Jan. 4. 2012 11:22AM No. 0556 P. 8

FLOOD INSURANCE STUDY

VILLAGE OF WELLSBURG, NEW YORK
CHEMUNG COUNTY

DECEMBER 15, 1980

federal emergency management agency
federal insurance administration

COMMUNITY NUMBER - 360167

Discharges for the Chemung River were obtained from discharge frequency curves for the stream gage at the Town of Chemung as prepared by the COE (Reference 3). This gage has been in operation for 63 years. The Town of Chemung is located about 6.3 miles downstream of Wellsburg.

Discharge values for 10-, 50-, 100-, and 500-year return periods at the gaging stations were plotted against drainage area on log-log paper. Values for the area were obtained from this plot using the appropriate drainage area.

Discharges for Bentley Creek were obtained from the regional flood frequency procedures developed by the COE (Reference 1). This method is based on the log-Pearson Type III analysis of a large number of station records in the Susquehanna River Basin, through 1972 (Reference 4). The coefficients for this method were modified in accordance with the analysis made for Newtown Creek and other smaller streams in the vicinity. The discharges for Newtown Creek were obtained from a frequency curve developed by the SCS (Reference 5). The SCS frequency curve compared closely to a frequency curve computed for the USGS stream gage on Newtown Creek (Reference 1). All flood discharges were determined by the Susquehanna River Basin Commission (SRBC).

A summary of peak discharges for the Village of Wellsburg is shown in Table 1, "Summary of Discharges." The discharges in Table 1 reflect the peak flow of floods that will occur after the completion of the dams. All discharges previously mentioned were computed without consideration of the effects of the dams and, therefore will not be consistent with the recurrence interval of flows shown in Table 1.

TABLE 1 - SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGES (cfs) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
CHEMUNG RIVER					
At State Route 367 bridge	2,506	52,500	84,000	100,000	148,000
BENTLEY CREEK					
At the downstream corporate limits	53.4	8,000	15,500	20,000	34,000

Jimmie Joe Carl

From: Jimmie Joe Carl [jjcarl@stny.rr.com]
Sent: Friday, December 23, 2011 12:30 PM
To: 'donald.leifheitjr@fema.dhs.gov'
Cc: 'Mark Watts'
Subject: Village of Wellsburg Flood Elevations

Don:

At our December 21, 2011 meeting at the Village of Wellsburg, you requested that we provide to you the FEMA flood elevations for Bentley Creek that corresponds to the location of the Village's existing fire station for the 10-year, 50-year, 100-year, and 500-year flood events.

The associated exercise to determine these elevations simply involves "picking" elevations of the various flood water surface elevations from the Bentley Creek Flood Profiles provided within the current Flood Insurance Study for the Village (dated December 15, 1980).

