



Town File No.	<u>D.91-8</u>
Applicant	<u>Town of Acton</u>



**DETERMINATION OF APPLICABILITY
ACTON WETLANDS PROTECTION BYLAW**

CHAPTER F

From the ACTON CONSERVATION COMMISSION

To TOWN OF ACTON - ENGINEERING TOWN OF ACTON
 (Name of person making request) (Name of property owner)

Address 472 Main Street, Acton Address SAME

This determination is issued and delivered as follows:

___ by hand delivery to applicant or representative on _____ (date)
 ___ by certified mail, return receipt requested on _____ (date)

Pursuant to the authority of the Town of Acton Bylaws, Chapter F, the Acton Conservation Commission has considered your request for a Determination of Applicability and its supporting documentation, and has made the following determination (check whichever is applicable):

Location: Street Address Between 85 & 89 Taylor Road
 Lot Number: N/A

This Determination is positive:

- ___ The area described below, which included all/part of the area described in your request, is an Area Subject to Protection Under the Bylaw. Therefore, any removing, filling, dredging or altering of that area requires the filing of a Notice of Intent.
- ___ The work described below, which included all/part of the work described in your request, is within an Area Subject to Protection Under the Bylaw and will removed, fill, dredge or alter that area. Therefore, said work requires the filing of a Notice of Intent.

3. _____ The work described below, which included all/part of the work described in your request, is within the Buffer Zone as defined in the regulations, and will alter an Area Subject Protection Under the Bylaw. Therefore, said work requires the filing of a Notice of Intent.

This Determination is negative:

1. _____ The area described in your request is not an Area Subject to Protection Under the Bylaw.
2. _____ The work described in your request is within an Area Subject to Protection Under the Bylaw, but will not remove, fill, dredge or alter that area. Therefore, said work does no require the filing of a Notice Intent.
3. The work described in your request is within a Buffer Zone, as defined in the regulations, but will not alter an Area Subject to Protection Under the Bylaw. Therefore, said work does not require the filing of a Notice of Intent.
4. _____ The area described in your request is subject to Protection Under the Bylaw, but since the work therein meets the requirements for the following exemption, as specified in the Bylaw and the regulations, no Notice of Intent is required:

Issued by the ACTON CONSERVATION COMMISSION

Signatures _____

Andrew J. Sheehan
Charlotte H. Temple
DD Chubman

This Determination must be signed by a majority of the Conservation Commission.

On this nineteenth day of June 19 91, before me personally appeared Andrew Sheehan, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

Andrea H. MacSengie March 16, 1995
Notary Public My commission expires

This Determination does not relieve the applicant from complying with all other applicable federal, state or local statutes, bylaws or regulations. This Determination shall be valid for three years from the date of issuance.

Form 2



Commonwealth of Massachusetts

DEP File No.

(To be provided by DEP)

City/Town ACTON

Applicant Town of Acton

Date Request Filed 6/4/91

Determination of Applicability Massachusetts Wetlands Protection Act, G.L. c. 131, §40

From ACTON CONSERVATION COMMISSION Issuing Authority

To TOWN OF ACTON-ENGINEERING TOWN OF ACTON
(Name of person making request) (Name of property owner)

Address 472 Main Street, Acton Address SAME

This determination is issued and delivered as follows:

- by hand delivery to person making request on _____ (date)
- by certified mail, return receipt requested on _____ (date)

Pursuant to the authority of G.L. c. 131, §40, the Acton Conservation Commission has considered your request for a Determination of Applicability and its supporting documentation, and has made the following determination (check whichever is applicable):

Location: Street Address Between 85 & 89 Taylor Road
Lot Number: N/A

1. The area described below, which includes all/part of the area described in your request, is an Area Subject to Protection Under the Act. Therefore, any removing, filling, dredging or altering of that area requires the filing of a Notice of Intent.

2. The work described below, which includes all/part of the work described in your request, is within an Area Subject to Protection Under the Act and will remove, fill, dredge or alter that area. Therefore, said work requires the filing of a Notice of Intent.

