LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
EMail: ptyrrell@ldlaw.com
Direct Dial
(860) 676-3069

July 23, 2002

RECEIVED
JUL 24 2002
CONNECTICUT
SITING COUNCIL

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Outlet Broadcasting's Request for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Chairman Gelston:

On June 29, 1999 Outlet Broadcasting, Inc. ("NBC-30") filed a Request to share an existing facility or, in the alternative, acknowledging its intent to erect an exempt facility.

During the ensuing time, NBC-30's plans have changed and it no longer desires to construct the tower as proposed to the Council. As it is pursuing an alternate solution, it hereby withdraws the June 29, 1999 Request and filing.

NBC-30 appreciates the Council's interest and assistance in this matter. Thank you for your staff's excellent cooperation.

Sincerely,

Peter J. Tyrrell

Peter J. Tyrrell

PJT/sda

Certificate of Service

An original and 25 copies of the foregoing have been mailed by first class mail to Mortimer A. Gelston, Chairman, State of Connecticut, Connecticut Siting Council, Ten Franklin Square, New Britain, CT 06051 and sent by first class mail by the applicant to the following parties and intervenors in this proceeding as of July 23, 2002: John M. Donahue, 39 Pinnacle Road, Farmington, CT 06032; Lewis K. Wise, Esq., Rogin, Nassau, Caplan Lassman & Hirtle, LLC, CityPlace I - 22nd Floor, Hartford, CT 06101-3460; Joseph L. Hammer, Esq., Day, Berry & Howard LLP, CityPlace I, 185 Asylum Street, Hartford, CT 06103; Thomas J. Wontorek, Town Manager, Town of Farmington, CT 06032-1053; Howard Slater, Esq., Murtha, Cullina, Richter & Pinney, CityPlace I, 185 Asylum Street, Hartford, CT 06103-3469; Thomas J. Donohue, Esq., Killian, Donohue & Shipman, 363 Main Street, Hartford, CT 06106-1885; Jeffrey Ollendorf,

Town Planner, Town of Farmington, One Monteith Drive, Farmington, CT 06032-1053; and Ms. Arlene B. Whitaker, Chair, Town Council, Town of Farmington, One Monteith Drive, Farmington, CT 06032-1053.

Peter J. Tyrrell

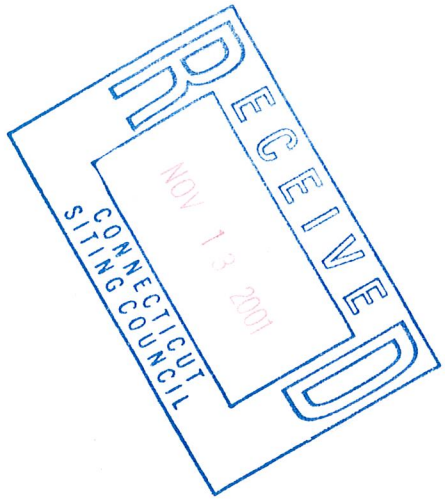
Peter J. Tyrrell, Commissioner of Superior Court

U:\WPC\COMM\PJT\Letters\NBC-30Ltr 7-12-02.wpd

WVIT
1422 New Britain Avenue
West Hartford, CT 06110
860 521-3030
860 521-3110 Fax

A Television Station of
National Broadcasting
Company, Inc.

NBC 30 CONNECTICUT



November 9, 2001

Arnold L. Chase
Executive Vice President
David T. Chase Enterprises, Inc.
280 Trumbull Street
Hartford, Connecticut 06103

Re: Rattlesnake Mountain

Dear Mr. Chase:

I am responding to your letter of October 11 regarding Outlet's continuing efforts to find a home for its digital transmission facilities atop Rattlesnake Mountain. I take issue with your version of the history of discussions between Outlet and your company relating to the construction of a new tower on the mountain, and I take great offense at your allegation that Outlet has been trying to obstruct the introduction of DTV service in the Hartford market. Nothing could be further from the truth.

Outlet and its parent, National Broadcasting Company, Inc., have expended millions of dollars over the past several years to build digital facilities at our owned stations across the U.S. and to digitize our network infrastructure. With specific respect to WVIT, we have been pursuing all possible options for accommodating our DTV facilities, and have been working with other local broadcasters to find a suitable site that would accommodate multiple antennas. To that end, among other avenues, we have explored modifying our existing tower; replacing our existing tower with a new tower; and entering into an agreement with your company to relocate our facilities on a new tower to be constructed by your company. Our goal has been to find the solution that not only provides the coverage we need to serve our viewers, but that also makes the most sense to us from an economic standpoint. In constructing a new tower, your goal has been to maximize your investment return. Not surprisingly, our goals may overlap and conflict.

As you are well aware, WVIT has owned a tower on the mountain since 1953. You first constructed a tower on adjoining property in 1984. Contrary to the allegations in your letter, Outlet has never opposed any development plans on Rattlesnake Mountain. At the time you submitted a zoning application with the Town of Farmington for the erection of a new tower to accommodate the digital operations of some local broadcasters, you represented to the Planning and Zoning Commission that Outlet had committed to remove our existing towers in the event your proposal was approved. At that time,

however, we had no such agreement with you and had not authorized you to make such a representation. Outlet did not oppose your proposal for a new tower. The only filing we made with regard to your proposal was a one paragraph letter which stated that Outlet reserved the right to develop our tower site in accordance with new technical requirements. It is our understanding that your zoning application was denied because it did not comply with applicable fall line requirements.

In contrast, when Outlet applied for a permit with the Town of Farmington to build a new tower on our site at Rattlesnake Mountain – which would have accommodated the digital facilities of Connecticut Public Television and Meredith Broadcasting, in addition to WVIT – you actively opposed our application before the zoning authorities. Indeed, you brought in experts on tower engineering who raised doubts as to the feasibility of our proposal. Our application was denied. We appealed this action to higher authorities.

At the same time as our appeal was pending, we continued to explore other possible alternatives. Recognizing the competing nature of our proposals, and the complicated zoning issues involved, we held several meetings with you and your representatives in an attempt to reach a mutually agreeable solution. Contrary to the statement in your letter, however, at no time did Outlet decide "the new tower would be owned by Communications Site Management, LLC." Notwithstanding the lack of any formal agreement or understanding, however, on three different occasions, Outlet did provide Chase Enterprises with an equipment list (March 1998; revised list December 16, 1999; resubmitted in Fall 2000.) Moreover, by letter dated August 11, 1999, Tom O'Brien proposed specific terms for an agreement for a partnership to build a joint tower. We never received a formal response to this proposal from you. Indeed, we have been frustrated at your unwillingness to provide us with a specific proposal. For example, the alleged "lease proposal" that you delivered to WVIT in mid-March of this year included nothing than merely the present value of a lease.

Outlet intends to continue to work diligently towards resolving our DTV facility requirements. However, we will not be pursuing an arrangement with Chase Enterprises.

Sincerely,

Mark Hoffman
President & General Manager

cc: Federal Communications Commission
Connecticut Siting Council
Town of Farmington
Gary Zenobi
Jerry Franklin

MURTHA, CULLINA, RICHTER AND PINNEY LLP
CITYPLACE I
185 ASYLUM STREET
HARTFORD, CONNECTICUT 06103-3469

TELEPHONE (860) 240-6000
FACSIMILE (860) 240-6150

NEW HAVEN OFFICE
WHITNEY GROVE SQUARE
TWO WHITNEY AVENUE
P. O. BOX 704
NEW HAVEN, CT 06503-0704
TELEPHONE (203) 772-7700

HOWARD L. SLATER
(860) 240-6176
HSLATER@MCRP.COM

August 2, 1999

RECEIVED
AUG - 2 1999
CONNECTICUT
SITING COUNCIL

VIA HAND DELIVERY

Joel M. Rinebold
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: TS-OUTLET-052-990629 - Outlet Broadcasting, Inc.

Dear Mr. Rinebold:

Please accept my appearance in this matter on behalf of Chase Family Limited Partnership No. 7 LLC ("Chase").

Delivered herewith are the original and twenty (20) copies of Chase's Answers to Interrogatories 1 through 7.

Thank you for your consideration.

Respectfully yours,

CHASE FAMILY LIMITED
PARTNERSHIP NO. 7 LLC

By Howard L. Slater
Howard L. Slater
Its Attorney

cc: Mr. Thomas J. Wontorek
Peter J. Tyrrell, Esq.
Joseph L. Hammer, Esq.
John M. Donahue, Esq.

ORIGINAL

CONNECTICUT SITING COUNCIL

Chase Family Limited Partnership No. 7 LLC (Chase No. 7)

1. ***Provide the application recently filed by Chase No. 7 with the Town of Farmington for the construction of a new tower.***

ANSWER: See Schedule 1 attached hereto.

2. ***Provide a map depicting the proposed new tower, guy wire anchors, and equipment buildings; existing towers and associated equipment; and the fall zone of the proposed tower. Identify all land uses, the location of the Metacomet Trail, and property owners within the fall zone of the proposed tower.***

ANSWER: See Schedule 2 attached hereto.

3. ***If the proposed variance for the construction of a new tower of the Chase No. 7 parcel is approved by the Farmington Zoning Board of Appeals, would this new tower be able to accommodate both WVIT and WEDH broadcast antennas?***

ANSWER: The proposed new Chase Tower is designed to accommodate up to nine television broadcast antennas. Although originally configured for six antennas (WTIC, WTIC-HD, WFSB-HD, WVIT, WVIT-HD, plus broadband standby antennas), the tower has sufficient extra capacity to support an additional three antennas as well.

The plan is to have the new Chase tower replace existing towers. If an agreement cannot be reached with WVIT, the new Chase tower would replace the existing Chase Tower. If an agreement is reached with WVIT, the new tower would replace the existing two WVIT towers.

4. ***Based on Outlet's proposed antenna loading schematic, what are the differences in antenna loading capacity between Outlet's proposed tower and Chase No. 7's proposed tower? What is the projected service life of Chase No. 7's proposed tower? Does Chase No. 7 propose to use the star mount system on the proposed tower?***

ANSWER: Based on Outlet's proposed loading schematic, the proposed new Chase tower would have approximately **twice** the loading capacity of the Outlet tower while at the same time maintaining a substantially greater wind and ice survivability rating. The proposed Chase tower would have a 50+ year service life. The Chase tower would utilize a star mount system but, because of the availability of

Responsible Witness: Arnold L. Chase

sufficient land for normal guying, it will have structural and safety advantages compared to the Outlet tower.

5. ***Would the acoustical effects generated by Chase No. 7's proposed tower differ substantially from the acoustical effects generated by the proposed Outlet tower?***

ANSWER: The proposed Chase Tower should exhibit similar acoustical effects **through the tower itself,** but would not be subject to the high-tension "singing" and resonances characteristic of high-tension guy wires of the type required by the proposed Outlet tower. Of further importance is the potential to solve the existing neighborhood noise problem. **If** the existing noise problem is caused by the interaction of the existing Chase and Outlet towers, then the proposed Outlet tower would not solve the problem as it would be in essentially the same location as the existing Outlet tower. However, the proposed Chase tower would be in a location not only several hundred feet away from the existing location, but also **farther away from the neighborhood.**

6. ***Has Chase No. 7 received Federal Aviation Administration (FAA) approval for the proposed tower? Describe the FAA lighting and marking requirements for the proposed Chase No. 7 tower and the existing tower. How would the FAA lighting and marking requirements for the proposed Chase No. 7 tower differ from the proposed Outlet tower?***

ANSWER: The FAA public notice period for the proposed Chase tower has been completed and approval issuance is pending. This is considered routine as the proposed tower is identical in height above sea level to the existing (approved) Chase tower.

The lighting requirements for the proposed tower are identical to the existing Chase tower and the existing and proposed Outlet tower - high intensity strobe lighting at levels identical to the respective existing towers.

7. ***Explain what "serious safety concerns" are raised by the "small size" of the Outlet parcel and the proposed "highly unusual guying".***

ANSWER: Outlet is proposing to build an 1,139' structure on a parcel of land originally intended for a 600' structure. The parcel is inadequate for the existing structure, which has exhibited buckling and deflection effects due to high winds, etc. This is due to the extremely tight guying radius. The normal distance for guy radius for a tower of 1,139 feet is approximately 800 feet. Outlet now proposes to squeeze a structurally more massive tower onto the small lot without the normal guy distance available on its own land, necessitating the use of guy cable sizes and tensions almost unheard of in the industry in an attempt to meet safety codes.

Responsible Witness: Arnold L. Chase

APPLICATION FOR VARIANCE, SPECIAL EXCEPTION OR APPEAL FROM DECISION OF ZONING ENFORCEMENT OFFICER TO THE ZONING BOARD OF APPEALS

Farmington, Connecticut

Number A -_____
Receipt No. _____
Receipt Amt. _____

Applicant: **Chase Family Interests No. 7 LLC**
Address: **One Commercial Plaza, 24th Floor, Hartford, Ct.**

Owner: **1.) Chase Family Interests No. 7 LLC** Tele. **293-4318**
2.) Chase Family Limited Partnership No. 5
3.) William S. Wadsworth, Jr. and First National Bank in Brookings, as co-trustees of the "Marital Trust Estate" under the William S. Wadsworth Trust Agreement dated Nov. 15, 1972 (whose properties will be combined into one lot after approval of this variance and prior to construction)

Address: **same**
Property Address: **Colt Highway/ Route 6, Farmington, Ct.**
Zone: **R80** Assessor's Lot No. **7a-2, 7a-1,** Area (Sq. Ft. or Acres) **150+/-**
Please indicate adjoining owners, including property across streets, their mailing addresses (inc. ZIP Code) and location as follows:

Bounded Northerly by: **multiple owners on Pinnacle Road as shown on the attached map**
Easterly by: **Colt Highway/ Route 6**
Southerly by: **Outlet Broadcasting, Inc. and Tilcon Materials**
Westerly by: **multiple owners on Pinnacle Road and Forest Hills Drive as shown on the attached map,*see complete list af all abutters**

APPLICATION FOR:
1. VARIANCE of Zoning Regulations Section(s): **Article II Section 1B.12**

( ) Use ( ) Yards (X) Other
( ) Area ( ) Signs Describe briefly:

Variance requested is to reduce the required minimum separation zone for the proposed tower by 8.17 per cent. The variance with respect to one adjacent property owner will be 975 feet. The variance with respect to the only other affected property owner will be 95 feet.

a. Why would strict application of the Regulations produce undue hardship?

Strict application of the regulation would undermine applicant's ability to make reasonable use of the property consistent with existing uses. Enactment of subsequent laws and regulations mandates applicant's variance request.

b. Why is this hardship unique to these premises and not shared by other properties in the neighborhood?

Existing uses, enactment of subsequent laws and regulations, and unique features of topography and shape and size of the parcel create the unique hardship.

c. Will the granting of the variance change the character of the neighborhood? **No.**

Is the property within 500 feet of any Town Line? **No.**

If Use Variance is requested, applicant is required to send written notice of public hearing by Certified Mail, no later than 10 days before such hearing, to all owners of property within 200 feet from any boundary of the subject property.

2. SPECIAL EXCEPTION

( ) Extension of nonconforming use or building.
( ) Extension of use 30 feet into zone in which it is not permitted.

3. APPEAL from decision of Zoning Enforcement Office to allow/deny

_____

4. APPROVAL required by State Statutes for automotive uses.
Type of license sought:_____

I hereby depose and say that all the above statements and the statements contained in any papers submitted with this application are true to the best of my knowledge.

Chase Family Interests No.7 LLC
By: Communications Site Management LLC, its Manager
By: David T. Chase Enterprises, Inc. its Manager

June 25, 1999
Date

Cheryl A Chase
Signature of Owner and Applicant
(If other than applicant)
Cheryl A. Chase
Exec. Vice President

Date

Signature of Owner

Chase Family Limited Partnership No.5
By: DATC, LLC its general partner

June 25, 1999
Date

Cheryl A Chase
Signature of Owner David T. Chase by Cheryl A. Chase Under Power of Attorney, as a Member and Not Individually

William S. Wadsworth, Jr. and First National Bank in Brookings, as co-trustees of the "Marital Trust Estate" under the William S. Wadsworth Trust Agreement dated Nov. 15 1972

6/29/99
Date

Signature of Co-Trustee

William S. Wadsworth Jr.
Signature of Co-Trustee

Filing Fees: Use Variance - $135.00
Other Variance or Special Exception - $110.00
Appeal of Enforcement Officer's Decision, or Automotive Use - $85.00

This application must be accompanied by 5 copies of plot plan showing existing and proposed conditions. If applicable, show on plot plan location of well and subsurface disposal system; and, if side or rear yard variance is requested, show the distance from the property line to adjoining neighbor's house.

7/97

JOHN M. DONAHUE
39 PINNACLE ROAD
FARMINGTON, CT 06032
860-677-0864

RECEIVED
AUG - 2 1993
CONNECTICUT
SITING COUNCIL

Mr. Mortimer Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Dear Mr. Chairman:

Re: NBC-30 Tower Application

As the Council knows from earlier correspondence, my wife Barbara and I are residents of Pinnacle Road in Farmington and have lived there for over 30 years. We have had a continuing interest in the last 15 years in the use of Rattlesnake Mountain, immediately behind our house, for large television towers. This interest is shared by most, if not all, of our neighbors; but in writing this letter I speak for ourselves and do not purport to express the views of our neighbors, although I know many of them agree with us.

We know you have the background from other sources. This letter will concentrate on the principal concerns we have as owners of land near the tower sites.

We already have the Chase 1984 Tower rising some 1350 feet from the mountain. It has been a continuing source of concern to the neighborhood not only because of its

(1) **massive profile** on the mountainside but also because of

(2) **noise** coming from the tower in the form of cable slapping and, in certain wind conditions, in the form of a humming or roaring sound which, on occasion, is as loud as a 727 revving its engines for takeoff;

(3) the **inability** of the tower owner **to correct** this problem or even identify its cause;

(4) shards of **ice** falling from the tower and its guys in winter thaws;

(5) continually blinking strobe **lights**;

(6) the increasing number of **appendages** on the tower

FILE
COPY

As to the proposed NBC-30 tower:

(1) the concern that the present tower with a relatively slim and unobtrusive profile will be replaced by a tower similar in **mass** to the 1984 Chase tower;

(2) the unsightly **starmount** proposed for the top of the tower;

(3) the potential of the new heavier tower to cause the same **noise problems** as the 1984 Chase tower;

(4) ditto for **lights and falling ice;**

(5) the danger that if one of the towers **collapses**, it may damage the other and cause unsafe conditions;

(6) the unknown effect of **electromagnetic waves** emanating simultaneously from two towers in close proximity.

As to the proposed new Chase tower:

(1) **another massive tower** desecrating the ridgeline with potentially all the same objectionable characteristics as the 1984 tower;

(2) the **proximity** of the new tower to the 1984 tower and to the residential neighborhood.

As to both tower proposals, we have the concern that their presence will negatively affect our property values and create an even more obtrusive blot on the ridgeline. Even the present towers stand out from as far away as Middletown as you drive north on Route 9 or Southington as you drive east on I-84 and from many other vantage points.

If the Council decides to pursue this matter, we urge that you schedule a public hearing in non-business hours in Farmington at which neighbors and other citizens of the Town may personally express their concerns.

Finally by writing this letter and expressing these views, I do not wish to concede by acquiescence or implication that I agree with the claim that the Siting Council has jurisdiction

over the NBC-30 Application or any related matter. I respectfully reserve the right, if and when appropriate, to raise questions and objections to the Council's jurisdiction, if indeed the Council determines that it should continue these proceedings.

Respectfully submitted,

John M. Donahue

cc Peter Tyrrell
Joseph L. Hammer
Howard Slater
Lewis K. Wise
T.J. Donohue

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
EMail: ptyrrell@ldlaw.com
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(860) 676-3069

September 8, 1999

RECEIVED
SEP 10 1999
CONNECTICUT
SITING COUNCIL

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

At a technical meeting held on August 4, 1999, the participants discussed NBC-30's above-captioned filing. The Council requested several of the participants to discuss alternatives to NBC-30's proposal.

NBC-30 would like to report that Mr. Chase and NBC-30 are discussing some alternative plans to the proposal. However, further discussion will be necessary to ascertain whether an alternate arrangement can be accomplished and to arrive at acceptable terms.

NBC-30 proposes to report again to the Council in early October, if this meets with the Council's approval. If the Council has any questions, please do not hesitate to contact me.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

PJT:kmd

Peter J. Tyrrell

cc: All participants

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
EMail: ptyrrell@ldlaw.com
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November 8, 1999

RECEIVED
NOV - 9 1999
CONNECTICUT
SITING COUNCIL

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

At a technical meeting held on August 4, 1999, the participants discussed NBC-30's above-captioned filing. The Council requested several of the participants to discuss alternatives to NBC-30's proposal.

NBC-30 would like to report that Mr. Chase, NBC-30 and other parties are discussing alternative plans to the proposal. However, further discussion will be necessary to ascertain whether an arrangement can be accomplished and to arrive at acceptable terms.

NBC-30 proposes to report again to the Council in early December, if this meets with the Council's approval. If the Council has any questions, please do not hesitate to contact me.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

Peter J. Tyrrell

PJT:kmd

cc: All participants

POND VIEW CORPORATE CENTER, 74 BATTERSON PARK ROAD, FARMINGTON, CT 06032
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website www.ldlaw.com

RECEIVED
OCT - 6 1999
CONNECTICUT
SITING COUNCIL

LEVY & DRONEY, P.C.

ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
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(860) 676-3069

October 8, 1999

RECEIVED
OCT - 6 1999
CONNECTICUT
SITING COUNCIL

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

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NBC-30 would like to report that Mr. Chase, NBC-30 and other parties are discussing some alternative plans to the proposal. However, further discussion will be necessary to ascertain whether an arrangement can be accomplished and to arrive at acceptable terms.

NBC-30 proposes to report again to the Council in early November, if this meets with the Council's approval. If the Council has any questions, please do not hesitate to contact me.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

PJT:kmd

Peter J. Tyrrell

cc: All participants

POND VIEW CORPORATE CENTER, 74 BATTERSON PARK ROAD, FARMINGTON, CT 06032
MAILING ADDRESS: P.O. BOX 887, FARMINGTON, CT 06034-0887 (860) 676-3000 FAX (860) 676-3200

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
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(860) 676-3069

April 24, 2000

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

At a technical meeting held on August 4, 1999, the participants discussed NBC-30's above-captioned filing. The Council requested several of the participants to discuss alternatives to NBC-30's proposal.

NBC-30 would like to report that Mr. Chase, NBC-30 and other parties are outlining alternative plans to the proposal. However, further discussion will be necessary to ascertain whether an arrangement can be accomplished and to arrive at acceptable terms.

NBC-30 proposes to report again to the Council as progress develops, if this meets with the Council's approval. If the Council has any questions, please do not hesitate to contact me.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

Peter J. Tyrrell

PJT:kmd

cc: All participants

POND VIEW CORPORATE CENTER, 74 BATTERSON PARK ROAD, FARMINGTON, CT 06032
MAILING ADDRESS: P.O. BOX 887, FARMINGTON, CT 06034-0887 (860) 676-3000 FAX (860) 676-3200
website www.ldlaw.com

Al Bova
Vice President & Group General Manager
WFSB (CBS), Hartford
WNEM (CBS), Flint/Saginaw
WOFL (FOX), Orlando
WOGX (FOX), Ocala/Gainesville
Vice President & General Manager, WFSB

RECEIVED
NOV 18 1999
CONNECTICUT
SITING COUNCIL

November 16, 1999

Mr. Mortimer Gelston
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Digital Transmission Tower Status Update

Dear Mr. Gelston:

I am writing you to make you aware that after multiple discussions and meetings regarding a joint transmission tower in Farmington, we are concerned that we have already missed one FCC mandated deadline and find a joint venture elusive. I have another meeting tomorrow with Arnold Chase and NBC, and I will keep you apprised.

In order to continue to serve our current constituency and stay compliant with federally mandated digital broadcast standards, we have applied for a zoning variance to install an additional transmitting tower on our property on Deercliff Road in Avon. The purpose of this letter is to advise you that we may be seeking your assistance as we progress with this application with the Town of Avon.

Thank you for your attention.

Sincerely,

Alfred Bova
VP & Group General Manager

AB/me

cc: Perry Bradshaw
Hope Etheridge

CORPORATE 0FFICE
280 TRUMBULL STREET
HARTFORD, CONNECTICUT 06103-3585
(860) 549-1674

RECEIVED
OCT 15 2001
CONNECTICUT
SITING COUNCIL

October 11, 2001

BY OVERNIGHT COURIER

Mr. Mark Hoffman
President & General Manager
NBC 30
1422 New Britain Avenue
West Hartford, CT 06110

Re: Rattlesnake Mountain

Dear Mr. Hoffman:

As you are aware, for many years now I have been attempting to reach agreement with Outlet Broadcasting, Inc. ("Outlet") with respect to the erection of a new television tower on our Rattlesnake Mountain property to be shared by WVIT, WTIC, CPTV and tentatively several other stations in order to allow them to provide digital television service. My efforts in this regard began about seven years ago, even before the FCC digital television mandate was finalized, when I initiated a meeting with Outlet and other local broadcasters in an effort to reach an early agreement so that the necessary facility could be erected for the benefit of all in a timely fashion.

From that time until now, Outlet has assured us and other interested parties that it would like to reach some type of sharing agreement for such a new tower. However, Outlet's conduct has made it painfully clear that Outlet has no intention today and probably never did have any intention of reaching an agreement to participate in such a joint endeavor. I assume that Outlet concluded soon after the promulgation of the FCC mandate that the cost of compliance with that mandate would not be cost-effective for many years, if ever. It would appear, therefore, that Outlet consciously adopted a strategy to delay the construction of the tower in order to forestall, for as long as possible, the expenditure of funds required to provide digital service. Meanwhile, at the same time it has been pursuing its apparent obstructionist strategy, Outlet has been telling the FCC that it is doing all it can to comply with the FCC mandate. However, Outlet's actions belie its posture before the FCC.

Soon after the FCC ordered television broadcasters to provide digital service by November 1, 1999, I submitted a zoning application with the Town of Farmington for the erection of a new tower for the purpose of enabling Channels 61 and 30 and other stations in the area to comply with the mandate. The proposed tower would have allowed Channel 30 to substantially increase its coverage area. For the first time, Channel 30 would have been able to operate at maximum allowable power and height and thereby serve several so-called "white areas."

Rather than support our proposal, however, Outlet actively opposed it before the planning and zoning commission at the eleventh hour, thereby ensuring its defeat. At that point, I invited Outlet to attempt to reach agreement with us on a new tower to be used under some type of sharing agreement. I offered Outlet a variety of possible arrangements ranging from various forms of joint ownership on the one hand, to more traditional lease terms on the other, all at market rate. Instead of accepting our invitation, Outlet submitted an application to build a new tower on its own property, knowing that its probability of success before the local zoning agencies was remote, indeed. This was because Outlet's proposal failed to meet a number of zoning regulations including, among others, the town's fall zone requirements. Understandably, Outlet's application for several huge variances of this regulation was denied in January, 1999.

After the denial, I again suggested on several occasions that we attempt to reach agreement on a new tower to be used jointly. Once again, however, Outlet ignored our requests and decided to appeal the denial of the zoning variances it had sought to the Superior Court. Moreover, several months later on June 29, 1999, Outlet filed an unprecedented application with the Connecticut Siting Council ("Council") to erect the same new television tower on its property on Rattlesnake Mountain which the town had rejected. As you know, we intervened in the proceeding, as did the Town of Farmington.

Following Outlet's filing, the Council convened a technical meeting on August 4, 1999 which all parties attended. At that meeting, the Council directed the parties to explore alternatives to Outlet's proposal – namely, the erection of one new tower on our property to be used jointly under a sharing arrangement to be negotiated by the parties.

After many months of negotiating the form of the relationship between the parties, we finally decided that the new tower would be owned by Communications Site Management LLC ("ComSite"), and that space would be leased to Outlet to accommodate its needs. However, a fair and equitable rental rate could not be negotiated by ComSite until it determined the cost of the new tower. That cost could not be ascertained until Outlet provided ComSite with its specifications; that is, the specific type of equipment it planned to mount on the tower. Despite repeated requests, it took Outlet over four months to provide the requested specifications. Outlet, meanwhile, refused to withdraw its zoning appeal, notwithstanding these negotiations. Predictably, the appeal was ultimately dismissed for lack of merit back in September, 2000. When Outlet finally provided us with its specifications, ComSite promptly completed its design for the tower and was able to formulate a lease proposal for Outlet.

In mid-March, 2001, I hand-delivered the lease proposal to Outlet's General Manager. In addition, ComSite's tower designer forwarded to the General Manager copies of the proposed tower's structural specifications so that Outlet could evaluate the tower design in light of its needs. We have made it clear that Outlet may lease as much of the tower as it desires at a market rate. Indeed, since we have always offered Outlet tower space at a market rate, the financial aspects of our pending proposal, as well as past proposals, cannot explain Outlet's actions. Despite the passage of approximately seven months since the delivery of our lease proposal and tower specifications and numerous calls from me, there has been absolutely no substantive response from Outlet. The only communications I have received from Outlet are periodic phone calls expressing continued interest in reaching an agreement and promising a prompt response to our proposal. However, there has never been any follow-through by Outlet through this lengthy period. I can only surmise that these contacts are part of your strategy to keep the entire project on hold so that none of the local broadcasters will be able to offer digital service and gain a competitive advantage over Channel 30, and to continue to delay the necessary expenditure of funds to provide digital service. Through Outlet's systematic delaying tactics, compliance with the Council's directive to all interested parties to reach an accommodation has been delayed by over two years and effectively thwarted.

As a result of its actions, Outlet has not only failed to satisfy the FCC mandate to provide digital service by November 1, 1999, it has also prevented both Channels 61 and 24, and possibly others, from doing so as well. For seven years now, Outlet has failed to make a single substantive proposal or counterproposal to us. We will no longer wait patiently for Outlet to step forward and negotiate an agreement with us in good faith. We are today ready, willing and able to take the steps necessary to erect a new tower to enable local broadcasters to provide digital service. Up to now, we have always made provisions for WVIT in our plans for the new tower. However, unless we can come to terms with Outlet within the next thirty (30) days, we will redesign the tower so that it will no longer be able to accommodate WVIT's needs and proceed accordingly without Outlet.

I look forward to your prompt response.

Yours very truly,

COMMUNICATIONS SITE MANAGEMENT, LLC
BY: DAVID T. CHASE ENTERPRISES, INC.,
MANAGING MEMBER

Arnold L. Chase, Executive Vice President

cc: Federal Communications Commission, One Battery March Park, Quincy MA 02169-7495
Connecticut Siting Council, 10 Franklin Square, New Britain CT 06051
Town of Farmington, town Hall, One Monteith Drive, Farmington CT 06032-1053
Gary Zenobi, General Manager, Fox 61 WTIC-TV, One Corporate Center, Hartford CT 06103
Jerry Franklin, President & CEO, Connecticut Public Broadcasting, Inc., 240 New Britain Avenue, Hartford CT 06106
Lawrence Tu, Executive Vice President & General Counsel, NBC, 30 Rockefeller Plaza, New York NY 10112
Thomas O'Brien, President & General Manager, NBC 5/KXAS-TV, 3900 Barnett Street, Fort Worth TX 76103

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August 2, 1999

RECEIVED
AUG - 2 1999
CONNECTICUT
SITING COUNCIL

VIA HAND DELIVERY

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: TS – OUTLET – 052-990629 - Request By Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to Conn. Gen. Stat. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Regs. Conn. State Agencies § 16-50-72(b)(2) and 73.

Dear Mr. Gelston:

Enclosed are an original and twenty (20) copies of the Town of Farmington's responses to the questions submitted to it by the Connecticut Siting Council by letter dated July 26, 1999.

Please note that the Town continues to reserve its right to contest the Siting Council's jurisdiction over the proposed tower and to address all other legal issues.

Very truly yours,

Joseph L. Hammer

JHL/fld
Enclosures

cc: Dean M. Cordiano, Esq.
Thomas J. Wontorek
Jeffrey Ollendorf
Peter J. Tyrell, Esq.
Lewis K. Wise, Esq.
John M. Donahue, Esq.

ORIGINAL

CONNECTICUT SITING COUNCIL
TS-OUTLET – 052-990629

TOWN OF FARMINGTON'S RESPONSES TO SITING COUNCIL QUESTIONS

1. Provide the Town of Farmington's Plan of Development and the relevant sections of the Town's Zoning Regulations which govern the proposed replacement of the Outlet telecommunications tower.

RESPONSE:

One copy of the entire Town of Farmington Plan of Conservation and Development (adopted July 24, 1995) ("Plan of Development") is attached. In addition, attached are 20 copies of pp. 1, 16, 97-100 and 114 of the Plan of Development.

The following sections of the Town of Farmington Zoning Regulations ("Zoning Regulations"), which govern the proposed replacement of the Outlet telecommunications tower, are attached:

Article I, Section 1 – purpose of regulations

Article II, Section 1(B)(12) – radio and television towers, including setback requirements

Article V, Section 4 – Zoning Board of Appeals powers and procedures

Article IV, Section 12 – special permit criteria and procedures

Please note that the current Outlet proposal does not meet the requirements of Article II, Section 1(B)(12) of the Zoning Regulations that (1) the base of a tower be located a minimum distance from any property line at least equal to the height of the tower, and (2) guy wires supporting the tower be at least 100 feet from any property line. Therefore, Outlet's current proposal would not be permitted under the Zoning Regulations absent the granting of a variance by the Zoning Board of Appeals ("ZBA") of the setback requirements. An application by Outlet to the ZBA for such variances in December 1998 was denied. If such variances were granted by the ZBA, Outlet would need to obtain special permit approval from the Plan and Zoning Commission for the proposed tower.

2. Provide all information relative to Outlet's variance application made to the Farmington Zoning Board of Appeals (ZBA). Specifically, provide any information

or data which supports the ZBA's concerns for falling ice and debris; the stability of the proposed star mount antenna design; the lack of continuity of the proposed design with neighboring properties; and that the structural design of the tower would meet only minimal standards.

RESPONSE:

By applications dated December 2, 1998, Outlet applied to the ZBA for variances of the requirements of Article II, Section 1(B)(12) providing (1) the base of a television tower to be located a minimum distance from any property line at least equal to the height of the tower, and (2) guy wires supporting a tower to be located at least 100 feet from any property line. Outlet appealed the ZBA's denial to the Superior Court in February, 1999. The appeal is pending. Briefs have not yet been filed.

Information supporting the ZBA's denial is attached as follows:

ZBA revised minutes regarding January 19, 1999 vote;

Portion (pp. 15-21) of transcript of ZBA's January 19, 1999 public hearing in connection with Outlet application (testimony of Joseph Vellozzi, P.E., consulting engineer retained by Chase Family Interests)

Letter dated January 19, 1999 from Attorney Lewis Wise to ZBA (on behalf of abutting property owner Chase Family Interests No. 7 LLC); and

Letter dated July 12, 1999 from John Donahue of 39 Pinnacle Road to ZBA.

3. Provide any information regarding the acoustical effects of other towers in the area.

RESPONSE:

As to acoustical effects of other towers in the area, attached are:

Letter dated December 18, 1998 from William Smyers, P.E. of Close, Jensen and Miller, P.C. to David Bondanza of WVIT (submitted by Channel 30 to ZBA); and

Portion (pp.37-38) of transcript of public hearing of December 21, 1998 held by ZBA in connection with Outlet application.

See also January 12, 1999 letter from John Donahue to ZBA submitted in response to Question #2.

Extensive testimony from residents of the area regarding noise from existing towers was given during public hearings held by the Plan and Zoning

Commission in 1998 in connection with an application by Chase Family Interests to amend the setback requirements of the Zoning Regulations applicable to towers. Transcriptions of the hearings have not been prepared since the applicant did not appeal from the denial of the application. Audio tapes of the hearings are available for review at the Farmington Zoning Office.

The Town understands that, in past years, a number of serious noise complaints have been made in connection with existing towers in the area.

4. What is the relief sought in the application request recently filed by Chase Family Interests No. 7 LLC with the Town of Farmington for the construction of a new tower?

RESPONSE:

By application dated June 30, 1998 to the ZBA, Chase Family Interests No. 7 LLC seeks a variance of Article II, Section 1(B)(12) of the Zoning Regulations to reduce the required minimum separation zone from the abutting property lines. The applicant seeks a variance of 975 feet as to one property line and 95 feet as to another property line.

5. Is there a master plan for the development of telecommunications towers in Farmington and specifically on Rattlesnake Mountain?

RESPONSE:

Farmington does not have a separate, master plan specifically for the development of telecommunications towers. However, the development of communications towers on Rattlesnake Mountain is addressed at page 114 of the Town's Plan of Conservation and Development (see pp. 1, 16, 97-100 and 114 attached in response to Question #1). Please note that paragraph 4 of page ~~114~~ 114 of the Plan of Conservation and Development provides "The Town should discourage the establishment of additional communication towers on Rattlesnake Mountain."

Town of Farmington

Plan of Conservation and Development

PLAN OF CONSERVATION AND DEVELOPMENT

TOWN OF FARMINGTON, CONNECTICUT

TOWN PLAN AND ZONING COMMISSION

ADOPTED JULY 24, 1995

TOWN PLAN AND ZONING COMMISSION

James H. Pogson, Chm.
Christian R. Hoheb, Sec.
Donald L. Banta
Barbara A. Brenneman
Charlie Martin
Deborah B. Quigley
Jeffrey P. Apuzzo
Ronald G. Harrison
John W. Vibert

Past Commissioners:
Evan R. Cowles
George S. Goodridge
James E. Hayes
John H. Midney
J. David Morrissey

STAFF:

Jeffrey Ollendorf, Planning Director
Elizabeth S. Dolphin, Asst. Planning Director
Elizabeth G. Mathews, Planning Aide

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INTRODUCTION

This report updates Farmington's Plan of Development which was last revised in 1982. Over this period of time Farmington experienced a significant expansion in its population, employment base, housing stock and Grand List.

The Plan of Conservation and Development as defined in Section 8-23 of the Connecticut General Statutes is a blueprint for the physical and economic development of a community. Planning officials have long recognized that these physical plans directly influence and shape the social and economic composition of a community's population which in turn affects the types and levels of services provided by local government.

Until recently the Plan's status has been strictly advisory, however in 1991 and 1992 Connecticut State law was amended to require zoning commissions to consider this document when adopting or revising zoning regulations and boundaries.

While in order to be most effective it is important for the Plan's recommendations to be as precise as possible, it is equally important for the planning process to remain flexible in order to respond to conditions and events which have either not been anticipated or which are not within the control of the Town.

With regard to implementing the policies and recommendations of the Plan, one must understand the limitations of the planning process within the State of Connecticut. The present system for the most part does not permit localities to properly sequence growth and development. So while a Plan of Development may recommend the benefits of developing one area before another or spreading development of a given area over a number of years, the legal tools to accomplish this are as of yet generally unavailable. Where a Plan recommends the development of a parcel of land for a particular use but only under a set of anticipated or preferred conditions, there is the real possibility that this land will be developed under its present zoning designation before the proper circumstances appear.

The Plan of Development is presented in two distinct parts. The first section details the present status and trend lines for a number of planning issues accompanied by general goal statements. The second part contains proposals for all of Farmington's neighborhoods in conjunction with the Town's Future Land Use Map.

I. HISTORY OF FARMINGTON

In 1640 families from Hartford, Windsor and Wethersfield established the settlement known as the Plantation of Tunxis on the east side of the Farmington River. This area was incorporated as the Town of Farmington in 1645.

Farmington's original geographic area was 225 square miles. Prior to the secession of the first of its districts in early 1700 the population was estimated at 750 residents.

While Farmington served as a significant trading center prior to the Revolutionary War, the Town's economy was substantially tied to agriculture.

After the last area of land was set off in the late 1700's the population of Farmington stood at 2,700.

A number of turnpike roads were constructed through Farmington after 1790 linking the Town with Hartford, Bristol Middletown and Danbury. These roads extended further beyond the State border to Albany, Boston and Philadelphia.

The decline of Farmington's agricultural economy, with the settlement of the Ohio valley, and the creation of the Farmington Canal in 1822 prompted the growth of commerce and industry within the Town. A number of industrial enterprises were established in Unionville, using power derived from a system of canals. The Farmington Canal was abandoned in 1846.

Miss Porter's School, which was founded in 1844, shaped the physical character and demographic composition of the Borough of Farmington. The school preserved many of the area's buildings which were eventually incorporated into the Town's historic district.

The population of Farmington by the beginning of the Civil War rose to 3,000 residents.

The extension of a trolley line from Hartford to Farmington in 1894 established a firm link with the central city. Farmington was transformed from a somewhat isolated village to a second ring suburb. This transportation improvement directly affected land use and settlement patterns within the Town. Amusement areas were developed along Farmington Avenue both in Unionville and in the vicinity of the West Hartford town line. The creation of the Oakland Gardens subdivision was directly influenced by the operation of the trolley as well.

Zoning regulations were adopted within the Borough of Farmington in 1927 and in the Town of Farmington and Borough of Unionville in 1934 and 1946 respectively. With the consolidation of the Town and two boroughs in 1947 a new set of regulations were adopted in 1950.

Farmington's population which was 5,300 residents in 1940 grew to 10,800 in 1960. This population change was accompanied by a similar percentage increase in the number of school age children, resulting in the construction of three new school buildings between the years 1950 and 1960.

The flood of 1955 altered the use of land within the Town's floodplain and was the impetus for redevelopment efforts in Unionville. The Town's first plan of development was initiated shortly after this event but never adopted. This effort was followed by the composition and adoption of a subsequent plan in 1964.

A trend to decentralize commerce and industry was evidenced in 1961 with the development of the Farmington Industrial Park and later in 1974 with the opening of Westfarms Mall. In 1967 the University of Connecticut Health Center was located on Farmington Avenue paving the way for future commercial development along this segment of road.

II. POPULATION STATISTICS AND CHARACTERISTICS

The Town of Farmington's population grew by 25.6 percent between the years 1980 and 1990, from 16,407 to 20,608 persons. This figure represents the third highest rate of growth within the Capitol Region, behind the towns of Hebron at 29.8 percent and South Windsor at 28.4 percent. On the other hand the population of the Capitol Region as a whole increased by only 6.1 percent during this same period.

Locally, as illustrated in the following table, Farmington had the greatest percentage increase in population of all the communities lying adjacent to its borders.

Town	Percentage Change in Population 1980-1990
Farmington	+ 25.6
Avon	+ 24.4
Burlington	+ 24.1
Plainville	+ 6.0
Bristol	+ 5.7
New Britain	+ 2.2
Newington	+ 1.3
West Hartford	- 1.9

Farmington's rate of growth during the 1980's may in part be attributed to substantial employment growth within the region coupled with Farmington's ample supply of vacant land, an adequate infrastructure system and the Town's attractive location with respect to the region's highway network and employment centers.

While future population changes will continue to be affected by economic growth in the region the following projections prepared by the State Office of Policy and Management as well as the Farmington Planning Department reflect a reduction in developable land and a decrease in the formation of new households.

Population Projections, Town of Farmington 1990-2010

From:	1990	1995	2000	2005	2010
Interim Connecticut Populations, State of CT Office of Policy and Management	20,608 (census)	22,560	23,480	24,020	24,350
Farmington Planning Department	20,608 (census)	22,483	24,650	25,900	27,210

Household Composition

The Census Bureau reported that Farmington's 1990 population was composed of 8,213 households. As in 1980, the number of persons per household in 1990 decreased from the preceding ten-year period. This most recent reduction from 2.66 persons to 2.47 persons per household may indicate that this figure is beginning to stabilize. This ratio is one of the lowest for a community in the Capitol Region, possibly reflecting the increase in construction of multiple family housing during the 1980's.

The rise in the number of single person households parallels the national trend. In 1980 these households comprised 20 percent of the Town's total number of households. This figure rose to 25 percent in 1990. This change is indicative of an aging population, an increase in the supply of one and two bedroom dwellings in Farmington as well as social changes taking place nationwide.

III. AGRICULTURAL RESOURCES

Agriculture has played a prominent role in the history of Farmington, not to mention serving as the basis for the Town's name itself. In the latter part of the 18th century and into the 19th century agriculture was the predominant occupation and land use in Town. Farms located along the valley floor produced hay and food crops while the hillsides were set aside for orchards and pasture land. Although the growth of manufacturing in Unionville provided substantial demand for farm products, by the mid 1800's agricultural production had begun to decline and persons employed in farming had dropped to less than 15 percent of Farmington's population. During the late 1800's local farmers began to phase out many crops, limiting farm production to primarily dairy products, vegetables, poultry and fruit.

This trend continued into the 20th century and today there are a total of 956 acres of land within the Town of Farmington used in agricultural operations. A figure which represents a reduction of 144 acres from the total reported in the 1982 Plan of Development. Of these 956 acres, 600 are contained in 32 privately owned parcels of land while 356 acres are leased by the Town as part of its flood management program. These parcels are located on Map 1, with the greatest amount of acreage concentrated within the Floodway and Southwest neighborhoods. With the exception of the one dairy farm located on Town Farm Road, agricultural products produced in the Town are generally limited to hay and vegetables.

The local agricultural economy has historically benefited from an abundant supply of favorable soils. In 1980 the Soils Conservation Service produced a list of soil types recognized as prime agricultural soils. These are soils that are permeable to water and air, nearly level in grade and not highly erosive. They are neither too acid nor alkaline, wet enough for crops but not subject to frequent flooding during the season of use and are not so stony that it interferes with cultivation by machinery.

According to the Hartford County Soil Survey of 1962 approximately 22 percent of the land area within Farmington formerly contained prime agricultural soils. These soils are illustrated on Map 1. Development activities over the years has reduced this figure to 1,300 acres or seven percent of the Town's land. Interestingly, with the exception of the farming activities located on Town property, a majority of the acreage which comprises the remaining agricultural operations in Farmington is not designated as prime agricultural soils.

FARMLAND PRESERVATION INITIATIVES

For the last ten or more years there have been significant efforts made at the state, regional and local levels of government to assist in the preservation of farmland soils and farming activities. The Plan of Development for the Capitol Region of Connecticut contains a policy statement encouraging the conservation of food and non-food agricultural lands while the State's Plan for Conservation and Development sets forth as a goal the maintenance of in-state food producing capacity through the conservation and preservation of prime agricultural lands.

In 1981 the State of Connecticut enacted the Right to Farm Law which establishes certain protections for existing farms from nuisance complaints made by neighboring landowners. The State of Connecticut since 1983 has also required State agencies to assess the impacts of their sponsored projects on areas of farmland 25 or more acres in area.

As a complement to its purchase of development rights program the State adopted in 1984 Public Act 84-184, enabling municipalities to establish an agricultural land preservation fund. This fund may accept gifts or loans from private individuals or the municipality for the preservation or acquisition of farmland in fee or by the purchase of development rights.

Many communities in recognizing the contribution that farmland has made to their aesthetic character and quality of life have initiated a host of strategies to aid in the preservation of both active and inactive farmland. Recent studies have also concluded that this policy makes good fiscal sense since farms have been found to produce a net tax benefit due to the minimal amount of services they require.

IV. NATURAL DRAINAGE SYSTEMS AND FLOOD PRONE AREAS

Farmington's network of brooks, ponds and streams not only serves to drain the land surface but also provides sustenance for plant, fish and wildlife and recharges wetland areas and groundwater supplies. The transformation of fields and woodlands to impervious surfaces and lawns increases and accelerates the amount and velocity of runoff from a given site. This alteration of an area's natural hydrology may result in downstream flooding, increased channel erosion and sedimentation from greater peak flows and a substantial reduction in stream flow in periods of drought.

It is therefore important that we acquire an understanding of the hydrologic characteristics and function of the Town's natural drainage systems and their principal waterways and the individual and cumulative impacts exerted upon these systems from the development of land.

DRAINAGE BASIN DESCRIPTIONS

The Town of Farmington is composed of three major drainage basins; the Farmington River, Connecticut River and Quinnipiac River. For the purposes of this report these basins were further broken down for analysis into ten watersheds, the boundaries of which all extend into adjacent municipalities. These ten drainage basins are illustrated on Map 2.

UNIONVILLE BROOK

The Unionville Brook watershed contains approximately 1,000 acres of land within the Town of Farmington. Unionville Brook receives water from Lake Garda as well as an unnamed watercourse originating from the area of Coppermine and West District Roads, before discharging into the Farmington River. More than three-quarters of this basin is developed. There have been no recent incidences of flooding noted along the brook or its tributaries.

ROARING BROOK

The smallest of the drainage basins profiled, Roaring Brook, drains an estimated 200 acres of land within Farmington. This watershed is almost completely developed with the exception of open land lying to the rear of several single family homes located along the east side of West Avon Road. Although this portion of the brook lies at the lower end of the drainage basin the brook does not regularly flood.

SCOTT SWAMP BROOK

The Scott Swamp drainage basin, consisting of 2,350 acres, includes most of the land area comprising the southwest corner of Farmington. An extensive network of wetlands located north of Morea Road along the Farmington/Bristol border forms the headwaters of Scott Swamp Brook. Prior to discharging into the Pequabuck River the flow of water within the brook is augmented by several smaller unnamed brooks which run in a north and south direction and are situated between Plainville Avenue and New Britain Avenue. Approximately one-third of this watershed is undeveloped, potentially leading to greater peak flows of water within this watercourse in the future. Flooding along the boundaries of this brook are infrequent.

PEQUABUCK RIVER

The 2,250 acres of land within this drainage basin contribute a flow of water which enters the lower reaches of the Pequabuck River. The watershed is predominantly developed with much of its open areas found in the Farmington Flood Zone and the Shade Swamp Sanctuary. Flooding does occur along the flatter sections of the river, however this tends to be along undeveloped areas regulated by the local and federal flood protection laws and to a lesser degree within existing conservation areas.

REGULATORY PROGRAMS

For the past 14 years Farmington has participated in the Federal Government's National Flood Insurance Program. Administered by the Federal Emergency Management Agency (FEMA), the program makes low cost flood insurance available within a member community in exchange for the Town's adoption of regulations intended to reduce potential damage from a flood event. In 1986 FEMA completed its detailed study of Farmington, producing floodway dimensions as well as elevations of the 100-year flood for seven rivers and brooks including the Farmington and Pequabuck Rivers, Roaring Brook, Unionville Brook, Scott Swamp Brook, Poplar Swamp Brook and the Woodridge Lake Inlet. While this information has been incorporated into Farmington's regulatory program, the Town has chosen to maintain more stringent requirements for development along the Farmington River between the railroad overpass and the Pequabuck River.

Thus far Farmington's experience with this program has been very positive. According to figures compiled by FEMA there are 131 properties carrying flood insurance policies in Town. Over the duration of the Town's membership in this program only one property has submitted a claim in connection with more than one flooding incident.

The State of Connecticut in addition to maintaining its stream channel encroachment line program, has also implemented three regulatory programs during the 1980's aimed at reducing the incidence of flooding as well as preserving minimum water volumes within waterways.

In 1985 the State mandated the use of erosion and sedimentation controls in conjunction with developments which disturb a minimum of one-half acre of land. This law has helped preserve the capacity of a watercourse by substantially reducing sediment carried off nearby lands by storm water runoff.

Connecticut's dam inspection program provides for the inspection of both large and small, public and private dam structures. Inspectors employed by the Department of Environmental Protection have distributed inspection reports to municipalities and private individuals alike and mandate repairs if required in order to prevent possible downstream flooding.

The Connecticut Water Diversion Act regulates the withdrawal and diversion of both groundwater and surface waters in an attempt to protect the supply of water available within a given drainage basin for other uses. While this statute goes a long way to ensuring the minimum flow of water within a watershed this program should be coupled with a complementary land use plan at the local level to ensure the achievement of this objective.

As previously mentioned, Farmington's Flood Zone Regulations have satisfactorily complemented the minimum standards established by FEMA. The configuration of the existing Flood Protection Zone and Flood Perimeter Overlay Zone was developed from data earlier compiled by the Army Corps of Engineers. These boundaries which encompass areas along both the Farmington and Pequabuck Rivers are of greater size than that presented in FEMA's 1986 study. This system has provided the Town with an extra level of protection.

The Town Plan and Zoning Commission's decision in 1987 to legislate the maximum site coverage within nonresidential zones at 40 percent has had a profound impact upon the Town's drainage system. Compared to a site completely covered by impervious surfaces a site which has its coverage restricted to only 40 percent will generate slightly less than 50 percent as much water runoff.

