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September 13, 2011

Mr. James G. Sweeney  
PO Box 806  
1 Harriman Square  
Goshen, NY 10924

Re: Review of Dover Village Plaza Expansion – Subdivision & Site Plan Approval  
Tax Grid No. 7063-00-562258  
Dover Village – Map No. 10031  
CEA No. 21104

Dear Mr. Sweeney:

Carpenter Environmental Associates, Inc., (CEA) has reviewed aerial imagery, USGS topographic maps, documents provided by the Town of Dover Planning Board (TDPB) for the construction of a proposed Hannaford Shopping Center, and parts of the New York State Department of Environmental Conservation (NYSDEC) records for the entire 11.9 acre subject property, to evaluate the presence or absence of historical wetlands on the property of the proposed shopping center. CEA has compiled historical aerial imagery, topographic maps, and technical narratives to conclusively demonstrate that a historical wetland that drained to both Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams, existed on the project site. Furthermore, there is significant evidence to indicate that wetland soils and hydrology still exist on the project site today.<sup>1</sup> CEA offers the following figures and associated comments with respect to historical wetland filling and the potential for wetlands to currently be present on the proposed project site.

**FIGURES:**

- Figure A – Site Location Map
- Figure B – Site Location Map (Aerial)
- Figure 1 – 1936 - Black & White (B&W) Aerial Photograph
- Figure 2 – 1944 - USGS Topographic Map
- Figure 3 – 1948 - B&W Aerial Photograph
- Figure 4 – 1947 - USGS Topographic Map
- Figure 5 – 1955 - B&W Aerial Photograph
- Figure 6 – 1958 - USGS Topographic Map
- Figure 7 – 1959 - B&W Aerial Photograph
- Figure 8 – 1967 - B&W Aerial Photograph
- Figure 9 – 1970 - B&W Aerial Photograph

<sup>1</sup> NYSDEC Environmental Resource Mapper – <http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>

Figure 10 – 1971 - B&W Aerial Photograph  
Figure 11 – 1974 - B&W Aerial Photograph  
Figure 12 – 1978 - B&W Aerial Photograph  
Figure 13 – 1980 - B&W Aerial Photograph  
Figure 13A – 1980 - B&W Aerial Photograph  
Figure 14 – 1981 - B&W Aerial Photograph  
Figure 15 – 1983 - B&W Aerial Photograph  
Figure 16 – 1984 - USGS Topographic Map  
Figure 17 – 1990 - B&W Aerial Photograph  
Figure 18 – 1995 - Color Infrared (CIR) Aerial Photograph  
Figure 19 – 1998 - USGS Topographic Map  
Figure 20 – 2000 - Color Aerial Photograph  
Figure 21 – 2004 - Color Aerial Photograph  
Figure 22 – 2009 - Color Aerial Photograph  
Figure 23 – 2011 - USGS Topographic Map  
Figure 24 – USGS Topographic Map Symbols

### **Historical Aerial Imagery and Topographic Maps**

- The **1936 B&W aerial photograph (Figure 1)** clearly depicts the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>2,3</sup> Vegetation is covering approximately 50 percent of the site primarily within the wider, northern half of the project site. The lack of vegetation and the presence of what appear to be tractor paths within the southern tip and the northeastern corner of the parcel indicate some level of historical disturbance. The USGS map from **1944 (Figure 2)** labels approximately 50 percent of the subject property as *marsh or swamp*.<sup>4</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the aerial photograph.
- The **October, 1948 B&W aerial photograph (Figure 3)** still depicts the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>5</sup> Vegetation is still covering approximately 50 percent of the site primarily within the wider, northern half of the project site. The lack of vegetation and the presence of what appear to be tractor paths within the southern tip and the northeastern corner of the parcel continue to indicate some level of historic disturbance. Additionally, a clear path or narrow dirt roadway extends along the southern edge of the wetland vegetation starting from Route 22 in the west to the

<sup>2</sup> 1936 B&W Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>

<sup>3</sup> NYSDEC Environmental Resource Mapper – <http://www.dec.ny.gov/imsmaps/ERM/viewer.htm>

<sup>4</sup> 1944 – USGS Topographic Map – Dover Plains, N.Y.-Conn.

<sup>5</sup> 1948 B&W Aerial – Dutchess County – Obtained from Dutchess County Soil & Water Conservation District; Aerial survey by Clark L ; Smith, October -1948; Prepared for the Conservation Department – State of New York, in cooperation with the U.S. Department of Agriculture, and Forest Service.

eastern property edge adjacent to the railroad. The terminus of the dirt roadway contains a turn-a-round loop that extends slightly northward along the eastern edge of the wetland vegetation. The USGS map from 1947 (Figure 4) labels approximately 50 percent of the subject property as *marsh or swamp*.<sup>6</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the aerial photograph.

- The 1955 B&W aerial photograph (Figure 5) still depicts the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>7</sup> Vegetation is still covering approximately 45-50 percent of the site primarily within the wider, northern half of the project site. The lack of vegetation and the presence of tractor paths within the southern tip and the northeastern corner of the parcel continue to indicate some level of historic disturbance. In addition to the narrow dirt roadway and turn-a-round noted in 1948, the southern tip of the property was recently graded or disturbed. Clearing and/or filling of the southeastern corner of the wetland vegetation closest to the turn-a-round loop noted in 1948 is evident. The USGS map from 1958 (Figure 6) labels approximately 50 percent of the subject property as *marsh or swamp*.<sup>8</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the aerial photograph.
- The September, 1959 B&W aerial photograph (Figure 7) still depicts the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>9</sup> Vegetation is still covering approximately 35 to 40 percent of the site primarily within the wider, northern half of the project site. The lack of vegetation and the presence of tractor paths within the southern tip and the northeastern corner of the parcel continue to indicate some level of historic disturbance. As in 1955, the southern tip of the property was recently graded or disturbed. Clearing and/or filling of the southeastern corner of the wetland vegetation closest to the turn-a-round loop noted in 1948 and 1955 is still evident and covers a larger area.
- The October, 1967 B&W aerial photograph (Figure 8) still depicts the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>10</sup> Vegetation is still covering approximately 35 to 40 percent of the site primarily within the wider, northern half of the project site. The lack of vegetation and the

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<sup>6</sup> 1947 – USGS Topographic Map – Dover Plains, N.Y.-Conn.

<sup>7</sup> 1955 B&W Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>

<sup>8</sup> 1958 – USGS Topographic Map – Dover Plains, N.Y.-Conn.

<sup>9</sup> 1959 B&W Aerial – Dutchess County – Obtained from Dutchess County Soil & Water Conservation District; Aerial survey by Abrams Aerial Survey ; Smith, September-1959; Prepared for the U.S. Department of Agriculture Commodity Stabilization Service.

<sup>10</sup> 1967 B&W Aerial – Dutchess County – Obtained from Dutchess County Soil & Water Conservation District; October 1967.

presence of tractor paths within the southern tip and the northeastern corner of the parcel continue to indicate some level of historical disturbance. As in 1955, the southern tip of the property was recently graded or disturbed. Clearing and/or filling of the southeastern corner of the wetland vegetation closest to the turn-around loop noted in 1948, 1955, and 1959 is still evident, with new paths visible, but covers a smaller area. There are paths and disturbances located within the northern edge of the wetland vegetation which appear to be filling activities.

- The **1970 & 1971 B&W aerial photographs (Figures 9 & 10)** still depict the site as containing wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>11</sup> The vegetation is covering approximately 25-30 percent of the site primarily within the wider, northern half of the project site, primarily towards the northwest. The lack of vegetation within the southern tip and the northeastern corner of the parcel continue to indicate some level of historical disturbance. Clearing and/or filling of the southeastern corner of the wetland vegetation as noted in 1948, 1955, 1959, and 1967 is still evident, and has expanded. There is a good amount of activity with trucks or trailers operating within the wetland area. The wetland appears to have less vegetation overall, but the stream channel is still prominent.
- The **1974 B&W aerial photograph (Figure 11)** still depicts the site as containing some wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively.<sup>12</sup> The vegetation is covering approximately 15-20 percent of the site primarily within the center and along the stream channel that tracks northeast. The lack of vegetation throughout the remainder of the site indicates continued historical disturbance through filling and/or grading. Loss of wetland vegetation as noted in 1948, 1955, 1959, and 1967 is still evident, and is progressing. The wetland has less vegetation overall, but the stream channel is still prominent. The northwestern corner of the wetland area appears to have been completely graded and/or filled.
- The **1978 B&W aerial photograph (Figure 12), taken from a high altitude and somewhat blurred,** depicts the wetland area as being graded and/or filled including the majority of the wetlands and watercourses that drained to the Seven Wells Brook and Stone Church Brook.<sup>13</sup> This is evidenced by the very light shading indicating either removal of the remaining vegetation and exposure of the underlying soils or deposition of fill material.
- The **1980 and 1981 B&W aerial photographs (Figure 13, 13A & 14)** depict the site as being graded and filled. Construction of the structures that comprise Dover Village Square have begun. Any wetlands or watercourses that drained to the

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<sup>11</sup> 1971 B&W Aerial. [www.historicaerials.com](http://www.historicaerials.com)

<sup>12</sup> 1974 B&W Aerial; USGS.