- 3 The work described below, which includes all/part of the work described in your request, is within the Buffer Zone as defined in the regulations, and will alter an Area Subject to Protection Under the Act. Therefore, said work requires the filing of a Notice of Intent

This Determination is negative

1. The area described in your request is not an Area Subject to Protection Under the Act.
2. The work described in your request is within an Area Subject to Protection Under the Act, but will not remove, fill, dredge, or alter that area. Therefore, said work does not require the filing of a Notice of Intent.
3. The work described in your request is within the Buffer Zone, as defined in the regulations, but will not alter an Area Subject to Protection Under the Act. Therefore, said work does not require the filing of a Notice of Intent.
4. The area described in your request is Subject to Protection Under the Act, but since the work described therein meets the requirements for the following exemption, as specified in the Act and the regulations, no Notice of Intent is required: _____

Issued by ACTON Conservation Commission

Signature(s) _____

Ann J. Shea _____
Charlotte H. Trislega _____
DD Chalmers _____

This Determination must be signed by a majority of the Conservation Commission.

On this nineteenth day of June 19 91, before me personally appeared Andrew Sheeha, to me known to be the person described in, and who executed the foregoing instrument, and acknowledged that he/she executed the same as his/her free act and deed

Andrea H. MacKenzie March 16, 1995
 Notary Public My commission expires

This Determination does not relieve the applicant from complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations. This Determination shall be valid for three years from the date of issuance.

The applicant, the owner, any person aggrieved by this Determination, any owner of land abutting the land upon which the proposed work is to be done, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the Department of Environmental Protection to issue a Superseding Determination of Applicability, providing the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee and Fee Transmittal Form as provided in 310 CMR 10.03(7) within ten days from the date of issuance of this Determination. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

4 The owner(s) of the area, if not the person making this request, has been given written notification of this request on _____ (date)
The name(s) and address(es) of the owner(s)

TOWN OF ACTON
472 MAIN ST.
ACTON, MA. 01720

5 I have filed a complete copy of this request with the appropriate regional office of the Massachusetts Department of Environmental Protection _____ (date)
6/14/91

DEP Northeast Regional Office
5 Commonwealth Avenue
Woburn, MA 01801

DEP Southeast Regional Office
Lakeville Hospital
Route 105
Lakeville, MA 02347

DEP Central Regional Office
75 Grove Street
Worcester, MA 01605

DEP Western Regional Office
State House West, 4th Floor
436 Dwight Street
Springfield, MA 01103

6. I understand that notification of this request will be placed in a local newspaper at my expense in accordance with Section 10.05(3) (b) 1 of the regulations by the Conservation Commission and that I will be billed accordingly.

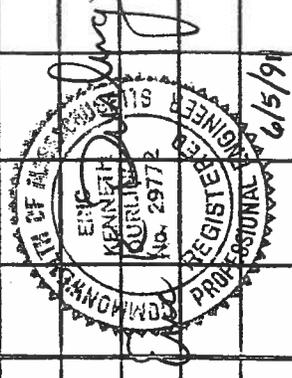
Signature Dennis P. Ring Name DENNIS P. RING
Address 472 MAIN ST., ACTON, MA. Tel (508) 264-9628
01720