Many communities during the 1980's as part of their storm water management program have adopted a zero net increase runoff policy. This program requires the detention of storm water on a parcel undergoing development to a point where the post development peak runoff would not exceed the peak volume generated from the site in its prior natural state. While this approach may initially sound attractive, studies have shown that detaining water and releasing it over a longer period of time on sites located in the lower reaches of a

V. GROUNDWATER

Over the last decade Farmington's groundwater system has essentially become the lone source of the Town's potable water supply. It is also a major component of the natural hydrologic cycle. In addition to being withdrawn from the ground into the water system, groundwater contributes to the supply of water within wetland areas and watercourses. Groundwater may, in many instances, provide the only source of water to a perennial stream in times of drought.

WATER SUPPLY

With the 1985 merger of the Farmington Water Company with the Unionville Water Company and the subsequent disconnection of the Metropolitan District Commission's water supply from the Unionville Water Company's distribution system it is now estimated that 90 percent of Farmington's population depend on groundwater sources for their water supply. This figure is up from 75 percent just 10 years ago.

The Unionville Water Company has reported that it withdrew over 651 million gallons of groundwater in the year 1990. This sum represents an increase in excess of 178 million gallons over that produced in 1989, the last year water was purchased from the Metropolitan District Commission.

Farmington's future water supply may very well depend upon the further withdrawal of water from its stratified drift aquifer.

The Town's groundwater resources have been investigated in several reports since 1950. The most definitive works dealing with potential well yield and groundwater quality were undertaken in 1976 and 1980. These reports indicated that approximately 14 square miles of Farmington was underlain by a stratified drift aquifer. The most favorable locations within the aquifer for the future withdrawal of groundwater were identified in the 1980 study. These areas which were described as potentially yielding over 250 gallons of water a minute are shown on Map 3. Since 1982 the Unionville Water Company has developed a new well in one of these areas. The Connecticut Sand and Stone well, located south of Farmington Avenue on the Connecticut Sand and Stone property approximately 1,700 feet east of the New York, New Haven, Hartford railroad trestle, yields over 600 gallons of water per minute. The Unionville Water Company is currently exploring the option of developing additional well sites within these areas previously discussed.

WATER QUALITY, CONTAMINATION AND PROTECTION

The quality of the groundwater which supplies the Unionville Water Company system is very good with only minimal treatment required at each groundwater well site. However the utility does not own the land surrounding these well sites and for the most part depends upon the establishment of a 200-foot easement to ensure their protection.

During the mid 1980's Farmington began to experience the problem of groundwater contamination. The first incident involved the loss of heating oil from a community fuel oil supply distribution system which served the Red Coat Lane area. Subsequently the individual wells located within the Pine Hollow subdivision were contaminated by a pesticide used in an adjoining farming operation. This was followed by the release of petroleum product from the underground tanks of a gasoline station located at Plainville Avenue and Burlington Road. These threats to the quality of the groundwater supply prompted the initiation of several regulatory and monitoring programs at both the state and local levels of government.

The State of Connecticut began its effort with the institution of a groundwater classification system. Modeled after the system used for surface waters, the groundwater system not only describes the existing quality of groundwater sources within the State but also establishes future goals for water quality and is used by the Department of Environmental Protection in the regulation of groundwater discharges from nonresidential land uses. Today all areas of Farmington are designated either GAA or GA, with the exception of those locations which were subject to the contamination previously described as well as the abandoned Town dump

PLANNING OBJECTIVES

1. Protect existing and proposed groundwater supplies located in stratified drift by regulating or prohibiting various land uses located within the primary or secondary recharge areas associated with well sites.

2. Retain the existing aquifer protection regulation in its current form and use it to augment the new State Aquifer Protection Act when it becomes effective.

3. Continue the Town's groundwater monitoring program and expand it into areas which contribute to the groundwater supply of an existing or proposed well site. Coordinate this effort with the Unionville Water Company and assist it in procuring monitoring well sites on properties for which development approvals are sought from the Town Plan and Zoning Commission.

4. Explore the feasibility of instituting a program to regulate all existing and new residential and nonresidential underground tanks, particularly in areas overlying the stratified drift aquifer.

5. Prevent a reduction in the existing groundwater tables by the following means:

    a. Maintain the site coverage requirements currently found in the Zoning Regulations.

    b. Require the development of storm water collection systems designed to recharge the groundwater supply on sites which overlay Farmington's stratified drift aquifer.

- Certain hillsides contribute to the natural beauty of the surrounding area. This beauty depends, to a large extent, on the existence of significant amounts of open space and on development which is in keeping with the surroundings and natural constraints of the land.

Low density zoning, the land's natural constraints and the lack of public sewers have all helped to maintain the aesthetic values and natural functions of these areas. Conditions attached to subdivision approvals have also been used to control erosion and to preserve vegetation on hillsides.

The 1991 revisions to the Subdivision Regulations included a new section that states that subdivisions shall be designed to minimize adverse impacts upon the listed natural and man-made resources which are on or contiguous to the subject premises. This list includes slopes in excess of 15 percent grade, and land along ridgelines. These regulations enable the Town Plan and Zoning Commission to preserve these valuable resources through redesign of the subdivision, use of the cluster subdivision regulations, establishment of conservation easements, regulation of the grading, building location, etc., or a reduction in the total number of building lots.

PLANNING OBJECTIVES

1. Continue to encourage low density residential use of hillside areas (over 15 percent slopes).

    a. Prohibit structures on slopes of more than 24 percent.

2. Encourage residential development which minimizes the disruption of ground cover and vegetation, and which preserves expanses of open space in order to preserve the aesthetic and natural functions of hillsides and ridgelines.

    a. Use Zoning and Subdivision Regulations to minimize the impact from development to ridgelines and hillsides.

    b. Encourage the preservation of glacial formations such as eskers and drumlins to preserve the glacial history of the Town of Farmington.

European Settlement

The Farmington River provided many of the resources needed for the settlement of the Town of Farmington. For centuries before the first English settlers came to this area, the Tunxis Indians had taken advantage of the fertile soils, fish and wildlife the Farmington River provided. Around 1640, the first English settlers arrived. They too were attracted by the river's abundant fishing and agricultural potential. The settlers also saw the river and its tributaries as a source of power. The "Grist Mill," which still remains at the end of Mill Lane, and its dam were constructed as early as the 1660's.

While early dams were constructed to power saw and grist mills, by the 1800's the Farmington River was providing the power for the development of Unionville as a manufacturing center. In 1828, a dam was constructed in Unionville to feed water into the Farmington Canal. The Farmington Canal was an 87-mile series of canals and aqueducts that ran from New Haven to Northampton, Massachusetts, through 60 locks and over eight rivers. The canal transported people and goods for only 20 years before the railroads took its place.

A half mile upstream from the "feeder" dam, a second dam was constructed in Unionville. The impounded water from this dam fed a canal that powered several small factories. The proximity to the Farmington Canal through the feeder canal gave Unionville factories early access to more distant markets.

The Farmington River made possible the industrial prosperity of Unionville and other towns along its banks. In return, however, the discharge of untreated sewage and industrial waste took a heavy toll on the river. As early as 1860, the river was too polluted for swimming, and few trout could be found as far north as New Boston, Massachusetts. While mill closings along the river in the late 19th and early 20th centuries brought some water quality improvement, population growth along the Farmington River and its tributaries during the 20th century substituted municipal sewage as the river's principal pollutant.

Water Quality

In 1967, the Connecticut Legislature passed a Clean Water Act, which was followed in 1972 by the Federal Clean Water Act. These statutes set criteria for the attainment of clean waters by setting contaminant limits, and requiring permits for all industrial or municipal discharges into a watercourse.

As a result of these statutes and other efforts to revitalize Connecticut's watercourses, the entire length of the Farmington River within Farmington meets Class B water quality criteria. The section of the river from its confluence with the Pequabuck River to the Farmington/Avon town line, however, has been designated as unsuitable for swimming, because of pollution from the Pequabuck River, and the zone of influence from the Farmington Sewage Treatment Plant. This designation, however, may be removed with the next revisions to the State water quality designations due to the improved water quality of the Pequabuck River. Table 2 illustrates the improved water quality in the Farmington River, primarily as a result of improvements to the Pequabuck River.

The treatment plant, along with a discharge by Pioneer Steel Ball in Unionville are the only two remaining permitted discharges into the Farmington River within Farmington. With improved water quality, the Farmington River now supports one of the largest trout fisheries in the State, and is an important river in the State's Atlantic Salmon restoration program.

Use of Stratified Drift Deposits

The lower Farmington River flows through an extensive stratified drift deposit, that was laid down by glacial meltwater during the last retreat of the glaciers. In Farmington, approximately 14 square miles are underlain by this material to depths, in some places, in excess of 450 feet. The fine-grained nature of some of this material, however, is incapable of yielding significant quantities of water. Map 3 identifies the areas within this deposit which are coarse-grained (sand and gravel), saturated, and have potential water yields in excess of 250 gallons per minute (gpm).

Recreation

The water quality improvements and the aesthetic qualities of the Farmington River have made it a popular source of recreation. The river is used extensively for fishing, canoeing and, to a lesser extent, swimming. Open space along the river is additionally used by hikers, birdwatchers and picnickers. Portions of the river's banks are also prime hunting spots, although hunting upon Town-owned land is restricted to only certain locations. Public access to the river suitable for launching canoes is available at Yodkins-Morin Memorial Park on Route 4, River Glen Park off of Woewassa and Wanowmassa Lanes and the Route 4 bridge in Farmington Village. Public pedestrian access is also available off Meadow Road and at Tunxis Mead Park.

Two recent development projects along the river have provided additional land for potential recreation and river access. An 8-lot subdivision along New Britain Avenue included the establishment of a conservation easement over 2.8 acres of the Flood Protection Zone, with an additional public access easement along the western property line and the river. Another 2.8 acres was deeded to the Town as part of the Rivercrest Condominiums project.

River Flow and Riparian Rights

Both the attenuation of pollutants in the Farmington River and the preservation of the river's aesthetic, recreational and ecological values are dependent upon the quantity of the river's flow. Since the Farmington River is dammed along both its western and eastern branch, the flow of the river is controlled by a series of regulations and agreements to assure adequate flow for downstream users. There are six key factors that control the flow of the Farmington:

From Goodwin Dam:

1) a minimum release of 50 cubic feet per second (cfs) is required at all times;
2) all natural inflow to reservoirs up to 150 cfs must be released;
3) release of all flows released from Otis Reservoir in Massachusetts;
4) releases upon request of the Farmington River Power Company in volumns from 0 to 300 cfs, up to 400 million gallons per day and 21.7 billion gallons per year;

From Colebrook Dam:

5) releases from Colebrook Reservoir when water elevation is above 708 feet; and
6) releases up to 3.26 billion gallons per year as needed by DEP for fisheries.

The "upon request" releases to the Farmington River Power Company are perhaps the most valuable for maintaining the multiple use characteristics of the Farmington River. The release agreement was established to preserve the riparian rights of the Farmington River Power Company, which operates a hydroelectric facility at Rainbow Dam in Windsor. Through this agreement, release requests have averaged approximately 190 cfs through the peak recreation period of May 15-October 31. This agreement has enabled the river to flow at levels higher than would tend to occur naturally during the summer months.

It should be noted that the cfs figures are measured at the point of release. The flow in cfs in the Town of Farmington and other downstream locations will naturally be greater in volumes dependent upon the flows from other tributaries.

Water Diversions

The Metropolitan District Commission (MDC) uses the Farmington River to supply 100 percent of the water supply for Greater Hartford. The first diversion of water from the Farmington River watershed for water supply to the Hartford area began in 1911 with the signing of an agreement to construct Nepaug Reservoir. In 1931, MDC began construction of the 30 billion gallon Barkhamsted Reservoir on the Farmington River's east branch to meet the growing water supply needs of the Hartford area. Finally, in 1949, the MDC, by Special

The purpose of the Flood Protection Zone is to preserve the river's ability to convey the regulatory flood. As such, uses within the Flood Protection Zone are restricted to those which have a low flood damage potential and will not obstruct or modify flood flows. The zone prohibits the construction of most structures and parking areas; and further regulates sand and gravel excavation, municipal uses, accessory structures and fill.

The purpose of the River Protection Overlay District is, more broadly, to preserve the multiple qualities of a river and the land adjacent to it. By prohibiting or regulating most alterations, including the removal of vegetation within an established buffer area, the river's ecosystem can be preserved along with the river itself.

While the Flood Protection Zone and River Protection Overlay District regulations do overlap, the zones tend to complement rather than duplicate each other. Where the land flattens out and a wider floodplain is established, such as occurs at the convergence of the Farmington and the Pequabuck Rivers, the Flood Protection Zone will provide greater protection to the rivers. Conversely, where steep banks exist and the floodway is relatively narrow, such as occurs along much the Farmington River from the northwestern town line to the railroad overpass, a River Protection District will tend to provide greater protection.

Additionally, by regulating the removal of vegetation, the River Protection District can protect a river and its characteristics in ways that the Flood Protection Zone cannot. Vegetation along rivers has important functions including slowing floodwaters, filtering erosion and sedimentation, increasing bank stability, providing important fish and wildlife habitat, and preserving a river's aesthetic and recreational qualities.

Activities along the Farmington River from above the Route 4 bridge in Unionville to the railroad overpass are further regulated by the State of Connecticut's establishment of stream channel encroachment lines in this area. No "obstruction or encroachment," as defined in Connecticut General Statute Section 25-4a, may be placed within these lines without first obtaining a permit from the Department of Environmental Protection. Permit decisions are based on findings of a proposal's effect on: the flood-carrying and water storage capacities of the river and floodplain, flood heights, hazards to life and property and natural resources. Since the stream channel encroachment lines have in most cases been established up gradient from the boundary of the floodway zone, they tend to provide added protection to the river resources.

Adjacent Land Uses

The land uses along the Farmington River are in general more intensive to the west and less intensive to the east. The land along the river as it enters the Town remains vacant due to the topography and the extent of the floodway. As the river passes under the Route 4 bridge in Unionville, pockets of industrial and commercial uses appear along the right bank, with residential uses along the left bank. Due to the floodway, however, the residences are setback at least 100 feet from the river.

As the river passes through Unionville Center, the adjacent uses are a mixture of industrial and commercial with a small pocket of residential along the right bank below the Route 177 bridge. Between the confluence of Roaring Brook in Unionville and the railroad overpass, the land use along the left bank is primarily open space and residential, while the uses along the right bank are nearly evenly split between residential and industrial, with some areas of vacant land.

Due to the expanse of the river's floodway from the railroad overpass to the Avon town line, the primary uses adjacent to the river are open space, agriculture and recreation. The exceptions include the Connecticut Sand & Gravel operation below the railroad overpass, which encompasses nearly one linear mile of river frontage; the mixed uses in Farmington Village and the low density residential development along Waterville Road.

Five development applications were approved in the last decade for new construction adjacent to the Farmington River. All of the projects were located along New Britain Avenue. The total construction included approximately 25,100 square feet of office and industrial warehouse space on 25.15 acres of land, 32 condominium units on 8.54 acres, and an 8-lot industrial zoned subdivision. Two projects in particular, the

b. Consider preservation of the Grist Mill dam remains. Salmon leaping to clear falls as they migrate upstream could provide a valuable aesthetic and educational experience.

c. Cooperate with DEP to educate local fishermen about their role in the salmon restoration effort.

9. Environment/2000: Connecticut's Environmental Plan, completed September 1, 1987, identified rivers and streams as valuable State resources. The plan proposed the development and implementation of a statewide program to coordinate the management and conservation of these valuable resources. In an effort to meet the Environment/2000 objective, DEP is coordinating a multi-organization River Management Program which is conducting a statewide river inventory and assessment, and developing a river management strategy for Connecticut rivers. Farmington should cooperate with the River Management Program which will help protect the Farmington River and other streams within the Town's boundary.

Table 3

WETLANDS SOILS IN THE TOWN OF FARMINGTON
BY DRAINAGE TYPE

DRAINAGE CLASSIFICATION	SOILS TYPE	SOIL NAME
Well Drained:	HaA	Hadley silt loam
	StA	Suncook loamy sand
	OnA	Ondawa sandy loam
Mod. Well Drained:	PoA	Podunk sandy loam
	WwA	Winooski silt loam
Poorly Drained:	WcA	Walpole loam
	WsA	Wilbraham stony silt loam
	WrA	Wilbraham silt loam
	RuA	Rumney sandy loam
	LmA	Limerick silt loam
Very Poorly Drained:	PmA	Peats and Mucks, shallow
	SeA	Scarboro loam
	LdA	Leicester, Whitman, and very stoney silt loam
	MoA	Menlo silt loam
	WtA	Wilbraham and Menlo very stoney silt loam
	MpA	Menlo stony silt loam
	SaA	Saco sandy loam
	Re	Riverwash
	SbA	Saco silt loam
	PkA	Peats and Mucks

The fifth change noted above is perhaps the most significant change made by the 1987 amendments to the Inland Wetlands and Watercourses Statute. The original statute listed a number of factors that commissioners should consider in making their findings on wetlands applications. The 1987 amendment added that while commissioners should consider the same factors cited in the original statute, where a public hearing is involved, they **shall not** approve wetlands activities that have feasible and prudent alternatives.

While this clause as it pertains to the Inland Wetlands and Watercourses Statute has not been tested in court, the same wording appears in the Connecticut Environmental Protection Act (CEPA) on which the Connecticut Supreme Court in Manchester Environmental Coalition vs. Stockton (184 Conn. 51.62-63 (1981) made a ruling. In this case, the court held "feasible" to mean "consistent with sound engineering" and "prudent" to mean "economically reasonable in light of social benefits derived from the activity." In this case, the court further noted that while economics may be considered, "a mere showing of expense, however, will not mean an alternative is imprudent."

Wetlands Applications

In the last decade, the Farmington Inland Wetland and Watercourses Agency has considered 167 applications. Of these applications, 139, or 83 percent of the applications were approved. At the time an application is submitted, it is determined whether the proposed activity is significant or not. In most cases, applications are considered significant except for the smallest activities such as driveway crossings, minor filling and stream or pond cleanings. Despite this, slightly more applications were considered non-significant than significant (52 percent vs. 48 percent). As might be expected, the likelihood of passage of a wetlands application was higher over the last decade for a non-significant activity than for a significant one (89 percent vs. 77 percent). Table 5 summarizes these findings.

Table 5 further identifies the types of applications sought over the last decade. Seventy-five percent of all applications were for fill, drainage discharges and temporary activities. Temporary activities include utility crossings, or other activities that can be fully or partially restored following completion.

Applications to fill wetlands or watercourses were by far the most common (44 percent of all applications). Since 1982, 27.50 acres of wetlands were approved for filling. This is an average of .38 acre of wetlands approved for filling per application.

Wetlands Buffers

Since 1980 four court decisions have had major impact on the regulation of wetlands in Connecticut: Aaron v. Conservation Commission, 183 Conn. 532 (1981); Cioffoletti v. Planning and Zoning Commission, 209 Conn. 544 (1989); Lizotte v. Conservation Commission, 216 Conn. 320 (1990); and Mario v. Town of Fairfield, 217 Conn. 164 (1991). In each court decision the regulatory confines of the local inland wetlands and watercourses agencies has been expanded.

In each of these cases, the courts upheld the regulation of activities beyond the statutory boundaries of a wetlands or watercourse defined in the Inland Wetlands and Watercourses Act. In all of these cases the courts relied on the broad authorization intended by the legislation to take "all steps reasonably necessary to protect fragile and valuable wetland areas." With Aaron, the courts first granted authority to regulate activities which may adversely affect a wetland or watercourse, but which are proposed outside of a wetland area, through the use of buffer regulations. Cioffoletti expanded this authority further by upholding the regulation of an activity outside of a wetland area without an associated buffer regulation where there was evidence that the activity would adversely affect the wetland or watercourse. In Lizotte, the courts took yet another step by upholding a regulation which prohibited, rather than regulated, certain activities within a certain distance from a wetland or watercourse. Finally, in Mario, the courts upheld the regulation, through the use of a "certificate of wetlands conformance," for any activity on a property which includes wetlands.

Although the courts have continued to expand the authority of local inland wetland and watercourse agencies, it is important to note that the first two rulings were unanimous decisions, while the Lizotte decision was made with a 4-1 majority, and the Mario decision was made with a mere 3-2 majority. This may indicate that the courts have reached the limits of local authority under the Inland Wetlands and Watercourse Act.

Watercourses

Surface water covers 515 acres or approximately three percent of Farmington's total area. Major water bodies include the Farmington and Pequabuck Rivers, Roaring Brook, Scott Swamp Brook, Wood Pond, Lake Garda, Batterson Park Pond, Walton Pond, Dunning Lake and the Farmington Reservoir. These water bodies are important assets to the Town providing recreational opportunities and aesthetic appeal, in addition to receiving storm water runoff, and discharges from sewage treatment facilities and industry.

Pollution to surface waters can be divided into two broad categories: point source, and non-point source. Point source pollution includes distinct discharges from wastewater outfalls from factories and sewage treatment facilities. These pollution sources are currently regulated by State and federal laws. Non-point source pollution includes a broad range of diffuse, small, intermittent or mobile discharges such as acid rain, leaky septic systems, storm water runoff, erosion and sedimentation, and agricultural and lawn chemicals.

The Connecticut Department of Environmental Protection adopted statewide "Water Quality Standards and Criteria" in 1980, which were most recently revised in 1991, and has delineated on maps the classification of all surface waters. These standards are used to regulate point source pollution discharges. The State water quality classes include Class AA, A, B, C, and D waters; with Class AA waters being the most pristine, and Class D waters being the most degraded. Table 6 summarizes the Connecticut surface water classifications. It is State policy to restore all surface waters, where possible, to at least Class B quality, and to maintain waters of higher quality in their present state.

Most rivers and streams in Farmington are Class B quality or better. Both Scott Swamp Brook and Roaring Brook are classified as having B/A water quality. This classification indicates that while the stream currently meets Class B criteria, DEP has set a goal of achieving Class A water quality. While the discharges resulting in the B classification for Roaring Brook are beyond the boundaries of Farmington, most of the discharges into Scott Swamp Brook occur in Farmington. Table 7 lists the discharges into or near Scott Swamp as indicated in a DEP Water Compliance Unit publication and associated map entitled, Leachate & Wastewater Discharge Sources Inventory: Connecticut River Basin (February, 1987). This table shows that most of the current discharges into Scott Swamp are cooling water discharges, which meet the criteria for discharges into Class A waters. According to DEP officials, and as implied by the listed discharges, the current B classification is a result of past improper spills, discharges or storage of industrial chemicals in the vicinity. DEP's goal therefore is to clean up these contaminated areas.

The Farmington River has Class Bc water quality for its entire length through the Town of Farmington, with an additional "b" subscript for the section of the river from just west of its confluence with the Pequabuck River to the Avon town line. The "c" subscript indicates that the river is suitable for cold water fisheries, and that more stringent water quality criteria may be developed on a case by case basis. The "b" subscript designates the zone of influence in the immediate vicinity of treated sewage outfalls. Swimming is not advisable in these areas. The "b" subscript for the Farmington River is influenced not only by the Farmington sewage treatment plant, but also the Pequabuck River.

The Pequabuck River is currently class D/Bc. The Pequabuck River has historically been heavily impacted by industrial and municipal discharge resulting in high turbidity, coliform bacteria and low dissolved oxygen levels. However, controls on industrial discharges and improvements to sewage treatment facilities in Plainville and Bristol over the last decade have, according to DEP, greatly improved the water quality of the Pequabuck River. These improvements are further substantiated by reports of the return of certain fish species. DEP even found an Atlantic Salmon during a recent fish count in the Pequabuck River. These improvements have not, however, been reflected in the water quality classification for the river which was established in June, 1988. It is uncertain,

Table 7
LEACHATE & WASTEWATER DISCHARGE SOURCES
FARMINGTON, CONNECTICUT: PEQUABUCK RIVER BASIN (1)

MAP #	DISCHARGE SOURCE (Company Name)	DISCHARGE TYPE
42	Mott Metalurgical	Former Solvent Discharge to drywell
43	Mott Metalurgical	Cooling water discharge
44	Fletcher Terry Co.	Water Soluble oils discharge to ground
45	Fletcher Terry Co.	Cooling water discharge
46	Dell Mfg.	Cooling water discharge
47	Dell Mfg.	Former ground discharge of untreated etching wastewaters
48	Edmunds Mfg.	Cooling water discharge
49	Servends, Inc.	Cooling water discharge
50	Edmunds Mfg.	Former industrial wastewater discharge to ground
51	Conn. Spring & Stamping	TCE Spills and leaks from solvents storage
52	Bauer Electro	Cooling water discharge
53	Roy Machine & Sales	Solvents and oil spills
54	Conn. DOT	Salt storage
55	Whitmon Spindle Co.	Ground discharge of cooling waters and oils
56	CT. Spring Corp.	Cooling water discharge
57	N.E. Aircraft	Cooling water discharge
58	N.E. Aircraft	Former metal hydroxide sludge lagoon and Zyglo discharge to ground (eliminated 1980)
59	Waterman Turkey Farm	Former failed septic system with bloodwaste
60	Hamilton Standard	Annual discharge of tower cleaning waters to septic system
61	Stanley Works	Cooling water discharge
62	Pratt & Whitney	Cooling water discharge

NOTES: (1) Map numbers and data from DEP publication entitled "Leachate & Wastewater Discharge Sources Inventory" February, 1992

6. In order to maximize the preservation of wetlands and watercourses, regulated buffer areas and development setbacks should be investigated for incorporation into Inland Wetlands and Watercourses Regulations.

    a. A buffer area is a relatively undisturbed "upland-to-wetland" transitional landscape. Natural buffer areas can be valuable in maximizing the preservation of a wetlands or watercourse. Their primary values include wildlife habitat (e.g. foraging, migration corridor, breeding and nesting), pollution attenuation, maintain landscape diversity, and recreational and aesthetic open space. The size of a buffer area should, at minimum, consider: site conditions (e.g. slope, vegetation cover, soils type), potential for impact from development (impervious cover, type of development, septic system), and quality of wetlands.

7. In considering the buildability of a lot in a proposed subdivision, the applicant should demonstrate that a house in character with the neighborhood, associated grading and utilities, and a suitable lawn area can be established. A minimum of 25 feet should be maintained between the primary structure and the wetlands to assure adequate lawn area.

8. Storm water discharge outlets should be located, where feasible, at least 15 feet from a wetlands or watercourse. Where feasible, a biofilter should be established between the outlet and the wetlands or watercourse.

    a. A biofilter is a depression designed and vegetated to maximize the filtration and settling of contaminants prior to their discharge into a wetlands or watercourse. The size, design and types of vegetation should be dependent upon the volume of discharge and the anticipated contaminants.

9. Open space or conservation easements which include wetlands should also include a buffer strip of upland.

    a. This buffer strip should be a minimum of 15 feet in width. As noted above, the site conditions, potential for impact and the quality of the wetlands should be considered when determining the actual size of the buffer. This buffer strip should remain naturally vegetated.

10. All wetlands and watercourses in the town should be inventoried and evaluated based on the Conn. DEP Bulletin No. 9, METHOD FOR THE EVALUATION OF INLAND WETLANDS IN CONNECTICUT as revised in 1990.

    a. The completed evaluation should include guidelines for how to use and not use results in reviewing a wetlands application.

11. Encourage continued efforts by the Conn. DEP to upgrade sewage treatment facilities upstream of Farmington which contribute substantial pollution to the Pequabuck River.

12. Prohibit new development which would contribute additional pollution to the Pequabuck River.

13. Assist the Conn. DEP in implementing water quality standards at a level consistent with their use for recreation and the protection and propagation of fish and wildlife.

14. Restrict or prohibit land uses which have the potential to pollute surface waters. Require the use of parking lot oil and grit separators where appropriate to protect nearby water bodies.

15. Particular care should be given in the design, implementation and enforcement of erosion and sedimentation controls on sites which include or which are adjacent to wetlands or watercourses, or which are identified on the High Erosion Potential Map.

16. Cooperate with State efforts to reduce impacts to surface water bodies from non-point source pollution.

wet meadow located off of South Road that is preserved by a conservation easement. The second is the grassland that grows in the alluvial soils along the Pequabuck River. The third is a wet meadow on the State property at the end of Deborah Lane and adjacent to I-84.

The final critical habitat found in Farmington is sand plains. The north central portion of Farmington is comprised of sand plain habitat. Sand plains are a rich source of sand and gravel. Farmington's sand plains currently support two separate sand and gravel operations. While much of Farmington's sand plains have been developed, a large section has been preserved as Winding Trails Recreation Area. The low, scrubby woodlands of sand plains tend to be predominantly vegetated by Black Oaks (Quercus velutina) and Pitch Pine (Pinus rigida). Additionally, although most soils in Farmington's sand plain range from well drained to excessively drained, they are also interspersed with wetlands providing even greater diversity of wildlife habitat.

While the Farmington River is not specifically listed as a critical habitat, it is an important part of the Atlantic Salmon Restoration program in Connecticut. The Atlantic Salmon is an anadromous fish, which means that it migrates from the ocean into freshwater to spawn. At present, all adult salmon that return to the Farmington River and enter the fishway at the Rainbow Dam in Windsor, Connecticut are captured to add to the hatchery stock.

Atlantic Salmon are released along the Farmington River at three stages of their development: fry, parr and smolt. Fry are newly hatched salmon. Although most fry are released further upstream, some are released in Farmington from the Route 177 bridge in Unionville, north to the Town line. In 1989-90, 225,607 fry were released in the Farmington River.

Farmington serves as a primary parr release location. When fry reach about two inches in length, they develop distinctive body markings, and are referred to as parr. Parr will remain in the river for another year or two. DEP has indicated that a fairly abundant population of parrs has established in the bend of the Farmington River. In 1989-90, 86,887 parrs were released in the Farmington River.

Salmon that reach about six inches in length between April and mid-June undergo physiological changes that allow them to enter salt water. These fish are referred to as smolts. Although all stocking of smolts is done in Windsor, Connecticut near the mouth of the Farmington River, DEP estimates that 10,000 - 20,000 smolts migrate through the Town of Farmington on their way to the ocean.

A successful restoration program could be a valuable aesthetic and economic factor for Farmington. Although there are few suitable spawning locations in Farmington, most returning salmon will pass through the Town on their way to spawning sites upstream. The potential abundance of salmon, combined with the aesthetic qualities of the Farmington River could establish this area as regionally significant for salmon fishing.

PLANNING OBJECTIVES

1. Establish guidelines for open space acquisition/ preservation to maximize wildlife value for food, shelter, nesting and/or migration.

2. Identify potential wildlife corridors to preserve connections between separate parcels of existing open space.

3. Conduct wildlife management studies on Town owned open space that recommends habitat management techniques to improve the wildlife values of suitable open space, and future open space needs to encourage wildlife preservation and diversity.

4. Obtain regular updates from the Natural Diversity Data Base in order to monitor any changes regarding endangered or threatened plant or animal species in Town.

5. Consider adopting stream buffer regulations.

X. EXISTING AND FUTURE OPEN SPACE

EXISTING OPEN SPACE

INTRODUCTION:

This section provides an updated inventory of the existing open space within the Town of Farmington. See also Map 5. The last open space inventory was completed in July of 1989. While a similar format has been maintained to allow for some comparison, computerization of this data has resulted in some adjustments that make a direct comparison difficult. Major changes will be noted.

The purpose of this portion of the plan is to provide a database of information that can be used to weigh future decisions regarding open space and land preservation. The intent is not to draw conclusions regarding the open space in Farmington, but rather to simply present the existing conditions.

Open space performs three main functions: recreation, resource conservation and enhancement of visual character. The existing open space in Farmington benefits the Town in all three capacities. Open space in this plan does not always mean undeveloped. The determination for inclusion is more related to the land's value as open or recreational land. Developed parcels, however, are only included when a significant amount of open land exists to balance the development. The following is an analysis of the Town's open space by type of ownership, type of use, public accessibility, and relative permanence. This section considers first the open space in the Town as a whole and then the open space within each of the Town's neighborhoods.

The Town of Farmington currently has a total of 6,358 acres of land that can be broadly categorized as open space. This definition includes the open space identified in Table 16 of the Existing Land Use section of this plan, and addition private agriculture and private forest land has been included. This total acreage is 34.5 percent of the entire Town and an increase of 421 acres over the 1989 figure of 5,937 acres. The following summaries of the individual categories and subcategories clarify the changes that have occurred in the Town's open space since the 1989 study.

The total existing open space in the Town of Farmington has been divided into 10 different categories and 12 different subcategories. Each category and subcategory is further divided by the land's accessibility (private or public) and by its permanence. The categories tend to group the open space by owner or type of owner, while the subcategories tend to group the land by use or purpose. The land's accessibility indicates whether the land is open to the public or not. Land is considered publicly accessible if access is not solely limited to a specified membership or group. This definition does not prohibit charging a fee. Permanence, for the purposes of this plan, is defined as land reasonably expected to remain as open space for the next 20 years. The results of this analysis are summarized in Table 8, and illustrated by Map 6.

OPEN SPACE BY CATEGORY:

The following is an analysis of Farmington's existing open space by category. The categories are listed in the order of their total acreage (highest to lowest).

Town of Farmington:

The Town of Farmington is the largest holder of open space, with 1,886 acres or 29.7 percent of the total. This is an increase of approximately 53 acres from the 1989 study. Four areas make up 69 percent of the Town-owned open space: floodplain land at the bend of the Farmington River (637 acres), The Farmington Town Memorial Forest (267 acres), Westwoods Golf Course (218 acres) and Tunxis Mead Park (170 acres).

Nearly 61 percent (or 1,128 acres) of Town-owned open space is used as Parks and Recreation. This is a 74 percent increase (409 acres) over the 1989 study. Most of the remaining Town-owned open space is split relatively evenly between Agricultural Land and Subdivision Open Space (385 acres and 327 acres respectively).

The increase in the Parks and Recreation land is primarily the result of changes in the classification of existing open space. The 1989 study classified most of the Town-owned open space in the Farmington River floodplain as agricultural land, regardless of its actual use. In the current study, however, only land under cultivation or rotation (372 acres) is subcategorized as agricultural land. The remaining Town-owned open space in the floodplain (182 acres) is classified as parks and recreation land. The parks and recreation subcategory also increased by the inclusion of public schools (162 acres).

All open space held by the Town is considered permanent, and 78 percent is publicly accessible. Most of the 420 acres classified as privately accessible is the agricultural land within the Farmington River floodplain.

The City of Hartford:
The City of Hartford owns 865 acres or 13.6 percent of Farmington's total open space. This is a 45 percent increase over the 595-acre total in the 1989 study. The primary cause of this increase was a transfer of the land known as Deadwood Swamp from the State of Connecticut category. Deadwood Swamp with 448 acres, together with Batterson Park with 234 acres make up 79 percent of the Hartford-owned open space.

Private, Nonprofit:
Farmington open space held by private, nonprofit organizations totals 749 acres, or 11.8 percent of the Town's total open space. This is an 11 percent increase over the 675 acres in the 1989 study. Most of this difference is a result of changes in the categorization of some existing open space. Winding Trails with 388 acres and 137 acres of Hill-Stead Museum property together make up 70 percent of the land in this category.

Although this open space is privately owned, all of the land is considered permanent and 73 percent, or 545 acres, is publicly accessible. Winding Trails alone accounts for 71 percent of the publicly accessible open space in this category. Although Winding Trails does require a membership for general access to the land and facilities, it has been included as publicly accessible because of activities such as cross-country skiing and mountain biking that are open to the public with a daily use fee, the availability of the facility for group events, and the reduced membership fee offered to Farmington residents.

State of Connecticut:
Nearly 12 percent (746 acres) of the Town's open space is owned by the State of Connecticut. Shade Swamp Sanctuary alone makes up 75 percent of the State's holdings. This 559-acre sanctuary preserves the northern extent of the Pequabuck Wetlands, a 1,000+ acre wetland that contains the Pequabuck River from its confluence with the Farmington River south into the Town of Plainville. All of the Connecticut-owned open space is considered permanent and all but a 17-acre agricultural parcel are publicly accessible.

Private, For-Profit:
Ten percent of the Town's total open space, or 636 acres is held by private, for-profit organizations. Ninety-four percent of this land (575 acres) is used for recreational purposes. The Farmington Country Club with 136 acres and the Tunxis Plantation Golf Course with 340 acres make up most of the recreational land in this category.

Also included in this category is the Farmington Reservoir with 54 acres. This is the only parcel in this category that is considered non-permanent. This parcel is currently for sale by the Unionville Water Company, and could be developed in the near future.

Since many of the parcels included in this category are private clubs, only 63 percent of the land is publicly accessible. The Tunxis Plantation Golf Course with 340 acres, the Farmington Polo Grounds with 58 acres, and the Farmington Club with 20 acres make up all of the publicly accessible land in this category. All of these properties, however, require a fee for access.

Private Agricultural Land:
This category includes 598 acres, or 9.4 percent of the Town's total open space. This land has been included in the open space plan to recognize its visual and historic values for the Town, and because most of this land

Table 9a

TOWN OF FARMINGTON
INVENTORY OF PUBLIC RECREATION AREAS AND FACILITIES

ACTIVE RECREATION

OPEN SPACE AREA	NEIGHBORHOOD	ACRES	SOFTBALL	BASEBALL	FOOTBALL	HOCKEY/SOCCER	MISC. PLAYFIELDS	BASKETBALL	TENNIS	TRACK	PAVED PLAY AREA	PLAYGROUND	GYM	GOLF	SWIMMING	CANOEING	WALKING TRAILS	CROSS-COUNTRY SKIING	FISHING	PICNICKING
Batterson Park	Batterson Park	234.43	1					1	1			X			X				X	X
Colt Park	East Farms	16.93										X								
Farmington Club	Central	20.15	1												X					X
Farmington High School	Highlands	52.71	1	2	1	1	3	1	8	X			X							
Farmington Polo Grounds	Central	57.73																		
Irving Robbins School	Robbins	30.84	1	1			1	1	4		1	X	X							
Lake Garda Playground	Lake Garda	0.08										X								
Noah Wallace School	Farmington Village	4.70										X								
Oakland Gardens Playground	Oakland Gardens	0.32										X								
Tunxis Plantation Golf Course	Central	339.74							4					X						
Union School	Unionville	10.14					1	1			X	X	X						X	
Westwoods Golf Course	Southwest	217.56												X						
SUBTOTAL		985.33	4	3	1	1	5	4	17	1	2	7	3	2	2	0	0	0	2	2

Table 9c
TOWN OF FARMINGTON
INVENTORY OF PUBLIC RECREATION AREAS AND FACILITIES

PASSIVE RECREATION

OPEN SPACE AREA	NEIGHBORHOOD	ACRES	CANOEING	WALKING TRAILS	CROSS-COUNTRY SKIING	FISHING	PICNICKING
Alice Pinney Park	Unionville	0.22					
Farmington Land Trust:							
Bancroft Mem. Forest	Talcott	25.09					
Bull Lot	Farmington Village	1.41					
Cowles Parcel	Floodplain	2.97	X			X	
Douglas-Mount Parcel	Unionville	4.87				X	
Farmington Canal	Talcott	7.94		X		X	
Lincoln Parcel	Talcott	3.35					
Lidgerwood Parcel	Talcott	1.96					
Miser Parcel	East Farms	2.52					
Rauch Parcel	Talcott	13.60					
Reiner Cons. Ease.	Talcott	11.17		X			
Rutz Parcel	East Farms	4.44					
Stedman Parcel	Farmington Village	1.12					
Thomson Parcel	Talcott	2.45					
Walter's Parcel	Farmington Village	0.18					
Farmington Village Green	Farmington Village	1.32					
Hill-Stead Museum	Farmington Village	137.26		X	X		
Lion's Park	Unionville	2.35					X
Oakland Gardens	Oakland Gardens	0.38					
Shade Swamp Sanctuary	Floodplain	558.62	X	X		X	
Town Memorial Forest	Southwest	266.92		X			
Town-Owned Floodplain	Floodplain	182.36	X	X	X	X	
Unionville Green	Unionville	0.34					
Will Warren's Den	South Farmington	7.19		X			
Yodkins-Morin Park	Unionville	3.87	X			X	X
SUBTOTAL		1,243.90	4	7	2	6	2

Twenty-five areas are listed for passive recreation only, totaling 1,244 acres. Of these passive recreation areas 4 provide for canoeing or canoe access, 7 areas have walking trails, 2 allow cross-country skiing, 6 have fishing access and 4 have picnic areas.

Agricultural Land:
This subcategory, which includes both publicly and privately owned agricultural land, totals 999 acres or 15.7 percent of the Town's open space. This includes the 372 acres of Town-owned agricultural land that lies within the floodplain of the Farmington River, in addition to the land included in the private agriculture category. All of the agricultural land is classified as privately accessible, and, only the Town-owned agricultural land is considered permanent.

Miscellaneous:
This subcategory includes open space where the primary use or purpose is unknown. Most of the 663 acres in this subcategory belongs to the City of Hartford (631 acres), and most of this land includes the 448 acres of Deadwood Swamp. All but an 85-acre parcel off of Fienemann Road, also owned by the City of Hartford, is considered permanent. This non-permanent parcel is identified as suitable for office development on the Future Land Use Map. Only three percent (19 acres) of this subcategory, however, is publicly accessible. This includes a number of small parcels owned by the Town of Farmington and the State of Connecticut.

Major Water Bodies:
This subcategory includes all water bodies in Town that are two acres or larger in size, regardless of their association with adjacent open space. The 659 acres of water in this subcategory (which is 10 percent of the Town's total open space), includes 277 acres in addition to those listed in the major water bodies category. Three water bodies make up 73 percent of the water in this subcategory: The Farmington River with 275 acres, Batterson Park Pond with 130 acres and Dunning Lake with 75 acres. All of the water in this subcategory is considered permanent, and 81 percent (536 acres) is publicly accessible.

Subdivision Open Space:
This subcategory includes 411 acres of open space that was preserved through the subdivision process. This includes land owned by the Town of Farmington (324 acres) and by private, nonprofit organizations in the form of homeowners' associations (86 acres). While all of the Town-owned, subdivision open space is publicly accessible, all of the land held by homeowners' associations is privately accessible.

Forest Land:
The open space listed in this subcategory is the same as that listed in the Forest Land category described previously.

Water Company Land:
This subcategory includes 194 acres of land owned by water companies. This land is preserved as open space in order to protect an associated watershed. Three parcels are included in this subcategory: MDC land surrounding West Hartford Reservoir (156 acres), Unionville Water Company land surrounding the Farmington Reservoir (36 acres), and the Lake Garda Water Company land below the Lake Garda Dam (2.71 acres). The land surrounding the Farmington Reservoir is considered non-permanent, because of its potential for development noted under the private, for-profit category section of this plan. Only the MDC land is open to public access.

Flood Control Land:
This subcategory includes land that is maintained as open space for the purpose of flood control. There are 169 acres, or 2.7 percent of the Town's total open space, in this subcategory. Most of this land is State-owned land in the northeast section of the Town.

Camps:
There are 92 acres of camps in Farmington, which account for 1.5 percent of the Town's total open space. These camps include Camp Courant with 47 acres, YMCA Camp Chase with 30 acres, and Camp Happy Hills with 15 acres. All are considered permanent, but allow only private access.

Floodplain:
This is the fifth largest neighborhood, but it includes the most open space by both acreage (1,336 acres) and percentage of neighborhood (87 percent). Shade Swamp Sanctuary, Town-owned floodplain land and Tunxis Mead Park make up nearly all of the open space in this neighborhood.

Seventy percent (938 acres) of the open space in this neighborhood is publicly accessible. Most of the privately accessible land is agricultural land that is owned and leased by the Town. Additionally, all of the land is considered permanent. The private agricultural land in this neighborhood (31 acres) is also considered permanent open space, because it is located within the Town's Floodway Zone.

Health Center:
This neighborhood contains the least open space by percentage of neighborhood, only 7 percent or 73 acres. A single City of Hartford parcel in the neighborhood's northeast corner makes up 89 percent of the open space. Since this parcel is privately accessible, this neighborhood includes only scattered small parcels totaling seven acres that are publicly accessible. All of this neighborhood's open space, however, is considered permanent.

Highlands:
Twenty percent of this neighborhood, or 134 acres, is designated open space. Farmington High School, subdivision related open space and River Glen Park make up 87 percent of this neighborhood's open space.

Ninety percent (121 acres) of this open space is both publicly accessible and permanent. Agricultural land accounts for most of the privately accessible, non-permanent open space.

Lake Garda:
This is the Town's smallest neighborhood, and it also contains the least amount of open space by acreage (14 acres), and the second least amount of open space by percentage of the neighborhood (7 percent). Most of the open space in this neighborhood is the lake itself which encompasses 11 acres.

While all of the open space is designated as permanent, only a small tot-lot is publicly accessible. Through the Lake Garda Improvement Association, however, most of the residents in the neighborhood have recreational access to the lake. Although at this writing controversy exists on whether the Lake Garda dam will be repaired or removed, the lake still is being designated as permanent. The primary reason for this is the assumption that even if the lake is drained, soils below the dam will very likely test as regulated wetland soils, which would, therefore, limit any development potential.

Oakland Gardens:
This neighborhood is the second smallest, yet it contains the second most open space by percent of neighborhood (70 percent). Nearly all of the 162 acres of open space in this neighborhood is either West Hartford Reservoir land owned by the Metropolitan District Commission, or State of Connecticut land on the other side of Route 4. All of the open space in this neighborhood is permanent and allows public access.

Robbins:
Irving Robbins Junior High School and the East Farms Elementary School provide most of the open space in this neighborhood (51 acres of a total 59 acres). All of the open space in this neighborhood is permanent and allows public access.

South Farmington:
South Farmington includes 643 acres of open space which is 39 percent of the neighborhood. Deadwood Swamp in the Town's southeast corner makes up 81 percent of this open space.

Only 13 percent (82 acres) of the open space in this neighborhood is designated for public access. Most of this area includes Deadwood Swamp. Seven acres of publicly accessible land around Will Warren's Den on Rattlesnake Mountain is located in this neighborhood. This land was donated to the Town by the Wadsworth family, and is accessible by the Metacomet Trail or the Red Trail (at the end of Forest Hills Drive).

Table 10

TOWN OF FARMINGTON OPEN SPACE
(By Neighborhood, Accessibility and Permanence)

				ACCESSIBILITY				PERMANENCE			
				PUBLIC		PRIVATE		PERMANENT		NON-PERMANENT	
NEIGHBORHOOD	ACRES	% OF NBHD	% OF TOTAL OPEN SPACE	ACRES	%	ACRES	%	ACRES	%	ACRES	%
Batterson Park	384	44%	6.0%	234	61%	150	39%	282	73%	102	27%
Central	1,084	51%	17.0%	818	75%	266	25%	934	86%	149	14%
East Farms	82	12%	1.3%	26	32%	55	68%	82	100%	0	0%
Farmington Village	315	29%	5.0%	197	63%	118	37%	252	80%	63	20%
Floodway	1,336	87%	21.0%	938	70%	398	30%	1,336	100%	0	0%
Health Center	73	7%	1.2%	7	10%	66	90%	73	100%	0	0%
Highlands	134	20%	2.1%	121	90%	13	10%	121	90%	13	10%
Lake Garda	14	7%	0.2%	0	0%	14	99%	14	100%	0	0%
Oakland Gardens	162	70%	2.5%	162	100%	0	0%	162	100%	0	0%
Robbins	59	10%	0.9%	59	100%	0	0%	59	100%	0	0%
South Farmington	643	39%	10.1%	82	13%	560	87%	562	87%	81	13%
Southwest	1,072	36%	16.9%	686	64%	386	36%	744	69%	328	31%
Talcott	401	22%	6.3%	183	46%	218	54%	326	81%	75	19%
Unionville	242	16%	3.8%	132	55%	110	45%	189	78%	53	22%
West District	359	24%	5.6%	254	71%	105	29%	292	81%	67	19%
TOTAL	6,358		100.0%	3,900	61%	2,458	39%	5,427	85%	931	15%

southern portion of lot 5 as open space in order to preserve its wetlands and to provide a connection between the Twin Ponds open space and the Farmington Town Memorial Forest.

5) **#119 Coppermine Road:**
This parcel has a number of characteristics that make it attractive for open space preservation:

- in connection with the preservation of lot 8A, this parcel would further enlarge the contiguous land preserved around the Town Memorial Forest;
- also in connection with lot 8A, it would provide a direct accessway to the Town Forest from West District Elementary School;
- the pond and topography in the southwestern portion of this parcel creates a very attractive setting;
- the parcel's easy accessibility and proximity to West District Elementary School would make it a good location for preserving the existing farm as an agricultural learning center.

6) **Lots 21, 22, and 23; Plainville Avenue; and**
Lots 25 and 29, Morea Road:
All of these parcels contain some wetlands that collectively comprise a large, relatively undisturbed area. This wetlands forms the headwaters of the Scott Swamp Brook and should be preserved in its entirety. Where feasible, a minimum 50 foot buffer of upland should be preserved. Wider buffer areas should be considered in some locations such as where the wetlands abut steep slopes on lots 21 and 22, or for uplands adjacent to wetlands of particularly high value.

7) **Lot 20C, Plainville Road:**
A corridor the width of the wooded wetlands on this parcel and along Plainville Avenue should be preserved for the entire depth of lot 20C. While this corridor is not immediately across from the Town Forest, it may preserve a suitable wildlife corridor between the Forest and the open land to the west.

8) **Lot 9A, Reservation Road:**
The Farmington Town Memorial Forest narrows in the vicinity of this parcel to approximately 550 feet wide, which is substantially narrower than the rest of forest. This parcel is one of the last vacant pieces of land adjacent to the Town Forest. The Town should consider acquiring this parcel for incorporation into the Town Forest.

9) **#741 Plainville Avenue:**
This agricultural parcel is a distinctive landmark. The Town should preserve this parcel as active agricultural land.

10) **Lot 11, Plainville Avenue:**
This triangular parcel to the south of Wells Drive is part of an industrially zoned parcel in Plainville. The Farmington portion should be preserved in order to maintain a buffer between the residential and industrial uses.

11) **Lot 3, Tunxis Street:**
A public access easement should be considered along the southern property line connecting Shade Swamp and a currently landlocked piece of Town land.

A second public access easement should be considered connecting the end of Tunxis St. with a utility access road that parallels Shade Swamp on State property. The utility road provides access to an otherwise inaccessible portion of Shade Swamp.

12) **Tunxis Mead:**
The Town should acquire the remaining parcels within Tunxis Mead's boundary that remain in private ownership.

property owners. The continued support of these private property owners should be encouraged, while conservation easements or open space acquisition should be considered in some cases to ensure the trail's permanent protection.

The following is a list of Metacomet Trail segments within Farmington that cross through either vacant land, underdeveloped land or other parcels where future development could potentially threaten the trail in its current location.

a) **Lots 1A, 2A, and 3A - Old Mountain Road:**
The trail passes through the center of these three parcels that total 15.5 acres. Any development on these parcels should protect the trail's continuity and character.

b) **73 Talcott Notch Road:**
Although this parcel is currently developed, it has sufficient size and frontage for possible future subdivision. The Metacomet Trail crosses this parcel by closely paralleling Metacomet Road. Any subdivision of this land should preserve this segment in order to avoid its relocation onto Metacomet Road.

c) **Prattling Pond Right-of-Way:**
This segment of the trail passes along a scenic, old carriage path. The right-of-way for this carriage path provides the frontage and possible access for some adjacent vacant and underdeveloped parcels. Any extension of pavement from either the Prattling Pond Road or Metacomet Road side should be located so as to preserve both the trail in its current location and adjacent woodland to the greatest extent possible. Roads narrower than Town standard should be considered in order to maximize the trails protection.

d) **Lots 1, 2 & 26 - Hampton Court; and**
Lots 7, 9 & 11 - Farmington Ridge Drive:
These lots are part of the Mountain Village Subdivision that was approved in April, 1987. Although the trail is located within this subdivision, no formal easement was established at the time of the subdivision. While it may be feasible to relocate this segment of the trail onto Hill-Stead property, it is preferable to maintain the trail in its present location.

It will, however, be necessary to relocate the trail on lot 26, Hampton Court prior to its development. The trail currently crosses diagonally through the center of this parcel. Relocation may be feasible along the western half of the old Paul Spring Road right-or-way. This piece of land was deeded to the Hill-Stead as part of the Mountain Village Subdivision.

e) **Mountain Road to Poplar Hills Drive:**
Possible off-road relocations of this segment of the trail should be investigated.

f) **Lots 2, 3 and 22 - Poplar Bars Road:**
This segment of the Metacomet Trail passes through the above private parcels and the Poplar Bars right-of-way (an old paper road with unknown status). A path and faded markers indicate that the trail at one time followed the ridge above the Farmington Reservoir through lot 3. This path is far more scenic than the current location. Consideration should be given to reestablishing the trail along the ridge.

g) **Route 6 to the Plainville town line:**
Serious consideration should be given to obtaining permanent protection for the Metacomet Trail and the surrounding land in this section. Of particular value is the trail south of Will Warren's Den. The character of the land along this section of the trail is unique to Farmington. The rugged cliffs and isolated ridgelines of this area provide a near wilderness experience within an increasingly suburbanized town. If fee ownership of the land in this area cannot be obtained, easements should be established in order to protect this environment.

