate housing
12 should go and at what density.

13 Q As far as making a choice between ~~the~~
14 and undisturbed breeding ground, you're not suggesting any
15 value order which puts mosquitos at a higher priority than
16 human beings.

17 Is that correct?

18 A That's correct.

19 We are all part of that system.

20 Q Isn't it also true that the threat to wild
21 life resources in this particular instance is a result of
22 the use of the chemical sprays and not the housing that
23 the people live in?

24 Isn't that also correct?

25 A Well, chemical sprays follow on housing. People

1 who use the chemical sprays live in the houses and they
2 use the chemical sprays to eliminate pests.

3 Q As far as the context of your discussion here,
4 are you referring to domestic use of household pesticides
5 purchased at the local grocery store or are you referring
6 to a more systematic application of chemical sprays to deal
7 with these types of insects?

8 A No, I was talking primarily of the former, the
9 household type.

10 However, it's the increased density and the conflict
11 between man and pest which creates conditions where public
12 actions are taken to eliminate the pests, and that's where
13 the large doses of chemical insecticides are applied.

14 Q Precisely in the statement where it appears,
15 "Increased development densities, however, are leading to
16 increased pressures on the County to control insect pests.
17 Increased chemical spraying would add large amounts of
18 pesticides to the food chains."

19 This is the large scale application of pesticides
20 which you view as a threat in the context of these develop-
21 ments.

22 Is it not?

23 A Yes, that would be the large scale.

24 Q Wouldn't it be preferable to place strict
25 controls by the New Jersey Department of Environmental

1 Protection on the application of pesticides in the water
2 shed of the Great Swamp rather than prohibiting housing
3 opportunities as a means of controlling the actual threat
4 to these wildlife interests?

5 A No.

6 I think it's much easier to limit man's encroachment.

7 The approach that you're suggesting is the typical
8 Corp of Engineers approach which is essentially structural:
9 build the dam, control the flooding, let the people locate
10 in the flood plain.

11 It's far better not to have the people locate in
12 the flood plain and eliminate the hazard rather
13 reduce it.

14 I'm of the opinion that land use planning is an
15 essential element of environmental quality.

16 Traditionally, we have concentrated on the struc-
17 tural means of controlling our environment. But, increas-
18 ingly, we're recognizing that non-structural means are also
19 part of the arsenal of weapons.

20 Q Our discussion on the use of pesticides is
21 totally outside the concern for construction within the
22 flood plain.

23 I'm speaking of a non-structural State Control on
24 the use of pesticides.

25 If this was applied, would that not serve the same

1 function or achieve the same goal that you seek in a
2 different manner?

3 Well, it would, but I know of no program other than
4 pesticides that can be used on a large scale to reduce
5 certain types of insects.

6 There's a lot of research going on in this area.
7 But, it's still essentially pesticides.

8 Q You're directing your concern now towards
9 a separate interest: controlling the pests in the context
10 of the pests not being impacted by chemical sprays that
11 get into the food chain. We can do that and still
12 for construction of housing if we employ a DEP ban
13 the use of harmful pesticides as opposed to a land use
14 control that prevents the constructions of houses.

15 Is that not correct?

16 A DEP ban is not inconsistent with the utilization
17 of land for housing purposes.

18 A That's correct. But, the DEP ban on insecticides
19 has not solved the problem of insect pests and nuisances.

20 The development is permitted to go into those areas
21 where there is such insect inhabitants.

22 Q Are you aware of the level of success en-
23 countered with the use of various pesticides to date?

24 A Well --

25 MS. McDERMOTT: Are you speaking of any

1 particular areas?

2 MR. ONSDORFF: In the area of the Great Swamp.

3 A In the area of the Great Swamp?

4 There has been some success, but the success in
5 natural areas has been minimal. The success in agricultur-
6 al areas has been substantial, but not in natural areas.

7 Q The Great Swamp itself is being preserved
8 as essentially a natural area as opposed to an agricul-
9 tural area?

10 A That's correct.

11 Q On Page 10 of your report you address in
12 the first full paragraph another wildlife/human
13 in the context of a disease conveyed by the fox
14 and cats.

15 Is that correct?

16 A That's correct.

17 Q Again, you seem to have selected a very
18 drastic means of resolving this conflict in separating
19 the human encroachment on the domain of the fox.