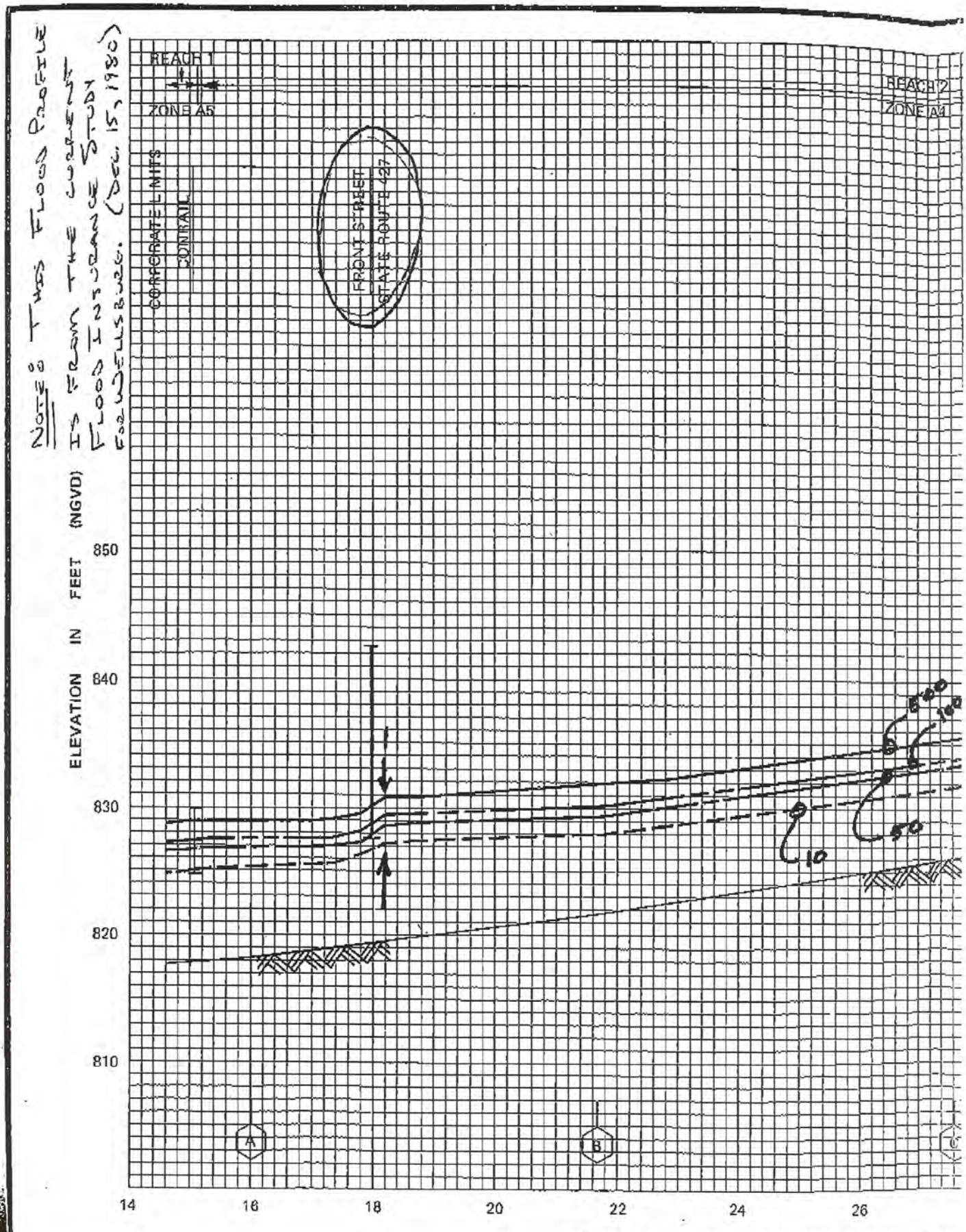
For purposes of this exercise, I picked off the various flood elevations at stream station 1820 of Bentley Creek (i.e. 1820 feet above the confluence with the Chemung River). This station seems to correspond to a cross-section that would pass along near Front Street. This station is approximately 20 feet upstream of the NYS Route 427 bridge over Bentley Creek. The associated flood elevations are as follows.

500-Year	830.9 feet
100-Year	829.5 feet
50-Year	828.6 feet
10-Year	827.2 feet

As you are aware, the use of the FEMA flood profiles to "pick" flood elevations is somewhat open to personnel interpretation. Regardless, as I discussed in our last meeting, the FEMA Study may not fully reflect the intricacies of the flooding/drainage situation at the existing fire station site. As discussed, I intend to more closely evaluate this situation, using Chemung County's LIDAR topography and some recently-received NRCS flood elevation data. I'll be directing this evaluation and the associated data to you separately soon after Christmas.

Have a good Christmas.

Sincerely – Jimmie Joe Carl, P.E.


NOTE: THIS FLOOD PROFILE IS FROM THE CURRENT FLOOD INSURANCE STUDY FOR WELLSBORO. (DEC. 15, 1980)
REACH 1
ZONE A5
REACH 2
ZONE A4
CORPORATE LIMITS
CONRAIL
FRONT STREET
STATE ROUTE 427
ELEVATION IN FEET (NGVD)
850
840
830
820
810
A
B
14
16
18
20
22
24
26
STREAM DISTANCE IN HUNDREDS OF FEET ABOVE

Questions concerning the VERTCON process may be mailed to NGS

Latitude: 42.016

Longitude: 76.73

FROM GOOGLE MAPS

NGVD 29 height:

Datum shift (NAVD 88 minus NGVD 29): -0.169 meter = -0.55 FEET

1 M = 39.37"
= 3.28'

NAVD 88 - NGVD 29 = -0.55 FEET

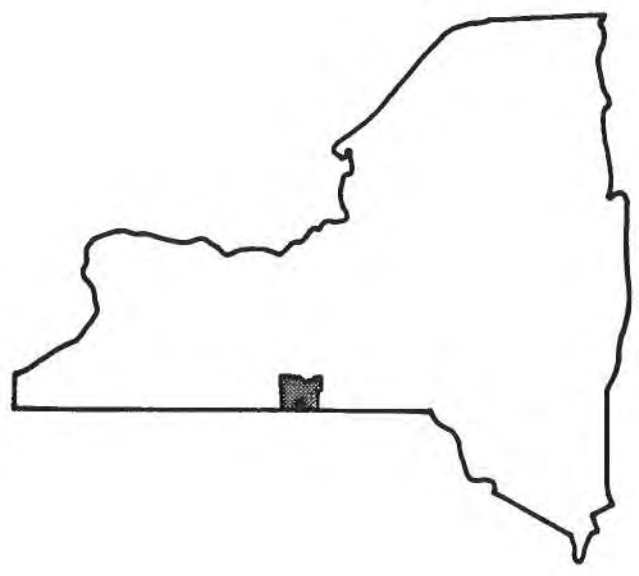
NGVD 29 = NAVD 88 + 0.55 FEET

⟹ THIS IS OUTPUT FROM THE VERTCON WEBSITE - THE NORTH AMERICAN VERTICAL DATUM CONVERSION.