5) Develop a pathway network of all existing and proposed trails, paper roads and sidewalks in Town.

   a) Proposed pathways that are not on existing publicly accessible land should be incorporated into the Future Open Space Plan.

6) Support regional efforts to construct multiuse recreation trails over the abandoned railroad beds in Farmington and surrounding towns, including the following:

   a) the current effort involving the north/south railroad beds from the Avon town line to Red Oak Hill Road in Farmington;

   b) future proposals involving the railroad bed south of Red Oak Hill Road into Plainville;

   c) future proposals involving the northeast/southwest railroad beds from Red Oak Hill Road into Burlington and Canton; and

   d) future regional efforts to link railroad beds, including those in Farmington, into a trail network.

7) Require the preservation of 10 percent of proposed subdivisions as allowed by Section 4.01.03 of the Farmington Subdivision Regulations. In establishing this open space, the following elements should be considered:

   a) presence of any of the natural resources listed in section 4.17 of the Farmington subdivision regulations;

   b) interconnection with existing or future open space or walkways; and

   c) aesthetic qualities as viewed from public roads or walkways.

8) Establish a conservation easement management plan for all conservation easements held by the Town.

   a) This plan should include an inventory of easement locations and natural features, a schedule for inspections, and recommended maintenance, if any.

9) Inventory and incorporate all conservation easements held by either the Town or the Farmington Land Trust into the Farmington Open Space Plan.

10) Further development of Town parks should balance the need for active and passive recreation, agriculture and wetlands and habitat preservation within the Town.

   a) Future plans for Tunxis Mead should be revised to incorporate the preservation of wetlands and floodplain forest, and the preservation of agriculture.

   b) Future development plans for Town-owned park land should be coordinated with the Conservation Commission.

11) Public acquisition of key parcels identified in the Future Open Space section should be considered on a priority basis as funds become available.

development between 1982 and 1991 adhered to that policy. Less than 100,000 square feet of space was developed during this time period. The Farmington Colonnade at just over 24,000 square feet was the largest amount of retail space constructed on one premises.

The supply of retail space began to exceed market demand subsequent to 1987. Several existing centers began leasing retail space to non-retail tenants, while a number of new buildings had difficulty attracting initial occupants.

Industrial

Along with its rise in manufacturing employment Farmington's industrial space expanded substantially during the 1980's. Since 1982 approximately 608,000 square feet of industrial space has been built, inclusive of new construction and additions to existing facilities. The Farmington Industrial Park accounted for just over 300,000 square feet of this new space. Other growth was channeled within the Brickyard Road corridor, including over 54,000 square feet of new construction along Eastview Drive.

In terms of square feet, lodging facilities followed the expansion of industrial and office development. A total of 192 rooms were added between the development of Centennial Inn and construction of an addition to the Marriott Hotel. Facilities at the Farmington Motor Inn were also renovated during this period of time. The recent closure of several hotels within the City of Hartford may very well spur the development of additional hotel and motel rooms within suburban communities, including the Town of Farmington.

Government Finance

The increase in commercial and industrial development during the 1980's has permitted the Town of Farmington to absorb a 25 percent increase in population without experiencing significant changes to its tax structure.

Income

Residential and non-residential construction coupled with revaluation in 1984 pushed Farmington's Grand List above the one billion dollar mark in 1986. Within the previous ten-year period ending in 1990, the Grand List grew by over 265 percent or an average of 29.4 percent a year. However during the last three years this rate of growth slowed to an average annual increase of 5.1 percent.

According to a study undertaken by the State of Connecticut Office of Policy and Management, Farmington had the 34th greatest equalized Grand List of all 169 municipal subdivisions within Connecticut in 1988. Farmington surpassed the ranking of many communities which had much higher populations.

In 1970 non-residential real estate comprised only 23.5 percent of Farmington's Grand List. This figure rose to approximately 40 percent in 1980. During the 1980's the Town maintained this ratio while experiencing tremendous growth in residential real estate.

The Town of Farmington, as a result of its substantial Grand List, derives most of its revenue from the local property tax. During the previous fiscal year only 10.64 percent of the Town's revenue was received from the State of Connecticut. Of all Connecticut's 169 towns and cities Farmington placed 23rd from the lowest in the receipt of State aid.

Expenditures

During the 1980's the budgets of most localities grew by extraordinary levels and Farmington was no exception. Within this ten-year period spending by the Town rose by approximately 143 percent.

The mill rate assessed by the Town has been acknowledged as one of the lowest in the State of Connecticut. In a 1990 study performed by the Connecticut Public Expenditures Council Inc., Farmington was found to have an equalized mill rate (mill rate adjusted for the last date of revaluation) amongst the lowest 20 percent of all Connecticut towns and cities.

XII. HOUSING

Perhaps the single most important element of Farmington's Plan of Conservation and Development may be the housing plan. The number and types of future housing units constructed will not only dictate the future population of the Town but also influence the socioeconomic composition of the community. Since residential development is the greatest user of land in Farmington, the design of our housing developments will most extensively affect our physical environment and the use and protection of its valuable resources.

Many experts believe that an inadequate supply of housing directly affects the economic health of a community and its ability to sustain economic growth in the future. More and more businesses have cited the scarcity of affordable housing as a major or contributing factor in their decision to relocate from a particular location.

Supply and Production

In 1990 the Census Bureau reported a total of 8,654 housing units within the Town of Farmington. By the end of 1991 this figure had grown to 8,918 dwellings.

The increase in housing supply outpaced the population increase from 1980 to 1990 due in large fact to another decrease in Farmington's average household size. While the Town's population grew by 25.6 percent between 1980 and 1990, the housing supply grew by over 38 percent during this same time period. In fact Farmington's rate of housing growth was the third highest of any municipality in the Capitol Region. The Region's inventory of homes during this same time period grew by a more modest 14 percent.

On average there were building permits issued for 212 residential dwelling units per year during the 1980's. This compares with an average of 116 building permits a year in the latter half of the 1970's. As indicated in the following table, housing production from year to year closely paralleled the health of the regional and national economies during the prior decade.

Building Permits Issued (number of housing units) Per Year

1980	1981	1982	1983	1984	1985
136	77	64	169	215	416

1986	1987	1988	1989	1990	1991	1992
456	326	319	77	57	95	111

In 1982 over 67 percent of Farmington's dwelling units were single family detached. In 1991, according to the Census Bureau, this percentage dropped to 61 percent. Multifamily housing was predominantly developed as condominiums during the previous decade. In fact, no multiple family rental housing developments, with the exception of elderly congregate housing, were produced in Farmington since 1985. Not surprisingly this date precedes a period of time when land prices escalated substantially.

Approximately 30 percent of the housing units in Farmington were occupied or offered as rental property in 1980. This ratio generally remained the same in 1990. While a significant number of rental units were thought to be lost due to the widespread number of condominium conversions in the 1980's, many of these units and new condominium units alike have been converted to rental properties. This trend has apparently been due in part to an oversupply in the condominium market during the last three to four years and may only be temporary in nature.

The location of new housing units built over the last ten years was widely distributed throughout Farmington. The density and type of housing developed since 1982 closely mirrored the recommendations set forth in the 1982 Plan of Development. A majority of the single family homes constructed during this time were located within cluster or open space subdivisions. The increased availability of public sanitary sewer and public water coupled with remaining tracts of land containing severe development limitations will most likely ensure the continuation of this housing as the predominant residential design.

Housing Programs and Regulations

In an effort to advance the construction of affordable housing the State of Connecticut instituted several mandatory and elective housing programs during the 1980's.

Municipal plans of development and zoning regulations must now encourage and provide for the development of housing opportunities for all citizens of the community.

Public Act 89-311 established an affordable housing land use appeals procedure within the Hartford-New Britain Superior Court. Under the terms of this act, where a land use application involving affordable housing is denied by a municipal planning, zoning or inland wetlands commission, the applicant may appeal such action to this court. The burden is then placed on the commission to prove that the particular project would be injurious to the public interests and that the protection of such interests would clearly outweigh the local need for affordable housing. This shift of the burden of proof from the developer to the town is contrary to the approach taken in all other types of land use litigation.

Voluntary initiatives sponsored by the State include the Connecticut Housing Partnership Act, the Regional Fair Housing Compact Pilot Program and the adoption of Public Act 91-204, enabling municipalities to adopt inclusionary zoning regulations.

Farmington joined the State's Housing Partnership Program in 1990. Under the provisions of this program members of the Partnership Committee are required to conduct a housing needs analysis, develop a housing plan and initiate or support a project to develop affordable housing. The State of Connecticut has offered various degrees of financial and technical assistance to encourage the formation of these bodies in all Connecticut towns.

The Regional Housing Compact Pilot Program represented Connecticut's first experience with a fair share housing plan. Under such a plan each municipality within a planning region is requested to provide a particular sum of affordable housing units over a five-year period. The Capitol Region Council of Governments, one of two planning regions participating in the pilot program, developed a compact to foster the development of between 5,000 and 6,521 units. As one of 25 towns participating in the compact, the Town of Farmington has pledged the development of 151 affordable housing units over the abovementioned period of time.

In 1991 inclusionary zoning regulations were recognized as a legal means to encourage the development of affordable housing. This mechanism usually involves the employment of a density bonus or relaxation of land use restrictions in exchange for the creation of low cost housing.

Since 1982 the Town of Farmington has made the following efforts to provide additional affordable housing.

Surplus land owned by the Town has been made available, through the Housing Authority, for the development of affordable single family housing since 1982. To date a total of ten homes have been constructed under this program. Another seven homes were completed in 1993.

In 1984 40 units of housing for the elderly known as Westerleigh and sponsored by the Farmington Ecumenical Elderly Housing Corporation were constructed. This development has successfully complemented the 40 housing units at Maple Village.

The Town of Farmington continues to expand its participation in the Federal government's Section 8 certificate and voucher program. A total of 95 families are currently leasing market rate apartments while paying no more than 30 percent of their income for housing costs.

XIII. TRANSPORTATION AND CIRCULATION

A community's transportation and circulation system is vital to both its quality of life and economic well-being. The measure of a transportation system's safety, capacity and accessibility for various population groups (i.e. young, handicapped and elderly) directly affects the satisfaction of local residents. The system's ability to efficiently transport goods and people also influences the attractiveness of a locality as an employment center.

The components of a transportation/circulation system include the circulation network (roads, bridges, sidewalks and parking facilities) as well as transit services (bus, rail and van operations). The predominant element of Farmington's transportation system is its roads. These roads perform varied functions within the network.

Minor streets provide access to individual properties, which are typically limited to residences. Collector roads serve to connect minor streets to secondary and primary arterials or serve to link distinct neighborhoods. Secondary arterials transport mostly intralocal traffic from one section of town to another or from residential neighborhoods to employment or retail centers. The average daily volume of traffic carried by a secondary arterial is generally in the range of 4,000 to 10,000 vehicles per day. Primary arterials transport over 10,000 vehicles per day, much of it being interlocal traffic and frequently having direct connection with a limited access highway.

All of the roadways within Farmington have been classified according to these definitions and are presented on the Map 8, entitled Circulation: Classification of Roads.

Minor Streets

The design of a minor street must not only reflect its function but also to the greatest extent possible be compatible with the character of the environment. While Farmington's current subdivision regulations specify that minor streets contain a fifty foot right-of-way and a twenty-two or twenty-six foot pavement width, over the last few years the Town Plan and Zoning Commission has begun to experiment with the use of private roads and cartways. These streets require very little or no right-of-way and contain a travel way between eighteen and twenty feet. In all cases ownership and maintenance of these road systems are assumed by private individuals or homeowners' associations.

To date the experience with this experiment has been positive. This approach has had a beneficial impact upon the natural environment and thus far these streets have been properly maintained while operating in an efficient and safe manner. It is recommended that the Town proceed, albeit cautiously, with additional applications of these designs.

The extension of minor streets for the provision of access to adjoining vacant parcels has continued to be a paramount issue in Farmington. Residents desirous of protecting their streets and neighborhoods from the negative effects of through traffic are frequently pitted against the policy of Town officials to provide for the safe and efficient movement of traffic. An updated set of criteria suggested for use by the Commission in deciding when to permit the use of permanent cul-de-sacs is presented at the end of this chapter.

Collector Streets

The 1982 Plan of Development established recommended design standards for collector roads. It is proposed that these standards be reexamined in applications where collector roads are proposed to primarily service residential traffic and where the need for and occurrence of on street parking is minimal. It is recommended that for the abovementioned situations the design width of collector streets be reduced from thirty-two to twenty-six feet.

Since the last Plan of Development was adopted, several streets have now been designated as collector roads. Devonwood Drive and Cambridge Crossing as well as Westview Terrace/Oakridge were added to this category as the result of adjoining development while on the other hand Middle Road was reclassified from a secondary arterial to a collector street, a designation consistent with average daily traffic volumes of less than 3,000 cars per day.

TABLE 11
Present and Past Average Daily Traffic Volumes (ADTS)
for Various Locations in Farmington

Road	Location	ADT			Percent Increase		
		1979	1985	1991	1979-1985	1985-1991	1979-1991
Route 4	N W of Rte. 177	11,300	10,100	11,900	-11	18	5
	E of Rte. 177	18,900	16,700	19,500	-12	17	3
	E of Brickyard Rd.	19,100	20,900	22,900	9	10	20
	E of Rte. 10	26,800	24,400	36,900	-9	51	38
	NE of South Rd.	13,800	17,100	18,500	24	8	34
Route 6	E of Bristol Line	17,200	16,400	17,500	-5	7	2
	E of Rte. 177	18,000	16,300	15,000	-9	-8	-16
	E of Hyde Rd.	21,500	17,700	17,400	-18	-2	-19
	W of Fienemann Rd.	19,600	16,700	17,600	-15	5	-10
	E of Fienemann Rd.	15,300	13,600	13,400	-11	-1	-12
Route 177	N of Rte. 4	6,800	5,100	9,00	-25	76	32
	N of New Britain Ave.	15,600	15,400	17,500	-1	14	12
	N of West District Rd.	11,200	12,000	16,800	7	40	50
	N of Rte. 6	8,500	10,700	14,100	26	32	66
	S of Rte. 6	7,300	10,600	12,800	45	21	75
Route 10	N of Rte. 4	6,400	8,500	9,700	33	14	51
	S of Rte. 4	10,400	10,600	13,900	2	31	33
	S of Rte. 6	14,400	12,700	13,100	-12	3	-9
	S of Cooke St.	7,800	7,200	7,600	-8	6	-2
Fienemann Road	SE of Rte. 6	8,500	NA	10,300	NA	NA	21
	SE of I-84	11,700	NA	12,300	NA	NA	5
Route 167	N of Rte. 4	NA	6,700	7,500	NA	12	NA
New Britain Avenue	N of Meadow Rd.	NA	2,300	4,600	NA	100	NA
South Road	SE of Munson Rd.	NA	4,900	5,200	NA	6	NA
Birdseye Road	S of South Rd.	NA	5,400	6,900	NA	28	NA
Mountain Road	E of High St.	NA	6,100	6,500	NA	7	NA

TABLE 12

EXISTING ROADWAY LEVELS OF SERVICE

Farmington Townwide Traffic Study

Location	1989 Existing Conditions A.M. 7:15-8:15	P.M. 4:30-5:30
1. Farmington Ave. at Rt. 177	F	F
2. Farmington Ave. at Rt. 167	C	E
3. Farmington Ave. at Brickyard Rd.	D	D
4. Farmington Ave. at Town Farm Rd.	F	F
5. Farmington Ave. at Old Mountain Rd. Talcott Notch Rd.	C	D
6. Farmington Ave. at UConn Health Center	F	D
7. South Rd. at Birdseye Rd.	B	B
8. Rt. 4 at I-84 On & Off Ramp	D	F
9. Wolf Pit Rd. at Rt. 6 Westbound	B	B
10. Rt. 6 at Fienemann Rd.	F	F
11. Farm Springs Rd. at Fienemann Rd.	D	C
12. Batterson Park Rd. at Fienemann Rd.	F	D
13. Rt. 10 at Cooke St.	B	B
14. Rt. 10 at Scott Swamp Rd.	C	D
15. Rt. 6 at Scott Swamp Rd.	D	D
16. Rt. 10 at Mountain Rd.	F	D
17. Rt. 6 at Hyde Rd.	F	D
18. New Britain Ave. at Rt. 6	E	F
19. Rt. 6 at Rt. 177	D	F
20. Morea Rd. at Rt. 177	E	F
21. Coppermine Rd. at Rt. 177	C	D

The State of Connecticut's Bridge Reconstruction Program has involved the rehabilitation of several bridges with spans of 20 feet or more within the Town of Farmington. Over the last ten years all of the Farmington River crossings have undergone extensive reconstruction while an entirely new bridge was built over the Pequabuck River along Meadow Road.

The Route 6 expansion project currently in progress will result in the construction of two new bridges spanning the Pequabuck River and Scott Swamp Brook. At this time there are no bridges located within the Town of Farmington which have been graded less than fair to good.

Safety

In 1989 accident data from both State and local sources was collected and analyzed for the previous three-year period. Of the 1,853 accidents reported 31 percent were classified as rear end collisions. In 27 percent of all cases vehicles were found to be following another too closely.

A list of ten intersections with the highest accident rates was developed by factoring together the number of accidents per year with annual traffic volumes for each intersection. Table 13 indicates intersections with accident rates ranging from 1.53 accidents per million vehicles to .73 accidents per million vehicles. Intersections which typically service the greatest number of vehicles per day do not necessarily possess the highest accident rates. Road grade, geometry and traffic control design all contribute to the safe operation of an intersection.

Traffic and Road Improvements

Since the adoption of the last Plan of Development a significant number of structural and nonstructural improvements have been made to Farmington's transportation system.

Physical improvements which have improved the safety of our roadways include replacement of the Meadow Road bridge, realignment and selective widening of a portion of Talcott Notch Road and the relocation of Mountain Road at its intersection with Birdseye Road and Route 6.

Projects that have effectively increased road capacity include the widening of Route 4 to four lanes in the vicinity of the University of Connecticut Health Center, the computerization and interconnection of traffic signals along Farmington Avenue and the addition of turning lanes at a number of existing intersections including the intersection of Route 6 with Fienemann and Birdseye Roads.

Nonstructural improvements include the creation of a commuter parking lot along Farmington Avenue, the adoption and implementation of strict curb cut standards by the Town Plan and Zoning Commission and the passage of zoning regulations in 1990 to require the preparation and adoption of traffic management plans by private firms which promote the creation of car pool and van pool programs. In addition the Town Council recently initiated a program to further extend the Town's sidewalk system.

Other projects which have commenced but are yet incomplete include the expansion of Route 6 from two to four lanes between Routes 10 and 177 and the reconstruction of Talcott Notch Road. The opening of the Central Connecticut Expressway between Routes 175 and I-84 is not expected to significantly reduce congestion along any of Farmington's local roadways. However the completion of this highway will further improve Farmington's accessibility to and from points located to the south.

In 1988 and 1989 the Town of Farmington financed feasibility studies by two engineering firms for an additional bridge crossing over the Farmington River as well as for the widening of a portion of Route 4 through Farmington Village. The recommendations of the former study were not further developed or implemented chiefly for financial reasons while the widening of Route 4 never received the support from a majority of Farmington residents. In fact a local ordinance subsequently adopted by the Town Council prevents the Town from participating in the widening of any portion of Route 4 within the villages of Unionville and Farmington.

The proposed collection of future roadway improvements are presented on the Circulation Proposed Improvement Plan, Map 9. Since the 1982 Plan of Development was written the State and Federal governments have abandoned plans to construct a set of limited access connector roads between I-84 and Route 6 west of Fienemann Road and Route 4 at Oakland Gardens.

For the most part all of the road improvements suggested in this report are limited to the existing road network. The development of new road systems today is extremely difficult. Significant disruption to existing neighborhoods within a community as developed as Farmington is practically unavoidable while in most instances these new systems are cost prohibitive.

Mass Transportation

The inability to accommodate or afford new street and high way systems coupled with more stringent standards imposed by the Federal Clean Air Act will require greater support for the expansion and improvement of our mass transportation system. Disappointingly not much has improved in and around Farmington over the last ten years. Although the Town's population since 1980 has increased by over 25 percent, the community's decentralized development pattern and lack of a significant population density along most of its major arteries continues to undermine the prerequisites needed for successful expansion of the mass transportation program.

The local bus service remains in operation along Route 4 while commuter express bus service is available to Farmington residents along Route 4 and Route 6.

Recently the Town's telebus system was successfully expanded to serve the general population. Known as the Farmington Valley Shuttle, service is provided along a fixed route system between locations in Farmington and Avon.

PLANNING OBJECTIVES

1. Encourage land uses and design standards along primary and secondary arterials which generate lower volumes of traffic during peak hours while limiting the number of proposed access points.

2. Maintain and expand the requirement for sidewalks as part of special permit and subdivision applications.

3. Coordinate the development of vacant properties to ensure the most beneficial placement of traffic signals and major driveways or new streets.

4. Support the initiation of the second phase of the comprehensive traffic study for Farmington in order to establish a well organized plan for road improvements.

5. Generally require that collector roads in large developments be designed and built as public roads, particularly when potentially serving adjoining parcels of land.

6. Encourage the development of additional commuter parking areas in Town, specifically in the area of Route 4 between Farmington Village and Devonwood Drive and along Route 6 or Route 177 in the vicinity of Tunxis College.

7. Support the establishment of a local/regional bicycle trail system.

8. Coordinate transportation improvement plans on a regional level.

9. Implement sidewalk expansion program as developed by the Town Council.

XIV. PUBLIC UTILITIES

Water

Farmington's water supply system has undergone major changes since 1982. During this period of time the State of Connecticut established exclusive service areas for all public and private water utilities. In 1985 a merger occurred between the Farmington and Unionville Water Companies. These changes have to this point provided substantial benefits to the Town although they may pose several problems for the future as described later in this chapter.

The Town of Farmington is currently divided into three major service areas with exclusive rights reserved by the Unionville Water Company, New Britain Water Department and the Metropolitan District Commission. The boundaries of these areas are illustrated on the Public Utilities Plan. Properties in these areas may be supplied with public water only by the designated company unless it waives its right to service. This arrangement may unfavorably affect the Town where environmental features or the physical limitations of a particular water system make it infeasible to adequately serve a piece of land.

Providers

In addition to the three major water companies two smaller companies supply water to more than 50 customers, Maple Ridge Farms Water Association and Hilltop Corporation. When taken together these water supplies provide service to approximately 65 percent of the Town's population. Groundwater serves as the exclusive source of supply for both the Unionville Water Company and Hilltop Corporation, while each of the other three use surface waters located outside the Town of Farmington. In an effort to assure the most dependable supply of water in Connecticut's cities and towns the State adopted a law in 1984 regulating the formation of new water companies. As a result there have been no new providers of water in Farmington since that time.

After its merger with the Farmington Water Company, the Unionville Water Company substantially upgraded water supply service within the Town. Since 1982 the company has added five new supply wells and acquired the Farmington Industrial Park water supply system. (For the location of all well sites see Map 3). A connection has been established between the Unionville and Farmington Village subsystems. This improvement followed the integration of the southwest service area into the main distribution network. Storage tanks have been constructed in the vicinity of the Farmington Edge condominiums and the former Farmington Reservoir, making the supply more reliable and increasing pressure. The Unionville Water Company has terminated the daily use of water from the Plainville Water Company and the Metropolitan District Commission, relegating these sources to emergency supply only.

Improvements to or expansion of the New Britain Water Department and Metropolitan District Commission systems within Farmington have been relatively minor in nature during the past decade. While the New Britain water system was extended to serve the Farmington Mountain and Waterside Six office parks, the Metropolitan District Commission expanded service within the areas of Munson Road, Middle Road and Mountain Road. The Metropolitan District Commission also provides water to an existing private system in the vicinity of Maple Ridge Drive and Goodrich Road and is in the process of extending service to Oakland Gardens.

Supply and Demand

For the Town of Farmington future concerns are generally limited to the production and distribution capabilities of the Unionville Water Company. In its recently completed 40-year water supply plan the Unionville Water Company reported that current demand exceeds supply during the maximum demand day. This deficit is currently overcome through employment of the company's storage tank facilities. Since the merger with the Farmington Water Company the Unionville Water Company has increased its production of water from just over 508 million gallons per year in 1985 to 652 million gallons per year in 1990. It has been projected by the utility that demand will increase by 16 percent between 1990 and the year 2000 and by another 35 percent between the years 2000 and 2030.

A total of 16 pump stations are presently in operation within Farmington's municipal boundaries, 12 of which are owned and maintained by the Town of Farmington. The age of these facilities ranges from one year to over 25 years.

The collection system includes 592,510 linear feet of pipe ranging from six inches to 36 inches in diameter. Over 90 percent of these lines were installed after 1960.

Present and Future Conditions

In 1991 the Town of Farmington authorized a consulting firm to update the sanitary sewer master plan originally developed by Marchant and Minges Engineers in 1959. The consultant's scope of work included an examination of the existing collection system including the preparation of recommended improvements as well as the formulation of a plan for the location of future service lines. This plan was developed in an effort to promote the most efficient route to existing unsewered areas and limit the number of additional pump stations.

As part of this program an infiltration-inflow study was conducted for several older sections of sewer pipe. While an analysis of the sample data collected indicated that up to 40 percent of the flow treated at the sewer treatment plant may be attributed to inflow and infiltration, the study recommended that any remedial action be deferred in the short run since it was economically preferable to continue treating this water. On the other hand it may be economically beneficial to consider the elimination of this situation when such an infiltration or inflow problem is occurring coincidentally along a section of pipe transporting flows at or above its existing capacity.

Since a majority of today's collection system was constructed in relatively recent times, there have been few instances of problems related to pipe capacity or condition. However it has been recommended that the Town begin to consider establishing a capital fund for the future replacement of various sections of sewer line composed of vetrified clay pipe. While only one length of sewer line, located beneath Railroad Avenue, has been currently identified as over capacity, when sewer flows are projected to the year 2030 sections of trunk lines located along Cottage Street and Farmington Avenue at Grandview Drive will have become undersized.

Adequate capacity presently exists at all 12 municipally owned pump stations. Only the South Road and Allstate Drive stations will need major improvements and expansion to accommodate projected flows in the year 2030.

Regional Coordination

As a condition of the acceptance of State or Federal funding for the improvement or expansion of sanitary sewer systems, communities which contain significant collection and treatment facilities are required to examine and incorporate the needs of nearby towns into their comprehensive waste water collection plan. This policy reduces duplication of effort, resulting in significant cost savings while potentially producing less impact on the environment. As of this time, through agreements, Farmington accepts effluent from the Towns of Burlington, Canton and Avon. It is not expected that either the volume of waste water from these towns will substantially increase or that additional towns will be added to this list.

While almost all waste water produced in Farmington is discharged into the local collection and treatment system, the Town has existing agreements with the Metropolitan District Commission, Plainville, Mattabassett and Bristol sewer authorities to accept those remaining flows.

natural state. Usually this result is attained by disposing of storm water underground or storing this water in man-made retention or detention structures located on the property. While this technique generally assures the minimum flow of water needed to sustain downstream wetlands or watercourses the potential for flooding may even increase, particularly when storm water has been retained on property located in the lower reaches of a watershed. For this reason, as previously recommended in the last Plan of Development, the Town should undertake a comprehensive townwide drainage study.

Existing Problems

For the most part Farmington does not experience chronic drainage problems which endanger persons or property. The municipal flood and drainage control program apart from existing regulatory measures is limited to the installation of spot improvements primarily along municipal roadways. However the alteration of the hydrology of several watercourses in Town has become evident over the years as a result of development.

PLANNING OBJECTIVES

1. Regulate and manage storm water runoff in a manner which poses the least amount of injury to property and natural resources.
   a. Initiate policies and regulations for the attenuation of pollutants in storm water runoff particularly in areas adjacent to watercourses and wetlands.

2. Use Zoning and Subdivision Regulations to protect downstream properties.

3. Undertake a comprehensive townwide drainage study in order to coordinate drainage control and protect natural resources.

4. Use detention and retention structures only after finding that downstream facilities are inadequate to accommodate projected runoff. Ensure that the hydrology of the receiving watercourse will not be altered in a detrimental manner and that adequate maintenance is provided for.

5. Implement a program which fairly assesses and distributes the cost of drainage improvements as recommended by the townwide drainage study.

The Town Plan and Zoning Commission in an effort to increase and complement the fire fighting capability of the existing system adopted minimum supply standards for subdivisions served by public water and regulations mandating the installation of automatic fire suppression systems for all new construction exceeding an area of 4,000 square feet.

Community Centers

Facilities in Farmington, which over the years have operated as community centers, have provided much needed recreation, social and meeting space. As the Town's population continues to grow the demand for this type of space appears to be outstripping the supply. Meeting space is increasingly difficult to obtain at such facilities as the Town Hall and main Library while social and recreation space at the existing senior and youth centers has become inadequate. A proposal to develop a new townwide community center at the Westwoods Golf Course was defeated by referendum just a few years ago.

Day Care Centers

During the 1980's an increase in the birthrate coupled with the presence of more single parents and two income families created a sizable demand for day care services. The Town responded by securing a state grant and hiring a coordinator to assist citizens in finding day care or establishing their own day care service. This program created several new group day care homes and day care centers in Town with a total capacity of 186 children.

Changes in State law requiring that family day care programs be regulated in the same manner as a single family home helped facilitate an increase in day care openings.

After a day care center was discontinued at the East Farms School, the University of Connecticut Health Center developed a similar facility on its premises.

Solid Waste

Since 1988 the Town of Farmington along with other communities in the Farmington Valley has transported its refuse to an incinerator facility within the City of Hartford. The Town is currently implementing a closure plan for the existing landfill at Quirk Park. Over the past two years Farmington has also phased out the disposal of stumps and building materials at the landfill site.

Under State mandate all communities in Connecticut have begun to recycle a significant portion of their waste stream. Locally, Farmington's program has been in effect since October, 1990. It addresses the recycling needs of residents in single family homes by utilizing the Town's regular trash hauling contractor. Multifamily developments as well as businesses and institutions are all individually responsible for the development and operation of their own recycling programs. A recycling committee has been formed in the community to promote and assist recycling efforts within the Town as a whole. Since the inception of Farmington's recycling program the quantity of waste transported to the Resource Recovery Facility in Hartford has been reduced on average by approximately 22 percent.

In another effort to reduce the production of unusable waste Farmington has included the construction of a compost facility in conjunction with the expansion of the Water Pollution Control Facility. Sludge produced by the sewer plant will be mixed with leaves and other organic material which can be used as fertilizer.

UConn Health Center

The University of Connecticut Health Center has primarily directed its planning efforts to the upgrading of its existing facilities. Many administrative offices have been relocated to a new building completed in 1990. A hospital support services building presently under construction contains approximately 88,000 square feet of space dedicated to supporting the operation of John Dempsey Hospital. Other recent improvements include a warehouse, parking structure, firehouse addition and a child care center.

XVI. HISTORIC RESOURCES

The protection and preservation of Farmington's historical, architectural and archaeological resources are a prominent element of the Town's quality of life.

The Farmington Village Historic District has existed for over 25 years, preserving those sites and structures located within its boundary. A plan to expand the the district is currently under review and is illustrated on Map 10. On the other hand there is at present no formal discussion to reconsider the establishment of a local historic district within an area of the former borough of Unionville.

Individual properties or structures added to the National Register of Historic Places over the last ten years, where they receive limited protection from State and federally supported actions, include the Hill-Stead Museum, the Unionville Museum, the Pequabuck Bridge at Meadow Road, the former Tunxis Hose Firehouse, portions of the Farmington Canal and the General George Cowles House at 130 Main Street, Farmington.

In 1984 the General Statutes of the State of Connecticut were amended to permit the designation and protection of individual historic or architecturally significant sites and structures by a local committee as selected by the local legislative body. Once this designation becomes effective activities involving these properties are regulated in a manner identical to those located within a historic district. Consideration should be given to the creation of such a designation for individual properties listed in the Historic District Study for the Village of Unionville (1978) as well as those sites recorded in a report entitled "A Guide to Historic Farmington" (Farmington Museum, 1976).

Over the last several years Farmington has revised its land use regulations in an effort to further protect the community's historic elements. Provisions have been added to both the zoning and subdivision laws which will protect historic and archaeologically significant sites when a parcel of land is developed. A map indicating possible archaeologically significant sites has been made available to the Planning Office by the State of Connecticut Museum of Natural History.

A preservation mechanism which may be employed in conjunction with zoning actions is the preservation easement. This restrictive covenant, typically established between government authorities or preservation organizations and private property owners, prevents structures from being razed and ensures that any physical change to a structure's outside appearance is done in accordance with accepted preservation standards.

Farmington's recent adoption of a demolition delay ordinance will provide valuable assistance to local preservation efforts. These laws postpone the demolition of a building for a period of time during which a government body, individual or preservation organization may attempt to purchase the structure or propose an alternative development plan. While this measure requires the voluntary cooperation of the landowner, it nevertheless has preserved structures in several Connecticut communities.

Finally, the coordination of preservation activities in Farmington has improved with the signing of a compact between the following organizations: The Farmington Historical Society, The Farmington Library, The Hill-Stead Museum, The Stanley Whitman House, The Unionville Museum and the Town of Farmington.

PLANNING OBJECTIVES

1. Create a historic district within Unionville according to the original boundaries proposed in 1978 or by some modified version.

2. Expand the Farmington Village Historic District in order to incorporate all historically or architecturally significant buildings and properties within the Main Street corridor.

XVII. EXISTING LAND USE

The Town of Farmington is predominantly residential (Tables 14 and 15). Currently, 66.5 percent (12,252 acres) of the Town is zoned residential, with 67 percent of this land (8,179 acres) zoned either R80 or R40. Land zoned for commercial or industrial use is closely split with 5.7 percent (1,043 acres) zoned industrial, and 4.3 percent (798 acres) zoned commercial. The remaining 14.1 percent of the Town is zoned either Floodway or Excavation.

The Existing Land Use Map (Map 11) in this plan depicts the current land uses in Farmington as of July 1, 1993. Tables 16-21 and Figure 1 analyze the acreages shown on this map:

Table 16: Existing land use summary by general categories;
Table 17: Changes in land use from 1982 to 1993;
Table 18: Existing land use by neighborhood;
Table 19: Existing land use by percent of neighborhood;
Table 20: Existing land use by percent of land use category;
Table 21: Total developable vacant residential land by neighborhood;
Figure l: General land use categories and business land use categories: 1982 vs 1993.

The following summarizes the current land uses and their changes since 1982.

RESIDENTIAL:

In 1982, residential development occupied 24.4 percent (4,490 acres) of the Town; while in 1993, this percentage increased to 28.0 percent (5,160 acres) (Table 17). The vast majority of this development is occupied by single family residential homes (88.3 percent or 4,553 acres) (Table 16).

Residential development as a whole grew by 14.9 percent between 1982 and 1993, with new development occurring on 670 acres (Table 17). Single family development grew by 14.6 percent (581 acres), while multifamily development grew by 17.3 percent (89 acres). Although 89 acres were committed to multifamily development, the drop-off in condominium development and sales in the latter portion of the decade left some projects uncompleted. Three such projects, totaling 70 acres, remain an average of 51 percent undeveloped.

The growth in residential development may, in fact, have been even greater. It seems that the 1982 plan included most of the street acreage in with the immediately surrounding land use. The current plan, on the other hand, provides a separate land use category for streets and highways (transportation). If the acreage for the streets could be removed from the 1982 residential land use figures, the residential growth since 1982 would be even greater.

A rule of thumb for residential development is that 10 percent of the land will be used for streets. If this rule held true in 1982, the residential acreage would be reduced by 449 acres to 4,041 acres. The residential growth between 1982 to 1993 would have been 27.7 percent, rather than the 14.9 percent indicated in this plan.

The Lake Garda neighborhood has the highest percentage of residentially developed land, at 64 percent of the total neighborhood (Table 19). Other neighborhoods that are largely comprised of residentially developed land include the Highlands, Talcott and West District neighborhoods with 54, 48 and 46 percent respectively.

The Talcott and West District neighborhoods also contain the largest percentages of the Town's total residential development by acreage. Combined, these neighborhoods contain 30 percent of the Town's total residential development (Table 20).

Table 15

ACRES PER ZONE
GROUPED BY LAND USE CATEGORY

	ZONE	ACRES	% OF TOWN
RESIDENTIAL:	R40	4,851	26.3%
	R80	3,329	18.1%
	R20	2,054	11.1%
	R30	978	5.3%
	RDM	362	2.0%
	R9	268	1.5%
	R12	216	1.2%
	RA	195	1.1%
	SUBTOTAL	**12,252**	**66.5%**
COMMERCIAL:	PR	360	2.0%
	BR	331	1.8%
	B1	87	0.5%
	UR	19	0.1%
	SUBTOTAL	**798**	**4.3%**
INDUSTRIAL:	CR	799	4.3%
	C1	243	1.3%
	SUBTOTAL	**1,043**	**5.7%**
OTHER:	FW	2,174	11.8%
	EE	431	2.3%
	SUBTOTAL	**2,605**	**14.1%**
TOTAL ZONED AREA*		**16,697**	**90.6%**
TOTAL TOWN AREA		18,429	100.0%

NOTES: * The Total Zoned Area does not include streets or most major water bodies.

Table 17

LAND USE CHANGES
(1982-1993)

GENERAL LAND USE CATEGORIES:

	1982		1993		Change 1982-1993	
	Acres	% of Town	Acres	% of Town	Acres	% Change
Residential	4,490	24.4%	5,155	28.0%	665	14.8%
Business	980	5.3%	1,246	6.8%	266	27.2%
Misc.	1,785	9.7%	2,519	13.7%	734	41.1%
Open Space	4,540	24.6%	5,428	29.5%	888	19.6%
Vacant Land	6,640	36.0%	4,080	22.1%	(2,560)	-38.6%

RESIDENTIAL AND COMMECIAL/INDUSTRIAL LAND USES:

	1982		1993		Change 1982-1993	
	Acres	% of Town	Acres	% of Town	Acres	% Change
Single Family	3,975	21.6%	4,553	24.7%	578	14.5%
Multi-Family	515	2.8%	602	3.3%	87	17.0%
Prof. Office	240	1.3%	414	2.2%	174	72.5%
Commercial	390	2.1%	428	2.3%	38	9.9%
Industrial	350	1.9%	404	2.2%	54	15.4%

COMMERCIAL/INDUSTRIAL:

This category, which includes professional office, general commercial, general industrial and excavation land uses, occupies 8.8 percent of the Town's total land area (Table 16). As a whole, this category grew by 23.9 percent (or 313 acres) over the last decade; with the greatest individual land use growth occurring with professional office development. Professional office development grew by 72.5 percent from 240 acres in 1982 to 414 acres in 1993 (Table 17). This growth does not include an additional 23 acres that were approved for professional office development, but which today remain undeveloped.

General commercial and industrial land uses also expanded over the last decade. Thirty-eight acres were developed for general commercial, for a 9.9 percent increase; while 54 acres were developed for general industry, for a 15.4 percent increase (Table 17).

While residential development is scattered throughout the Town, much of the non-residential development tends to be concentrated in certain areas. Eighty-three percent (343 acres) of the professional office land is located within the Batterson Park, Health Center, and Southwest neighborhoods; with 43 percent located in the Batterson Park neighborhood alone (Table 20). While the Batterson Park neighborhood holds nearly half of the Town's professional office development, the neighborhood itself makes up only five percent of the Town's total land area. The primary cause of this concentration is the neighborhood's proximity to the I-84 corridor; and the Interstate's Fienemann Road exit, which provides easy access to the businesses in this area.

Sixty-five percent (263 acres) of the land developed for general industry is located in the Southwest neighborhood (Tables 18 & 20). Industrial land, however, occupies only 9 percent of the total land area in this neighborhood (Table 19).

By contrast, however, general commercial development tends to be more scattered throughout the Town. The largest concentrations occur in the Central, East Farms and Southwest neighborhoods; where, respectively, 24, 18 and 11 percent of the Town's total commercial land is located (Table 20). These concentrations are attributed to Route 4, Westfarms Mall and Route 6 respectively.

VACANT LAND:

Vacant land includes vacant residential, vacant nonresidential, private agriculture and private forest land. Current acreages are shown on Table 16.

All of the private forest land and most of the private agriculture land currently receives tax relief under the State P.A. 490 program. This program encourages the protection of land by reducing its tax burden. Since this program provides no significant long-term protection from development, both private agriculture and forest land are included in the vacant land category. To acknowledge the value of these lands as open space, they are also identified in the Existing Open Space section of this plan.

Currently, 21.6 percent of the Town (or 3,986 acres) is categorized as vacant land (Table 16). This is a reduction of 36.8 percent (or 2,323 acres) since 1982, when vacant land accounted for 34.2 percent of the Town (or 6,309 acres) (Table 17). Residentially zoned vacant land declined during this period by 35 percent, from 5,520 acres to 3,598 acres (Table 21).

The vacant land figures were used to project the Town's saturation population and to estimate future commercial and industrial development. Table 21 shows the total developable residential land in each of the Town's neighborhoods. The total developable residential land includes all vacant land within a residential zone minus a percentage of known wetlands or steep slopes. The saturation population and the potential future commercial and industrial development are discussed in more detail in the Future Land Use section of this plan.

Table18
EXISTING LAND USE BY NEIGHBORHOOD
Acres

CATEGORY	LAND USE	BATTERSON PARK	CENTRAL	EAST FARMS	FARMINGTON VILLAGE	FLOODPLAIN	HEALTH CENTER	HIGHLANDS	LAKE GARDA	OAKLAND GARDENS	ROBBINS	SOUTH FARMINGTON	SOUTHWEST	TALCOTT	UNIONVILLE	WEST DISTRICT	TOTAL
Residential	Single Family	85	289	293	354	0	187	333	117	26	206	337	483	868	371	609	4,556
	2-4 Family	0	0	0	4	0	0	6	0	0	0	0	6	0	43	0	60
	Multifamily	0	116	0	41	0	76	14	0	5	0	26	116	0	87	64	545
	SUB-TOTAL	85	405	293	399	0	263	353	117	31	206	363	605	868	501	673	5,161
Commercial/ Industrial	Professional Office	178	15	13	8	0	104	0	0	5	13	14	61	0	2	1	414
	General Commercial	25	101	78	35	0	35	7	0	1	21	37	47	0	30	10	427
	General Industrial	0	37	0	0	0	0	0	0	0	0	19	263	0	30	54	403
	Excavation	0	74	0	0	183	0	0	0	0	0	43	75	0	0	4	379
	SUB-TOTAL	203	227	91	43	183	139	7	0	6	34	113	446	0	62	69	1,623
Miscellaneous	Government/Institution	6	33	57	60	18	176	33	0	0	0	6	26	5	7	38	465
	Miscellaneous	140	110	295	111	4	214	59	32	22	103	110	204	32	122	150	1,708
	SUB-TOTAL	146	143	352	171	22	390	92	32	22	103	116	230	37	129	188	2,173
Open Space	Recreation/Preservation	238	771	56	230	1,178	73	48	3	162	8	560	715	306	105	225	4,678
	Major Water Bodies	130	163	26	38	127	0	21	11	0	0	2	29	20	70	23	660
	Public Schools	0	0	0	5	0	0	53	0	0	51	0	0	0	10	44	163
	Cemeteries	0	0	0	15	0	0	0	0	0	0	0	1	0	3	0	19
	SUB-TOTAL	368	934	82	288	1,305	73	122	14	162	59	562	745	326	188	292	5,520
Vacant Land	Private Agriculture	16	149	0	3	31	0	13	0	0	0	19	283	0	16	67	597
	Private Forest	0	0	0	24	0	0	0	0	0	0	61	45	75	37	0	242
	Vacant Residential	29	187	162	91	0	128	63	20	0	176	322	534	513	532	125	2,882
	Vacant Non-residential	11	48	0	0	0	55	0	0	0	0	0	108	0	4	34	260
	SUB-TOTAL	56	384	162	118	31	183	76	20	0	176	402	970	588	589	226	3,981

Table 20
EXISTING LAND USE BY NEIGHBORHOOD
Percent of Total Land Use Category in Each Neighborhood

CATEGORY	LAND USE	BATTERSON PARK	CENTRAL	EAST FARMS	FARMINGTON VILLAGE	FLOODPLAIN	HEALTH CENTER	HIGHLANDS	LAKE GARDA	OAKLAND GARDENS	ROBBINS	SOUTH FARMINGTON	SOUTHWEST	TALCOTT	UNIONVILLE	WEST DISTRICT	TOTAL
Residential	Single Family	2%	6%	6%	8%	0%	4%	7%	3%	0%	5%	7%	11%	19%	8%	13%	100%
	2-4 Family	0%	0%	0%	7%	0%	0%	9%	0%	0%	0%	0%	11%	0%	72%	0%	100%
	Multifamily	0%	21%	0%	8%	0%	14%	3%	0%	0%	0%	5%	21%	0%	16%	12%	100%
	SUB-TOTAL	2%	8%	6%	8%	0%	5%	7%	2%	0%	4%	7%	12%	17%	10%	13%	100%
Commercial/ Industrial	Professional Office	43%	4%	3%	2%	0%	25%	0%	0%	1%	3%	3%	15%	0%	0%	0%	100%
	General Commercial	6%	24%	18%	8%	0%	8%	2%	0%	0%	5%	9%	11%	0%	7%	2%	100%
	General Industrial	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	5%	65%	0%	7%	13%	100%
	Excavation	0%	20%	0%	0%	48%	0%	0%	0%	0%	0%	11%	20%	0%	0%	1%	100%
	SUB-TOTAL	13%	14%	6%	3%	11%	9%	0%	0%	0%	2%	7%	27%	0%	4%	4%	100%
Miscellaneous	Government/Institution	1%	7%	12%	13%	4%	38%	7%	0%	0%	0%	1%	6%	1%	1%	8%	100%
	Miscellaneous	8%	6%	17%	6%	0%	13%	3%	2%	1%	6%	6%	12%	2%	7%	9%	100%
	SUB-TOTAL	7%	7%	16%	8%	0%	18%	4%	1%	1%	5%	5%	11%	2%	6%	9%	100%
Open Space	Recreation/Preservation	5%	16%	1%	5%	25%	2%	1%	0%	3%	0%	12%	15%	7%	2%	5%	100%
	Major Water Bodies	20%	25%	4%	6%	19%	0%	3%	2%	0%	0%	0%	4%	3%	11%	4%	100%
	Public Schools	0%	0%	0%	3%	0%	0%	33%	0%	0%	31%	0%	0%	0%	6%	27%	100%
	Cemeteries	0%	1%	0%	79%	0%	0%	0%	0%	0%	0%	0%	4%	0%	16%	0%	100%
	SUB-TOTAL	7%	17%	1%	5%	24%	1%	2%	0%	3%	1%	10%	13%	6%	3%	5%	100%
Vacant Land	Private Agriculture	3%	25%	0%	0%	5%	0%	2%	0%	0%	0%	3%	47%	0%	3%	11%	100%
	Private Forest	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	25%	18%	31%	15%	0%	100%
	Vacant Residential	0%	6%	6%	3%	0%	4%	2%	0%	0%	6%	11%	19%	18%	18%	4%	100%
	Vacant Non-residential	4%	18%	0%	0%	0%	21%	0%	0%	0%	0%	0%	41%	0%	2%	13%	100%
	SUB-TOTAL	1%	10%	4%	3%	0%	5%	2%	0%	0%	4%	10%	24%	15%	15%	6%	100%

XVIII. FUTURE LAND USE PLAN

The Future Land Use Plan is composed of the Future Land Use Map (Map 12) as well as the specific development guidelines and policies found in the following neighborhood plans. These documents must be employed together when making land use decisions since there will be occasions when circumstances described in the neighborhood plan would alter the preferable land use designation of a given parcel of land on the Future Land Use Map.

In developing the Future Land Use Plan the Commission used the following: environmental conditions, current land use patterns, availability and adequacy of utilities and transportation systems, the planning objectives stated in the previous sections as well as the recommendations made by citizens through the forums known as Farmington's Future.

The actual decision to implement the recommendations contained in the Future Land Use Plan is dependent upon both a detailed analysis of the on site environmental features of a given parcel of land as well as a review of the particular circumstances external to that site including the operation of the surrounding road network and adjacent land use.

The zoning laws of the State of Connecticut do not generally permit municipalities to directly control the pace of development of its land once placed in a particular zoning district. Therefore, one of the few ways to affect the timing of growth within a town is through the zone change process. It must also involve a thorough assessment of the impacts of a land use change upon such issues as traffic safety and circulation, the community's infrastructure including schools and utilities and the provision of local services (i.e. fire, police and recreation).

All parcels of land have been classified into one of eight land use categories which are as follows: Residential (at four density classes), Commercial, Office, Industry, Government/Institution, Open Space, Utility and Transportation Rights-of-way and Water Bodies. Each is discussed below.

Residential - This category provides five levels of density as opposed to differentiating between housing types (i.e. single or multiple family). Since all five classes could accommodate some form of housing other than individual subdivision lots through application of the Town's cluster or RDM regulations, it would be impractical to precisely identify on this type of map all of the sites which would be appropriate for multiple family housing. A number of institutional uses currently permitted by the Farmington Zoning Regulations within residential zoning districts would also fit into this category.

Commercial - This classification includes retail and personal services, restaurants, recreational and lodging facilities. It would also permit office uses and many institutional uses.

Office - This category includes lodging facilities as well as a number of institutional uses.

Industry - This classification includes manufacturing, warehousing, wholesaling, lodging facilities, office uses, some institutional uses and a limited number of commercial uses including recreational facilities.

Government/Institution - This category in addition to government functions would also include health and special population care facilities, schools, museums and religious facilities.

Open Space - In applying this designation to various parcels on the Future Land Use Map, only those properties currently identified as permanent open space in Section X of this Plan or those parcels which have no development potential due to environmental or regulatory constraints are shown on the Future Land Use Map as Open Space. Existing non-permanent open spaces in addition to those parcels identified by the Commission as future open space are described in the Open Space Plan in Section X.

At full development of the Town the Future Land Use Plan would permit approximately two million square feet of additional nonresidential development, while based upon present household sizes, Farmington's population would rise to an estimated 31,283 residents.

4. Require single family cluster development in order to:

    a. Protect environmental features including wetlands, water bodies, ridgelines, vegetation, agricultural resources and open spaces.

    b. Encourage the provision of affordable housing.

    c. Protect new housing developments from impacts associated with major roadways and other incompatible uses.

5. Encourage the use of site design techniques including building orientation, street and lot layout and landscaping which maximize the potential for using passive solar energy.

6. Generally require all commercial property in excess of two acres be placed into the BR zone classification.

7. Situate to the greatest degree possible future industrial development in close proximity to I-84. This will reduce the movement of truck traffic through residential streets.

8. Reexamine Farmington's industrial zoning districts, particularly in light of the forthcoming State's aquifer protection regulations. Those uses may have to be divided into separate classes depending upon the character of materials used and waste generated.

BATTERSON PARK

The Batterson Park neighborhood is located in southeastern Farmington and bounded by Route 6 to the north, the New Britain city line to the south, Dead Wood Swamp to the west and Two Mile Road with its adjoining residences to the east. Future development of this neighborhood will be influenced chiefly by the presence of I-84. The scope and scale of this development must take into account the capacity of both the New Britain water system and the surrounding road network as well as the potential impact upon the water quality of Batterson Pond. The largest parcel of land with the greatest development potential is owned by the City of Hartford and lies to the west of Fienemann Road. It is presumed that all land owned by the City of Hartford and located to the east of Fienemann Road will remain as recreational use.

Development Policies

1. Encourage the development of office, lodging and institutional uses along the I-84 corridor.

2. Ensure that all new development located in close proximity to Batterson Park Pond contains a water quality management plan. Such plans should promote to the greatest degree possible subsurface drainage systems in addition to the use of catchment structures for the attenuation of pollutants and landscaping maintenance programs which produce the least amount of nutrient runoff.

3. The largest single vacant parcel in this neighborhood, located to the south of I-84 and west of Fienemann Road, is proposed for office use but could also include multiple family housing if such use is protected from the negative effects of I-84.

4. Farm Springs Road should remain a dead end in order to prevent through traffic from using Terrie Road.

5. Maintain residential zoning districts along Fienemann Road. While the volume of traffic along this street has reduced the suitability of single family housing, the conversion to commercial uses would reduce traffic safety and negatively impact residences to the rear.