20 Is that correct?

21 I don't think it's drastic. I think it's common
22 sense in following up a national policy relating to the
23 Great Swamp.

24 There is a Great Swamp in there. The Great Swamp
25 is a wildlife refuge and it's just common sense to have

1 this buffer area between the Great Swamp and suburban
2 densities.

3 Q Would it not accomplish the same thing as
4 preventing the conveyance of disease to cats and dogs by
5 the
6 banning pets in/development of these areas which would then
7 allow still for the provision of housing for human beings?

8 A I just think it's unreasonable to expect a township
9 in New Jersey to ban pets through 60 percent of the
10 community. Excuse me, it would be less: 40 percent,
11 perhaps.

12 Q But if that sort of thing was adopted it
13 would resolve your conflict as far as the fox is
14 and still allow housing for human beings.

15 Would it not?

16 A I just don't think that's a viable solution.

17 The enforcement aspect of it would create incredible
18 difficulty on the part of the community.

19 Q But on its face it would work.

20 A I don't think the implication would work.

21 Q That's right, I'm asking you to answer the
22 context on its face.

23 It's a means to accomplish the same end while still
24 allowing the housing to be constructed?

25 A Yes.

I guess another way would be to shoot the fox.

PENGAD CO., BAYONNE, N.J. 07002 - FORM 2644

1 Q I haven't ^{asked} / to kill the fox, I'm trying
2 to house the people.

3 Right?

4 Have you done any quantitative studies that deter-
5 mine the amount of open spaces within the Great Swamp
6 water shed which are required to support the wildlife
7 inhabitants found within the National Refuge?

8 A No.

9 Q Are you aware of any studies of this nature?

10 A I'm not familiar with any studies.

11 In discussion with Jack Fillio, the manager of the
12 Great Swamp, he did indicate that there are pla
13 the area of the Great Swamp throughaquisition.

14 Q On Page 10 the statement appears just above
15 the last paragraph on the page, "The amount of pressure
16 exerted by residents to control human/wildlife conflicts
17 increases with increased density of development."

18 I ask: What is the basis for that assertion?

19 A That was based in part on our conversation with
20 ~~Jack Fillio~~ Fillio where he indicated the increasing number of
21 complaints and public pressures towards eliminations of
22 portions of the natural eco system of the Great Swamp
23 as development occurs in and around the Great Swamp.

24 He saw a very close relationship between development
25 in proximity to the Great Swamp and pressures for artificial

PENGAD CO., BAYONNE, N.J. 07002 - FORM 1044

1 means of controlling the population of the Great Swamp.

2 Q To your knowledge, were any of these people
3 complaining or applying pressures, individuals living in
4 least cost housing projects or developments?

5 A I would have no knowledge of that.

6 Q Are you aware of any least cost housing
7 developments within the buffer areas of the Great Swamp?

8 A Least cost housing is a term I've used and you're
9 using. I'm still not sure what least cost housing is.

10 In my experience and in the study I have done in
11 a community outside of Morris County, I've found that
12 least cost housing is housing that was generally built
13 prior to World War II. By that I mean, those houses were
14 selling at prices lower than new housing was selling.

15 that's
16 I'm of the opinion that where our major resource
17 for least cost housing is in existing construction.

18 I know of no new construction that I would call
19 least cost housing in Passaic.

20 Q Have you reviewed any of the expert reports
21 submitted by the plaintiff's consultant Allan Mallach in
22 his discussion of least cost housing standards and densities?

23 A Yes, I have.

24 Q In the context of Mr. Mallach's least cost
25 housing standards and densities, are any of these housing
types found within the buffer areas of the Great Swamp,

1 to your knowledge?

2 A Except for individual lots which are nonconforming
3 [REDACTED] size.

4 The densities and lot sizes that Allan Mallach is
5 talking about are not, to my knowledge, found in Passaic.
6 I don't -- incidentally, consider his criteria of least
7 cost -- his criteria of least cost at all. In fact, some
8 of his criteria involves expensive housing, particularly
9 in terms of costs per bedroom which is quite expensive.

10 Q Would you feel that it would be accurate
11 to suggest in addition to an increased density of develop-
12 ment correlation with increased pressure to control
13 wildlife conflicts that the increased status of the resi-
14 dents on the economic scale might be another factor in
15 their predisposition or educational level or free time
16 that they would have to devote towards exerting pressure
17 and knowing what public officials to contact as opposed
18 to a straight line correlation between development and
19 pressure on public officials with regards to these human
20 wildlife conflicts?