<sup>13</sup> 1978 B&W Aerial; USGS.

Seven Wells Brook and Stone Church Brook have been graded or filled.<sup>14,15</sup> The southern portion of the site has a layer of grassy vegetation.

- The **1983 B&W aerial photograph (Figure 15)** depicts the site as being graded and filled and the structures that comprise Dover Village Square have been constructed.<sup>16</sup> The southern portion of the site has been filled and/or re-graded (light area). The USGS map from **1984 (Figure 16)** labels approximately 35 percent of the subject property as *marsh or swamp*.<sup>17</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the historical aerial photographs. The structures that comprise Dover Village Square are depicted just north of the marsh or swamp label.
- The **1990 B&W aerial photograph (Figure 17)** depicts the structures that comprise Dover Village Square as occupying the northern half of the subject parcel.<sup>18</sup> Immediately south of the developed structures, there is a wet depression. This may indicate that that even though the wetland vegetation was graded, sufficient hydrology and hydric soils still remained.
- The **1995 CIR aerial photograph (Figure 18)** depicts the structures that comprise Dover Village Square as occupying the northern half of the subject parcel.<sup>19</sup> Immediately south of the developed structures, there is still a wet depression. This is a strong indicator indicate that that even though the wetland vegetation was graded, sufficient hydrology and hydric soils characteristics still remain. The USGS map from **1998 (Figure 19)** labels approximately 35 percent of the subject property as *marsh or swamp*.<sup>20</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the historical aerial photographs as well as the wet depression seen in the 1995 CIR aerial photograph. The structures that comprise Dover Village Square are depicted just north of the marsh or swamp label.
- The **2000 color aerial photograph (Figure 20)** depicts the structures that comprise Dover Village Square as occupying the northern half of the subject parcel.<sup>21</sup> Immediately south of the developed structures, there is still a wet depression.

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<sup>14</sup> 1980 B&W Aerial; Dutchess County Farm Service Agency; Prepared for the USDA – SCS Lanham, MD.

<sup>15</sup> 1981 B&W Aerial; USGS.

<sup>16</sup> 1983 B&W Aerial; Dutchess County Farm Service Agency; Prepared for the NHAP; Contractor – Keystone Aerials.

<sup>17</sup> 1984 – USGS Topographic Map – Dover Plains, NY-CONN.; State of Connecticut Highway Department; Topography 1958; Photorevised 1982-1984.

<sup>18</sup> 1990 B&W Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>.

<sup>19</sup> 1995 CIR Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>.

<sup>20</sup> 1998 – USGS Topographic Map – Dover Plains, NY-CT; State of Connecticut DEP NRC; Topography 1958; Planimetry from imagery taken in 1982; Photoinspected with imagery 1998.

<sup>21</sup> 2000 Color Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>.

Once again, this is a strong indicator indicate that that even though the wetland vegetation was graded, sufficient hydrology and hydric soils characteristics still remain.

- The **2004** color aerial photograph (**Figure 21**) depicts the structures that comprise Dover Village Square as occupying the northern half of the subject parcel.<sup>22</sup> Immediately south of the developed structures, there is still a wet depression which is much larger than in 1995 and 2000. Once again, this is a strong indicator indicate that that even though the wetland vegetation was graded, sufficient hydrology and hydric soils characteristics still remain.
- The **2009** Color aerial photograph (**Figure 22**) depicts the structures that comprise Dover Village Square as occupying the northern half of the subject parcel.<sup>23</sup> Immediately south of the developed structures, there is still a wet depression. Once again, this is a strong indicator indicate that that even though the wetland vegetation was graded, sufficient hydrology and hydric soils characteristics still remain. The USGS map from **2011** (**Figure 23**) labels approximately 35 percent of the subject property as *marsh or swamp*.<sup>24</sup> The location of the marsh or swamp symbols correlate with the location of the wetland vegetation depicted on the historical aerial photographs as well as the wet depression seen in the 2004 and 2009 Color aerial photographs. The structures that comprise Dover Village Square are depicted just north of the marsh or swamp label.

### **Historical Wetland Filling, Grading and Dumping Activities**

In October 1989, Lawler, Matusky & Skelly Engineers (LMS) prepared a Phase I Investigation report for the subject property titled *Engineering Investigations at Inactive Hazardous Waste Sites – Route 22, Eastside – Site No. 314032 – Town of Dover, Dutchess County*. The report noted that the project site was used as a municipal landfill for household refuse from the mid-1940s to the early 1960s.<sup>25</sup> The report notes that “residents carted their refuse and dumped it into the **marshy depression..**”<sup>26</sup> In addition, a NYSDEC Division of Hazardous Waste Remediation - Inactive Hazardous Waste Disposal Report obtained from DEC Region 3 archives for the subject property gave the following site description:

“**SITE DESCRIPTION: Flat and wet with small stream through center. Partially vacant, some storage of construction materials. Limits of fill intermediate.**”<sup>27</sup>

<sup>22</sup> 2004 Color Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>.

<sup>23</sup> 2009 Color Aerial – Dutchess County – Obtained from GeoAccess – <http://geoaccess.co.dutchess.ny.us/geoaccessv2>.

<sup>24</sup> 2011 – USGS Topographic Map (Hybrid) – Dover Plains, NY-CONN.; USGS National Map Viewer; <http://viewer.nationalmap.gov/viewer/>

<sup>25</sup> Engineering Investigations at Inactive Hazardous Waste Sites – Route 22, Eastside – Site No. 314032 – Town of Dover, Dutchess County; LMS; 10-1989; pg 1-1.

<sup>26</sup> IBID

<sup>27</sup> NYSDEC – Archived File for Site No. 314032 – Obtained from NYSDEC Region 3

The historical aerials in Figures 1-11 depict the slow degradation of a naturally occurring wetland within the project site due to filling, grading, and dumping activities. The aerials from 1936 to 1974 depict an approximately 5 acre wetland on the 11.9 acre site with varying types of vegetative strata and at least one persistent watercourse that drained towards both Seven Wells Brook and Stone Church Brook, NYSDEC Class A & C(t) protected streams respectively. The LMS report and NYSDEC Region 3 site description both confirm the presence of a marshy depression and stream on the subject property, providing further evidence of historical wetland conditions.

The remainder of the aerial imagery in Figures 17-23 depicts a large, persistent, wet depression in the exact location of the historic wetland. This area, just south of the current Dover Village Plaza structures, constitutes supporting evidence that both hydrology and potentially hydric soils are still present as components of the wetland system that has been documented both visually (aerial photography) and narratively (NYSDEC reports) for decades on this site.

Prior to any further development or grading of the property, the applicant should determine the depth to groundwater and the presence or absence of hydric soils. Mowing, clearing, grading, or any manipulation activities should cease at the site for at least one or more growing seasons with normal rainfall for the purpose of examining the plant community that develops.<sup>28</sup> Based on the information provided herein, the property owners must determine the presence or absence of wetland indicators in accordance with Federal, State, and Local wetland regulations to ensure a vital resource is not being further degraded or destroyed.

The federal Clean Water Act (PI-92-500\*) became effective on October 18, 1972 and fill activity on this site of the sort observed in this photographic assessment after that date would be governed by Section 404 of that law requiring a prior "Dredge and Fill Permit" from the Army Corps of Engineers. We have inquired of the Corps about such a permit and have been advised that none exists.

Sincerely,  
CEA Engineers, P.C.