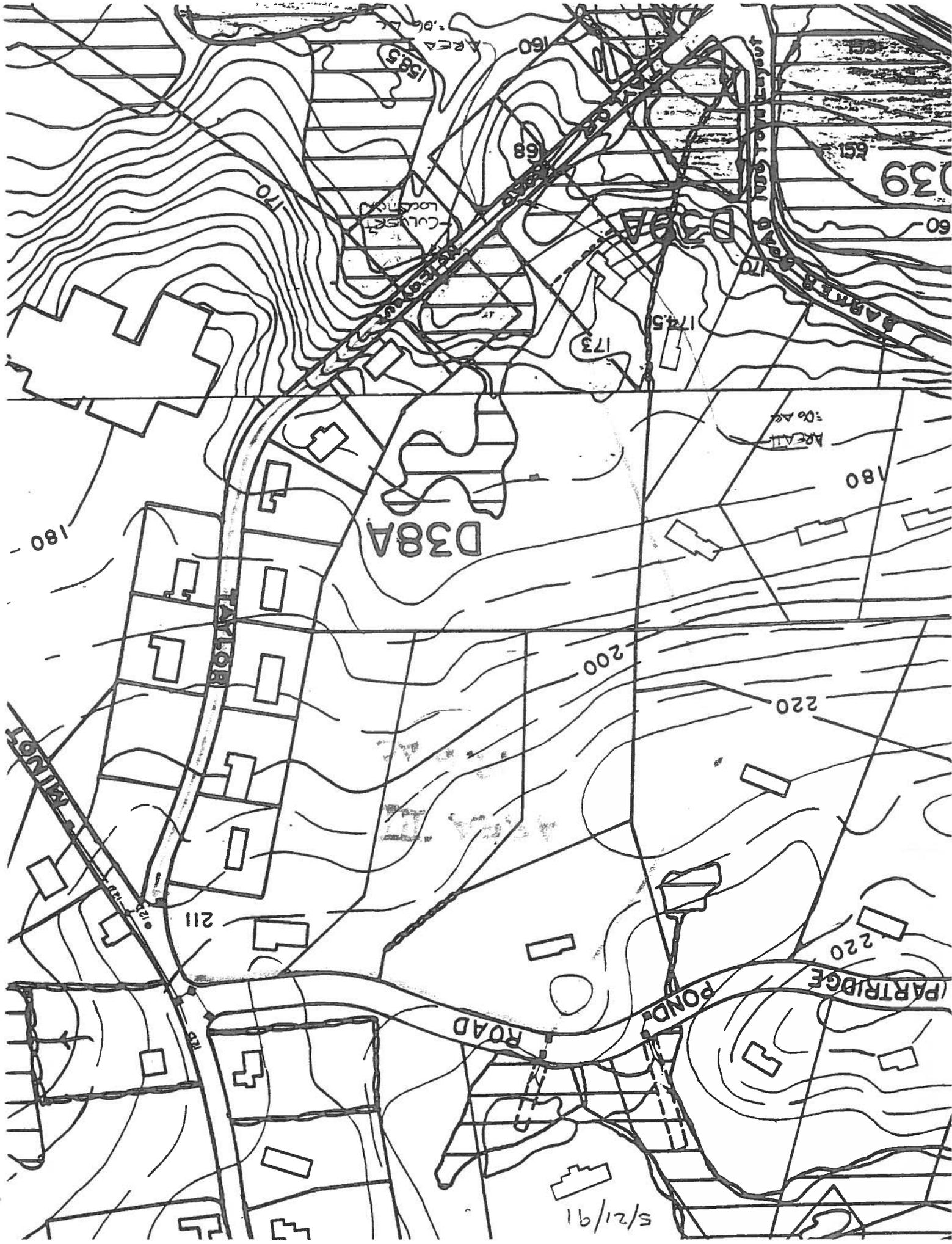
TOWN OF ACTON ENGINEERING DEPARTMENT
DRAINAGE CALCULATIONS - RATIONAL METHOD

JOB TAYLOR ROAD DRAIN
SYSTEM IMPROVEMENTS

BY D. RING DATE 5/21/91

STREET	LOCATION		AREA		CONC. TIME		"1"	"Q"	DIAM IN	SLOPE FT/FT	DESIGN - 10 YR STORM				PROFILE			
	FROM STA	TO STA	INC ACRES	TOTAL ACRES	"C"	TO UNFT					IN PIPE	n	Q cfs	V fps	LENGTH FT	FALL FT	OTHER LOSSES	INV UPPER
REA I	-	-	0.6	0.6	.90	<6	N/A*	5.7	.31	.005	.013	.40	2.02	24'	.12	-	163.12	163.0
REA II	-	-	0.6	1.2	.90	<6	N/A*	5.7	.62	.005	.013	.80	2.02	94'	.47	-	163.00	162.5
REA III	-	-	19.6	19.6	.20	37	-	2.7	10.58	.015	.013	12.87	7.28	31'	.45	-	162.62	162.1
ALTERNATE: 15"										.015	.009	11.4	31'	.45	-	162.62	162.1	
TRAVEL TIME IN PIPES IS NOT SIGNIFICANT DUE TO THE SHORT LENGTHS.																		
NOTE: SINCE T _c FOR AREAS I + II ARE SIGNIFICANTLY LESS THAN AREA III THEY WILL NOT CONTRIBUTE TO THE PEAK FLOW IN THE 18" DIA CMP.																		





