ML-Morris County Face Housing Council
V. Boonton

Jan 23,1980

Transcript of Deposition of Allen J. Dresdner

Pg. 109

ML000912 10/4

SUPERIOR COURT OF NEW JERSEY LAW DIVISION - MORRIS COUNTY DOCKET NO. L-6001-78 P.W.

MORRIS COUNTY FAIR HOUSING COUNCIL, ET ALS.,

pinecr CROSS

Allen J. Dresdaer Plaintiff

**DEPOSITIONS OF:** 

-vs-

6

7:

8

10

11%

12

131

141

165

16.

17

183

194

20

211

22

23}

地位一套

X-2

ALLEN J. DRESDNER

BOONTON TOWNSHIP, ET ALS.,

Defendant

"民主产生"。在4

es Fondhala

PATRICE K. SPROVIERI, a Certified Shorthand BEFORE:

> Reporter and Notary Public of the State of New The second is a substitution of the second s

> Jersey, at the offices of Dresdner Associates,

P.A., 57 Union Place, Summit, New Jersey, on

Tuesday, January 22, 1980, commencing at 10:00 We such was showing slope and greater

in the forenoon, pursuant to notice.

AB-4 Sketch map showing area served be

APPEARANTCLE Singham

STANLEY C: VAN NESS; PUBLIC ADVOCATE By to Kenneth R. Meiser, Esquire

for the Plaintiffs

W-I Sketum map showing water bodies and

MESSES AS DILLON TO BITAR & LUTHER

By: BARRY M. JOHNSTON, ESQUIRE

Sie for the Borough of Mendham!

reservoirs in Kinnelon

MESSRS. VILLORESI & BUZAK

By: EDWARD J. BUZAK, ESQUIRE for the Borough of Kinnelon SUPERIOR COURT MCRAL COUNTY,

MOUND.

FEB 1 1 1980

FRANK A. HEADLEY COUNTY CLERK DEPUTY CLEAK

Reporting Services Arranged Through: ROSENBERG & ASSOCIATES

Certified Shorthand Reporters 769 Northfield Avenue

W. Orange, N.J. 07052

Telephone: (201) 678-5650

24

R.Danni 1-29-80 MORRIS COUNTY FAIR HOUSING

Plaintiff :

Defendant

DEPOSITIONS OF:

-vs-

ALLEN J. DRESDNER

BOONTON TOWNSHIP, ET ALS.,

6

5

7

-

8

9

10

11

12

13

14

15

16

17

18

19

BEFORE: PATRICE K. SPROVIERI, a Certified Shorthand

Reporter and Notary Public of the State of New

Jersey, at the offices of Dresdner Associates,

P.A., 57 Union Place, Summit, New Jersey

Tuesday, January 22, 1980, commencing a

in the forenoon, pursuant to notice.

APPEARANCES:

STANLEY C. VAN NESS, PUBLIC ADVOCATE
By: KENNETH E. MEISER, ESQUIRE
for the Plaintiffs

MESSRS. DILLON, BITAR & LUTHER
By: BARRY M. JOHNSTON, ESQUIRE
for the Borough of Mendham

MESSRS. VILLORESI & BUZAK
By: EDWARD J. BUZAK, ESQUIRE
for the Borough of Kinnelon

22

22

**23** 

24

25

Reporting Services Arranged Through:
ROSENBERG & ASSOCIATES
Certified Shorthand Reporters
769 Northfield Avenue
W. Orange, N.J. 07052
Telephone: (201) 678-5650

## INDEX

2	ACCOUNTS OF	DIRECT	CROSS
	Acceptance Dresdner		
4	Mr. Meiser	2,82	
5	Mr. Buzak		105
- 11			

## **EXHIBITS**

	EXHIBIT	DESCRIPTION	IDENT.
9	MB-1	Sketch map showing qualified farmlands in Mendham	4
11	MB-2	Sketch map showing flood plains in Mendham	Kan.
12	MB-3	Sketch map showing slopes greater than 12 per cent in Mendham	
14	MB-4	Sketch map showing area served by sewer in Mendham	4
15 16	MB-5	Sketch map showing area served by water in Mendham	4
17	K-1	Sketch map showing water bodies and slopes in Kinnelon	83
18 19	K-2	Sketch map showing water supply reservoirs in Kinnelon	83



1	ALLEN J. DRESDNER, 57 Union Place,
2	Summit, New Jersey, Sworn.
¢.	FIRECT EXAMINATION BY
5	MR. MEISER:
6	Q This is a continuation of depositions which
7	we started two weeks ago. The same guidelines would
8	apply. If you have any questions that you don't under-
9	stand, please clarify it with me, and I'll try to rephras
10	the question.
11	MR. JOHNSTON: Let me just interj
12	point. When you say it's a continuation
13	continuation as to this witness but not as to this
14	particular defendant, I would hope.
15	MR. MEISER: We have asked no questions
16	about
17	MR. JOHNSTON: About the Borough of Mendham?
18	MR. MEISER: They were general, introductory
19	questions about his resume.
	MR. JOHNSTON: What defendant was present at
· 22	MR. MEISER: The people who were present
23	initially were the attorneys from Morris Township.

MR. MEISER: The people who were present initially were the attorneys from Morris Township, from Mendham Township, from Passaic, and from Kinnelon.

**25** 

2	DIRECT EXAMINATION CONTINUED
3	ST NE EEISER:
4	
5	Okay, Mr. Dresdner, what materials have you
	prepared for your review of Mendham Borough?
6	A. I prepared a report for the Borough of Mendham
7	called an analysis of the relationship of environmental
8	characteristics and land development, which I believe
9	you've received and have a copy of.
10	Q Right. Go ahead.
11	A. Well, I base that report on a number of
12	and published periodicals and maps.
13	Q For the record, why don't you just read into
14	the record those which you have used.
15	A. Some of them include the Lords Study prepared by
16	the State Bureau of Geology, the county soil maps, the
17	New Jersey State map of surficial geology, the USGS map
18	of the area, the map of Morris County streams prepared by
19	Morris County, the State Department of Community Affairs
10	Report, the plans prepared
21	by the Aristate Regional Planning Commission, the State of
22	New Jersey, the Department of Community Affairs and Morris
23	County plans.

MR. JOHNSTON: Thank you.

Those are some of the published reports that come immediately to mind. There are others.

1	Q Have you prepared any maps yourself in pre-
2	paration for use at this trial?
30	prepared several sketch maps. I haven't finalized
4	them, ner did I intend to finalize them until just before
5	the trial.
6	Q Would you be actually the one, unlike Morris
7	Township, where someone else from Catlin's office was pre-
8	paring the maps for trial, will you be preparing these
9	yourself?
10	A. Yes, we will be preparing them ourselves.
11	MR. MEISER: The sketch maps, can
12	mark the back of them for identification
13	(Thereupon, MB-1 through MB-5, sketch maps,
14	are received by the reporter and marked for Identi-
15	fication.)
16	Q For the record, would you just briefly sum-
17	marize what is shown on these five maps, one by one?
18	A. Yes. MB-1 shows qualified farm lands in the borough
19	as well as regular farm land. MB-2 shows flood plains in
	<b>beze</b> ngh. MB-3 shows slopes greater than twelve per cer
94)	the the Borough. MB-4 shows the area served by sewer in the
22	borough. MB-5 shows the area served by water in the
23	borough.
24	Q We'll come back to those. Now turning to
25	your report for a moment, on Page 3 you characterized

Mendham Borough as a low density rural-residential character. In population terms, density terms, what do you mean density rural-residential character"?

relates to the character of the area, and part relates to the function of the area in identifying or classifying a community as low density rural-residential. Generally speaking, a low density rural-residential area is characterized by a combination of single-family homes and farms with densities in the built-up or residential areas, at least from — starting at perhaps two units perthat's half-acre lot sizes in areas where there water and sewer provided. Occasionally, the density might go down to four units per acre. A ten thousand square-foot lot size is usually the smallest you would expect in these kinds of communities, with the exception of those portions of the community that are the oldest portions of the community.

There would be a large agricultural hinterland, and the community, to the extent that one exists, securitially to serve the surrounding residential area.

Finally, there are not usually large employment generators within the community.

Q Okay. When a town is suburbanized so that it has a suburban character, is there any type of density

2
3
5
6
7
8
9
10
11
 12
13
14
15
16
17

19

22

23

24

25

1

as	to 1	perso	ons p	er s	quare	mile	that	we	might	t see	or w	e migh
be	able	e to	use	as a	char	acter	izati	on a	as sul	ourba	1?	
		<b>k</b> el]	L, th	ere	would	be a	rang	e.	More	impo	rtant	would
) De	the	exte	ent c	f de	velop	ment	and i	ts 1	locati	lon in	n rela	ation
to	the	cent	ral	city	and	trans	porta	tior	faci	llitie	es.	

- Q Is there any guideline that you could give in terms of persons per square mile, the density in the town itself?
- Mentioned, it would be a substantial range. For example, Summit is a suburban community, and we have here everything from one-acre lots to six-story apar.

  New Providence is another suburban community, and they range -- the residential areas range in size from, say, perhaps one-third of an acre to garden apartments.

  Berkeley Heights is a suburban community, and they have no apartments.

Generally speaking, a suburban community can range anywhere from densities which are typically five to ten square foot lots for single-family homes to elements are artments, depending again on their history, the reasons for their existence, and the reason for their development.

Q Are you familiar with the term "developing municipality" as the New Jersey Courts have used it?

2

Le's been discussed? Yes, yes. 5 Which ones? 6 A. Well, what comes immediately to mind is Professor 7 Rose's publication. I've also read Mary Brooks -- I be-8 lieve Mary is her first name -- on exclusionary zoning. 9 Those are two reports that come to mind. Have you read any court decisions in which 10 the question of developing municipality has been discussed? 11 12 I read the Mount Laurel decision, the Oa Madison. I don't believe the Divan Realty in Mont 13 brought that up, and I read the Capputo case some time 14 ago. I've been trying to get that one to read, bring me 15 up to date on. 16 Do you have an opinion as to whether Mendham 17 Borough is a developing municipality? 18 MR. JOHNSTON: I'm not going to allow him to 19 answer that, because his response indicates that he's read only a very few of the many cases on the question of developing municipality under the 22 applicable doctrine, and, at any rate, you're asking 23 him to state an opinion on a matter which calls for 24 a legal analysis rather than an analysis in his line 25

I'm generally familiar with it, yes.

Have you read any of the zoning cases in

1 |

of expertise.

MR. MEISER: I think that, in some of his reports, he has gone into an analysis of whether, in his opinion, towns are developing municipalities. I can show you in some of his reports where he does that.

MR. JOHNSTON: Since his reports have been published, there have been additional decisions coming down on that question, and, for that reason, I do not think it's a proper question to ask of him at this time.

MR. MEISER: Well, I think, you kare, want to argue at court that it's irrelevant, then fine, but I think here a lot of his conclusions as to whether Mendham has any obligation, what the environmental factors are, are really keen on this question. I think it's worth finding out what his opinion is and what its basis is.

MR. JOHNSTON: You're saying that it was creelevant. I certainly --

MR. MEISER: Irrelevant to the outcome of this case, but if --

MR. JOHNSTON: Are you asking him whether he based his report on a pre-conception of whether

Mendham was a developing community within the meaning

of court cases?

23

24

25

MR. MEISER: I'm trying to find out what his opinion is in drawing his conclusions and writing his report, as far as Mendham Township. The whole conclusion is about whether Mendham Borough should have any obligation to build or whatever. it's worth finding it out what his opinion is on I think it's also worth noting that your own it. planner, in his master plan, discusses that subject. Now, obviously, they're not attorneys --

MR. JOHNSTON: The planner isn't planner --

MR. MEISER: Right, but he's not an attorney either.

MR. JOHNSTON: I don't see what remotely that has to do with this gentleman's report in this deposition, what the planner may have said. You can examine the planner on that.

What I'm saying to you is, if you're asking this gentleman to state, in his opinion, whether the Sorough of Mendham is a developing community within the meaning of the court decisions, I'm going to say that he's not qualified to answer that question.

MR. MEISER: Well, whether he's qualified or not, I mean, could come up before the court.

rr

A TEISER:

DIRECT EXAMINATION CONTINUED

Mr. Dresdner, in any of your reports which you have prepared for this case, have you gone into an analysis of whether municipalities are developing municipalities within the meaning of the Supreme Court decisions?

A Yes, I have.

think we're still entitled to find out what his opinion is.

MR. JOHNSTON: On what basis? He's being deposed as an expert witness in his area of expertise. Why are you entitled to have an answer from him which would be an opinion on a legal matter?

MR. MEISER: Because that's a framework for his whole conclusions as to whether Mendham Borough should have any ground -- should have any --

MR. JOHNSTON: I don't think there's any basis in the report for that statement at the can ask him that. You can ask him if a state his report was a conception of whether Mendham is a developing community or not. Let him answer it. If it turns out that I'm wrong, then I'll answer if he has an opinion, but, certainly, I think you've misconstrued what's in this document that we're talking about now.