6. Establish 150-foot zoning setbacks between all commercial development and I-84.

Population Statistics

1990 Population:	628	
1980 Population:	470	
Percent Change 1980-1990:	+34	
Saturation Population:	1,113	
Percent Change 1990-Saturation:	+77	
Neighborhood Percentage of Town's Future Population Growth:	4.5	
1980 Population Density:	.53	Persons per Acre
1990 Population Density:	.71	" " "
Saturation Population Density:	1.26	" " "

11. Establish a commuter parking facility along Route 4 in the vicinity of Town Farm Road.

12. Ensure that as vacant lands are developed along the route of the proposed bypass road owners either construct a portion of the road or financially contribute to its development.

Population Statistics

1990 Population:	1,897	
1980 Population:	1,100	
Percent Change 1980-1999:	+72	
Saturation Population:	3,134	
Percent Change 1990-Saturation:	+65	
Neighborhood Percentage of Town's Future Population Growth:	12.5	
1980 Population Density:	.51	Persons per Acre
1990 Population Density:	.89	" " "
Saturation Population Density:	1.48	" " "

FARMINGTON VILLAGE

The Farmington Village neighborhood is bounded on the west by the Farmington and Pequabuck Rivers, on the east by a line essentially extending from the eastern border of the Hill-Stead Museum and the Farmington Reservoir, on the south by Route 6 and the north by Route 4 and the I-84 connector. The character of this neighborhood continues to be most strongly influenced by the historic district and its adjoining historic residences as well as Miss Porter's School. While generally developed, this area does contain a number of acres of vacant land mostly in the form of excess property associated with a number of existing homes.

Development Policies

1. The commercial zoning district along the Route 4 corridor should not expand beyond its present boundaries.

2. Consideration should be given to developing a service road north of Route 4 between Mountain Spring Road and the Farmington Country Club.

3. Further commercial development along Route 10 between Route 4 and Meadow Road should be strongly discouraged.

4. It may be appropriate to permit the premises known as 185 Main Street to be used for limited commercial or institutional use providing activity is limited to the existing structures and the remainder of the property is permanently preserved as open space.

5. The 8.5-acre site located to the rear of the residences situated on the south side of Tunxis Street should be developed for residential use at medium density.

6. Sidewalks within this neighborhood should be completed at the earliest date.

7. Residential development of the eastern portion of this neighborhood should be maintained as very low density due to the presence of steep slopes and as a means of preserving the quality of the area occupied by the Hill-Stead Museum.

8. The flood zone area should be carefully maintained in order to preserve the floodplains of the Pequabuck and Farmington Rivers.

9. Acquire the land containing the former Farmington reservoir. Convert the property into a recreational use with facilities proposed in the study prepared by the Eastern Connecticut Environmental Review Team. If the Town is unable to undertake this purchase, the property should be developed under its current R80 designation and in such a manner as to preserve much of it as open space.

10. Expand the boundaries of the current historic district in conjunction with the plan developed by the Farmington Historic District Commission.

FLOODPLAIN

The boundary of the Floodplain neighborhood essentially follows the limit of the Town's flood zone district south of Route 4. It extends to Route 6 to the south and from the Pequabuck and Farmington Rivers to the vicinity of New Britain Avenue east to west. This area is and will remain predominantly undeveloped due to the occurrence of frequent flooding and ownership of a majority of this property by State and local government. The northern portion of this neighborhood is underlain by the most productive area of Farmington's stratified drift aquifer.

Development Policies

1. Complete closure plan for the Farmington landfill in accordance with timetable approved by the Connecticut Department of Environmental Protection. Continue to monitor quality of groundwater in the vicinity of the landfill.

2. Closely monitor sand and gravel operations to ensure no degradation of the natural environment. Specifically assess impact upon groundwater, floodplain capacity and surface water quality of the Farmington River.

3. All sand and gravel operations in this neighborhood should eventually be converted to open space.

4. Continue to develop Quirk Park as the Town's major recreational facility. However this development must be undertaken in a manner which preserves the value and function of the park's wetland and floodplain system.

5. Maintain the border of the existing flood zone district. Permit structures within this zone for government purpose only.

Population Statistics

1990 Population:	1,272	
1980 Population:	1,340	
Percent Change 1980-1990:	-5	
Saturation Population:	1,549	
Percent Change 1990-Saturation:	+22	
Neighborhood Percentage of Town's Future Population Growth:	3	
1980 Population Density:	1.26	Persons per Acre
1990 Population Density:	1.2	" " "
Saturation Population Density:	1.46	" " "

LAKE GARDA

Lake Garda, Farmington's smallest neighborhood unit, is also its most densely developed. This 185-acre area lies adjacent to the Burlington border and is bounded by Plainville Avenue and West Meath Lane on the east, Burlington Road on the north and the Woodside Estates subdivision to the south. The extension of public sewer and water service throughout much of the neighborhood and the development of the area's largest remaining tract of land produced significant increases in housing units and population. Future development will ease substantially with construction limited to a small inventory of legally preexisting nonconforming lots.

Development Polices

1. Complete the extension of public sewer and water service throughout the entire neighborhood.

2. Upgrade the storm water system to reduce harmful deposits of sand and pollutants into Lake Garda.

3. Maintain the existing R9 Zone.

Population Statistics

1990 Population:	1,001	
1980 Population:	720	
Percent Change 1980-1990	+39	
Saturation Population:	1,342	
Percent Change 1990-Saturation:	+34	
Neighborhood Percentage of Town's Future Population Growth:	3	
1980 Population Density:	3.9	Persons per Acre
1990 Population Density:	5.4	" " "
Saturation Population Density:	7.25	" " "

ROBBINS

The Robbins neighborhood is bounded by Route 6 to the south, the Hill-Stead Museum to the north, Route 4/I-84 to the east and to the west by the former Farmington reservoir. East of Birdseye Road this neighborhood is mostly developed while the western portion contains a large amount of vacant acreage, particularly along Route 6. Future development of the vacant land is greatly affected by a lack of access to public utilities.

Development Policies

1. Maintain the R80 zoning classification of land surrounding the Hill-Stead Museum in order to preserve the character of the museum's landscape.

2. Rezone residential homesites located on the west side of Birdseye Road, north of Paul Spring Road, to R20 in order to eliminate current zoning nonconformities.

3. The low density residential zoning classification of property along the north side of Route 6 should be left unchanged. However development should be clustered in order to preserve the existing wetlands network. Access should be limited if possible to the existing traffic signal across from Waterside 6.

4. Commercial development should not be extended to the north side of Route 6 between Birdseye Road and Wolf Pit Road.

Population Statistics

1990 Population:	673	
1980 Population:	655	
Percent Change 1980-1990:	+3	
Saturation Population:	935	
Percent Change 1990-Saturation:	+39	
Neighborhood Percentage of Town's Future Population Growth:	2.5	
1980 Population Density:	1.09	Persons per Acre
1990 Population Density:	1.12	" " "
Saturation Population Density:	1.56	" " "

SOUTHWEST

The Southwest neighborhood is bounded on the west by the City of Bristol, on the south by the Plainville town line, on the east by the Shade Swamp Wildlife Sanctuary along with the Pequabuck River and on the north by Coppermine Village and the northern border of the Town Forest. In addition to being Farmington's largest neighborhood geographically, it also contains the greatest amount of vacant land. However this area also has the largest concentration of permanent open space (518 acres) with the exception of the Floodplain neighborhood.

Future development will occur within all three major land use categories, with residential growth primarily north of Route 6 and commercial and industrial expansion taking place principally south of Route 6. The expansion of a sizable length of Scott Swamp Road from two to four lanes will not significantly alter future land use plans in this neighborhood.

Development Policies

1. Rezone all property to the south and west of the Trotters Glen subdivision to R40. Utilize cluster development extensively within the Meadow Road corridor as a device to preserve active farmlands.

2. Medium density housing may be appropriate for the 60-acre parcel of land located on Plainville Avenue opposite Portage Crossing. This site is relatively isolated as it is surrounded on three sides by extensive wetland areas, however development must be undertaken in a very sensitive fashion since it is located at the headwaters of the Scott Swamp Brook. Further improvements to the intersection of Route 177 and Meadow and Morea Roads should also be a component of any such development.

3. The Town should consider a zero net runoff drainage policy for the development of property north of Morea Road within the Scott Swamp Brook watershed.

4. The vacant parcel of land located on the north side of Hyde Road between New Britain Avenue and Scott Swamp Road may be suitable for moderate to high density multiple family housing.

5. Maintain the existing residential zoning for all developed properties along Route 6 and Hyde Road east of New Britain Avenue.

6. The largest industrially zoned vacant property in this neighborhood abuts the western edge of the railroad right-of-way. This site is appropriate for light industrial or office use. While it is not desirable to place another traffic light along Route 6 at this location it may be unavoidable due to its size (development potential) and the inability to access it via Hyde Road or New Britain Avenue. A sizable wetland area prevents this site from connecting to the adjacent Farmington Business Center.

7. Nonresidential zoning districts should not be expanded within the Route 6 corridor. The Future Land Use map eliminates some existing commercial zones in order to discourage strip development and traffic on Scott Swamp Road.

8. The vacant parcel located on the southwest corner of Route 6 and Route 177 should be developed for nonresidential use only if such use would generate a low to moderate volume of traffic and where access is provided a substantial distance away from the intersection, preferably limited to opposite the entrance to Tunxis Community College.

9. A firehouse should be constructed in this neighborhood as soon as possible. The Westwoods property should be considered as a possible site for this facility.

10. The vacant property situated across Route 6 from Brookshire Lane is appropriate for low density clustered attached or detached housing. Access to this site can be provided from both Plainville Avenue and Scott Swamp Road.

TALCOTT

Bounded on the north by the Avon town line and on the west by the Farmington River, this neighborhood extends easterly to the rear of a number of businesses and multiple family residences fronting on Route 4 and southerly to the I-84 connector and Farmington Village. This area possesses the Town's most homogeneous land use pattern and its rugged topography coupled with the substantial absence of public sewer and water will maintain this characteristic in the future. Development pressure within this neighborhood is expected to remain low.

Development Policies

1. Much of the Talcott neighborhood should be formally established as a sewer avoidance area. This policy would result in lower costs to the Town in the future as well as maintain the rural character of the area.

2. Several of this neighborhood's roadways have design deficiencies. Safety improvement plans must be designed and undertaken in balance with the natural landscape.

3. Retain the R80 zoning designation in its present form.

4. Special zoning restrictions must be promulgated to protect the ridgeline which traverses this neighborhood in a north/south direction.

5. Additional uses for The Barney House may be needed to keep this property viable. Such uses must not degrade the residential character of the area nor exacerbate traffic safety at the intersection of Mountain Spring Road and Route 4.

Population Statistics

1990 Population:	578	
1980 Population:	730	
Percent Change 1980-1990	-21	
Saturation Population:	1,346	
Percent Change 1990-Saturation:	+133	
Neighborhood Percentage of Town's Future Population Growth:	7.5	
1980 Population Density:	.4	Persons per Acre
1990 Population Density:	.32	" " "
Saturation Population Density:	.74	" " "

Population Statistics

1990 Population:	2,665	
1980 Population:	2,970	
Percent Change 1980-1990:	-10	
Saturation Population:	4,282	
Percent Change 1990-Saturation:	+61	
Neighborhood Percentage of Town's Future Population Growth:	16	
1980 Population Density:	2	Persons per Acre
1990 Population Density:	1.8	" " "
Saturation Population Density:	2.89	" " "

PRIME AGRICULTURAL SOILS LEGEND	
	PRIME AGRICULTURAL SOILS
	FARM LAND ON PRIME AGRICULTURAL SOILS
	FARM LAND ON NONPRIME AGRICULTURAL SOILS

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

MAP #1

PRIME AGRICULTURAL SOILS AND CURRENTLY FARMED LAND

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

ROARING BROOK

FARMINGTON RIVER

UNIONVILLE BROOK

MDC RESERVOIR

WOODRIDGE LAKE

ROCKLEDGE BROOK

SCOTT SWAMP BROOK

PEQUABUCK RIVER

QUINNIPIAC RIVER

QUINNIPIAC RIVER

QUINNIPIAC RIVER

BATTERSON PARK POND

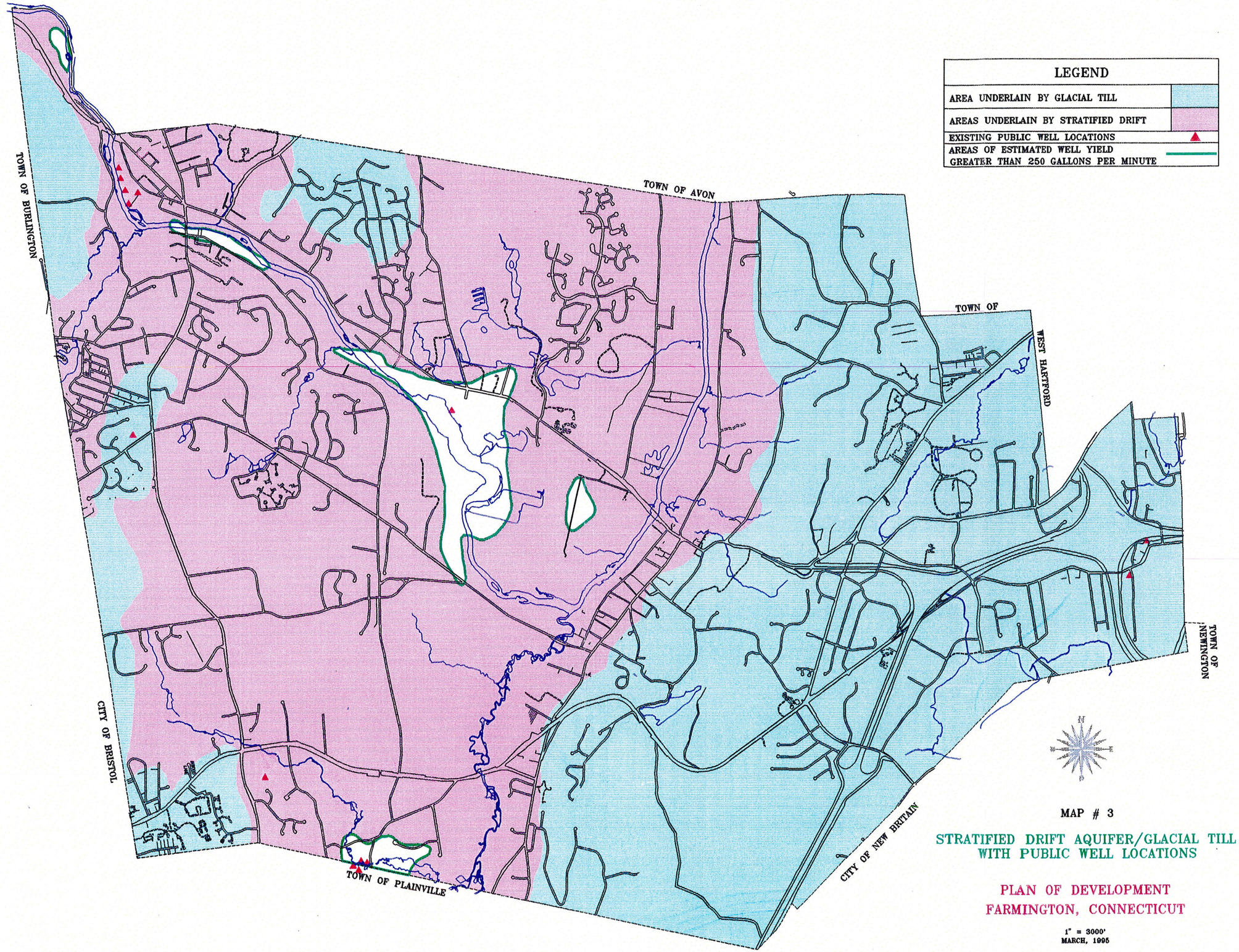
QUINNIPIAC RIVER

MAP #2

LOCAL WATERSHED DIVISIONS

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995



MAP # 3

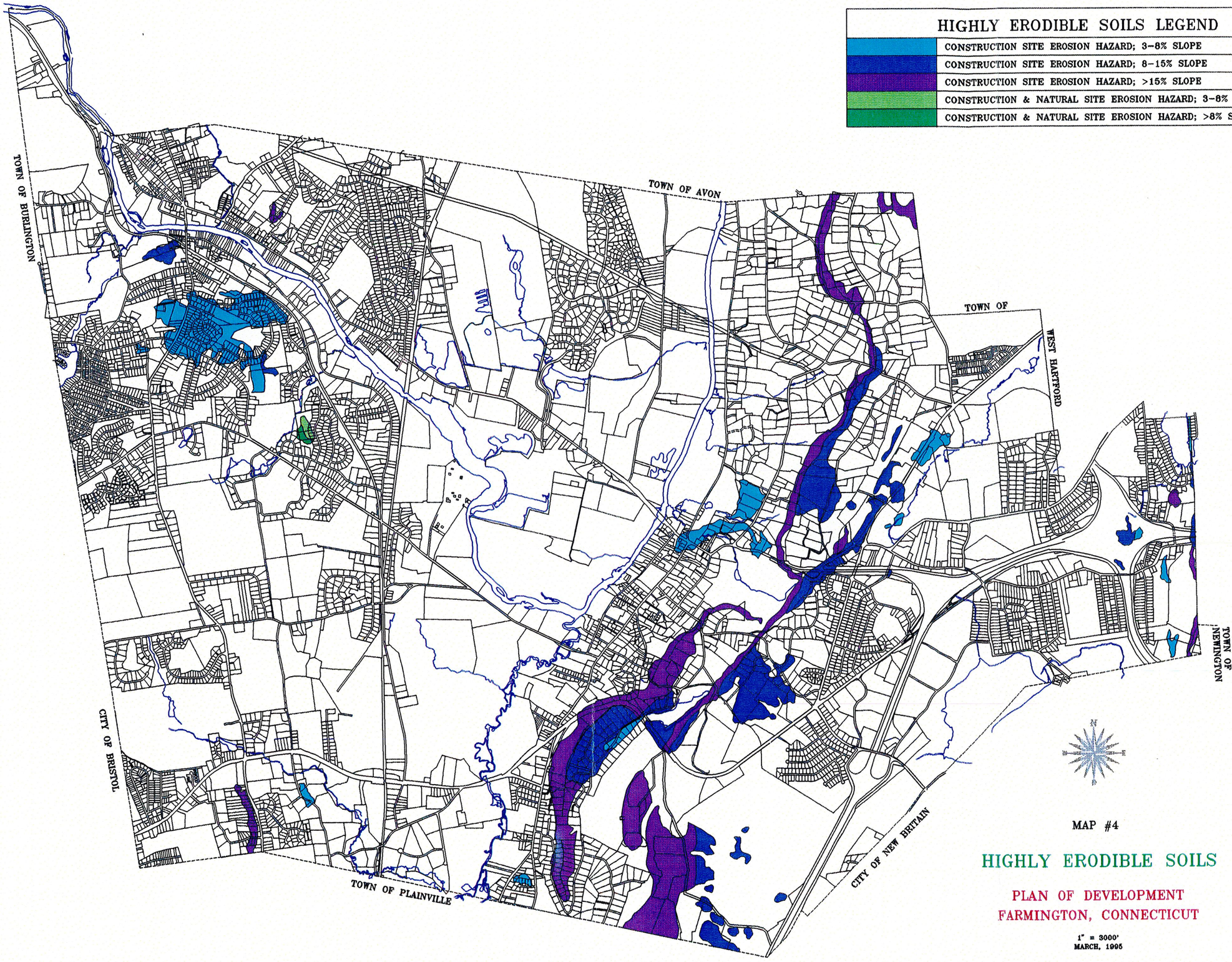
STRATIFIED DRIFT AQUIFER/GLACIAL TILL
WITH PUBLIC WELL LOCATIONS

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

HIGHLY ERODIBLE SOILS LEGEND

	CONSTRUCTION SITE EROSION HAZARD; 3-8% SLOPE
	CONSTRUCTION SITE EROSION HAZARD; 8-15% SLOPE
	CONSTRUCTION SITE EROSION HAZARD; >15% SLOPE
	CONSTRUCTION & NATURAL SITE EROSION HAZARD; 3-8% SLOPE
	CONSTRUCTION & NATURAL SITE EROSION HAZARD; >8% SLOPE



MAP #4

HIGHLY ERODIBLE SOILS

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

EXISTING OPEN SPACE LEGEND

	FARMINGTON, TOWN OF
	HARTFORD, CITY OF
	PRIVATE, NON-PROFIT
	CONNECTICUT, STATE OF
	PRIVATE, FOR PROFIT
	PRIVATE AGRICULTURE
	MAJOR WATER BODIES
	FOREST LAND
	METROPOLITAN DISTRICT COMMISSION
	FARMINGTON LAND TRUST

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

Map #5

EXISTING OPEN SPACE

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 5000'
MARCH, 1995

EXISTING OPEN SPACE ACCESS AND PERMANENCE LEGEND

- PUBLIC ACCESS, PERMANENT
- PRIVATE ACCESS, PERMANENT
- PRIVATE ACCESS, NON-PERMANENT

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

N

Map #6

EXISTING OPEN SPACE BY ACCESS AND PERMANENCE

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

FUTURE OPEN SPACE LEGEND	
RECOMMENDED OPEN SPACE	
ITEM NUMBER IN TEXT	1

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

MAP #7

FUTURE OPEN SPACE

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

ROAD CLASSIFICATION LEGEND	
MINOR ROAD	
COLLECTOR ROAD	
SECONDARY ARTERIAL ROAD	
PRIMARY ARTERIAL ROAD	

TOWN OF BURLINGTON

TOWN OF AVON

TOWN OF WEST HARTFORD

TOWN OF NEWINGTON

CITY OF BRISTOL

TOWN OF PLAINVILLE

CITY OF NEW BRITAIN

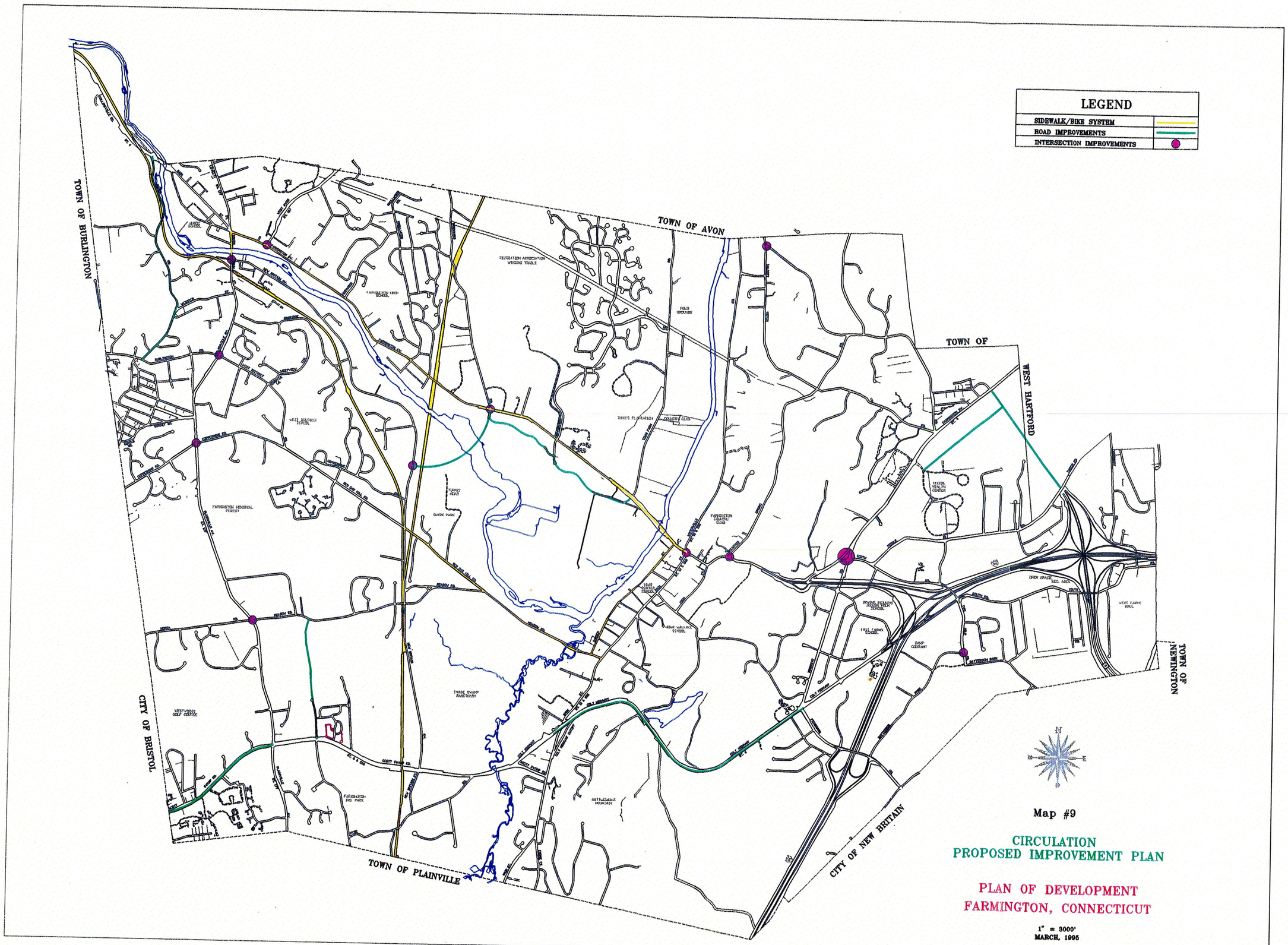
Map #8

CIRCULATION
CLASSIFICATION OF ROADS

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'

MARCH, 1995



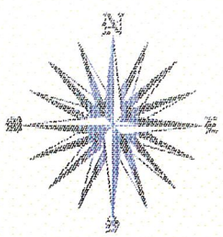
Map #9

CIRCULATION
PROPOSED IMPROVEMENT PLAN

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

LEGEND	
EXISTING PARCELS	
PROPOSED PARCELS	

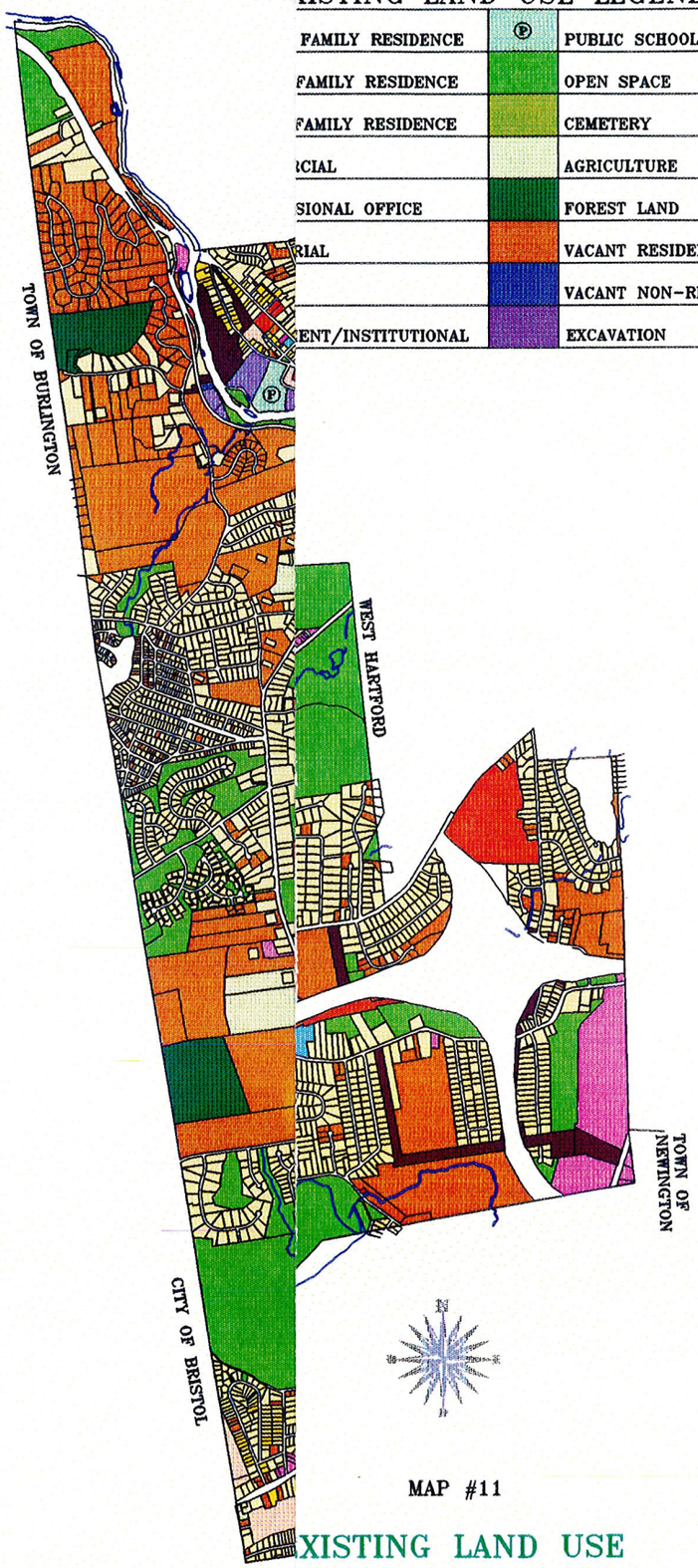


MAP #10

HISTORIC DISTRICT PARCELS

PLAN OF DEVELOPMENT
FARMINGTON, CONNECTICUT

1" = 1100'
MARCH, 1995



XISTING LAND USE LEGEND

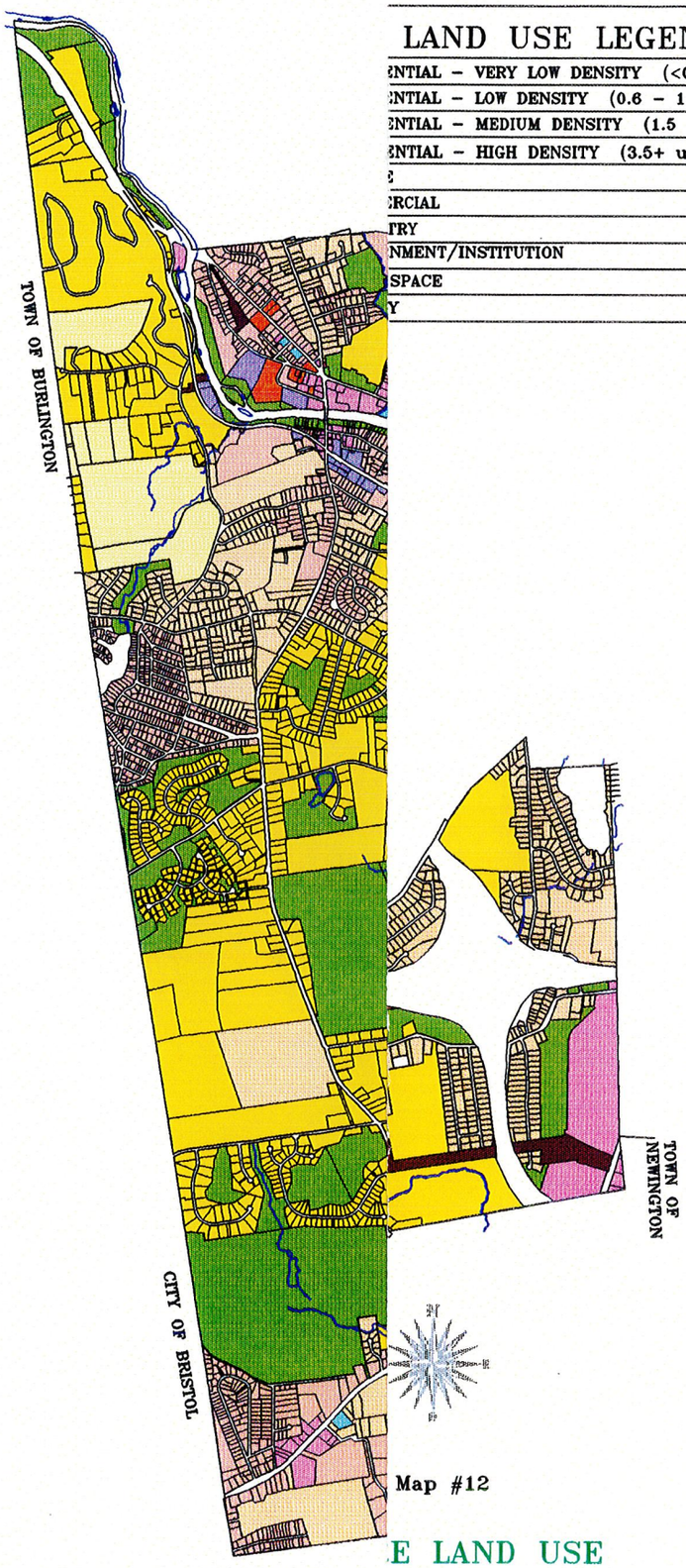
FAMILY RESIDENCE	Ⓟ PUBLIC SCHOOL
FAMILY RESIDENCE	OPEN SPACE
FAMILY RESIDENCE	CEMETERY
CIAL	AGRICULTURE
SIONAL OFFICE	FOREST LAND
RIAL	VACANT RESIDENTIAL
	VACANT NON-RESIDENTIAL
ENT/INSTITUTIONAL	EXCAVATION

MAP #11

XISTING LAND USE

PLAN OF DEVELOPMENT
RMINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995



LAND USE LEGEND

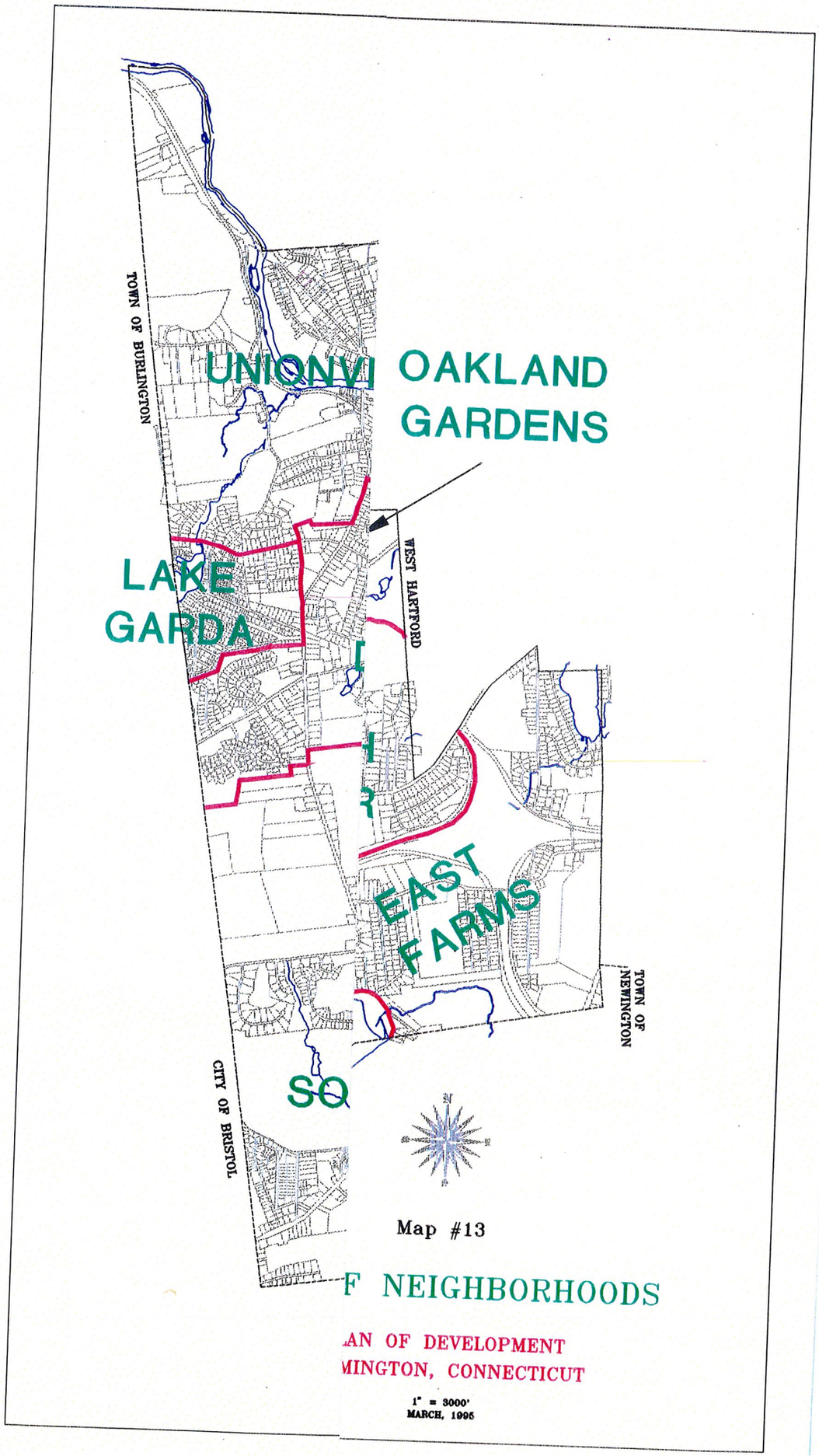
NTIAL – VERY LOW DENSITY (<0.5 u/a)
NTIAL – LOW DENSITY (0.6 – 1.4 u/a)
NTIAL – MEDIUM DENSITY (1.5 – 3.4 u/a)
NTIAL – HIGH DENSITY (3.5+ u/a)
RCIAL
FRY
NMENT/INSTITUTION
SPACE
Y

Map #12

E LAND USE

F DEVELOPMENT
ON, CONNECTICUT

1" = 3000'
MARCH, 1995



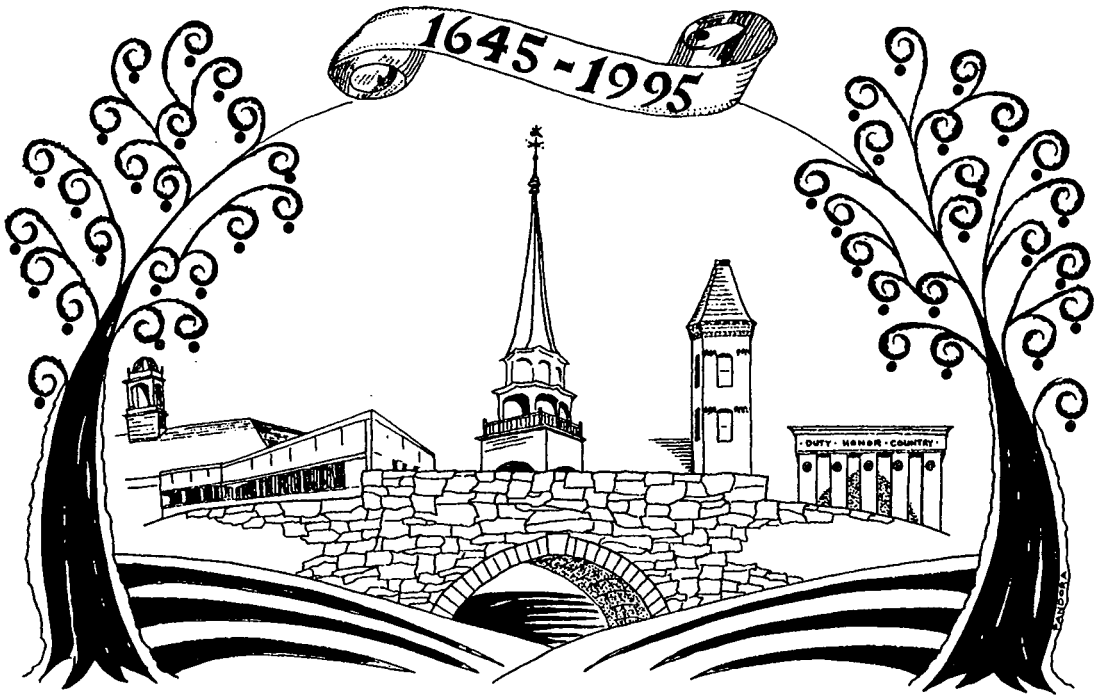
Map #13

F NEIGHBORHOODS

AN OF DEVELOPMENT
MINGTON, CONNECTICUT

1" = 3000'
MARCH, 1995

Town of Farmington



Plan of Conservation and Development

PLAN OF CONSERVATION AND DEVELOPMENT

TOWN OF FARMINGTON, CONNECTICUT

TOWN PLAN AND ZONING COMMISSION

ADOPTED JULY 24, 1995

TOWN PLAN AND ZONING COMMISSION

James H. Pogson, Chm.
Christian R. Hoheb, Sec.
Donald L. Banta
Barbara A. Brenneman
Charlie Martin
Deborah B. Quigley
Jeffrey P. Apuzzo
Ronald G. Harrison
John W. Vibert

Past Commissioners:
Evan R. Cowles
George S. Goodridge
James E. Hayes
John H. Midney
J. David Morrissey

STAFF:

Jeffrey Ollendorf, Planning Director
Elizabeth S. Dolphin, Asst. Planning Director
Elizabeth G. Mathews, Planning Aide

INTRODUCTION

This report updates Farmington's Plan of Development which was last revised in 1982. Over this period of time Farmington experienced a significant expansion in its population, employment base, housing stock and Grand List.

The Plan of Conservation and Development as defined in Section 8-23 of the Connecticut General Statutes is a blueprint for the physical and economic development of a community. Planning officials have long recognized that these physical plans directly influence and shape the social and economic composition of a community's population which in turn affects the types and levels of services provided by local government.

Until recently the Plan's status has been strictly advisory, however in 1991 and 1992 Connecticut State law was amended to require zoning commissions to consider this document when adopting or revising zoning regulations and boundaries.

While in order to be most effective it is important for the Plan's recommendations to be as precise as possible, it is equally important for the planning process to remain flexible in order to respond to conditions and events which have either not been anticipated or which are not within the control of the Town.

With regard to implementing the policies and recommendations of the Plan, one must understand the limitations of the planning process within the State of Connecticut. The present system for the most part does not permit localities to properly sequence growth and development. So while a Plan of Development may recommend the benefits of developing one area before another or spreading development of a given area over a number of years, the legal tools to accomplish this are as of yet generally unavailable. Where a Plan recommends the development of a parcel of land for a particular use but only under a set of anticipated or preferred conditions, there is the real possibility that this land will be developed under its present zoning designation before the proper circumstances appear.

The Plan of Development is presented in two distinct parts. The first section details the present status and trend lines for a number of planning issues accompanied by general goal statements. The second part contains proposals for all of Farmington's neighborhoods in conjunction with the Town's Future Land Use Map.

VI. HILLSIDES/RIDGELINES

The Town of Farmington is underlain by three bedrock types which define the general topography of the Town. Most of the Town is underlain by erodible sedimentary rocks. The level and gently sloping land west of the Metacomet Ridge is underlain by New Haven Arkose, a reddish-brown sandstone commonly called Brownstone, while the land east of the ridge is underlain predominantly by shale. The primary hills of Farmington are underlain by harder, less erodible metamorphic rock in the northwestern corner, and igneous rock or traprock creating the Metacomet Ridge.

The slopes of northwestern Farmington form a portion of the western wall of the Connecticut Central Valley. The Central Valley is formed by underlying soft sedimentary rock, while the wall of the valley is formed by the harder, less erodible metamorphic rock of the western uplands. Metamorphic rock has undergone physical changes caused by intense heat and pressure from the Earth's interior. This heat and pressure caused the original rock to recrystallize, resulting in fused and tightly interwoven crystals. The fusing of the crystals forms a rock much more resistant to erosion than the sedimentary rocks of the adjacent central valley.

The second conspicuous hillside in Farmington is the Metacomet Ridge. This ridge rises very steeply on the western slope to elevations between 760 feet at the peak of Rattlesnake Mountain to 520 feet elsewhere along the ridge. The Metacomet Ridge was formed by a series of geologic activities, including volcanism, tilting of the Earth's crust and erosion. The Central Valley region of Connecticut was originally overlain by alternating sedimentation and volcanic lava flows. Faulting caused the layers to be tilted; while the subsequent erosion formed valleys or shallower slopes from the erodible sedimentary rock, and ridges from the less erodible volcanic traprock.

Although traprock erodes slowly, weathering by frost action greatly reduces the stability of these ridges. Traprock is formed with natural veins that give a columnar appearance to the exposed rock along the ridge. Water seeping into cracks weakens the rock along the veins by freezing and thawing. Eventually, these weakened columns succumb to gravity. The scree, or blocks of fallen traprock, at the base of sections of the Metacomet Ridge are the result of this weathering.

A third hillside type is the glacial formations such as eskers and drumlins. While these formations are not as conspicuous as the metamorphic and traprock hills, they may form locally significant hillsides, and are noteworthy for their geologic value. Eskers are sinuous ridges that were formed by glacial meltwater flowing through tunnels or crevasses in the ice. With the glacier's retreat, the water found a lower path, leaving a narrow, often steepsided ridge composed of river deposits.

Drumlins are relatively small, elongated, egg-shaped hills composed entirely, or almost entirely of glacial till. Drumlins were formed during the retreat of the last glacier by a mechanism that smeared thick layers of usually clay laden till. Drumlins usually occur in clusters.

A small cluster of drumlins, including Burnt Hill, occurs in northeastern Farmington. Bedrock contour maps indicate that these hills have layers of till 100 to 150 feet in thickness. The shale bedrock in this area probably provided the clay for the formation of these drumlins.

Farmington has long recognized the aesthetic and environmental values of hillside areas. The low density residential development which characterizes most of these areas has maintained the visual character of hillsides in addition to limiting erosion and reducing flood hazards in adjacent low-lying areas.

Hillside development requires careful planning for the following reasons:

- Substantial destruction of vegetation can result in increased runoff and sedimentation requiring increased public expenditures for flood control and storm water management.

XVIII. FUTURE LAND USE PLAN

The Future Land Use Plan is composed of the Future Land Use Map (Map 12) as well as the specific development guidelines and policies found in the following neighborhood plans. These documents must be employed together when making land use decisions since there will be occasions when circumstances described in the neighborhood plan would alter the preferable land use designation of a given parcel of land on the Future Land Use Map.

In developing the Future Land Use Plan the Commission used the following: environmental conditions, current land use patterns, availability and adequacy of utilities and transportation systems, the planning objectives stated in the previous sections as well as the recommendations made by citizens through the forums known as Farmington's Future.

The actual decision to implement the recommendations contained in the Future Land Use Plan is dependent upon both a detailed analysis of the on site environmental features of a given parcel of land as well as a review of the particular circumstances external to that site including the operation of the surrounding road network and adjacent land use.

The zoning laws of the State of Connecticut do not generally permit municipalities to directly control the pace of development of its land once placed in a particular zoning district. Therefore, one of the few ways to affect the timing of growth within a town is through the zone change process. It must also involve a thorough assessment of the impacts of a land use change upon such issues as traffic safety and circulation, the community's infrastructure including schools and utilities and the provision of local services (i.e. fire, police and recreation).

All parcels of land have been classified into one of eight land use categories which are as follows: Residential (at four density classes), Commercial, Office, Industry, Government/Institution, Open Space, Utility and Transportation Rights-of-way and Water Bodies. Each is discussed below.

Residential - This category provides five levels of density as opposed to differentiating between housing types (i.e. single or multiple family). Since all five classes could accommodate some form of housing other than individual subdivision lots through application of the Town's cluster or RDM regulations, it would be impractical to precisely identify on this type of map all of the sites which would be appropriate for multiple family housing. A number of institutional uses currently permitted by the Farmington Zoning Regulations within residential zoning districts would also fit into this category.

Commercial - This classification includes retail and personal services, restaurants, recreational and lodging facilities. It would also permit office uses and many institutional uses.

Office - This category includes lodging facilities as well as a number of institutional uses.

Industry - This classification includes manufacturing, warehousing, wholesaling, lodging facilities, office uses, some institutional uses and a limited number of commercial uses including recreational facilities.

Government/Institution - This category in addition to government functions would also include health and special population care facilities, schools, museums and religious facilities.

Open Space - In applying this designation to various parcels on the Future Land Use Map, only those properties currently identified as permanent open space in Section X of this Plan or those parcels which have no development potential due to environmental or regulatory constraints are shown on the Future Land Use Map as Open Space. Existing non-permanent open spaces in addition to those parcels identified by the Commission as future open space are described in the Open Space Plan in Section X.

At full development of the Town the Future Land Use Plan would permit approximately two million square feet of additional nonresidential development, while based upon present household sizes, Farmington's population would rise to an estimated 31,283 residents.

PLANNING OBJECTIVES

1. Preserve residential neighborhoods as stable, safe, vital and attractive living environments.

    a. Institute safeguards to protect neighborhoods from the the adverse effects posed by adjacent new development.

    b. Parcels of land which are contiguous to existing residential neighborhoods should only be developed in a compatible manner. In measuring compatibility, consideration should be given to similarity of uses (type, density, scale), traffic impacts, hours of activity, noise generation, lighting and design (setbacks and buffers).

2. Vacant land located along Farmington's arterials should primarily be developed as housing in order to reduce sprawl and preserve the Town's major activity centers. The density of such housing will generally range from medium to high in order to support mass transportation systems.

    a. Parcels of land which have substantial depth should be developed in a clustered design in order to increase setbacks from the roadway.

    b. Where the development of housing is not feasible the Town should encourage the development of land uses which generate lower volumes of traffic or which generate their greatest amount of traffic during off peak hours.

3. The following criteria shall be utilized in applying density standards to various areas of Town:

    a. Very low density (up to .5 units per acre) where average slope of land exceeds 20 percent; where soils present severe or very severe limitations for on site septic systems; for all areas included in a sewer avoidance program and where the existing neighborhood is characterized by very low density use.

    b. Low density (.6 to 1.4 units per acre) where average slope of land is less than 20 percent; in areas which contain active agricultural activity or prime agricultural soils; in areas which contain a significant concentration of sensitive environmental resources; in areas characterized by low or very low density development.

    c. Medium density (1.5 to 3.5 units per acre) where average slope is less than 15 percent; where public sewers are readily available; in areas located between high density and low density neighborhoods; in areas presently characterized by medium density developments.

    d. High density (3 to 5 units per acre) where average slope is less than 15 percent; where public sewer and public water is readily available; where areas are in close proximity to supporting services; to serve as a transition between dissimilar uses; where multiple family development can provide a feasible alternative to commercial development along those portions of arterial streets where single family homes are no longer desirable.

    e. Very high density (over 5 units per acre) where average slope is less than 10 percent; where public sewer and water is readily available; where areas are in close proximity to supporting services; where areas are located immediate to secondary arterial and arterial roadways; to serve as a transition between dissimilar uses; where multiple family development can provide a feasible alternative to commercial development along those portions of arterial streets where single family homes are no longer desirable.

4. Require single family cluster development in order to:

   a. Protect environmental features including wetlands, water bodies, ridgelines, vegetation, agricultural resources and open spaces.

   b. Encourage the provision of affordable housing.

   c. Protect new housing developments from impacts associated with major roadways and other incompatible uses.

5. Encourage the use of site design techniques including building orientation, street and lot layout and landscaping which maximize the potential for using passive solar energy.

6. Generally require all commercial property in excess of two acres be placed into the BR zone classification.

7. Situate to the greatest degree possible future industrial development in close proximity to I-84. This will reduce the movement of truck traffic through residential streets.

8. Reexamine Farmington's industrial zoning districts, particularly in light of the forthcoming State's aquifer protection regulations. Those uses may have to be divided into separate classes depending upon the character of materials used and waste generated.

XIX. NEIGHBORHOODS

This section of the Plan of Conservation and Development translates planning objectives found in preceding sections into specific development policies for particular locations. This includes recommendations for specific action as well as observations which identify opportunities and constraints for individual parcels within each neighborhood.

The Plan of Conservation and Development has maintained the designation of 15 neighborhoods from the previous Plan. See also Map 13. This was done in order to permit direct comparisons of data from the 1982 Plan of Development to today.

A brief description of each neighborhood is followed by a set of policy statements and population statistics. These population statistics include the population of each neighborhood at full development as well as the percentage of the Town's future population growth attributable to each neighborhood. Full development (saturation) of the Town is defined as the maximum development of all remaining vacant and underutilized land under current zoning designations and restrictions.

The following neighborhood analyses should be used with the Future Land Use Plan and Map.

SOUTH FARMINGTON

The South Farmington neighborhood extends east to west from I-84/Fienemann Estates to the Pequabuck River. It is bounded on the north by Route 6 and on the south by the Plainville town line. The western section of this area is characterized by mixed land use and higher density development while the eastern section is dominated by large expanses of open space, much of which, due to steep grades and wetlands, is undevelopable.

Development Policies

1. Existing areas used for mining operations should be utilized in the future for the processing of earth products or light industry. However the Town should not permit the physical expansion of these sites.