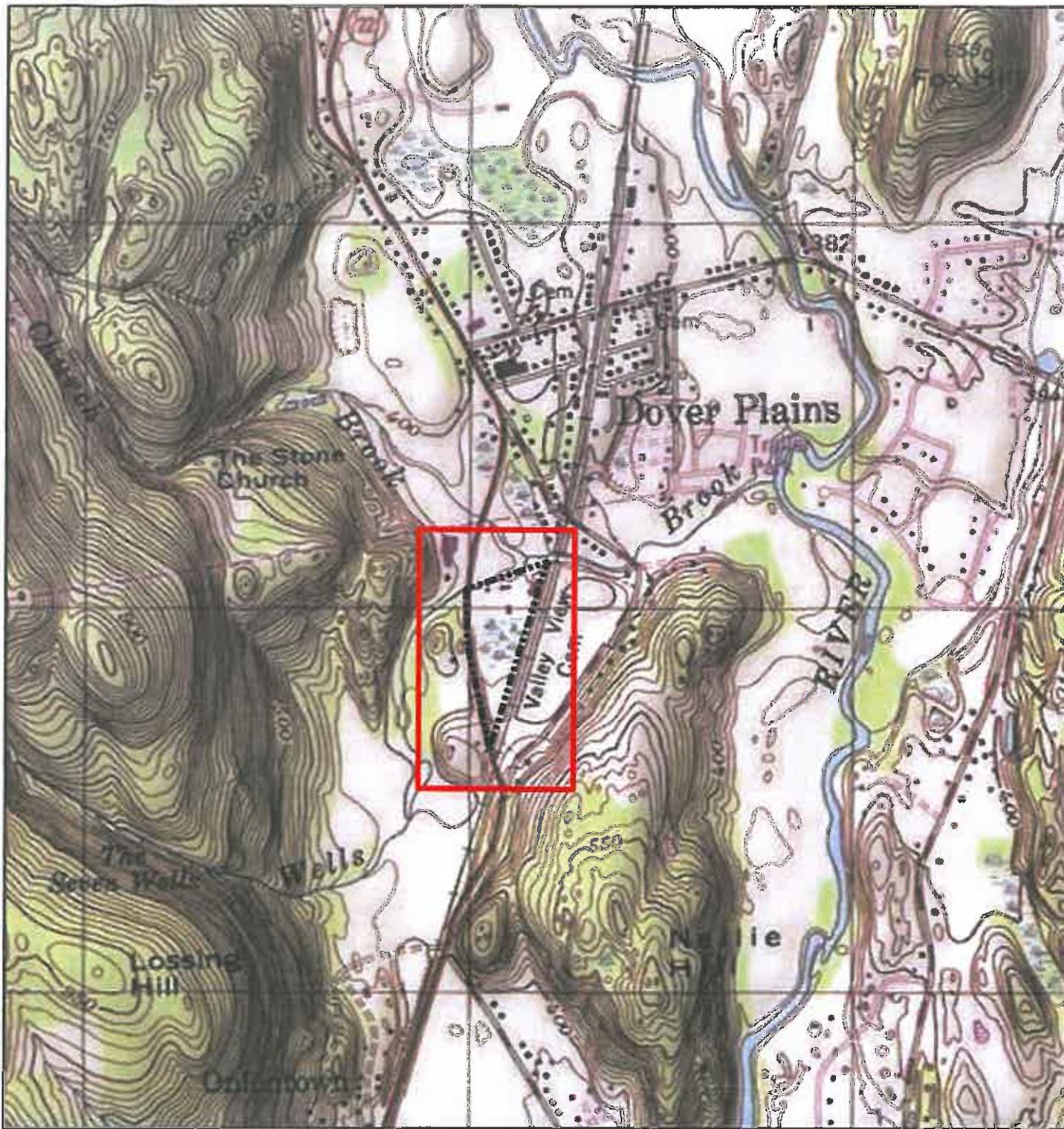


Greg M. Fleischer, PWS  
Senior Scientist

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<sup>28</sup> U.S. Army Corps of Engineers. 2009. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-09-19. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

## FIGURES



Topographic Map Source: ESRI ArcGIS Online and data partners including USGS and © 2007 National Geographic Society



1:14,000

**Legend**

-  Parcel Boundary
-  Project Vicinity

**Site Location Map**

NY Route 22,  
Dover Plains, NY 12522  
(41.732594, -73.579999)

USGS Quadrangle - Dover Plains

Figure A



Source: ESRI, i-cubed, USDA FSA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGP

### Site Location Map (Aerial)

NY Route 22,  
Dover Plains, NY 12522  
(41.732594, -73.579999)

USGS Quadrangle - Dover Plains

## Figure B



1:6,500

### Legend

-  Creek
-  Parcel Boundary
-  Project Vicinity



CEA No. 21104

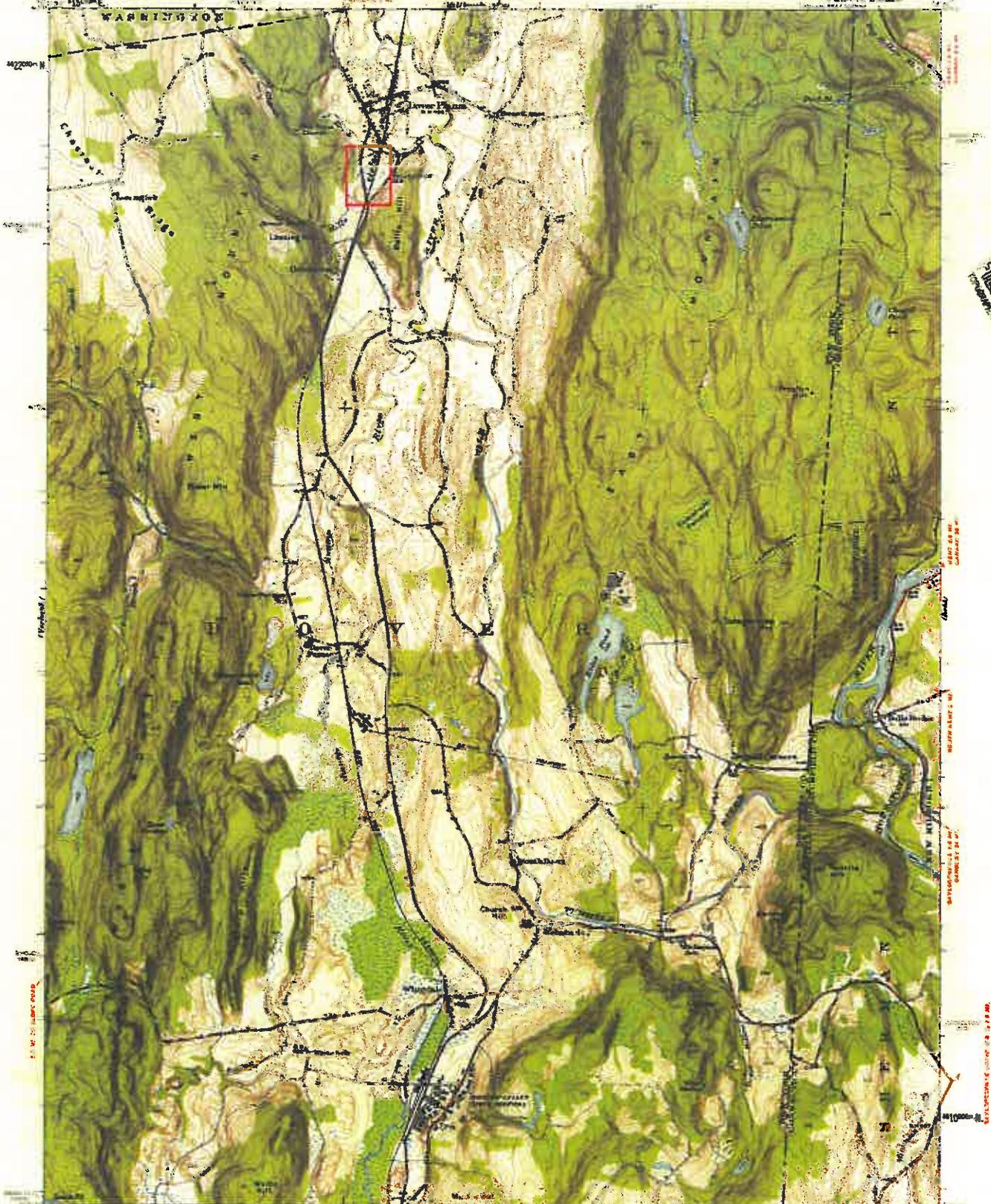


# FIGURE 2

UNITED STATES  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

UNITED STATES  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

WASHINGTON  
D.C.



