Federal Emergency Management Agency

Washington, D.C. 20472

NOV 3 0 2007

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 07-03-1448P
Community Name: Township of Worth, PA
Community No.: 421472
Effective Date of This Revision: MAR 2 0 2008

Mr. John C. Poorman
Chairman, Board of Supervisors
Township of Worth
123 Reese Hollow Road
Port Matilida, PA 16870

Dear Mr. Poorman:

The Flood Insurance Study report and Flood Insurance Rate Map for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Philadelphia, Pennsylvania, at (215) 931-5512, or the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at http://www.fema.gov/nfip.

Sincerely,

Lora S. Eskandary, CFM, Project Engineer
Engineering Management Branch
Mitigation Directorate

For: William R. Blanton Jr., CFM, Chief
Engineering Management Branch
Mitigation Directorate

List of Enclosures:

Letter of Map Revision Determination Document
Annotated Flood Insurance Rate Map
Annotated Flood Insurance Study Report

cc: [redacted]
HDR Engineering, Inc.

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Township of Worth Centre County Pennsylvania	BRIDGE	HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 421472		
IDENTIFIER	S.R. 6220, Section C11	APPROXIMATE LATITUDE & LONGITUDE: 40.803, -78.061 SOURCE: USGS QUADRANGLE DATUM: NAD 27	

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO.: 421472 0005 B DATE: August 15, 1989	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: August 15, 1989 PROFILES: 4P, 5P AND 6P SUMMARY OF DISCHARGES TABLE

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM - Flood Insurance Rate Map; ** FBFM - Flood Boundary and Floodway Map; *** FHBM - Flood Hazard Boundary Map

FLOODING SOURCE(S) & REVISED REACH(ES)

Laurel Run - from approximately 2,500 feet downstream of Interstate 99 to approximately 600 feet upstream of State Route 3042

Oliver Run - from approximately 2,100 feet downstream to approximately 700 feet upstream of T-313

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Laurel Run	Zone A	Zone AE	YES	YES
	No BFEs*	BFEs	YES	NONE
Oliver Run	Zone A	Zone AE	YES	YES
	No BFEs	BFEs	YES	NONE

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Lora S. Eskandary, CFM, Project Engineer
Engineering Management Branch
Mitigation Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Lora S. Eskandary, CFM, Project Engineer
Engineering Management Branch
Mitigation Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. Eugene K. Gruber
Director, Mitigation Division
Federal Emergency Management Agency, Region III
One Independence Mall, Sixth Floor
615 Chestnut Street
Philadelphia, PA 19106-4404
(215) 931-5512

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Lora S. Eskandary, CFM, Project Engineer
Engineering Management Branch
Mitigation Directorate

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

PUBLIC NOTIFICATION

FLOODING SOURCE	LOCATION OF REFERENCED ELEVATION	BFE (FEET NGVD 29)		MAP PANEL NUMBER(S)
		EFFECTIVE	REVISED	
Laurel Run	At approximately 2,200 feet downstream of Interstate 99 (Northbound)	None	1019	0005 B
	At approximately 400 feet upstream of State Route 3024	None	1110	0005 B
Oliver Run	At approximately 1,900 feet downstream of T-313	None	1071	0005 B
	At approximately 800 feet upstream of T-313	None	1109	0005 B

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised BFEs presented in this LOMR may be changed.

A notice of changes will be published in the *Federal Register*. A short notice also will be published in your local newspaper on or about the dates listed below. Please refer to FEMA's website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp for a more detailed description of proposed BFE changes, which will be posted within a week of the date of this letter.

LOCAL NEWSPAPER Name: *The Centre Daily Times*
Dates: 12/13/2007 12/20/2007

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Assistance Center toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMR Depot, 3601 Eisenhower Avenue, Alexandria, VA 22304. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

Lora S. Eskandary, CFM, Project Engineer
Engineering Management Branch
Mitigation Directorate

DEPARTMENT OF HOMELAND SECURITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

Proposed Base Flood Elevation Determination for the Township of Worth, Centre County, Pennsylvania, Case No. 07-03-1448P. The Department of Homeland Security's Federal Emergency Management Agency solicits technical information or comments on the proposed Base (1-percent-annual-chance) Flood Elevations (BFEs) shown in the Flood Insurance Study (FIS) and/or on the Flood Insurance Rate Map (FIRM) for your community. These proposed BFEs are the basis for the floodplain management measures that your community is required to either adopt or show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). For a detailed listing of the proposed BFEs and information on the statutory period provided for appeals, please visit FEMA's website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp, or call the FEMA Map Assistance Center toll free at 1-877-FEMA MAP.