2. The property south of Farmstead Lane is appropriate for cluster development including multiple family housing at medium density.

3. The floodplain and wetland system associated with the Pequabuck River should be protected from encroachments.

4. The Town should discourage the establishment of additional communication towers on Rattlesnake Mountain.

5. While the privately owned property located to the south of Route 6 possesses some of the most severe terrain in Farmington consideration should be given to clustering development in detached or attached structures in areas of moderate grade providing public sewer is available.

6. Development in this neighborhood should be done in a manner which minimizes disturbance to the Metacomet Trail.

7. Commercial and industrial districts located within the Route 10 and Scott Swamp Road corridors should not be expanded.

8. Vacant property situated east of Pinnacle Road should be accessed by the surrounding interior road network instead of from Route 6.

Population Statistics

1990 Population:	905	
1980 Population:	1,060	
Percent Change 1980-1990:	-15	
Saturation Population:	1,552	
Percent Change 1990-Saturation:	+71	
Neighborhood Percentage of Town's Future Population Growth:	6	
1980 Population Density:	.65	Persons per Acre
1990 Population Density:	.55	" " "
Saturation Population Density:	.95	" " "

TOWN OF FARMINGTON

REGULATIONS
FOR
ZONING
SUBDIVISION
INLAND WETLANDS

FARMINGTON TOWN HALL
One Monteith Drive
Farmington, Connecticut 06032-1053

FARMINGTON, CONNECTICUT

ZONING REGULATIONS
(Amended to March 1, 1996)

SUBDIVISION REGULATIONS
(Amended to March 22, 1996)

INLAND WETLANDS AND WATERCOURSES REGULATIONS
(Amended to January 26, 1996)

ZONING REGULATIONS

TOWN OF FARMINGTON, CONNECTICUT

ARTICLE I. PURPOSE AND INTENT

Section 1. PURPOSE

These regulations are adopted under the General Statutes of the State of Connecticut, as amended, for the following purposes:

To promote and to protect the public health, safety and welfare of the inhabitants of Farmington, Connecticut, and of the public generally;

To facilitate adequate transportation, water, sewerage, schools, parks and other public benefits;

To encourage the most appropriate use of land throughout the Town, thereby conserving the value of properties;

To regulate the height, number of stories and size of buildings and other structures; the percentage of the area of the lot that may be occupied; the size of yards, courts and other open spaces; and the height, size and location of advertising signs;

To regulate the density of population and the location and use of buildings, structures, and land for trade, industry, residence or other purposes;

To divide the municipality into zones of such number, shape and area as may be best suited to carry out the purposes of these regulations;

To regulate the erection, construction, reconstruction, alteration or use of buildings or structures and the use of land in such zones;

To permit certain classes or kinds of buildings, structures or uses of land within the Town only after obtaining a special permit or special exception;

To lessen congestion in the streets;

To secure safety from fire, panic, flood and other dangers;

To provide adequate light and air;

To prevent the overcrowding of land;

To further the policies of the Plan of Development;

To guide development in a manner which recognizes the importance of the natural environment;

To guide development which minimizes impacts to wetlands, watercourses, flood prone areas, hillsides, surface water and groundwater resources and other sensitive and significant features of the natural landscape; and

To encourage the preservation of historic structures.

Section 2. BASIC REQUIREMENTS

No land, building, structure or portion thereof shall hereafter be used, and no building structure or portion thereof shall be constructed, reconstructed, located, extended, enlarged or substantially altered, except in conformity with these regulations.

These regulations are intended to state the uses of land and/or buildings and structures which are permitted within the Town. Uses not stated are not permitted.

Section 3. APPLICATION OF REGULATIONS

No conveyance of land shall be made that reduces the remaining land of the grantor below the applicable minimum area, frontage, bulk and yard requirements. No building permit, zoning permit, certificate of occupancy or certificate of zoning compliance shall be issued for the erection or occupancy of a building or structure on land conveyed in violation of this section.

Section 4. INTERPRETATION

In interpreting and applying these regulations, the regulations shall be considered as the minimum requirements for the promotion of the public health, safety and general welfare.

When these regulations impose a greater restriction on the use of buildings or require larger yards, courts or other open spaces, or require a greater percentage of lots to remain unbuilt, or impose other standards higher than those imposed by any law, ordinance, regulation or private agreement, these regulations shall control. When restrictions are imposed by any law, ordinance, regulation or private agreement which are greater than those required by these regulations, such greater restrictions shall not be affected by these regulations.

When one section of these regulations imposes standards greater than those of another section, the standards of the more restrictive section shall control.

Section 5. ESTABLISHMENT OF ZONES

The Town of Farmington is divided into ten residential zones, designated herein as R80, R40, R30, R20, R12, R12LG, R9, R9LG, RDM and AH; three business zones, designated herein as PR, BR and B1; three industrial zones, designated herein as CR, C1 and EE; an urban renewal zone, designated herein as UR; a flood protection

e. The outside residential appearance of the dwelling is not changed.

f. No goods, chattels, materials, supplies or items of any kind shall be delivered either to or from the premises in connection with the home office except in a passenger automobile.

g. No goods, chattels, materials, supplies or other items of any kind related to the home office shall be stored outside of the building containing the home office.

5. Farm provided:

a. All activity is solely limited to the raising of crops;

b. All farm buildings except dwellings shall be located not less than 100 feet from any street line.

B. Uses Allowed Only by Special Permit. In addition to specific requirements listed here, the standards provided in Article IV. Section 12. shall also apply to applications submitted under this section. Article IV. Section 12. shall also apply to application procedures, hearing and notice requirements and site plan information.

1. School.

2. Day Camp.

3. Hospital.

4. Nursing Home.

5. Charitable and Philanthropic Institution.

6. Group Day Care Home.

7. Bed and Breakfast Establishment.

8. Public Utility Building or Structure not including service or storage yard.

9. Cemetery provided no burial plot shall be within 75 feet of any property line.

10. Country Club and Fraternal Organization, except where the chief activity is a service carried on as a business such as catering or renting of a function hall.

11. Municipal Land Use and owned or leased buildings and structures used in connection with the governmental or proprietary functions of the Town of Farmington or of any other government, and such uses of land as may be made by

the Town or any other government in connection with any of its governmental or proprietary needs and functions.

12. Radio and Television Tower, (commercial) provided the base of the tower is located a minimum distance from any property line at least equal to the height of the tower. Any guy wires used to support the tower shall be at least 100 feet from any property line.

    Communication Facility including satellite receiving or transmitting station.

13. Community Building for use by the residents of the community or neighborhood and maintained and operated for community purposes.

14. Farm, provided:

    a. All farm buildings except dwellings shall be located not less than 100 feet from any street line;

    b. Only the slaughtering of livestock and poultry raised on the premises shall be permitted; and

    c. Commercial piggeries are prohibited.

15. Church, College, Library.

16. Poultry raising of less than 20 fowl providing they are suitably confined.

17. Public or Private School.

18. Private garage with four bays.

19. Guest House in the R80 Zone only.

20. Day Care Center, Nursery School.

21. Farm Stand (not otherwise located on a farm).

22. Home Business provided:

    a. The home business is situated in the principal building which is used as the dwelling and shall occupy no more than 25 percent of the total living area of the dwelling unit.

    b. Only those residing in the dwelling and up to two non-resident employees may be engaged in the home business.

    c. Only articles made, raised or grown on the premises may be sold on the premises. This provision shall not

has a significant consequence the Commission shall conduct a public hearing prior to its action.

Small additions to nonresidential structures or buildings not previously approved by the Commission and changes in use shall be brought to the attention of the Zoning Enforcement Officer. When determined by the Zoning Enforcement Officer that such proposal does not require a special permit or site plan approval, a Zoning Permit may be issued.

C. After a building or structure is completed, and prior to the occupancy of such building or structure, an applicant shall apply for a Certificate of Zoning Compliance from the Zoning Enforcement Officer. This certificate shall state that such building, use or structure is in conformance with all zoning regulations or is a valid nonconforming use under such regulations. The Zoning Enforcement Officer may require that an applicant prepare and submit an as built site plan in order to determine compliance with the Zoning Regulations.

Section 3. ENFORCEMENT

These regulations shall be enforced by the Planning Director or his agent acting as the Zoning Enforcement Officer who is hereby authorized to cause any building, place, premises or use to be inspected, and to order in writing the remedying of any condition found to exist in violation of these regulations.

The Commission, the Zoning Enforcement Officer or any official having jurisdiction, in addition to other remedies, may institute an action or proceeding to prevent the unlawful erection, alteration, reconstruction, maintenance or use of any building or to correct or abate any unlawful act or to prevent the illegal occupation of buildings or land or to prevent any illegal act in or about such premises.

The penalties for such illegal acts shall be as provided in the General Statutes.

Section 4. ZONING BOARD OF APPEALS

A. Powers and Duties

The Zoning Board of Appeals shall be empowered to act on the following types of applications:

1. Hear and decide appeals where it is alleged that there is error in any order or decision made by the Zoning Enforcement Officer.

2. Decide requests for special exceptions in the following cases:

   a. Where a zone boundary line divides a lot in one ownership, a permit may be issued for a use allowed on

either side of the boundary line, but such specially allowed use shall not extend more than 30 feet into the zone in which it is not permitted by these regulations.

b. Extension of a nonconforming use or building.

3. Authorize upon appeal in specific cases variances from the terms of these regulations where by reason of exceptional shape, size or topography of the lot, or other exceptional situation or condition of the building or land, practical difficulty or unnecessary hardship would result to the owners of said property from a strict enforcement of the regulations. Before any variance is granted, the Board must make a written finding in its minutes as part of the record in the case,

   a. That special circumstances, described in detail, attach to the property which do not generally apply to other property in the neighborhood and constitute the hardship.

   b. That relief can be granted without detriment to the public welfare or impairment to the integrity of these regulations.

B. Procedure

1. The Board shall hold public hearings on all applications and appeals, and shall publish a notice of said hearing in a newspaper of general circulation within the Town in accordance with the zoning law. In applications for all variances except use variances the Planning Department shall mail notice of the public hearing no later than 10 days before such hearing to all owners of property which are abutting to or directly across from any boundary of the property which is the subject of the application. In applications for variances involving the Use Regulations the applicant shall mail notice of the public hearing, by certified mail, no later than 10 days before such hearing to all owners of property within 200 feet from any boundary of the property which is the subject of the application. Evidence of such mailing shall be presented to the Planning Department at or before the public hearing. The names and addresses used shall be those as recorded in the office of the Town Assessor on the date the application is filed. In the case where a property requiring notice has been submitted to common interest ownership, such as a condominium, the required notice need only be sent to the homeowners' association and in the case of a use variance to all owners of buildings or dwellings located within 200 feet of the boundaries of the parcel which is the subject of such application.

2. Every application for variance from the Use Regulations, as distinguished from the Height and Area Regulations, shall be immediately transmitted to the Town Plan and Zoning Commission, and on or before the public hearing held by the Board on such application for variance, the Commission shall make a report with recommendations thereon.

3. All determinations of the Board shall be made in accordance with the comprehensive plan set forth in these regulations and in harmony with the purpose and intent expressed in Article I. Section 1. thereof. In addition to this general rule of guidance, and to particular requirements hereinbefore specified in these regulations (see Article IV. Section 12.), no permit for special exception shall be issued by the Board unless it finds in each case that the proposed building or structure or the proposed use of land,

   a. Will not aggravate a traffic hazard, fire hazard or panic hazard.

   b. Will not block or hamper the Town pattern of highway circulation.

   c. Will not affect adversely the Town's income from taxation by removing considerable real property from the grand list.

   d. Will not tend to depreciate the value of property in the neighborhood, or be otherwise detrimental to the neighborhood or its residents, or alter the neighborhood's essential characteristics.

4. All appeals to the Zoning Board of Appeals from the orders or decisions of the Zoning Enforcement Officer shall be made within ten days from the date on which the order, decision or requirement was rendered.

ARTICLE VI. AMENDMENTS, VALIDITY

Section 1. These regulations may be amended, changed or repealed as provided in the zoning law of the State.

Section 2. The invalidity of any section or provision of these regulations shall not invalidate any other section or provision thereof.

Section 12. SPECIAL PERMITS, SITE PLANS, INTENT AND APPLICATION REQUIREMENTS

A. INTENT

These Zoning Regulations are based upon the division of the Town into districts, within each of which the use of land and structures and the size and location of structures in relation to the land are substantially uniform. However, it is recognized that there are certain other uses and features that would be appropriate in such districts if controlled as to number, area, location or relation to the neighborhood so as to promote the public health, safety and welfare. Change of zone and special permit uses shall be subject to the satisfaction of the requirements and standards set forth herein. Zone changes and special permit uses are declared to possess such particular characteristics that each shall be considered as an individual case.

B. Standards for Granting of a Change of Zone or Special Permit

In considering applications the Commission shall require compliance with the following:

1. That the existing and future character of the neighborhood in which the zone and/or use is to be located will be protected;

2. That adequate safeguards have been taken to protect adjacent property and the neighborhood in general from detriment;

3. That traffic circulation within the site and the amount, location and access to parking is adequate, and adequate sight distance is provided for all proposed and existing driveways;

4. That the road network, to include intersections, impacted by the proposed development will be capable of satisfactorily handling the increased traffic generated by such use;

5. That the i) basic design of the proposed use(s) or buildings; ii) relationship between the buildings and the land; and iii) overall physical appearance of the proposed use(s) or buildings will be in general harmony with the character of the surrounding neighborhood and will not serve to blight or detract from abutting residences or other property;

6. That adequate safeguards have been taken to protect the natural environment; and

7. That all required public services will be reasonably available to serve the proposed development.

C. Procedures

1. Every application for change of zone and special permit shall require a public hearing.

2. Notice of the public hearing by certified mail shall be mailed by the applicant no later than ten (10) days before such hearing to all owners of property, as recorded in the office of the Town Assessor on the date the application is filed, located within 200 feet of any boundary of the property which is the subject of the application. In the case where any property within 200 feet of the property which is the subject of the application has been submitted to common interest ownership, such as a condominium, the required notice need only be sent to the homeowners' association and to those owners of buildings or dwelling units located within such 200 feet. Evidence of such mailing shall be presented to the Planning Department at or before the public hearing. In addition, the applicant shall post a notification sign provided by the Planning Department on the property at least seven (7) days prior to the date of the public hearing.

3. All applications for a zone change or special permit shall be accompanied by an application for site plan approval unless otherwise waived by the Commission. In addition, an application for site plan approval shall be submitted to the Commission for the development of any varied use and for any site or building modifications to any existing special permit use. Applications for site plan approval shall be accompanied by 8 sets of plans, 24" x 36" in size, at a scale of no less than 1" = 100', and contain all information as listed on the Application Checklist which is included as part of these regulations as Appendix B. The Commission may waive any and all of the information required on a site plan provided enough information is submitted to the Commission to sufficiently determine compliance with these regulations.

4. From time to time requests are received for revisions of or additions to approved site plans and/or special permits, zone changes or stated uses. Such revisions or additions may have minor or major consequences. Such requests will be first screened by the Zoning Enforcement Officer and if he determines such a request to be of minor consequence, he will conditionally approve the request and advise the Commission of his action. Unless the Commission acts to modify his conditional approval, the conditional approval shall become final approval. If the Zoning Enforcement Officer determines such request to have a significant consequence, the request shall be submitted to the Commission for its consideration and action. Following a finding by the Commission that the request has a significant consequence the Commission shall conduct a public hearing prior to its action.

5. Changes in special permit uses shall require Commission approval. (Changes in tenancy for approved uses shall not require an application to the Commission, nor shall changes within any one of the individual categories of special permit uses listed for each zone.)

6. Applications under Section 7. for sign approval shall not require public hearings.

REGULAR MEETING ZONING BOARD OF APPEALS JANUARY 19, 1999 (REVISED MINUTES)

Present were members Lawler, Knapp, Witkin, Perrault, Lindquist, Mazzochi, alternate members Kraiza and Hawkins, the Assistant Town Planner and the Planning Aide. The meeting opened at 10:29 p.m.

KENNETH P. CORRIGAN

Upon motion made and seconded (Mazzochi, Perrault), it was unanimously

VOTED: To approve variance to reduce side yard from required ten feet to 9.5 feet for addition of two car garage, as per plan submitted, for property located at 39 Two Mile Road, R20 zone.

Members cited the applicant's hardship as being his inability to expand the garage to the minimum width necessary to accommodate two cars.

ELIZABETH L. WILDE

Upon motion made and seconded (Perrault, Mazzochi), it was by a vote of five in favor (Lawler, Perrault, Witkin, Lindquist, Mazzochi) to one opposed (Knapp)

VOTED: To grant Elizabeth Wilde a reduction in side yard from an aggregate of 30 feet to an aggregate of 26 feet and in front yard from 40 feet to 21 feet for addition to home, as per plans submitted, located at 13 Colton Street, R20 zone, conditional upon approval by the Historic District Commission.

Members cited the applicant's hardship as being the existing non-conforming status of the house.

OUTLET BROADCASTING, INC./WVIT

Board members Lawler, Perrault, Knapp, Witkin, Kraiza, and Hawkins voted on this item.

Upon a motion made and seconded (Knapp, Witkin) it was by a vote of three in favor (Knapp, Witkin, Kraiza) to three opposed (Lawler, Perrault, Hawkins)

VOTED: to grant Outlet Broadcasting, Inc., /WVIT variance from regulation requiring the base of a tower to be located a minimum distance from any property line at least equal to the height of the tower, as per plan submitted, for property located at 200 Colt Highway, R80 zone. The motion failed.

Members voting against the motion made the following findings:

a) The applicant failed to demonstrate adequate hardship. Members found that the zoning regulations permitted a number of other uses to be made of the property under the R-80 zone. The regulations also permitted the erection of a tower lower in height.

b) The applicant failed to demonstrate that this proposal would conserve the public health, safety, and property values. Members found insufficient evidence that the proposed location of the tower would provide adequate protection for neighboring properties from falling ice or debris. Concerns were also raised about the stability of the proposed starmount antenna design. Finally, it was the Commission's finding that the aesthetic design of the tower and starmount would not be in keeping with the adjoining residential area.

OUTLET BROADCASTING, INC. / WVIT

Board members Mazzochi, Perrault, Witkin, Lindquist, Lawler, and Knapp voted on this item.

Upon a motion made and seconded (Witkin, Knapp) it was by a vote of two in favor (Knapp, Witkin) to four opposed (Lindquist, Lawler, Perrault, Mazzochi)

VOTED: to grant Outlet Broadcasting, Inc./WVIT reduction in the separation of guy wires for radio/TV tower from property line from 100 feet to19 feet, as per plan submitted, for property located at 200 Colt Highway, R80 zone. The motion failed.

Members voting against the proposal cited the same reasons given in the preceding vote.

MINUTES

Upon a motion made and seconded (Witkin, Knapp) the minutes of the December 21, 1998 meeting were unanimously approved.

The meeting adjourned at 11:11 p.m.

OUTLET BROADCASTING HEARING #2, JANUARY 19, 1999

Witkin – "Town of Farmington, Zoning Board of Appeals, notice is hereby given that the Zoning Board of Appeals will hold a public hearing Tuesday, January 19, 1999, at 8 p.m. in the Town Hall Council Chamber on the following application. Outlet Broadcasting Inc., WVIT for reduction in the separation of the guy wires for radio TV tower for property line from 100 feet to 19 feet for property located at 200 Colt Highway, R30 zone. At these hearings interested persons may be heard and written communications received. Copies of these proposals are on file in the Planning Department, Town Hall, Farmington Connecticut, dated at Farmington Connecticut, December 31, 1998, Zoning Board of Appeals, G.V. Lawler Chairman."

Lawler – "May we hear from the applicant."

Reiner – "Good evening ladies and gentlemen. My name is Mike Reiner of Reiner, Reiner and Bendett in Farmington, Connecticut, counsel for the applicant. (Unintelligible) the next one as well. I think we'll be talking about both applications in our presentation."

Lawler – "We have no problem with that."

Reiner – "O.k. So we'll assume that the presentation is for both applications."

Lawler – "I think you need to know that when it comes time to taking action on these two variances we're going to have a different makeup on the board. We'll have six members who were here last time, and then we will have – there'll be a change. Two of the alternates who were voting on the first application will not be voting on the second one."

Reiner – "Very well. I think where we left off the last time was that we had concluded our presentation, however, I'd like to introduce again Tom O'Brien who's President and general manager of WVIT and (unintelligible) applicant."

O'Brien – "Good evening. As Mike mentioned, I'm Tom O'Brien, president and general manager of NBC 30 WVIT, the applicant tonight. We left off last time, we wanted to introduce, reintroduce, some experts that we brought with us to answer any questions you have, or anybody in the audience has, as far as the application goes with the variance for our tower. If I can just introduce the people who are with me, Dave Bondanza, who's WVIT's director of engineering and operations. He handles all the technical details around our transmitter site and at the station. Charlie Zablonski is sitting in the front row. Charlie is NBC's vice president of network engineering and development. Charlie's responsibility's for all of NBC's properties around the world and the United States for engineering and technology. He is incoming president of the Society of Motion Picture and Television Engineers, and is on the Board of the North American Broadcasters Association, so he is very qualified to talk about any technical details. Matthew Vlasidis is the lead engineer, where's Matthew? Matthew is the lead engineer for the NBC 30 tower project. He's an independent engineer, a nationally renowned engineer on tower

Lawler – "So following up on that, the shortest distance is toward the east and you've got 236 feet from the …"

Bondanza – "From the (unintelligible)."

Lawler – "So that's where you need the, that's the major, or that's the worst situation. Any other questions from the Board? Does anyone else wish to speak in favor of the application? Does anyone wish to speak in opposition to the application? Please come forward."

Donohue – "Mr. Chairman, for the record, T.J. Donohue with the firm of Killian and Donohue and Shipman in Hartford. I'm here on behalf of Chase Family Interests and we are pleased and appreciative of the Board's continuance of the part hearing, so that we would have an opportunity to get an expert, retain an expert, and have an expert review the design criteria of this tower. Some of the questions which Mr. Kraiza asked about distances can be shown on this map which we prepared and which highlights the very significant dimension of the variances which are requested here today. The Chases have property which literally abuts this parcel, 2000 running feet. They have property, there is property of approximately an acre which is within the outer guys, which is their experts discussion of what the fall zone is, owned by other people other than the applicant. And then there is an additional 10 acres within a 5, a 50% fall zone, and there's 80 acres within the hundred 100% fall zone presently on your zoning books, which is owned by people other than the applicant. That's excluding the 10 acre piece in there. That's the dimension of the variance which is requested today. We were pleased to have the opportunity to have this reviewed and we did retain Joseph Vellozzi who is a P.E. and a Phd and an national expert on towers. And I think I'd like to call up Joe to give his analysis of the safety and structure and design of this tower as he has reviewed all the criteria and particularly the materials in the book which has been given to you by the applicant."

Vellozzi – "Good evening. My name is Joseph Vellozzi. I'm a consulting engineer…"

Lawler – "Excuse me, can you spell your name?"

Vellozzi – "V as in Victor, e-l-l-o-z-z-i."

Lawler – "Thank you."

Vellozzi – "Like my colleagues I have 35 years of experience in this industry, not dealing just with towers but with other special structures, for example, I engineered the arm in the Statue of Liberty when it was rehabilitated in '85. I worked on other notable structures such as the Golden Gate Bridge, the (unintelligible) observatory radio telescope which is currently being upgraded, and I probably have been involved with over a thousand tower projects over the past 10 or 15 years, where I've concentrated heavily in towers. Let my try to put some of the issues in perspective for your edification. Let's start on tower fall radius. I take exception with one statement made by the applicant in that towers indeed

tend to fall within the confines of the anchors. This is strictly true for towers which are guyed at optimal distances. Normally, a thousand or 1100 foot broadcast tower would have it's outer anchor 500, 600, 700 feet away. This particular tower is what we call steep guyed. Because of the constraints on the property, the guys have been pulled in to the minimum practical angle, and they are quite steep. They are 75 degrees in angle, measured to the vertical. So because the anchors are pulled in, you seem to be led into believing that the tower, if it were to fall, it's going to fall within the confines of the anchors. Towers do not tend to fall straight over. Once the guys lose their strength because they are cut by whatever means, by an aircraft strike or by sabotage, or if a tower begins to fall, the guys are unable to support the tower and it simply dominoes to the ground. 2000 foot towers have collapsed in a radius of 300 feet, which is only 12.5 to 15% of the height of the tower. Other towers, however, have collapsed typically with debris going out as far as 300 feet, which represents 30% of the height of a thousand foot broadcast tower. Whenever there have been significant wind effects involved, such as hurricanes or tornadoes spawned by hurricanes or aircraft strikes sometimes to the tower, the towers have often fell to a radius of 50% of their height. So the potential for a fall radius in the event of a catastrophe albeit it's small but in the event of a catastrophe the fall radius that you have to contend with is a minimum of 30% of the tower height, and it could go as high as 50% of the tower height. I would like to present, while the Board is quite aware of the confines of the property, you're probably more familiar than I am with it, the green parcel is the present Channel 30 site. Typically the guys are running out about 320 feet from the center line of the tower, and the distance to what I call the south is about 200, 250 feet to the property line. The distance to the north when we come to the parcel 5 which is the Chase property, this red zone would be in the 300 foot fall radius. So if the tower were to fall in the 300 foot fall radius it would land on other properties that are highlighted in red. If it were to fall within the 500 foot radius, or 50% of the height, actually 50% of the height is a little bit more than 500 feet if you count the antenna, in that case we start encroaching on a good circumference of the Chase property to the north, the town of Farmington which also contains Will Warrens den, to what I would call the west and of course the quarry property to the south. If you look at the present restriction, you'll notice that the yellow zone which represents the 100 foot buffer zone for whatever reason it's there, to protect property values, ice limits or whatever, it does fall on property that is intended to be developed, at least it shows a subdivision here with various lots. So unless, unless the present zoning law does not have jurisdiction we have a conflict with residential properties to the northwest, if the 100% buffer zone is invoked. I would present further to the Board if you wanted to see some exhibits, I know this is hard to read, I testified to this particular exhibit although I did not present it at my meeting to the Zoning and Planning Board, this is a tower in South Carolina. The height was in the order of 17-, 1800 feet, the outer guy anchors were at 900 foot radius which I have highlighted in yellow, the tower was convected out by the wind where the furthest point on the tower fell 900 feet away. That, that corresponds to a fall radius of 50% of the tower height on this particular collapse."

Kraiza – "Excuse me, was that tower built like this one?"

Vellozzi – "No, this was a straight tower I believe."

Kraiza – "O.k., a straight tower."

Kane – "Would that be in the guy anchors?"

Vellozzi – "It happened to be within the guy anchors, but it's a normally guyed tower. It had three inner guys at 300 feet, three middle guys at 600, and three outer at 900. Our assessment of this is it was probably struck by a tornado, I'm not trying to exaggerate the facts. We don't design for tornadoes, but should a tornado occur, it could occur, and if it brings down the tower there's a possibility that it could convect the damage to 50% fall zone. In the summary of tower failures that were presented to you by the applicant, there's one tower, (unintelligible) TV in Sioux Falls South Dakota, 2000 foot. It happens to have fallen in a point five radius, with the debris going out a thousand feet. That was a tower that was struck by an airplane, it was a light plane, the plane landed safely. Another tower in that particular group KDLT, a 1500 foot tower, fell within a point five radius, that was due to high winds. Where we have towers, Jackson, Mississippi, 2000 foot broadcast tower, this is the mapping that I brought back from the site, the antenna lay within 50 feet of the foundation pier, from 2000 feet up, it only went out 50 feet, but other sections in the tower went out 300 feet. The fall radius is approximately point one seven five. Here's another 2000 foot tower. This happens to be Channel 5, WRAL in Raleigh, North Carolina. It fell due to ice. It fell due to unbalanced ice on the guys. A severe act of god. The ice decided to melt off the south side of the tower, and the imbalance broke the tower. The fall radius on this was 15% of the height."

Lawler – "50%?"

Vellozzi – "15% of the height. There was no wind involved. There's another tower, these are not on the list and that's why I'm highlighting them. This particular tower in Indiana section 18 which was up 400 feet in the tower lay 300 feet away from the tower on the ground. Now that corresponds to a lot more than 30% of the height. The conclusion was that it was struck by a tornado. Because that's the only thing that could have convected the tower out that far. The antenna was 15 feet from the center pier, so it fell straight down. But the fall radius of the debris field on this particular tower, 300 feet and 1000 feet would make it 30%. So again, I'm just reinforcing what we all understand and what we all know, is that yes, towers do fall within the outer anchors, but as you pull in the outer anchors, if you make the tower steep guyed, if anything it's going to fall at a steeper radius, because the guys are much steeper. And how we, how we contend with that issue when we consider all of the adjacent properties, I don't know. I would like to turn my attention now to ice fall. Heavier pieces of ice do tend to fall straight down, but what's heavy and what's light is a matter of, you know, a 800,000 pound aircraft flies at 42,000 feet, a 100,000 pound jet flies at 37,000 feet. They have significant difference in weights but the same characteristics. The thing that determines how far ice goes out is not its weight but its density. Light, well I shouldn't say light, but a half inch of ice, if you form a lot of ice on the candelabra, yes you can have big chunks of ice but if it's two inches in thickness, if you consider the density of the ice and the density of wind that has to accelerate it to move it out, two inches of ice will tend to fall within a 300, and I'm going to go a little bit more, to say 3- to 400 feet. Here's a half inch of ice, half inch thickness,

because it's more like a sail, it could still weigh 30,000 pounds, or it could weigh five pounds, it depends upon it's size, but ice that's in sheets of a half inch thick could easily go out 750 to 1000 feet. The same calculations done for Atlanta, two inches of ice convected in a 28 mile per hour wind at 10 meters: let me put it in perspective. How long does it take the ice to fall from a thousand foot tower? Well if you ask your son or daughter who's just taken physics, they'll say S equals one half AT squared, where A is acceleration and we'll calculate the time because we know the fall. And you get about 10 or 11 seconds, and it's over. So if the wind was blowing at 40 feet per second, and it had 11 seconds to blow on the ice, it should take it out 400 feet. 40 feet per second is 30 miles per hour. But remember, the winds are aloft heavier than they are down at the surface. In any case, it's a little bit more complicated than that because even though ice may tend to fall according to laws of gravity, you reach a point where you reach the terminal speed. So you start getting a thousand foot broadcast towers after they've fallen about 700 feet they reach terminal velocity. So they're airborn a little bit longer. That doesn't mean it goes further because it has more time, because heavier pieces of ice when the wind blows on it, it doesn't move. You've got to overcome the inertia, so what the meteorologist does, he just says what the probability of the wind is, and he convects the ice out at the rate of the speed, but that doesn't happen, because the ice has to accelerate before it catches up with the wind. In any case, in 28 mile per hour wind at 10 meters, two inches of ice is calculated to fall 350 feet. One half inch of ice in a 15 mile wind will go out 500 feet. It's a real fact that light pieces of ice are going to fall onto this subdivision. Whether or not they're going to be alarming or whether they're cause for concern I can't say. They're certainly not going to be 2 inches thick, but they're going to be a half inch thick. The probability and frequency of that event I can't say. It's going to be a rare event, but it will happen. I just want to lend a little bit more credibility to everything you've heard today, here is the bridge in Atlanta. This was used as an exhibit when we got into litigation. This has nothing to do with the building of the bridge. The building of the bridge involved litigation. But eventually because the bridge was built, the state had to come in and sue Cox, the broadcaster, because they condemned their property. O.k.? But, and what we tried to do is move the tower back so they wouldn't have to build a bridge. Cox was so stubborn, they could have gotten a new tower that was steep guyed back here. It would have eliminated the ice problem, it would have saved three million dollars in building the bridge. But nevertheless they held out and they ended up losing, they lost a lot of attorneys' fees because they were stubborn and the bridge got built anyway at three million dollars of taxpayers money, and they lost the case and they're stuck with their tower. But the only thing I want to make is that the bridge at it's furthest point to scale is 450 feet from the center line of the tower. The thickness of the bridge, it's unbelievable, I thought it would be like two inches of concrete. I don't remember the number but it's in the order of like 6 inches. So the bridge was designed with substantial strength, 450 feet away from the tower to protect vehicles from falling ice. So the indication from this is that there's a good probability of having destructive pieces of ice go out 450 feet. By the same token, the bridge at it's closest point is 250 feet away. 250 feet away."

Kraiza – "How high is that tower?"

Vellozzi – "Excuse me?"

Kraiza – "How high is that tower?"

Vellozzi – "A thousand foot. You know that all antennas have to be up at least a thousand feet, or else they're not going to work. Preferably on this mountain you'd want to get up higher. You'd get better television. That's also a statement of fact. I mentioned the issue of the steep guying of the tower. I have computed the angle of the guys, I believe I mentioned 74 degrees. 74.3 degrees. I computed that by taking the pinpoint of the guy at the end of the candelabra, took the horizontal radial distance, and divided that into the vertical distance. In effect that gives me 28%. The guy radius is 32% from the center line of the tower. So just so the record is clear, this is about on the limit of being practical. In other words, the guys are getting so steep, the guy sizes are going up to three inches at the number 4 level, and 3 and 3/8 inches at the number 5 level. There's a multitude of guys at the top so the primary guys are three inches, the (unintelligible) guys at the end of the (unintelligible) candelabra but starmount at 2 and 5/8 inches. Now the reason the guys are getting so heavy and it raises safety issues which the applicant has acknowledged that he will address, and he has not addressed them as of yet, and he doesn't know the consequences of them. What happens because the guys are so steep guyed, in order to resist the horizontal forces they have developed more tension. More tension means bigger guys sizes. A normal tower of this size to support three antennas with proper guying radii, land use permitting, the maximum guy size would be in the order of two, two and half inches maximum. The guy sizes on this tower are three and 3/8, which is more than double the size if you look at the metallic area. You've got to square the diameter. As a result of the steepness which drives up the diameter of the guys, the steepness of the guys raises concerns about the high frequency and the low frequency vibrations. First of all, with guys above three inches, it's beyond the state of the art in controlling high frequency galloping. I mean high frequency aolean vibrations. What aolean vibrations are are the high frequency singing of the guys that could lead to fatigue. It's associated with the Von Karmon vortex street, or the alternating vortices over the guys. And I've had experience with large diameter guys. I've had experience with this on the radio telescope in Puerto Rico, where we have up to 40 Stockbridge dampeners on each cable, and we've been tuning them for over 10 years, to get the dampeners properly spaced, to give the most effective control. And there's no telling with guys of this size and you've got to remember because the guy is heavier it has to have a certain initial tension in it to maintain it's stiffness, and these tensions are in the order of hundreds of thousands of pounds, it's right on the drawing. We have no guarantee that we're going to be able to control the aolean vibrations at that kind of tension, or if we can control it, it's going to take months, maybe years, of tuning the dampeners before we can get the system to work properly. So just assuming that the guys are going to be equipped with high frequency dampeners does not guarantee that they're going to be successful, because we are in a state of the art situation here. I don't think that we can get the dampener clamps for 3 and 3/8 guys. But until we can see that the issues on buckling stability and dynamic stability and that the use of the guy articulation devices have been fully satisfied, there are still concerns regarding the safety issues regarding the tower. The last issue deals with the guy anchors. It is not customary to do final design on guy anchors until you have an approval to build a tower, because then it becomes a waste of time and money. But the guy

anchors on this project are certainly going to be sizable for the forces involved. The forces are exaggerated because of the steepness of the guys. The guy anchors are extremely close to the adjacent property, and without knowing the size and the type of anchor to be used, the owner is very concerned about the effect of the construction of the anchors on his property. I've also been told that there's a requirement that the anchors, and I believe that's the request for a variance tonight that the anchors have to be within what, a hundred feet of the property line, when in fact they are within something presently now like 20, 25 feet of the property line. I'm finished. I don't think I have any more material."

Hawkins – "I have a question. Are there federal standards for guy wire angle standards?"

Vellozzi – "Federal standards? No."

Hawkins – "What is an acceptable range of guy wire angles?"

Vellozzi – "Steep guyed towers have been built with angles of about 30% guyed, well, 35% guying, not 30%, 35."

Hawkins – "So this one is 74%?"

Vellozzi – "No no, either I took about angle or radial distance."

Kraiza – "Well you threw out the number of 74, tell us about that number."

? – "...and you're horrified that it's so steep."

Vellozzi – "O.k., well 74% corresponds to point two eight anchor ratio, 28% of the height."

Kraiza – "Go ahead. So then in his question..."

Vellozzi – "What's normally, well, what's been acceptable in the past is about 35%."

Kraiza – "Meaning a 65 degree angle."

Vellozzi – "About a 65 degree angle. What happens to the cost if you actually look at the cost of the tower as you approach steep guying, the optimum guy angle is typically 55 to 60 degrees. If you get flatter than that, like 45, it's not optimum anymore because the guy starts to become very long. You make the guy horizontal and go to the next planet, it's ineffective. So, 60 degrees is typically optimum. If a person was building a 2000 foot tower when they would go to three anchors they may elect to go to like 55 degrees on the top guy. So, in any case, when you start getting above 60, the cost starts to go up. As you approach 65, it starts to go up very steeply. Sometimes you have to pay that cost because you have land restrictions. Unfortunately, with this case we have zoning problems, other than just land restrictions. But when you start exceeding 70 degrees, I don't know what

happens. I've, I have serious concerns about the buckling capacity of the tower. What we mean by buckling capacity are current codes leading to what we call limit state design approaches. Which means that you have to ensure that you could overload the structure by an agreed to amount, like 40% or 50% before you bring about collapse. And this becomes the reserve capacity. Now, most guyed structures cannot withstand 40, 45% overload because their nonlinear structures, they have P Delta effects. When the wind blows, the structure deflects, and the guys tend to pull it over rather than restore it. So the harder the wind blows, the more deflection. With a steep guyed tower, the deflections increase that much more rapidly. So we are beyond the state of the art, until we examine these buckling and stability issues, which has not been done up to this point. I will go one step further, and, well, it's best I don't say that, but, no, I'm not going to speculate, I'm not going to speculate."

Hawkins – "One more question. The anchor size is directly related to the diameter of the guy as well as the angle?"

Vellozzi – "Well the steeper the angle the bigger the guy, so yes, the bigger the anchor, but it's related to the diameter. It's also related to the type of soil condition that you have."

Lawler – "Thank you. Does the number of the guy lines make a difference as far as whether it's steep or shallow?"

Vellozzi – "I don't know what you mean by the number of guy lines."

Lawler – "Well they're showing here, one two three four five six seven levels of guy wires on this tower. When you're talking, is that a standard number, or how far apart do you put guy wires?"

Vellozzi – "That, that's a matter of design prerogative. Years ago when they built the Baltimore Tower, Dresser Industries when they started to build candelabras, they got into the habit of guying the tower right at the top. And then when they came out with the candelabra they put (unintelligible) guys on it. And then they put arms coming down to support the candelabra. I could design a candelabra that cantilevers out 150 feet from the top guys, and I might use a 12 to 14 foot tower face to carry the torsional loads and unbalanced loads. But that's a matter of design prerogative. It, to answer your question, the number of guy levels doesn't affect the steepness. It's the top guys that affect the steepness. So there might, we're not here to talk about how to design the tower more optimally. But it's possible you could remove some of the steepness effects by lowering the top guys. But then you don't have anything guying the candelabra. And the tower might get heavier."

Lawler – "Any other questions from the Board?"

END OF TAPE ONE, SIDE TWO

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January 19, 1999

Zoning Board of Appeals
Town of Farmington
Town Hall, One Monteith Drive
Farmington, CT 06032-1053

Re: Application of Outlet Broadcast for Variance of "Fall-Zone" Regulation
Application of Outlet Broadcast 30 for Variance of Guy Wire Buffer

Dear Members of the Board:

I represent Chase Family Limited Partnership No. 5, which owns about 108 acres abutting the Outlet Broadcast, Inc. ("OB") property to the west. All of this property is located in the R-80 Zone. An application for an eight-lot subdivision on this parcel is currently pending before the Planning and Zoning Commission. Chase Family Interests No. 7 LLC owns another 20 acres abutting the OB property to the north and east, all of which is also located in the R-80 Zone. The Chase tower is located on this parcel. In addition, Chase interests hold an option on approximately 25 acres of the Wadsworth parcel abutting the OB tower to the east. The following will summarize some of the reasons these abutting owners oppose the OB variance applications regarding the height of the tower and the distance of the guy wires from the property lines.

I. Tower Height

A. Description of Height Variance Sought

The proposed OB tower will be approximately 1124 feet in height, including the large candelabra at the top. Because the parcel is so small (about 10 acres), OB has applied for a variance of Section 1(B)(12) of the Zoning Regulations which limits the height of a tower in the R-80 Zone to the distance between the tower and the property line. The parcel in question is so small that the so-called "fall-zone" requirement is not satisfied with respect to *any* of the parcel's boundaries. Thus, the distances from the tower to the property lines range from approximately 237 feet (21% of the fall-zone) to the east to 459 feet to the south and Will Warren's Den (41% of the fall zone), a public historic attraction maintained by the Town.

B. Purpose of the "Fall-Zone"

There are two primary purposes served by the fall-zone requirement. The first is to protect the property values of all property within the zone by providing an adequate buffer between towers and residential property. The second is to protect all property within the zone from the safety hazards posed by towers. The 100% fall-zone requirement was adopted by Farmington following the erection of the Channel 61 tower in 1984. Last fall, the Chase interests applied to the Town Plan and Zoning Commission for a reduction of the fall-zone requirement from 100% to 50% of the tower height in connection with their application for a much safer tower on a suitable parcel of land which was in excess of 100 acres in size. The Commission unanimously denied the application, finding among other things that the current rule "provides a minimum buffer needed between such different land uses and would tend to protect and maintain property values." Minutes, Town Plan and Zoning Commission, September 21, 1998.

Testimony will be presented at the hearing which will explain that the proposed tower presents unusual safety issues. These are largely because the tower is so steeply guyed, necessitated by the extremely small size of the parcel which was originally intended for a 500-foot tower. Given these very real safety concerns, it would be unreasonable to permit a tower which would result in placing residential property and Will Warren's Den within 21% to 41% of the fall-zone. Moreover, the property owned by Chase Family Interests No. 7 contains the existing Chase tower. The guy wires for that tower would be within approximately 495 feet of the proposed OB tower. A OB tower failure could, therefore, cause the failure of the Chase tower. Safety concerns alone preclude the granting of OB's request for a 75% reduction in the fall-zone.

II. Guy Wires and Anchors

A. Description of Variance Sought

OB seeks a separate variance of the requirement found in Section 1(B)(12) of the Zoning Regulations that all tower guy wires be at least 100 feet from the property line. Because of the height of the tower and the small size of its parcel, OB must place its three guy anchors very close to its property lines. The locations of these anchors violate the 100-foot requirement with respect to *three* common property lines with Chase-owned property and one common property line with the Wadsworth land. The applicant, in reality, is therefore seeking *four* variances. Thus, the proposed eastern guy anchor will be 19 feet from one Chase property line and 35 feet from another (variances of 81% and 65%, respectively); the proposed northeast guy anchor will be 31 feet from another Chase property line (69% variance); and the southeast guy anchor 40 feet from the Wadsworth property (60% variance). *Indeed, the locations of the proposed guy anchors do not even satisfy the normal yard requirements for the R-80 Zone, which requires 50 feet for the front and rear yard, and 40 feet for each side yard.* The applicant is, thus, proposing less of a setback for massive guy wires than would be required for a deck or a porch.

Moreover, there are two guy anchors proposed for each of the three tower legs with three guy wires attaching to the outer guy and four guy wires attaching to the inner guy. The result is that multiple wires will be located within the 100-foot buffer. For example, on the west side of the tower, three guy wires will be within 19 feet of the Chase property, and seven guy wires will be located within approximately 30 feet of the Chase property. The guy wire variances would, thus, if granted, place numerous wires within the 100-foot buffer at three locations, from 19 feet to 35 feet from the Chase property line, and a fourth location, 40 feet from the Wadsworth property. It should also be noted that each guy anchor is part of a large concrete structure, much of which will be located underground. These structures will be even closer to the property lines than the guy anchors themselves. However, as of this writing, the applicant has failed to present any information as to the design or appearance of the guy anchors or the extent of the excavation required for them. This information is necessary not only to evaluate the safety of the tower, but also to understand the impact of the guy anchors on the abutting properties. The application should be denied because of the failure to present such necessary information.

B. Purpose of Guy Wire Buffer

The primary purposes of the guy wire buffer are to protect the property values of abutting property by providing an adequate buffer and protecting abutting property from noise. Here, guy wires are proposed as close as 19 feet to residential property owned by Chase. This property will obviously be impacted by the various types of noise potentially produced by the wires. The four variances, if granted, can be expected to seriously injure the value of the Chase property.

C. Legal Standards For a Variance

Zoning Boards of Appeal are authorized to grant variances pursuant to Conn. Gen. Stat. § 8-6(3) which allows zoning regulations to be varied consistent

> with their general purpose and intent and with due consideration for conserving the public health, safety, convenience, welfare and property values solely with respect to a parcel of land where owing to conditions especially affecting such parcel but not affecting generally the district in which it is situated, a literal enforcement of such bylaws, ordinances or regulations would result in exceptional difficulty or unusual hardship so that substantial justice will be done and the public safety and welfare secured.

As pointed out by Judge Fuller in his treatise *Land Use Law and Practice*, variances of regulations intended to protect public health and safety cannot be granted under the statute. See Fuller, *Land Use Law and Practice*, Chapter 9, pp. 146-147.

Variances can only be granted when necessitated by unusual "hardship." As explained by our Supreme Court on many occasions, the applicant must show

> that because of some peculiar or unique characteristic of his property, the strict application of the zoning regulation produces an unusual hardship, as opposed to the general impact which the regulation has on other properties in the zone.

Fuller, *Land Use and Practice* at p. 155.

Moreover, it has often been held that financial loss or the potential financial advantage or loss of competitive advantage to the applicant cannot be a proper basis for a variance and do not constitute hardship. Similarly, "a variance should not be granted to allow a property owner to implement modern technology to expand a use to allow a business to remain competitive." Fuller, *id* at p. 152.

D. The Standards For a Variance Cannot Be Satisfied By OB

OB has not and cannot satisfy the standards required for the granting of a variance with respect to either of its applications. First, there is absolutely nothing unique about the applicant's property which necessitates the requested variances. The only characteristic of OB's property which has prompted its applications is the fact that it is far too small to satisfy the fall-zone and set-back standards found in the Zoning Regulations. The Zoning Regulations in question affect this property in the same manner as any other undersized parcel in the Town of Farmington. Since there is obviously nothing unique about the size of the parcel, the applications cannot be granted.

Moreover, the hardships cited by OB simply do not constitute legal hardships as defined by our courts. OB argues that advances in technology require the erection of a new, more massive tower and that the alternatives available if such a tower cannot be built will be more costly. However, these are precisely the kinds of claims which have been consistently rejected by the courts. As noted above, neither the desire nor the need to implement modern technology nor financial loss constitute a legal hardship. Since there is nothing unique about the OB property, and since it cannot establish a legal hardship, the variance applications must be denied. The effect of granting these applications would be the establishment of a precedent which would make it difficult, if not impossible, to deny future variance requests under similar circumstances.

E. The Regulations Prohibit the Replacement of One Nonconforming With Another

The applicant proposes to demolish its existing nonconforming tower and replace it with another nonconforming tower. Moreover, the proposed new tower is significantly more massive, would have a greater capacity than the existing tower and would, in addition, house a candelabra at the top. It is important to understand that the size of OB's proposed tower is significantly larger than would be required to accommodate OB's needs only. Instead, it seeks to erect a tower to accommodate other broadcasters, as well as different types of tower users not presently on its existing tower.

Any argument the applicant may make that the variance standards discussed above should not be applied here because of its existing nonconforming tower must be rejected. Indeed, the Farmington Zoning Regulations specifically provide to the contrary. Article IV, Section 1(B)(b) states that a nonconforming structure like the applicant's tower "may not be demolished and replaced by a new nonconforming structure except as provided for in this section." The section allows such replacement only in the case of damage or destruction "by fire, explosion or natural disaster . . ." Article IV, Section 1(B)(c). Furthermore, the proposed tower, if allowed, would violate the well-established principle prohibiting the enlargement or expansion of nonconformities.

This regulation, therefore, not only does not permit this Board to relax its standards in this matter, it actually prohibits the applicant from erecting a new nonconforming tower. Article IV, Section 1(B)(b) furthers the well-established legal principle that nonconformities should be abolished as quickly as possible. If OB's tower is unsafe or outmoded, it should be demolished. OB will find another location or will be forced to co-locate. The Farmington Zoning Regulations, however, forbid the erection of a new nonconforming tower.

Thank you for your consideration.

Yours very truly,

Lewis K. Wise

LKW:pgp

Planning Office

John M. Donahue
39 Pinnacle Road
Farmington, Connecticut 06032
(860) 677-0864

Received 1.11.99
BL

January 12, 1999

Farmington Zoning Board of Appeals
Town Hall
Monteith Drive
Farmington, CT 06032

Dear Board Members:

Re: Channel 30 Tower Variance

As a homeowner at 39 Pinnacle Road, I write on my own behalf and on behalf of my wife, Barbara Donahue, to restate and supplement the statements I made in opposition to the above application at a hearing before your Board on December 21, 1998.

The applicant asks you to grant a variance that you cannot properly grant under the Farmington Zoning Regulations or under applicable rules of law. The variance should be denied for the following reasons:

1. **Not Continuation of Existing Nonconforming Use:** The present Channel 30 Tower on Rattlesnake Mountain properly exists as a nonconforming use since it was built before the Town adopted the one hundred percent fall line requirement in the mid-80s. If the tower were destroyed by explosion or natural disaster, it could be rebuilt with its present dimensions within two years and continue as a nonconforming use. Article IV, Section 1.B.1.c.of the Farmington Zoning Regulations (the "Regulations").

But, of course, that is not what has happened. The applicant proposes to replace the present nonconforming tower with one of equal height but substantially greater mass and with the capacity to serve a larger number of television channels, both analog and digital. Moreover, the proposed tower would have a large triangular "star mount" on its top extending 30 feet on either side of the tower base and would be served by a building larger than the present one.

Clearly, the greatly expanded use of the site cannot be permitted without the variance and the variance sought must meet the normal requirements. There is no provision in the Regulations or the law to relax the normal requirements because of a previously existing nonconforming use similar in nature and the applicant has referred to no precedent justifying such mitigation of the requirements.

2. **No Special Conditions Unique to Applicant's Property:** For a variance to be granted, the applicant must show that there are special circumstances attaching to the applicant's propery which do not apply to other properties in the neighborhood. The simple fact is that the

applicant's property is too small in area to permit the proposed use. The land was acquired decades ago to accommodate a 500 foot TV tower and it falls far short of meeting the one hundred percent fall line requirement for the proposed 1000 foot tower. There is nothing special or unique about the applicant's land other than the deficiency in its size. This shortage of area does not warrant the allowance of the variance.

3. Granting the Variance Would Nullify the Fall Line Requirement: The fall line requirement was adopted after the construction of the present Chase tower in 1984 and its purpose was certainly not to facilitate the constuction of more towers of that magnitude. Its purpose was to ban the constuction of tall towers on small parcels near adjoining residential properties. As recently as September 1998 the Farmington TPZ refused to amend the Regulation to require only fifty percent of tower height in denying the then pending Chase tower application and found that "the current setback specified in the regulations provides a minimum buffer needed between such different land uses and would tend to protect and maintain property values". Minutes TPZ, September 21, 1998.

Since there is nothing unique about the applicant's property, if its variance were granted how could a similar variance be denied for a tower on any other parcel on Rattlesnake Mountain? In fact there would be a precedent for waiving the fall line requirement for any small parcel in the Town on which the owner wished to build a tall tower. In effect the granting of the Channel 30 variance would **nullify** the fall line requirement altogether.

4. Applicant Has Failed to Prove the Requisite Hardship: While denial of the variance might entail the loss of an economic opportunity for Channel 30 and its parent company NBC, economic detriment alone does not constitute a hardship within the meaning of that term as used in the Regulations and as interpreted in numerous court decisions. While the applicant represents that it must meet certain federal requirements of the FCC, no authority has been offered to indicate that the need to comply with a governmental mandate constitutes a hardship to warrant such a major deviation from local zoning as is sought in this application. In fact the FCC itself has recognized that as a general rule local zoning rules should be complied with. FCC Notice of Proposed Rule Making, August 18, 1997 at paragraph 15. It must be concluded that the type of hardship necessary to support the requested variance has not been proven.

