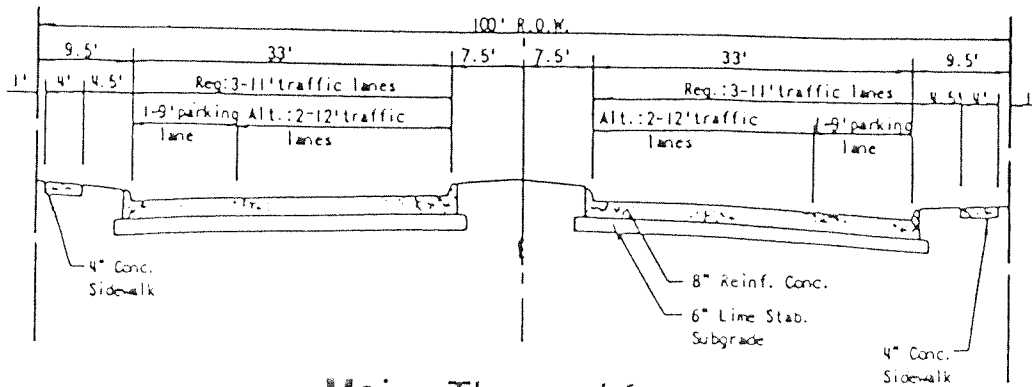
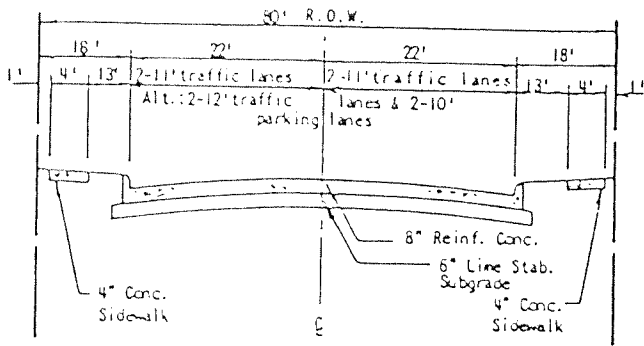


