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**GUIDE FOR PREPARING  
TECHNICAL SUPPORT DATA NOTEBOOK**



**MAY 1989**

**REVISED JANUARY 1990**

**ENGINEERING STUDY DATA PACKAGE (ESDP)  
GUIDELINES AND SPECIFICATIONS FOR  
STUDY CONTRACTORS**

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The January 1990 revision to the May 1989 version of the Guide for Preparing Technical Support Data Notebook (TSDN) affects only the format of the document. This revision consolidates the Sample TSDN submittal section of the original document within the first five sections of the Guide in order to reduce printing costs. In addition, in some cases the number of examples given in the original document have been reduced. The revision only slightly alters the format of the Guide and does not affect the substance of the information presented. The two versions of the Guide may be used interchangeably.

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## INTRODUCTION

The Guide for Preparing Technical Support Data Notebook (TSDN) was designed to supplement instructions in the Flood Insurance Study Guidelines and Specifications for Study Contractors and the Statement of Work concerning the preparation, filing, and submittal of technical support data developed during a Flood Insurance Study (FIS) for later processing by the Engineering Study Data Package (ESDP) Information Facility (hereinafter referred to as the Information Facility). This Guide demonstrates how the Study Contractor (SC) is to prepare and file the support data in the TSDN, which the SC will create for each FIS under contract. Once the FIS is completed, the ESDP Information Facility microfilms and files the data contained in the TSDN, together with other support data developed by the Technical Evaluation Contractor (TEC) during the technical review of the study. The microfilmed materials compose the ESDP (study package) materials for the FIS that are available from the Information Facility to be used by FEMA, FEMA TECs and SCs, private engineering firms, and interested individuals for risk assessment and related purposes. Questions about the study package not answered in this Guide or the SC Guidelines and Specifications should be directed to the Regional Project Officer.

This Guide is divided into five sections, covering general documentation, engineering analyses, the FIS draft, mapping information, and miscellaneous reference materials. Each section contains examples (sample pages) of a completed TSDN for demonstration purposes. These sections correspond to the categories under which the technical support data are to be organized and filed by the SC within the TSDN. Materials that are not physically included in the TSDN because of size or volume are to be submitted as clearly identified exhibits to the TSDN. Some sections are divided into subsections that relate to specific technical support data, each of which includes a description of the data to be included and basic instructions outlining how Index sheets, if applicable, are to be completed and how the information is to be labeled and identified. Community and other heading information on the Index sheets is to be typed; the remainder can be handwritten if pen or dark pencil is used to ensure that the sheet is completely reproducible on microfilm. Any other notations for the purposes of identifying or labeling support data may be handwritten in pen or dark pencil to insure that it will be reproducible on microfilm. The completed TSDN is to begin with a cover page identical to the example following this Introduction. All information on the cover page is to be typed and all blanks filled in.

The SC is to submit the TSDN to the TEC along with the draft FIS submittal. The SC is to retain copies of support data relating to the hydrologic and hydraulic analyses so that the SC can respond to technical issues raised during TEC review and processing of the FIS. If, for any reason, the SC cannot meet this requirement, the appropriate TEC representative is to be contacted immediately to provide further instructions.

The TSDN and exhibits that are being submitted are to be properly packaged and clearly labeled for mailing. The SC should ensure that mailing packages such as boxes, tubes, computer envelopes, computer binders, notebook binders, and any other packaging material are all properly secured, are sturdy, and are identified by the community for which the FIS data apply. When shipping the TSDN to the TEC, if the SC determines that, for cost efficiency, several TSDNs are to be put together for mailing, each community's TSDN package needs to be individually labeled.

The mailing containers used to ship the information to the TEC are to be strong enough to withstand bulk fourth class shipment through the postal service. Appropriate precautions are to be followed when shipping computer products such as floppy diskettes; such fragile information needs to be packaged in special mailing containers. For mapping data that cannot be physically included in the TSDN, special map roll containers are to be used. The map roll packages should be clearly marked by community. A transmittal letter providing an inventory of all of the materials being shipped to the TEC is to accompany the TSDN mailing. The SC is to contact the appropriate TEC representative if specific instructions are required for particular packages.

TECHNICAL SUPPORT DATA NOTEBOOK

For

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(COMMUNITY NAME AND STATE)

FLOOD INSURANCE STUDY

SUBMITTED BY: \_\_\_\_\_  
Study Contractor

DATE SUBMITTED \_\_\_\_\_

TECHNICAL SUPPORT DATA NOTEBOOK

For

TOWN OF ANYTOWN, ANYWHERE COUNTY, ANystate  
(COMMUNITY NAME AND STATE)