5. Granting the Variance Would be Detrimental to Public Welfare: To grant a variance your Board must find that doing so would not entail a "detriment to the public welfare or impairment of the integrity of these regulations", Regulations, Article IV, Section 4.A.3.b. Testimony of neighbors would justify a conclusion that the proposed new tower would be detrimental to the welfare of our neighborhood and the intent of the Regulations in that:

(a) it would replace the present relatively unobtrusive Channel 30 tower with a more massive structure with a heavier

profile topped by an unsightly triangular "star mount";

(b) it would, because of its increased mass, create the potential for noise pollution like that now coming from the Chase tower of similar mass;

(c) There would be danger from falling ice from the tower and the guys, particularly to people walking on the Metacomet Trail, which is used year around;

(d) electro-magnetic waves would create a health hazard, particularly to those with already existing health problems;

(e) the constantly blinking lights constitute a continuing and inescapable annoyance;

(f) all of the above factors combine to reduce and depress property values in the neighborhood.

We appreciate your attention to this controversial and complicated matter. We believe that your personal observation of the mountainside combined with the arguments we present here should lead you to a conclusion that the best interests of the neighbors and the Town are served by denying this application.

Respectfully submitted,

John M. Donahue

Close, Jensen and Miller, P.C.

CONSULTING ENGINEERS, ENVIRONMENTALISTS, LAND PLANNERS AND SURVEYORS

1137 SILAS DEANE HIGHWAY
WETHERSFIELD, CONNECTICUT 06109-4201

(860) 563-9375 FAX (860) 721-1802

December 18, 1998

Mr. David Bondanza
Director, Engineering & Operations
WVIT
1422 New Britain Avenue
West Hartford, CT 06110

Re: Expected noise from proposed Channel 30 Tower

Dear Mr. Bondanza:

At your request I've made an investigation of the probability of a changed noise level resulting from the replacement of the present Channel 30 Tower with a more robust tower of about the same height, but with a "candelabra" structure at the top.

My best estimate, in the limited time available so far, is that the replacement tower probably will not cause a noticeable increase in the noise level. The reasoning goes as follows:

1. Noise complaints have arisen primarily since the erection of the Chase Tower, and it is a reasonable assumption that the Chase Tower is presently the primary source of noise in the neighborhood.

2. If the structure of the proposed Channel 30 Tower were inherently as noisy as the present Chase Tower, and if it were to be built right next to the Chase Tower, then the result would be a doubling of the source sound energy.

3. A doubling of the source energy would result in about a 3 dB increase in sound pressure level at the neighborhood locations.

4. People will generally not notice a 3 dB increase in level. The reason is that human hearing usually spans a range of sound energies of over 10 billion to 1 (100 dB). A doubling of sound energy (3 dB) is a small part of that range, and is hard to notice except under special circumstances as for instance when the sounds are presented one right after the other.

5. But the structure of the proposed Channel 30 Tower is probably inherently less noisy than the present Chase Tower because there is less structure in the candelabra arms at 1,000 feet height of the proposed tower than there is in the 200 feet or so of the Chase Tower that extends above the 1,000 foot height. In addition, the extra 200 feet of structure of the Chase Tower, being at a greater height than the candelabra arms, will generate noise from the larger wind velocity at the higher elevation.

6. Also, since the proposed Channel 30 Tower will not be placed right next to the Chase Tower, but will be in a location more remote from the neighborhood, one would expect something less than the 3 dB increase on this basis alone. (Possible exception for residence south of tower).

Close, Jensen and Miller, P.C.

CONSULTING ENGINEERS, ENVIRONMENTALISTS, LAND PLANNERS AND SURVEYORS

WETHERSFIELD, CONNECTICUT 06109-4201

7. Since a 3 dB increase is not usually noticeable, and since Items 5 and 6 above both suggest that the increase will be less than 3 dB, it seems reasonable to expect no noticeable increase in noise level in the neighborhood resulting from the proposed Channel 30 Tower.

General Information

I have conferred with several neighbors, and am presently on 24 hour call to come and measure the noise if it gets quite loud. Attempts in the past have generally not been successful because by the time I can get my equipment to the site, the wind has died down or changed direction.

I did get some measurements of modest wind noise from both existing towers on December 11, 1998 and December 15, 1998.

It should be noted that we do not know the exact mechanism of the noise generation. The most probable, I believe is the pressure fluctuation caused by vortices that form as air flows past a structural element. The sound is that of a "swish" you hear when you swing a thin rod in the air or the "whoop" you hear when doing the same thing with a (thicker) broomstick. I have written a computer program to predict the theoretical sound level to be received at various locations relative to a tower complex made up of many cylindrical elements such as cross-braces, sections of tower legs or guy wires, etc.

The program predicts that the proposed Channel 30 tower itself, will actually be less noisy than the present Channel 30 tower. The reason for this result is that smaller diameter elements of the present tower create larger A-weighted sound levels than larger elements of the proposed tower. At present we cannot depend too much on this conclusion, however, because some experimental evidence tends to confirm it, but other evidence tends to cast doubt upon it.

It is also apparent that the vortex sound, as modeled by the computer program, does not account for all tower noise. The levels measured during the 20 mph NW wind on December 11th, are in the same general range as those predicted by the computer for that condition, but on December 15th in much lower wind conditions (SSW @ 8 mph) the measured levels were well above the much lower levels predicted by the computer for that low wind velocity. During the low velocity wind test it seemed reasonably apparent that the sound was coming from the Chase tower, rather than the present Channel 30 tower, so there is something that happens in that tower complex that creates an as yet unexplained noise. If that unexplained phenomenon occurs in the proposed Channel 30 tower in proportional fashion, then the reasoning in the first part of this letter is still valid. We should be aware, however, that the unexplained phenomenon might appear to a greater or lesser degree in the proposed tower. The investigation of the noise is still continuing.

Very truly yours,

CLOSE, JENSEN and MILLER, P.C.

William H. Smyers Jr.

William H. Smyers, Jr., P.E.
Chief Acoustical Engineer

TRANSCRIPT
OUTLET BROADCASTING HEARING #1, DECEMBER 21, 1998

Secretary Witkin – "Town of Farmington, Zoning Board of Appeals, notice is hereby given that the Zoning Board of Appeals will hold a public hearing on Monday, December 21st, 1998, at p.m. at the Town Hall Council Chambers on the following applications. Outlet Broadcasting, Inc., WVIT for variance from regulation requiring the base of a tower to be located a minimum distance from any property line at least equal to the height of the tower for property located at 200 Colt Highway, R80 zone. At these hearings interested persons may be heard and written communications received. Copies of these proposals are on file in the Planning Department, Town Hall, Farmington, Connecticut, dated at Farmington, Connecticut, December 3rd, 1998, Zoning Board of Appeals, G.V. Lawler, Chairman. And the copies of the engineering (unintelligible), we all have those."

Chairman Lawler – "May we hear from the applicant?"

Reiner – "Good evening, members of the Board. My name is Mike Reiner of Reiner, Reiner and Bendett of Farmington. We're counsel for Outlet Broadcasting, who is the applicant. The issue before you is whether the applicant, Channel 30, is entitled to a variance of the so-called fall line requirement to construct a new tower on Rattlesnake Mountain. The proposed tower would replace the two existing towers that Channel 30 presently maintains on the same site. This site has been used by Channel 30 for the past 47 years. Channel 30 is an FCC license holder, and as such, is required under FCC regulations to transmit both digital and analog signals (unintelligible). Currently Channel 30 and until recently every other station broadcasts in an analog signal only. The notion is to eventually phase out analog transmission altogether and to only have digital transmission. The problem is that the new dual transmission requirements cannot be effected using the present towers on Channel 30's property on Rattlesnake Mountain. The problem Channel 30 is facing is not self inflicted but instead stems from a federal regulation. The property in question was purchased specifically for one purpose, and has been used always by Channel 30 for its tower needs. In fact, any other use of the property is impossible. The fall line requirement was not in the Town's Zoning Regulations when the previous towers were constructed. You'll hear testimony tonight proving that careful planning and engineering shall accomplish the same safety results we're all concerned about, and which precipitated the fall line requirement."

END OF SIDE ONE, TAPE #1

Reiner – "Channel 30's application is driven by an effort to comply with the new FCC regulations that I just mentioned. If Channel 30 is not able to use its property to build a suitable tower it will suffer (unintelligible) difficulty and undue hardship. This is because stations failing to comply with the FCC's timetable are in danger of losing their authorization to broadcast digitally. Of course, no one challenges the fact that reasonable land use controls are necessary and desirable. However, no one can deny that the FCC's

Lawler – "Thank you. Sir?"

Kelley – "My name is George Kelley. I live at 53 Pinnacle Road, Farmington. I understand how (unintelligible) in terms of safety, so I will try to couch my comments in those terms. I suppose you're not just talking about physical, bodily harm. All the engineers are talking about how this tower's going to fall on somebody, and that's a big concern. Well, being a neighbor, o.k., there's a lot more than just physical bodily harm. Since the Chase tower went up, you know, how many years ago, I know of at least one neighbor who moved out. Sold their house and moved to West Hartford because they were afraid of the radiation hazard. O.k.? So there's a fear right there, o.k., now, maybe they didn't get physically damaged by it, but it was certainly intimidating enough to them to move out, o.k.? I for one am concerned mainly about the noise, o.k., of the additional size of the tower, o.k, that's been a continuing problem in our neighborhood, the additional noise caused by the 61 tower. Now I understand the smaller tower may emit some of these noises also, o.k. The larger tower structure gives off a larger noise. I was somewhat impressed because (unintelligible) been able to find out what this noise, this jet engine noise, for one, o.k.? But I do notice that he says the wind velocity increases as you go higher, significantly more. And I kind of tend to think it's like a guitar string, I mean you know you play it. I have no idea what really causes it. But I was interested to see that the wind velocity does change quite a bit. So just a psychological cause, by this continual noise, there's two types of noise by the way, one's this jet engine noise that everybody alludes to, but there's also another cracking noise that occurs, o.k.? And this is kind of you know really scary, because nobody really knows what that one is either, whether it's a heat and contraction, expansion, somewhat like, I have no idea. But it it's real unnerving, it's kind of like a halyard hitting on a sailboat, you know, a metal mast, it's kind of erratic and difficult. But this, what I'm talking about, is kind of unnerving, you're talking about safety. Your nerves get shot after a while (unintelligible). Also another thing, talking about intimidation, right now, you stand on our property and this is where I'm in favor of the existing fall zone, at least that gives some residents some protection or some…When you stand under the tower and look up, o.k., it's a massive structure. Now 61 right now is a pretty intimidating structure to stand near, even live near, I mean, you're talking about the fear of falling, well that's one thing, o.k.? But then to put this 60 foot dish at the top? I mean, you know, just think of this psychologically what it does to you. Here you've got, normally you think of a building to be built structurally sound like a pyramid. Well now you're proposing I understand you know, a stick with this huge thing on top of it. And believe me, living under that, you know, just the thought alone of it is intimidating, it's scary. I mean if you just look up and you think this thing is going to come down. Another safety issue that is very real, o.k., we're talking about designs and how the wind increases as you go up. Last year, I think, maybe the year before, we had serious ice, icing, o.k., with wind, o.k. We lost our, we lost a couple of trees and everything else like that. But also off the 61 tower, o.k., you could hear crashing through the woods as the sun melted off the shards of ice off the guy wires and off the tower itself. All the more reason, o.k., to maintain the fall zone, o.k., as a safe distance from this tower, because anything underneath the tower, you get a little bit of wind and that falling ice, o.k., and it's, you're going to get more than bodily harm, I mean it's going to fall

down on adjoining property. I'm not an engineer. I don't know how much wind it takes to push a shard of ice off the top of a 60 foot structure down a thousand feet where's it going to end up. Maybe one of your engineers can answer that. But that's another very real safety issue and a concern that I think you should be aware of in making this determination. Also in, one of the gentleman testified of course there's a real esthetic difference between the proposed tower and the new tower. I like what Mr. Donahue said, I mean, a world of difference, there really is a big difference. Thank you."

Lawler – "Thank you."

Reiner – "Mr. Chairman? I know this is when the opposition speaks but we do have experts here on health issues and noise issues, if you'd like a response…"

Lawler – "I'd like to here from anyone else who wishes to oppose first, and then we'll give you an opportunity to rebut. Sir would you take the microphone?"

Michaelis –"Ray Michaelis, 84 Pinnacle Road."

Lawler – "I'm sorry, your first name?"

Michaelis – "Ray Michaelis. My wife and I moved to Pinnacle Orchard in 85. In 91 (unintelligible) and I went through about 8 hours of brain surgery, followed up with 30 days of bone marrow transplant, for, they found brain tumors, brain cancer, cancerous brain tumors. And research isn't good enough to say it's due to a tower or anything else, but it's one thing I always, it's something I always speculate, o.k., is it a tower, is it a cellular phone, or what. We can't say what was the cause of it. But I'd just say from to this day I certainly am concerned for my children, the children in the neighborhood and other residents in the neighborhood of, you know, who have pacemakers or other things (unintelligible). Health and safety standpoint there's a concern for turning down the application of (unintelligible) of what's going on here. There is a health concern here for the residents in the neighborhood (unintelligible)."

Lawler – "Does anyone else wish to speak in opposition to the application?"

Peters – "Recently I learned that there was another resident on Pinnacle Road that had brain surgery for a tumor. That's 2 within 10 houses of each other."

Lawler - "Does anyone else wish to be heard in opposition? Sir would you come forward?"

Matarazzo – "My name is Sebastian Matarazzo. I live at 5 Pinnacle Road. In 1990, my wife had a liver transplant. And going through all what we've been going through as far as radiation and everything else. We've had a problem since her transplant. And the doctors more or less asked us what our location was to towers. And we said we live in an area where we have towers. And he says, if anything further goes on there, we'll have to move because of her health. And I think anybody else that has had that problem agrees

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
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July 26, 1999

Joseph L. Hammer, Esq.
Day, Berry & Howard LLP
CityPlace I
185 Asylum Street
Hartford, CT 06103-3499

Re: TS-OUTLET-052-990629 - Outlet Broadcasting request for an order to approve tower sharing for the replacement of an existing facility and removal of an existing facility located on Rattlesnake Mountain in the Town of Farmington, Connecticut

Dear Attorney Hammer:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than August 2, 1999. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 20 copies to this office. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Yours very truly,

Jenice L. Holmes

Jenice L. Holmes
Secretary I

JLH

c: Council Members
Thomas J. Wontorek, Town Manager, Town of Farmington
Lewis K. Wise, Rogin, Nassau, Caplan, Lassman, & Hirtle, LLC
Peter J. Tyrrell, Levy & Droney, P.C.
John M. Donahue
Howard Slater, Murtha, Cullina, Richter, and Pinney
Thomas J. Donohue, Killian and Donohue, LLC
Mark F. Kohler, Assistant Attorney General

FILE COPY

Town of Farmington

1. Provide the Town of Farmington's Plan of Development and the relevant sections of the Town's Zoning Regulations which govern the proposed replacement of the Outlet telecommunications tower.

2. Provide all information relative to Outlet's variance application made to the Farmington Zoning Board of Appeals (ZBA). Specifically, provide any information or data which supports the ZBA's concerns for falling ice and debris; the stability of the proposed star mount antenna design; the lack of continuity of the proposed design with neighboring properties; and that the structural design of the tower would meet only minimal standards.

3. Provide any information regarding the acoustical effects of other towers in the area?

4. What is the relief sought in the application request recently filed by Chase Family Interests No. 7 LLC with the Town of Farmington for the construction of a new tower?

5. Is there a master plan for the development of telecommunications towers in Farmington and specifically on Rattlesnake Mountain?

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Phone: (860) 827-2935
Fax: (860) 827-2950

July 26, 1999

Lewis K. Wise, Esq.
Rogin, Nassau, Caplan, Lassman, & Hirtle, LLC
Cityplace I, 22nd Floor
185 Asylum Street
Hartford, CT 06103-3460

Re: TS-OUTLET-052-990629 - Outlet Broadcasting request for an order to approve tower sharing for the replacement of an existing facility and removal of an existing facility located on Rattlesnake Mountain in the Town of Farmington, Connecticut

Dear Attorney Wise:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than August 2, 1999. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 20 copies to this office. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Yours very truly,

Jenice L. Holmes

Jenice L. Holmes
Secretary I

JLH

c: Council Members
Thomas J. Wontorek, Town Manager, Town of Farmington
Peter J. Tyrrell, Levy & Droney, P.C.
Joseph L. Hammer, Day, Berry, and Howard
John M. Donahue
Howard Slater, Murtha, Cullina, Richter, and Pinney
Thomas J. Donohue, Killian and Donohue, LLC
Mark F. Kohler, Assistant Attorney General

FILE COPY

Chase Family Limited Partnership No. 7 LLC (Chase No. 7).

1. Provide the application recently filed by Chase No. 7 with the Town of Farmington for the construction of a new tower?

2. Provide a map depicting the proposed new tower, guy wire anchors, and equipment buildings; existing towers and associated equipment; and the fall zone of the proposed tower. Identify all land uses, the location of the Metacomet Trail, and property owners within the fall zone of the proposed tower.

3. If the proposed variance for the construction of a new tower on the Chase No. 7 parcel is approved by the Farmington Zoning Board of Appeals, would this new tower be able to accommodate both WVIT and WEDH broadcast antennas? Would the existing Chase tower be removed?

4. Based on Outlet's proposed antenna loading schematic, what are the differences in antenna loading capacity between Outlet's proposed tower and Chase No. 7's proposed tower? What is the projected service life of Chase No. 7's proposed tower? Does Chase No. 7 propose to use the star mount system on the proposed tower?

5. Would the acoustical effects generated by Chase No. 7's proposed tower differ substantially from the acoustical effects generated by the proposed Outlet tower?

6. Has Chase No. 7 received Federal Aviation Administration (FAA) approval for the proposed tower? Describe the FAA lighting and marking requirements for the proposed Chase No. 7 tower and the existing tower. How would the FAA lighting and marking requirements for the proposed Chase No. 7 tower differ from the proposed Outlet tower?

7. Explain what "serious safety concerns" are raised by the "small size" of the Outlet parcel and the proposed "highly unusual guying".

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 26, 1999

Peter J. Tyrrell, Esq.
Levy & Droney, P.C.
Pond View Corporate Center
74 Batterson Park Road
Farmington, CT 06032

Re: TS-OUTLET-052-990629 - Outlet Broadcasting request for an order to approve tower sharing for the replacement of an existing facility and removal of an existing facility located on Rattlesnake Mountain in the Town of Farmington, Connecticut

Dear Attorney Tyrrell:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than August 2, 1999. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 20 copies to this office. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Yours very truly,

Jenice L. Holmes

Jenice L. Holmes
Secretary I

JLH

c: Council Members
Thomas J. Wontorek, Town Manager, Town of Farmington
Lewis K. Wise, Rogin, Nassau, Caplan, Lassman, & Hirtle, LLC
Joseph L. Hammer, Day, Berry, and Howard
John M. Donahue
Howard Slater, Murtha, Cullina, Richter, and Pinney
Thomas J. Donohue, Killian and Donohue, LLC
Mark F. Kohler, Assistant Attorney General

FILE COPY

Outlet Broadcasting Inc.

1. Provide a map(s) depicting the proposed replacement tower, guy wire anchors, and equipment buildings; existing towers and associated equipment; and the fall zones of the existing and proposed towers. Identify all land uses, the location of the Metacomet Trail, and property owners within the fall zone of the proposed tower.

2. Was a study completed to determine the maximum increase in noise generated by the proposed facility including the acoustical effect of wind on the proposed structure and guy wires, and noise that would be generated by the electronic and HVAC equipment. If so, what is the predicted maximum increase, occurrence frequency, and duration of noise from the proposed facility? What mitigation measures would be employed for noise control?

3. In addition to an antenna(s) on the third position of the star mount system, how much additional capacity can be accommodated on the proposed replacement tower for tower sharing? What is the projected service life of the proposed replacement tower?

4. Describe the Federal Aviation Administration (FAA) lighting and marking requirements for the existing tower and the proposed replacement tower.

5. What is the diameter of the existing and proposed guy wires? Explain how the angle of the guy wires may affect the structural integrity or capacity of the proposed tower.

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 16, 1999

Peter J. Tyrrell
Levy & Droney, P.C.
Pond View Corporate Center
74 Batterson Park Road
Farmington, CT 06032

Re: TS-OUTLET-052-990629 - Outlet Broadcasting request for an order to approve tower sharing for the replacement of an existing facility and removal of an existing facility located on Rattlesnake Mountain in the Town of Farmington, Connecticut

Dear Mr. Tyrrell:

The Connecticut Siting Council (Council) requests that representatives of Outlet Broadcasting Inc. (Outlet) and all interested persons attend a technical conference at the office of the Council, Ten Franklin Square, New Britain, Connecticut to be held at 10:00 a.m. on August 4, 1999. At this technical conference, the Council seeks to discuss the replacement and sharing of the Outlet tower.

Prior to this technical conference, the Council requests all interested persons to respond to interrogatories intended to develop a factual record to help decide this case. All filings to the Council must consist of an original and twenty copies. Fewer copies of bulk material may be provided as appropriate.

The Council also intends on holding a public hearing in the Town of Farmington to substantiate all information through cross-examination after all interrogatories have been answered. The time, date, and location of this hearing will be announced and noticed with sufficient time to enable all interested persons an opportunity to participate.

Please contact me if you have any questions regarding this process. Thank you for your attention and cooperation.

Very truly yours,

Joel M. Rinebold
Executive Director

JMR/tsg

c: Council Members
Thomas J. Wontorek, Town Manager, Town of Farmington
Lewis K. Wise, Rogin, Nassau, Caplan, Lassman, & Hirtle, LLC
Joseph L. Hammer, Day, Berry, and Howard
John M. Donahue
Howard Slater, Murtha, Cullina, Richter, and Pinney
Thomas J. Donohue, Killian and Donohue, LLC
Mark F. Kohler, Assistant Attorney General

L:\siting\cm\outlet\july16

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

PETER J. TYRRELL
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July 15, 1999

via HAND DELIVERY

RECEIVED
JUL 15 1999
CONNECTICUT
SITING COUNCIL

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Chairman Gelston:

Yesterday, attorneys for the Chase Family filed a letter in opposition to NBC-30's Request for shared use of a facility or its intent to erect an exempt facility. The Chase Family claims improprieties in NBC-30's failure to mail Chase a copy of its Request and seeks a public hearing to address this and other related issues.

The Chase Family is wholly mistaken in its filing. It seems to characterize NBC-30's request as a zoning application which must be served on abutters and is subject to a public hearing.

CGS § 16-50aa is not a zoning statute. It is a State regulatory mechanism that seeks to encourage and, if necessary, order the sharing of towers to avoid their proliferation across Connecticut. It is a statute that affects property rights of existing tower owners. Hence, a Request by NBC-30 seeks to invoke governmental approval of a governmentally inspired action -- the shared use of a tower. The statute requires no notice and no hearing. No parties are mentioned or contemplated.

> CGS § 16-50aa(c)(1) states:
> An owner of a facility which agrees to shared use of the facility... may request in writing that the council approve the proposed shared use of the facility. If the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use.

This statute contemplates interaction between the tower owner and the State; it does not allow a contested hearing. The Council's findings derive from its own review. NBC-30 Request has complied with all these requirements. This statute permits a proceeding to occur only if a dispute arises whether a tower can be shared, or on what terms, or at what price. The General Assembly permitted a proceeding in those limited circumstances, and no other.

NBC-30, in filing to state its intent to erect an exempt facility, is simply seeking an acknowledgment by the Council that its action complies with the Council's Regulations. Similarly, no notice and no hearing are required pursuant to these Regulations.

The only citation given by the Chase Family for its claim is a reference to Regulations § 16-50j-14, which section governs "contested cases". The Chase Family seeks to turn what has been, in previous filings, a confirmation that the private action of tower sharing meets governmental rules into a town meeting or hearing. This is not a contested case. It should not be made one.

As the Chase Family's filing makes clear, they are seeking Town of Farmington's variances to construct a third tower on Rattlesnake Mountain in excess of 1300 feet high. Apparently, NBC-30's Request places their third tower site in jeopardy, as NBC-30 has no plans to join the Chase tower, as the Chase Family implies in its letter, nor remove its existing tower other than through this instant Request. The Chase Family raises "safety concerns" about the guying of the NBC-30

tower. Their concerns are illusory. First, the proposed tower is a replacement tower for the existing facility which has been in operation without incident for 23 years. Second, the construction plans have been designed by one of the country's top tower design and fabrication companies and have been certified by a professional engineer.

NBC-30 strongly objects to the Chase Family's attempt to interpose itself into a State encouraged activity to the detriment of the public interest. NBC-30, as a federally licensed broadcaster, is attempting to meet two public interest mandates: first, a Federal mandate to offer digital television this year in Connecticut, and second, to share its tower as directed by State law. The Chase Family is not a broadcaster, it is a privately owned, commercial realty development enterprise seeking to erect speculative vertical real estate -- the 1300 foot tower.

The tower sharing and exempt modification procedure has served the telecommunications industry and the public interest well. It has reduced the growth of towers in Connecticut. Let us not follow the misplaced call of the private interests and derail State policy. NBC-30 urges the Council to consider the filing on its merits without a hearing and without delay.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

Peter J. Tyrrell

PJT:kmd

cc: Lewis K. Wise, Esq.

U:\WPC\COMM\PJT\Letters\Siting Council 2.wpd

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JONATHAN M. STARBLE
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Of Counsel
JEROME E. CAPLAN
EDWIN A. LASSMAN

Retired
EDWARD S. ROGIN
LOUIS E. NASSAU

July 14, 1999

VIA FACSIMILE 827 2950 and REGULAR MAIL

RECEIVED
JUL 15 1999
CONNECTICUT
SITING COUNCIL

Connecticut Siting Council
ATTENTION: Joel M. Rinebold, Executive Director
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order (1) approving the shared use of a facility pursuant to C.G.S. § 16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

I represent Chase Family Limited Partnership No. 5 ("Chase No. 5") which owns approximately 108 acres abutting Outlet Broadcasting, Inc.'s NBC-30 ("Outlet") tower to the west. In addition, I represent Chase Family Interests No. 7 LLC ("Chase No. 7") which owns another twenty (20) acres abutting Outlet's tower site to the north and east. This 20-acre parcel is the site of an existing telecommunications tower approximately 1300 feet in height.

This is to advise you that, despite my clients' status as abutting owners of Outlet's property, Outlet failed to mail to them a copy of its Request for an Order dated June 29, 1999 (the "Outlet Request") which we believe was required under the statute and regulations governing the Siting Council procedures. My clients were only notified several days ago by the Town of Farmington of the filing of Outlet's Request and consequently have had little time to prepare a detailed response to the filing.

My clients strongly request that the Council schedule a public hearing on the Outlet Request. Not only does the Outlet Request raise serious and obvious jurisdictional and other legal issues, but also the new tower proposed by Outlet is considerably larger than Outlet's existing tower. Because of the small size of the Outlet parcel, the proposed tower will require highly unusual guying which raises serious safety concerns given the proximity of the Chase properties and tower. Moreover, the Council should be aware that the Chase interests have recently applied for a variance with the Farmington Zoning Board of Appeals in order to erect a new tower on the Chase No. 7 parcel which, unlike the

proposed Outlet tower, will have the capacity to consolidate *all* area television broadcasters onto one tower, including NBC-30 as well as numerous other users, thereby obviating the need to erect any additional towers.

Given the seriousness of the jurisdictional issues presented by Outlet's Request, the unusual safety concerns raised as a result of the small size of Outlet's parcel, and the "co-location" opportunities which may be possible if the Chase proposed tower is approved, a public hearing should be scheduled at which all interested parties may be heard.

Please be advised that, given their status as abutting owners, my clients hereby request that they be designated as parties pursuant to Section 16-50j-14.

Thank you for your consideration.

Yours very truly,

Lewis K. Wise

LKW:pgp
cc: Peter J. Tyrrell, Esq. (via facsimile 676 3200)
Joseph L. Hammer, Esq. (via facsimile 275 0343)

DAY, BERRY & HOWARD LLP

Counsellors at Law
Hartford, Stamford and Boston

CityPlace I
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Connecticut 06103-3499
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Facsimile (860) 275-0343
Internet jlhammer@dbh.com

July 14, 1999

Joseph L. Hammer
(860) 275-0391

RECEIVED
JUL 15 1999
CONNECTICUT
SITING COUNCIL

VIA FACSIMILE AND OVERNIGHT MAIL

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Request By Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to Conn. Gen. Stat. § 16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Regs. Conn. State Agencies §16-50-72(b)(2) and 73.

Dear Chairman Gelston:

We are writing on behalf of the Town of Farmington ("Town") in response to the above-referenced request dated June 29, 1999 by Outlet Broadcasting, Inc. ("Outlet").

The Town of Farmington ("Town") objects to Outlet's request and respectfully requests that the Siting Council schedule a public hearing affording the Town an opportunity to present evidence, testimony and comment and address legal issues prior to taking action on Outlet's request. Further, please note that it is the Town's intent to request party status pursuant to Regs. Conn. State Agencies § 16-50j-14(a) in connection with the Siting Council's consideration of Outlet's request.

There are several existing towers in the area in question. The area is in close proximity to numerous residential homes. The tower proposed by Outlet in its request was the subject of a variance application made to the Farmington Zoning Board of Appeals ("ZBA") and denied on January 19, 1999. Through its application for a variance, Outlet sought a variance from the setback requirements for towers under the Farmington Zoning Regulations. Absent the variance, the Farmington Zoning Regulations would not allow the construction of the proposed tower. Following the ZBA's denial of the variance application, Outlet filed an appeal to the Connecticut Superior Court which is still pending. In denying the variance application, the ZBA (i) found a lack of sufficient evidence demonstrating adequate protection for neighboring properties from falling ice or debris from the tower; (ii) expressed concerns regarding the stability of the proposed starmount antenna design; (iii) found that the tower and antenna design were not in keeping with the adjoining residential area; and (iv) received testimony that the structural design of the tower would meet only minimal standards. Please also note that at previous hearings for

other towers in this area, there has been extensive testimony regarding noise emanating from existing towers. In addition, an adjoining property owner, Chase Family Interests No. 7 LLC, has recently filed an application with the Town to construct a new tower.

We understand that Outlet's request is on the Siting Council's agenda for its July 15, 1999 meeting. The Town has not had an opportunity to study Outlet's request in detail or to explore the legal issues presented by the request. We respectfully request that you not take any action on the application at your July 15 meeting other than to schedule a public hearing at which the Town will have an opportunity to comment, present evidence and address legal issues, including the significant issues of whether the proposed tower is within the Siting Council's jurisdiction and, if so, whether the proposed construction constitutes an exempt activity pursuant to Conn. Regs. State Agency §§ 16-50j-72(b)(2) and 73. Further, at a public hearing the Town would have the opportunity to provide evidence and comment on the nature of the surrounding area, the location of other existing and proposed towers, safety issues, noise issues and other potential adverse impacts on the surrounding area. Given the 1,000 foot height of the proposed tower, the significant impacts which it may have on the surrounding area, and the fact that Outlet through its earlier zoning application recognized the zoning jurisdiction of the Town of Farmington, we submit that it is essential to conduct a public hearing on Outlet's request.

Very truly yours,

Joseph L. Hammer

JLH/pll

cc: Dean M. Cordiano, Esq.
Thomas J. Wontorek
Jeffrey Ollendorf

JOHN M. DONAHUE
39 Pinnacle Road
Farmington, CT 06032
860-677-0864

RECEIVED
JUL 14 1999
CONNECTICUT
SITING COUNCIL

July 13,1999

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Channel 30 Tower Application

Dear Mr. Chairman:

As a resident of 39 Pinnacle Road, Farmington, I write on behalf of myself and my neighbors to put before you certain facts and background relative to the above application. I discussed the application with your Executive Director, Joel Rinebolt, yesterday and he suggested it would be helpful to have the following information before you at your meeting on Thursday, July 15:

1. Channel 30 in December 1998 sought a variance from the Farmington Zoning Board of Appeal ("ZBA") to construct the type of tower which is the subject of this application. A variance was requested because the proposed new tower failed to meet the one hundred percent fall-line requirement of the Farmington zoning ordinance.

2. At the ZBA hearing on the requested variance residents of the neighborhood and other residents of the Town of Farmington opposed the variance and the constuction of the Channel 30 tower on these grounds, among others:

(a) The proposed tower would replace the present relatively unobtrusive Channel 30 tower with a more massive structure with a much heavier profile topped by an unsightly triangular "star mount";

(b) It would, because of its increased mass, create the potential for noise pollution like that which now comes from the Chase Channel 61 tower of similar mass;

(c) There would be danger from falling ice from the tower and the guys, particulatly to walkers on the Metacomet Trail, which is used year around;

(d) Electro-magnetic waves could create a health hazard, particulkaly to those with already existing heath problems and pacemakers;

(e) The constanly blinking lights in combination with those on the Channel 61 tower constitute a continuing and inescapable annoyance;

(f) all of the above factors combine to reduce and depress propery values in the neighborhood.

3. At a meeting on January 19, 1999, the ZBA denied the variance sought by Channel 30 and found:

> "The applicant failed to demonstrate that this proposal would conserve the public health, safety and property values. Members found insufficient evidence that the proposed location of the tower would provide adequate protection for neighboring properties from falling ice or debris. Concerns were also raised about the stability of the proposed starmount antenna design. Finally it was the Commission's finding that the aesthetic design of the tower and starmount would not be in keeping with with the adjoining residential area and may negatively impact the property values of the surrounding homes."

4. Channel 30 appealed the denial of the variance to the Superior Court and the appeal has not yet been acted upon.

5. The Chase Family Interests ("Chase") already has a massive tower of over 1,300 feet (the "Channel 61 Tower") on Rattlesnake Mountain near the site of the proposed new Channel 30 Tower. It was built in 1984 and was the subject of litigation brought by members of our neighborhood.

6. In the spring/summer of 1998 Chase applied to the Farmington Planning and Zoning Commission ("TPZ") for approval of a new 1,700 foot tower near the existing Channel 61 Tower. This was to be in addition to and not in replacement of the Channel 61 Tower. Chase asked TPZ to change the fall-line requiremet of the ordinance to fifty (rather than one hundred) feet of tower height.

7. After strenuous objection from the neighbors, residents of the Town and the Connecticut Park and Forest Association, TPZ on September 21, 1998 rejected Chase's application for a 1,700 foot tower, stating:

> "....(T)he reduction of the present setback for towers stated in the regulation would reduce protection of adjacent residential developments from a number of externalities. These include falling ice from the tower structure and guys, undesirable noise and light. Members also concluded from the evidence submitted that the reduction of the setback (fall zone) would possibly present a safety problem in the event of tower collapse. The Commission members lastly felt that the curent setback specified in the regulations provided a minimum buffer needed between such different land uses and would tend to protect and maintain propery values."

8. Chase did not appeal from the TPZ's September 1998 denial of its application.

9. Chase has now (this month) filed with the Farmington ZBA a request for the construction of a new tower of some 1,500 feet near the Channel 61 tower. He seeks a variance, as did Channel 30, from the one hundred percent fall-line requirement. A hearing on this application to ZBA is scheduled for September 21, 1999.

This letter is written hastily in order to put some of the relevant facts before the Council at your July 15 meeting. The issue of towers on Rattlesnake Mountain has a long, complicated and controversial background.

I request the Council's leave to file further information and arguments with respect to this application and to request a public hearing at which the views of the residents may be presented, if and when such a public hearing seems necessary or appropriate.

Respecfully Submitted,

John M. Donahue

DAY, BERRY & HOWARD LLP

Counsellors at Law
Hartford, Stamford and Boston

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Joseph L. Hammer
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July 14, 1999

RECEIVED
JUL 14 1999
CONNECTICUT
SITING COUNCIL

VIA FACSIMILE AND OVERNIGHT MAIL

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Request By Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to Conn. Gen. Stat. § 16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Regs. Conn. State Agencies §16-50-72(b)(2) and 73.

Dear Chairman Gelston:

We are writing on behalf of the Town of Farmington ("Town") in response to the above-referenced request dated June 29, 1999 by Outlet Broadcasting, Inc. ("Outlet").

The Town of Farmington ("Town") objects to Outlet's request and respectfully requests that the Siting Council schedule a public hearing affording the Town an opportunity to present evidence, testimony and comment and address legal issues prior to taking action on Outlet's request. Further, please note that it is the Town's intent to request party status pursuant to Regs. Conn. State Agencies § 16-50j-14(a) in connection with the Siting Council's consideration of Outlet's request.

There are several existing towers in the area in question. The area is in close proximity to numerous residential homes. The tower proposed by Outlet in its request was the subject of a variance application made to the Farmington Zoning Board of Appeals ("ZBA") and denied on January 19, 1999. Through its application for a variance, Outlet sought a variance from the setback requirements for towers under the Farmington Zoning Regulations. Absent the variance, the Farmington Zoning Regulations would not allow the construction of the proposed tower. Following the ZBA's denial of the variance application, Outlet filed an appeal to the Connecticut Superior Court which is still pending. In denying the variance application, the ZBA (i) found a lack of sufficient evidence demonstrating adequate protection for neighboring properties from falling ice or debris from the tower; (ii) expressed concerns regarding the stability of the proposed starmount antenna design; (iii) found that the tower and antenna design were not in keeping with the adjoining residential area; and (iv) received testimony that the structural design of the tower would meet only minimal standards. Please also note that at previous hearings for

other towers in this area, there has been extensive testimony regarding noise emanating from existing towers. In addition, an adjoining property owner, Chase Family Interests No. 7 LLC, has recently filed an application with the Town to construct a new tower.

We understand that Outlet's request is on the Siting Council's agenda for its July 15, 1999 meeting. The Town has not had an opportunity to study Outlet's request in detail or to explore the legal issues presented by the request. We respectfully request that you not take any action on the application at your July 15 meeting other than to schedule a public hearing at which the Town will have an opportunity to comment, present evidence and address legal issues, including the significant issues of whether the proposed tower is within the Siting Council's jurisdiction and, if so, whether the proposed construction constitutes an exempt activity pursuant to Conn. Regs. State Agency §§ 16-50j-72(b)(2) and 73. Further, at a public hearing the Town would have the opportunity to provide evidence and comment on the nature of the surrounding area, the location of other existing and proposed towers, safety issues, noise issues and other potential adverse impacts on the surrounding area. Given the 1,000 foot height of the proposed tower, the significant impacts which it may have on the surrounding area, and the fact that Outlet through its earlier zoning application recognized the zoning jurisdiction of the Town of Farmington, we submit that it is essential to conduct a public hearing on Outlet's request.

Very truly yours,

Joseph L. Hammer

JLH/pll

cc: Dean M. Cordiano, Esq.
Thomas J. Wontorek
Jeffrey Ollendorf

ROGIN, NASSAU, CAPLAN, LASSMAN & HIRTLE, LLC
ATTORNEYS AT LAW

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ELIZABETH R. HOUDE
JONATHAN M. STARBLE
MONIQUE R. POLIDORO

Of Counsel
JEROME E. CAPLAN
EDWIN A. LASSMAN

Retired
EDWARD S. ROGIN
LOUIS E. NASSAU

July 14, 1999

RECEIVED
JUL 14 1999
CONNECTICUT
SITING COUNCIL

VIA FACSIMILE 827 2950 and REGULAR MAIL

Connecticut Siting Council
ATTENTION: Joel M. Rinebold, Executive Director
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order (1) approving the shared use of a facility pursuant to C.G.S. § 16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Mr. Rinebold:

I represent Chase Family Limited Partnership No. 5 ("Chase No. 5") which owns approximately 108 acres abutting Outlet Broadcasting, Inc.'s NBC-30 ("Outlet") tower to the west. In addition, I represent Chase Family Interests No. 7 LLC ("Chase No. 7") which owns another twenty (20) acres abutting Outlet's tower site to the north and east. This 20-acre parcel is the site of an existing telecommunications tower approximately 1300 feet in height.

This is to advise you that, despite my clients' status as abutting owners of Outlet's property, Outlet failed to mail to them a copy of its Request for an Order dated June 29, 1999 (the "Outlet Request") which we believe was required under the statute and regulations governing the Siting Council procedures. My clients were only notified several days ago by the Town of Farmington of the filing of Outlet's Request and consequently have had little time to prepare a detailed response to the filing.

My clients strongly request that the Council schedule a public hearing on the Outlet Request. Not only does the Outlet Request raise serious and obvious jurisdictional and other legal issues, but also the new tower proposed by Outlet is considerably larger than Outlet's existing tower. Because of the small size of the Outlet parcel, the proposed tower will require highly unusual guying which raises serious safety concerns given the proximity of the Chase properties and tower. Moreover, the Council should be aware that the Chase interests have recently applied for a variance with the Farmington Zoning Board of Appeals in order to erect a new tower on the Chase No. 7 parcel which, unlike the

ROGIN, NASSAU, CAPLAN, LASSMAN & HIRTLE, LLC

proposed Outlet tower, will have the capacity to consolidate *all* area television broadcasters onto one tower, including NBC-30 as well as numerous other users, thereby obviating the need to erect any additional towers.

Given the seriousness of the jurisdictional issues presented by Outlet's Request, the unusual safety concerns raised as a result of the small size of Outlet's parcel, and the "co-location" opportunities which may be possible if the Chase proposed tower is approved, a public hearing should be scheduled at which all interested parties may be heard.

Please be advised that, given their status as abutting owners, my clients hereby request that they be designated as parties pursuant to Section 16-50j-14.

Thank you for your consideration.

Yours very truly,

Lewis K. Wise

LKW:pgp
cc: Peter J. Tyrrell, Esq. (via facsimile 676 3200)
Joseph L. Hammer, Esq. (via facsimile 275 0343)

ROGIN, NASSAU, CAPLAN, LASSMAN & HIRTLE, LLC
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Of Counsel
JEROME E. CAPLAN
EDWIN A. LASSMAN

Retired
EDWARD S. ROGIN
LOUIS E. NASSAU

FACSIMILE TRANSMISSION

TO: Joel M. Rinebold — FAX NO.: 827 2950
Peter J. Tyrrell — 676 3200
Joseph L. Hammer — 275 0343

FROM: Lewis K. Wise

DATE: July 14, 1999

NO. OF PAGES (including cover sheet): 3

REMARKS: ☒Urgent ☐For your review ☐Reply ASAP ☐Please comment

Comments:

☒Original or hard copy to follow by regular mail
☐Facsimile only; Original will not follow
☐Enclosures to follow by regular mail

If there are any problems in receiving this message, please call us at (860) 278-7480.

This facsimile contains PRIVILEGED AND CONFIDENTIAL INFORMATION intended only for the use of the addressee(s) named above. If you have received this facsimile in error, you are requested to do the following:

1. Do not read the contents of this facsimile.
2. Promptly call our office to advise of the improper transmission.
3. Please mail the facsimile to its sender at the above address. We will gladly refund your postage.

Thank you.

7-13-99

To Joel Rinebolt
Fr John Donahue

Here is my letter for our telephone of yesterday. Hard copy is in mail.

Our home fax was not working well yesterday - okay now.

But today all day I'll be at
Hartford Foundation for Public Giving
Phone 548-1888 Fax 524-8346
Please fax regulations we discussed there addressed to me.

Thanks for your help

John Donahue

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JUL 13 1999
CONNECTICUT
SITING COUNCIL

4 pages including this

JOHN M. DONAHUE
39 Pinnacle Road
Farmington, CT 06032
860-677-0864

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JUL 13 1999
CONNECTICUT
SITING COUNCIL

July 13,1999

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Channel 30 Tower Application

Dear Mr. Chairman:

As a resident of 39 Pinnacle Road, Farmington, I write on behalf of myself and my neighbors to put before you certain facts and background relative to the above application. I discussed the application with your Executive Director, Joel Rinebolt, yesterday and he suggested it would be helpful to have the following information before you at your meeting on Thursday, July 15:

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2. At the ZBA hearing on the requested variance residents of the neighborhood and other residents of the Town of Farmington opposed the variance and the constuction of the Channel 30 tower on these grounds, among others:

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I request the Council's leave to file further information and arguments with respect to this application and to request a public hearing at which the views of the residents may be presented, if and when such a public hearing seems necessary or appropriate.

Respectfully Submitted,

John M. Donahue

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 7, 1999

Honorable Thomas J. Wontorek
Town Manager
Town of Farmington
Town Hall
1 Monteith Drive
Farmington, CT 06032-1053

RE: TS-OUTLET-052-990629 - Outlet Broadcasting request for an order to approve tower sharing for the replacement of an existing facility and removal of an existing facility located on Rattlesnake Mountain in the Town of Farmington, Connecticut.

Dear Mr. Wontorek:

On June 29, 1999, the Connecticut Siting Council (Council) received a request from Outlet Broadcasting for an order to approve tower sharing and modify an existing telecommunications facility located in the Town of Farmington, Connecticut, pursuant to Connecticut General Statues § 16-50aa and Regulations of Connecticut State Agencies 16-50j-72.

The Council will consider this item at the next meeting scheduled for Thursday, July 15, 1999, at 1:30 p.m., in Hearing Room Three, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal. Thank you for your cooperation and consideration.

Very truly yours,

Joel M. Rinebold
Executive Director

JMR/tsg

Enclosure: Request for Tower Sharing

L:siting\outlet\farmington\wontorek.doc

PETER J. TYRRELL
EMail: ptyrrell@ldlaw.com
Direct Dial
(860) 676-3069

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

August 2, 1999

via UPS OVERNIGHT No: N406-841-994-7

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

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SITING COUNCIL

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Chairman Gelston:

Please find enclosed Outlet's Responses to the Council's Interrogatories.

Respectfully submitted,

LEVY & DRONEY, P.C.

Peter J. Tyrrell

PJT:kmd
Enclosures

cc: All participants

Connecticut Siting Council
Outlet Broadcasting
Set 1

1. Provide a map(s) depicting the proposed replacement tower, guy wire anchors and equipment buildings; existing towers and associated equipment; and the fall zones of the existing and proposed towers. Identify all land uses, the location of the Metacomet Trail, and property owners within the fall zone of the proposed tower.

Ans. The requested map is being prepared by Hodge Associates of Farmington, Connecticut and will be submitted when completed. There are no existing residential properties within the NBC-30 fall zone. However, subsequent to Farmington Zoning Board of Appeal's denial of a variance to NBC-30 on January 19, 1999, the Farmington Planning and Zoning Commission approved a subdivision within the fall zone. The subdivision was proposed by a Chase Family entity.

2. Was a study completed to determine the maximum increase in noise generated by the proposed facility including the acoustical effect of wind on the proposed structure and guy wires, and noise that would be generated by the electronic and HVAC equipment? If so, what is the predicted maximum increase, occurrence frequency and duration of noise from the proposed facility? What mitigation measures would be employed for noise control?

Ans. The attached Noise Evaluation was completed by Close, Jensen and Miller, P.C. of Wethersfield, Connecticut in January, 1999. The study concluded that less than a 3 dB increase in noise may result and since a 3 dB noise increase is usually not noticeable, it is reasonable to expect that no noticeable increase in the noise level will result from the proposed NBC-30 tower.

NBC-30 also plans to add vibration dampening and suppression devices to the guy wires to further reduce the noise level.

NOISE EVALUATION

PROPOSED CHANNEL 30

TRANSMISSION TOWER

FARMINGTON, CONNECTICUT

JANUARY 1999

Close, Jensen and Miller, P.C.
Wethersfield, Connecticut

Channel 30 (NBC) proposes to replace its existing transmission tower on Rattlesnake Mountain with a stronger tower of the same height, but with a starmount structure at the top.

The following evaluation indicates that there will probably be a small increase in noise level that will not be noticeable to the adjacent neighborhoods if the present tower is replaced with the proposed one.

The area is shown in Figure 1. The Chase Tower to the north has about the same width (12 ft. sides) as the proposed Channel 30 Tower, and it has a structure height of about 1,200 ft. compared to the 1,000 ft. height of the existing and proposed Channel 30 Towers.

There is no doubt that the present Chase Tower, upon occasion, can be a source of considerable noise. On Saturday, January 9, 1999, at about 9:30 AM test measurements were made at various locations near the tower. Traffic and other extraneous noise was negligible at the noted locations. The temperature had been below freezing, but was slightly above freezing during the tests. A warm front was moving in from the south, and the Chase Tower was not visible because of a layer of fog. The location of the tower was well known, however, from previous visits. There was a relatively steady dull roar that emanated from the sky in the direction of the Chase Tower. The sound pressure level was generally in the range of 52 to 55 dB(A) throughout the area as shown on page 1 of Appendix A. The noise level varied slightly in the same manner as the wind changed.

The wind, as estimated from the 9, 10, & 11 o'clock recordings at the three nearest airports, was from about 10 degrees west of south at about 10 miles per hour. A continuous time history of the noise level stored in the recording sound level meter is shown on page 2 of Appendix A. The circled numbers are labeled as "events" by the sound level meter, and they correspond to the various locations shown in Figure 1.

The sound level meter is a Cirrus Research Labs., Model 702. Type I (precision) meter, calibrated before and after at 94 dB.

These noise levels are quite substantial considering the relatively low wind velocity, and it is understandable that neighbors would be concerned about a possible increase.

Unfortunately, a calculated prediction of the wind noise to be generated by a structure such as a tower, appears to be beyond the state of the art at present. Therefore, the evaluation of the expected noise from the proposed Channel 30 Tower can best be estimated by comparison with the existing Chase Tower as follows:

If the structure of the proposed Channel 30 Tower were inherently as noisy as the present Chase Tower, and if it were to be built right next to the Chase Tower, then the result would be a doubling of the source sound energy.

A doubling of the source energy would result in about a 3 dB increase in sound pressure level at the neighborhood locations.

People will generally not notice a 3 dB increase in level. The reason is that human hearing usually spans a range of sound energies of over 10 billion to 1 (100 dB). A doubling of sound energy (3 dB) is a small part of that range, and is hard to notice except under special circumstances as for instance when the sounds are presented one right after the other.

But the structure of the proposed Channel 30 Tower is probably inherently less noisy than the present Chase Tower because there is less structure in the starmount arms at the 1,000 feet height of the proposed tower than there is in the 200 feet or so of the Chase Tower that extends above the 1,000 foot height. In addition, the extra 200 feet of structure of the Chase Tower, being at a greater height than the starmount arms, will generate noise from the larger wind velocity at the higher elevation.

Also, since the proposed Channel 30 Tower will not be placed right next to the Chase Tower, but will be in a location more remote from the neighborhood, one would expect something less than the 3 dB increase on this basis alone. (Possible exception for residence south of tower).

At the location of the proposed Channel 30 Tower, any sound radiating from about the lower 1/3 of the tower is blocked from line of sight and thereby reduced in intensity by the brow of the hill for most of the neighborhoods.

Since a 3 dB increase is usually not noticeable, and since the last 3 paragraphs all indicate that the proposed tower will be less noisy than the Chase Tower and will, therefore, create less than a 3 dB increase, it seems reasonable to expect no noticeable increase in the noise level resulting from the proposed Channel 30 Tower.

COMPUTER ANALYSIS

An attempt was made to extend the state of the art by using the theoretical sound level and frequency that is supposed to be generated by wind flowing across a cylindrical object. The program attempts to simulate the tower and guy wires as a multitude of short cylinders, stacked end to end and otherwise arranged in space. Each piece of cylinder has its own:

- elevation and hence wind velocity
- diameter
- orientation with respect to wind and hence it own component of wind velocity perpendicular to its axis
- slant distance to neighborhood receiver location

The summation of the noise generated by all the pieces of cylinders yields a calculated noise level for each of several neighborhood locations.

This mechanism of sound generation the pressure variations arising from vortices of air forming alternatively on each side, downstream of the cylinder. It is the "swish" that one hears when whipping a thin rod in the air, or the lower frequency "whup" sound caused by a larger cylinder such as a broomstick.

There have been three occasions when tower noise was measured. On December 11, 1998, in a wind of 20 mph from 20 degrees west of north, the program predicted sound levels that were in the same general range as those measured. However, on December 15, 1998 and particularly on January 9, 1999, at much lower wind velocities of 8 and 10 mph and from 20 and 10 degrees west of south respectively, the program drastically under-predicted the actual measured sound level.