U.S.G.S.  
FILE COPY

**NOT CLASSIFIED**  
 High Altitude    Light Air  
 Low Altitude    Heavy Air

SCALE: 62500  
 CONTOUR INTERVAL: 5 FEET  
 DATUM: MEAN SEA LEVEL

U.S.G.S.  
 Historical and  
 Topographic Division  
**U.S.G.S.**  
**FILE COPY**  
 INFORMATION DIVISION

FIGURE 3



HISTORICAL FILE COPY  
Do not mutilate copies to

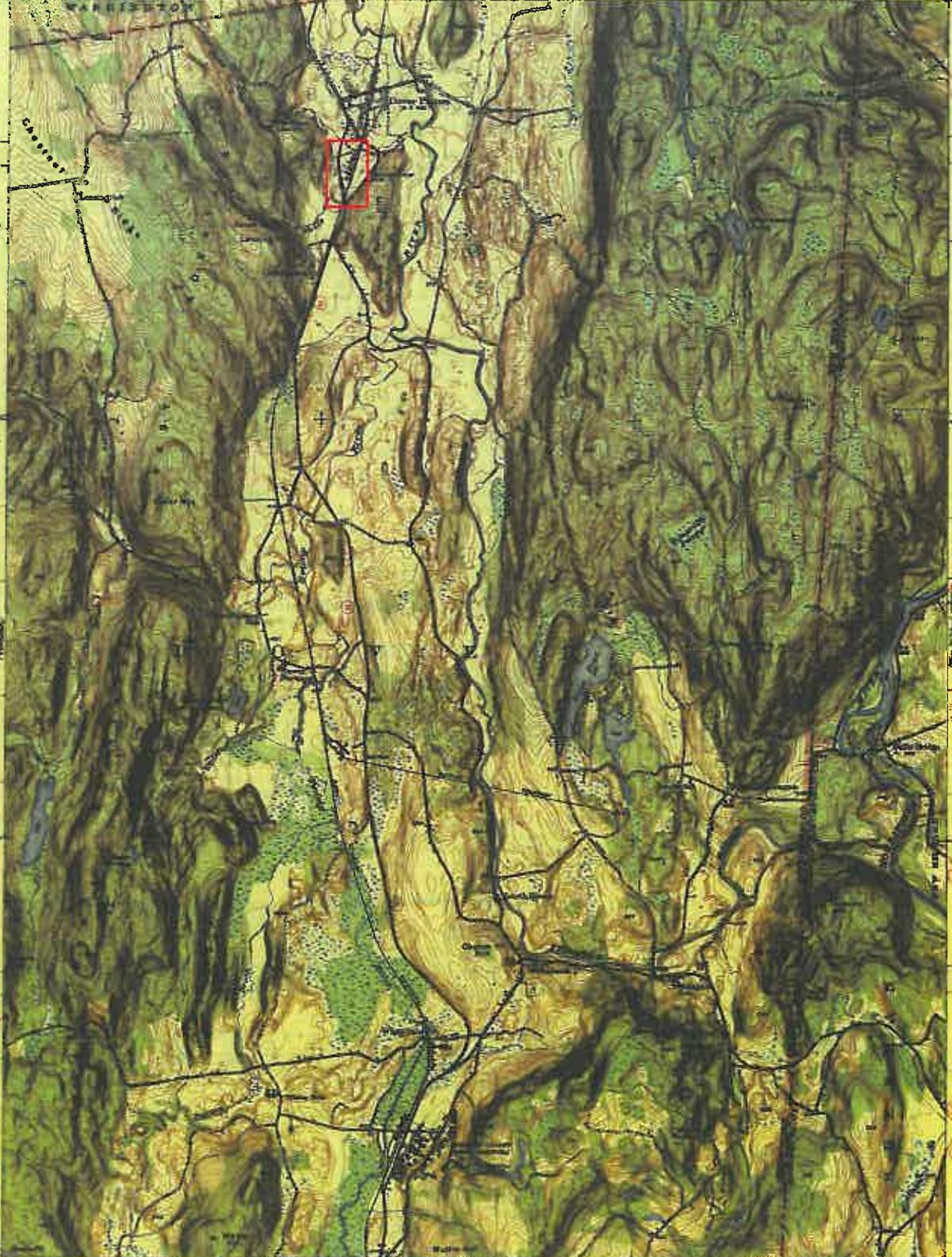
**FIGURE 4**

FILE COPY

THESE LEADS  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

WAR DEPARTMENT  
CORPS OF ENGINEERS U. S. ARMY

NEW YORK CORPS OF ENGINEERS  
DOVER PLAINS QUADRANGLE  
1:50,000 Scale



USGS  
Historical File  
Topographic Drawing

Topographic map of 1:50,000 scale, American edition, 1950, based on U.S. Army system. A 1000-foot grid based on New York (East) and Geodetic of 1929. See also: [http://www.usgs.gov](#)

DOVER PLAINS NY CORN

FILE COPY



**FIGURE 6**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

STATE OF CONNECTICUT  
HIGHWAY DEPARTMENT

DOVER PLAINS QUADRANGLE  
NEW YORK-CONNECTICUT  
7.5 MINUTE SERIES (TOPOGRAPHIC)



Maped, edited, and published by the Geological Survey  
 based on 1948 air photos  
 Data and other information from the Connecticut State  
 Highway Department, 1957  
 Revised edition of 1977  
 30' contour interval  
 1:50,000 scale  
 7.5' x 7.5' grid  
 1:50,000 scale



Scale 1:50,000  
 1 inch = 0.833 miles  
 1 centimeter = 0.039 miles

DOVER PLAINS, CT  
 1977  
 1:50,000 scale  
 7.5' x 7.5' grid  
 1:50,000 scale

FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C.  
 A portion of the map is available in microfiche format.