1	MR. JOHNSTON: With respect to the Borough
2	of Mendham in that?
3	MR. MEISER: I'll ask the question and
4	MR. JOHNSTON: I didn't hear the question.
5	I'm sorry.
6	MR. MEISER: The question was has he done it
7	with any of them.
8	Q Which towns have you done that for?
9	A. I've done that for the Township of Mendham, the
10	Township of Chatham. I'd have to doublecheck, but I be-
11	lieve also the Township of Kinnelon.
12	Q And was there a reason why you die the control of
13	analysis for those three municipalities?
14	A. I was requested to.
15	Q And when you made those analyses, what fac-
16	tors did you look at?
17	A. I looked at the six factors, as I recall, that were
18	listed as the criteria to determining whether a community
19	is developing or is not developing or developed.
20	What are the six criteria?
21	Those six criteria included may I go into my
22	records?
23	Q. Sure.
24	A. Including land area, relation to central city, the
25	rural character of the community, population trends, vacant

•	tailds available for development, and land use trends; that
2	is, whether they're in the path of inevitable future deve-
3	· Topment.
4	How large is Mendham Borough?
5	A. Mendham Borough is about 4700 persons.
6	Q How about in square miles?
7	A. Slightly less than six square miles, 5.94.
8	Q What does the phrase "sizable land area"
9	mean to you?
10	A. Sizable land area, to me, is a relative term which,
11	in and of itself, has no meaning except in relation to the
12	size of other communities.
13	Q In relation to other communities in New
14	Jersey, what do you think is a sizable land area?
15	A. In New Jersey? Well, it would be in excess of
16	five to ten square miles, in excess of ten square miles.
17	Q Do you have any idea how many municipalities
18	in New Jersey are in excess of ten square miles?
19	A. Well, the average size municipality in New Jersey
21	china een square miles, thirteen or fourteen square miles
21	Time is probably down around the size of the Borough
22	of Mendham.
23	Q In other words, you would say, approximately
24	there are many municipalities larger in area than Mendham
25	Borough, some are smaller?

22

23

24

25

1	A. Yes.	
2	MR. JOHNSTON: Is that what you meant by	
<b>6</b>	mean"?	
4	THE WITNESS: Yes. I should say median	
5	rather than mean, but yes, that's what I mean. The	
6	difference, however, between this median size com-	
7	munity of, say, five or six acres and the larger	
8	sizable communities is quite large.	
9	Q Do you know what the median size of an area	
10	of municipalities in Morris County is?	
11	A. In Morris County? No, I don't.	
12	Q. Do you believe that Mendham Borou	,
13	substantially shed it's rural characteristics?	
14	A. No, I'm not of that opinion.	
15	Q. What factors do you look at to determine	
16	whether it has shed it's rural characteristics or not?	
17	A. I look at the amount and distribution of lands that	
18	are qualified for farm-land assessments and are being used	
19	for farm purposes, whether qualified for farm-land asses-	
	e de hot.	
21	In Mendham area, what percentage is qualified	7

I don't think I -- I don't recall working out that I do recall, however, on the basis of the map, that there's a substantial amount of farm land in the southern part of the community. In going through my report, I note,

24

25

1 on Page 16, that 53 per cent of the vacant agricultural 2 lands in the borough are qualified farm lands. Elsewhere, 4 Excuse me. What was that number? 5 Page 16, 53 per cent of the vacant agricultural 6 lands in the borough are qualified farm land and could not 7 be considered developable at this time. That is the 8 sentence. 9 I note, elsewhere on Page 16, that qualified farm 10 lands account for 837 acres. 11 Do you have any idea of what the Q. 12 useage was thirty, twenty, or ten years ago? 13 As I recall in reading the history, it was 14 hay, grain, and orchards. 15 Okay. I quess I didn't make my question 16 clear. What I was trying to ask is do you know how much 17 land was used for agriculture thirty, twenty, or ten years 18 ago in Mendham Borough? 19 No, sir. I don't. 20 21 tial reduction in the last thirty years? 22 A.

Do you know whether there's been a substan-There has been a reduction. The number of acres that have gone out of farming, however, I don't know. What is Mendham's population per square mile? Do you know that as of today?

•	n les. I dan work did due. Induc slightly less
2	than eight persons per square mile.
3.	MR. JOHNSTON: Eight hundred or eight?
4	THE WITNESS: Eight.
5	MR. JOHNSTON: Slightly less than eight per-
6	sons?
7	THE WITNESS: Oh, I'm sorry. Eight hundred
8	persons.
9	MR. MEISER: It really shrank.
10	THE WITNESS: Eight hundred persons per
11	square mile.
12	O Do you know how that compares to
13	of persons per square mile in Morris County as a whole?
14	A. No, I don't.
15	Q Let me just make this clear. You have not
16	been retained and are not going to testify to anything
17	about fair share at your testimony, in Mendham Borough, is
18	that correct?
19	A. The extent of fair share that I have considered
	to the amount of vacant developable land in the
21	township, in the borough, not to any obligation the commun
22	ity might have to provide it.
23	Q. Then you will not be giving any testimony
24	about whether Mendham Borough is or is not a developing
25	municipality, is that correct?

1	A. T
2 3 4	Q. your rep from the
5	A. T
6	Road, wh
7	about se
8	five mile
9	
10	iı
11	
12	11
13	11
14	
15	
16	ir
17	20
18	re
19	M€
20: 21	

23

24

25

Α. ΄	That's	correct.

Q Okay. One of the subjects you mentioned in your report is transportation. How far is Mendham Borough from the nearest exit of 287, do you know?

There is a major interchange on 287 at Mount Airy Road, which goes directly into Mendham. That would be about seven miles from the center of Mendham and perhaps five miles from the southern border of the borough.

MR. JOHNSTON: When you say "goes directly into Mendham --"

Excuse me. I don't -- do you mind if I

MR. MEISER: Go ahead.

MR. JOHNSTON: When you say "goes directly into Mendham," are you speaking of by way of Route 202, then Tempe Wick Road, or do you mean there's really a direct route from that interchange into Mendham?

than 202 and Tempe Wick. It would take several rural roads: Mount Airy Road, Clairmont Road, over some hills to Bliss Road, Bernardsville Road, Hilltop Road into the center of the borough.

MR. JOHNSTON: Okay.

1	DIRECT EXAMINATION CONTINUED
2	BY MR. MEISER:
1	How long a drive would that be, do you know?
4	I don't know how long it would take.
5	Q. What type of field work, by the way, did you
6	do in Mendham Borough in preparing your report?
7	A. I took a windshield inventory of the borough. That
8	is, essentially, driving through the borough, noting the
9	character of the various areas in the borough, and coming
10	to conclusions regarding the character and extent of develo
11	ment, the terrain, the streams, and the densities
12	Q When was this tour taken?
13	A. This was taken many months ago. During the summer,
14	in all likelihood, July or August.
15	Q Was this an all-day
16	A. Of 1979.
17	Q. Was this an all-day tour?
18	A. No. It was between a half a day and all day. It
19	was more than the morning. I recall that.
	Were you in Mendham Borough for any other
	than preparing for your report and your testimony,
22	besides this windshield tour?
23	MR. JOHNSTON: Ever or on that trip?
24	MR. MEISER: For a purpose other than that
25	day for purposes of preparing this report.

Dresdner - direct

1	A Yes, I was, but not for the purpose of preparing
2	this report. I'm sorry, so the answer would be no, I
3€	waen't.
4	Going back to the map, how far is Mendham
5	Borough from the nearest exit of Route 80?
6	A. As the crow flies, it must be fifteen miles.
7	MR. JOHNSTON: Which exit is that?
8	THE WITNESS: That exit would be at the
9	Spicertown exit of Route 80 with 6, 34, and 42.
10	That is in the northern portion of Wharton.
11	Q Do you know what the closest place went be
12	from Mendham Borough to pick up Erie Lackawanna
13	A. The closest place for Mendham Borough to pick up
14	the Erie Lackawanna would be either in Morristown or, pos-
15	sibly, Peapack-Gladstone.
16	Q Okay. I'd like to turn now to your map on,
17	I believe it's water. I think that's MB-5.
18	A. Yes.
19	Q Now, this is a map which you prepared, I be-
20	Lieve?
21	A. Yes, sir.
22	Q And where was the information that you got the
23	you used to prepare this?
24	A. This information was derived from the Lords Study.
25	Q. The Lords Study listed the water, the area

1	served in water in each municipality?
2	A Yes.
3,	1 see, and when was the Lords Study done, as
4	of what date, what year, do you know?
5	A. The Lords Study was done in it was published in
6	1974.
7	Q I see. Have you checked to see if there
8	may have been any expansion of the service area in Mendham
9	Borough since 1974?
10	A. Yes, I did.
11	Q And the answer was?
12	A. No.
13	Q Now, this map seems to indicate that all of
14	the northern part, up to the boundary line, is served by
15	water, is that correct?
16	A. That's correct.
17	Q. Where these lines are, the cutting off of
18	the water supply, do those relate to any roads or to any
19	recognizable boundaries, do you know?
20	They probably relate to either drainage divides or
21	Ascations between roads.
22	Q I have a zoning map. I'm wondering if there'
23	any correlation between the zoning
24	MR. JOHNSTON: Looks like it ought to overlay
25 25	A. We have areas between roads.
<b>.</b>	No linyo andab boomach boats

1
2 3 4
5
6
7
8
9
10 11
 12 13
14
15
16
17
18
19
<u> </u>

22

23

24

	Q.	Ok	ay, s	0 1	et me	just	see so	methi	ng.	The
water	line	is th	e red	l.,	That's	wher	e the	water	sto	p <b>s?</b>
	Yes	. The	area	of	servi	ce is	withi	n the	red	line
shown	An ms	, over	·lav							

- Q The southermost part, where it extends, I guess, along Hilltop Road, is there any other -- I'm trying to see if we can mark this. The intersection of Thomas and Hilltop is served, is that correct?
- A That's correct.
- Q I see. Okay, and it seems to cross all of -let me see if I can identify that road.
- A. It would include all of --
- Q All of Talmage is covered? Part of Prentiss.

  Okay, let me see if I can, just for my purposes, just draw this map approximately where it would be. Coveville Drive is covered, and most of this area that is zoned one-acre zoning on the right is covered, is that correct?
- A. That's correct.
- Q The area south is not, south of these red Lines, is not served by public water at this time, is that correct?
  - A. That's correct.
  - Q On Page 12 of your report, this is going to stay with water, your report indicates that the borough maintains two public water wells, water supply wells with a

1	combined capacity of point seven million gallons per day.
2	Where did you get that information from?
3	A I don't recall whether we got that from the borough
4	car a published source.
5	Q Is there a public source, that you know of,
6	that gives this information for each municipality?
7	A. Well, they would give the information for water
8	wells. In fact, there are probably two sources. One is -
9	both are with the Department of Environmental Protection.
10	One relates to well information, and the other would relate
11	to water supplies.
12	Q Do you know the names of the two wells.
13	Mendham Borough?
4	A. No, I don't.
5	Q Do you know when they were built?
6	A. No, I don't.
7	Q Now, on Page 12 of your report, you indicate
18	that the present water demand in the borough is about a
9	half million gallons per day. Where did you get that info
de de	mation from?
21,	That might have been from the master plan or from
22	well records, from the township's borough's well record.
23	Q I see. Is there, in this area, an average
24	use of water per day by either a family or a home?
25	A. There are standards or rule-of-thumb figures for

1	water use.
2	Q What are those standards?
3	A Well, in a built-up area where you have commerce
4	and industry, it's eighty to one hundred gallons per person
5	per day. For solely residential use, it could be all the
6	way down to 20 gallons per person per day.
7	Q Do you have any information as to what the
8	use is in Mendham Borough?
9	A. No, I don't, other than the point five million
10	gallons per day.
11	Q In a built-up area, what is the release that
12	it's 80 gallons to 100 gallons per day?
13	A Per person? Because industry is factored in.
14	Q I see.
15	A. You can have a wide variety of use for industry and
16	commerce, from the water-intensive industry to water-non -
17	intensive industry.
18	Q Would you anticipate that Mendham would be
19	closer to the 20 than in the 80 to 100, with the absence of
90	
2 <b>y</b>	Absolutely.
22	Q On Page 12, when you say the surface areas
23	for these supplies are shown on figure blank and includes
24	approximately fifty per cent of borough, is the figure mean
25	to refer to this?

1	A. Yes, sir.
2	Q. Okay. Have you computed how many or exactly
3 4	percentage of the township is that is covered by
5	A. No, I haven't, other than fifty per cent. In looki
6	at this drawing, I'd say it's about 55 per cent served by
7	water.
8	Q Do you know how many people in Mendham Borou
9	are using this water, public water source today?
10	A. No, I don't.
11	Q Now, do you know how much of this
12	comes from the wells and how much from the reservoir
13	A. No, I haven't made a breakdown between the source
14	or sources of public water.
15	Q Do you know what the maximum capacity for
16	water per day would be in the borough, considering both
17	the reservoir and the wells?
18	A. Well, I've noted as point seven million gallons the
19	two wells. The capacity of the reservoir is, as I recall,
204	*** *** million gallons. However, you can't use all four
21	<b>#11108</b> gallons in one day, because there would be no
22	replenishment.
23	You can assume perhaps ten per cent would be reason
24	able to use up, which would be four hundred thousand.
25	Q A day?