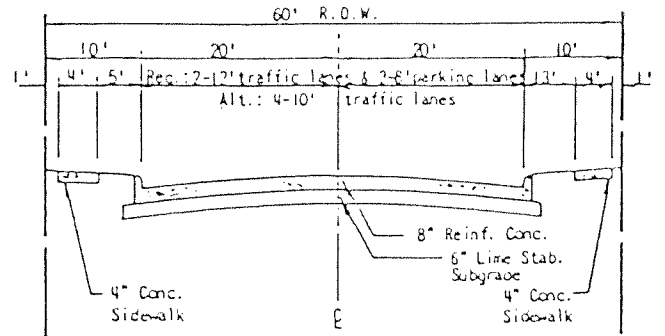
TYPICAL STREET CROSS-SECTIONS



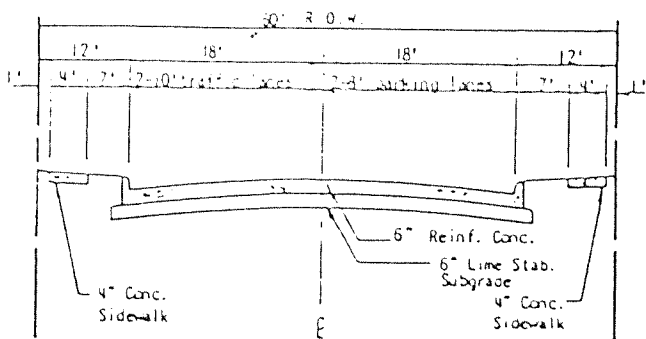
Major Thoroughfare



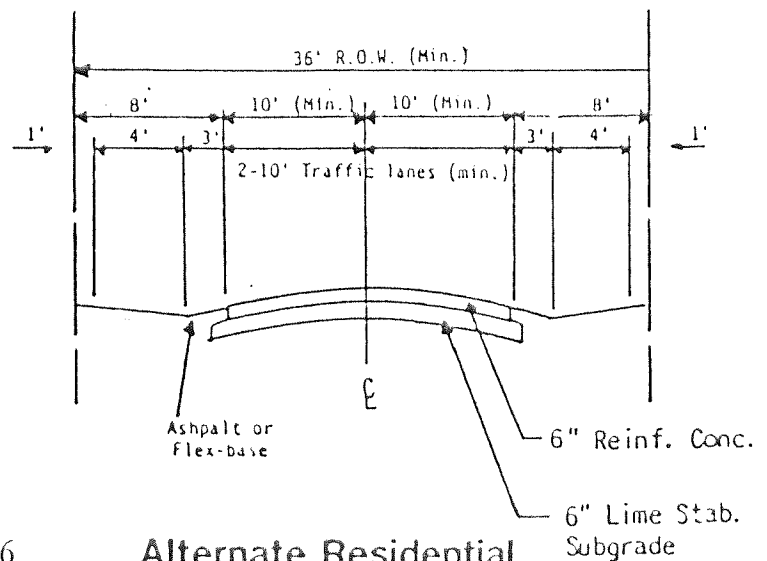
Collector A



Collector B

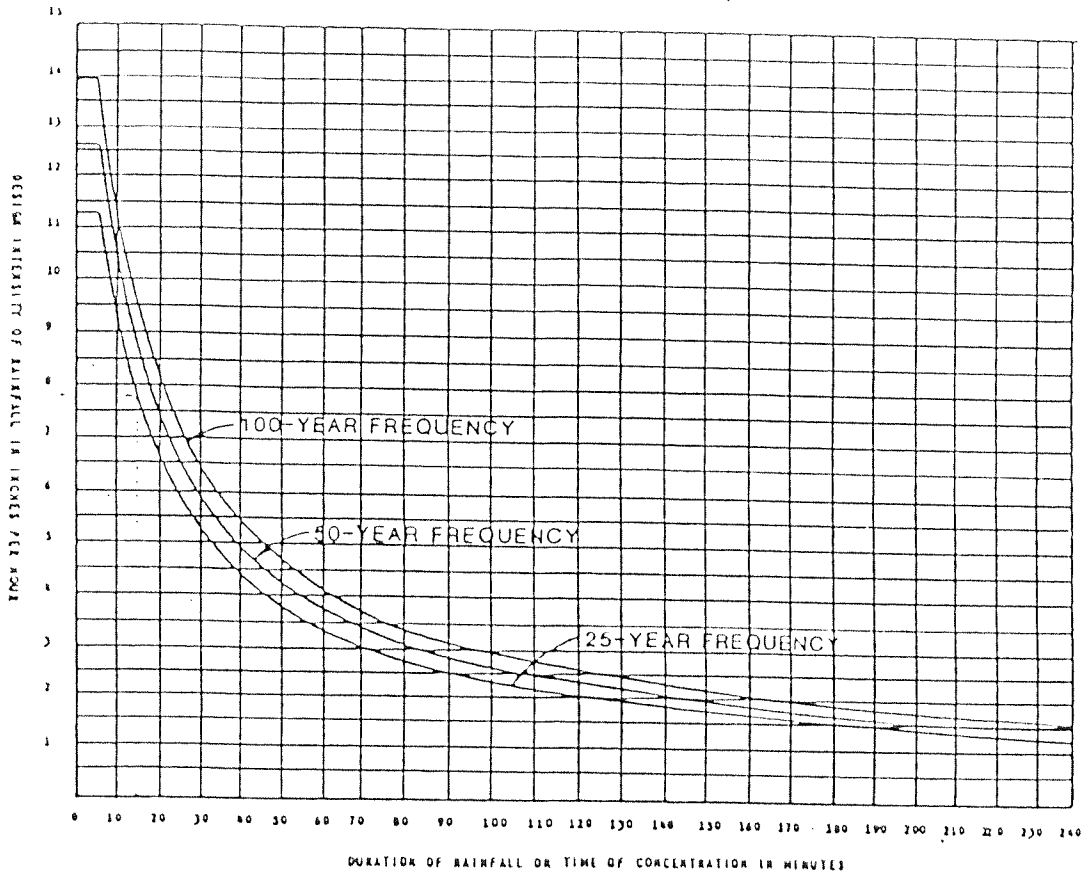


Residential

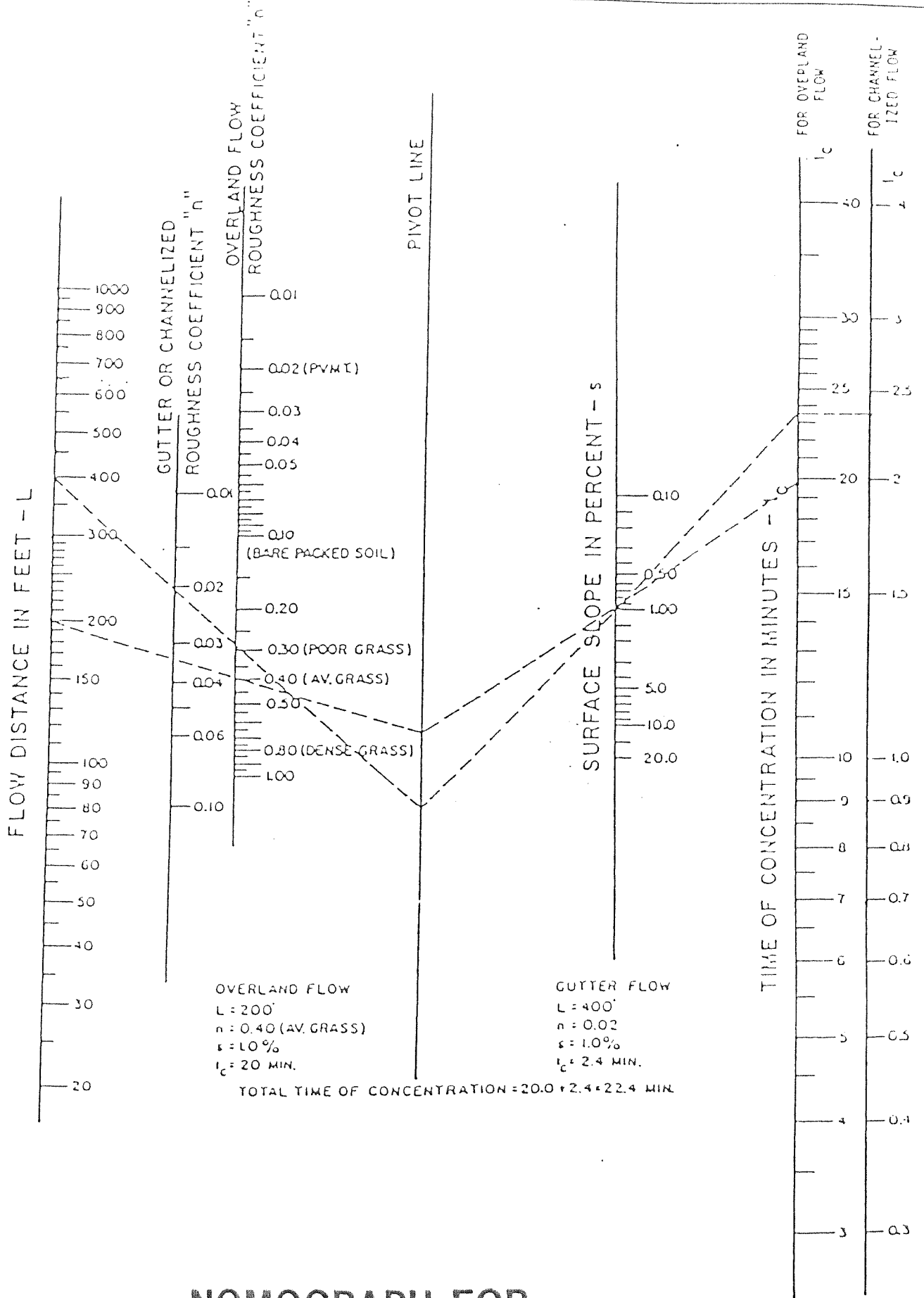


Alternate Residential

RAINFALL FREQUENCY-INTENSITY-DURATION CURVES
(S.D.H. & P.T.-COLLIN COUNTY)



RAINFALL INTENSITY CURVES



NOMOGRAPH FOR TIME OF CONCENTRATION

EXAMPLE

Known:

- Major Street
- Pavement Width = 33'
- Gutter Slope = 1.0%
- Pavement Cross Slope = 1/2"/1'
- Depth of Gutter Flow = .5'