FIGURE 7

Z-2-E C-4 ~~1118~~

1959

Wetlands

Filling and grading of wetland

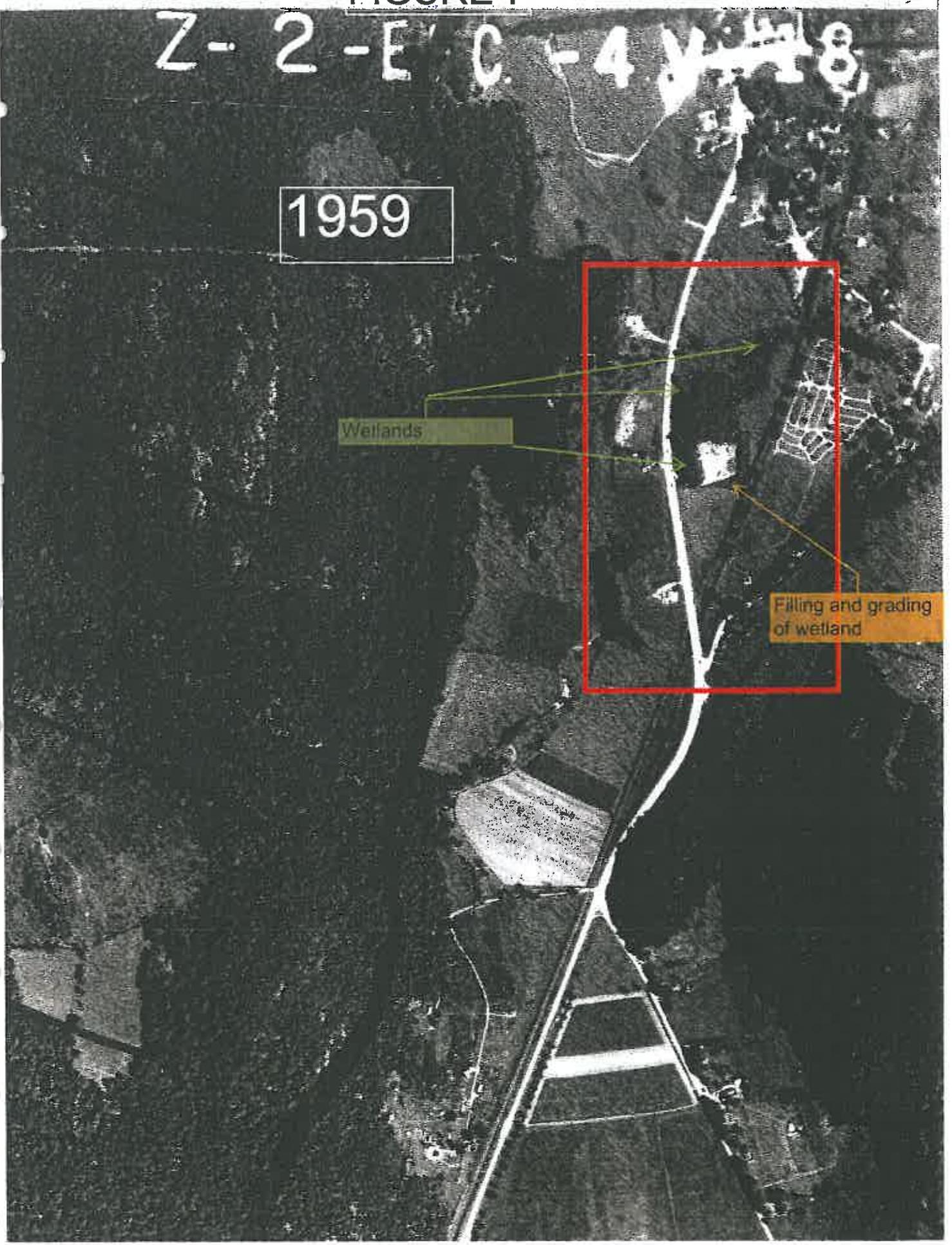
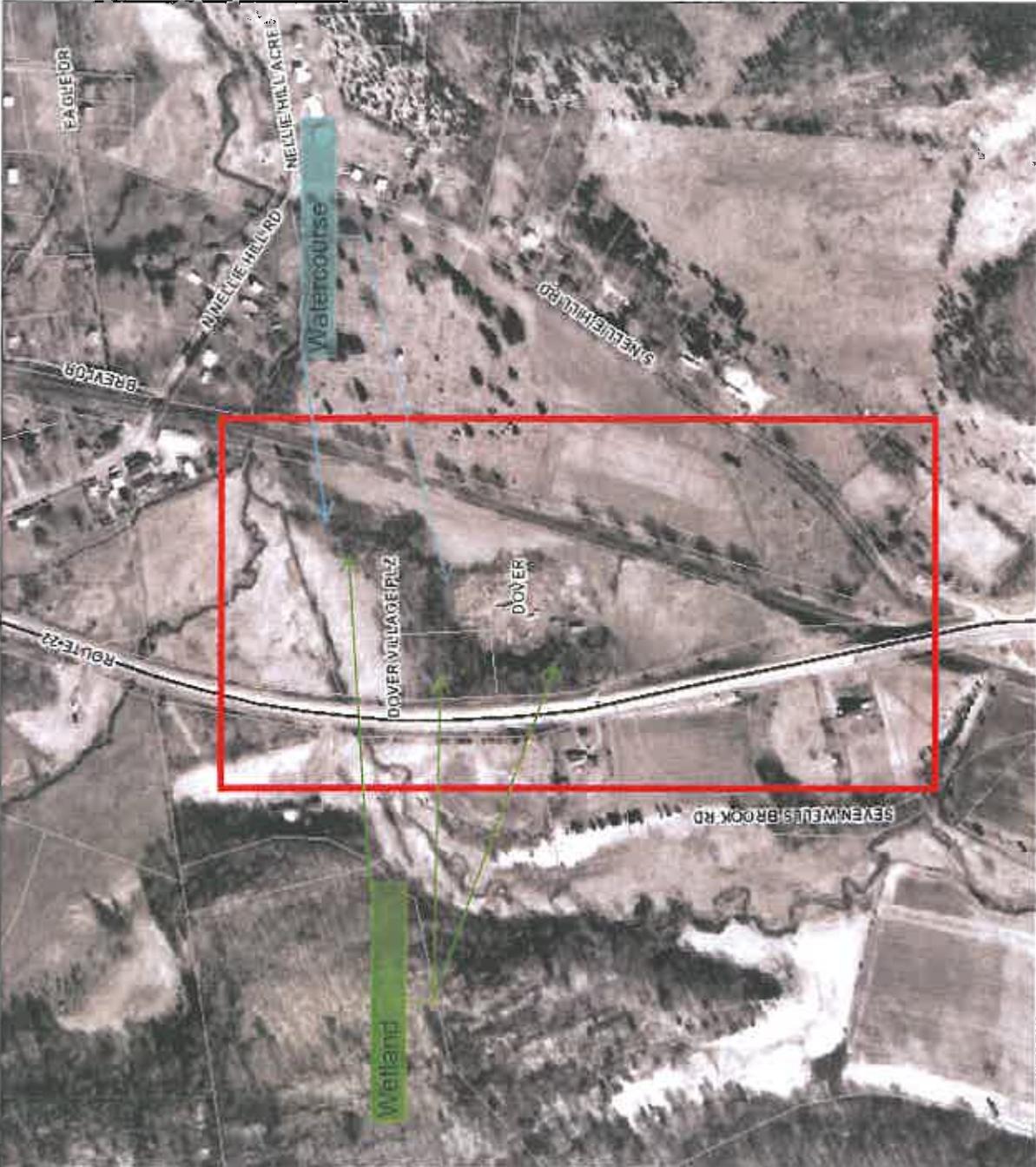


FIGURE 8





**GeoAccess v2**  
Dutchess County, NY

|                |   |  |        |  |            |  |       |  |    |  |       |
|----------------|---|--|--------|--|------------|--|-------|--|----|--|-------|
| Municipalities |   |  |        |  |            |  |       |  |    |  |       |
| Roads          | <table border="0"> <tr><td></td><td>County</td></tr> <tr><td></td><td>Interstate</td></tr> <tr><td></td><td>State</td></tr> <tr><td></td><td>US</td></tr> <tr><td></td><td>Other</td></tr> </table> |  | County |  | Interstate |  | State |  | US |  | Other |
|                | County  |  |        |  |            |  |       |  |    |  |       |
|                | Interstate  |  |        |  |            |  |       |  |    |  |       |
|                | State   |  |        |  |            |  |       |  |    |  |       |
|                | US  |  |        |  |            |  |       |  |    |  |       |
|                | Other   |  |        |  |            |  |       |  |    |  |       |
| Parcels        |   |  |        |  |            |  |       |  |    |  |       |
| Aerials 1970   |   |  |        |  |            |  |       |  |    |  |       |

**1970**

**FIGURE 9**

This map is provided as a service of the Dutchess County Internet, GeoAccess. Absolutely no accuracy or completeness guarantee is implied or intended. Print date: 9/9/2011