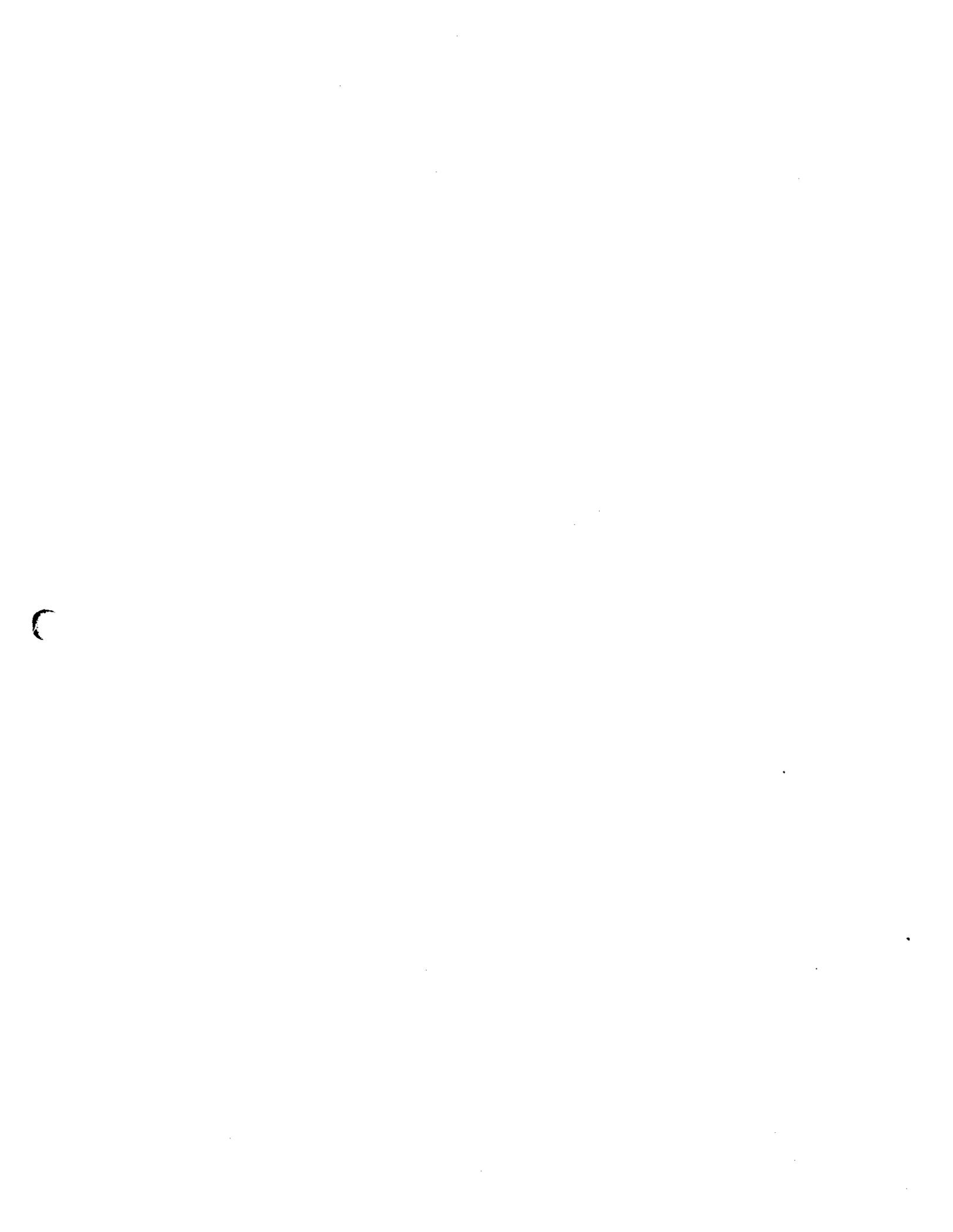
FLOOD INSURANCE STUDY

SUBMITTED BY: UNKNOWN, INC.  
Study Contractor

DATE SUBMITTED JULY 1, 1988

SAMPLE

**SECTION 1  
GENERAL DOCUMENTATION**



### SPECIAL PROBLEMS REPORTS (SPR)

The purpose of this section is to provide FEMA with a comprehensive chronology of any special problems/issues encountered by the Contractor in the processing and preparation of the Flood Insurance Study (FIS). Any written documentation generated or received by the Contractor that pertains to specific problem identification and/or special study processing requirements is to be included in this section. The Contractor is to ensure that the reports/documents

- a) are arranged in reverse chronological order with the date of the SPR (day, month, year) and the report titles neatly recorded in pen or dark pencil,
- b) pertain to the appropriate community FIS, and
- c) are legible, properly labeled as to name of SC, community, state, and flooding sources, and easily identified as SPRs.

Any handwritten information is to be in pen or dark pencil to ensure that the data is completely reproducible on microfilm. On occasion, the Contractor may not be able to include the entire SPR or any part of the SPR in this binder. If this occurs, the Contractor is to insert a statement sheet in place of the SPR and indicate that the SPR is available separately. Copies of materials not physically located within this TSDN are to be bound, labeled, and identified by exhibit number.





**SPECIAL PROBLEM REPORT  
FLOOD INSURANCE STUDIES**

Date: \_\_\_\_\_

Contract Number: \_\_\_\_\_

Name of Community: \_\_\_\_\_

Study Contractor: \_\_\_\_\_

**PROBLEM AREA**

TECHNICAL COORDINATION

UNRESOLVED

DISCREPANCIES

UNREALISTIC SCHEDULE

OTHER

DETAILED EXPLANATION

PROPOSED SOLUTION

## SPECIAL PROBLEM REPORT FLOOD INSURANCE STUDIES

Date: November 1, 1980

Contract Number: H-3970

Name of Community: Town of Anytown,  
Anywhere Co., Anystate

Study Contractor: \_\_\_\_\_

### PROBLEM AREA

- |                        |                                     |
|------------------------|-------------------------------------|
| TECHNICAL COORDINATION | <input type="checkbox"/>            |
| UNRESOLVED             | <input type="checkbox"/>            |
| DISCREPANCIES          | <input type="checkbox"/>            |
| UNREALISTIC SCHEDULE   | <input checked="" type="checkbox"/> |
| OTHER                  | <input type="checkbox"/>            |

### DETAILED EXPLANATION

Unknown, Inc., contracted to study two streams in detail, which encompassed approximately seven miles. Since the initial Time and Cost analysis, three bridges were built. Additional cross-section data must be obtained and the hydraulic modeling must be redone. Therefore, the current schedule for completion of the study cannot be met.

### PROPOSED SOLUTION

- Request three-month extension to incorporate new information and meeting to revise scheduled deadline



### CONTACT (TELEPHONE CONVERSATION) REPORTS

The purpose of this section is to provide FEMA with a comprehensive chronology of written records of verbal communication (telephone conversation) as documented by the Contractor.

This section should only include those records of verbal communication relating to the preparation and processing of the Flood Insurance Study (FIS) data for the appropriate community. The Contractor is to ensure that the contact reports

- a) are arranged in reverse chronological order with the date (day, month, year) of the contact report and the name of the firm or agency contacted neatly recorded in pen or dark pencil,
- b) pertain to the appropriate community FIS, and
- c) are legible, properly labeled as to name of SC, community, and state, and easily identified as contact reports.

Any handwritten information is to be in pen or dark pencil to ensure that the data is completely reproducible on microfilm. If more than one community is involved, the TSDN for each community is to contain a copy of the information.





### Appendix IV

## FLOOD INSURANCE ADMINISTRATION

Flood Insurance Study  
Contact Report

Study Contractor \_\_\_\_\_

DATE: 12 DEC 77

COMMUNITY NAME: Anytown, Anystate

CONTACT REPORT BY: JCW  
(Name and Office of Person Reporting)

METHOD OF CONTACT:

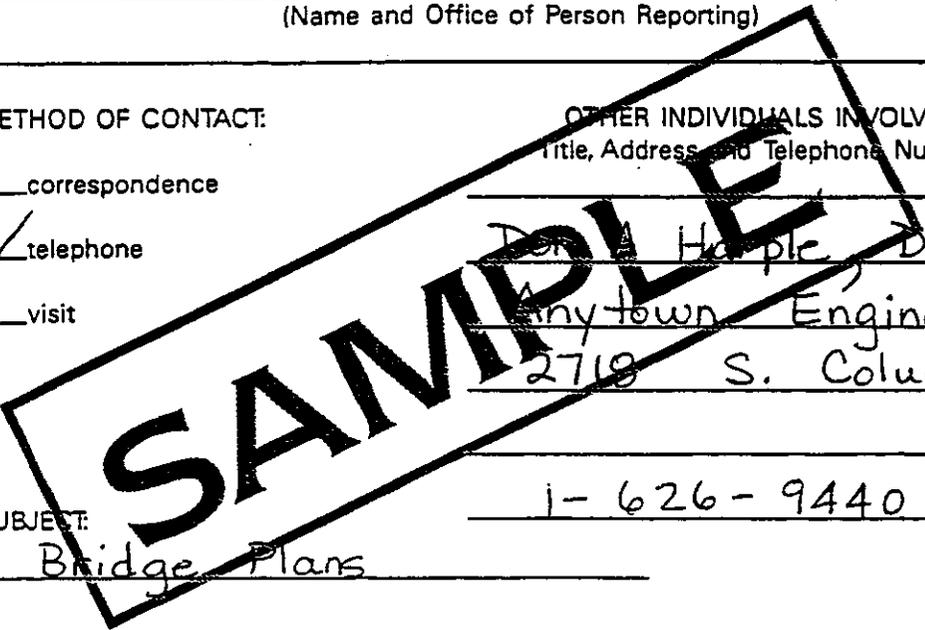
- correspondence
- telephone
- visit

OTHER INDIVIDUALS INVOLVED:  
Title, Address and Telephone Number

Don Hample, Drainage Eng.  
Anytown Engineer's Office  
2718 S. Columbia

SUBJECT: Bridge Plans

1-626-9440



SUMMARY OF CONTACT:

Directions: Turnpike to Exit #7; Proceed  
North on #250 to Bogart Rd (1st stop light);  
Turn left on Bogart Rd and proceed to  
Columbus Ave.; Turn right on Columbus Ave.  
and proceed to Anytown, USA, Engineer's  
Office.

5

### MEETING MINUTES/REPORTS

The purpose of this section is to provide FEMA with a comprehensive chronology of written meeting minutes/reports developed by the Contractor during the preparation of the Flood Insurance Study (FIS). These minutes/reports are to summarize discussions and/or issues that were presented in meetings between the Contractor and other parties, including Federal, state, and community officials and private firms. Minutes of standard meetings such as Time and Cost, Final Community Coordination Officer (CCO), and Initial Coordination are typically included in this section.

The Contractor is to ensure that the meeting minutes/reports

- a) are arranged in reverse chronological order with the date of the report, the date (day, month, year) of the meeting, and the type of meeting neatly recorded in pen or dark pencil;
- b) pertain only to the appropriate community FIS;
- c) are legible, properly labeled as to name of SC, community, state, and easily identified as meeting minutes/reports; and
- d) are complete and of original quality.

Any handwritten information is to be in pen or dark pencil to ensure that the data is completely reproducible on microfilm. If more than one community FIS is involved, the TSDN for each community is to contain a complete copy of the information.







# Federal Emergency Management Agency

Region IV  
1371 Peachtree Street, NE, Suite 700  
Atlanta, GA 30309

April 10, 1982

MEMORANDUM FOR: BRIAN MRAZIK, ACTING ASSISTANT ADMINISTRATOR  
OFFICE OF RISK ASSESSMENT, IA, RA

Attention: Charles Lindsey, Chief  
Technical Operations Division

FROM: Glenn C. Woodard, Chief  
Natural and Technological Hazards Division

SUBJECT: CCO Meeting - Final - Anytown, Anystate

Place of Meeting: Town Hall

Date of Meeting: April 10, 1982

Enclosed Attendance Record: Yes

Review of Flood Insurance Program and Purpose of Flood Insurance Study: Bel Pringle, FEMA, Region IV

Presentation by Contractor: Darryl Hasaway, Gee and Jenson

Discussion of Appeals and Floodplain Management: Bel Pringle

Problems: corporate limits, potential restway of numbered "A" zones, street locations.

Newspaper: Anytown News

C. E. O.: Mr. Richard Hicks  
Town Manager  
Town of Anytown  
P.O. Box 458  
Anytown, AS 12345

T. E. C. Contacted: Yes, Doris Williams, G and O, 5-16-88

Distribution of Studies: 50 sets plus normal distribution

FEDERAL EMERGENCY MANAGEMENT AGENCY  
 FEDERAL INSURANCE & HAZARD MITIGATION  
 NATIONAL FLOOD INSURANCE PROGRAM

MEETING ATTENDANCE RECORD

LOCATION: Town of Anytown, Anywhere County, Anystate Date: April 1, 1980

NATURE OF MEETING: Final CCO

NAME (Please Print)	ORGANIZATION (Please Print)	PHONE
RON SMITH	TOWN CLERK	(312) 355-1212
BILL JONES	STATE ENGINEER	(317) 555-1234
John Nielsen	UNKNOWN, INC.	(312) 555-4321
Harold Wright	Anytown Builders, Inc.	555-3333
Larry Reed	Anywhere County Cler.	555-4444
George Smith	ANYTOWN Pub.	555-8378
Fred Lotter	Anytown Talbloid	555-8888
Robert Rankin	CITIZEN	555-7777
Henry Grant	CITIZEN	555-1122
Sam Shepherd	FEMA	(312) 555-3434



# Federal Emergency Management Agency

Region IV 1371 Peachtree Street, NE Atlanta, Georgia 30309

April 1, 1977

MEMORANDUM FOR: BRIAN MRAZIK, ASSISTANT ADMINISTRATOR  
OFFICE OF RISK ASSESSMENT, IA, RA

Attention: Charles Lindsey, Chief  
Technical Operations Division

FROM: Glenn C. Woodard, Chief  
Natural and Technological Hazards Division

SUBJECT: CCO Meeting - Initial

Place of Meeting: Anytown, Anystate

Date of Meeting: April 1, 1977

Enclosed Attendance Record: Ricky Blackman, Building Inspector

Review of Flood Insurance Program and Purpose of Flood Insurance Study:  
Discussion of Appeals and Floodplain Management: Carol S. Campbell, FEMA,  
Region IV

Comments: Never identified previously (XDS)  
Under study with the County  
Base map with new ETJ area attached

Newspaper: Anytown News

C.E.O.: Mr. Richard Hicks  
Town Manager  
Town of Anytown  
P.O. Box 458  
Anytown, AS 12345



### GENERAL CORRESPONDENCE

The purpose of this section is to provide FEMA with a comprehensive chronology of the written correspondence generated or received by the Contractor during the preparation of the Flood Insurance Study (FIS). General written correspondence as classified in this section would include letters, transmittals, memorandums, general status reports or queries, and internal communication, routing slips, or notes. Correspondence relating specifically to hydrology and hydraulics are to be included in the appropriate engineering analyses sections of the TSDN. The Contractor is to ensure that the information contained in this section pertains only to the general processing and development of the FIS data for the appropriate community.

The Contractor is to ensure that the general correspondence

- a) is arranged in reverse chronological order,
- b) pertains only to the appropriate community FIS,
- c) is legible, properly labeled as to SC, name of community, and State, and
- d) is complete and of original quality.

Any handwritten correspondence is to be in pen or dark pencil to ensure that it is completely reproducible on microfilm.

If more than one community FIS is involved, the TSDN for each community is to contain a complete copy of the information.

Planning Research Corporation

Division of PRC Engineering  
Long Wharf  
Boston, MA 02110  
617-723-1700

January 3, 1984  
08-0966-46

Mr. Thomas Buck  
Federal Emergency Management Agency  
State and Local Programs  
500 C Street, S.W.  
Washington, D.C. 20472

Re: Flood Insurance Studies FEMA Contract H-4776

Dear Mr. Buck:

Enclosed please find the following items prepared under Contract No. H-4776 for the Town of Anytown, Anystate.