FLOOD INSURANCE STUDY

VILLAGE OF WELLSBURG, NEW YORK

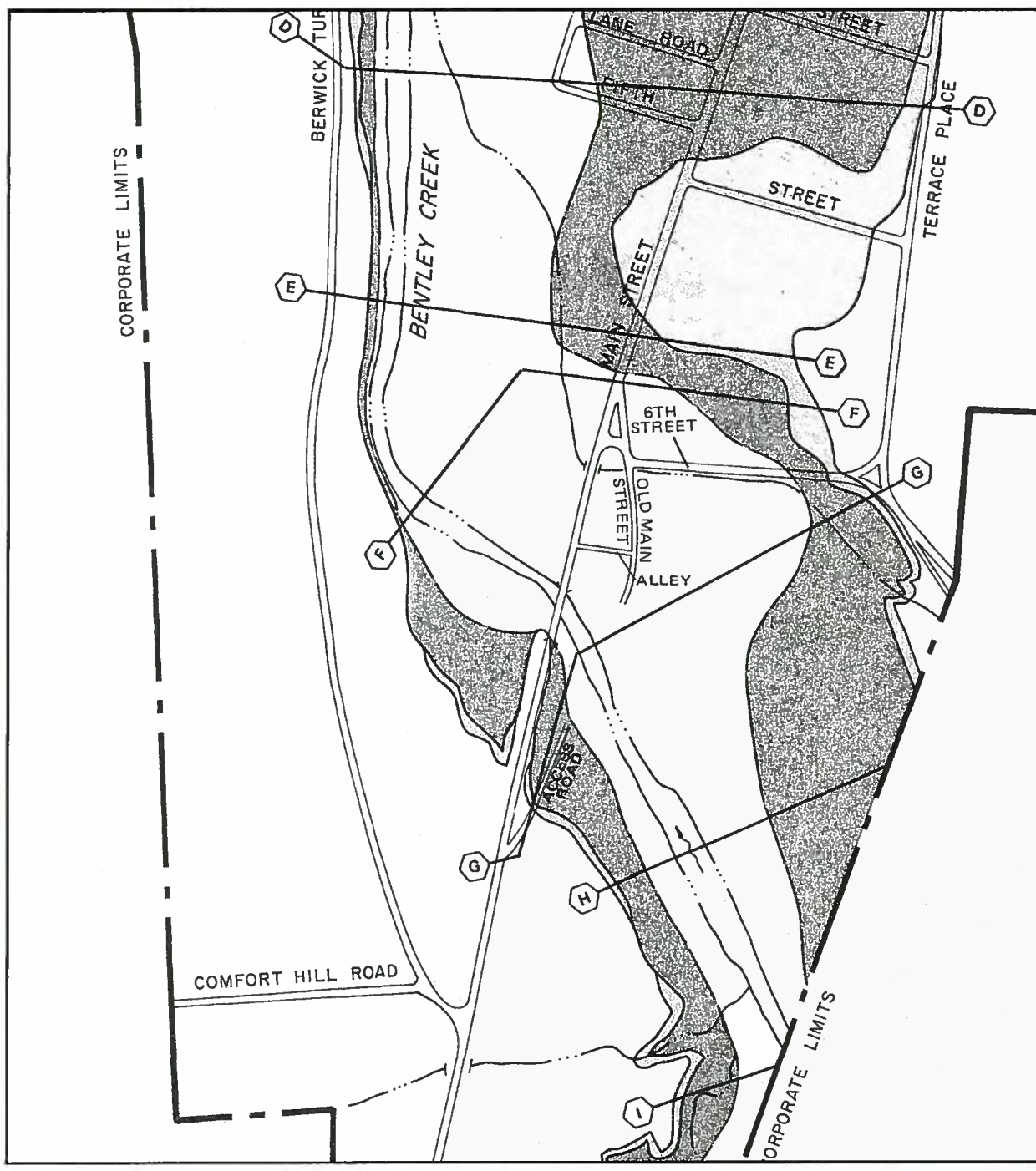
CHEMUNG COUNTY



DECEMBER 15, 1980

federal emergency management agency
federal insurance administration

COMMUNITY NUMBER - 360157



APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FLOODWAY

FLOOD BOUNDARY AND FLOODWAY MAP

VILLAGE OF
WELLSBURG, NEW YORK
CHEMUNG COUNTY

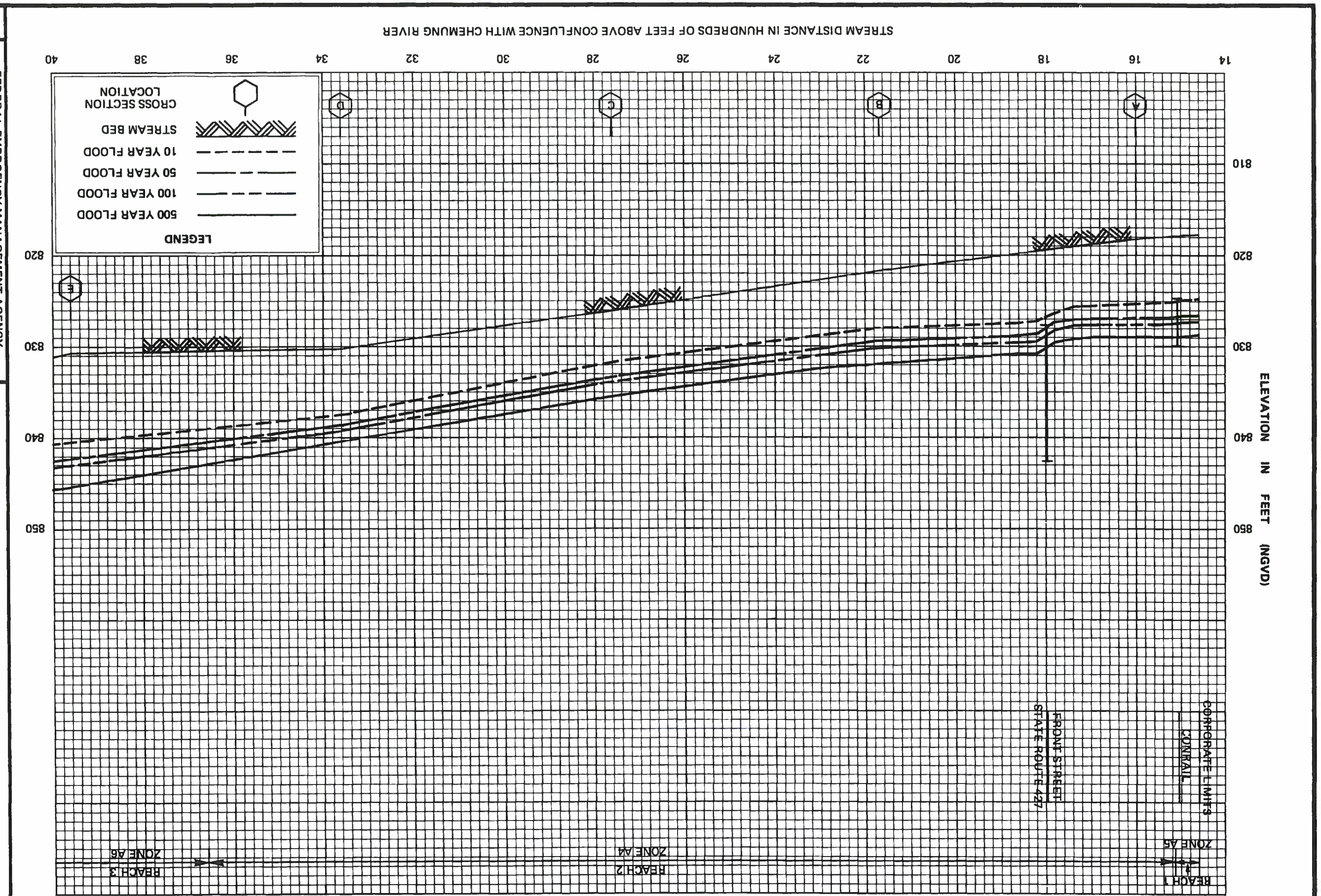
ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
360157 0001