FIGURE 10

1971

Wetland

Watercourse

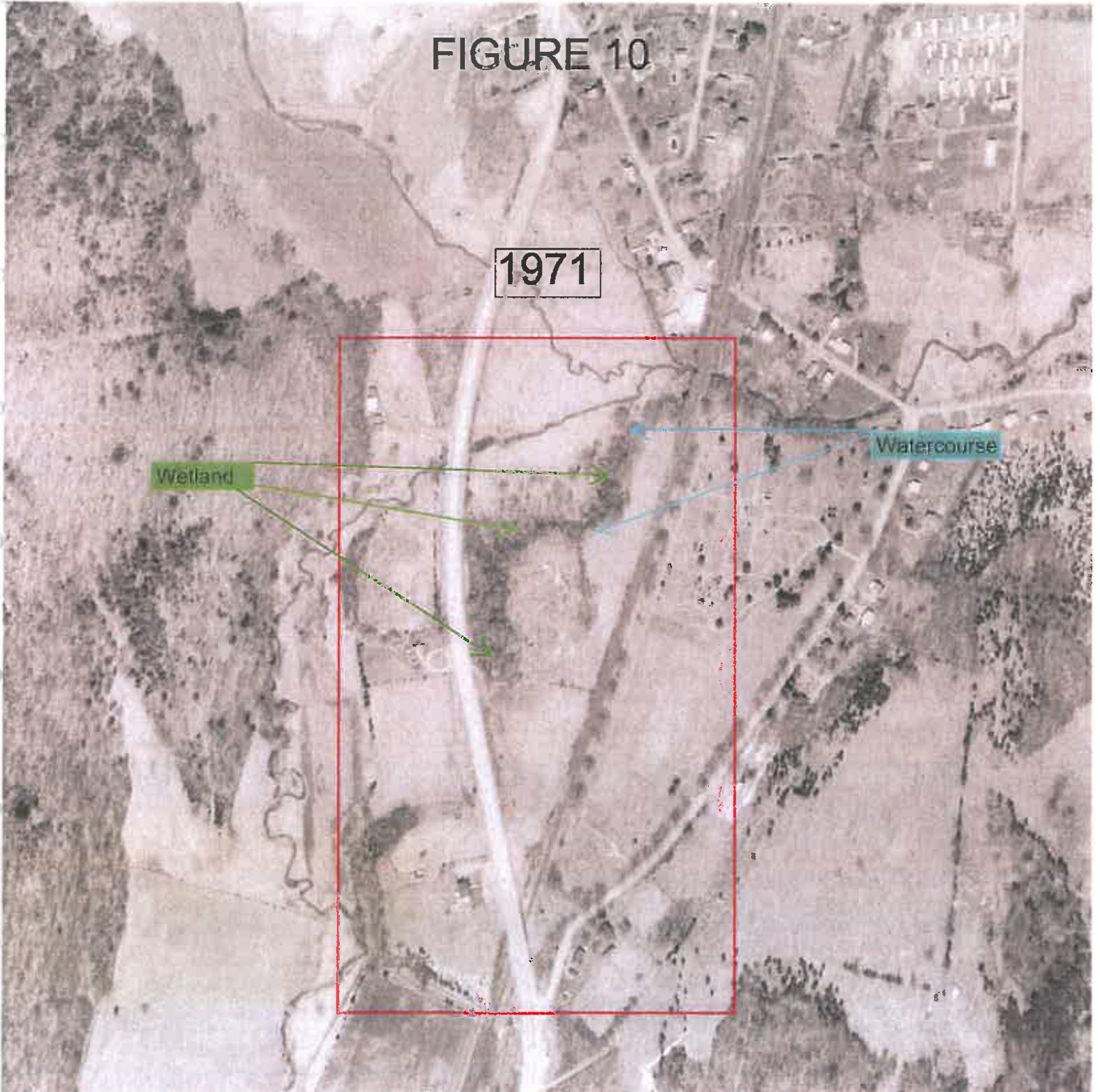


FIGURE 11

1974

SS-VOLY

2 117

2-24-74

Watercourse

Wetland

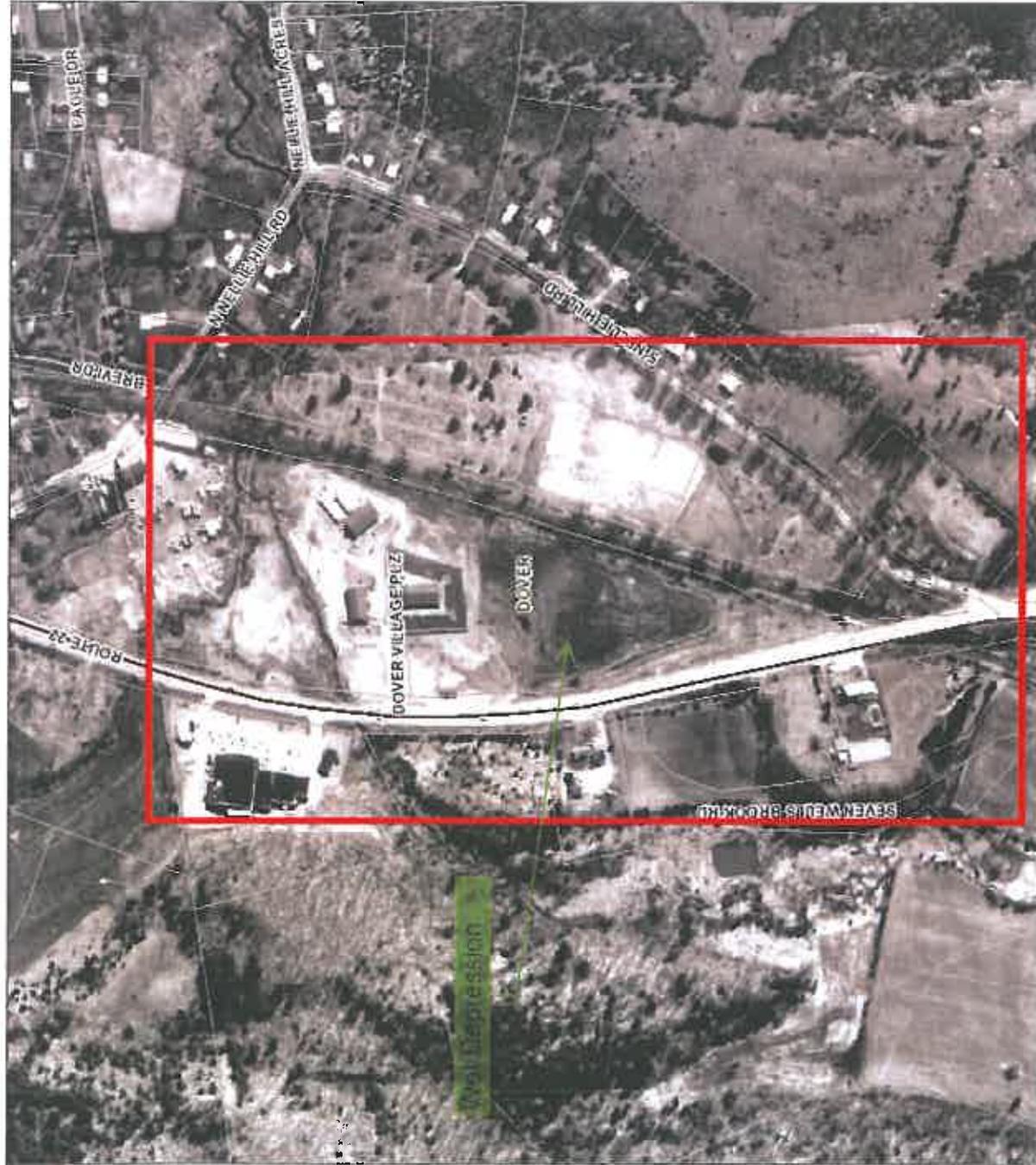


FIGURE 12

1978



5-11-781307 98177 2-125H4000 GS-VEOU



**GeoAccess** 02  
Dutchess County, NY

|                |   |  |        |  |            |  |       |  |    |  |       |
|----------------|---|--|--------|--|------------|--|-------|--|----|--|-------|
| Municipalities |   |  |        |  |            |  |       |  |    |  |       |
| Roads          | <table border="0"> <tr><td></td><td>County</td></tr> <tr><td></td><td>Interstate</td></tr> <tr><td></td><td>State</td></tr> <tr><td></td><td>US</td></tr> <tr><td></td><td>Other</td></tr> </table> |  | County |  | Interstate |  | State |  | US |  | Other |
|                | County  |  |        |  |            |  |       |  |    |  |       |
|                | Interstate  |  |        |  |            |  |       |  |    |  |       |
|                | State   |  |        |  |            |  |       |  |    |  |       |
|                | US  |  |        |  |            |  |       |  |    |  |       |
|                | Other   |  |        |  |            |  |       |  |    |  |       |
| Parcels        |   |  |        |  |            |  |       |  |    |  |       |
| Aerials 1980   |   |  |        |  |            |  |       |  |    |  |       |