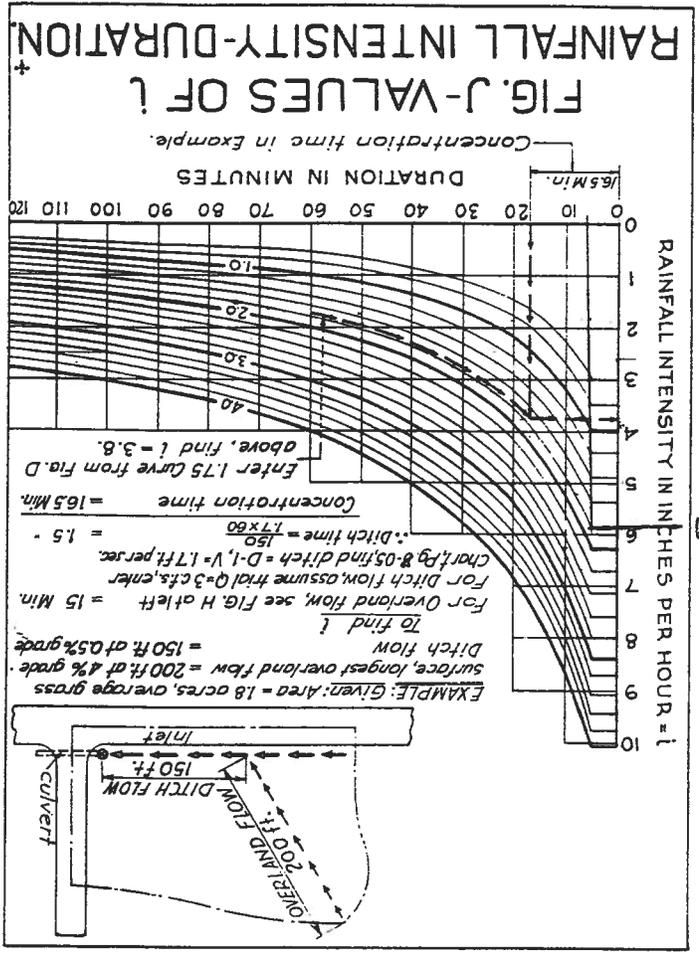