Download RTF Table

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

Changes to Base Flood Elevations Determinations

AGENCY: Federal Emergency Management Agency (FEMA), Emergency Preparedness and Response Directorate, Department of Homeland Security.

SUMMARY: On August 15, 1989 the Department of Homeland Security's Federal Emergency Management Agency identified Special Flood Hazard Areas (SFHAs) in the TOWNSHIP OF WORTH, CENTRE COUNTY, PENNSYLVANIA, through issuance of a Flood Insurance Rate Map (FIRM). The Mitigation Division has determined that modification of the elevations of the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in this community is appropriate.

DATES: Upon the second publication of notice of these changes in a newspaper of local circulation in your community, any person has 90 days in which he or she can request, through the Chief Executive Officer of the community, that the Mitigation Division reconsider the determination. Any request for reconsideration must be based on knowledge of changed conditions or new scientific or technical data. All interested parties are on notice that until the 90-day period elapses, the Mitigation Division's determination to modify the BFEs may itself be changed.

ADDRESSES: Any person having knowledge or wishing to comment on these changes should immediately notify:

Township of Worth
Mr. John C. Poorman
Chairman, Board of Supervisors
Township of Worth 123 Reese Hollow Road
Port Matilda, PA 16870

FOR FURTHER INFORMATION CONTACT: William R. Blanton, Jr., CFM, Chief, Engineering Management Branch, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472, (202) 646-2903.

SUPPLEMENTARY INFORMATION: A hydraulic analysis was performed to incorporate updated topographic information and has resulted in an increase in SFHA width, a decrease in SFHA width and establishment of BFEs for Laurel Run and Oliver Run. The table below indicates existing and modified BFEs for selected locations along the affected lengths of the flooding source (s) cited above.

* Elevation in feet (NGVD)[1]
\+ Elevation in feet (NAVD)[2]
\# Depth in feet above ground

Source of Flooding	Location	Lat/Long Coordinates	Existing BFE	Modified BFE	Affected Communities
Laurel Run					Township of Worth
	At approximately 2,200 feet downstream of Interstate 99 (Northbound)	40° 48' 11.441" / -78° 3' 25.422"	None	* 1019	
	At approximately 400 feet upstream of State Route 3024	40° 48' 33.864" / -78° 4' 28.407"	None	* 1110	
Oliver Run					Township of Worth
	At approximately 1,900 feet downstream of T-313	40° 48' 36.77" / -78° 4' 0.156"	None	* 1071	
	At approximately 800 feet upstream of T-313	40° 48' 45.211" / -78° 4' 28.562"	None	* 1109	

All elevations referenced to the National Geodetic Vertical Datum of 1929 (NGVD).

[1]National Geodetic Vertical Datum, rounded to nearest whole foot
[2]North American Vertical Datum, rounded to nearest whole foot

The changes are being made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65.

Under the above-mentioned Acts of 1968 and 1973, the Mitigation Division must develop criteria for floodplain management. To participate in the National Flood Insurance Program (NFIP), the community must use the modified BFEs to administer the floodplain management measures of the NFIP. These modified BFEs will also be used to calculate the appropriate flood insurance premium rates for new buildings and their contents and for the second layer of insurance on existing buildings and contents.

Last Updated: Monday, December 3, 2007

FEMA 500 C Street, SW Washington, D.C. 20472 Phone: (202) 566-1600

significance for floodplain management and for flood insurance rates. This event, commonly termed the 100-year flood, has a 1 percent chance of being equaled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (1 percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for the flooding source studied in detail affecting the community.

The flood-frequency discharge values for Bald Eagle Creek were determined utilizing regional regression equations developed in USGS Water-Resources Investigations 82-21 (Reference 1).

A summary of the drainage area-peak discharge relationships for the stream studied by detailed methods is shown in Table 1, "Summary of Discharges."