1. Preliminary Flood Insurance Study Report
2. Vicinity Map
3. Tables

Under separate cover we have forwarded the following:

1. 1 Mylar set of work maps FHBM and FIRM on 99 detailed sheets and index sheet.
2. Stream Profile - 1 Sheet.
3. Transect Profiles - 1 Sheet.
4. Transect Location Map - 2 Sheets.
5. Base map at a scale of 1" = 1200' as requested by the Town of Marshfield in the initial meeting - 3 sheets.

Sincerely,



Herbert G. Benson  
Vice President

EKO'B/tav  
Encls.





## ENGINEERING ANALYSES

### HYDROLOGIC ANALYSES

The purpose of this section is to provide FEMA with comprehensive documentation and support data relating to the hydrologic analyses performed by the Contractor during the processing of the Flood Insurance Study (FIS). This section is to identify the methodologies/models used by the Contractor to calculate the storm frequency discharges for each flooding source and include any support data, reports, correspondence, or documentation pertaining to the hydrologic analyses performed for the FIS.

The Contractor is to ensure that the hydrologic information

- a) is arranged in alphabetical order according to the flooding source/stream name;
- b) is properly labeled as to SC, name of community, and State, and easily identified by flooding source;
- c) includes the type of model used, the date (day, month and year) of the analysis, and the exhibit number(s) assigned to those analyses that cannot be physically included in the TSDN, neatly recorded in pen or dark pencil on the Index sheet;
- d) is notated whether product is one of several others;
- e) pertains only to the appropriate community FIS;
- f) is complete and of original quality; and
- g) includes any other relevant data to assist issues in identifying the data.

The community name and state are to be typed at the top of the Index sheet. Any handwritten information on the remainder of the Index sheet is to be in pen or dark pencil to ensure that the sheet is completely reproducible on microfilm.

If the hydrologic analysis pertains to more than one community's FIS and it is not feasible to divide the analysis without jeopardizing its integrity and future usability, the SC is to include a complete copy of the analysis in each community's TSDN. To the extent possible, the SC is to identify the portions of the analysis which pertain to each community. Adherence to these procedures will insure that each community's TSDN is complete, thereby assisting future data users in reconstructing the original study if necessary.

Both paper copies and copies of computer models on diskette are to be submitted with the TSDN. Paper copies of the hydrologic computer models used/generated for the FIS are to be individually bound and labeled according to the community and flooding source to which they apply, properly identified by exhibit number, and listed on the Index sheet. Copies of computer models on diskette are to be packaged in computer envelopes or binders and also labeled properly, identified by exhibit number, and listed on the Index sheet.

More complete information on organizing and submitting computer products is in Attachment 5 of the Statement of Work.

NOTE: Photographic or mapping information that may have been used in the development of the models is not to be included in this section. It should instead be included under Section 4, "Mapping Information."



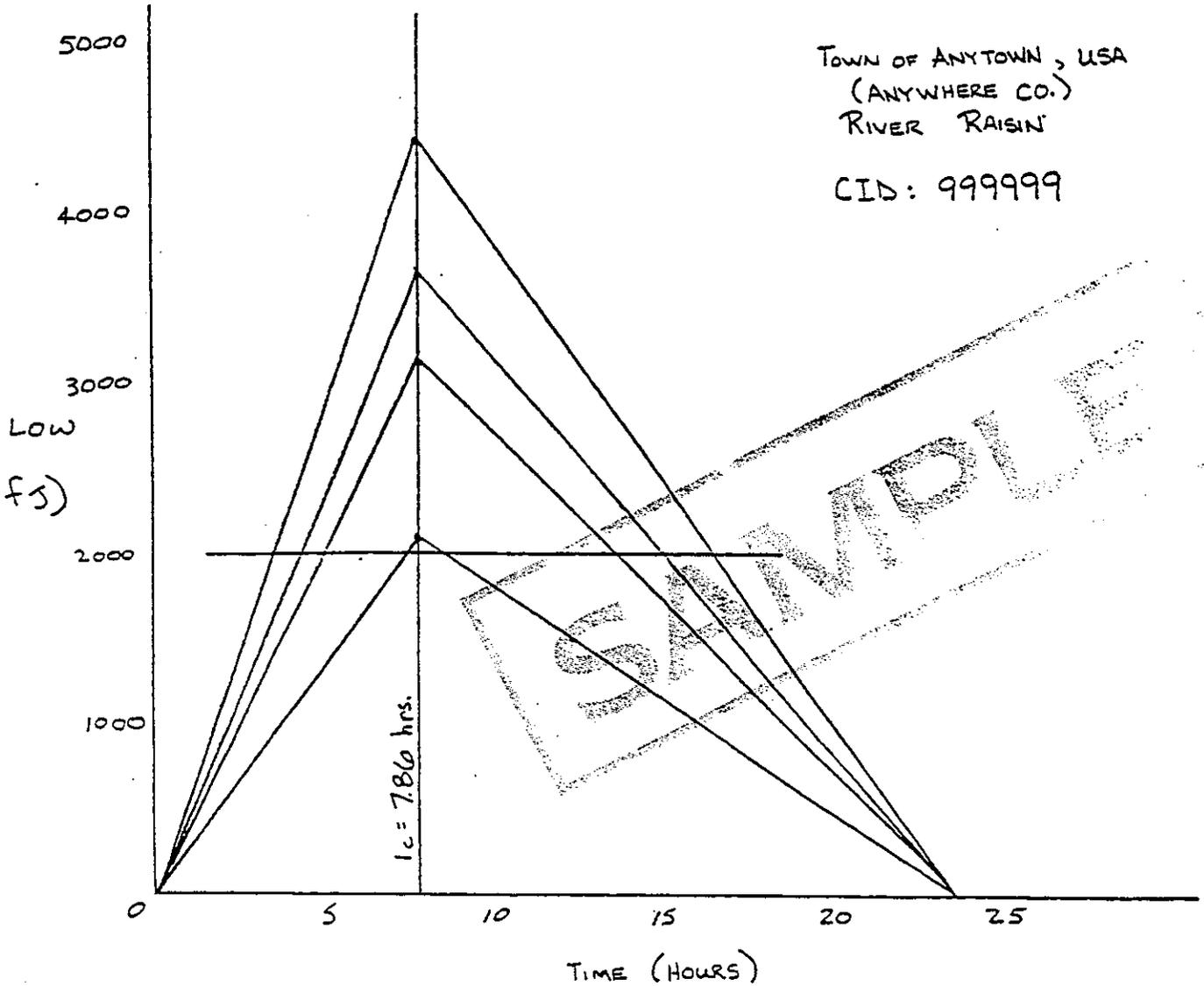


FINKBEINER, PETTIS & STROUT, LIMITED

SUBJECT RIVER RAISIN SHEET 1 OF 2

STORAGE ABOVE B&O RR BRIDGE

DATE \_\_\_\_\_ CALCULATED BY DGB CHECKED BY \_\_\_\_\_



TOWN OF ANYTOWN, USA  
(ANYWHERE CO.)  
RIVER RAISIN

CID: 999999

ASSUME AREA UNDER CURVE = VOLUME

$$V_{10} : \frac{1}{2} (2110 \text{ F}^3/\text{SEC}) (23.58 \text{ HRS.}) \left( \frac{3600 \text{ SEC}}{\text{HR}} \right) \left( \frac{1 \text{ AC}}{43560 \text{ F}^2} \right) = 2056 \text{ AC Ft.}$$