1980

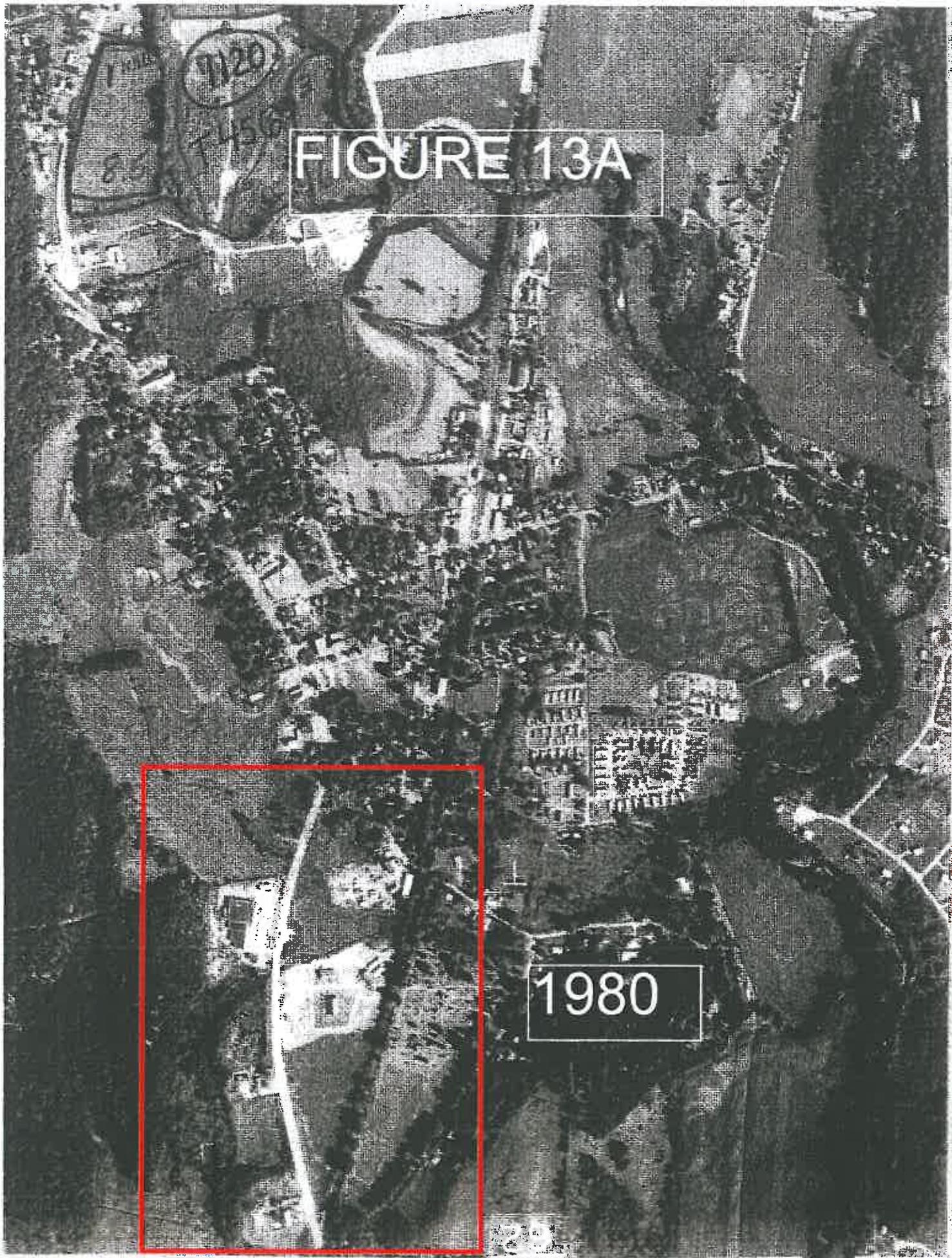
FIGURE 13

This map is provided as a service of the Dutchess County Internet, GeoAccess. Absolutely no accuracy or completeness guarantee is implied or intended. Print date: 9/9/2011

FIGURE 13A



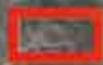
1980



GS-VEWK

FIGURE 14

1981



4-7-81

FIGURE 15

1983



FIGURE 16

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

STATE OF CONNECTICUT  
HIGHWAY DEPARTMENT

DOVER PLAINS QUADRANGLE  
NEW YORK-CONNECTICUT  
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey  
Controlled by USA and REGIONS

Photography in part by photogrammetry methods from aerial  
photography taken 1941. Topography by photostereoscopy, 1944  
Revised 1958

Projection: 10,000-foot grid based on New York  
coordinate system, east zone and Connecticut coordinate system  
1000-meter Universal Transverse Mercator grid scale  
Spheroid: Clarke, 1866

1927 North American Datum  
To place on the proposed North American Datum 1983  
read the projection sheet in Figure 16 and  
20 meters north or south of desired corner data

There may be errors when maps within the boundaries of  
the National State boundaries shown on this map



THIS MAP COMPLETES WITH ORIGINAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 20192  
A 7.5 MINUTE TOPOGRAPHIC MAP, AND SYMBOLS IS "LARGE" IN SIZE

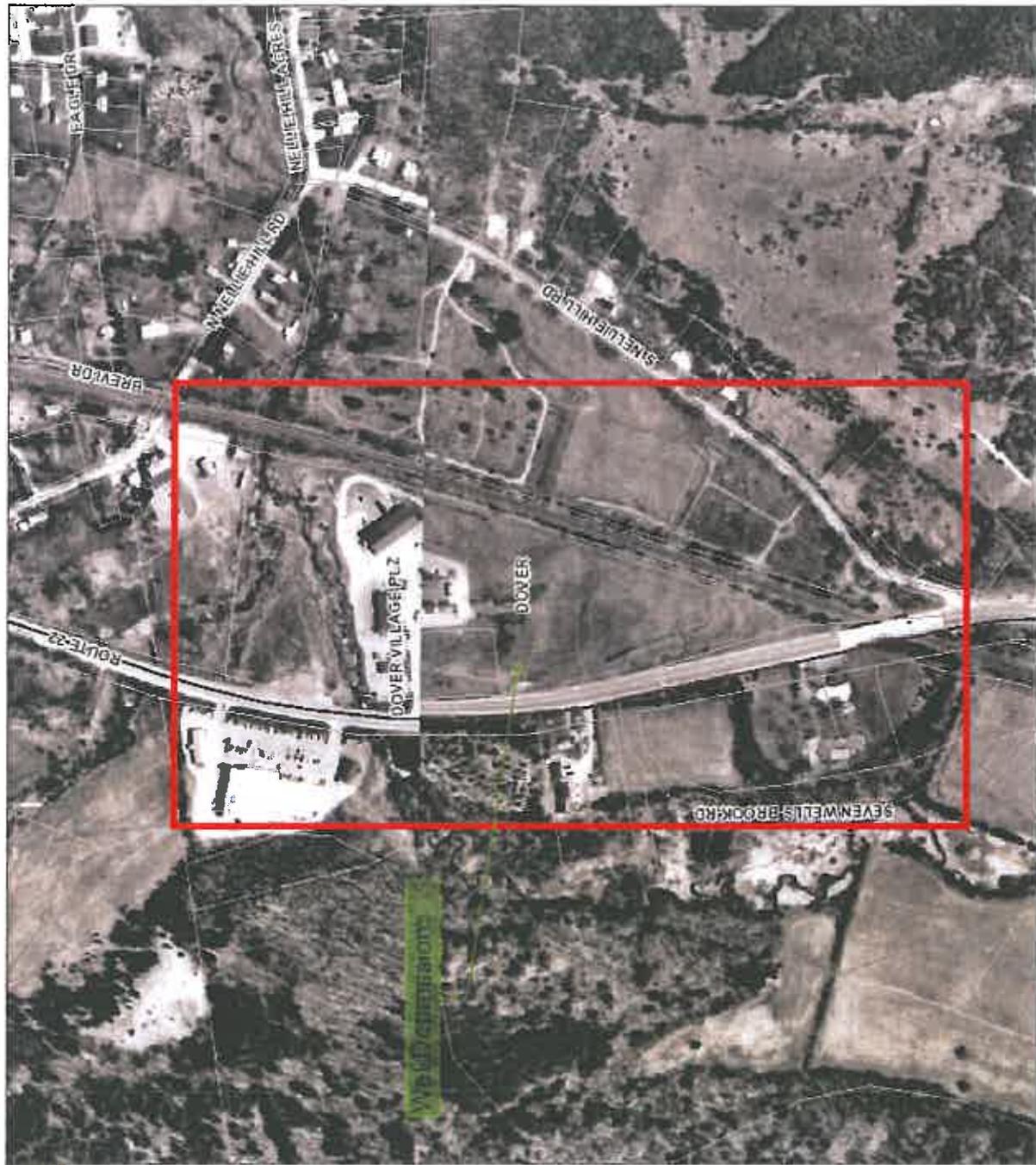
This map shows a topographic map of the  
area shown in the title of Connecticut and New York  
State boundaries shown in black. The boundary  
between Connecticut and New York is shown in red.

| ROAD CLASSIFICATION  |            |
|----------------------|------------|
| Primary              | Light blue |
| Secondary            | Unimproved |
| U. S. State May 1957 |            |

DOVER PLAINS, N. Y. - CONN.  
41075-75-024

1968  
PHOTO TOPOG 1714  
DMA 1007 4 75 - SERIES 1001

NOT FOR  
REPRODUCTION OR DISTRIBUTION



**GeoAccess v2**  
Dutchess County, NY

**Municipalities**

**Roads**

- County
- Interstate
- State
- US
- Other

**Parcels**

**Aerials 1990**

1990  
**FIGURE 17**

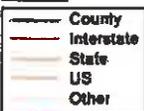
This map is provided as a service of the Dutchess County Internet, GeoAccess. Absolutely no accuracy or completeness guarantee is implied or intended. Print date: 9/9/2011