EFFECTIVE DATE:
JUNE 15, 1981

federal emergency management agency
federal insurance administration

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



FEDERAL EMERGENCY MANAGEMENT AGENCY

Federal Insurance Administration

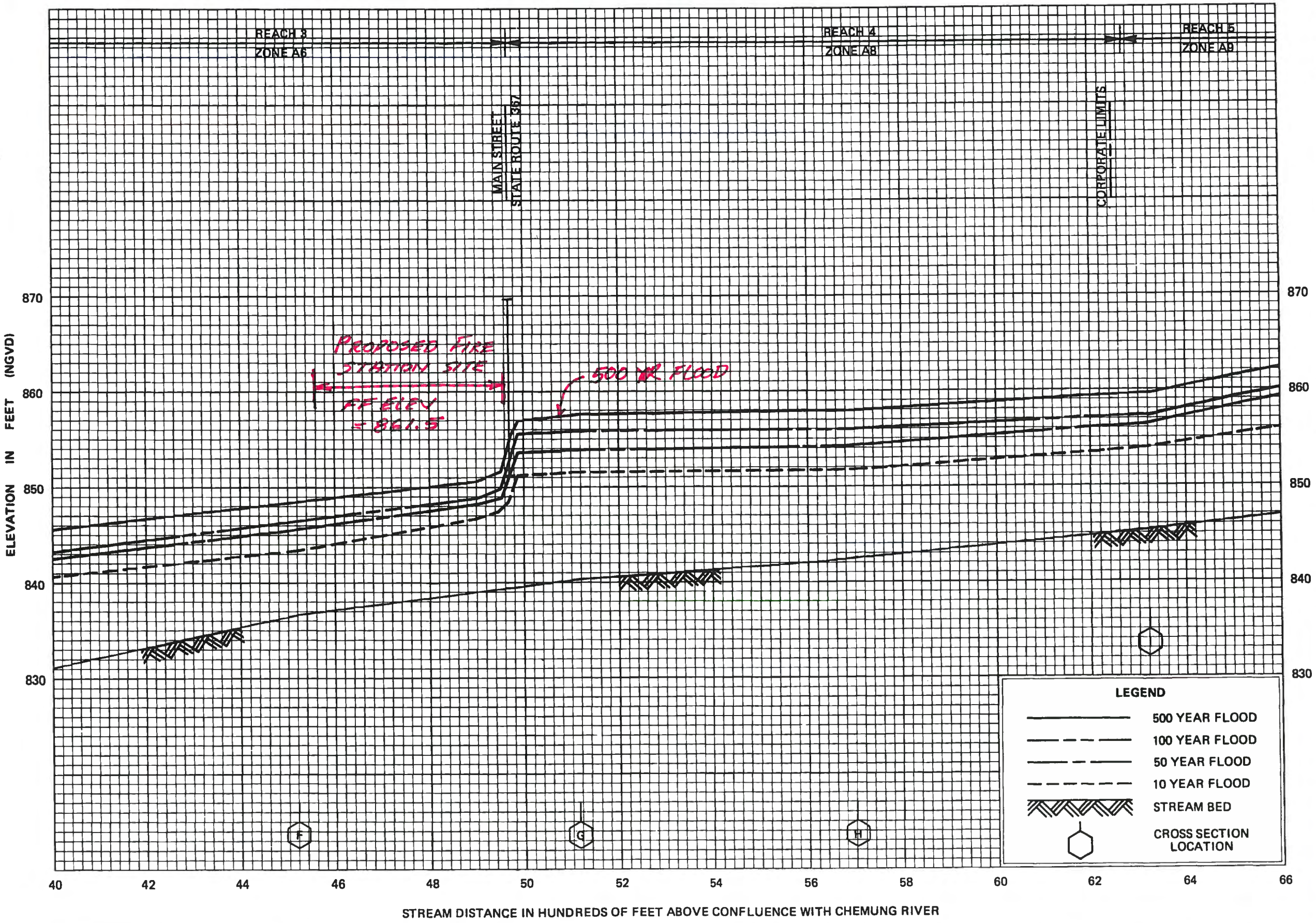
VILLAGE OF WELLSBURG, NY

(CHEMUNG CO.)