$$V_{50} : " (3166) \quad " \quad " \quad " = 3085 \text{ AC Ft.}$$

$$V_{100} : " (3669) \quad " \quad " \quad " = 3575 \text{ AC Ft.}$$

$$V_{500} : " (4440) \quad " \quad " \quad " = 4326 \text{ AC Ft.}$$

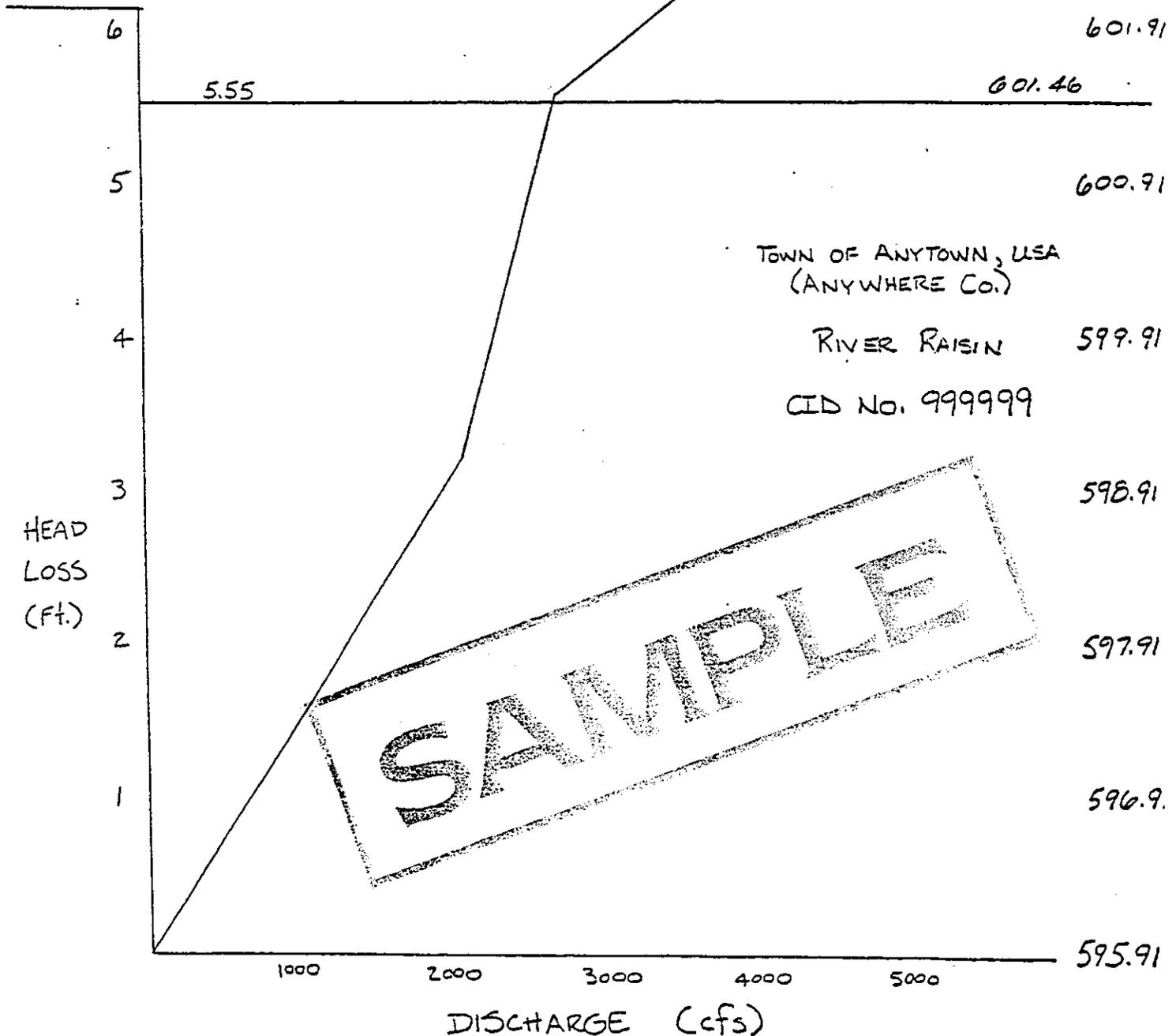
SUBJECT RIVER RAISIN SHEET 2 OF 2  
STORAGE ABOVE B & O RR BRIDGE

DATE \_\_\_\_\_ CALCULATED BY DGB CHECKED BY \_\_\_\_\_

HEAD LOSS CURVE THROUGH B & O RR STRUCTURE

FREQ	Q	U/E ELEV	D/S ELEV	DIFF.
10 YR	2110	599.19	595.91	3.28
50 YR	3160	601.89	598.42	3.47
100 YR	3669	602.23	598.90	3.33
500 YR	4440	602.63	599.45	3.20

TOP OF RAIL = 601.46  
 601.46 - 595.91 = 5.55  
 601.89 - 601.46 = .43  
 602.23 - 601.46 = .77  
 602.63 - 601.46 = 1.17



(

## ENGINEERING ANALYSES

### HYDRAULIC ANALYSES

The purpose of this section is to provide FEMA with comprehensive documentation and support data relating to the hydraulic analyses performed by the Contractor during the processing of the Flood Insurance Study (FIS). This section is to contain information and support documentation such as computer models, correspondence, memorandums, etc., pertaining only to the hydraulic analyses performed for the FIS.

The Contractor is to ensure that the hydraulic information

- a) is arranged in alphabetical order according to the flooding source/stream name;
- b) is properly labeled as to SC, name of community, and State and easily identified by flooding source;
- c) includes the type of model used, the date (day, month, and year) of the analysis, and the exhibit number(s) assigned to those analyses that cannot be physically included in the TSDN, neatly recorded in pen or dark pencil on the Index sheet;
- d) notated if product is one of several others;
- e) pertains only to the appropriate community FIS;
- f) is complete and of original quality; and
- g) any other relevant data to assist users in identifying the data.

The community name and state are to be typed at the top of the Index sheet. Any handwritten information on the remainder of the Index sheet is to be in pen or dark pencil to ensure that the sheet is completely reproducible on microfilm. If more than one community FIS is involved, each FIS data package is to contain a complete copy of the information.