TABLE 1 - SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. miles)	PEAK DISCHARGE (cfs) 100-YEAR
BALD EAGLE CREEK		
At U. S. Route 322	38.7	7,000
At downstream corporate limits of Borough of Port Matilda	30.5	5,800
LAUREL RUN		
At downstream corporate limits of of Borough of Port Matilda	8.9	4,800
Downstream of U.S. Route 322	5.7	3,100
OLIVER RUN		
Downstream of U.S. Route 322		1,700

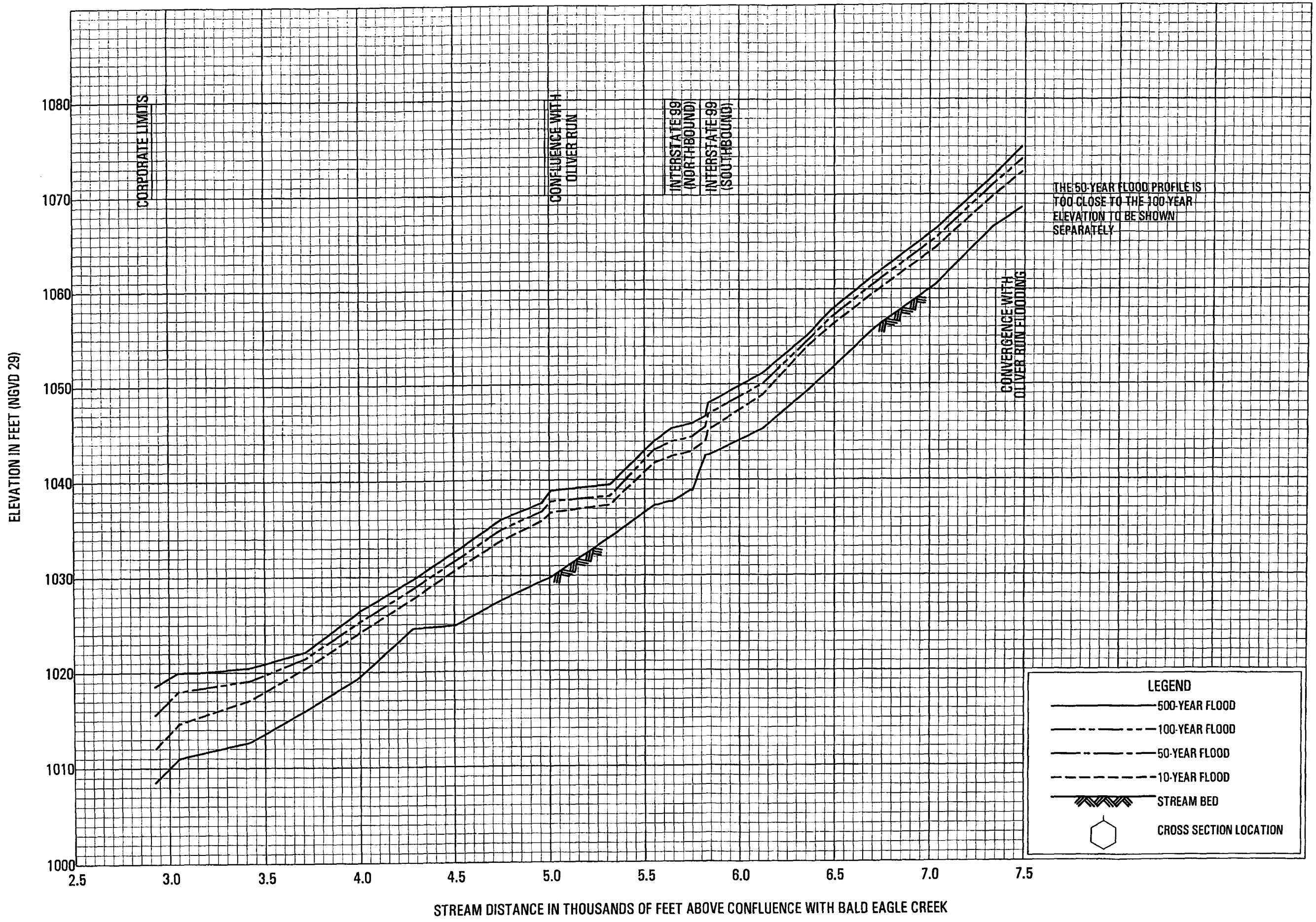
← Revised Data

REVISED TO REFLECT LOMR EFFECTIVE MAR 20 2008

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the source studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Cross sections were field surveyed and located at close intervals above and below bridges and culverts in order to compute the significant backwater effects of these structures. All bridges, dams, and culverts in the community were field surveyed to obtain elevation data and structural geometry.