FLOOD PROFILES

BENTLEY CREEK

02P



FLOOD PROFILES

BENTLEY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF WELLSBURG, NY
(CHEMUNG CO.)

03P

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

Chemung County, New York

Wellsburg VFD

March 15, 2013

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://soils.usda.gov/sqi/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Units

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Gully

Short Steep Slope

Other

Political Features

Cities

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:1,100 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Chemung County, New York
Survey Area Data: Version 9, Dec 19, 2011

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Chemung County, New York (NY015)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CeB	Chenango channery silt loam, fans, 0 to 8 percent slopes	3.6	100.0%
Totals for Area of Interest		**3.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Chemung County, New York

CeB—Chenango channery silt loam, fans, 0 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 33 to 38 inches
Mean annual air temperature: 43 to 48 degrees F
Frost-free period: 100 to 170 days

Map Unit Composition

Chenango, fans, and similar soils: 80 percent
Minor components: 20 percent

Description of Chenango, Fans

Setting

Landform: Valley trains, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly from sandstone, shale, and siltstone

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2s
Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Channery silt loam
8 to 28 inches: Channery silt loam
28 to 60 inches: Very channery loam

Minor Components

Phelps

Percent of map unit: 5 percent

Tioga

Percent of map unit: 5 percent

Unadilla

Percent of map unit: 5 percent

Valois

Percent of map unit: 5 percent

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://soils.usda.gov/

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://soils.usda.gov/

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://soils.usda.gov/

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.glti.nrcs.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://soils.usda.gov/

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

1 **PROPOSED SITE LAYOUT PLAN**
SCALE:1"=20'

LEGEND

685	EXISTING MAJOR CONTOUR
685	EXISTING MINOR CONTOUR
838.8	EXISTING SPOT ELEVATION
855	PROPOSED MAJOR CONTOUR
854	PROPOSED MINOR CONTOUR
x860.33	PROPOSED SPOT ELEVATION
	PROPOSED STORM/SANITARY
	100 YR. FLOOD BOUNDARY
	100 YR. FLOOD WAY
	10 YR. FLOOD LINE
	EXISTING UTILITY POLE
	EXISTING PROPERTY LINE
	EXISTING TREE LINE

LEGEND

	PROPOSED BUILDING AREA
	BUILDING ACCESS DRIVE & PARKING AREA
	CONCRETE SIDEWALK
	HEAVY DUTY PAVED PAD @ BAYS
	RETAINING WALL

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DRAWN BY :	CT
CHECKED BY :	JL
DATE :	11-30-2012
SCALE :	AS SHOWN

#	DATE:	DESCRIPTION OF REVISION:	By:

"Unauthorized Alteration Or Addition To Plans Bearing A Licensed Engineer's Or Architects Seal, Is A Violation Of Section 7209 Of The New York State Education Law."

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HUNT
ENGINEERS • ARCHITECTS • SURVEYORS
AIRPORT CORPORATE PARK, 100 HUNT CENTER, HORSEHEADS, N.Y. 14845
607-358-1000
FAX-358-1800

(PRELIMINARY)
PROPOSED SITE LAYOUT PLAN

WELLSBURG FIRE DEPARTMENT
147 MAIN STREET
WELLSBURG, NY 14894

C 3.1

PROJECT NO:
2678-003

1 **SITE GRADING PLAN**
SCALE:1"=30'

N

LEGEND

685	EXISTING MAJOR CONTOUR
685	EXISTING MINOR CONTOUR
838.8	EXISTING SPOT ELEVATION
855	PROPOSED MAJOR CONTOUR
854	PROPOSED MINOR CONTOUR
x860.33	PROPOSED SPOT ELEVATION
	PROPOSED STORM/SANITARY STRUCTURE
	PROPOSED STORM PIPE STRUCTURE
	PROPOSED STORM PIPE
	100 YR. FLOOD BOUNDARY
	100 YR. FLOOD WAY
	10 YR. FLOOD LINE
	EXISTING UTILITY POLE
	EXISTING PROPERTY LINE
	EXISTING TREE LINE

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DRAWN BY :	CT
CHECKED BY :	JL
DATE :	12-09-2012
SCALE :	AS SHOWN

#	DATE	DESCRIPTION OF REVISION	BY
1	10 09 12	10 10 12	10 15 12

"Unauthorized Alteration Or Addition To Plans Bearing A Licensed Engineer's Or Architects Seal, Is A Violation Of Section 7209 Of The New York State Education Law."