If the hydraulic analysis pertains to more than one community's FIS and it is not feasible to divide the analysis without jeopardizing its integrity and future usability, the SC is to include a complete copy of the analysis in each community's TSDN. To the extent possible, the SC is to identify the portions of the analysis which pertain to each community. Adherence to these procedures will insure that each community's TSDN is complete, thereby assisting future data users in reconstructing the original study if necessary.

Both paper copies and copies of computer models on diskette are to be submitted with the TSDN. The hydraulic computer models generated for the FIS are to be individually bound and labeled according to the community and flooding source, properly identified by exhibit number, and listed on the Index sheet.

More complete information on organizing and submitting computer products is in Attachment 5 of the Statement of Work.

NOTE: Photographic or mapping information that may have been used in the development of the models is not to be included in this section. It should instead be included under Section 4, "Mapping Information."











### KEY TO CROSS-SECTION (XS) LABELING

The purpose of this section is to provide FEMA with comprehensive cross-referencing between the field survey notes, the draft FIS materials, the hydraulic computer analyses, and the Environmental Protection Agency (EPA) Reach File Numbers. This section identifies the cross-section information developed by the Study Contractor and the TEC for each flooding source. The SC is to complete the Study Contractor portion of the Key to Cross-Section Labeling form in the manner described below. When the study undergoes technical review by the TEC, additional information pertaining to each cross section will be added by the TEC.

Specifically, the Study Contractor is to ensure that the information

- a) pertains only to one flooding source,
- b) is arranged from the mouth or point furthest downstream to the point furthest upstream,
- c) is neatly and completely recorded in pen or dark pencil on the Index sheet, and
- d) is complete and of original quality.

Contractors are to fill out information pertaining to their sections only and a separate form is to be used for each flooding source. All heading information, such as name of firm, date, name of community, date of the computer run, etc., is to be typed. The remainder of the information on the Index sheet can be handwritten, using pen or dark pencil to ensure that the sheet is completely reproducible on microfilm.

Using the field survey notes, the SC is to neatly record the field survey section number for all surveyed sections from the furthest points downstream and upstream under the column titled "Field Survey Section No." The SC is to list the corresponding lettered section submitted to the TEC in the draft FIS report under "XS Letter Draft FIS." The corresponding computer section number/stationing is to be entered next to the appropriate field surveyed section and/or draft FIS letter under "Computer Stationing."







### KEY TO TRANSECT LABELING

The purpose of this section is to provide FEMA with comprehensive cross-referencing between the field survey notes, the draft FIS materials, the wave height analyses, and the Environmental Protection Agency (EPA) Reach File Numbers. This section identifies the transect information developed by the Study Contractor and the TEC for areas with wave height analyses. The SC is to complete the Study Contractor portion of the Key to Transect Labeling form in the manner described below. When the study undergoes technical review, additional information pertaining to each transect would be added by the TEC.

Specifically, the Study Contractor is to ensure that the information

- a) pertains only to one flooding source,
- b) is neatly and completely recorded in pen or dark pencil on the Index Sheet, and
- c) is complete and of original quality.

All heading information, such as name of firm, date, name of community, date of the analyses, etc., is to be typed. The remainder of the information on the Index Sheet can be handwritten, using pen or dark pencil to ensure that the sheet is completely reproducible on microfilm.

Using the field survey notes, the SC is to neatly record the field survey transect number for all surveyed transects. The SC is to list the corresponding transect numbers submitted to the TEC in the draft FIS report under "Transect Number Draft FIS." The corresponding computer transect number is to be entered next to the appropriate field-surveyed transect and/or draft FIS transect under "WHAFIS Transect Number." It is important that the SC indicates which transects included wave setup, wave runup, and/or erosion analyses. Numbered footnotes that indicate which of the three analyses, if any, have been considered can be found on the Key to Transect Labeling. The appropriate number(s) (1, 2, or 3, indicating consideration of erosion, wave setup, or wave runup, respectively) should be added, in superscript, to the affected transect number.





DRAFT FIS REPORT TEXT

The purpose of this section is to provide FEMA with the draft FIS data that was prepared by the Study Contractor. This category shall contain all relevant FIS components that are prepared for submission by the SC to FEMA for technical review, processing, and publication of the FIS. Included are draft FIS components such as the FIS report, flood profiles, floodway data tables, summary of elevation tables, transect location tables, surge elevation tables, certification statement of work accomplished, and any other relevant support data. The information organized and submitted in this section shall only include the most up-to-date record copies of the draft FIS. The Study Contractor is to ensure that the draft

- a) pertains only to the appropriate community FIS;
- b) is legible, property labeled, and easily identified by community;
- c) is prepared on sheets 11" x 17" or smaller so that they can be easily microfilmed;
- d) if data is produced that is, by necessity, larger than 11" x 17", this data is to be submitted as clearly labeled exhibits to the TSDN; and
- e) is complete and of original quality.

FLOOD INSURANCE STUDY

TOWN OF ANYTOWN, ANystate

(ANYWHERE CO.)

**SAMPLE**  
DECEMBER 1980

This SAMPLE only represents a portion of the Draft FIS Report Text. The TSDN submittal should include the FIS Report Text in its entirety.

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EXHIBITS

Flood Profiles - River Raisin  
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FLOOD INSURANCE STUDY  
FOR  
TOWN OF ANYTOWN, ANYSTATE

1.0 INTRODUCTION

1.1 Purpose of Study

The purpose of this Flood Insurance Study is to investigate the existence and severity of flood hazards in the Town of Anytown, Anywhere County, Anystate, and to aid in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. Initially, this information will be used to convert the township to the regular program of flood insurance by the Federal Emergency Management Agency (FEMA). Further use of the information will be made by local and regional planners in their efforts to promote sound land use and floodplain development.

1.2 Authority and Acknowledgements

The source of authority for this Flood Insurance Study is the National Flood Insurance Act of 1968, as amended.

The hydrologic and hydraulic analyses were adapted from the Corps "Special Flood Hazard Information" report, with slight modifications. The Corps report was completed December, 1976. This study was performed by Unknown, Inc., for the Federal Emergency Management Agency, under Contract No. H-3970 and was completed in December, 1980 (Reference 1).

1.3 Coordination

An inventory of available data pertinent to the study from local, county, regional and state agencies and firms, as well as from the general public, was conducted early in the study and continued throughout. Community base map and identification of the stream reach requiring detailed study were done at meetings held in May, 1978.

**SAMPLE**



3

## MAPPING INFORMATION

The purpose of this section is to provide FEMA with comprehensive mapping data relating to the processing of the Flood Insurance Study (FIS). This section identifies the various types of mapping used by the contractor to map the floodplain and/or floodway for each flooding source.

The Contractor is to ensure that the information

- a) is properly labeled as to SC and community name, and is easily identified by flooding source and community;
- b) includes the type of map, the date (day, month, and year) of the map, the number of map sheets, and the exhibit number(s) assigned to those maps that cannot be included in the TSDN, neatly recorded in pen or dark pencil on the Index sheet;
- c) pertains only to the appropriate community FIS; and
- d) is complete and of original quality.