### 21104 - Dutchess County Aerial\_1995

Municipalities



Roads



Aerials 1995



# 1995

## FIGURE 18



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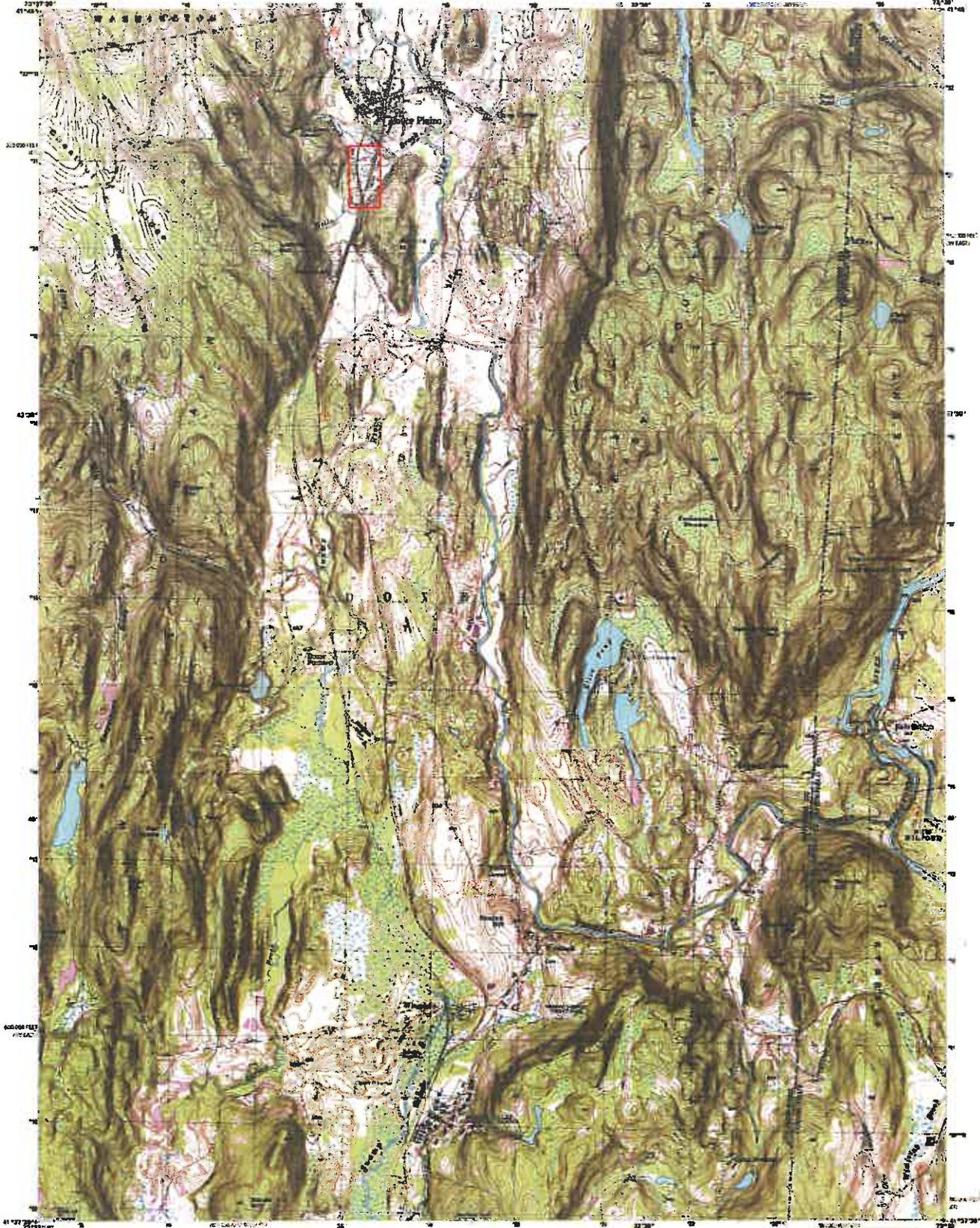


U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NATURAL RESOURCES CENTER

# FIGURE 19

DOVER PLAINS QUADRANGLE  
NEW YORK-CONNECTICUT  
7.5-MINUTE SERIES (TOPOGRAPHIC)



RECEIVED  
MAR 31 2001  
USGS  
NATURAL RESOURCES CENTER

Produced by the United States Geological Survey  
Topography compiled 1982. Potentially altered from original data  
1983 and other sources. Photoreproduced using imagery dated 1979  
to image features of drainage channels. Survey control  
survey of 1988. Boundaries marked 2000  
State plane datum of 1927 (State 57)  
Projection: New York coordinate system, east zone  
Datum: (unspecified)  
USGS data table: New York coordinate system, east zone and  
Connecticut coordinate system  
1998 National Geographic Map view grid, zone 18  
North American Datum of 1983 (NAD 83) is shown by map 1983-83  
The values of the grid between 1983 and 1983-83  
are based on the datum of the National Geodetic Survey  
NAD 83 datum  
There may be public buildings within the boundaries of  
the National or State reservation shown on this map  
Information shown in purple may not meet USGS content standards  
and may conflict with previously issued notices

SCALE 1:64,000

CONTOUR INTERVAL: 10 FEET  
ANOMALOUS VERTICAL DATUM OF 1969  
IN CONNECTICUT PART IN NORTH, SEA LEVEL BY 2000

1978 data and 2000 synthetic stereo  
reproduction of contour of 1:62,500

THIS MAP COMPRISES SEVEN DATUMS, MAP ACCURACY APPROXIMATE  
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 2458, DENVER, COLORADO 80201  
A PUBLISHED TOPOGRAPHIC MAP AND SYMBOLS IS AVAILABLE ON REQUEST

DOVER PLAINS, NY-CT  
1998

1:64,000 6 X 9 IN. QUADRETS 1998

Legend:

- Primary features: Light blue, red, black
- Red outline: Improved outline
- Secondary features: Red outline, black
- Red outline: Improved outline
- Red outline: Improved outline
- Red outline: Improved outline

DOVER PLAINS, NY-CT  
1998





GeoAccess v2  
Dutchess County, NY

21104 - Dutchess  
County Aerial\_2009

Municipalities 

Roads 

Aerials 2009 

2009  
FIGURE 22



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**FIGURE 23**

USGS National Map Viewer



FIGURE 24

**RIVERS, LAKES, AND CANALS - continued**

|  |  |
|--|--|
| Perennial lake/pond                      |  |
| Intermittent lake/pond                   |  |
| Dry lake/pond                            |  |
| Narrow wash                              |  |
| Wide wash                                |  |
| Canal, flume, or aqueduct with lock      |  |
| Elevated aqueduct, flume, or conduit     |  |
| Aqueduct tunnel                          |  |
| Water well, geyser, fumarole, or mud pot |  |
| Spring or seep                           |  |

**ROADS AND RELATED FEATURES**

Please note: Roads on Provisional-edition maps are not classified as primary, secondary, or light duty. These roads are all classified as improved roads and are symbolized the same as light duty roads.

|                                     |  |
|-------------------------------------|--|
| Primary highway                     |  |
| Secondary highway                   |  |
| Light duty road                     |  |
| Light duty road, paved*             |  |
| Light duty road, gravel*            |  |
| Light duty road, dirt*              |  |
| Light duty road, unspecified*       |  |
| Unimproved road                     |  |
| Unimproved road*                    |  |
| 4WD road                            |  |
| 4WD road*                           |  |
| Trail                               |  |
| Highway or road with median strip   |  |
| Highway or road under construction  |  |
| Highway or road underpass; overpass |  |
| Highway or road bridge; drawbridge  |  |
| Highway or road tunnel              |  |
| Road block, berm, or barrier*       |  |
| Gate on road*                       |  |
| Trailhead*                          |  |

\* USGS-USDA Forest Service Single-Edition Quadrangle maps only.  
 In August 1993, the U.S. Geological Survey and the U.S. Department of Agriculture's Forest Service signed an Interagency Agreement to begin a single-edition joint mapping program. This agreement established the coordination for producing and maintaining single-edition primary series topographic maps for quadrangles containing National Forest System lands. The joint mapping program eliminates duplication of effort by the agencies and results in a more frequent revision cycle for quadrangles containing National Forests. Maps are revised on the basis of jointly developed standards and contain normal features mapped by the USGS, as well as additional features required for efficient management of National Forest System lands. Single-edition maps look slightly different but meet the content, accuracy, and quality criteria of other USGS products.

**SUBMERGED AREAS AND SOGS**

|                                 |  |
|---------------------------------|--|
| Marsh or swamp                  |  |
| Submerged marsh or swamp        |  |
| Wooded marsh or swamp           |  |
| Submerged wooded marsh or swamp |  |
| Land subject to inundation      |  |

Max Pool 43!

**SURFACE FEATURES**

|                                 |  |
|---------------------------------|--|
| Levee                           |  |
| Sand or mud                     |  |
| Disturbed surface               |  |
| Gravel beach or glacial moraine |  |
| Tailings pond                   |  |

**TRANSMISSION LINES AND PIPELINES**

|                                      |  |
|--------------------------------------|--|
| Power transmission line; pole; tower |  |
| Telephone line                       |  |
| Aboveground pipeline                 |  |
| Underground pipeline                 |  |

**VEGETATION**

|           |  |
|-----------|--|
| Woodland  |  |
| Shrubland |  |
| Orchard   |  |
| Vineyard  |  |
| Mangrove  |  |

\*\* Provisional-Edition maps only.  
 Provisional-edition maps were established to expedite completion of the remaining large-scale topographic quadrangles of the conterminous United States. They contain essentially the same level of information as the standard series maps. This series can be easily recognized by the title "Provisional Edition" in the lower right-hand corner.

\*\*\* Topographic Bathymetric maps only.

**Topographic Map Information**

For more information about topographic maps produced by the USGS, please call: 1-888-ASK-USGS or visit us at <http://ask.usgs.gov/>