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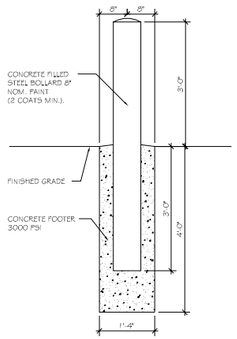
HUNT
ENGINEERS • ARCHITECTS • SURVEYORS
AIRPORT CORPORATE PARK, 100 HUNT CENTER, HORSEHEADS, N.Y. 14845
607 · 358 · 1000
FAX · 358 · 1800

(PRELIMINARY)
PROPOSED GRADING & DRAINAGE PLAN

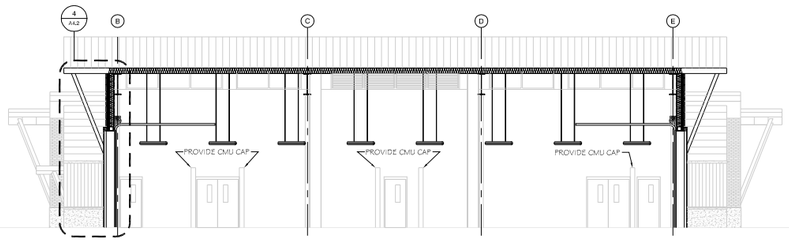
WELLSBURG FIRE DEPARTMENT
147 MAIN STREET
WELLSBURG, NY 14894

C 4.1

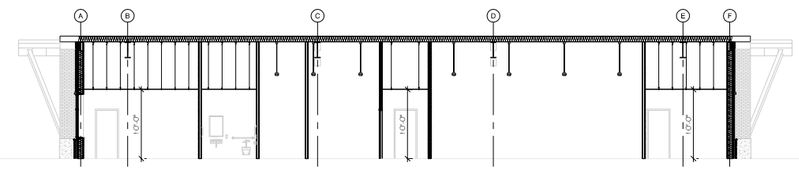
PROJECT NO:
2678-003



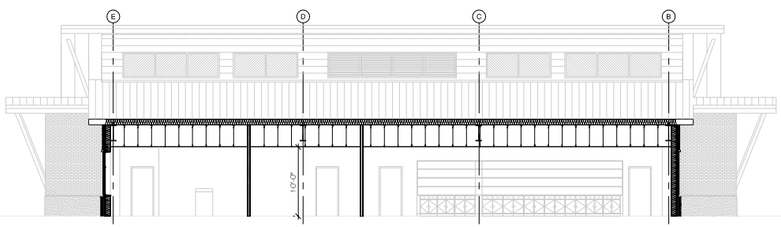
9 STEEL BOLLARD DETAIL
3/4"=1'-0"



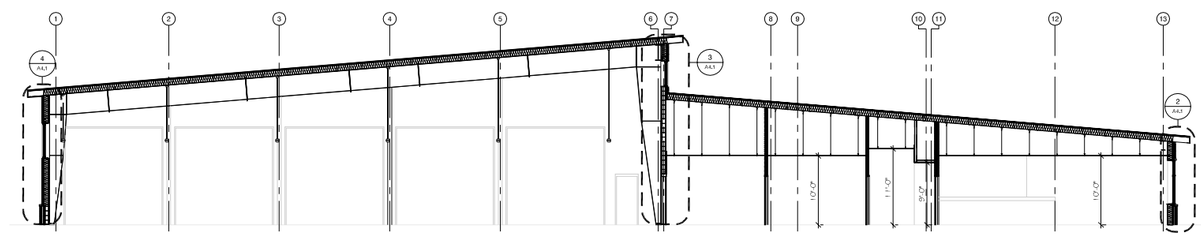
8 BUILDING SECTION
1/8"=1'-0"