21 My mind sort of wandered in the first half of the
22 question. So, if you could repeat it I'll answer it.

23

24 (The Court Reporter reads the requested question:

25 Would you feel that it would be accurate to suggest

1 in addition to an increased density of development correla-
2 tion with increased pressure to control human wildlife
3 ~~conflicts~~ that the increased status of the residents on
4 ~~the~~ economic scale might be another factor in their pre-
5 disposition or educational level or free time that they
6 would have to devote towards exerting pressure and knowing
7 what public officials to contact as opposed to a straight
8 line correlation between development and pressure on public
9 officials with regards to these human wildlife conflicts?)
10

11 A No, it has not been my experience that it is that
12 correlation between income and freedom to complete

13 Q Are you aware of any sociological studies
14 which have endeavored to explore relationships between any
15 of the innumerable characteristics which make up a popu-
16 lation personality make-up, if you will, and their pro-
17 pensity towards seeking redress from any levels of public
18 authority?

19 A Yes.

20 There were studies in the '50's and '60's which
21 indicated that lower income families were less prone to
22 challenge authority. I think it's more a function, inci-
23 dentally, of the awareness of the -- of our system -- that
24 is, those people who have been living in the country for
25 a long enough time to understand the judicial system. are

1 more prone to complain and litigate.

2 Q The final paragraph appearing on Page 10 I
3 ~~direct~~ your attention to. The statement appears in the
4 beginning of the paragraph, "Accordingly, the density
5 structure of the lands in Passaic Township bordering on
6 the Great Swamp must be such as to form a smooth progression
7 from wilderness area to suburban densities."

8 Have you delineated the boundaries of these lands
9 which you feel must provide the smooth progression from the
10 wilderness areas to the suburban?

11 What are the bordering or buffer lands that you've
12 discussed in that phrase?

13 A Well, the buffer area would be essentially the low
14 lands or areas with a high ground water table that are
15 located between the flood plain of the Great Swamp and the
16 higher elevations along -- at the toe or the foot of Long
17 Hill.

18 Q Finally, this paragraph concludes by stating,
19 "This requirement, together with other associated environ-
20 ~~mental~~ constraints, clearly calls for large lot zoning in
21 ~~part of~~ the Great Swamp water shed lands within Passaic
22 Township."

23 My question is: Why did you limit the requirement
24 to most of the water shed lands as opposed to all of them?

25 A A lot of the water shed lands are located high up

1 on the slopes of Long Hill.

2 The character of the area has already been established.

3 There is sewer and public water supply. The connection with
4 the Great Swamp's environmental regime is not as close and
5 as strong as areas are lower down on the slopes, at lower
6 elevations and closer to the Great Swamp.

7 Q Would you qualify this statement which calls
8 for large lot zoning to the extent that it could be moder-
9 ated by cluster development with respect to specific sites
10 which are constrained in the sense to dedicate those as
11 open spaces and are developed away from those environmentally
12 constrained lands with higher densities?

13 A Yes.

14 I have no problems with cluster zoning, and indeed
15 it's a useful tool to accomplish environmental objectives.

16 MR. ONSDORFF: Your witness.

17 MS. McDERMOTT: No questions.

18

19 (The deposition adjourns at 4:15 p.m.)

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

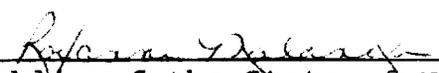
I, Roxanne Malanga,
a Notary Public and Shorthand Reporter of the
State of New Jersey, do hereby certify that
prior to the commencement of the examination

ALLEN DRESDNER

was duly sworn by me to testify the truth, the
whole truth and nothing but the truth.

I DO FURTHER CERTIFY that the foregoing
is a true and accurate transcript of the testimony
as taken stenographically by and before me at the
time, place and on the date hereinbefore set forth,
to the best of my ability.

I DO FURTHER CERTIFY that I am neither
a relative nor employee nor attorney nor counsel
of any of the parties to this action, and that I
am neither a relative nor employee of such attorney
or counsel, and that I am not financially interested
in the action.



Notary Public of the State of New Jersey