FEDERAL EMERGENCY MANAGEMENT AGENCY

TOWNSHIP OF WORTH, PA

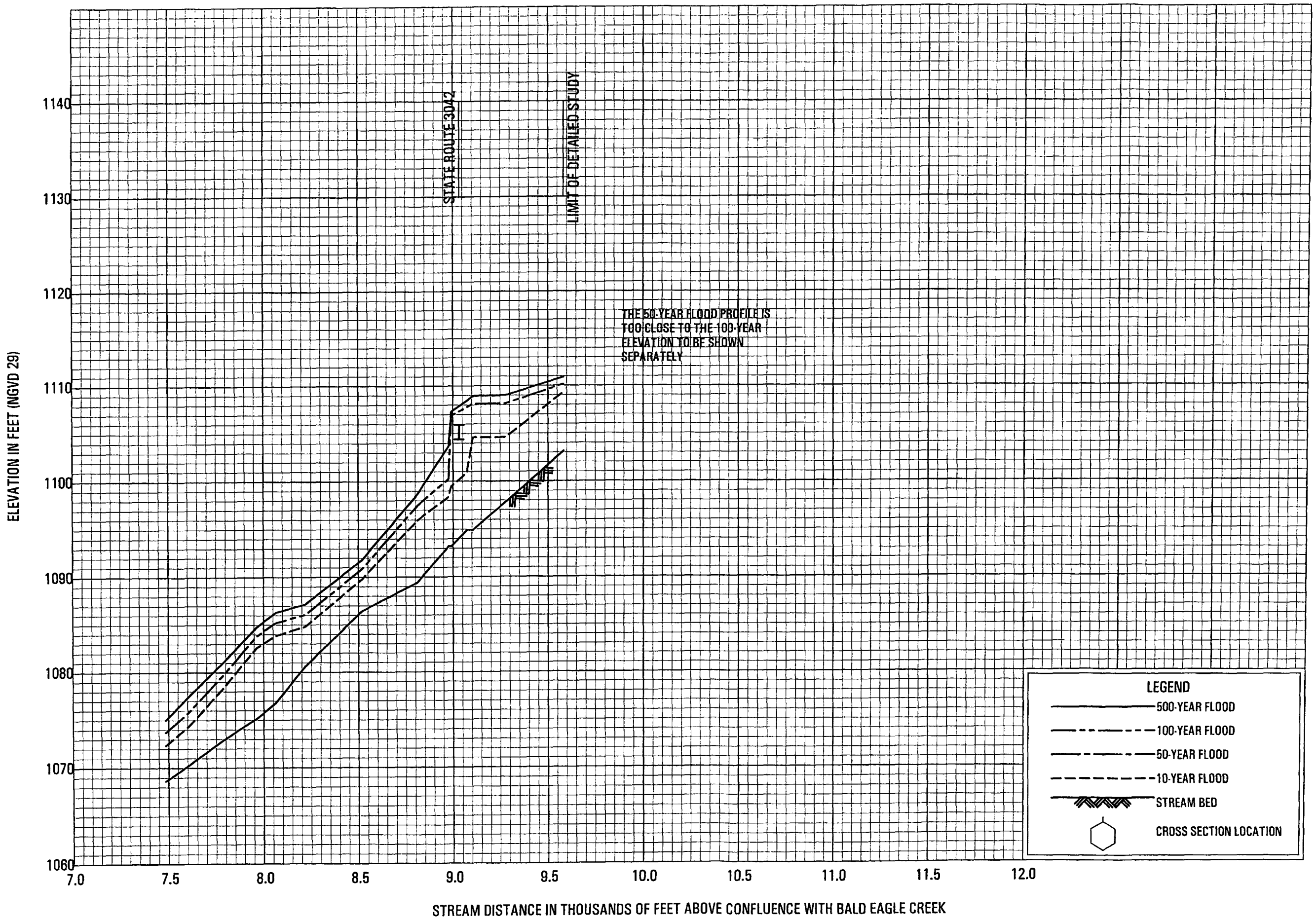
(CENTRE CO.)