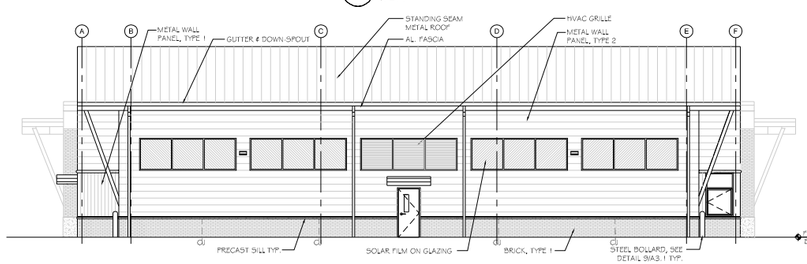
7 BUILDING SECTION
1/8"=1'-0"



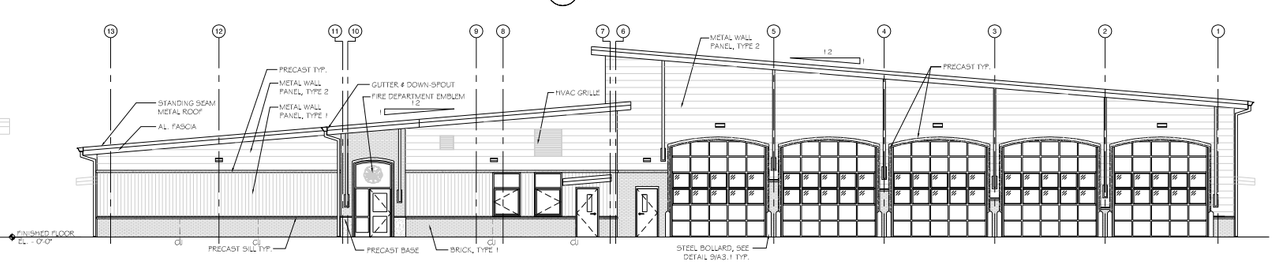
6 BUILDING SECTION
1/8"=1'-0"



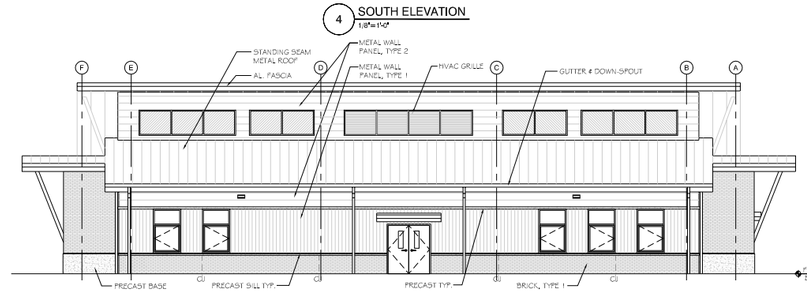
5 BUILDING SECTION
1/8"=1'-0"



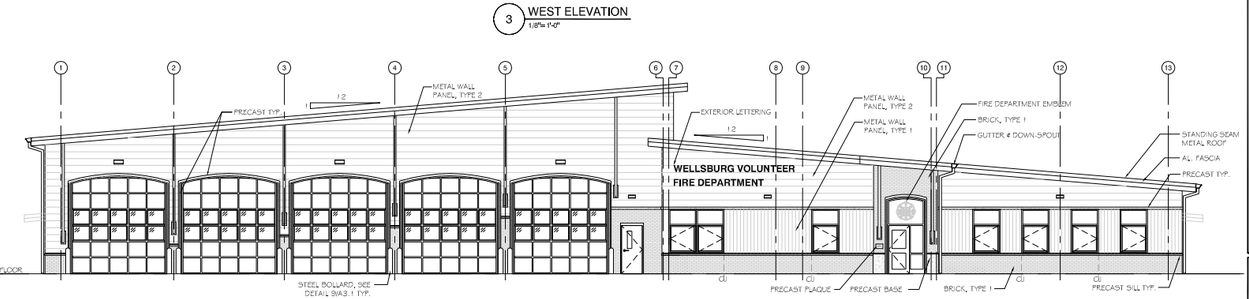
4 SOUTH ELEVATION
1/8"=1'-0"



3 WEST ELEVATION
1/8"=1'-0"



2 NORTH ELEVATION
1/8"=1'-0"



1 EAST ELEVATION
1/8"=1'-0"

DRAWN BY : CAP
CHECKED BY : DRA
DATE : 1/25/13
SCALE : AS NOTED

#	DATE	DESCRIPTION OF REVISION

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ELEVATIONS & BUILDING SECTIONS

WELLSBURG FIRE DEPARTMENT

147 MAIN STREET

WELLSBURG, NY 14894

A3.1

PROJECT NO: 2676-003