The community name and state are to be typed at the top of the Index sheet. Any handwritten information on the remainder of the Index sheet is to be in pen or dark pencil to ensure that the sheet is completely reproducible on microfilm. If more than one community FIS is involved, each TSDN is to contain a copy of the information.

In addition to the Index sheet, the SC is to prepare a Work Map Delineation Summary providing a brief narrative of how the final work maps were created. All supplemental materials, such as topographic maps, aerial photographs, etc., are to be listed with a concise explanation of how the final work maps were delineated.

The Contractor is to provide copies of the mapping information within this Notebook or bound and labeled separately and identified by exhibit number.







Study Contractor: \_\_\_\_\_

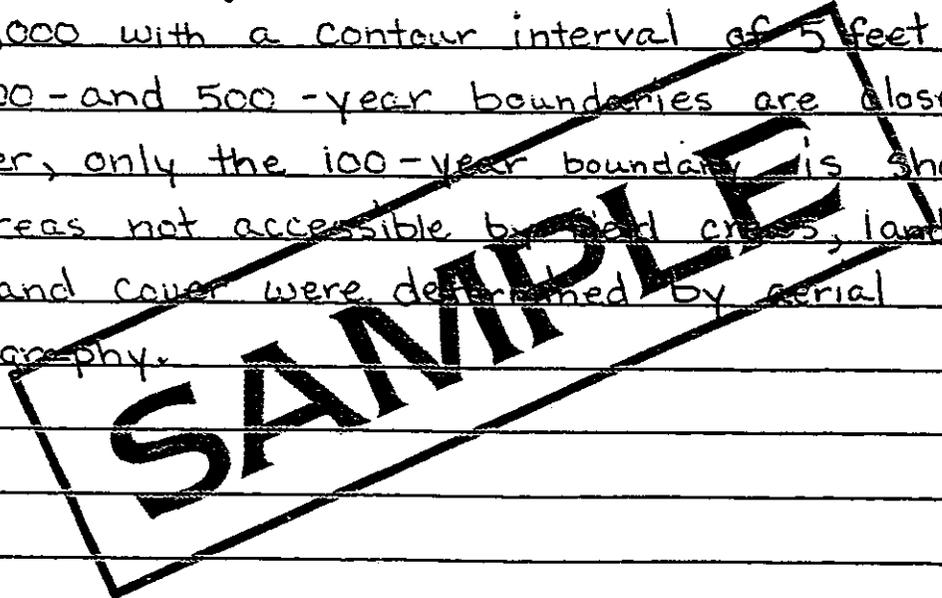
**MAPPING INFORMATION**

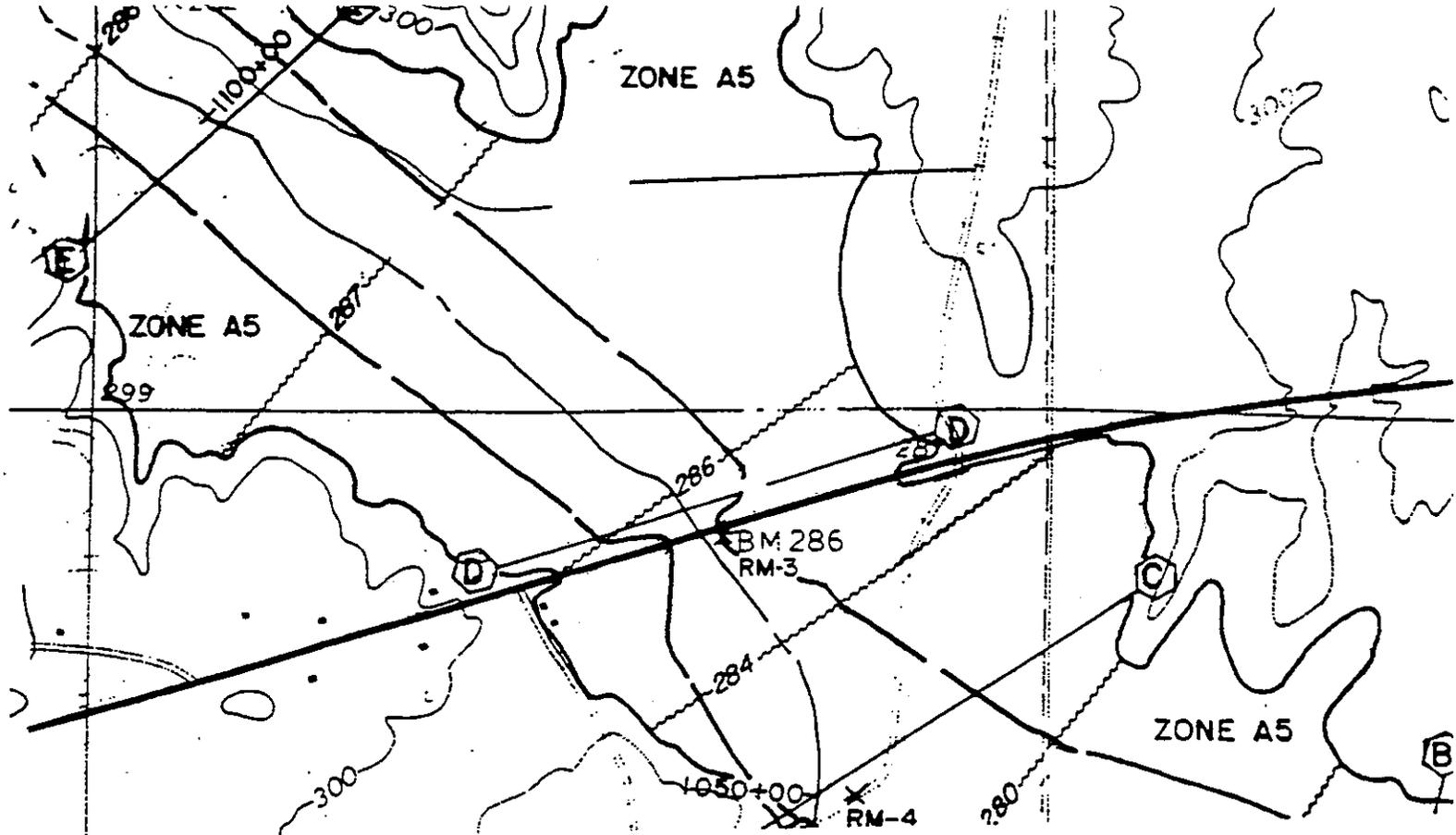
**WORK MAP DELINEATION SUMMARY**

Town of Anytown, Anywhere Co., Anystate  
(COMMUNITY NAME, STATE)

**FLOOD INSURANCE STUDY**

For the River Raisin, the 100- and 500-year floodplain boundaries were delineated using the flood elevations plotted along surveyed cross sections. The flood boundaries were interpolated between cross sections using USGS quadrangle maps at a scale of 1:24,000 with a contour interval of 5 feet. Where the 100- and 500-year boundaries are close together, only the 100-year boundary is shown. For areas not accessible by field cross, land use and land cover were determined by aerial photography.