2
H.
3
H07)
4

5

6

7

9

8

10

11

12 13

14

15

16

17

18

19

21

22

23 24

A.	Yes.	Not	over a	long	period	of	time,	but	over	a
short	period	of t	ime wi	thout	advers	ely	affec	ting	the a	situa
tion.	Howev	er, i	f you	run i	t for -	- re	educe	it te	n pe	r cent
a day	for in	exce	ss of	a wee	k, you	lose	a go	odly	port:	ion
of vo	ır wate	r.	ř							

- Do you have any idea as to how many additional families -- how many additional individuals, we'll start with, could safely be allowed to utilize the borough's public water system?
- I haven't worked that out.
- If you were going to work it out, be your methodology? How would you decide to
- Assuming there were no changes in water use habits, I would take the differential between the point five million gallons per day that exists and the point seven million gallons per day in the two public water wells. That's 200,000 gallons per day, and assuming, say, three and a half persons per family -- in order to make the division easier, four persons per family. Multiplying that times 20, which is a low figure, very low figure for water consumption, I would come up with a figure of 80 gallons per day per family and divide that into 200,000, and that would be an additional 2,500 persons.
- Twenty-five hundred persons or twenty-five hundred units?

comfortable

24

25

1	A. Twenty-five hundred units.
2	Q Is there any way of knowing or any guidelines
3	as to how close to a hundred per cent capacity the public
4	water system could safely operate?
5	A. I don't know what the guidelines are, but, surely
6	you shouldn't operate at capacity, and from between eighty
7	to ninety per cent of capacity, my opinion, is a comfortabl
8	and reasonable margin.
9	Q. Is that based on any specific water companies
10	or specific knowledge?
11	A No. Well, it's based on my experience as a planner.
12	and not as an engineer.
13	Q. Supposing an owner of land, let's say for the
14	moment, just south of your cutoff line in any part of the
15	town was interested in being hooked up to a public water
16	system, what would he have to do? What would the process
17	be, or is there a process?
18	A. He would have to if he wanted to hook up, he
19	would have to get permission from the water company, which
20	is owned by the borough, and pay for the installation, if
21	epproved, pay for installation of the lines within his
22	development, as well as connecting, extending the lines off
23	site to link into the system.

The variables are whether he's linking into a portion of the system that has adequate flow and pressure to support

1	an addition, so if he's tying into the end of the system,
2	that is, into a six or eight-inch water line, he may not
3	, be able to get the volume or the pressure that would be
4	necessary from the standpoint of health or safety.
5	Q Have you done any investigation as to whether
6	there is the volume or pressure to allow an additional
7	hookup?
8	A. No, I haven't.
9	Q Do you know if the water company has granted
10	any extensions in recent years, has expanded
11	A. No, I don't.
12	Q Do you know where these two wells or d
13	in the township?
14	A. Yes. The two wells are located in the southern
15	part of the service area noted on the water supply overlay
16	of the Lords map with a square.
17	Q Would you be able to, through any of your
18	maps, tell on what road or where, any more specifically,
19	where they're located?
24.	Les. It would be located in the area of Hilltop
21	Road and Thomas Road.
22	Q. Do you know whether it would be possible for
23	a developer in the southern part of the borough to develop
24	his own well to service his development?

There are a lot of private wells in the southern

į	l
1	
2	
<b>3</b> .	
5	
6	
7	-
8	
9	
10	
11	
12	
13	
14	
15	
16	

18

19

20

21

22

23

24

25

portion of the borough. Depending on the conditions in the area, particularly sub-surface conditions and site specific sub-surface condition. I couldn't answer that question yes or no.

- Q Is there any way to know that you know what a limit might be on public wells or an area like Mendham? What information would you need to know for that?
- A Exclusive of exploratory borings, the source that I would go to is the Lords Study, which suggests a safe yield of potable water for different rock types throughout the state.
- Q How much of Mendham Borough is pre carries 
  Virtually all of it.
- Q What do you feel that face yield -- what do they say the face yield is?
- A. Without public water and public sewer, they recommend a minimum lot size of three to four acres.
- Q Do they get into any projections in the Lords Study of what the safe yield for water is without considering septics? In other words, just looking at the ability to supply enough water for the people.
- A I'm sorry. I don't understand the question.
- Q. Okay. Let me try to rephrase it. Let me ask you this: What does the term "safe yield" mean, as you've been using it, as the Lords Study uses it?

A.

25

A.

without decreasing the potable water table. Now, Mendham Borough, it was mentioned earhar, I believe, a daily water capacity of seven-tenths 5 of a million. Is there any way of knowing whether that is 6 reducing the water table, and, if so, how much and whether 7 it's reducing it beyond the safe yield? That's a long 8 question. 9 Well, I have my own judgment on it, but more accurate 10. would be a question to the borough as to whether they're 11 lowering the ground water tables as a result of 12 pumping. 13 Do you have any knowledge as to whether 14 are? No, I don't. 15 16 Does the Lords Study give you any way of 17 looking at Mendham Borough as a pre cambrian rock and saying 18 the amount of water we can safely withdraw from the borough 19 as a whole is such-and-such a figure per day? tell, yes. It's a very gross figure, and it's mentially three to four -- I'm sorry. It would be comparable to multiplying three to four acres by an average 22 family size. 23 How many acres are there in Mendham Borough? 24

That's the amount you can withdraw from the ground

4,735 acres, as I recall. Excuse me. Thirty-eight

•	mulated deten when a population of 4/100 persons.
2	Q What was the acreage again?
3	L Thirty-eight hundred acres.
4	Now, if you divide that by, let's say, four
5	acres, using the formula you used, what would that come ou
6	to?
7	A. Nine hundred and fifty.
8	Q And we were saying the average size was four
9	for a family?
10	À. Yes.
11	Q Proceeding along the way you had discussed
12	what does that come out to?
13	A. Thirty-eight hundred.
14	Q And that thirty-eight hundred stands for
15	what?
16	A. Well, in this case, that would be the population
17	that could be served by limiting potable water resources
18	to ground water solely and observing a face yield concept.
19	Q Now, is it your opinion that, environmentally
20	we ahound not provide public water for more than 3800 peop.
21	in Mendham Borough?
22	A. No. What I'm saying here is that, if you base you
23	water supply solely on ground water
24	Q Right.
25	A when you go above 3800 people, you're drawing down
	1

on your water supply. You're losing it. Again, assuming you've got septic tanks, which is a source of recharge.

have public sewers, what you're drawing out of

With the septic tanks, there is some replenishment.

Now, the Borough of Mendham has a surface water reservoir which supplements or complements the ground water and could offset the service and serve as an offset for the population which is in excess of 3800 persons.

- Q Considering the reservoir and considering your safe yield approach that you've been taking the have any opinion as to the population in Mendham be supported with this type of water system?
- A No, I really haven't worked that out. I would have to find out what, in fact, has been the experience with the two wells and what is the reasonably expected daily useage of the reservoir.
- Q Now, if I'm in an area which is unserved by water and I want to draw -- prepare a large public well or that would serve the development, what type of permistration of the local or federal government?
- A. You would require approval, I believe, by the Board of Health, the local board of health, probably the state board of health.

-	min domination. I mayne just state that,	
2	although I have no objection to the witness answering	3
<b>√3</b>	this question, he certainly can't be bound by the	
4	laws and regulations, which will speak for them-	
5	selves as to what has to be done to get permission	
6	to draw water.	
7	A. And it would have to be registered.	
8	Q Does Mendham Borough allow anyone outside	
9	the borough to use its public water?	
10	A. They serve a portion of the township, as I recall.	
11	Yes, they do.	
12	Q Let me ask you this: Where is the	
13	located?	
14	A. The reservoir is located on the boundary of the	
15	Township of Mendham and Randolph Township.	
16	Q. On what stream?	
17	A. India Brook.	
18	Q Do you know whether there's any possibility	
19	of either expanding that reservoir or creating a new reser-	
20	Voir in any stream in the vicinity of Mendham Borough?	
21	No, I don't.	
22	Q Do you know if the borough made any studies	
23	about the possibility of either expanding their water sys-	
24	tem through another well or through another reservoir,	
25	expanding the reservoir?	

2 Q

No, I don't know.

Now I want to ask you a little bit about the maps, if you can get that.

MR. JOHNSTON: I have just one point of clarification I'd like to make on water. If you prefer, I'll wait until the end of the deposition. It might be better to do it now.

MR. MEISER: Go ahead.

MR. JOHNSTON: Mr. Dresdner, as I understood your testimony earlier, when you were asked by counsel how you would go about making a possible of the remaining capacity of the public support population, you derived a figure of 2,500 units. It's my impression that your later testimony indicated that that 2500-unit figure was a raw figure, without taking into account safe yield. Is that correct?

THE WITNESS: That's correct.

MR. JOHNSTON: So that you really aren't in position to say how much of that apparent 200,000-allon capacity could be safely used, is that correct?

THE WITNESS: That's correct.

MR. JOHNSTON: Okay. That's the only point I wanted to clarify.

(Thereupon, there is a discussion off the record.)

1	DIRECT	EXAMINATION CONTINUED
2	BY MR.	MEISER:
<b>š</b> ,		This is MB-4, identification, I believe.
•	. <b>350</b> v. 75	circled-in area is the area served by sewers, is
5	that co	orrect?
6	A.	Yes.
7		Q I see 1132. Is that the number of acres?
8	A.	Yes.
9		MR. JOHNSTON: Excuse me. Let's develop that
10		a little bit. How many acres did you testify were
11		in the borough?
12		THE WITNESS: Thirty-six hundred.
13		MR. JOHNSTON: Okay.
14	DIRECT	EXAMINATION CONTINUED
15	BY MR.	MEISER:
16		Q. What is the source from which you derived
17	this gr	aphic illustration?
18	A.	That also is the Lords Study.
19		Q Have you checked to see if there's been an
Ġ,		
<b>21</b>		no, I haven't. There has not been an update of the
22	Lords S	tudy.
23		Q If there's been an update in Mendham Borough?
24	A.	No, that I have not checked.
25		MR. JOHNSTON: What's the date of the Lords
]		

Study?

2

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

22

23

24

25

1

THE WITNESS: 1974.

MR. JOHNSTON: Still '74?

THE WITNESS: Yes.

Do you have the Lords map from which you derived that, also?

Yes.

That's entitled, "Landfill overlay sheet 25," is that correct?

"Sewage, landfill overlay sheet 25."

Do you, in your report give the this sewage treatment plant? I think it's on P I note on Page 14 that the average daily Yes. is .35 m.g.d., and the capacity is .5 million gallons per day.

We discussed this with water. It's the same Q. question with sewer. Is there any approximation of how much a family or an individual needs or uses in gallons per day?

\*t would be the same as they use for water, essen-There's some loss, but, generally, the amount of water that comes out of your tap is the amount of water that flows into your cemetery system, whether it's a septic tank or a public system.

So in the area of Mendham Borough, we're in

BAYONNE. 9

1 the area of 20? Is that --Twenty gallons per person. Now, I believe you indicated that, in your this system is at 70 per cent of capacity, is that 5 correct? 6 Yes. 7 Assuming for the moment that we wanted to 8 know how many more units could hook up to reach 100 per 9 cent capacity, could we go through the formula that you 10 used earlier? 11 Less than 2,000 units. A. 12 Could you tell us how you compute 13 I divided 80 into 150,000. 14 And 80 was assuming that four individuals are in a house? 15 16 Yes. 17 Would use 20 gallons per person? 18 Yes. I might add that's a very low figure, particu-19 larly as you go from rural to suburban. The more built up unity, the higher the density, the greater the By the same token, we'd really, I guess, if 22 we were accurate, to be precise, would use 3.5 persons 23 per family rather than 4, wouldn't we? 24

I think in a suburban community you're safe in

25

23

24

25

1 4, safer at 4 than at 3.5. I may have asked this question. Let me ask Do you have any knowledge whether the sewage plant recent years has allowed any additional tie-ins? 5 Well, to the extent that there is additional develop-A. 6 ment within the service area, they would accept the connec-7 tion, and that would be the same with the water area. 8 is, if you have in-fill, they would accept -- which I answered in the negative to your question on water. I 10 assumed you meant extensions beyond the service area. 11 Do you know if there's been any ea Q. 12 the service area since the system was created? 13 No, I don't. 14 Do you know when the system was created? No. 15 Do you know the type of treatment of sewage 16 17 that take place at the plant? 18 I don't recall. 19 Did you speak to anyone about this? he treatment plant operator.

Do you know if there's been an upgrades of the treatment process in recent years?

No, I don't. A.

Are there any standards as to how close to 100 percent capacity a sewage treatment plant can operate at?

25

2	any standards, but good judgment suggests they should be
	at less than capacity at any one time.
	Do you have any thoughts as to how much less,
5	whether it be 70 per cent, 80 per cent, 90 per cent, 95
6	per cent?
7	A No, I don't have any thoughts other than the ten
8	to fifteen per cent under-capacity that was mentioned by
9	me earlier on water.
10	Q Okay, and that's based not on any specifics
11	but as your general feelings as a planner?
12	A. Correct.
13	Q Do you have any knowledge as to what percen-
14	tage of capacity the system would be operating at if in-fill
15	was completed in this area in accordance with the present
16	zoning?
17	MR. JOHNSTON: If what was completed in this
18	area?
19	MR. MEISER: If the in-fill that he was dis-
<b>25%</b>	was a sing earlier in other words, if this area was
*	aully built up as permitted by the present zoning.
22	A. I don't know whether it would be within or whether
23	it would exceed capacity.