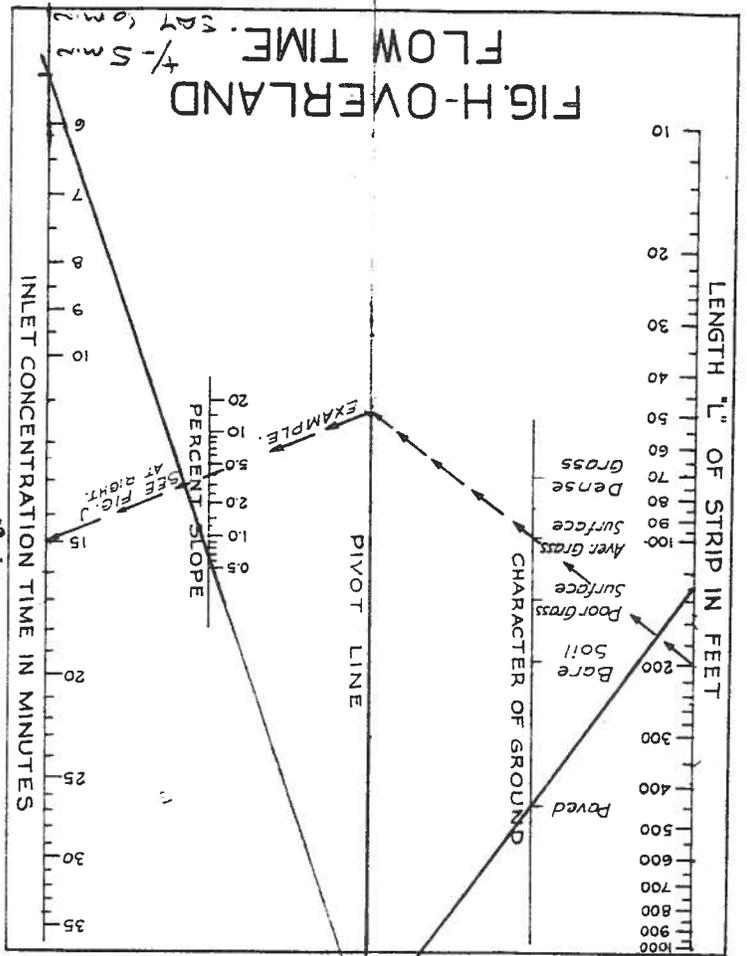
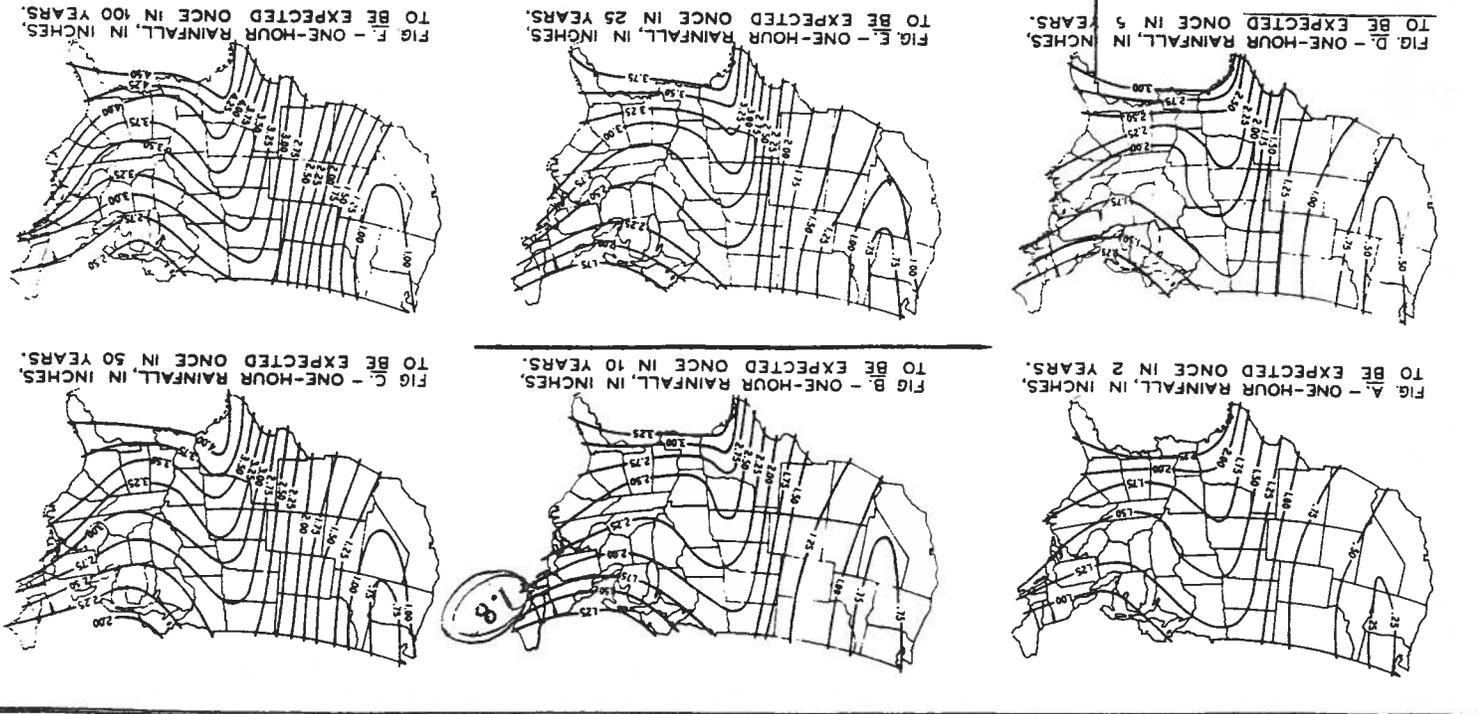