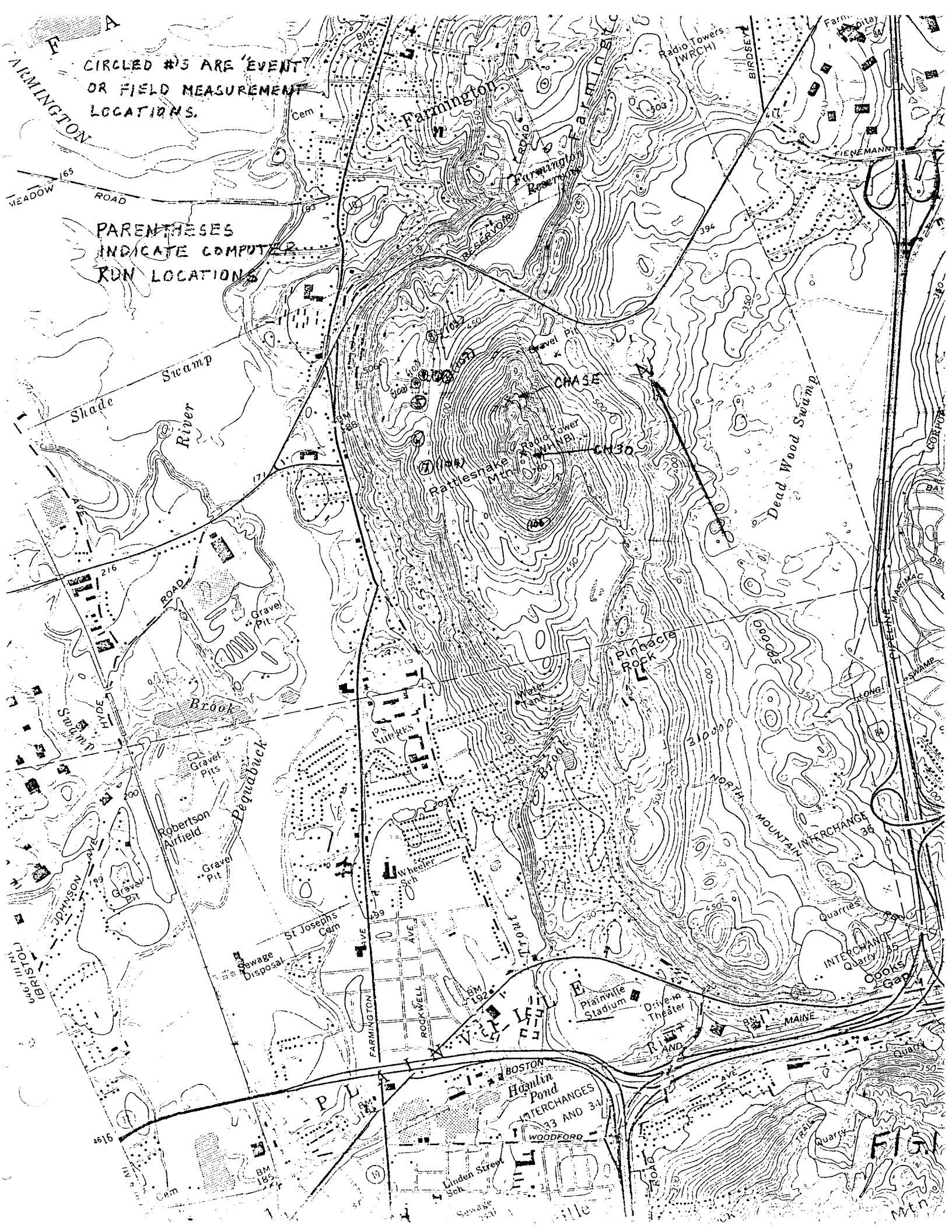
It must be concluded therefore, that there is some mechanism of noise generation in the Chase Tower, that is presently unknown. There are many possibilities and a very extensive investigation would be required to track them down.

The proposed Channel 30 Tower, while increasing in width to the size of the Chase Tower, is not expected to have as much extra equipment hanging on it, and it will retain the present Channel 30 Tower features of round diagonals instead of back to back L's and K braces of the Chase Tower. It is also planned to use round co-axial leads instead of the rectangular wave guides of the Chase Tower. In case any of these features happen to be related to the noise levels generated by the Chase Tower, then there is extra reason to expect a lower level from the proposed Channel 30 Tower.

A sample computer run for the Chase Tower is included as Appendix B for general interest, but the program is not capable of predicting the levels caused by various wind conditions.

At present, the best estimate for the noise from the proposed Channel 30 Tower can only be by the previous comparison to the present Chase Tower, and is expected to be less than 3 dB(A), and probably not noticeable.

William H. Smyers Jr., P.E.


FARMINGTON
CIRCLED #'S ARE 'EVENT' OR FIELD MEASUREMENT LOCATIONS.
PARENTHESES INDICATE COMPUTER RUN LOCATIONS
Farmington
Cem
Radio Towers (WRCH)
BIRDSEYE
FIENEMANN
MEADOW ROAD
Farmington Reservoir
RESERVOIR
Gravel Pit
CHASE
CH30
Radio Tower (WHNB)
Rattlesnake Mtn
Shade Swamp
River
Dead Wood Swamp
Pinnacle Rock
Water Tank
Brook
Gravel Pits
Robertson Airfield
Pequabuck
Wheeler Sch
St Josephs Cem
Sewage Disposal
Trout
Brook
NORTH MOUNTAIN
INTERCHANGE 36
Quarries
INTERCHANGE 35
Cooks Gap
Plainville Stadium
Drive-in Theater
MAINE
BOSTON
Hanlin Pond
INTERCHANGES 33 AND 34
WOODFORD
Linden Street Sch
Quarry
FIG. 1

APPENDIX A.

FIELD MEASUREMENTS 1/9/99

Close Jensen and Miller P.C. WIND ≈ SLOW @ 10 MPH

CRL 702 014408

Baud	9600		
Range	40.0-122.3	Weighting	A
Time Constant	Fast (JAN.9)	Ln	Fast
Reset Time	10:34:42 (9: EST.) 9/01/99	Battery	Ok
Time Integrator	.12 sec	# Events	8

	Run	Stop	110.0 Thresh.	Overload
Time	10:36	01:25	00:00	00:00 hr:min:sec

	Peak	Max	Min	Cal 1	Offset 1	Cal 2
Level	107.6	84.3	48.3	0 +	.0	0 dB
Time	11:07	10:41	10:35	00:00		00:00 hr:min

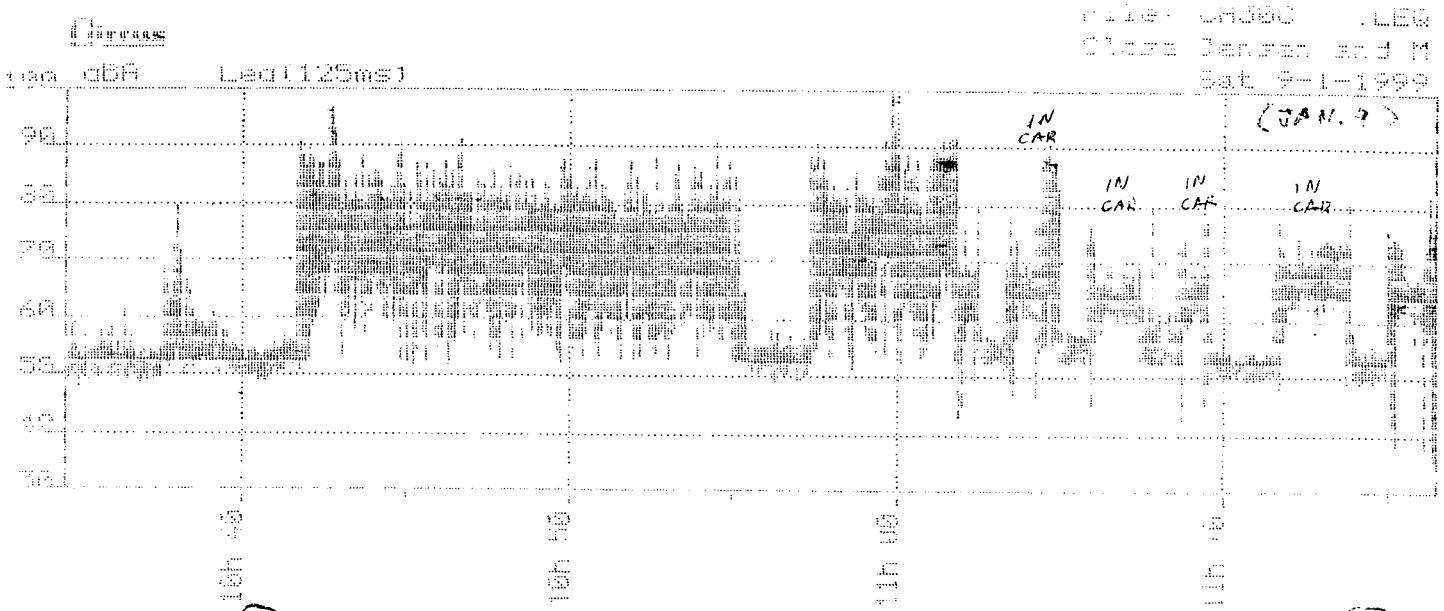
Total	Start	Run Time	Leq	L 01	L 05	L 10	L 50	L 90	Max
3dB	10:34	10:36	57.0	59.5	56.2	55.2	52.5	50.5	84.3

Event		Start	Run Time	Leq	L 01	L 05	L 10	L 50	L 90	Max	
1	3dB	10:34	02:40	52.8	56.8	54.7	53.8	51.7	50.1	61.6	FRONT LUKACH
2	3dB	10:39	02:27	59.4	68.0	55.4	54.6	52.5	50.5	84.3	½ WAYBACK "
3	3dB	10:55	00:01	54.6	.0	.0	55.8	54.2	52.4	56.0	REAR "
4	3dB	11:02	00:47	55.2	57.7	56.7	56.0	54.3	52.8	58.8	CORNER PINNACLE RIDGE
5	3dB	11:04	00:51	61.3	70.0	57.0	56.5	54.6	53.1	83.9	CUL-DE-SAC @TURN (WIRES)
6	3dB	11:07	00:56	58.6	64.0	59.7	58.7	54.6	53.0	80.3	½ WAY DOWN RD.
7	3dB	11:09	01:54	52.5	54.6	53.7	53.3	51.8	50.3	56.4	EXTREME S. END (WIRES)
8	3dB	11:13	00:57	52.7	55.7	54.7	53.9	51.8	50.1	56.5	½ WAY N. ON PINNACLE

No Traffic noise for these --

No measurement @ extreme N. on Pinnacle or @ Tower Rd. entrance where traffic noise predominated.

FIELD MEASUREMENTS
TIME HISTORY



① FRONT LUKACH

② ½ WAY BACK LUKACH

TALKING TO MR. LUKACH

③ REAR EDGE LUKACH

IN CAR

④ CORNER PINNACLE RIDGE

⑤ CUL-DE-SAC @ TURN (WIRES)

⑥ ½ WAY DOWN RD

⑦ END PINNACLE (WIRES)

⑧ ½ WAY N. ON PINNACLE

APPENDIX B

RERUN 1/9/99

CHASE TOWER

TWN
TOWER WIND NOISE COMPUTER PROGRAM
CLOSE, JENSEN & MILLER
WETHERSFIELD, CT 06109

CHASE TOWER
TWWV8CCW
WIND FROM N 20 00 00.0 W AT 20 MPH

RECEPTOR LOCATION: PT 95--AT PROPOSED TOWER LOCATION

N.E.GUYS	(BOTTOM TO TOP)						
13.7	13.6	15.5	18.9	19.3	20.5	24.5	
TOTAL	28.1						
S.E.GUYS							
-36.0	-9.1	4.1	13.0	14.9	18.3	23.9	
TOTAL	25.7						
W. GUYS							
15.7	15.3	17.0	20.1	20.6	21.8	25.7	
TOTAL	29.4						
TWR LEGS	(BOTTOM TO TOP SECTIONS)						
-9.8(3)	-4.0(3)	-7.4(3)	-6.1(3)	-8.0(3)	-7.1(3)	1.0(3)	-1.2(3)
-3.4(3)	1.4(3)	1.8(3)	-1.2(3)	5.5(3)	2.1(3)	0.9(3)	10.7(3)
11.5(3)							
TOTAL	16.0						
ELV.CABL							
38.1(2)							
TOTAL	38.1						
ELV.COND							
33.9							
TOTAL	33.9						
LGTNG RD							
31.8							
TOTAL	31.8						
CONDUITS							
29.2(3)	21.9(2)						
TOTAL	29.9						
UTIL CND							
31.8							
TOTAL	31.8						
ELV.RLS							
30.7(2)							
TOTAL	30.7						
K-BRACES							
23.8(5)							
TOTAL	23.8						
TOTAL AT LOCATION: PT 95--AT PROPOSED TOWER LOCATION							42.1

RECEPTOR LOCATION: PT 16---25 FT. FROM CHASE TOWER BOTTOM

```
.E.GUYS
   28.4      24.7      24.6      26.5      25.6      26.1      29.6
   TOTAL     35.3
S.E.GUYS
  -25.3      -1.9       9.4      17.2      17.2      20.0      25.2
   TOTAL     27.4
W. GUYS
   28.7      24.9      24.7      26.5      25.7      26.2      29.6
   TOTAL     35.4
TWR LEGS
   18.7(3)   15.2(3)    5.8(3)    5.3(3)    2.2(3)    2.5(3)    9.3(3)    5.5(3)
    2.6(3)    7.0(3)    6.7(3)    3.2(3)    9.5(3)    5.7(3)    4.3(3)   13.6(3)
   13.8(3)
   TOTAL     23.1
ELV.CABL
   50.8(2)
   TOTAL     50.8
ELV.COND
   46.5
   TOTAL     46.5
LGTNG RD
   44.1
   TOTAL     44.1
CONDUITS
   41.2(3)   33.8(2)
   TOTAL     42.0
JTIL CND
   44.1
   TOTAL     44.1
ELV.RLS
   43.0(2)
   TOTAL     43.0
K-BRACES
   35.3(5)
   TOTAL     35.3
```

TOTAL AT LOCATION: PT 16---25 FT. FROM CHASE TOWER BOTTOM 54.2

MEASURED 56.9
(AT FENCE)

RECEPTOR LOCATION: PT 107- BACK YARD LUKACH/DONNAHUE

E.GUYS							
13.9	13.6	15.4	18.6	19.1	20.3	24.3	
TOTAL	27.9						
S.E.GUYS							
-41.3	-14.3	-0.9	8.2	9.6	13.1	18.9	
TOTAL	20.6						
W. GUYS							
17.8	16.9	18.3	21.2	22.1	23.1	27.0	
TOTAL	30.7						
TWR LEGS							
-10.8(3)	-5.1(3)	-8.7(3)	-7.5(3)	-9.4(3)	-8.5(3)	-0.4(3)	-2.7(3)
-4.9(3)	0.0(3)	0.3(3)	-2.6(3)	4.0(3)	0.7(3)	-0.5(3)	9.3(3)
10.2(3)							
TOTAL	14.6						
ELV.CABL							
36.7(2)							
TOTAL	36.7						
ELV.COND							
32.5							
TOTAL	32.5						
LGTNG RD							
30.4							
TOTAL	30.4						
CONDUITS							
27.8(3)	20.5(2)						
TOTAL	28.5						
GTIL CND							
30.4							
TOTAL	30.4						
ELV.RLS							
29.3(2)							
TOTAL	29.3						
K-BRACES							
22.4(5)							
TOTAL	22.4						

TOTAL AT LOCATION: PT 107- BACK YARD LUKACH/DONNAHUE 40.9

MEASURED 49.2

RECEPTOR LOCATION: PT 106-- WAY SOUTH OF TOWERS

.E.GUYS							
6.6	6.5	8.5	12.1	12.9	14.4	18.7	
TOTAL	21.9						
S.E.GUYS							
-46.1	-19.0	-5.5	3.8	5.7	9.4	15.5	
TOTAL	17.0						
W. GUYS							
8.6	8.2	10.0	13.4	14.3	15.8	20.0	
TOTAL	23.2						
TWR LEGS							
-17.8(3)	-11.9(3)	-15.3(3)	-13.9(3)	-15.8(3)	-14.7(3)	-6.5(3)	-8.5(3)
-10.5(3)	-5.6(3)	-5.0(3)	-7.8(3)	-1.0(3)	-4.2(3)	-5.2(3)	4.8(3)
6.2(3)							
TOTAL	10.0						
ELV.CABL							
31.4(2)							
TOTAL	31.4						
ELV.COND							
27.3							
TOTAL	27.3						
LGTNG RD							
25.3							
TOTAL	25.3						
CONDUITS							
22.6(3)	15.4(2)						
TOTAL	23.4						
GRTL CND							
25.3							
TOTAL	25.3						
ELV.RLS							
24.2(2)							
TOTAL	24.2						
K-BRACES							
17.3(5)							
TOTAL	17.3						
TOTAL AT LOCATION: PT 106-- WAY SOUTH OF TOWERS							35.5

RECEPTOR LOCATION: PT 104-- EXTREME S. END OF PINNACLE

..E.GUYS							
6.9	6.8	8.8	12.4	13.2	14.7	19.0	
TOTAL	22.1						
S.E.GUYS							
-46.7	-19.5	-6.0	3.3	5.1	8.8	14.9	
TOTAL	16.4						
W. GUYS							
9.7	9.2	10.9	14.2	15.3	16.6	20.9	
TOTAL	24.1						
TWR LEGS							
-17.6(3)	-11.7(3)	-15.1(3)	-13.8(3)	-15.6(3)	-14.6(3)	-6.4(3)	-8.4(3)
-10.4(3)	-5.5(3)	-4.9(3)	-7.7(3)	-0.9(3)	-4.1(3)	-5.2(3)	4.9(3)
6.2(3)							
TOTAL	10.1						
ELV.CABL							
31.6(2)							
TOTAL	31.6						
ELV.COND							
27.4							
TOTAL	27.4						
LGTNG RD							
25.4							
TOTAL	25.4						
CONDUITS							
22.7(3)	15.5(2)						
TOTAL	23.5						
UTIL CND							
25.4							
TOTAL	25.4						
ELV.RLS							
24.3(2)							
TOTAL	24.3						
K-BRACES							
17.4(5)							
TOTAL	17.4						
TOTAL AT LOCATION: PT 104-- EXTREME S. END OF PINNACLE							35.7

RECEPTOR LOCATION: PT 100, SOUTHERLY ON PINNACLE

..E.GUYS							
8.5	8.3	10.3	13.8	14.6	16.1	20.3	
TOTAL	23.5						
S.E.GUYS							
-45.8	-18.6	-5.1	4.2	5.9	9.6	15.6	
TOTAL	17.2						
W. GUYS							
11.4	10.8	12.5	15.8	16.9	18.2	22.3	
TOTAL	25.7						
TWR LEGS							
-16.2(3)	-10.4(3)	-13.8(3)	-12.5(3)	-14.3(3)	-13.3(3)	-5.1(3)	-7.1(3)
-9.2(3)	-4.2(3)	-3.7(3)	-6.6(3)	0.2(3)	-3.0(3)	-4.0(3)	6.0(3)
7.2(3)							
TOTAL	11.2						
ELV.CABL							
32.7(2)							
TOTAL	32.7						
ELV.COND							
28.5							
TOTAL	28.5						
LGTNG RD							
26.5							
TOTAL	26.5						
CONDUITS							
23.9(3)	16.6(2)						
TOTAL	24.6						
UTIL CND							
26.5							
TOTAL	26.5						
ELV.RLS							
25.4(2)							
TOTAL	25.4						
K-BRACES							
18.6(5)							
TOTAL	18.6						
TOTAL AT LOCATION: PT 100, SOUTHERLY ON PINNACLE							36.9

RECEPTOR LOCATION: PT 101, BETWEEN LUKACH & DONNAHUE

..E.GUYS							
9.2	9.0	11.0	14.5	15.3	16.7	21.0	
TOTAL	24.2						
S.E.GUYS							
-45.4	-18.3	-4.8	4.5	6.2	9.9	15.9	
TOTAL	17.5						
W. GUYS							
11.9	11.3	13.0	16.3	17.3	18.6	22.8	
TOTAL	26.1						
TWR LEGS							
-15.7(3)	-9.8(3)	-13.3(3)	-11.9(3)	-13.8(3)	-12.8(3)	-4.6(3)	-6.6(3)
-8.7(3)	-3.8(3)	-3.3(3)	-6.1(3)	0.7(3)	-2.5(3)	-3.6(3)	6.4(3)
7.6(3)							
TOTAL	11.6						
ELV.CABL							
33.2(2)							
TOTAL	33.2						
ELV.COND							
29.0							
TOTAL	29.0						
LGTNG RD							
27.0							
TOTAL	27.0						
CONDUITS							
24.3(3)	17.1(2)						
TOTAL	25.1						
UTIL CND							
27.0							
TOTAL	27.0						
ELV.RLS							
25.9(2)							
TOTAL	25.9						
K-BRACES							
19.0(5)							
TOTAL	19.0						
TOTAL AT LOCATION: PT 101, BETWEEN LUKACH & DONNAHUE							37.3

RECEPTOR LOCATION: PT 102, NORTHERLY ON PINNACLE

N.E.GUYS							
9.7	9.4	11.4	14.9	15.7	17.1	21.3	
TOTAL	24.6						
S.E.GUYS							
-45.5	-18.4	-4.9	4.4	6.1	9.8	15.8	
TOTAL	17.4						
W. GUYS							
11.6	11.1	12.7	16.0	17.0	18.3	22.4	
TOTAL	25.8						
TWR LEGS							
-15.6(3)	-9.8(3)	-13.2(3)	-11.9(3)	-13.7(3)	-12.7(3)	-4.6(3)	-6.6(3)
-8.7(3)	-3.7(3)	-3.3(3)	-6.1(3)	0.7(3)	-2.5(3)	-3.6(3)	6.4(3)
7.6(3)							
TOTAL	11.6						
ELV.CABL							
33.2(2)							
TOTAL	33.2						
ELV.COND							
29.0							
TOTAL	29.0						
LGTNG RD							
27.0							
TOTAL	27.0						
CONDUITS							
24.3(3)	17.1(2)						
TOTAL	25.1						
UTIL CND							
27.0							
TOTAL	27.0						
ELV.RLS							
25.9(2)							
TOTAL	25.9						
K-BRACES							
19.0(5)							
TOTAL	19.0						
TOTAL AT LOCATION: PT 102, NORTHERLY ON PINNACLE							37.3

3. In addition to an antenna(s) on the third position of the star mount system, how much additional capacity can be accommodated on the proposed replacement tower for tower sharing? What is the projected service life of the proposed replacement tower?

Ans. As towers of this type are individually designed, added capacity of a known amount can be included in the design. As a proxy for unknown future users, 20% additional weight in the star mount system was assumed for design purposes. Furthermore, up to twelve PCS type antennas could be attached at the 150 foot level.

The service life is designed to be sixty years. Attached is a listing of towers designed by Kline Towers.

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

QUESTION 3

LIST OF KLINE TOWERS - BY STATE

Alabama		
WDBB-TV	Tuscaloosa	2000 Ft.
WSFA-TV	Montgomery	2000 Ft.
WHOA-TV	Montgomery	1745.6 Ft.
WALA-TV	Mobile	1197 Ft.
WBRC-TV	Birmingham	986 Ft.
WNAL-TV	Gadsden	961 Ft.
WKAB-TV	Montgomery	729 Ft.
WJSU-TV	Anniston	502 Ft.
Alaska		
Arizona		
Arkansas		
KAIT-TV	Jonesboro	1793 Ft.
California		
KSBW-TV	Salinas	1554 Ft.
Mt. Sutro	San Francisco	970 Ft.
KCBS-TV	Mt. Wilson	899 Ft.
KICU-TV	San Jose	652 Ft.
KNBC-TV	Mt. Wilson	450 Ft. (Major Modifications to existing Structure)
KMPH-TV	Wilsonia	432 Ft.
KTLA-TV	Mt. Wilson	409 Ft.
KDTV	Mt. Allison	439 Ft.
KTTV	Mt. Wilson	140 Ft.
Colorado		
NOAA	Boulder	300 Meters
Connecticut		
Delaware		
District of Columbia		
WRC-TV	Washington, D.C.	525 Ft.

1225-35 Huger St. • P.O. Box 1013 • Columbia, S.C. 29202 • (803) 251-8000 • FAX: (803) 251-8099

Established 1923

Builders of the World's Tallest Broadcast Towers.

AISC QUALITY CERTIFICATION CATEGORY I & II

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Florida

WCTV	Tallahassee	2000 Ft.	
WCIX-TV	Miami	1741.5 Ft.	
WESH-TV	Daytona Beach	1671 Ft.	
WHVE-FM	Sarasota	1575 Ft.	
WTOG-TV	St. Petersburg	1513.75 Ft.	
WFTX-TV	Cape Coral	1506 Ft.	
WDBO-TV	Orlando	1484 Ft.	
WTVT	Tampa	1463 Ft.	
WPBF-TV	West Palm Beach	1452.5 Ft.	
WINK-TV	Ft. Myers	1432 Ft.	
WEZY-FM	Hillsborough Co.	1422 Ft.	
Omni TV	Tampa	1402 Ft.	Starmount
WEAR-TV	Pensacola	1284 Ft.	
WINZ-FM	Miami	1045 Ft.	
WAVV-FM	Naples	1022 Ft.	
Two Way	Miami	970 Ft.	
WTVJ	Miami	956 Ft.	Starmount
ATS FM	Hobe Sound	943 Ft.	Starmount
WYDP-TV	Middleburg	849 Ft.	
WESH-TV	Daytona Beach	800 Ft.	
WFSU-TV	Tallahassee	700 Ft.	
ATS FM	Royal Palm Beach	376 Ft.	Starmount
Microwave	Tallahassee	130 Ft.	
Weather Radar	Middleburg	100 Ft.	

Georgia

WFOX-FM	Gainesville	1764 Ft.	
WAGT-TV	Augusta	1560 Ft.	
WTOC-TV	Savannah	1531 Ft.	
WRDW-TV	Augusta	1507 Ft.	
WTGS-TV	Savannah	1465 Ft.	
WJBF-TV	Augusta	1292 Ft.	
US Navy	McIntosh County	1200 Ft.	
WVAN-TV	Pembroke	1086 Ft.	
WAGA-TV	Atlanta	1048 Ft.	Starmount

Hawaii

Idaho

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Illinois		
Sears	Chicago	134 Ft. (2)
Indiana		
Iowa		
KTIV/KCAU	Sioux City	2000 Ft.
KCCI-TV	Des Moines	2000 Ft.
KWWL-TV	Waterloo	1857 Ft.
KIIN-TV	West Branch	1449 Ft.
WHBF/WOC	Bettendorf	1381 Ft.
KMEG-TV	Sioux City	1000 Ft.
Kansas		
KWCH-TV	Hutchinson	1504 Ft.
WIBW-TV	Topeka	1255 Ft.
Kentucky		
WAVE-TV	Louisville	1643 Ft.
WPSD-TV	Paducah	1623 Ft.
WTVQ-TV	Lexington	994 Ft.
WLKY-TV	Louisville	985 Ft.
WHAS-TV	Louisville	984 Ft.
Louisiana		
KARD-TV	West Monroe	2000 Ft.
KTBS-TV	Shreveport	1800.5 Ft.
WAFB-TV	Baton Rouge	1726 Ft.
KALB-TV	Alexandria	1586 Ft.
Maine		
WGME-TV	Portland	1619 Ft.
Maryland		
WGMS-TV	Bethesda	450 Ft. (4)

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Massachusetts

Michigan

Minnesota

KMSP-TV	Minneapolis	1430 Ft.
KTTC-TV	Rochester	1314 Ft.
KSAX-TV	Alexandria	1156 Ft.
KEYC-TV	Mankato	1116 Ft.
WDIO-TV	Duluth	746 Ft.
KRFW-TV	Redwood Falls	554 ft.

Mississippi

WJTV	Jackson	1615 Ft.
WXXV-TV	Gulfport	1539 Ft.
WTOK-TV	Meridian	240 Ft.

Missouri

KYTV	Springfield	2000 Ft.
KDEB-TV	Springfield	1616 Ft.
KMOX-TV	St. Louis	1210 Ft.
KETC-TV	St. Louis	1073 Ft.
KTVI-TV	St. Louis	1049 Ft.

Montana

Nebraska

KPTM-TV	Omaha	1505 Ft.
KMNE-TV	Bassett	1426 Ft.
KTNE-TV	Angora	1409 Ft.
KSNB-TV	Superior	1086 Ft.
KBGT-TV	Albion	1000 Ft.

Nevada

New Hampshire

New Jersey

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

New Mexico			
KBIM-TV	Roswell	1839 Ft.	
New York			
WKTV	Utica	1065 Ft.	
WTEN-TV	Albany	275 Ft.	
WTC	New York	351.5 Ft.	
North Carolina			
WITN-TV	Washington	2000 Ft.	
WECT-TV	Wilmington	2000 Ft.	
WTVD	Durham	2000 Ft.	
WRAL-TV	Raleigh	2000 Ft.	
WXIK-FM/TV	Gastonia	2000 Ft.	
WWAY-TV	Wilmington	2000 Ft.	
WPTF-TV	Auburn	2000 Ft.	
WRAL/WPTF	Auburn	2000 Ft.	
WRAL-DTV	Auburn	1989 Ft.	Starmount
WLVV-FM	Mooresville	1475 Ft.	
WPCQ-TV	Charlotte	1404 Ft.	
WGHP-TV	High Point	1256 Ft.	
WTVI	Charlotte	1198 Ft.	
WUNC-TV	Chapel Hill	1183 Ft.	
WUNU-TV	Lumberton	1002 Ft.	
WASV-TV	Asheville	673 Ft.	Starmount
WXII-TV	Winston Salem	618 Ft.	
WBT-AM	Charlotte	438 Ft. (2)	
WBT-TV	Charlotte	160 Ft.	
North Dakota			
KTHI-TV	Fargo	2063 Ft.	
KXJB-TV	Valley City	1000 Ft.	
Ohio			
WKRC-TV	Cincinnati	971.3 Ft.	
WLWT-TV	Cincinnati	950 Ft.	

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Oklahoma		
KTVY-TV	Oklahoma City	1602 Ft.
Oregon		
Pennsylvania		
WPVI-TV	Philadelphia	1169.5 Ft.
WFMZ-TV	Allentown	460 Ft.
Rhode Island		
WPRI-TV	Providence	969 Ft.
South Carolina		
WCSC-TV	Charleston	2000 Ft.
WLTX-TV	Columbia	1706 Ft.
WIS-TV	Columbia	1526 Ft.
WESC-FM	Greenville	1280 Ft.
WRLK-TV	Columbia	948 Ft.
WCIV-TV	Charleston	895 Ft.
WFBC-TV	Greenville	805 Ft.
WPDE-TV	Florence	750 Ft.
WCBD-TV	Charleston	748 Ft.
WCCA-TV	Columbia	522 Ft.
WSHB-TV	Cypress Creek	406 Ft. (2), 236 Ft. (1)
Microwave	Blaney	275 Ft.
U.S. Navy	Charleston	270 Ft. (2)
U.S. Navy	Charleston	265.5 Ft. (2)
Observation	South of the Border	250 Ft.
Radio	Lexington	140 Ft.
Microwave	Springhill	115 Ft.
South Dakota		
KELO/KSFY	Sioux Falls	2000 Ft.
KDLT-TV	Mitchell	1569 Ft.

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Tennessee

WBIR-TV	Knoxville	1504 Ft.	
WTVK-TV	Knoxville	1061 Ft.	
WINT-TV	Crossville	724 Ft.	
WJHL-TV	Johnson City	550 Ft.	

Texas

KPRC/KHTV	Houston	2000 Ft.	Starmount
KRIV	Houston	2000 Ft.	
KKHT-FM	Splendora	1932 Ft.	
KRTW/KLTJ	Liverpool	1920 Ft.	
KNKI-FM	Greenwood	1920 Ft.	
KHOU-TV	Houston	1899 Ft.	
KRNB-FM	Decatur	1800 Ft.	
KXXV-TV	Waco	1736 Ft.	
Richland TV	Cedar Hill	1575 Ft.	Starmount
KTVT	Dallas/Ft. Worth	1552 Ft.	
KSAT-TV	San Antonio	1505 Ft.	
WFAA/KDFW	Cedar Hill	1452 Ft.	Starmount
KAMR-TV	Amarillo	1440 Ft.	
KCIT-TV	Amarillo	1425 Ft.	
KRTK-TV	Houston	1169 Ft.	
KLMG-TV	Longview	1249 Ft.	
KKMJ-FM	Austin	1227 Ft.	
KVTV	Laredo	1035 Ft.	
KBMT-TV	Port Arthur	1032 Ft.	
KVVV-TV	Alvin	1023 Ft.	
KZTV	Corpus Christi	982 Ft.	
KTXS-TV	Merkel	979 Ft.	
Communications	Cedar Hill	970 Ft.	
KLBK-TV	Lubbock	923 Ft.	
KRIS-TV	Corpus Christi	904.5 Ft.	
Microwave	Waco	200 Ft.	
Microwave	Longview	200 Ft.	

Utah

Vermont

KLINE TOWERS
DIVISION OF KLINE IRON & STEEL CO., INC.

Virginia

WSET-TV	Lynchburg	1230 Ft.	
WVEC-TV	Norfolk	1094 Ft.	
WHRO-TV	Norfolk	1003 Ft.	
WLVA-TV	Lynchburg	500 Ft.	
Military	Vint Hill Farms	90 Ft.	

Washington

KSTW-TV	Tacoma	637 Ft.	

West Virginia

Wisconsin

WAEO-TV	Rhinelander	1679 Ft.	
WHA/WISC/WMNS	Madison	1317 Ft.	Starmount
Omni TV	Milwaukee	1221 Ft.	Starmount
WDJT-TV	Milwaukee	1170 Ft.	
WLUK-TV	Green Bay	1160 Ft.	
WBAY-TV	Green Bay	1149 Ft.	
WMTV	Madison	1099 Ft.	
WVTV	Milwaukee	1013 Ft.	
WITI-TV	Milwaukee	963 Ft.	

Wyoming

U.S. Navy	La Reunion	1400 Ft.	
U.S. Navy	Keflavik, Iceland	1000 Ft.	
U.S. Navy	Grindavik, Iceland	600 Ft.	
Weather	Greenland	40 Ft. (2)	
U. S. Navy	Keflavik, Iceland	30 Ft. (2)	
Radio	Hong Kong	41 Meters	

4. Describe the Federal Aviation Administration (FAA) lighting and marking requirements for the existing tower and the proposed replacement tower.

Ans. The requirements are the same for both towers. The requirements can be met by: (1) candy stripe painting with continuous blinking red light; (2) no painting scheme with high intensity white strobe light for day time use and blinking red lights at night, or (3) no painting scheme and continuous white strobe lights varying in intensity depending on the time of day. The choice of painting and lighting used is subject to F.A.A. approval. Such choice may be changed, again, subject to F.A.A. approval.

5. What is the diameter of the existing and proposed guy wires? Explain how the angle of the guy wires may affect the structural integrity or capacity of the proposed tower.

Ans. The guy wires on the existing NBC-30 tower range in size from 1 3/16 to 1 7/16 inches in diameter. The proposed guy wires are between 1 5/8 to 3 3/8 inches. The tower has been designed in accordance with EAI/TIA-222-F standards, assuming 90 mph wind with no ice and 40 mph with 2 inches of radial ice. This design equals or exceeds existing building codes.

Guy wires are usually designed to have an angle relative to the tower of 14 to 60 degrees. The angles on the proposed tower are 18 to 56 degrees. Guys close to the 18 degree angle impart higher vertical loads and those toward the 56 degree impart both horizontal and vertical loads. Towers guyed at the 14 to 60 degree angle have structural integrity if they are designed to the EIA/TIA-222-F standard.

As mentioned in the answer to Question 3, once the capacity of a tower is determined, the tower and guys are custom designed to their unique characteristics with minimum safety factors as set forth in EIA/TIA-222-F. Kline Tower has performed a Dynamic Analysis as part of its tower design. NBC-30 plans to use articulators at both ends of the guy assembly that would allow the guys to rotate freely in both the vertical and horizontal directions.

TS- Outlet-052-990629

LEVY & DRONEY, P.C.
ATTORNEYS & COUNSELLORS AT LAW

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June 29, 1999

via HAND DELIVERY

RECEIVED
JUN 29 1999
CONNECTICUT
SITING COUNCIL

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: A Request by Outlet Broadcasting, Inc. for an order: (1) approving the shared use of a facility pursuant to C.G.S. §16-50aa, or (2) acknowledging Outlet's intent to erect an exempt facility pursuant to Reg. 16-50-72(b)(2) and 73.

Dear Chairman Gelston:

This filing contains a request by the Outlet Broadcasting Inc. which, as an F.C.C. licensee, transmits television programming as WVIT. WVIT is an NBC affiliate broadcasting on Channel 30. Outlet Broadcasting Inc. is the Applicant (Applicant or NBC-30).

NBC-30 currently operates a 1060 foot tower in Farmington, Connecticut. Due to a new federal mandate to offer digital TV, NBC-30 must replace its existing tower. It proposes to construct a tower whose antennas are the same height, but whose structure is almost sixty feet shorter. Current operators, such as the Town of Farmington and TCI, a community antenna television company (CATV), plan to relocate their equipment to the new tower and remove the existing facility. NBC-30 also operates a shorter 150 foot tower in closer proximity to the one sought to be replaced. Omnipoint Communications uses this tower and will relocate its antenna to the new facility. This shorter tower will also be removed.

Background

NBC-30, currently a television station of Outlet Broadcasting Inc. and a wholly owned subsidiary of the National Broadcasting Company (NBC), has operated a

tower facility at this current site for its analog television broadcast signal since February, 1953. In March of 1999, NBC-30 has been issued a license and mandated by the Federal Communications Commission (F.C.C.) to provide digital television service within the State of Connecticut. The conversion from analog to digital television initiated by F.C.C. pursuant to Congressional mandate has created the need to modify existing tower facilities to accommodate the digital service. The construction permit and license effective March 31, 1999 requires NBC-30 to build a digital television facility (by November 1, 1999) while simultaneously maintaining existing analog transmissions until at least April 1, 2007 (Exhibit A). The new transmission system includes components such as the transmitter, antenna, transmission line and studio to transmitter links. These elements would be placed at the tower facility. The current tower facilities are inadequate to accommodate the structural loading of additional components and will be removed upon completion of the construction of the new facilities.

The digital service as well as the existing analog service, will provide news, information and entertainment programming to the entire 3,765,000 people in the NBC-30 service area. The change by NBC-30 from analog to digital broadcasting is more significant than the change from black and white to color television. The digital broadcast system will alter the picture format and thus enhance and sharpen the high quality pictures and sound transmitted to the home. The digital signal will also allow other additional data services, including the Internet, and multiple programs per channel to be added to the broadcast.

The proposal includes the replacement of two guyed triangular towers with a single guyed triangular tower on the same site. The towers are 150 feet above ground level (AGL) and 1060 feet (AGL) respectively. Facilities on both of these structures would be moved to a single 1001.5-foot (AGL) tower. The overall height of facilities on the site 1849 feet above mean sea level (AMSL) would not change.

	Existing Tower	Proposed
Tower Height	1060	1001.5
Antenna Height	69	125
Ground Height Above Sea Level	720	722.5
Height above Mean Sea Level	**1849**	**1849**

The 150-foot tower currently facilitates the backup analog broadcast antenna for NBC-30. The tower is shared with Omnipoint Communications to support its PCS service and the Town of Farmington's Fire and Highway Department radio systems. The net effect of this proposal is to eliminate the 150-foot tower and replace the 1060-foot structure with a 1001.5-foot facility.

The 1060-foot tower supports communications antennas necessary for the broadcast of the NBC-30 analog signal. The tower has a 69-foot RCA analog antenna mounted at the top of the 1060-foot structure. The tower was built in 1976 and is nearing its end of life and is at its structural capacity. The proposed 1001.5-foot tower would have two antennas in a 'stacked' arrangement (125 feet) at the top to accommodate both the analog and digital signals. The proposed broadcast antennas or their equivalent would be used (Exhibit B). The tower structure would accommodate three such stacked arrangements, or six broadcast antennas. In order to share the use of the facility, a three pointed star or candelabra mount system would be installed on the top (Exhibit C). One set of these stacked antennas would be used by NBC-30 for the transmission of its analog and digital signals. The center of radiation for this antenna array would be at 1095 feet (AGL) and 1034 feet (AGL) for digital and analog signals respectively. Currently, the center of radiation for the existing analog signal is 1095 feet (AGL). The existing tower's width is seven feet and the proposed one will be twelve feet wide.

Additionally, the existing 1060-foot tower is currently shared with two other users. Connecticut Public Television WEDH Channel 24 (WEDH (PBS)) has antennas mounted on the tower for the distribution of the Instruction Television

System (Knowledge Network). The Knowledge Network is sponsored by the Connecticut State Education Department and sends instructional classroom programming, for grades K-12 along with college level material, to Connecticut public and private learning institutions (Exhibit D).

TCI Cablevision also shares the existing 1060-foot tower with NBC-30. TCI, a CATV company, is operating at the four hundred and twenty foot height on the current tower and will occupy the same location with its antennas on the proposed facility. TCI Cablevision uses its facilities to communicate with its technicians as they perform various utility and CATV tasks. These antennas are critical to the smooth functioning of TCI Cablevision's operations and business.

All television stations face the conversion to digital transmission. The schedule for the conversion process has been established by the F.C.C. (Exhibit E). While WEDH (PBS) does not have to begin digital transmissions until 2003, grant funding is available and WEDH (PBS) believes the best approach would be to construct the transmission system at this time. As shared users of the proposed tower, the economic impact to WEDH (PBS) would be minimized. WEDH (PBS) has agreed to share use of this tower facility pursuant to mutually acceptable terms and conditions. WEDH (PBS) would mount an antenna for their digital transmission assignment on the second part of the star. The F.C.C. has encouraged area broadcasters to work cooperatively in providing common tower solutions to minimize the impact in area communities. WEDH (PBS) currently broadcasts their analog signal from Avon, Connecticut. The WEDH (PBS) tower is inadequate to support additional services including digital television. WEDH (PBS) faces limitations on tower construction due to the proximity of the approach and departure paths to Bradley International Airport. WEDH (PBS) will be located at the 1001.5-foot height on the proposed tower. WEDH (PBS) will retain operation of its existing tower for its current analog service.

Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to a level at or

above applicable ANSI standards. The power density calculations would be 23.5% of the maximum level allowed with the proposed additional services (Exhibit F). These calculations assume that both the main WVIT antenna at the 1001.5 foot height and its emergency back-up at the 570 foot level are transmitting simultaneously. This should not occur. Thus, the actual power density calculations will be below 14% of the standard.

The Applicant has planned to leave the third point of the star open to accommodate shared use of another state-wide broadcast service for the digital television (DTV) conversion process. The Town of Farmington Fire and Highway antennas will move from the existing tower to the suggested facility at the 110 foot height. Further, Omnipoint Communications will transfer its antenna array to the new tower at the 190 foot level.

The necessary communications equipment would be located in a proposed single story 5000 square foot building at the base of the tower (Exhibit G). Currently a single story 2400 square foot building on the tower site houses the NBC-30 analog equipment. The proposed expansion includes the additional space necessary to accommodate the digital transmission equipment for all parties. Erosion and sediment controls will be used as necessary during construction. The current and proposed towers are, and will be, supported by three pairs of guy anchors and their associated foundations and bolts. The new guy anchor foundations will be adjacent to the existing structures. Project plans anticipate that a new 1500 gallon above ground diesel fuel tank will be installed in accordance with D.E.P. regulations. The existing tank will be removed.

Another tall tower is immediately adjacent to the NBC-30 site. It is operated by Communications Site Management and owned by Chase Family Trust. The tower is about 1000 feet away from the existing NBC-30 tower. The Chase tower is approximately 1200 feet (AGL) in height and supports many wireless communication systems. The Chase tower has reached maximum capacity. In 1998 the Town of Farmington denied an application for a new tower by Chase to accommodate more

tenants (Exhibit H). Thus, the Chase tower is unavailable for NBC-30's and WEDH (PBS)'s use.

Discussion

The NBC-30 tower satisfies the following criteria:

a) **Technical Feasibility.** The proposed tower facility will allow the parties to begin the federally mandated conversion to DTV. Without replacement, the current tower cannot support the structural loading of additional antenna weight. WEDH (PBS) also has structural limitations on their current facilities. The proposal will provide a joint solution to challenges involved with the launch of digital television for the state of Connecticut. Shared usage of tower facilities is encouraged by the F.C.C. and required by the State of Connecticut.

The Farmington site provides a uniquely centralized location for broadcast facilities for the state of Connecticut. Somewhat equidistant from the state borders, NBC-30 has served the public for 46 years providing consistent omnidirectional broadcasts from this same site. WEDH (PBS) currently broadcasts from the Town of Avon six miles away. Expansion and modifications to its towers is not viewed favorably by the Federal Aviation Administration (FAA) due to the proximity of approach and departure paths from Bradley International Airport. NBC-30 has an existing FAA approval for the site and has received FAA approval for construction of the proposed replacement tower at the Farmington site (Exhibit I).

The 'DTV Table' (Exhibit E), as included in the F.C.C.'s Sixth Report and Order (97-115) released February 12, 1998, allocated each eligible television station a second channel assignment to facilitate the conversion process to digital television. The table was built assuming that the existing conditions will continue in order to allocate new channel and power

assignments. The conditions used in the computations included current physical site location and existing antenna heights. To minimize interference and maximize the spectrum usage the F.C.C., having already issued NBC-30 the construction permit, substantially limits the relocation of the tower to a three mile radius. 47 CFR §73.622. Any physical movement of the transmission facility beyond said three mile radius after issuance of the construction permit requires considerable study of adjacent channel interference in neighboring television markets and approval of the F.C.C.

The northeast section of the United States has the highest density of television stations, limiting NBC-30's ability to relocate its site. NBC-30 engineers have strongly recommended the replacement of the existing tower facility and stacking of the analog and digital antennas to comply with the F.C.C. mandate. This is based on the fact that strong signals which have the ability to cause co-channel interference are being transmitted from New York City, New York; Boston, Massachusetts; Linden, New Jersey; Worcester, Massachusetts; New London, Connecticut and Schenectady, New York.

Jointly, NBC-30 and WEDH (PBS) engineers have determined that the WEDH (PBS) digital channel assignment (Channel 32) could be moved six miles subject to F.C.C. approval without providing undue harm to an adjacent television market or increase interference to any existing analog signal. NBC-30 transmits at 134 kW power while WEDH (PBS) broadcasts at 50 kW. This power differential and the absence of other close and strong emitters on the WEDH (PBS) frequency, unlike the NBC-30 channel, permits the movement the WEDH (PBS) transmitter from Avon to Farmington.

The existing 1060-foot tower was built in 1976. The tower is near its end of useful life and will require replacement in the near term. The proposed

tower facility would be built by Kline Iron and Steel, one of the premier broadcast tower firms in the United States. Feasibility studies and foundation designs have been completed. The proposed tower would exceed the current ANSI EIA/TIA standards RS-222F for the design and construction of tower facilities. The tower will be designed for a basic wind speed of 90 mph at 30-feet (AGL). This exceeds the national standard set for Hartford, Connecticut's building specification of 80 mph. Foundation borings show soil conditions have a bearing capacity in excess of 10 tons per square foot (Exhibit J). The proposed tower would be placed approximately 50 feet from the existing tower and on a parallel footprint so that it would have minimal environmental impact to the site and surrounding area. The two existing towers would be dismantled upon completion of the construction of the new tower. NBC-30 and WEDH (PBS) engineers have concluded that the proposed antenna installation presents minimal potential for interference to or from existing radio transmissions from this location.

b) **Environmental Feasibility.** The proposed shared use will have a minimal environmental effect for the following reasons:

- The proposed tower facility will not cause any significant change or alteration in the physical and environmental characteristics of the existing site. The proposed tower will reduce by approximately sixty feet the height of the tower facility. The antenna height of the new and proposed towers are equal. The surrounding land about the base of the tower will be largely allowed to return to the natural vegetative state after the construction is completed. The site has no residential properties directly surrounding it.

- Both of NBC-30's existing towers will be removed from the site following construction of a single replacement tower. This will leave

only one new tower on the site accommodating all the existing and mandated services.

- The proposed tower facility will not increase noise levels at the existing facility by six decibels or more and will not emit any noise other than from air conditioning equipment when in use.

- Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to a level at or above applicable ANSI standards. Using Office of Science and Technology (OST-65) methods, calculations would show that present levels would be 23.5% of the maximum level allowed. The proposed additional antenna would comply with C.G.S. §22a-162. In actual operation, the power density will not exceed 14% of said standard.

- The proposed installation will not require any additional water or sanitary facilities. The facility will not produce any additional air emissions from any combustion sources. After construction is complete, the proposed installation will not generate any traffic other than periodic maintenance visits.

- The boundaries of the current site will remain unaffected by the proposed changes. The design of the facility has incorporated the boundaries within its parameters.

Based on the above information, the Applicant believes that if approved, the proposed-shared tower facility use will have a minimal environmental effect and is therefore environmentally feasible.

c) **Public Safety.** The tower is an element that enhances the public safety for the State of Connecticut and the Town of Farmington for the following reasons:

- NBC-30 and other TV broadcasters are among the principle delivery mechanisms for the State Emergency Action Notification System (EAS), and formerly the Emergency Broadcast System (EBS). The State of Connecticut Department of Emergency Management utilizes the EAS/EBS for emergency messages such as urgent weather warnings, evacuation information, or other perilous news. These messages are distributed to the public via the broadcast channel from the Farmington tower. Local news and information is truly available only from a limited number of live area sources. NBC-30 is one of the premier outlets in the State of Connecticut with the resources to provide alerts and information from an actual scene to keep the public informed on developing situations. Redundant systems built into the infrastructure of NBC-30 provide for a better than 99.95% on-air rate providing continuous ability to update the public on any potential situation.

- The Town of Farmington houses their fire department radio system on the 150-foot tower. Communications to and from fire or emergency scenes is of an obvious vital life safety nature.

Based on the above information, public safety concerns for the citizens of the State of Connecticut are benefitted by the construction of the replacement tower facility.

d) **Economic Feasibility.** As previously mentioned, NBC-30 has owned tower site property, and has responsibly maintained it for 46 years. NBC-30 is an Outlet Broadcasting station that is a wholly owned subsidiary of the National Broadcast Company, a division of General Electric (GE).

WEDH (PBS) is wholly owned by Connecticut Public Broadcasting a member station of the Corporation for Public Broadcasting (PBS). WEDH (PBS) has obtained funding from the NTIA for its share of the construction of digital television facilities. The parties will enter into a mutual agreement to share the use and cost of the proposed tower facility on terms agreeable to the parties and is thus economically feasible to both parties. This proposed tower has the capacity to enable other shared uses.

e) **Town Action.** Previously, NBC-30 has sought approval from the Town of Farmington Zoning Board of Appeals (ZBA) for a variance from the fall-line requirement. The ZBA decided, in a tie vote of 3-3, to deny the request (Exhibit K). It appears that the ZBA focused on local issues. The Applicant believes that the state-wide benefits for 3.8 million people of federally required digital television service, enhanced public safety, state mandate and federal preference for tower sharing, avoidance of tower proliferation and the environmental feasibility of a replacement tower were not given adequate weight in the decisional process.

f) **Legal Feasibility.** The Council has jurisdiction over this request on two separate grounds. First, C.G.S. §16-50aa(c)(1) authorizes the Council to issue an order approving the shared use of a tower. NBC-30's tower is operating for a commercial purpose by a company which uses the tower to transmit TV signals in the electromagnetic spectrum pursuant to its F.C.C. license. Thus, the NBC-30 tower is a C.G.S. §16-50aa(b) facility.

NBC-30 has received a request from WEDH (PBS) to share its tower to provide digital TV to the WEDH (PBS) audience. NBC-30's existing tower is at the end of its useful life after twenty-three years in service and does not have the structural capacity to add any significant weight to the existing tower. NBC-30 has received a similar request from Omnipoint. In fact, recently NBC-30 determined that it had to place Omnipoint on an adjacent 150 foot tower to accommodate its request for its PCS service

rather than place Omnipoint on its 1060 foot structure as the taller tower was at its structural capacity.

Faced with WEDH (PBS)'s request and NBC-30's need to add its F.C.C. mandated digital TV antenna, NBC-30 filed this request to share a replacement tower with WEDH (PBS). Failing to receive the requested order would force both NBC-30 and WEDH (PBS) to seek an additional tower or towers. Additionally, NBC-30 would, in the near future, also need to replace the existing tower to meet its existing needs and tenant obligations.

NBC-30's plan is to remove two towers, 150 and 1060 feet respectively, and to replace them with one 1001.5 foot structure. Removal of one tower, the avoidance of building additional towers, and the consolidation of antenna on the new facility avoids the unnecessary proliferation of towers and is in the public interest.

The Council has both a state mandate and a federal preference to share towers and thus avoid their proliferation. NBC-30's proposal squarely complies with the state mandate contained in C.G.S. §16-50aa(a) by the consolidation of facilities operated by licensees of several different radio-based services. This plan also satisfies the F.C.C.'s preference for TV broadcasters to share digital facilities where feasible (See 47 CFR §73.635). Both NBC-30 and WEDH (PCS) have undertaken significant steps to accommodate and further this federal entreaty.