What would the sewage authority have to do

if it sought to expand its service area in this present

Well, it could -- I don't know whether there are

~

unserviced area? I guess I'm talking about both as far as laying pipes and what it might have to do with upgrade its

study. It may go beyond upgrading the treatment plant.

For example, it might require construction of a new treatment plant. It would depend on the receiving or assimilative capacity of the outfall stream. It would depend on the topography of the land. They may have to do a number of things or very little.

Q Do you know if such a study has emade?

- A. No, I don't.
- Q On Page 15 of your report, the last full paragraph above the slope limitations, the first sentence states:

"The above history in treatment from Mendham Borough sewage treatment plant continues today."

What was your basis for that sentence?

The assumption that there hadn't been any changes

The 1974 in the treatment of outfall from the borough's sewage treatment plant.

- Q Was that an assumption, or did you check that out?
- A. I don't recall. I would think that we checked it out.

objectives.

25

1

Have you yourself done any pollution studies

of any sort of any of the streams in Mendham Borough?

	20, I haven't.
	Do you know of any data since 1974 concerning
5	the quality of the streams in this area?
6	A. None specific.
7	Q Is there any state or county policy that you
8	know of, that you know of, to limit the expansion of sewer
9	systems or to encourage septics for new developments?
10	A There was a state policy that encouraged centralized
11	sewer systems, as contrasted with package systems and the
12	treatment plants. The status of that policy no.
13	know. There's been some talk about going back to smaller
14	treatment plants.
15	Q Where was this policy written or whose policy
16	was it?
17	A. Well, that was the State of New Jersey's policy,
18	and it resulted in the 201 area facility plants.
19	Q Do you know, is there any county policy pre-
	either sewer systems or assimilative sources to
	plants or septics?
22	A. I know of no policy of one over the other. There is
23	a county sewer plan. You use the kind of system to either
24	accomplish water quality objectives or to complement use

2	
<b>5</b>	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14 15	
16	
17	
18	
19	
22	
23	

25

Q.			Have	you	re	vie	wed	the Mo	orris	Count	y ma	ster
plan	as f	ar a	s it	deal	Ls w	ith	the	sewag	ge fa	cility	ele	nent?
<b>.</b>	<b>.</b> ≵e	s, I	peru	sed	it.	I	may	even	have	a copy	, of	it
والهلا	<b>2/1</b> 1	don'	t rec	all	any	of	the	detai	.ls o	f it.		

Q Let me read a sentence to you, then I'll give you a chance to look at it and see if you agree or disagree with this. On Page 80, in discussing the North Branch water shed, it states, "that existing facilities such as the Mendham Borough plant should be utilized to their fullest capacity with improved treatment as required to meet the water quality standards of the receiving

I'll give you this. Take a look at it, what your opinion is on that.

A. Page 80?

Q Yes, 80.

A Oh, I see. Well, I --

MR. JOHNSTON: Before you respond to the question, I might ask you to consider whether you have the sentence in context or not. I don't know myself what you're referring to, and I don't have many objection to your answering the question or not, but if you think you need some time to review the context before you can do that, I suggest you take it.

A. Okay. Well, I cannot disagree with the improved

treatment required to meet water quality standards of the receiving stream. Whether that can be accomplished with the plant to its fullest capacity, that would take a ditional study.

What they seem to be saying is that -- and I'm not sure which is the first priority. The plant should be utilized to its fullest capacity, and there should be improved treatment to meet required water quality standards. Well, the latter obviously takes precedence over the former. That is the -- before, it says, additional service, it should have a quality of effluent that meets standards.

I don't know whether that answers your qu

not.

Q Okay, fine.

MR. JOHNSTON: May I just see that for a moment?

(Thereupon, there is a discussion off the record.)

Q One of your concerns for recommending high relation low density was the possibility of contamination by septics. How much of that problem can be taken care of proper location? In other words --

A Of septic tanks?

Q Where you site the septic and where you site the well.

3	
6	
7	
. 8	
9	
10	
11	
12	
13	
14	
15	
16	
 17	
18	
19	

23

24

25

1

A.	Wel	1, i	t's a	a combina	tior	of	two	factors:	The	soil
con	ditions	and	the	location	of	the	two	utilities	in	rela-
	<b>i wik</b> ea	ch o	ther.							

Right.

- A. So given an adequate size lot, proper location of the well and septic tank should obviate any problems that one could expect from pollution of the ground water.
- Q Your feeling is that, given the best location of the two, you still require four acres of zoning per house if there's no public water or sewer?
- A. No. The three to four acres is based on the safe water yield.
  - Q I see, so it's only secondarily --
- A. Yes.
  - 0 -- the contamination?
- A And in some cases independent.
- Q We got into this a little bit in our last deposition, but let me expand a little bit. Do you have an opinion as to whether it would be feasible to utilize of package treatment plants for higher density in the southern part of Mendham Borough?
- A package treatment plant is probably the only feasible way of serving higher densities in the southern part of Mendham Borough.

MR. JOHNSTON: How did you happen to get into

25

that in the last deposition, since, as I understood 2 it, he wasn't asked any questions pertinent to endham Borough before? MR. MEISER: This subject of -- we can dis-5 regard my introductory thing. The question came 6 up in connection with Mendham Township. 7 MR. JOHNSTON: As to what they can do in 8 Mendham Borough? 9 MR. MEISER: It was just a preamble to the 10 question. There was no discussion of Mendham 11 Borough. 12 MR. JOHNSTON: When you say you g 13 before, you mean you got into the general question 14 in another municipality? 15 MR. MEISER: Without any reference to Mendham 16 Borough. 17 MR. JOHNSTON: Thank you. I'm at ease now. 18 MR. MEISER: Okay. 19 Now, the feasibility of the package treatment plant to, as I mentioned before, the ability of the ing stream to accept the effluent, period. 22 Are there package plants that do not require 23 24

a stream, that have other means of disposing rather than into a stream? Yes, there's spray irrigation. There's a method --

1	it's not a common method of disposing of effluent.
2	Q Is there any other method?
	here could be recharge back into the ground. I'm
4.00	y familiar with that.
5	Q Do you draw any conclusions about the feasi-
6	bility of a package plant in any part of southern Mendham
7	Borough without looking at the particular stream and par-
8	ticular land?
9	A. When you say the feasibility of a treatment plant,
10	you can't separate that from the package treatment, you
11	can't separate that from the number and density
12	you're going to serve, and there may be other a
13	ways of treating that, the sewage from that particular
14	density. I could not address package treatment plants
15	in the southern part of the Borough of Mendham. Generally,
16	it has been a state policy to discourage package treatment
17	plants.
18	Q. This was the Department of Environmental
19	Protection policy?

es.

That was a policy, you indicated, which may have been in a state of flux?

A Yes.

22

23

24

25

Q I see, so I just want to make it clear on this. For a particular site, what factors would you need

24

25

1 to know to make an evaluation of the feasibility of it? 2 You may be just repeating your last answer. ssuming that the outfall would be to a stream, Line here is an assimilative capacity of the stream to 5 accept the volume and quality of effluent. Secondly, would 6 be the density and distribution of the population to be 7 served. Package treatment plant becomes feasible as den-8 sity increases. At a certain level or floor, it becomes 9 cheaper, if you will, to provide septic tanks rather than 10 a package treatment plant. 11 Can you point out on any of these 12 are the F2 streams in the borough and where th 13 you have that information? 14 All the streams --15 Available? 16 All the streams in the borough are F22 streams. 17 When you say all of the streams, how many 18 are we talking about? Do you know? 19 No, I don't, but every stream in the borough is Med as an F2 stream. Now, have you done any analysis of the soils 22 in Mendham Borough?

A. No analysis. I'm familiar with the soils from the Soil Conservation Service map.

Q. What are the predominant soils? Do you know

what they would be?

MR. JOHNSTON: Excuse me. Are you going to get away now from sewage, or is this in connection with the sewer question?

~~

MR. MEISER: I'm moving on to soils. I may have a few questions coming back to how the things relate. Do you want to ask a few questions?

MR. JOHNSTON: Just one question. This might be the best time to answer it.

Mr. Dresdner, do you recall, a while ago,
Mr. Meiser asked you whether the full development
of the area served by sewer would result
sent system -- let me put it another way.

the present system could absorb the full development
permitted by zoning in the area that it serves?

Do you recall that question?

THE WITNESS: Yes, sir.

MR. JOHNSTON: I think your answer was that you didn't know for sure whether it could or not as far as capacity is concerned, is that right?

THE WITNESS: That's correct.

MR. JOHNSTON: When you say that, you're talking about you don't know whether the capacity of the treatment plant to take in effluent would be exceeded?

1

ould be on --5 THE WITNESS: That's correct. 6 7 8 9 DIRECT TESTIMONY CONTINUED 10 BY THE WITNESS: 11 A. 12 13 14 15 16 17 18 19 22 sive of the steep slope Edneyville areas. 23 Q. you talking about of slope? 24

MR. JOHNSTON: You are not commenting, then,

what the effect of the outflow from the plant

THE WITNESS: That's correct.

MR. JOHNSTON: Okay. Thank you. wanted to make sure that I correctly solved those points in my mind. I'm sorry. Go ahead.

- The major soil associations in the borou Parker-Edneyville Association and the Bartley-Tu Cokesbury Associations. Now, within these associations, there are a variety of soils, but the main ones are Parker, Edneyville, Bartley, Turbotville, and Cokesbury.
- What is your opinion, if you have one, as to the suitability of, let's say first, Edneyville soil for, first of all, just residential development in general?
- It would depend in part on the slope. All of these 'd have to apply a slope factor to. The Edneyville ending are generally suitable for urban development, exclu-
- When you say steep slope, what percentage are
- That would be, for Edneyville, eight to fifteen A.

•	per cent or 1'm sorry. That would be fifteen to twenty-
2	five per cent.
	I see. Now, how does this soil rate as far
5	A. They're essentially okay for septic, except for the
6	steep slopes.
7	Q I see. How about the Parker? How do you
8	classify the Parker?
9	A. The Parker are less suitable for urban development
10	but not unsuitable for urban development.
11	Q I see.
12	A. When I say less suitable, I compare it to
13	Edneyville. Again, the steep slopes are generally unsuit-
14	able.
15	Q And when you talk about steep slopes on Parke
16	what are you talking about?
17	A In excess of fifteen per cent.
18	Q I see. What about the Cokesbury?
19	A. The Cokesbury are generally poor for all types of
	Elepment.
	And the Bartley?
22	A. The Bartley are comparable to the Parker or are
23	between Parker and Cokesbury in terms of suitability, so
24	we're taking those four. From most suitable to least suit-

able, I would go from Edneyville to Parker to Bartley to

	Dresane	-
1	Cokesbui	cy.
2		Q
5		Q.
6	soil in	Me
7	<b>A.</b>	In
8		

11

12

13

14

15

16

17

18

19

22

23

24

25

Q	And	how	does	Turbo	tvi	lle fi	t in n	ow?	
setta	ırbotville	e is	compa	rable	to	Cokesi	oury.	It's	a
	s genera								

- What about the Califon? Is there any Califon Mendham Borough?
- In Mendham Borough?
  - Yes.
- There should be. It's often associated with Yes, there are Califon soils in Mendham. Cokesbury.
- And how would you classify the Calif how does the soil survey classify Califon?
- The Califon soils are also a difficult soil with in urban development. They're characterized by a high ground water table, not quite as high as Cokesbury, and as I said, they are associated with Cokesbury. They're the next higher soil.
- Assuming for the moment the existence of a source of public water, do you have any general feeling as, all, overall in the township, the environmental density that would be required, assuming for the moment that the whole town had public water? That's just an assumption.

MR. JOHNSTON: Let me see if I understand what you're saying. You're saying that, assuming

. Š.

, All

we don't have to be concerned with?

MR. MEISER: The reason I'm asking that is

the has been basing his assumption on the Lords

Study which talks about requiring three to four

that the town had public water from some source that

I'm just curious what his conclusion would be if the water were available.

acres of minimum zoning, requiring private water.

Well, I'm not basing it solely on the Lords Study vis-a-vis potable water, because you can't take the community out of context with its present development and its present transportation system, its relationship rounding communities. For that reason, it would be very difficult to claim a density for the community.

Q Well, obviously, transportation is relevant to the patterns and these things. The past history is relevant. What I'm trying to find out is if you think there's a certain minimum zoning that would be environmentally required, assuming the water source to exist.

ell, recognizing also that --

MR. JOHNSTON: I still don't understand the question. If you do, go ahead and answer it, but when you say assuming the water source to exist, do you mean, for example, that assumption that we were getting water piped some great distance from some

other source that was so remote we didn't have to be concerned with it in our own land use?

MR. MEISER: I am assuming one of several possibilities. That's one. Another one would be an additional reservoir or a third public well which would have a capacity to supply this.

What I'm really trying to find out is how important the water factor is in his conclusion and what his conclusion is if you take that factor away.

MR. JOHNSTON: I'm not sure I understand but if you think you do, I don't have and to your trying to answer it.

