United States Department of Agriculture

Natural Resources Conservation Service

228 Walnut Street, Room 850
Box 985 Federal Square Station
Harrisburg, Pennsylvania 17108-0985

March 14, 1979

ENGINEERING FIELD MANUAL NOTICE - PA-1

The attached 24-hour rainfall data should be inserted in Chapter 2 of the Engineering Field Manual following Page 2-50. These sheets replace similar sheets distributed in March 1970. The earlier version of the rainfall data sheets, which did not include the 100-year frequency 24-hour rainfall, should be removed from the Engineering Field Manual.

Graham T. Munkittrick, Acting
State Conservationist

Attachment

DIST: ALL HOLDERS OF ENGINEERING FIELD MANUAL FOR CONSERVATION PRACTICES

United States Department of Agriculture

Natural Resources Conservation Service

228 Walnut Street, Room 850
Box 985 Federal Square Station
Harrisburg, Pennsylvania 17108-0985

July 3, 1979

ENGINEERING FIELD MANUAL NOTICE-PA-2

The following supplemental pages are to be added to the Engineering Field Manual, Chapter 2, immediately following Page 2-76:

Pages 2-76.01 through 2-76.06
Pages 2-76.07 through 2-76.15

Both sets of these pages are Supplements to Exhibit 2-10 presently in the manual. The first set gives peak rates of runoff for Curve Numbers 95 and 100 for drainage areas from 5 acres to 2,000 acres. The second set gives peak rates of runoff for Curve Numbers 60 through 100 for drainage areas from 1 acre to 5 acres.

Additional copies of this notice are available from the State Office.

Graham T. Munkittrick, Acting
State Conservationist

Attachment

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United States Department of Agriculture

Natural Resources Conservation Service

228 Walnut Street, Room 850
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September 30, 1985

ENGINEERING FIELD MANUAL NOTICE PA-4

Enclosed are supplemental pages which should be added to the Engineering Field Manual:

~~Chapter 3 Pages 3-94.1 and 3-94.2~~ (*replaced EFH PA-3*)
Chapter 9 - Page 9 – ~~14.1~~ (*16*)
Chapter 14 - Replace Exhibit 14-13, with Drawing No. 5, P-38, 023
page 14 - 111

JAMES H. OLSON
State Conservationist

Enclosures

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United States Department of Agriculture

Natural Resources Conservation Service

228 Walnut Street, Room 850
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November 12, 1985

ENGINEERING FIELD MANUAL NOTICE PA-5

Enclosed is a revised listing of soil series with corresponding hydrologic soil group for soils in Pennsylvania. The vertical lines indicate changes from the previous listing.

Remove and destroy 2-10.5 and 2-10.6 dated 3/81 and replace with the enclosed Exhibit 2-1 dated 11/85.

JAMES H. OLSON
State Conservationist

Enclosures

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United States Department of Agriculture

Natural Resources Conservation Service

228 Walnut Street, Room 850
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Harrisburg, Pennsylvania 17108-0985

October 23, 1986

ENGINEERING FIELD MANUAL NOTICE PA-6

Enclosed are revised Chapter 7, Grassed Waterways, and Chapter 9, Diversions of the Engineering Field Manual.

Remove and discard all the white sheets in Chapter 7, TSC-NE-ENG 702 should be removed and discarded. TSC-NE-ENG 705 should be retained and renumbered 7-49; TSC-NE-ENG 710 renumbered 7-50 and TSC-NE-ENG 715 renumbered 7-51.

Remove and discard all the white sheets in Chapter 9 as well as TSC-NE-ENG 905.

EFM Notice PA-4 (page 9.14.1) shall be renumbered 9-16 and retained.

JAMES H. OLSON
State Conservationist

Enclosures

DIST: ALL HOLDERS OF ENGINEERING FIELD MANUAL FOR CONSERVATION PRACTICES

The Soil Conservation Service is an agency of the United States Department of Agriculture

United States
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228 Walnut Street, Room 850
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Harrisburg, Pennsylvania 17108-0985

November 4. 1986

ENGINEERING FIELD MANUAL (EFM) NOTICE PA-7

The reprinting of the EPM in 1984 contained three revised pages in Chapter 6, These pages, 6-43. 43a, and 43b, explain and contain charts for designing risers for ponds.

These three pages are enclosed and should replace page 6-43, dated October 21. 1970.

JAMES H. OLSON
State Conservationist

Enclosures

DIST: ALL HOLDERS OF ENGINEERING FIELD MANUAL FOR CONSERVATION PRACTICES

United States
Department of
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Natural Resources
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Service

Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

August 18. 1987

ENGINEERING FIELD MANUAL NOTICE PA - 8

Please make the following pen and ink additions to the footnote on page-9-8 under Table 9-1:

> "Stability to be checked for minimum anticipated retardance (bare earth if applicable), Refer to Exhibits 7-1 and 7-2 (pages 7-17, 18, 19) or SCS-TP-61 for more information,"

JAMES H. OLSON
State Conservationist

DIST: All Holders of' the Engineering Field Manual for conservation Practices

United States Department of Agriculture
Natural Resources Conservation Service
Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

March 8, 1990

ENGINEERING FIELD MANUAL NOTICE - PA-9

The new Chapter 2: Estimating Runoff and Peak Discharges has been distributed to all holders of the Engineering Field Manual for Conservation Practices . The Chapter has been completely rewritten and contains new work sheets for use.