Gravel Pits

**SAMPLE**

**FLOOD INSURANCE STUDY  
WORK MAP  
ANYTOWN (T), ANYSTATE**

**PREPARED BY:**

**UNKNOWN INC.  
EXHIBIT MI-1**

LEGEND

SPECIAL FLOOD HAZARD  
AREA WITH  
DATE OF IDENTIFICATION



Note: These maps may not include all Special Flood Hazard Areas in the community. After a more detailed study, the Special Flood Hazard Areas shown on these maps may be modified, and other areas added.

CONSULT NFIA SERVICING COMPANY OR LOCAL INSURANCE AGENT OR BROKER TO DETERMINE IF PROPERTIES IN THIS COMMUNITY ARE ELIGIBLE FOR FLOOD INSURANCE.

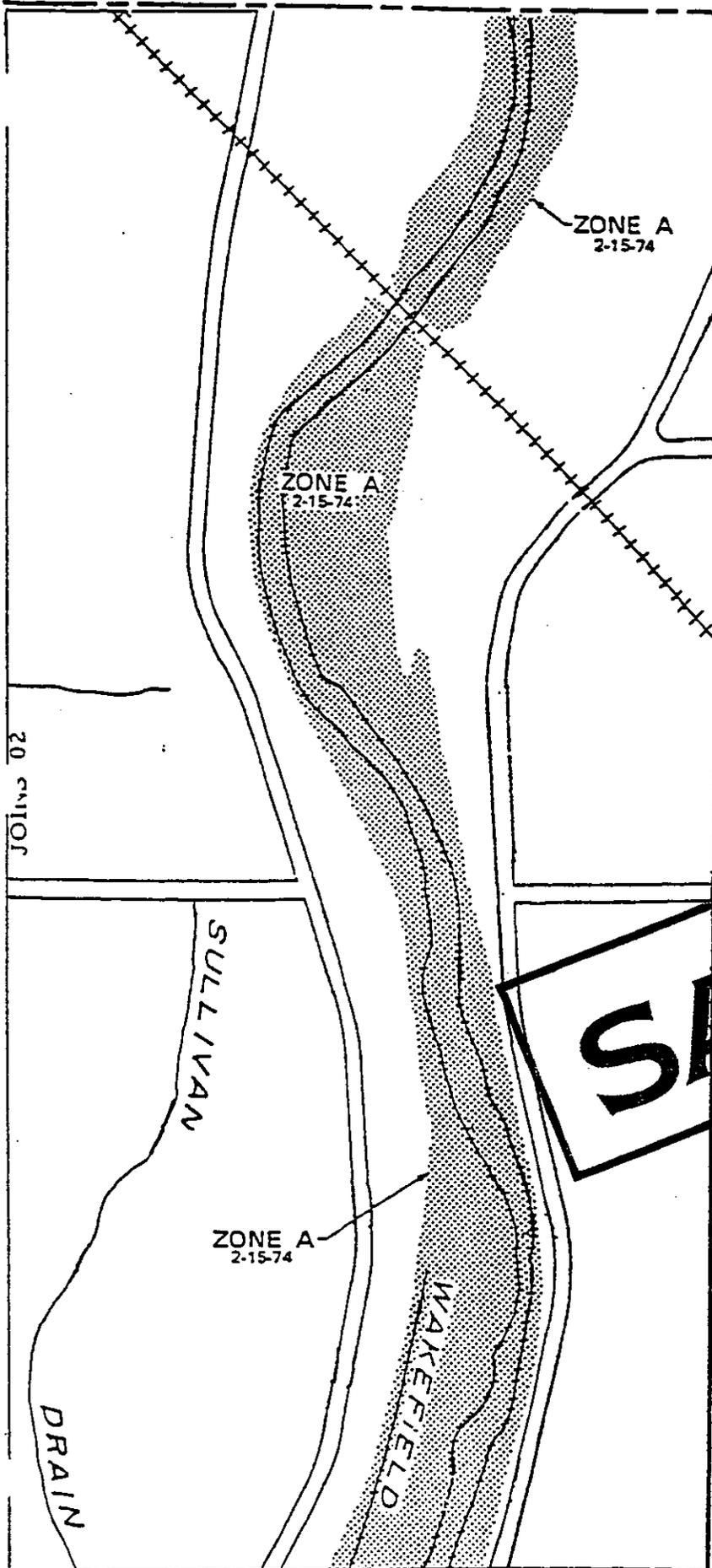
INITIAL IDENTIFICATION DATE:

FEBRUARY 15, 1974

REVISION DATES:

7-30-76: ADD S.F.H.A., REDUCE S.F.H.A., SHOW CURVILINEAR BOUNDARIES

**SAMPLE**



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
Federal Insurance Administration

FLOOD HAZARD BOUNDARY MAP H - 01-14

MAP INDEX

TOWN OF ANYTOWN, AS  
(ANYWHERE CO.)

COMMUNITY NO. 999999

**MISCELLANEOUS REFERENCE  
MATERIALS**

### MISCELLANEOUS REFERENCE MATERIALS

The purpose of this section is to provide FEMA with any other support data relating to the processing of the Flood Insurance Study (FIS) that were not previously covered by the preceding sections. This section is to be used to identify any additional data that the Contractor provides or is essential to the processing of the FIS. Support data in the form of reference materials such as field survey notes and notebook, flood hazard analyses reports, floodplain information reports, watershed studies, site visit photographs, and miscellaneous data such as community population and demographic studies, tax base reports, legal references, and other relevant material, shall be included in this section.

The Contractor is to ensure that the information miscellaneous materials

- a) are properly labeled as to SC and community name and easily identified by flooding source;
- b) include the type of information, the date (day, month, and year) of the information, and the exhibit number(s) assigned to those materials that cannot be included in the TSDN, neatly recorded in pen or dark pencil on the Index sheet;
- c) pertain only to the appropriate community FIS; and
- d) are complete and of original quality.

The community name and state are to be typed at the top of the Index sheet. Any handwritten information on the remainder of the Index sheet is to be in pen or dark pencil to ensure that the sheet is completely reproducible on microfilm. If more than one community is involved, each FIS data package is to contain a copy of the information.

Copies of materials not in this Notebook are to be bound and labeled separately and identified by exhibit number.





TOWN OF ANYTOWN  
(ANYWHERE CO.)  
ANYSATE

CID NO. 999999

HUD - FIA

12179-00-FIA-12-02  
Jan - 1976

Sections & Profiles River Raisin



E. V. Lewis	P.C.
E. H. Nichols	K
A. A. Sayer	φ
T. J. Wilson	φ

Zeiss Level #26225

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@ Br. 25

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