A It's still a very difficult answer to give to that question, because there are certain areas of town which, by virtue of its Cokesbury and Califon soils, may very well require densities substantially greater than three or four units per acre, because the percolation just isn't there for tank.

in, another factor could be storm water runoff into the streams. The borough as well as the township is the headwater for the North Branch, as I recall, and serves a purpose in maintaining downstream flow, not only the quality

1	of downstream flow but the volumes of downstream flow. I'm
2	sorry.
3	Go ahead.
4	A reasons I
5	mentioned previously, I couldn't give a single density figu
6	for the entire community.
7	Q Maybe we can come back on that. Let's go on
8	to the slopes map. We can come back to a few of those ques
9	tions later. I believe that's your third one. What was you
10	source in preparing this map?
11	A. The U.S. Geodetic Survey.
12	Q Now, the area in red is the area with the area
13	over twelve per cent?
14	A. Yes.
15	Q Do you know anything more about these slopes
16	from this map than that they're over twelve per cent? In
17	other words, is there any way of knowing which is over
18	fifteen, which is over twenty?
19	A. No, it just shows in excess of twelve per cent. It
	lude areas that were in excess of twenty per cent.
4	But there's no way of knowing which of these
22	are twelve?
23	A. No.

24

25

Now, we were talking about the soils map earlier. One of the things that seemed to me is that a number

1	of soil characteristics are labelled A, B, C, B, and I be-
2	lieve B is usually from eight to fifteen per cent slope, is
3	* that correct?
4	2  No, no. D is. D as in David is eight to fifteen.
5	B is three to eight or five to eight, five to ten, something
6	like that.
7	Q I see. I guess I was wrong on that. Is
8	twelve per cent recognized as a traditional cutoff point as
9	between what is suitable for building at high densities and
10	what is not?
11	A Oh, no. Twelve per cent, in this case,
12	because that was a figure that the Department of
13	Affairs used in distinguishing vacant land from vacant
14	developable land. That was the sole reason we used twelve
15	per cent.
16	Q By the way, we were both wrong. If I'm
17	right, it's C that's eight to fifteen per cent slopes.
18	A. Okay.
19	Q A is usually zero to three. B is three to
	A C is eight to fifteen.
	tight. Fifteen to twenty-five is D, and twenty-five
22	and over is E. There's some shifting in there, but, essen-
23	tially, eight to fifteen is C, yes.
24	Q Is that a traditional breakoff, eight to

fifteen per cent in classifying soils?

these

24

25

1	A. Yes, in classifying soils it's a reasonable break.
2	Q As far as choosing land that's suitable for
<b>3</b>	the target of the there a difference between twelve per cent
4	**************************************
5	twelve rather than fifteen?
6	A I say the sole reason for my selecting twelve was
7	that's what the Department of Community Affairs used in its
8	fair share allocation. Fifteen can be used as easily and
9	is used in subdivision regulations.
10	Q What would it take to find out which per-
11	centage of these soils are in that twelve to fifther the
12	cent slope, in that borderline area?
13	A I'd have to go back over the USGS and measure it
14	again.
15	Q Do you have any idea what percentage of these
16	might be over fifteen per cent?
17	A. No. I suspect it would be a relatively small per-
18	centage, but that may be a reflection of my bias, but it
19	should be a relatively small per cent.
	(Thereupon, there is a discussion off the
	zecord.)
22	Q. Now, you took this from the U.S. Geodetic
23	map. How much reliability would a planner give to that

tic t map, the U. S. Geodetic thing? Would they say there's a ninety-nine per cent chance of accuracy? Would they say the

1	slope is higher? Is there any guideline in the field as to
2	how accurate those maps are considered?
	The maps themselves are
	extractly accurate. The steepness of the slope depends,
5	in part, on the contour interval. If you have a contour
6	interval, say, of two feet, then you have a very accurate
7	slope map. If you have a contour interval of twenty feet,
8	then you have a less accurate slope map, not that the
9	twenty-foot contours are not accurate, but the interpolation
10	is less so.
11	Q I see, and what did you say the company
12	were?
13	A. Twenty feet. The accuracy errs on conservatism.
14	That is, the areas that I've shown as steep are conserva-
15	tive. There are more areas that are steep land than are
16	shown on this map. However, with a twenty-foot contour
17	interval, you get the steepest areas.
18	Q I see. Okay, what about the flood plains
19	map. Can you get that?
	Ahis, also, I can make a copy of.
7,	MR. MEISER: I think that would save some
22	time, because if I've got that, it saves asking a
23	lot of general questions,
24	THE WITNESS: This is MB-2.

This is your wetlands map?

1	A. Flood plain.
2	Flood plains map. I'm sorry. Have you com-
3.	public was area that's in the flood plain?
4	• • • • • • • • • • • • • • • • • • •
5	in wetlands and flood plain. That would include both wet-
6	lands and flood plain. I corrected you too quickly, and
7	that would account for 325 acres.
8	Q. Okay. Now, the first one that I'm going to
9	look at is the water plain area in the northeastern part of
10	the town. Looking at this map, could you tell us what that
11	is?
12	A. Well, that's part of the flood plain of
13	that passes through that portion of town. Oh, yes, that's
14	part of the headwater of the north or south branch of the
15	Raritan.
16	Q What was your source of this map for demar-
17	cating areas as in the flood plain or wetlands?
18	A. The source was either HUD maps or the soil survey.
19	I don't recall which at this time. If they were HUD flood
21	maps, that would have been the source. If not,
22	Q Do you know if there is a HUD map for Mendham
23	Borough?
24	A No, I just don't recall.
25	Q Okay. Now, when you say you used the soils,

1	which soils would have been put within these demarcations?
2	A. Well, the Cokesbury soils would have been put in
	The soils that have a seasonally high groundwater
	the surface or possibly within four feet
5	of the surface, but, surely, a seasonally high groundwater
. 6	at the
7	Q So in other words, this was taken, then, from
8	the Morris County soil map, is that where it was taken?
9	A If it were, if it were, it would have been from the
10	it might have been taken from the HUD study, if there is
11	such a study.
12	Q Is it your position that any land
13	a soil with a high water table within four feet of the sur-
14	face should never be built on for high density?
15	A. No, not at all.
16	Q Then what would be the rationale, if it's
17	not always true, of automatically taking off those soils
18	from the list of developable land?
19	A. Here again, it was based on the Department of Com-
	fairs exclusion of wetlands, as they excluded areas
	when alones in excess of twelve per cent, wetland, and quali-
22	fied farm lands or fair share allocation purposes, the
23	implication being that these areas should not be developed.
24	Q Did DCA define, in the report you looked at,
25	wetlands as having a high water table within four feet?
	A. No. In fact, curiously and perhaps unfortunately,

they did not opine wetland.

2

Then what was your rationale for using the of high water table as the cutoff?

5

6

7

8

10

11

12

13

14

15

16

17

18

19

22

23

24

25

mell, I didn't say that. I said up to four feet. There's an excellent rationale for that, which is that the land is unsuitable for septic tanks. That is, if you have a seasonally high water table at -- within four feet of the surface, that imposes severe constraints on septic tanks. Depending on proximity to a stream and the nature of the soil itself, it may also reflect the flood plain.

Simply from looking at the soil w this water table within four feet, is it possible determination of whether it's possible to use that for high density, if there are public sewers?

The limitation, the main limitation, to a high A. ground water table -- I shouldn't say the name. An important limitation to high water table is unfeasibility for septic tanks as well as severe constraints for foundations and road construction. The area does not lend itself to density urban development because of these environmental esstratits.

Under the soil map, a soil which has a high water table of four feet or less is always deemed severe for foundation?

For foundations? Foundations with a basement. A. They

22

23

24

25

1	make a distinction. I should have mentioned this earlier:
2	With basement and without basements. They're invariably
	th high water table, particularly if the land is
AA	flatter the land, the more severe the flatter
5	the land, given a high water table, the more severe the
6	construction constraints are on it. The reason for that is
7	drainage becomes difficult.
8	Q I'm not sure if I understood your answer.
9	Let's assume there's no basement. Does the soil, if any,
10	always list tables, water tables, of under four feet as
11	severe for foundation?
12	A No, no. It lists it severe for development
13	a flat soil, say zero to eight per cent, relatively level.
14	When you get in the C soils, eight to fifteen, you have
15	relatively steep grades which impose other constraints,
16	but they do hasten runoff.
17	Q I see. The Morris County Master Plan states
18	that, in adopting a conservative approach, only those lands
19	having a water table of two feet or less have been mapped.

validly use a two-foot water table as the cutoff opment, or do you feel it has to be four?

Well, I don't know what Morris County is making A. reference to, but four would be more suitable for septic tanks.

Okay.

25

1 Water table within two feet of the surface is high, 2 is a high water table. MR. JOHNSTON: Could I interject a question on that? Do you know what the current standard for 5 construction of an individual septic system mandates 6 as to the groundwater level? 7 THE WITNESS: One foot. The groundwater 8 table has to be one foot below the septic tank. 9 MR. JOHNSTON: Do you know at what depth the 10 perc test has to be taken and found acceptable? 11 THE WITNESS: I think it was two 12 don't recall. It may be four feet. 13 MR. JOHNSTON: So for all you know, it could 14 be four feet mandated by law for construction of 15 individual septic tank? 16 THE WITNESS: Well, in practice it would 17 virtually always be at least four feet. 18 MR. JOHNSTON: Okay. Thank you. 19 DIRECT EXAMINATION CONTINUED MEISER: 22 **23** 

Can you tell me, from this zoning map, how this area is zoned? Is our overlay good enough to do that?

It's zoned one-quarter acre residence.

That's the area with this low water table?

A. Largely in the one-acre zone. A portion of it is in

24

25

	CHC DUBLICOD TOHOL	
2	Q It's largely in the what acre zone did you	
		,
	quarter-acre lot.	
5	Q So you excluded in this area, this high water	
6	area, land from being developable which has the highest	
7	density zoning in the township, is that correct?	
8	A. Well, if it were vacant, yes. I'm not excluding it.	
9	I'm merely taking it out from the calculation.	
10	Q Of what's developable?	
11	A Right, and that calculation was prepared to compare	
12	it with the Department of Community Affairs calc	
13	developable land in the borough.	
14	MR. JOHNSTON: In point of fact, do you know	
15	whether that land we're talking about now is already	
16	developed?	
17	THE WITNESS: Well, no, actually. It includes	В
18	a large wetland which is part of the Mendham Commons	,
19	which is not developed nor is planned for developmen	t.
	MR. JOHNSTON: Well, the Mendham Commons is	
	eveloped as a unit, isn't it?	
22	THE WITNESS: That's right. That's right,	

THE WITNESS: That's right. That's right,
but it doesn't include the developed portion of the
Mendham Commons. What is shown here is not developed
by the Commons, nor will it be.

1	MR. JOHNSTON: That's right, but it is in the
2	area of an approved development which includes some
	pen spaces, some units, okay?
	THE WITNESS: Yes.
5	DIRECT EXAMINATION CONTINUED
6	BY MR. MEISER:
7	Q Can you tell from this zoning map whether
8	there's been any actual construction of housing within that
9	area?
10	A Yes. There appears to be several homes which are
11	several lots, portions of which are located with
12	wetland area.
13	Q I see. Let's move down the map to the second
14	wetland area which is on the border of Mendham Township,
15	bordered by, I believe it is, Franklin Road. Now, again,
16	that is taken from the soils
17	A Either the soils or HUD flood insurance maps.
18	Q I see. Is it possible for you to take a look
19	at the soils map and see what those soils are, just see if
	onform to this?
	that would go on Cokesbury soil, which is character-
22	ized by ground water at the surface.
23	Q. What are the letters for Cokesbury? Does it
24	give it?
25	A. Yes, CoA.

CoA?

1

2	A Right.
<b>)</b>	Can you tell from this overlay what the
4,	the last been for that particular area?
5	A. Single-family one-acre zoned.
6	Q Can you tell from the zoning map, whether,
7	in fact, there's been construction within there?
8	A. Yes, there's been construction throughout this area
9	Q Is the construction within this wetlands
10	area or outside it? Does the zoning map tell?
11	A. Well, the location of buildings on the zame
12	represent symbols. However, there's a road that
13	through it, and there are homes built in the area.
14	Q I see. Let's go all the way down to the
15	far southeast part of the township. Can you tell from your
16	soil map what type of soil that is?
17	A. That's also a Cokesbury soil with CoB, B as in Bett
18	Q Okay. Moving on to I'm pointing, but let
19	me characterize it. It is the one along what's labelled a
<b>6</b>	private coad, is the starting point. It's in the southern
21	part set the eastern part of the town, the southeastern
22	part. It looks like an oddly shaped T, perhaps. Is there
23	a stream in there, that you know of?
24	A. There's an ephemeral or intermittent stream shown
25	on the soils map.

Q.

2	A. It's a seasonal stream. There's water during
Y	is desired.
1 4	I see, and is it possible to tell what soils
5	generally? There's probably more than one in this area of
6	the soil map.
7	A. That's essentially the Cokesbury soil again, CoB.
8	Q Now, the final one is a large thing which
9	goes from the western boundary of Mendham Borough to, per-
10	haps, the middle of the town, and it's the largest area on
11	here. Are there any major streams in that area?
12	A. Well, there's a McVicker's Stream. That
13	major stream in the area.
14	Q I see, and is there one major soil charac-
15	terization there?
16	A Yes, it's a Cokesbury, CsB.
17	Q I see, and that's what is the predominant
18	soil in this delineated area?
19	A. Yes.
	Now, can you tell if there's been any develop
2	** In the northern part of that delineated flood plain
22	area?
23	A. There's been a little, very little development within
24	this particular flood plain area.
25	Q. That development has been what type of zoning

What do you mean when you say ephremeral?