This request, as more fully explained above, meets the requirements for shared use as established by statute. The NBC-30 tower is technically, legally, environmentally and economically feasible. It meets and enhances public safety concerns. It satisfies the criteria of C.G.S. §16-50aa(c)(1).

Second, TCI Cablevision is a CATV company as that term is defined in C.G.S. §16-1. NBC-30's tower is a "tower" as that term is used in Regs. §16-50j-2a(q) because this 1060 foot frame is a structure which is taller than its width and is taller than its relative surroundings. It is used principally to send and receive radio signals for numerous F.C.C. licensees. It supports antennas used for such transmission and reception. One of these antennas is used by TCI Cablevision for its CATV business. TCI Cablevision's antennas are an integral part of its CATV business and, as such, are deemed to be associated equipment as that term is used in Regs. 16-50j-2a(a). Thus, by virtue of TCI Cablevision's CATV use of its associated equipment on the NBC-30's tower, the facility is a §16-50j-2a(q) tower and is subject to the Council's authority and jurisdiction.

Entities falling under the Council's jurisdiction cannot build a new tower or physically alter an existing structure without the Council's consent or unless the change is not deemed a modification or does not have a substantial adverse environmental effect as determined by the Council. A modification is exempt pursuant to Regs. 16-50j-72(b)(2) if the change on an existing tower site does not increase the tower's height, extend the boundaries of the site, increase noise levels by six decibels or more, and exceed the power density of the total radio frequency electromagnetic radiation as established by C.G.S. §22a-162. NBC-30's proposal satisfies all of these conditions. Consequently, NBC-30 requests that the Council acknowledge NBC-30's intent to erect an exempt facility as authorized pursuant to Regs. §16-50j-72(b)(2) and 73.

Conclusion

In conclusion, NBC-30 has demonstrated that it has complied with all of the requirements for the Council to acknowledge NBC-30's intent to erect an exempt facility, or to order the shared use of a facility, or to approve the facility on both grounds.

Respectfully submitted,

LEVY & DRONEY, P.C.

Daniel E. Kleinman

Peter J. Tyrrell

PJT/ms
Enclosures

cc: Ms. Arlene B. Whitaker, Chair
Town Council, Town of Farmington

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EXHIBIT "A"

United States of America

FEDERAL COMMUNICATIONS COMMISSION

DIGITAL TELEVISION BROADCAST STATION CONSTRUCTION PERMIT

Official Mailing Address:

OUTLET BROADCASTING, INC
NBC, 11TH FL
1299 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20004

Call Sign: WVIT-DT

Permit File No.: BPCDT-980803KP

Authorizing Official:

Clay C. Pendarvis
Chief, TV Branch
Video Services Division
Mass Media Bureau

Grant Date: 3/3/99

This permit expires 3:00 a.m. local time, November 01, 1999

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

New Commission rules which become effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these new rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee:

OUTLET BROADCASTING, INC

Station Location:

CT-NEW BRITAIN

Frequency (MHz): 596.0 - 602.0

Channel: 35

Hours of Operation: Unlimited

Transmitting Antenna location (address or description):

CT-Rattlesnake Mountain, 1.5km NW of New Britain

Transmitter: Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Antenna type: (directional or non-directional): Non-Directional

Description: DIELECTRIC TFU-18GTH-R 04

Beam Tilt: 0.75 Degrees Electrical

Major lobe directions (degrees true): Not applicable

Antenna Coordinates: North Latitude : 41 42 2
West Longitude : 72 49 57

Transmitter output power.....: As required to achieve authorized ERP

Maximum effective radiated power (AVG) : 87.1 kW
: 19.4 DBK

Height of radiation center above ground.....: 337 Meters

Height of radiation center above mean sea level.: 557 Meters

Height of radiation center above average terrain: 457 Meters

Antenna structure registration number: 1044874

Overall height of antenna structure above ground (including obstruction lighting if any) see the registration for this antenna structure.

Special operating conditions or restrictions:

1. The grant of this construction permit is subject to the condition that, with ample time before commencing operation, you make a good faith effort to identify and notify health care facilities (e.g., hospitals, nursing homes, see 47 CFR 15.242(a)(1)) within your service area potentially affected by your DTV operations. Contact with state and/or local hospital associations and local governmental health care licensing authorities may prove helpful in this process. During this pre-broadcast period, you must provide all notified entities with relevant technical details of your operation, such as DTV channel, targeted on-air date, effective radiated power, antenna location, and antenna height. You are required to place in the station's public inspection file documentation of the notifications and contacts made and you may not commence operations until good faith efforts have been made to notify affected health care facilities. During this pre-broadcast period and for up to twenty (20) days after commencing operations, should you become aware of any instances of medical devices malfunctioning or that such devices are likely to malfunction due to your DTV operations, you must cooperate with the health care facility so that it is afforded a reasonable opportunity to resolve the interference problem. At such time as all provisions of this condition have been fulfilled, and either upon the expiration of twenty (20) days following commencement of operations or when all known interference problems have been resolved, whichever is later, this condition lapses.

*** END OF AUTHORIZATION ***

THIS IS TO NOTIFY YOU OF ACCEPTANCE FOR FILING OF APPLICATION RECEIVED ON 08-03-98

CONSTRUCTION PERMIT

CHANNEL: 35

LOCATION: NEW BRITAIN, CT

THIS NOTIFICATION DOES NOT IMPLY GRANT OF APPLICATION, OR AUTHORITY TO CONSTRUCT OR OPERATE THIS STATION.

IN FUTURE INQUIRIES PLEASE REFER TO FILE NUMBER: BPCDT - 980803KE

FCC 372 (4/95) NOTIFICATION

FEDERAL COMMUNICATIONS
COMMISSION
WASHINGTON, DC 20554

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

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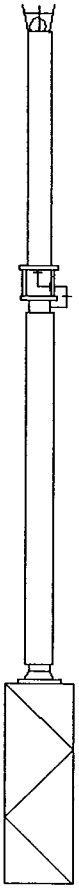
OUTLET BROADCASTING, INC
WVIT-DT COMMERCIAL DIGITAL TV
NBC, 11TH FL
1299 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20004

25004)2400 03

DTV/UHF STACKED ANTENNAS



- Gain of 28.0 NTSC (typical)
- Top Mount DTV for best circularity and performance
- Maximizes DTV "Line of Sight"

UHF STACK MECHANICAL SPECIFICATIONS

(DTV H_2 = 55 ft)		NTSC CHANNEL		
		14	41	69
Height with Lightning Protector	H_4 (ft)	132.6	115.0	104.2
Height less Lightning Protector	H_2 (ft)	128.6	111.0	100.2
Height of Center of Radiation (DTV)	H_3 (ft)	101.1	83.5	72.7
Height of Center of Radiation (NTSC)	H_3 (ft)	35.3	26.5	21.1
Aerodynamic Area (Above tower top)	CaAc (ft^2)	198	160	135
Moment Arm (Above tower top)	D_1(ft)	57.0	49.0	45.0
Weight	W (ton)	19.7	14.6	10.3

Note: Structural design to TIA/EIA-222-F code with 80 mi/h basic wind speed.
Mechanical data includes radomes on both antennas.

Dielectric

NBC

EXHIBIT "C"

841 WILLIAMS STREET
WEST COLUMBIA, SOUTH CAROLINA 29169
WWW.KLINETOWERS.COM
PHONE: (803) 251-8000
FAX: (803) 251-8099

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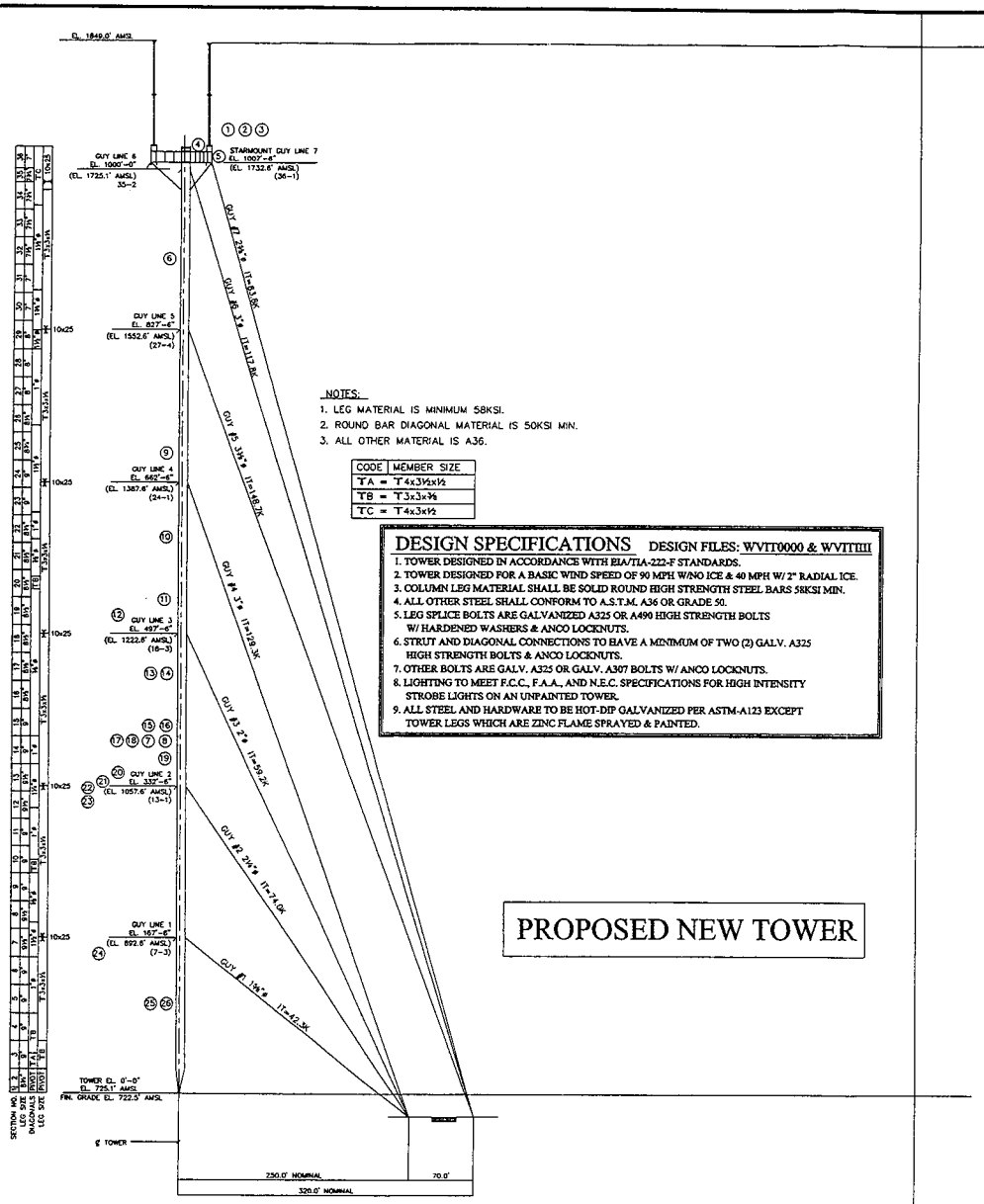


TOWER ELEVATION

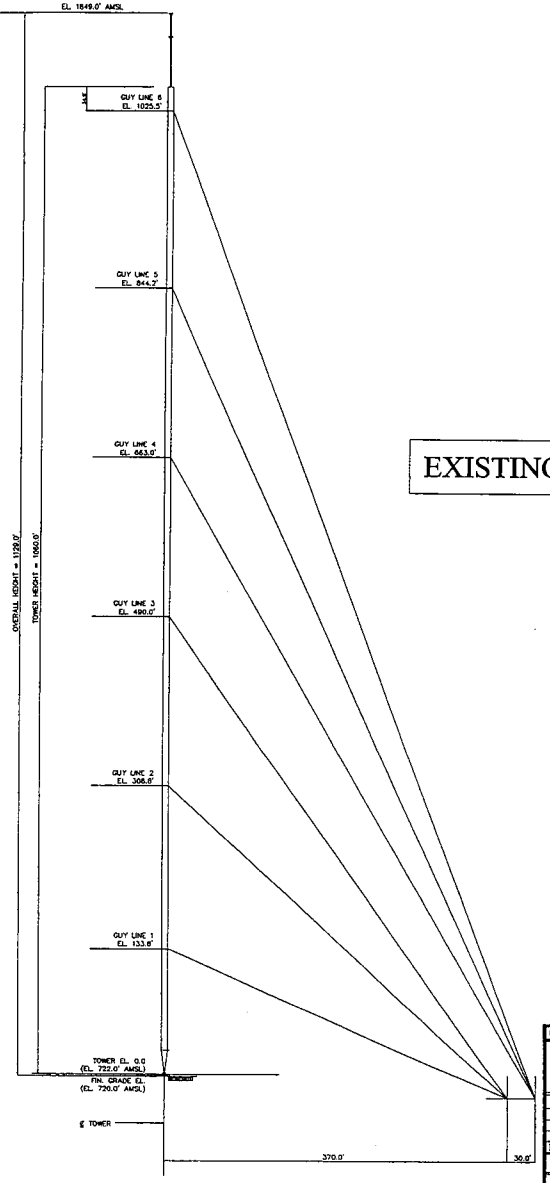
NOTES:
1. LEG MATERIAL IS MINIMUM 58KSI.
2. ROUND BAR DIAGONAL MATERIAL IS 50KSI MIN.
3. ALL OTHER MATERIAL IS A36.

CODE	MEMBER SIZE
TA =	T4x3½x½
TB =	T3x3x⅜
TC =	T4x3x½

DESIGN SPECIFICATIONS
DESIGN FILES: WVIT0000 & WVITIII

1. TOWER DESIGNED IN ACCORDANCE WITH EIA/TIA-222-F STANDARDS.
2. TOWER DESIGNED FOR A BASIC WIND SPEED OF 90 MPH W/NO ICE & 40 MPH W/ 2" RADIAL ICE.
3. COLUMN LEG MATERIAL SHALL BE SOLID ROUND HIGH STRENGTH STEEL BARS 58KSI MIN.
4. ALL OTHER STEEL SHALL CONFORM TO A.S.T.M. A36 OR GRADE 50.
5. LEG SPLICE BOLTS ARE GALVANIZED A325 OR A490 HIGH STRENGTH BOLTS W/ HARDENED WASHERS & ANCO LOCKNUTS.
6. STRUT AND DIAGONAL CONNECTIONS TO HAVE A MINIMUM OF TWO (2) GALV. A325 HIGH STRENGTH BOLTS & ANCO LOCKNUTS.
7. OTHER BOLTS ARE GALV. A325 OR GALV. A307 BOLTS W/ ANCO LOCKNUTS.
8. LIGHTING TO MEET F.C.C., F.A.A., AND N.E.C. SPECIFICATIONS FOR HIGH INTENSITY STROBE LIGHTS ON AN UNPAINTED TOWER.
9. ALL STEEL AND HARDWARE TO BE HOT-DIP GALVANIZED PER ASTM-A123 EXCEPT TOWER LEGS WHICH ARE ZINC FLAME SPRAYED & PAINTED.

PROPOSED NEW TOWER



EXISTING TOWER

REV.	BY	DATE	TMES	REMARKS

KLINE TOWERS ©1998
DIVISION OF KLINE IRON AND STEEL CO., INC.
COLUMBIA, SOUTH CAROLINA

JOB: HARTFORD STARMOUNT TOWER	
CUSTOMER: WVIT-TV	
LOCATION: WEST HARTFORD, CONNECTICUT	
ENGINEER: KLINE	
DETAILS OF: Exist. & Fut. Tower Details	
DETAILED BY: JAL	DET. DATE: 03-Jun-99
CHECKED BY:	CHK. DATE:
CONT#: 97-180	SHEET#: SK901

NBC-30
TOWER
EQUIPMENT SCHEDULE

Manufacturer	Model Type	Ctr. Radiation Above Ground	Description
The following antennas are on the 1069' tower			
RCA	TFU-28G	1,060 FT	DICERS / TOP BEACON / LIGHTNING ARRESTOR (8" RIGID COAX FEED LINE)
MA/COM	DA-624	1,020 FT	ENG RECEIVE ANTENNA / WITH JUNCTION BOX 1"CTL CABLE, 15/8" PRODALIN LINE #31-1090 (AIR)
ANDREW	62070 / 62071	600 FT	2 ITFS ANTENNAS FED WITH ANDREW EW 127 LINE
PHELPS DODGE	STATION MASTER	520 FT	REMOTE PICKUP / ENG. REPEATER 450.050 / 455.050 7/8" LINE CABLEWAVE HCC78-50J-467
DB PRODUCTS	DB-408	420 FT	TCI CABLE 450 Mhz REPEATER receive only antenna
DB PRODUCTS	DB-812KY	400 FT	NEWS ROOM REPEATER NEWSROOM KKH 237 7/8" LINE
DB PRODUCTS	DB-814	360 FT	TCI CABLE REPEATER
RF SYSTEMS	PA4-65	350 FT	RADOME COVERED 4FT 7 GHz TSL / STL ELLIPTICAL WG WEP 65
MICROWAVE RADIO	ULTRASCAN	335 FT	RADOME COVERED ENG RECEIVE ANT.SYS. 7/8" LINE AND 1" CTL CABLE
DB SYSTEMS	DB-420	330 FT	TCI CABLE REPEATER
RF SYSTEMS	PA4-65	320 FT	RADOME COVERED 4FT 7 GHZ TSL / STL ELLIPTICAL WG WEP 65
DIAMOND	X-50A	140 FT	2 MTR / 450 MHz REPEATER ANTENNA 7/8' FEED
ANIXTER	P2072GR	100 FT	6 FT 2 GHZ GRID DISH ANTENNA ELLIPTICAL WG
RF SYSTEMS	PA6-65	100 FT	RADOME COVERED 6' DISH CH 20 MW / CPTV ELLIPTICAL WG
The following antennas are on the 100' tower			
RCA	TFU-30J	141 FT	STANDBY ANTENNA, EMERGENCY / TEST USE ONLY 60 kW INPUT MAX
EMS WIRELESS	RR 9017DP	105	XMIT / RECEIVE OMNIPOINT CELLULAR TELEPHONE SYSTEM 3 PANEL ANTENNAS
CELLWAVE	YAGI	110 FT	XMIT 154.190 / RECEIVE 159.420 2 YAGI ANTENNAS TOWN OF FARMINGTON
CELLWAVE	FOLDED DIPOLE	110 FT 100 FT	2 FOLDED DIPOLES FOR LOW BAND PAGING SYSTEM TOWN OF FARMINGTON
The following antennas are on the roof of the building			
ANDREW		19 FT	12 GHZ RECEIVE ONLY
ANDREW		19 FT	6 GHZ RECEIVE ONLY
PATRIOT		19 FT	KU BAND RECEIVE ONLY
SCALA	GRID DISH	15 FT	XMIT 953.050 / RECEIVE 956.650 TOWN OF FARMINGTON 5 WATT RELAY TO CH 61 TOWER
The following is to be on the proposed tower			
DIELECTRIC Ch. 30/35	DTV/NTSC	1001.5 FT	DICERS / TOP BEACON / LIGHTNING ARRESTOR (8" RIGID COAX FEED LINE)
DIELECTRIC Ch. 32	DTV	1001.5 FT	DICERS / TOP BEACON / LIGHTNING ARRESTOR (8" RIGID COAX FEED LINE)
DTV OPEN	DTV	1001.5 FT	Shared Use available
MICROWAVE RADIO	ULTRASCAN	1,000 FT	ENG RECEIVE ANTENNA / WITH JUNCTION BOX 1"CTL CABLE, 15/8" PRODALIN LINE #31-1090 (AIR)
MICROWAVE RADIO	ULTRASCAN	1,000 FT	ENG RECEIVE ANTENNA / WITH JUNCTION BOX 1"CTL CABLE, 15/8" PRODALIN LINE #31-1090 (AIR)
DIAMOND	X-50A	900 FT	2 MTR / 450 MHZ REPEATER ANTENNA 7/8' FEED
ANDREW	62070 / 62071	600 FT	2 ITFS ANTENNAS FED WITH ANDREW EW 127 LINE
DIELECTRIC	TUP Broadband Panel	600 FT	COMMUNITY STANDBY ANTENNA, EMERGENCY / TEST USE ONLY
MICROWAVE RADIO	ULTRASCAN	535 FT	RADOME COVERED ENG RECEIVE ANT.SYS. 7/8" LINE AND 1" CTL CABLE
RF SYSTEMS	PA4-65	535 FT	RADOME COVERED 4FT 7 GHz TSL / STL ELLIPTICAL WG WEP 65
PHELPS DODGE	STATION MASTER	520 FT	REMOTE PICKUP / ENG. REPEATER 450.050 / 455.050 7/8" LINE CABLEWAVE HCC78-50J-467
PHELPS DODGE	STATION MASTER	500 FT	FUTURE REPEATER
PHELPS DODGE	STATION MASTER	500 FT	FUTURE REPEATER
PHELPS DODGE	STATION MASTER	420 FT	TCI CABLE 450 Mhz REPEATER receive only antenna
PHELPS DODGE	STATION MASTER	400 FT	NEWS ROOM REPEATER NEWSROOM KKH 237 7/8" LINE
RF SYSTEMS	PA4-65	350 FT	RADOME COVERED 4FT 7 GHZ TSL / STL ELLIPTICAL WG WEP 65
RF SYSTEMS	PA4-65	320 FT	RADOME COVERED 4FT 7 GHZ TSL / STL ELLIPTICAL WG WEP 65
DB PRODUCTS	ULTRASCAN	335 FT	RADOME COVERED ENG RECEIVE ANT.SYS. 7/8" LINE AND 1" CTL CABLE
DB PRODUCTS	DB-420	330 FT	TCI CABLE REPEATER
DB PRODUCTS	DB-812KY	300 FT	6 FT 2 GHZ GRID DISH ANTENNA ELLIPTICAL WG
EMS WIRELESS	RR 9017DP	190 FT	XMIT / RECEIVE OMNIPOINT CELLULAR TELEPHONE SYSTEM 9 PANEL ANTENNAS FUTURE SHARED
EMS WIRELESS	RR 9017DP	190 FT	XMIT / RECEIVE OMNIPOINT CELLULAR TELEPHONE SYSTEM 3 PANEL ANTENNAS
DB SYSTEMS	DB-420	110 FT	XMIT 154.190 / RECEIVE 159.420 2 YAGI ANTENNAS TOWN OF FARMINGTON
RF SYSTEMS	FOLDED DIPOLE	110 FT	2 FOLDED DIPOLES FOR LOW BAND PAGING SYSTEM TOWN OF FARMINGTON
ANIXTER	PA4-65	105 FT	RADOME COVERED 6' DISH CH 20 MW / CPTV ELLIPTICAL WG
CELLWAVE	YAGI	100 FT	Future
CELLWAVE	FOLDED DIPOLE	100 FT	Future
RF SYSTEMS	PA4-65	100 FT	Future
			FCC WVIT TOWER FILE NUMBER 82472

EXHIBIT "D"

6/23/99

STATE AND CITY	NTSC CHAN	DTV CHAN	DTV POWER (kW)	ANTENNA HAAT (m)	DIGITAL TELEVISION SERVICE DURING TRANSITION		EXISTING NTSC				DTV/ NTSC AREA MATCH (%)
							CURRENT SERVICE		NEW INTERFERENCE		
					AREA (Sq km)	PEOPLE (thous)	AREA (Sq km)	PEOPLE (thous)	AREA (% NL Area)	PEOPLE (% NL Pop)	
CT BRIDGEPORT	43	42	50.0	156.0	9545	2622	9689	2664	2.1	2.8	97.3
CT BRIDGEPORT	49	52	50.0	222.0	10021	3223	9688	3156	6.3	10.2	98.8
CT HARTFORD	3	33	1000.0	276.0	21991	3476	24532	3877	0.0	0.0	85.9
CT HARTFORD	18	46	219.5	299.0	17043	3203	17368	3157	6.3	6.3	90.1
CT HARTFORD	24	32	50.0	262.0	13076	2852	11674	2651	11.3	11.0	98.6
CT HARTFORD	61	5	1.0	515.0	22582	3667	23105	3792	7.9	10.7	86.5
CT NEW BRITAIN	30	35	134.0	451.0	22623	3872	22140	3765	17.5	13.2	96.1
CT NEW HAVEN	8	10	8.6	363.0	22646	5353	23122	4690	3.7	2.4	90.0
CT NEW HAVEN	59	6	1.0	314.0	16594	4189	18681	4424	2.3	0.9	85.9
CT NEW HAVEN	65	39	50.0	82.0	1425	546	1369	530	0.0	0.0	100.0
CT NEW LONDON	26	34	116.7	381.0	16634	2417	15227	1723	0.6	1.6	99.4
CT NORWICH	53	45	50.0	207.0	9654	839	9558	838	2.8	4.5	97.5
CT WATERBURY	20	12	3.2	366.0	18905	4400	18645	4039	8.1	4.6	92.9
DC WASHINGTON	4	48	1000.0	237.0	26989	6541	24745	6454	6.6	3.0	98.9
DC WASHINGTON	5	36	1000.0	235.0	26351	6530	26711	6533	0.0	0.0	95.9
DC WASHINGTON	7	39	1000.0	235.0	23331	6004	23215	6365	0.0	0.0	95.4
DC WASHINGTON	9	34	1000.0	235.0	24624	6440	22883	6299	0.0	0.0	100.0
DC WASHINGTON	20	35	231.6	235.0	17347	6010	17179	5746	0.1	0.0	96.0
DC WASHINGTON	26	27	67.2	233.0	15070	5823	15606	5637	13.3	4.1	94.9
DC WASHINGTON	32	33	194.3	213.0	13878	5588	14310	5777	10.0	2.3	93.5
DC WASHINGTON	50	51	65.0	247.0	14147	5160	14207	5376	0.1	0.0	97.7
DE SEAFORD	64	44	50.0	195.0	4202	154	4202	154	3.2	2.9	100.0
DE WILMINGTON	12	55	1000.0	294.0	23176	7443	20136	6742	0.0	0.0	99.8
DE WILMINGTON	61	31	50.0	292.0	16054	5337	15401	5324	5.3	6.5	97.1
FL BOCA RATON	63	44	61.7	310.0	13892	3705	13892	3705	0.0	0.0	100.0
FL BRADENTON	66	42	50.0	465.0	18294	2380	18282	2379	0.0	0.0	100.0
FL CAPE CORAL	36	35	216.1	450.0	24093	879	23907	870	0.0	0.0	100.0
FL CLEARWATER	22	21	232.4	433.0	21082	2536	21082	2536	9.1	5.2	100.0
FL CLERMONT	18	17	240.6	458.0	28579	2143	28566	2101	0.0	0.0	99.4
FL COCOA	52	51	154.7	285.0	14214	1507	14142	1510	0.0	0.0	99.7
FL COCOA	68	30	50.0	287.0	13459	1043	13446	1039	0.0	0.0	100.0
FL DAYTONA BEACH	2	11	47.2	503.0	44133	2602	41617	2380	0.0	0.0	99.7
FL DAYTONA BEACH	26	49	145.7	304.0	16535	1271	13794	830	0.0	0.0	100.0
FL FORT LAUDERDALE	51	52	151.7	262.0	13422	3627	13422	3627	0.0	0.0	100.0
FL FORT MYERS	11	53	1000.0	451.0	36265	1082	34767	1033	7.0	5.4	99.6
FL FORT MYERS	20	15	215.4	451.0	24348	847	24348	847	0.1	0.0	100.0
FL FORT MYERS	30	31	50.0	293.0	16321	651	16188	651	6.5	4.2	100.0
FL FORT PIERCE	21	38	117.7	147.0	11558	446	11088	436	0.0	0.0	100.0
FL FORT PIERCE	34	50	301.7	454.0	24332	1376	23318	1068	0.0	0.0	100.0
FL FORT WALTON BEA	35	25	50.0	60.0	4682	155	4678	155	2.1	0.6	100.0
FL FORT WALTON BEA	53	40	56.2	219.0	12566	488	12574	488	0.0	0.0	99.9
FL FORT WALTON BEA	58	49	50.0	59.0	1170	106	1170	106	0.0	0.0	100.0

EXHIBIT "E"

EXHIBIT "F"

STATEMENT REGARDING POTENTIAL RF EXPOSURE FROM A PROPOSED CANDELABRA TOWER TO BE CONSTRUCTED AT THE WVIT TOWER SITE ON RATTLESNAKE MOUNTAIN IN FARMINGTON, CONNECTICUT

My name is John W. Kean. I have been a broadcast engineer since 1954. I am a Senior Member of the Institute of Electrical and Electronic Engineers (IEEE). I hold Society of Broadcast Engineers (SBE) Professional Broadcast Engineer Certification number 347. My qualifications to perform RF measurements are well known. I represented Public Broadcast Service (PBS) interests in matters regarding regulation of RF exposure from 1976 to 1989. In that capacity I attended and served on ERMAC, The President's Council on Electromagnetic Radiation, ANSI C-95, The American National Standards Institute Committee and its successor committee IEEE SCC-28 and COMAR, the IEEE Committee On Man And Radiation. I have presented papers and served on industry panels dealing with RF measurements techniques. I am a present member of IEEE SCC-28.4.

Using methods detailed in Office of Science & Technology Bulletin OET-65, and ANSI/IEEE standard C95.1 1999, I calculated worse case RF power density for a proposed new guyed Candelabra tower to be constructed at the WVIT-TV tower site on Rattlesnake Mountain in Farmington, CT.

Stations taken into consideration by this study include: WTIC-TV CH-61, WRCH-FM, WEDH-DTV CH-32, WVIT-DTV CH-35, and WVIT-TV CH-30, as well as two way, paging, MMDS and microwave systems presently located or to located on the WTIC-TV and WVIT-TV towers. Attached find schedules for all known RF sources on the WTIC-TV tower and a schedule of planned RF sources for the proposed WVIT tower. Worse case assumptions were used when full information was unavailable.

The percentage of allowable ground level power density contributed by each RF source at its frequency for a uncontrolled area was calculated and then added to obtain a total for each tower. Totals for each tower were then added. Calculations were performed for the tower base to ensure worse case conditions. It should be noted that all of the main television antennas atop the WVIT tower and the emergency antenna at 570 feet AGL, will never be in use at the same time so that the WVIT tower base percentage total will always always be below 14% (See attached schedules for each tower)

Total RF ground level power density from all sources at the nearest point of public access will be less than 23.5% of the allowable public exposure to RF power density allowed by Connecticut/ANSI/IEEE C-95.1a, 1998 guidelines.

John W. Kean John Kean

Dated 6-25-1999

Tower		User	Antenna	Manufact	Model	Gain	Frequency	Input Pow	ERP	AGL ft	Azimuth	LineLoss	Rec. Only	VertField Pct	ANSI
WTIC															
"		WTIC-TV	Waveguide	Andrews	AGW25H3	13.98db	753.25Mhz		5000kW	1338	Omni	N/A	N/A	10%	4.07
"		WRCH-FM					100.5Mhz		7.5kWh&v	889	Omni	N/A	N/A	40%	1.4775
"		United	10'dish	Andrews	HPX10-122C	48.5db	12250Mhz	2 watts		500					0.000059
"		United	6'dish	Andrews	HPX6-122E	44.8db	12250Mhz	2 watts		480					0.0003
"		CAI	Pylon	Bogner	B16SO	15.7db	2500/2700	18x10watt	7002kW	350				10%	0.01
"	*	MetMob	2 Panel		PD-10017		875Mhz		90ch100w	256					0.61644
"		W11BJ	Pylon	Bogner	B6VA		199.25Mhz	N/A	.828kW	250		N/A	N/A	10%	0.0018
"		MetMob	6 Panel		PD-1132					240			Yes		0
"		BellAtlan	6 Panel	Exmod	ALP-9212					239					2.06
"	*	MetMob	6'dish	Andrew	UHX6-59H	38.8db	6125Mhz	2 watts		155					0.00451
"		United	8'dish	Andrews	HPX8-122D	47.3db	12250Mhz	2 watts		100					0.0003
"		United	6'dish	Andrews	HPX6-122E	44.8db	12250Mhz	2 watts		100					0.00025
"		United	6'dish	Andrews	HPX6-122E	44.8db	12250Mhz	2 watts		100					
"		United	LogPeriodic							90			Yes		0
"		United	LogPeriodic							80			Yes		0
"		United	LogPeriodic							70			Yes		0
"	*	MetMob	10'dish	Andrew	UHX10-59J	43.2db	6125Mhz	2 watts		67					0.74
"		United	10'dish	Andrews	HPX10-122C	48.5db	12250Mhz	2 watts		30					0.000095
Brdge		United	6' dish	Andrews	HPX6-122E	44.8db	12250Mhz	2 watts		20					0.0013
"		United	6'dish	Andrews	HPX6-122E	44.8db	12250Mhz	2 watts		20					0.0013
"		FarmPol	Parametric	Scala	PR-450		450Mhz	2-2.5watt		20			N/A		0.051
Roof		United	Off Air	6 antennas	?								Yes		0
"		FarmPol	Parametric	Scala	PR-450		450Mhz	2-2.5watt		40			N/A		0.00023
"		FarmPol	Parametric	Scala	PR-450		450Mhz	2-2.5watt		30			N/A		0.01
Grnd		United	SatDish							0			Yes		0
"		United	SatDish							0			Yes		0
"		United	SatDish							0			Yes		0
"		United	SatDish							0			Yes		0
"		United	SatDish							0			Yes		0
"		WTIC-TV	8'dish	Andrews	PA8-65D	42.3db	7000Mhz			15			Yes		0
		WTIC-TV	8'dish	Andrews	PA8-127C	47.6db	13000Mhz	1 watt		15			N/A		0.00015
															9.06%

Total % of ANSI standard for uncontrolled areas

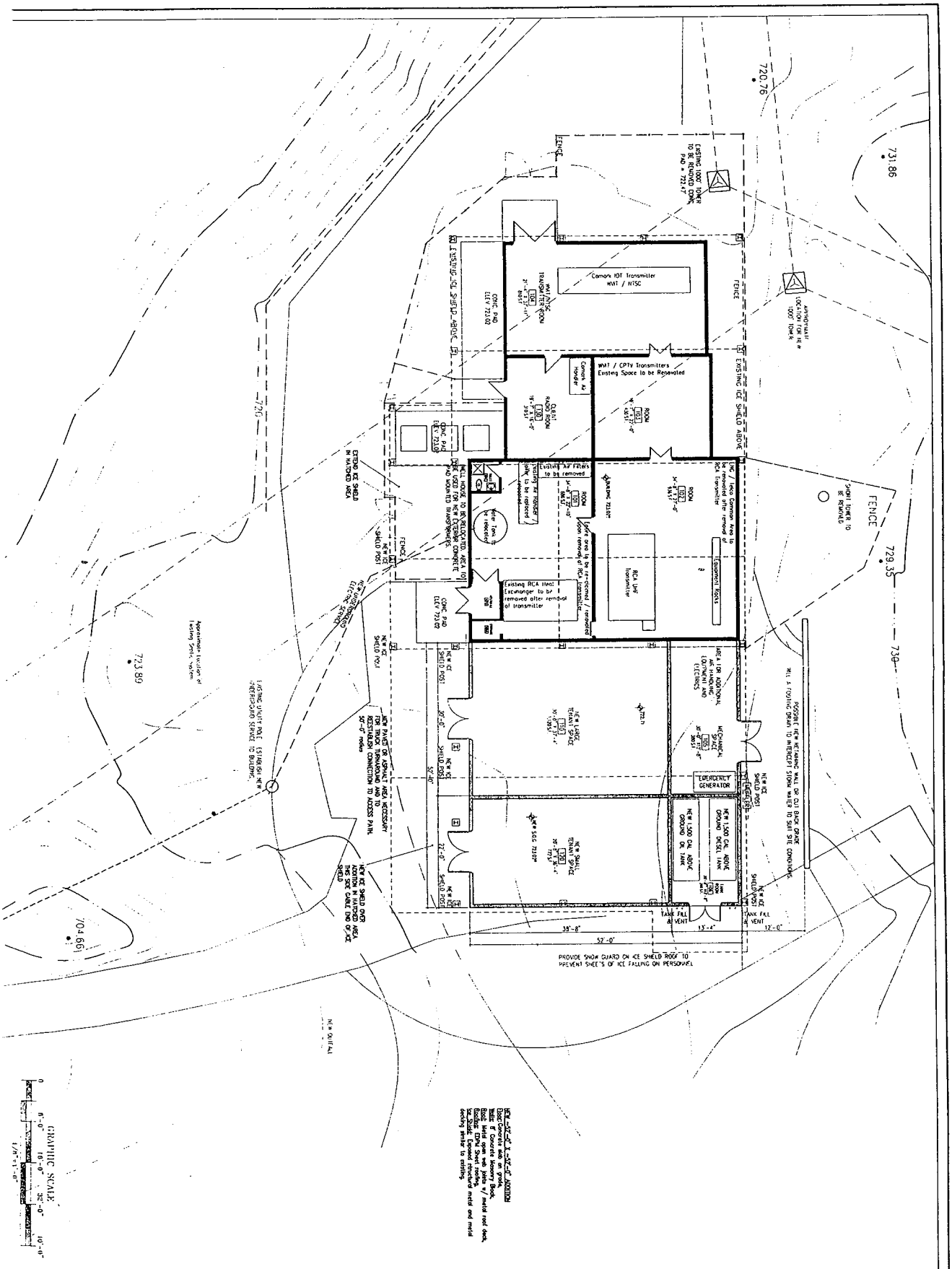
* Used Metro mobiles figures since I didn't have enough information to calculate the power density

Tower	User	Antenna	Manufact	Model	Gain	Frequency	Input Pow	ERP	AGL ft	Azimuth	LineLoss	Rec. Only	VertField Pct	ANSI
WVIT	WVIT-TV	Pylon	Dielectric	TFU30GTH		567.25Mhz	N/A	5000 kW	1060	Omni	N/A	N/A	10%	6.83
Prop	WVIT-DTV	Pylon	Dielectric	TFU18GTH		599.0 mhz	N/A	134.0kW	1106	Omni	N/A	N/A	10%	0.3
"	WEDH-DT	Pylon	Dielectric	TFU18GTH		581.0 mhz	N/A	200.0kW	1050	Omni	N/A	N/A	10%	0.5
"	Future	Pylon	Diecletric	TFU18GHT		UHF	N/A	200.0kW	1060	Omni	N/A	N/A	10%	0.5
"	WVIT	Microwave	MRC	Ultrascan		2000 mhz	N/A	N/A	1000	Rotating	N/A	Yes	N/A	0
"	Future	Microwave	MRC	Ultrascan		2000 mhz	N/A	N/A	1000	Rotating	N/A	Yes	N/A	0
"	WVIT	Whip	Diamond	X-50A		442 mhz	20watts		900	Omni		N/A	N/A	
"	CPTV	Pylon	Andrew	62070	12.5db	2500 mhz	30watts	6.9kW	600	104		N/A	10%	0.42
"	CPTV	Pylon	Andrew	62071	12.5db	2500 mhz	30watts	6.9kW	600	270	N/A	N/A	10%	0.42
"	*Standby	Panel	Dielectric	TFP	15.2db	450-700mhz	60 kW	1986.0kW	570	Omni	N/A	N/A	10%	4.7
"	Future	Microwave	MRC	Ultrascan		2000mhz	N/A	N/A	540	Rotating	N/A	Yes	N/A	0
"	WVIT	4'dish	RFSystem	PA4-65	40db	7000mhz	2watts		520			N/A	N/A	0.000003
"	Future	Whip	PhelpsDod	StatMast	7db	450mhz	35watts		520	Omni		N/A	N/A	0.015
"	Future	Whip	PhelpsDod	StatMast	7db	450mhz	25watts		500	Omni		N/A	N/A	0.012
"	TCI Cable	Whip	PhelpsDod	StatMast	7db	450mhz	25watts		500	Omni		N/A	N/A	0.012
"	Future	Whip	PhelpsDod	StatMast	7db	450mhz	25watts		420	Omni		N/A	N/A	0.014
"	TCI Cable	repeater	DB Prod	DB-420	6.6db	450mhz	125watts		400	Omni		N/A	N/A	0.015
"	Future	Microwave	MRC	Ultrascan		450mhz	3x100watts		360			N/A	N/A	0.01
"	TCI Cable	repeater	DB Prod	DB-420	6.6db	2000mhz	N/A	N/A	335	Rotating	N/A	Yes	N/A	0
	Future	4'dish	RFSystem	PA4-65	40db	450mhz	3x100watts		330			N/A	N/A	0.11
"	Omnipoint	3 Panel	EMSWire	RR-901top		7000mhz	1 watt		320			N/A	N/A	0.000004
"	Omnipoint	3 Panel	EMSWire	RR-901top	15.5db		N/A		190			Yes	N/A	0
"	Farmingtn	Yagi	Cellwave	Yagi	2.5db	900mhz	20 watts		180			N/A	N/A	0.02
"	TCI Cable	repeater	DB Prod	DB-420	6.6db	154/159mhz	30watts		110			N/A	N/A	0.15
"	Farmingtn	Fold dipole	Cellwave	Fold dipole	2.5db	154/420mhz	30watts		100			N/A	N/A	0.15
"	Future	6'dish	Anixter	P2072	31.9db	900Mhz	3 watts		110			N/A	N/A	0.002
"	CPTV	6'dish	RFSystem	PA6-65	40db	2000mhz	3 watts		105			N/A	N/A	0.00005
Building	CPTV	6'dish	Andrew	PA6-65	44.8db	7000mhz	4 watts		100			N/A	N/A	0.00002
"	CPTV	6'dish	Andrew	PA6-65	38.8	12000mhz	N/A		19			Yes	N/A	0
"	WVIT	Sat Dish	Patriot			6700mhz	2 watts		19			N/A	N/A	0.002
"	Farmingtn		Scala	Paraflecter	12db	953mhz	5 watts		19			Yes	N/A	0
									15			N/A	N/A	0.06

Total % of ANSI standard for uncontrolled area: 14.18%

*The panel at 570 feet is a emergency antenna for up to four television stations, therefore, the total percentage wi ll always be less than 14.18%

EXHIBIT "G"



PROGRESS PRINT NOT FOR CONSTRUCTION

A1

project	WVIT TRANSMITTER FACILITY Rattlesnake Mnt. Farmington, CT
	FLOOR PLAN
project number	
revisions:	
date drawn:	11-3-98
date issued:	
drawn by:	CB
scale:	1/8=1'-0"

THERIAULT/LANDMANN ASSOCIATES
TLA
395 Ferry St. • Hartford, CT 06114
Tel: (860) 296-9008
Fax: (860) 296-2309
Clyde Blackwell
CT 08837

KILLIAN & DONOHUE, LLC
ATTORNEYS AT LAW

ROBERT K. KILLIAN, JR.*
THOMAS J. DONOHUE, JR.
*ALSO ADMITTED IN DISTRICT OF COLUMBIA

363 MAIN STREET
HARTFORD, CONNECTICUT 06106-1885
TELEPHONE (860) 560-1977
TELECOPIER (860) 249-6638

Presenters:

T. J. Donohue, Jr., Killian & Donohue

1. Arnold Chase, Chase Family Interests

2. Bill Astin, Buck & Buck

3. Ray Carnavale
   John Waba LeBlanc & Royal Telecom

4. Dave Emery, Communications Site Management

EXHIBIT "H"

KILLIAN & DONOHUE, LLC
ATTORNEYS AT LAW

ROBERT K. KILLIAN, JR.*
THOMAS J. DONOHUE, JR.
*ALSO ADMITTED IN DISTRICT OF COLUMBIA

363 MAIN STREET
HARTFORD, CONNECTICUT 06106-1885
TELEPHONE (860) 560-1977
TELECOPIER (860) 249-6638

CHASE FAMILY TRUST

APPLICATION FOR NEW TOWER FACILITY
FARMINGTON, CONNECTICUT
JULY 13, 1998

Presentation Materials:

1. Return Receipts/Notice
2. Map re: Easement Area
3. Elevation Rendering
4. Presentation Exhibit (Color); Buck & Buck
5. Article re: High Definition Television
6. FCC Bulletin - Frequently Asked Questions re: High Definition Television
7. Fall Radius/Specifications
8. Lexington/Hunter Appraisal Report
9. FAA Tower Approval, Extension, Registration Map
10. Federal Radiation Guidelines
11. Jack Kearn site report; update
12. Summary of Grand List/Tax
13.

EXHIBIT "I"

Federal Aviation Administration
NEW ENGLAND REGION, ANE-520
12 NEW ENGLAND EXECUTIVE PARK
BURLINGTON, MA 01803

AERONAUTICAL STUDY
No: 98-ANE-0635-OE

ISSUED DATE: 05/26/99

DIANE ZIPURSKY
OUTLET BROADCASTING, INC
1299 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20004

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: ANTENNA

Location: FARMINGTON CT
Latitude: 41-42-02.35 NAD 83
Longitude: 072-49-55.35
Heights: 1129 feet above ground level (AGL)
1849 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

-As a condition to this determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 7(HIWOL), & 13.

-It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

X At least 10 days prior to start of construction (7460-2, Part I)

X Within 5 days after construction reaches its greatest height (7460-2, Part II)

-See attachment for additional condition(s) or information.

This determination expires on 07/05/00 unless:

(a) extended, revised or terminated by the issuing office or
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

-As a result of this structure being critical to flight safety, it is required that the FAA be kept apprised as to the status of this project. Failure to respond to periodic FAA inquiries could invalidate this determination.

This determination is subject to review if an interested party files a petition on or befcre 06/25/99. In the event a petition for review is filed it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, AIRSPACE & RULES DIVISION, ATA-400 Federal Aviation Administration, Washington, D.C. 20591.

This determination becomes final on 07/05/99 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration, including increase in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect to air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communication Commission if the structure is subject to their licensing authority.

FCC licensees are required to file an environmental assessment with the Commission when seeking authorization for use of the high intensity flashing white system.

If we can be of further assistance, please contact our office at 781-238-7520. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 98-ANE-0635-OE.

David T. Bayley
Manager, AIRSPACE BRANCH

(DNH)

7460-2 Attached
Attachment

The proposed structure will be located in the town of Farmington, CT, approximately 1.6 NM northeast of Plainville-Roberston Field (4B8) in Plainville, CT.

The proposal will exceed the obstruction standards of Title 14 Code of Federal Regulation (CFR), Part 77 subpart C as follows:

> Section 77.23(a)(1) by 629 feet, a structure that exceeds a height of 500 feet above ground level (AGL) at the site of the object.
>
> Section 77.23(a)(2) by 929 feet, structures that exceed a specified height of 200 feet within three (3) nautical miles of an airport reference point. That height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport (1.6 NM actual) up to a maximum of 500 feet as applied to 4B8.

The proposal was circularized and no comments were received.

The study for Instrument Flight Rules (IFR) effect disclosed that the structure would have no effect on arrivals, departures, or enroute traffic.

The study for Visual Flight Rules (VFR) indicated that structure would not have any adverse affect on VFR arrivals, departures, or enroute aircraft; nor would it affect any known existing or proposed public-use airport or navigation facility.

The proposed construction is to replace an existing tower of equivalent height with a new antenna. There is no cumulative impact of the proposed structure, when combined with other existing and proposed structures.

Therefore, as a result of the study, it is determined that the proposed structure would not have a substantial adverse affect on VFR or IFR operations and would not be a hazard to air navigation provided:

1. Section 77.21 and 77.31 Effect of proposed construction would derogate the reliability of the FAA facility Hartford ATCT. Harmful interference to this FAA facility may exist if the proponent's equipment meets only the minimum FCC requirements. We request a minimum spurious emission tolerance of "141 dB", "127 dB", and "134 dB" below the EIRP within the 118-138 Mhz band.
2. Upon receipt of notification from the Federal Communication Commission that harmful interference is being caused by the licensee's transmitter, the licensee shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after one year of interference-free operation.
3. The proponent complies with the conditions set forth in the previous pages.

This determination concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of compliance relating to laws, ordinances, or regulations required by other governmental bodies.

Please refer to Aeronautical Study Number 98-ANE-0635-OE in any future correspondence concerning this structure.

ATTACHMENT

EXHIBIT "J"

UNDERGROUND
ENGINEERING &
ENVIRONMENTAL
SOLUTIONS

Haley & Aldrich, Inc.
110 National Drive
Glastonbury, CT 06033-4318
Tel: 860.659.4248
Fax: 860.659.4003
Email: HAR@HaleyAldrich.com

HALEY & ALDRICH

MEMORANDUM

19 January 1999
File No. 91266

TO: WVIT
Mr. David Bondanza

FROM: Haley & Aldrich, Inc.
Scott R. Walker, E.I.T.
John P. Dugan, Jr., P.E.

SUBJECT: Subsurface Exploration
Proposed WVIT Antenna Tower
Farmington, Connecticut

We are pleased to provide you with this preliminary summary of our subsurface exploration at the subject project. Work was conducted on 14-16 December, and consisted of seven core borings and three auger holes. Ninety-five linear feet of bedrock was drilled and NX core samples recovered from the proposed tower base and guy anchor foundation locations. Auger holes and split-spoon sampling was performed in the existing parking area to explore conditions below the proposed transmitter facility expansion. Drilling was performed by Site Environmental Services, LLC of Seymour, Connecticut. As part of the exploration program, field mapping was conducted to measure the primary and secondary joint set orientations where they were exposed in outcrops at the surface.

Bedrock at this site is the (Triassic) Holyoke Basalt, a very fine grained to aphanitic volcanic rock which cooled relatively quickly from lava erupted at the surface. Core samples indicate that the basalt is hard, relatively unweathered, and that joints are primarily high angle to near-vertical. Some secondary mineralization and weathering has occurred along joint surfaces, resulting in the healing of some old joints, and deposition of limonite, pyrolusite, and quartz. Some thin clay layers were present on joint surfaces in the southernmost borings. Field mapping indicates that the primary joint orientation is N30E, dipping between 65 and 85 degrees to the southeast. A secondary near-vertical joint set strikes N65W.

From an engineering standpoint, this rock is excellent as a foundation material. The tower base will bear on bedrock, which is estimated to have a bearing capacity in excess of 10 tons per square foot (tsf). The guy wires will be held by rock anchors grouted into the basalt.

We are beginning work on the rock anchor design. Some rock excavation will be necessary for guy anchor installation.

In the parking lot of the existing building we found bedrock was between 4.0 and 7.5 feet below grade. The overburden consists of 1-2 inches of asphalt and 4-6 inches of road base gravel, underlain by sandy silts and clays. Nearby bedrock outcrops indicate that some rock excavation will likely be required to construct footings.

We are proceeding with our engineering analyses and report. If there are any questions or concerns in the interim, please do not hesitate to call. We at Haley & Aldrich appreciate the opportunity to work with you on this project.

G:\PROJECTS\91266\MEMO2.WPF

EXHIBIT "K"

THE TOWN OF FARMINGTON

INCORPORATED 1645

TOWN HALL
1 MONTEITH DRIVE
FARMINGTON, CONNECTICUT 06032-1053

INFORMATION (860) 673-8200
FAX (860) 675-7140
"TOWN TALK" (860) 673-8255
24 HOUR MESSAGE (860) 675-0652

January 22, 1999

Attorney Mike Reiner
Reiner and Reiner
160 Farmington Avenue
Farmington, CT. 06032

Dear Mr. Reiner,

At a meeting of the Zoning Board of Appeals held on January 19, 1999, Outlet Broadcasting, Inc., /WVIT's application for variance from regulation requiring the base of a tower to be located a minimum distance from any property line at least equal to the height of the tower for property located at 200 Colt Highway was denied by a vote of three to three. Members voting against the motion made the following findings:

a) The applicant failed to demonstrate adequate hardship. Members found that the zoning regulations permitted a number of other uses to be made of the property under the R-80 zone. The regulations also permitted the erection of a tower lower in height.

b) The applicant failed to demonstrate that this proposal would conserve the public health, safety, and property values. Members found insufficient evidence that the proposed location of the tower would provide adequate protection for neighboring properties from falling ice or debris. Concerns were also raised about the stability of the proposed starmount antenna design. Finally, it was the Commission's finding that the aesthetic design of the tower and starmount would not be in keeping with the adjoining residential area and may negatively impact the property values of surrounding homes.

At the same meeting, Outlet Broadcasting, Inc./WVIT's application for reduction in the separation of guy wires for radio/TV tower from property line from 100 feet to19 feet for property located at 200 Colt Highway also was denied, by a vote of four to two. Members voting against the proposal cited the same reasons given in the preceding vote.

If you have any questions, please contact the Planning Department at 673-8221.

Very truly yours,

Laurence S. Witkin (B.L.)
Laurence S. Witkin, Secretary
Zoning Board of Appeals

LW:bl