FLOOD PROFILES

LAUREL RUN

REVISED TO REFLECT LOMR EFFECTIVE MAR 20 2008

04P



FEDERAL EMERGENCY MANAGEMENT AGENCY

TOWNSHIP OF WORTH, PROPOSED TO REFLECT LOMR

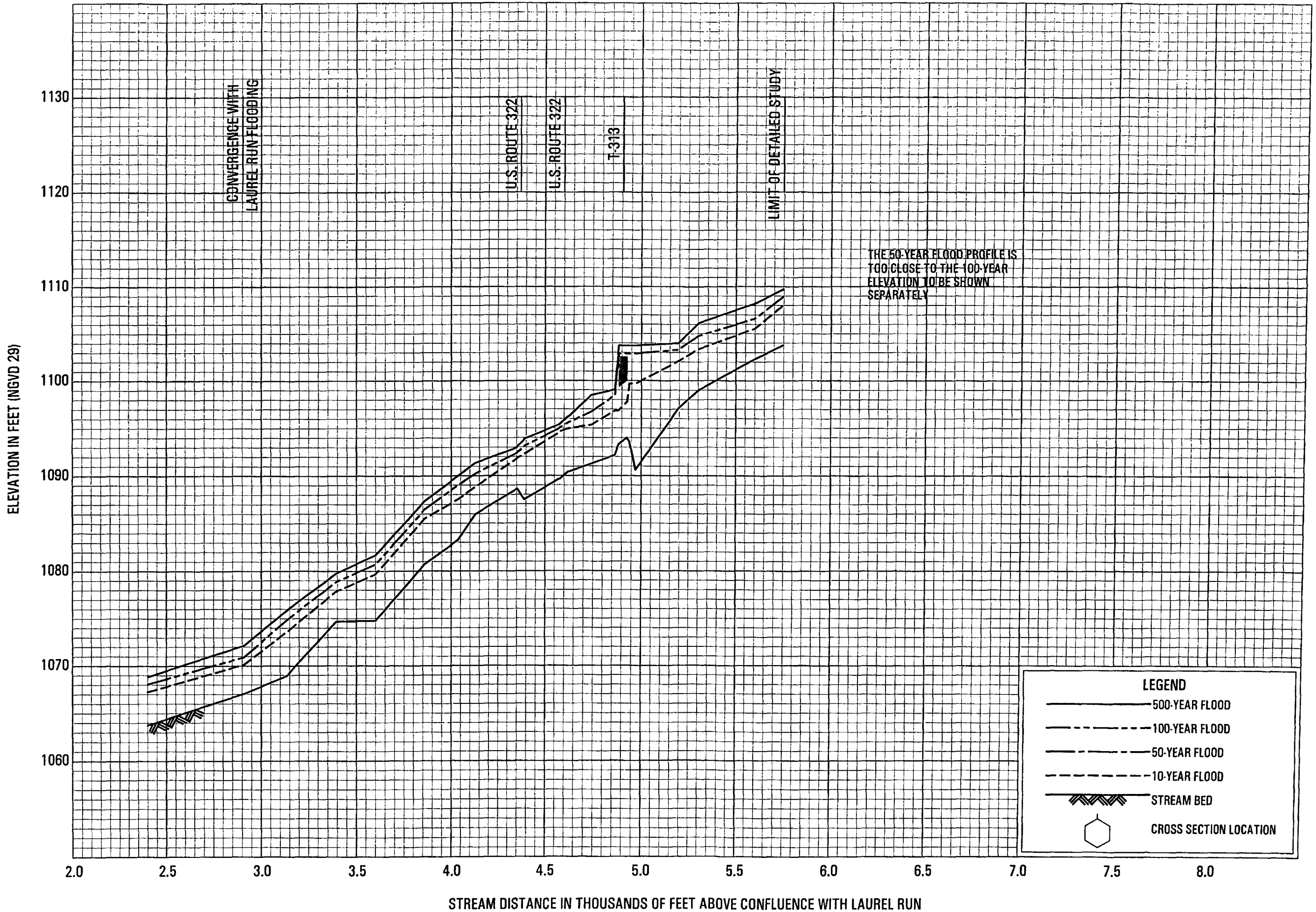
(CENTRE CO.)