1	A. That has been in one-quarter acre zone and one-
2	acre zone. There's also been development in the five-acre
4	I see. The one-quarter acre zone, is that
5	along Main Street and Hampton Road?
6	A. Yes, it is.
7	Q I'm not sure what's been scratched out. Is
8	there any other flood plain on this map that we have not
9	looked at? The last one. Okay. That's at the northern
10	border?
11	A Right.
12	Q Of the Borough of Mendham, and the control of the Borough of Mendham, and the control of the c
13	one strip. Everything else, just to make the record clear,
14	has been scratched out. That which we've not talked about
15	is not meant to be included as a flood plain land?
16	A That's correct.
17	Q Okay. Now, what is the zoning of this norther
18	most flood area, can you tell?
19	A That's CcB. I believe that's Cokesbury, also. Let
	check.
	hat's Califon's soil.
22	
23	Q Let me just check that. That was called CcB soil?
	A. Yes.
24	
25	Q Okay. I have no further questions on this may

have said this already. If you have, I apologize.

The areas in the northwestern sector and the south
Western sector that you have crossed out as not

properly being in a delineated area, why were they

crossed out, or else why were they put there to

start with, then crossed out?

MR. JOHNSTON: Just one, if I may. You may

THE WITNESS: I, in looking over the soils map, my reaction is that they should not be crossed out. However, they are crossed out here. I will go back and doublecheck these areas. For this follows India Brook.

MR. JOHNSTON: Yes.

THE WITNESS: And I would question -- I would go back and see whether I can determine why it was crossed out and whether it should be.

MR. JOHNSTON: Okay. I think we have to know that. I suppose you're not talking about something that you can do right now, are you?

THE WITNESS: Well, I'd rather take fifteen representation of twenty minutes after this and --

MR. JOHNSTON: If you'd write me a letter explaining the answer and a copy to Mr. Meiser, then he can determine whether he wants to depose any more questions about that. I think we can agree to

handle them separately.

2

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

22

23

24

25

1

THE WITNESS: It will be consistent. If these are, in fact, flood plains, the soils are reflected as such, and you have the Morris County map there. You can doublecheck it.

MR. MEISER: All right. Fine. Let me just

DIRECT EXAMINATION CONTINUED

BY MR. MEISER:

Now, you gave me a total, which I've written down someplace, of the total acreage that is in this flood plain, 325 acres?

A Approximately.

Q Do you remember, does that 325 acres include or exclude the scratched-out area?

- A It should exclude the scratched-out area.
  - Q You said it should.
- A That I will also get back to you on with a letter.
- Q Fine. All right. Now, in your report, let me turn to that for a second, you list, on Page 16 of your but list flood plains and wetlands as 68 acres with farm lands already subtracted out.
- A. Right.
- Q. I guess we should go back to that map. Do you know which of those 68 acres would be the ones you're excluding now?

A.	I would have to lay that over my farm-land map and
see whe	ere the comparison is.
W V	Maybe you can just Xerox. Would it be pos-
ena (	Xerox? That might save the need for you
A.	We have to see whether it distinguishes between the
two col	lors.
	Q Sure.
	(Thereupon, there is a discussion off the
	record.)
	All right. On this map, what does brown and
what do	es green stand for?
<b>A</b>	I was afraid you'd ask that question. T
qualifi	ed farm lands. That would be the lighter.
	Q Okay, and the brown?
A.	Maybe estates, but, again, I would have to clarify
that.	
	(Thereupon, there is a discussion off the
	record.)
	Q How was this map prepared?
**************************************	mis was prepared from an existing land use map
	by Mr. Kasler, and the information on qualified
	by Mr. Kasler, and the information on qualified nd assessments, that we received from the Borough
farm-la	(*************************************
farm-la	nd assessments, that we received from the Borough
	what do A. qualifi A. that.

22

23

24

25

. 1	A. Yes.
2	Q So that 837 would be the green?
4	Now, your characterization on Page 16 where
5	you've got vacant and agricultural land, farm land, slopes
6	in excess of twelve per cent, vacant developable land, how
7	does the brown fit into that?
8	A. That I would have to clarify. That may be, if not
9	estates, that may be the 459 acres, but looking at it, I
10	would have to go back into my records and also speak to my
11	person who prepared this sketch.
12	Q Now, on Page 16 where you've got
13	ferent breakdowns, assuming these are estates, where would
14	they be listed on that chart at the bottom of Page 16?
15	A. They would not. If they were estates, they would
16	not be listed.
17	MR. JOHNSTON: They would not be listed as
18	vacant land at all?
19	THE WITNESS: No, they would not be listed as
	cant land if they were estates.

listed as be listed as All right. The question I'm really getting to -- I don't know if you're going to be able to answer it It's sort of -- the bottom line is where in the township are the 459 acres of vacant developable land? MR. JOHNSTON: You don't have your wetland

map on there, do you?

THE WITNESS: No. I was just looking here
to see if there was any consistency between the
steep slopes.

record.

MR. JOHNSTON: Look, let's put this off the

(Thereupon, there is a discussion off the

record.)

DIRECT EXAMINATION CONTINUED

BY MR. MEISER:

Q I'll ask the question again. Re the planning board map, can you point out where acres of vacant developable land are?



A The vacant lands are those parcels which have no structures on them, as shown on this zoning map. There are three characteristics which we will exclude, environmental characteristics which we will exclude from the vacant lands. These are the flood plains and wetlands, the steep slopes, and the qualified farm-land assessment.

1	Q How much, if any, of these vacant developabl
2	lands are north of Main Street?
3	Tery small percentage of the lands that are vacant
44	and developable are located north of Main Street.
5	Q This being Main Street, this road here?
6	MR. JOHNSTON: You say it's largely because
7	they're already developed rather than for any of
8	the other reasons?
9	THE WITNESS: That's correct, and the reason
10	they're largely developed is because they have the
11	fewest environmental constraints, and it
12	cally makes sense to go to these areas with the sense to go to these areas with the sense to go to these areas
13	easiest to develop.
14	Q Now, is this area and I'm referring to th
15	far northwestern part of the corridor, vacant developable,
16	the brown up there?
17	A. Yes, yes, if brown is vacant developable, and I wil
18	have to clarify that.
19	MR. JOHNSTON: Except is that not where the
	andham Borough sewage treatment plant is located,
	this area, if you know?
22	THE WITNESS: I don't recall where it's lo-
23	cated.
24	Q Does that brown area in the far northweat
25	have water, public water, or public sewer?

Yes.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

22

23

24

25

Now, there's a large brown area south of et and north of where the farms start. Other than does that seem to be the vacant developable?

There is a flood plain coming from there, also, which is part of the McVicker's Brook, Stream section, but other than that, that includes what appears to be a large vacant area.

That land is zoned one acre and five acre below it to the south?

Yes.

Q. Going back to our earlier maps, That is to the south of the water line, is outside the water line?

Yes.

And it's to the south of the sewer line, okay, so we were saying that all of this brown here is outside the water area. I know it dips down.

No, the sewage dips down. I'm sorry. No, no. It's You're right. It's the water. Most of this e of the water line. The water line dips down in here, then comes back something like that.

There's a brown area on the right-hand side to the south of Main Street that is presently zoned what? One acre?

1	A. One acre.
2	Now, can we tell whether that's in or out of
3	the water or sewer?
4	A Outside
5	MR. JOHNSTON: Outside the sewer?
6	THE WITNESS: Outside the sewer and inside
7	the water.
8	MR. JOHNSTON: Inside the water. It does
9	not appear to be vacant, does it?
10	THE WITNESS: On some of the larger parcels,
11	if there were a building up front, we would
12	the rear portion. That's why I don't be
13	we have estates.
14	MR. JOHNSTON: Approximately what dimensions
15	is this area? Can you tell, that patch of ground?
16	THE WITNESS: I have the scale right here.
17	That would be approximately 1200 feet deep and
18	700 to 800 feet wide at its widest.
19	DIRECT EXAMINATION CONTINUED
	W MR. AMISER:
2)	Would you repeat those dimensions?
22	A About 1200 feet deep and 700 to 800 feet wide at its
23	widest.
24	Q Now, all of the other areas that are brown
25	would be south of the water and sewer line, is that correct?

1	A. Most of them would be. Some, like right in here,
2	are within the water line but outside the sewer line.
	Does this line going across the southern
· ·	part of the town have any meaning?
5	A. That's a road.
6	Q What road is that?
7	A. That's Cherry Lane.
8	Q So in other words, the land north of Cherry
9	Lane is within the water system?
10	A. Some of the land north of Cherry Lane is within the
11	water system. The water system runs between Charles
12	and Talmage Road.
13	Q What about this corner area?
14	A. A portion of that, if brown, that is within the water
15	area. A portion of it is shown as having steep slopes, and
16	it is outside the sewer service area.
17	Q What about water?
18	A. It's within the water.
19	Q Within the water. Now, can we tell what the
i ii be	for that brown land along the border?
	Yes. That's one-acre zoning.
22	Q And the land above Cherry Lane?
23	A. That's five-acre.
24	Q Is there any other brown on this map which
25	would be in either the water or the sewer?

one-quarter acre there?

	A. The brown area just south of therry Lane, that's
2	outside of the sewer but within the water.
	MR. JOHNSTON: That's largely overlaid with
1	slopes, is it?
5	THE WITNESS: Yes, steep slopes.
6	Q And what zoning is that presently?
7	A. That is five-acre zoning.
8	Q Is there anything else that would be within
9	the water or the sewer that's brown, that you see?
10	A There are two brown parcels on Hilltop Road. That's
11	within the water but outside the sewer, which ha
12	slopes and are zoned five acres.
13	Q Anything else?
14	A No, that would cover it all.
15	Q Let me ask you about the zoning map itself.
16	Starting with Main Street, over to the right on Main Street,
17	we see zoning of a fourth an acre. If we go back, for example,
18	Halstead in here and Dean, then we jump to one-acre zoning.
19	Do you know any environmental or any reason why this was
	acre?
21	don't know, of my own personal knowledge, why it
22	was zoned one acre.
23	Q Do you see any environmental reasons that
24	would have required one-acre zoning here, as compared to the

	2	,	
Į,	Ó	Ņ	ć
Š	4	ú	Ĭ
X			į
é		Ž,	40.00
œ.		ď.	N,

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.	A str	eam	flows	thi	rough	the	area	we're	talki	ng	abo	)U
and goe	into	the	Mendi	am	Borot	ıgh	Park.	That	would	be	a	
	hig	her	zoning	J •								

Is that stream marked on this map at all or shown?

Portions of it are shown on the map. The portion shown near Mendham Commons is on the map, and it is not shown anywhere else on the map, but the stream does go into the pond located at Mendham Park.

> MR. JOHNSTON: Excuse me. I suggest you might be a little bit confused here. There's parklands. The one you're referring to, is further north. There's the borough pool.

THE WITNESS: I'm sorry. That's my error. I was tracing out the stream that did not go to the borough -- the borough pond is considerably north of Mendham Park, I was referring to. I don't see on this map an environmental basis for the distinction zoning between Main Street and off Main Street. here may be such a reason but not based on the zonng map.

MR. JOHNSTON: When you say an environmental basis, you mean based on the environmental characteristics we've been talking about today?

THE WITNESS: Yes, steep slopes, flooding.

22

23

24

1	I can get the water table.
2	DIRECT EXAMINATION CONTINUED
3	SEL MEISER:
4	Now, at the top of this map we have the
5	Raritan River, and what is the zoning, can you tell, along
6	the Raritan River?
7	A. One acre.
8	Q And below the railroad track?
9	A Below the railroad track, one-half acre.
10	Q Can you estimate the distance of this half-
11	acre zoning from the river along here?
12	A. Probably from 150 feet to 300 or 400 feet
13	(Thereupon, there is a discussion off the
14	record.)
15	Q Do you think 150 feet or 300 feet from a
16	river is an appropriate distance to increase the density
17	when we're talking about water protection?
18	A It depends on many other factors. As you noted,
19	there's a rail line which is abandoned. That seemed to be
	or one of the bases, rather, for the change in
22	Q I see.

MR. JOHNSTON: If you know, isn't the abandoned railroad line part of what the county park system now calls Patriots Path, running through there?

1 THE WITNESS: I don't know. 2 MR. JOHNSTON: You don't know, okay. AMINATION CONTINUED BY 5 Now, how many acres is the Mendham Commons, 6 do you know? Can you show on there where it is? A. Mendham Commons, I will draw it in red. 8 Within that acreage, how many acres is that, 9 do you know? 10 I seem to recall a figure of 360. No, 120, 120 11 acres. 12 MR. JOHNSTON: I think that's abo 13 but I can't say for sure. 14 Now, how many units are being built in Mendham 15 Commons, do you know? 16 360? 17 So that's a density of just under three per Q 18 acre? 19 Are these rental housing or for sale town-22 Either condominiums or townshouses. 23 Now, the land outside this, is that being used for anything? I'm referring to the quarter-acre zoning 24 outside your sketch. 25

1	A Not to my knowledge.
2 * • 3	As far as you know, that's vacant?
4	Maybe you know. Is this the water-impacted
5	area, or is that developable land?
6	A. No, that would be part of the flood plain.
7	Q. I see.
8	A High water table.
9	Q Now, in the Master Plan I saw several refer-
10	ences to a senior citizen housing project. Do you have
11	any knowledge of that?
12	(Thereupon, there is a discussion
13	record.)
14	Q Can we mark on there where that senior citi-
15	zens tract is?
16	(Thereupon, the witness complies.)
17	Q And do you know the acreage and the number of
18	units to be built there?
19	A No, I don't.
	(Thereupon, there is a discussion off the
***	** ** ** *****************************
22	Q Do you know what the status of that is?
23	A. No, I don't.
24	(Thereupon, there is a discussion off the
25	record.)

public water?