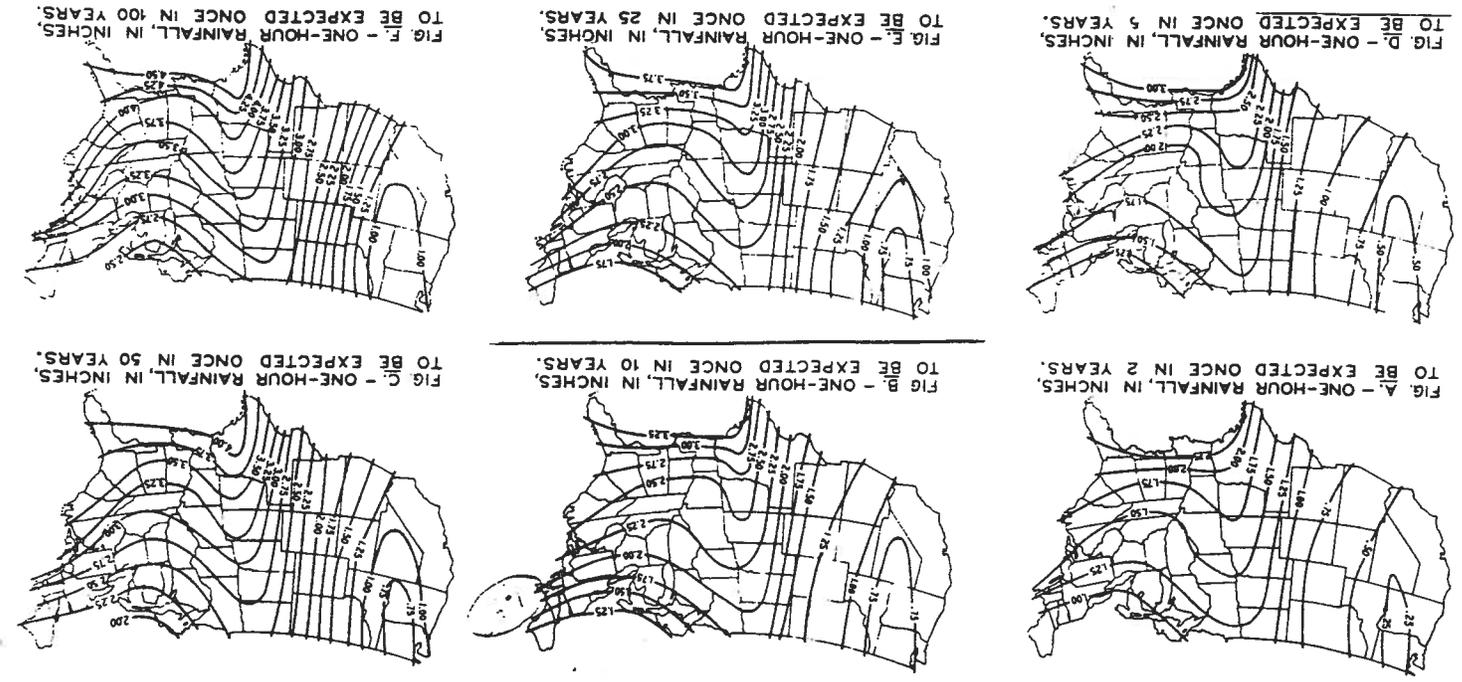