Remove and destroy the existing Chapter 2 including Northeast Supplement Pages 2-8.1, 2-8.2, 2-10.1 through 2-10.4, 2-30.1, 2-30.2, 2-30.3, 2-30.5, 2-76.1 through 2-76.15 and 2-77 through 2-85.

Pennsylvania supplement pages 2-10.5 and 2-10 6 (Exhibit2-1) should be retained, renumbered 2-42.1 and 2-42.2, and placed with Table 2-1. Northeast supplement pages 2-30.4 and 2-30.6 should be retained, renumbered 2-88.1 and 2-88.2, and placed with Table 2-3. Northeast supplement pages 2-50.1 through 2-50.14 should be retained , renumbered 2-84.1' through 2-84.14 and placed with Table 2-2.PA supplement pages 2-50.01 through 2-50.03 should be retained, renumbered 2-14.1 through 2-14.3 and placed after Exhibit 2-III.

The new Chapter 2 has several typographical errors which are being corrected. The reprinted pages will be distributed as soon as they are available. In the interim, the following corrections should be made as pen-and-ink changes:

1. On page 2-5, equation 2-5 should be corrected so that the flow length “L” is raised to the 0.8 power. Also, the entire term [($\frac{1000}{CN}$) -9] is raised to the 0.7 power.

2. On page 2-8 and page 2-90, the subheading for the "Area" column should read "(acres or %)".

3. On page 2-10 and 2-91, the instructions for item 2 should refer to Figure 2-7 or equation 2-5.

more

4. On page 2-10 and page 2-91, in the To equation the term ($\frac{1000}{CN}$ -9) should be ($\frac{1000}{CN} - 9$) The division line is missing.
On page 2-10 and page 2-91, the instructions for item 6 should refer to Figure 2-26 or Table 2-2.

6. On page 2-89, Table 2-4 should be expanded to include Ia values for runoff curve numbers above 95.

CN	Ia
96	0.083
97	0.062
98	0.041

Please note that all of Pennsylvania is in the area using SCS rainfall distribution II (Figure 2-1, page 2-15), Therefore Exhibit 2-II, Page 2-13 is the only applicable exhibit for determining unit peak discharge rates.

There is an MS-DOS microcomputer program which duplicates the manual computation procedures in the chapter. The program is available from your area engineer.

The initial supply of the chapter has been exhausted. Additional copies of the chapter and worksheets should be photocopied as needed until the corrections and reprinting are completed. At that time, non-government users of this procedure will be able to order Chapter 2 and the computer program from the National Technical Information Service.

RICHARD N. DUNCAN
State Conservationist

Dist: All holders of "Engineering Field Manual for Conservation Practices"

United States Department of Agriculture
Natural Resources Conservation Service
Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

February 5, 1990

ENGINEERING FIELD MANUAL NOT I CE PA-10

Purpose: To provide a set of map symbols which may be used to help develop plans and maps that are easily read and consistent throughout the state . These symbols are a collection of those found to be in common use , based on a survey of various area and field offices within the state . Use of these symbols should help to improve the understanding of plans by reviewers, landowners, and contractors.

Effective Date: Upon receipt

Action: Exhibit 5-2 (sheets 1 & 2 of 2), pages 5-25 & 26 are to be filed after page 5-24 of the Engineering Field manual.

RICHARD N. DUNCAN
State Conservationist

Enclosure

DIST: All Holders of' the Engineering Field Manual
for conservation Practices

United States
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Natural Resources
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Service

Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

March 10, 1992

Enclosed is a Pennsylvania supplement to the Engineering Field Manual which can be used to select the size of orifice discharge pipes. The chart was developed using the orifice flow equation, $Q = CA(2gH)^{0.5}$ where C = 0.6, A is the cross sectional area of the pipe in $feet^2$, g = 32.2 ft/sec^2, and H is the head over the centerline of the pipe.

The chart is labeled Exhibit 3-18.1 and should be added to the EFM as page 3-106.1.

RICHARD N. DUNCAN
State Conservationist

Enclosure

DIST: All Holders of' the Engineering Field Manual for conservation Practices

United States Department of Agriculture
Natural Resources Conservation Service
Suite 340
One Credit Union Place
Harrisburg, PA 17110-2993

April 8, 1992

ENGINEERING FIELD MANUAL NOTICE PA-12

The enclosed list of standard PA-SCS drawings is a Pennsylvania supplement to the Engineering Field Manual. This list is being distributed to all offices. The actual drawings have been distributed to Area Offices only (except for a few infrequently used drawings which are available from the state Office) and should be requested from those offices as needed. Future new drawings will be distributed to the Area Offices and list updates to all offices.

The list should be filed in Chapter 5 of the EFM after page 5-26. The Area Offices and any other offices which have any of the drawings should start a separate file to store master copies of the actual drawings.

Please be reminded that the use of standard drawings for a specific practice, requires approval by the person with appropriate engineering job approval authority.

RICHARD N. DUNCAN
State Conservationist

Enclosure

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Suite 340
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July 10, 1992

ENGINEERING FIELD MANUAL NOTICE PA-13

Enclosed is a revised page 5-28 of the EFM. This page updates the listing of standard PA-SCS drawings to include the addition of new standard drawings PA-040 thru 042. These new drawings are of three types of frequently used push-offs, primarily for agricultural waste facilities.

The drawings are being provided to each area office and should be requested as needed from them. Please be reminded that the use of standard drawings for a specific practice requires approval by the person with appropriate engineering job approval authority.

RICHARD N. DUNCAN
State Conservationist

Enclosure

DIST: All Holders of' the Engineering Field Manual for conservation Practices