24

25

1	Q Do you know the reason for the three-acre
2	zoning in the northwestern part of the township?
	To.
4	As we go down the maps, south of Main Street
5	we see the land shifting from one-acre to five-acre zoning.
6	Do you know of any environmental or other reasons why the
7	lines are where they are?
8	A Well, the lines follow property lines. The reason
9	or a good reason for reducing densities in that area would
10	be because of the relative steepness of the slopes and the
11	wetland areas. As you saw on the previous maps,
12	much steeper, and there are more wetlands to the
13	Main Street than there are to the north.
14	Q Would that be your answer through the entire
15	moving in a west-east direction for where we switch from
16	one-acre to five-acre?
17	A. Yes. Generally, there's a change as you go further
18	south to north, undevelopable or land more difficult to
19	develop than there is to the north. The lines themselves
20.	property boundaries, not natural boundaries.
21.	Some of the five-acre land is within the
22	public water system, and this area, do you think five-acre
23	zoning is appropriate in areas where there is access to

Yes. It would depend, in part, on the utility system,

13

14

15

16

17

18

19

22

23

24

25

Dresdner - direct 1 that is, the sanitary sewer system. Conditions may be such five acres is necessary to provide the necessary perco-Mut, generally speaking, my recommended basis for fing the densities in the southern portion of the 5 community would relate, primarily, to the steep slopes, the 6 flood plains, and the distance from community facilities 7 and utilities. 8 Let's assume for the moment that we have what 9 you've listed as vacant developable land within this public 10 water area. Your feeling is that that land should still 11 remain five acres?

A. I think it would be reasonable to remain acre, yes.

And your reasoning would be what?

- Proximity to the wells, potential soil conditions, and possibly steepness of the slope.
- Do you know or have any thought as to what the ultimate population is that Mendham Borough can support under this existing zoning?

, I don't.

By the way, do both the senior citizen and the Commons have public -- are they tied into public water and sewer?

Yes, sir. They are.

(Thereupon, there is a discussion off the record.)

13

14

15

16

17

18

19

22

23

24

25

Dresdner - direct 1 MR. MEISER: That's enough. I'm finished 2 with Mendham Borough. (Thereupon, there is a luncheon recess.) 5 ALLEN J. DRESDNER, Sworn. 6 7 DIRECT EXAMINATION BY 8 MR. MEISER: 9 Let's begin by asking you what reports and 10 11

studies you've done or maps for Kinnelon at this time, for purposes of this trial. A I've prepared one report, an analysis of

tionship of the environmental characteristics and land development for the Borough of Kinnelon. I've used, in preparing that report, previous master planning reports for the Borough of Kinnelon, its natural resources inventory, the Morris County soil survey, USGS maps covering Kinnelon, and publications by the New Jersey Department of Community Affairs, the Tri-State Regional Planning Commission, Morris anning Board. Did I say the Tri-State Regional Tending Commission? Period.

Now, you referred to the Master Plan. you review both the original 1963 -- I believe it's 1963 --Master Plan and the update?

A Yes, I did.

1	Q Do you have the update here?
2	Here are the documents I do have.
	Now, did you indicate whether you've prepar
T.	any maps yourself in preparation for this trial?
5	A. I didn't prepare any final maps. I've been using
6	existing maps for analytic purposes. I have two maps her
7	that have been prepared. One map is slopes in excess of
8	twelve per cent and water bodies. The map shows both
9	water bodies and slopes, and the second map shows water
10	supply reservoirs in Kinnelon.
11	MR. MEISER: Can we get those mark
12	identification, K-1 and K-2?
13	(Thereupon, K-1 and K-2, maps, are received
14	by the reporter and marked for Identification.)
15	Q Do you anticipate preparing any other maps
16	for trial?
17	A No. Essentially, these are the two maps that will
18	be prepared: One relating to steep slopes, the other re-
19	lating to water sheds and reservoirs.
	Now, have you made any trips to Kinnelon in
	arion for this case?
22	A. Yes, I have.
23	Q What did that consist of?

I made a windshield survey through the community

to note and to confirm the location of residential develop-

1	ments, the character and quality of the landscape, and I
2	was particularly concerned with the reservoirs, and I
N	ries 111 the reservoirs.
4	Now, what is the present population of
5	Kinnelon? Is it 8500?
6	A. I'm doublechecking right now. I don't recall what
7	it was. Yes, that would be about correct.
8	Q And what is the area of Kinnelon?
9	A. The area is 12,600 acres.
10	Q How many square miles does that come out
11	to?
12	A. 19.7 square miles.
13	Q Now, as part of your research in Kinneron,
14	did you give any consideration to whether, in your mind,
15	Kinnelon was a developing municipality?
16	A. Yes, I considered it.
17	Q Did you reach a conclusion?
18	A. I reached a conclusion on that, although I wasn't,
19	as I recall, asked to reach a conclusion.
20.	What is your conclusion?
	That it is not a developing community.
22	Q And what were the reasons, under the Supreme
23	Court test, that led you to that conclusion?
24	A. Well, as I said, I wasn't asked to come to a con-
25	clusion. I didn't apply the Supreme Court test rigorously.

1	My main considerations related to the difficult nature of
2	development in Kinnelon and its location off the beaten
	that is, off the direction of inevitable future
5	Q So you didn't go through the Mount Laurel 6
6	test, one by one?
7	A. No, I didn't.
8	Q In Kinnelon, how many areas of vacant land
9	are we starting with?
10	A The vacant land areas, information that I would
11	have would be from the land use map and land use
12	dated April 13, and on Page 2, Table 1, there's
13	that vacant land consists of 8,639.9 acres.
14	Q Would you repeat that number, sir?
15	A 8,639.9 acres. That's 72 per cent of the total
16	land area, according to Table 1.
17	Q Now, which one of these maps is your slope
18	map? Can we get that one out? Now, what was your method-
19	ology in computing this slope map?
	this also went to the USGS map, where we interprete
	The compour intervals, which were twenty feet to determine
22	slopes in excess of twelve per cent.
23	Q And how many acres did it turn out to be?
24	A. As I recall, it was 44 per cent of the total com-
25	munity, so that would be 44 per cent of 12,600 acres or

1	approximately 5,500 acres.
2	Q So approximately 5,500 acres have slopes
	Tes.
5	Q. Do we know how many of those 5,500 acres
6	are developed, if any?
7	A. No, I don't have that breakout.
8	Q Do you have any opinion that, if we were
9	using a cutoff point of fifteen per cent slopes rather th
10	twelve per cent, would there be any substantial difference
11	in this number?
12	A. No. My opinion, there would not be a sum
13	difference in this number. This is a portion of the coun
14	which has steep slopes to a greater per cent, to a greate
15	degree than most other portions of the county.
16	Q Now, the Master Plan on Page 7 stated that
17	there were 3,960 acres that have a slope of 10 per cent
18	or less. Does that sound accurate to you?
19	A. That would be the original Master Plan?
	Right, the last textual paragraph.
	(Thereupon, there is a discussion off the
22	record.)
23	A. That seems reasonable. It does not conflict, in

any event, with my estimate of about 4,400 acres with slopes in excess of 12 per cent.

•	Now, on Page /, it continues that this land,
2 ∂.:::2	referring to that 3,960 acres, is generally suited to most
	was of urban development. Would you agree or disagree
	with that statement?
5	A Well, insofar as the slope itself is concerned, I
6	would agree. There are other considerations other than
7	slope that address suitability for urban development.
8	Q What factors are you referring to there?
9	A The availability of utilities, the public interest
10	in protecting public lands, the location of the zero to
11	ten per cent slopelands. For example, if these
12	more level lands are located in valleys between
13	hillsides, their suitability for urban development is less
14	than if they were in a large parcel, not isolated by hills.
15	Q I see. All right. We turn to the second
16	map, which is, I believe, the water map. Could you tell us
17	what is shown on this map?
18	A. Yes. This shows the reservoir-rich area that
19	Kinnelon is located in and infers a responsibility to pro-
	these reservoirs.
1	ithin Kinnelon, there's Stickel's Pond, Tikeout
22	Reservoir, Taylortown Reservoir, and Boonton Reservoir,
23	all located entirely or within the borough. Additionally,
24	there is the Split Rock Reservoir and the Charlotteburg Re-
5	servoir the latter of which is nartially located within

19

22

23

24

25

1	Kinnelon, and both of which have a portion of their water-
2	sheds in Kinnelon; so there are six reservoirs either
2	or partly within Kinnelon, as well as their water-
	and the borough.
5	Q What are the black squares within the map?
6	What do they symbolize?
7	A They symbolize the drainage basins. That is, within
8	these black areas all waters flow to a common source. In
9	most cases it's a stream. Occasionally, it's a lake or a
10	reservoir.
11	Q At this drainage basin, where did
12	the information that
13	A. This was taken from the USGS map by following con-
14	tour lines and connecting high points and thereby separating
15	the directions in which surface water flows.
16	Q Okay. Let's start out in the northwestern
17	part of the county. That is enclosed on three sides by
18	this drainage map. What does that indicate?

That shows the portion of Kinnelon that is within lotteburg Reservoir watershed. Most of the waterlocated outside of Kinnelon, However, the dam and lower portion and deeper portion of the reservoir is located within Kinnelon.

Moving down below the Charlotteburg Reservoir, what does this drain into immediately below it?

1	A. Right. That area would drain, in Kinnelon, would
2	drain into the Split Rock Reservoir located entirely out-
4	Company Connection.
	Then the Stickel's Pond area, where does
5	that drain to?
6	A. The map shows a common drainage area into Stickel's
7	Pond and Tikeout Reservoirs, both of which are part of
8	the same system.
9	Q And the remainder of the town drains into
10	what?
11	A. Fayson Lakes, which is not noted or labe
12	map, and the Taylortown and Boonton Reservoirs.
13	
*	Q Where would Fayson Lakes be?
14	A Fayson Lakes is the lake shown immediately north of
15	Taylortown Reservoir.
16	Q. This?
17	A. Yes.
18	Q Did you do any analysis in your report of
19	vacant developable land within Kinnelon?
	t's my recollection that I did not do any analysis
	That sort. However, let me doublecheck my notes. That
22	correct.
23	Q Is there a reason you didn't for this town?
24	A I think I was of the opinion that the limitations
25	to density were so great, particularly in terms of geologic

However,

1	conditions, topographical conditions, and hydrologic,
2	that it was not necessary at that time to go through the
	ble land calculations.
	(Thereupon, there is a discussion off the
5	record.)
6	Q Referring to the Master Plan of Kinnelon on
7	Page 13, on Page 13 of the Master Plan of Kinnelon, they
8	chart as lands suited for development 6,441 acres. Do you
9	know what they were using when they were using the charac-
10	teristics of land the term "land suitable for develop-
11	ment"?
12	A. The 6,441 acres would include, in part,
13	slopes less than 10 per cent, which is some 3,960 acres;
14	and where they get the remaining 1,500 acres I don't know.
15	I believe I can account for some 3,900 acres as being lands
16	suitable for development based on the Master Plan. However
17	I don't know where the additional 1,500 acres would come
18	from.
19	Q All right. On Page 13 in their Master Plan,
	ine marginal land in the residential zone as 3,209

ter Plan, as 3,209 Do you see that?

Yes, sir.

22

23

24

25

Do you know what their definition in the Master Plan of margin land is?

No, I don't.

1		Q Going back to the water map for the moment,
2		eve that Butler owns one of these reservoirs, is rect?
4		Tes, that's the Tikeout Reservoir.
5		Q And is any of Kinnelon tied into or using
6	public	water taken from that reservoir?
7	A	I don't believe so.
8		Q Let me backtrack for a second. Do you know,
9	is any	residence in Kinnelon presently using public water?
10	A	There may be some homes adjacent to Butler that are
11	being	serviced by Butler, but, other than that,
12	believ	e there are any homes receiving water from
13	reserv	oir.
14		Q Is there any other residence in the township
15	which :	is presently receiving public water from any source?
16	A.	I don't know. I believe they may be coming from
17	the Tay	ylortown Reservoir, and, of course, Fayson Lakes pro-
18	vides :	its own water, but I believe that's from wells.
19		Q Do you know what the capacity of the Fayson
		dis are?
#	A TO SE	lo, I don't.
22		Q Do you know how many families are served by
23	that?	
24	A.	No.
25		Q So I guess you don't know whether they're at

capacity either?

That's correct.

1 2	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
	H

18

19

22

23

24

	Do y	ou know	whether	it would	be poss	sible for
ay kaw reside	ences	anywhe	ere in th	e townshi	p to tie	into
any existing	sourc	ce of pu	ublic wat	er?		