FIG. G-INTENSITY EXPECTATION FOR ONE-HOUR RAINFALL. EXAMPLE: Assume expectancy period = 5 years, see Fig. D, assume locality, find 1 hour intensity = 1.75 in. per hour. COMPUTATION OF I IN RATIONAL FORMULA.

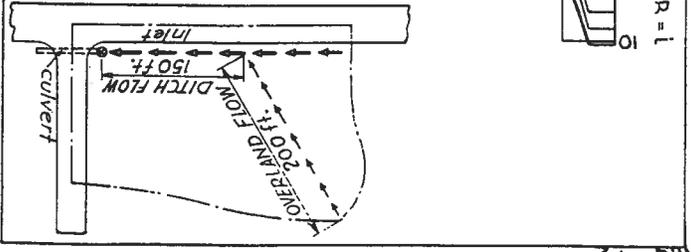




COMPUTATION OF I IN RATIONAL FORMULA.

EXAMPLE: Assume expectancy period = 5 years, see Fig. D, assume locality, find 1 hour intensity = 1.75 in. per hour.

FIG. G. INTENSITY EXPECTATION FOR ONE-HOUR RAINFALL.



EXAMPLE: Given: Area = 18 acres, average gross surface, longest overland flow = 200 ft. at 4% grade. Ditch flow = 150 ft. at 0.5% grade. To find I . For Overland flow, see Fig. H at left = 15 Min. For Ditch flow, assume that $Q = 3$ cfs, enter Chart, Pg. 8, find ditch = $D = 1$, $V = 1.7$ ft. per sec. Ditch time = $\frac{150}{1.7 \times 60} = 1.5$ min. Concentration time = 1.5 min. Enter 1.75 Curve from Fig. D above, find $I = 3.8$.



FIG. J. VALUES OF I RAINFALL INTENSITY-DURATION.

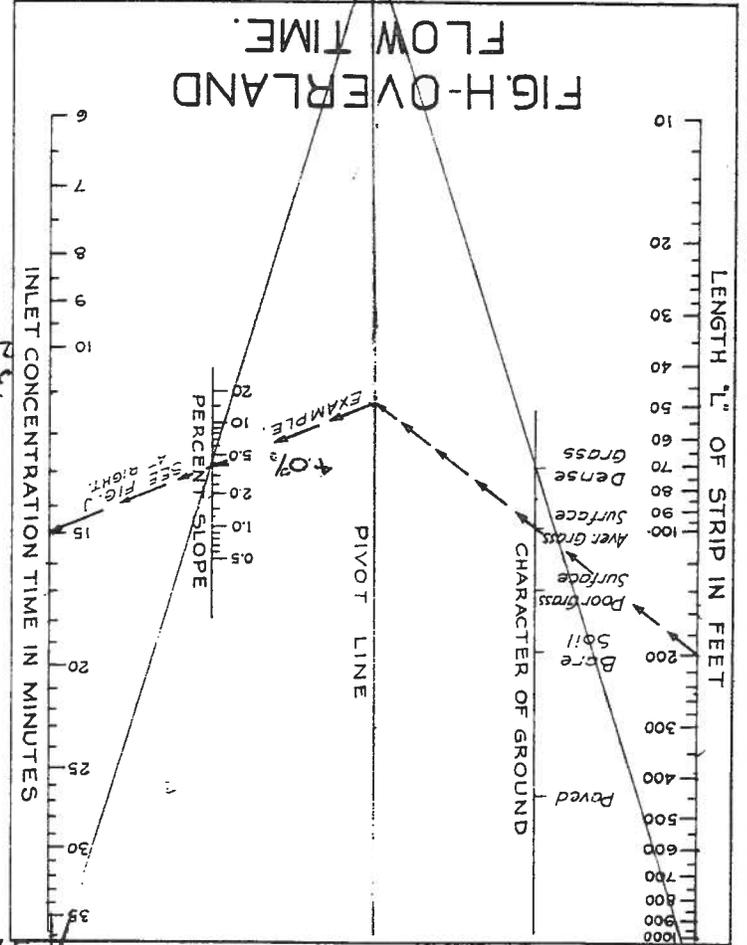


FIG. H. OVERLAND FLOW TIME.

SEWER PIPES

Enter up to 10 pipes.
 Enter <Return> only for flowrate and diameter to end.

FLOWRATE (CFS)	DIAMETER (IN)	FRICITION (FT ^{1/6})	SLOPE (%)	VELOCITY (FPS)
* 0.40	6.00	0.0130	0.50	2.02
12.87	18.00	0.0130	1.50	7.28

PIPE CAPACITIES FROM "CUTTOOLS" CIVIL ENGINEERING SOFTWARE. DIAMETER, COEFFICIENT OF FRICTION & SLOPE WERE ENTERED AS KNOWN QUANTITIES FROM THE PLAN.

* X 2 FOR DOUBLE G CMP