EFFECTIVE MAR 20 2008

FLOOD PROFILES

LAUREL RUN

05P



FEDERAL EMERGENCY MANAGEMENT AGENCY

TOWNSHIP OF WORTH, PA

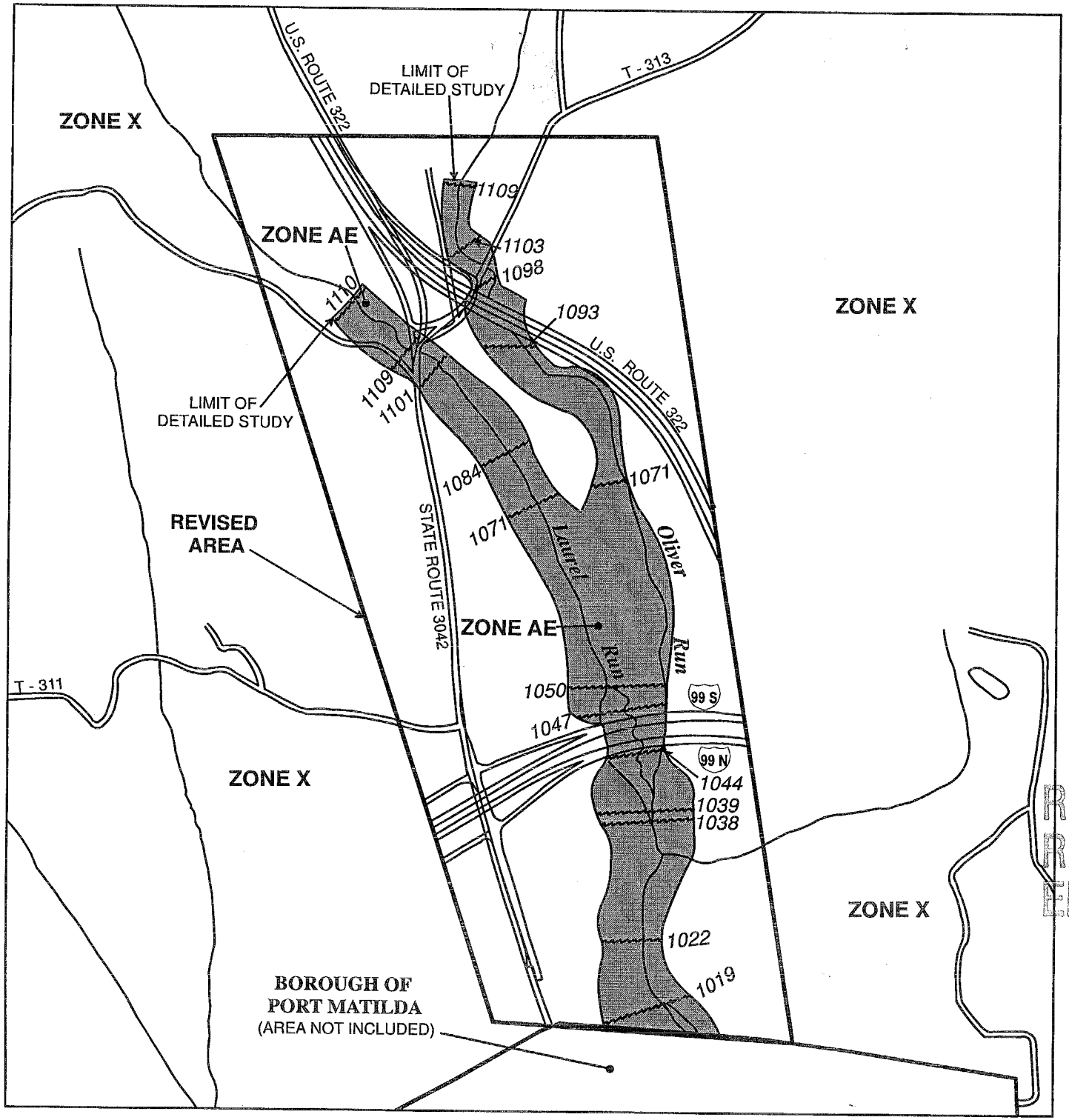
(CENTRE CO.)

FLOOD PROFILES

OLIVER RUN

REVISED TO REFLECT LOMR EFFECTIVE MAR 20 2008

06P



Legend

- 1% annual chance (100-Year) Floodplain
- 1% annual chance (100-Year) Floodway
- 0.2% annual chance (500-Year) Floodplain

All Elevations Referenced in NGVD 29

1,000 500 0 1,000 FEET

300 150 0 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP and STREET INDEX

TOWNSHIP OF
WORTH,
PENNSYLVANIA
CENTRE COUNTY

ONLY PANEL PRINTED

REVISED TO REFLECT LOMR EFFECTIVE MAR 2 0 2008

COMMUNITY-PANEL NUMBER
421472 0005 B

EFFECTIVE DATE:
AUGUST 15, 1989

Federal Emergency Management Agency