- A I don't have any personal knowledge regarding that.
- Q Do you have any knowledge as to whether any other town would be willing to sell water?
- A. No, I don't.
- Q Have you done any research at all on the water systems in Kinnelon, other than mapping the A. No, sir. I haven't.
- Q Let me ask you this: Do you remember in your report stating that you did not believe there was a capacity in Kinnelon for any additional public wells?

  Do you remember making that --
- A. No, I don't. I may be in error, and I'm reading my report now.
- Q Let's turn to Page 11. I think that's the

  I'm referring to. The second sentence states:

  The principal reason for this is that the character of pre cambrian rock structure underlying the borough is such as to make unlikely the possibility of developing a significant ground water source at any single location with the potential for supporting the high density development."

2		明明 一十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二
	Ì	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18	-	
19		
22		

24

25

Is you	r basis for this conclusion that this is
pre cambrian,	or do you have other bases for that?
o, it	would be pre cambrian.
	But there are places in the county with

But there are places in the county with pre cambrian rock that have developed large public water sources, aren't there?

- A I don't know of any that have developed large public water sources from pre cambrian rock. If there are large public water sources, it would come from a reservoir.
- Q What about Mendham Borough that we were talking about this morning? Do they have large we
  pre cambrian rock?
- A Oh, yes, they have wells in pre cambrian rock, but a large population I would consider in excess of 10,000 persons.
- Q I see. So what you're saying you don't think that the potential is there to support something like 10,000 people?
- A. Essentially, yes, yes, from a groundwater supply.

Then when you're referring to high density

A Yes.

Q Do you have an opinion as to whether it would be possible for a particular high density development to

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

develop a groundwater well in Kinnelon?

es, I'm sure there are places and conditions in where you can develop a groundwater in sufficient volume to serve a higher density of development. However, as is the nature of the pre cambrian structure, it is very difficult, if not impossible, to determine where these places will be except on the basis of drilling.

I see. Now, when you say virtually all potential surface water supplies have already been developed for consumption outside the borough, what were you referring to there?

I was referring to the numerous lakes an that have already been usurped for reservoirs, and, as shown on the watershed map, except when you combine the portion of Kinnelon that flows into the Pequannock River with the orange-shaded areas in Kinnelon, relatively little remains within the borough which would provide for reservoir space or volumes of water to create a reservoir.

I see. Now referring back to your slope map, butheastern part of the town there seems to be a large corridor of largely white widths, particularly in the southern part, not too many slopes, although you can't reflect this. Do you see which ones I'm referring to? Yes, I do.

What would be the barriers to development

23

22

24

there?

Well, a part of it is a lowlands or swamps, and area towards the south central of this corridor that we're talking about. The remainder of this is hemmed in between steep slopes and high mountains.

- Q What is the problem with developing high density development hemmed in, as you say, with slopes, if you leave the slopes as open spaces?
- It would depend on the extent of the level area or the valley that you're building on. When you're building in the lower areas, there is very little room twater to protect downstream conditions, so if y high densities in these low areas, you increase the volume and peak rates of stormwater runoff, therefore, increasing the potential for downstream flooding when it doesn't exist and exacerbating the conditions when they do exist.

That's looking at it in a very limited way, of course.

There are other limitations to developing in that corridor,
but you raised the question relating to topography --

Is this corridor the area in which the Fayson lopment has been built?

- A. No. The corridor is to the east of the Fayson Lakes development.
- Q So that you're saying that Fayson Lakes has been built to the west of this corridor?

6<sup>-</sup>7

25

1	A. Yes, sir.
2	O In that white area to the left of the next
3	Simped Area?
4	L Yes.
5	Q I see. What type of density was Fayson Lakes
6	built at?
7	A I don't recall. It seems less than one unit per
8	acre when I drove through. However, that was based on
9	front view, not so much on depth.
10	Q At the northeastern part on the Butler border,
11	it seems to me we have a large area of white both the large large area of white both the large l
12	adjacent to it, then moving away. What is the
13	there?
14	A. The topography there is essentially a long, level
15	slope up from the Pequannock River and down into the
16	Borough of Butler. A portion of that area is already
17	developed in Kinnelon and is an extension of the Borough
18	of Butler.
19	Q Can you estimate how many acres are vacant
23	No. I can't.
22	Q Are there obstacles to development in this
23	area sufficient that you would take that out of the cate-

in this the cate-24 gory of developable land?

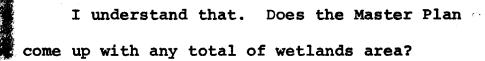
If I were to classify land as vacant developable,

and	l in or	der to	be consi	stent w	ith pre	vious ca	lculati	Ons
tha	t I've	done f	or other	commun	ities,	the only	areas	that
	e de	ake out	of deve	lopable	in tho	se lands	that a	re
V.	ant ar	e lands	which h	ave slo	pes in	excess o	f twelve	e
per	cent,	lands	which ar	e wetla	nds or	subject	to floo	ding
and	lands	which	have qua	lified	farm-la	nd asses	sments.	

- Q Is it possible to know how much of this white would be wetlands?
- A relatively small portion would be wetlands, if indeed there were any wetlands up there.
- Q So I just want to make it clear.

  definition of developable area that the Department Community Affairs has come up with, all the remainder of this white land through the township would qualify?

  A Well, not all of the remainder, because the white areas include developed areas, as well, so a portion of the white areas that are neither developed nor wetlands or flood prone would be developable; but, as I mentioned, I haven't made that calculation.



A It has a total of rivers, lakes, ponds, and reservoirs. That's the original Master Plan, and that's nearly a portion of the total.

In the updated Master Plan, it still calls that

1	category rivers, lakes, ponds, and reservoirs and really
<b>2</b>	does not include lands that are subject to flooding.
3	Is there a reason that you didn't do the
24	La
5	that you've done in other towns?
6	A No, I didn't think it pertinent in this particular
7	situation.
8	Q And your reason? You may have said it ear-
9	lier:
10	A. Well, the reason is that it's so extensively steeply
11	sloped that to take the level lesser lands out
12	context with the adjacent steep slopes seems to
13	sonable.
14	Q I see.
15	A. The character of Kinnelon is that of a steeply-
16	sloped community.
17	Q Do you plan to make any such analysis of
18	vacant developable land between now and the trial?
19	A. Not unless I'm requested to.
20	If you are requested, I'd request a copy of
Zi.	since we're going to be out of deposition time.
22	A. Depends when the trial is.
23	Q That's true. Are there any units of housing
24	in Kinnelon that have public sewer?

24

25

tied into the Butler system. I see, and do you know if the Butler system ting at capacity? o, I don't. 5 Do you have any idea as to whether there's 6 a possibility of any other tie-in to that system in 7 Kinnelon? 8 In Kinnelon? No, I don't believe so. 9 No, you don't believe what? 10 I don't believe that there are opportunities or 11 tie-ins that are in proximity to the existing : 12 You can always through a line down a road and t 13 reasonably speaking, I believe the only area is the area 14 I mentioned. 15 The Master Plan, Page 67, recommends 16 several things. One is an engineering study to locate a 17 possible source of water for municipal distribution system, 18 and it talks about the possibility of using existing sources 19 or establishing a separate reservoir. Do you know if any studies have been made? Mo, I don't know whether it's been made. 22

Q Is it possible that, in these white, undeveloped areas of Kinnelon, to use any type of package treatment plant for sewage?

A That would be very difficult to do, because the

1	
2	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
15 16	
	` `

18

19

22

23

24

logical way of disposing the effluent is	into a stream and
not through spray irrigation or recharge	in this particula
man, and as I noted earlier, so many of	the streams in
the community are part of a public water	supply reservoir
system.	

- Q Now, I believe you recommend zoning of one home for every three or four acres in Kinnelon, is that correct? Is that in your report?
- A I don't recall whether I put it in the report, but that would be a reasonable statement of my opinion for Kinnelon.
- Q Does Kinnelon have three-acre or zoning anyplace in its town?
- A No. The highest zoning is 60,000 square feet or one and a half acres per unit.
- Q I believe that the update of the Master Plan says that the ultimate population of the township is eighteen or nineteen thousand people at full development under present zoning. Is that correct?
- believe so. Wait one second. I will doublecheck
- Q Given the fact that Kinnelon has zoned the possibility of that many units, would it be better to have some relatively high density apartments in zoning the rest of the town and three or five acres to protect our environ-

1	mental concerns, rather than the zoning that the township
2	has?  If the touchstone were eighteen thousand and if the were the fixed condition, my answer would be yes.
5	Q Have you looked at the soils in Kinnelon?
6	A. Yes, I have.
7	Q What are the major soils in Kinnelon?
8	A. The major soils are the Rockaway soils and Hibernia
9	soils.
10	Q Are there some soils in Kinnelon which are
11	listed as moderate for development?
12	A. Yes, I would say so. Without looking at
13	it's reasonable to assume that a community the size of
14	Kinnelon has soils that will be moderate, that would impos
15	moderate constraints or limitations to development.
16	Q Do you have any idea what percentage of thes
17	soils would fit in that category of moderate?
18	A. No, I don't.
19	Q Would the RoC be one that might fit within
	egory of moderate?
	<b>Andrew Mes.</b>
22	Q And also, perhaps, the RpC?
23	A. Yes, that would be moderate for town and country
24	planning, as noted in the soil survey.
25	Q We'll refer to the 1961 report on apartments

which	I	believe	you	may	have.	Have	you	rev	riewed	that
docume										

Yes, I have.

Did you have any opinions as to that analysis?

A. Well, the opinion I had on this analysis was similar to the opinion I had on the Master Plan, and that is that it was — both this and the Master Plan were written during a period, during a decade, when environmental and energy concerns were not part of the planning process.

Q Go ahead.

A And what they reflected was an ethic that it hasn't been discredited, has been substantial in the light of reality.

Q This report, and it's entitled, "Garden
Apartment Development, Kinnelon," was prepared October 1961.
They list several sites as possible locations for garden
apartments. That is on Boonton Avenue near Shirley Terrace.
Do you have any familiarity with that site?

A If Shirley Terrace can be pointed out to me -
(Thereupon, there is a discussion off the second.)

Q Looking generally at the map, I take it we did not find Shirley Terrace, is that correct?

A That's correct.

Q Looking generally at Boonton Avenue, are there

appropriate the location.

	103
1	any undeveloped sites along Boonton Avenue, which, if we
2	were going to build apartments, might be a more desirable
1	es, there are more desirable locations along
5	Boonton Avenue for apartments than other portions of
6	Boonton Avenue. Generally speaking, the closer you are
7	to the City of Butler, the Borough of Butler, the more

Now looking along Boonton Avenue, how does that area fit in terms of slopes? Is there a possibility of knowing from the slopes map whether that's will fifteen or about it?

- A Yes. Well, portions of Boonton Avenue go through areas of steep slope, and other portions go through areas of less than twelve per cent slope.
- Q I see. The areas of less than twelve per cent slopes, are we talking in terms of a block, or is there any way to approximate that area?
- A. No. It would be difficult. However, let's see how the second of the second of Boonton Road perhaps a half-mile in length and more, which go through areas that are not excessively steep, and, here again, they seem to be closer to Butler than further away.
- Q I see. All right. There's reference to
  Kiel Avenue on the west side of the road near the school.

16

18

19

22

23

24

25

	•		-					
		(Thereupon,	there	is	a	discussion	off	the
l	19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						_	
Ì	mecord.	<b>)</b>						
١		•						
1		•						

Do you have any comments as to that as a possible location for multi-family housing?

- A. Yes.
  - 0 And which is?

Can you locate that on the map?

- I think it would be more preferable to have it closer to Butler. Multi-family apartments do not traditionally generate school children, so there's no merit in having that kind of high density within walking to the school.
  - Q I see.
- A. It would be preferable to have residential development that does generate children closer to the school.
  - Q Any other comments on that area?
- 17 | A No.
  - Q. The two final areas are the Fayson Lake area, southeast of south Fayson Lakes, and then Fayson Lake area and the Fayson Lake area and the Fayson Lake area and the Fayson Lake area. I'm wondering if you can locate and something the south fayson Lake area.
  - A Well, that area looks developed on the map that I have.
    - Q Both areas? Which one are you referring to?
  - A. Well, southeast of south Fayson Lakes is developed,

and the other --

2 0. The other one says Fayson Lakes area south-

That also seems developed. There are some undeveloped lands there, but that's deep and precipitous.

Q I see. All right. I really don't believe
I have any more questions.

MR. MEISER: Do you want to ask anything?

## CROSS-EXAMINATION BY

## MR. BUZAK:

Q Just in relation to the last communication potential apartment sites, multi-family sites in which you're speaking of preferable or more preferable areas, are you speaking in regard to or in relation to the slopes of the land or a multitude of factors?

A multitude of factors. At least as important as the slope is proximity to public water and sewer supplies, as well as transportation.

In terms of those areas that were pointed out,

\*\*\*\*\*\*\*\* the distance, if you know, from public water or

public sewer supplies?

A. Well, they're in excess of a mile. They're not what I would call proximate to public utilities at all.

MR. BUZAK: I have nothing else.

MR. MEISER: Okay. We're finished.

(Thereupon, the depositions were concluded 3:35 p.m.)



•

I. PATRICE K. SPROVIERI,

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

ALEEN J. 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