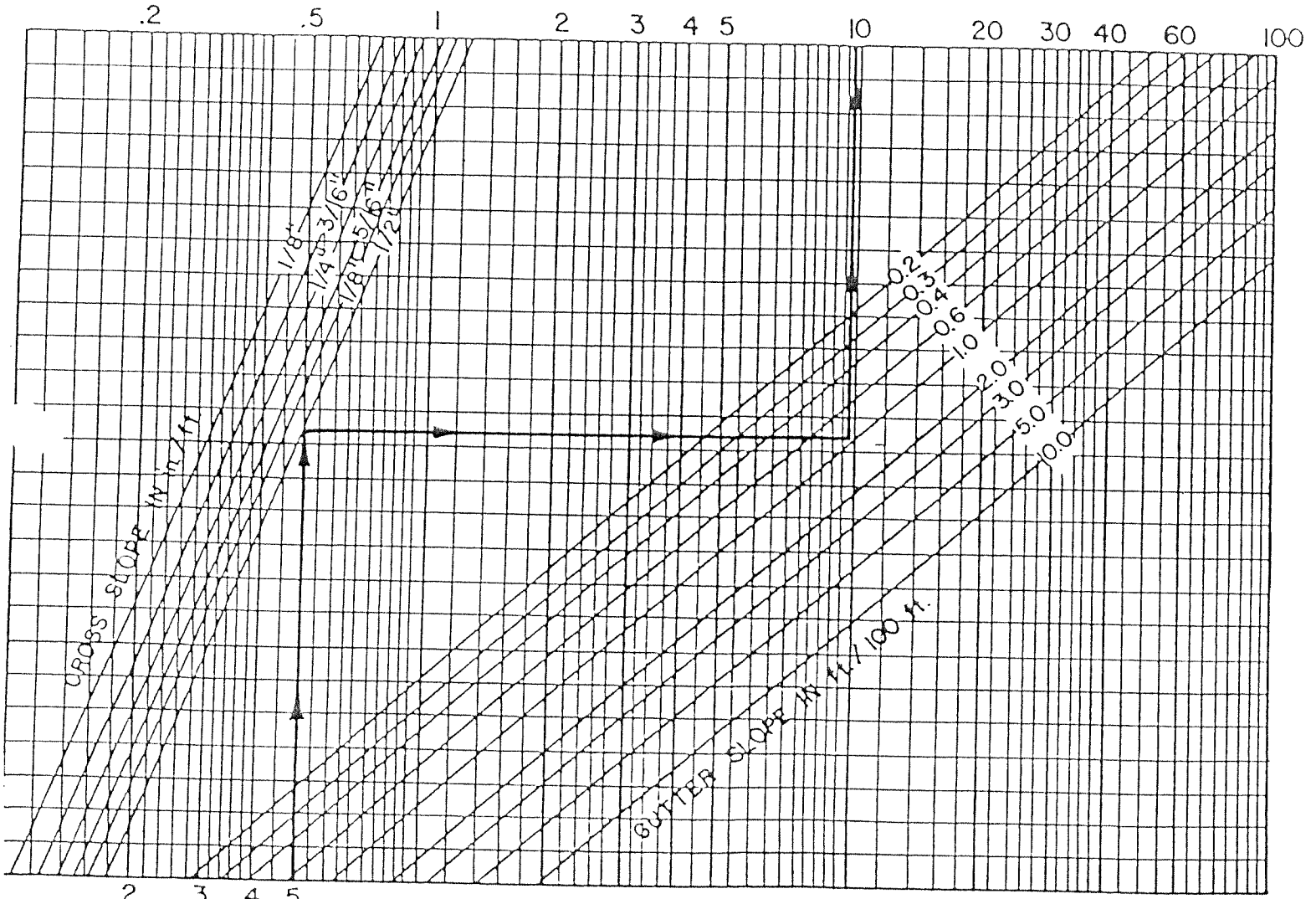
Solution:

- Enter Graph at .5'
- Intersect Cross Slope = 1/2"/1'
- Intersect Gutter Slope = 1.0%
- Read Gutter Capacity = 9.8 c.f.s.

Find:

Gutter Capacity

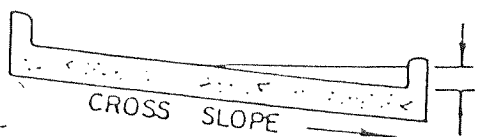
GUTTER CAPACITY IN C.F.S.



DEPTH OF GUTTER FLOW
IN FEET

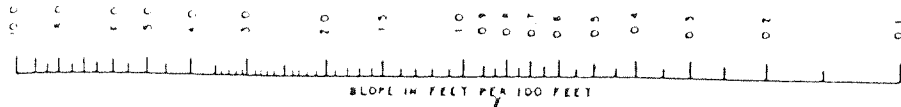
PLATE 3

CAPACITY OF
TRIANGULAR GUTTERS

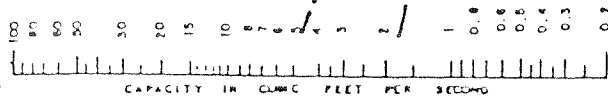
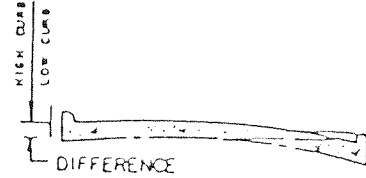


DEPTH OF
GUTTER FLOW

(Roughness Coefficient $n = 0.0175$)



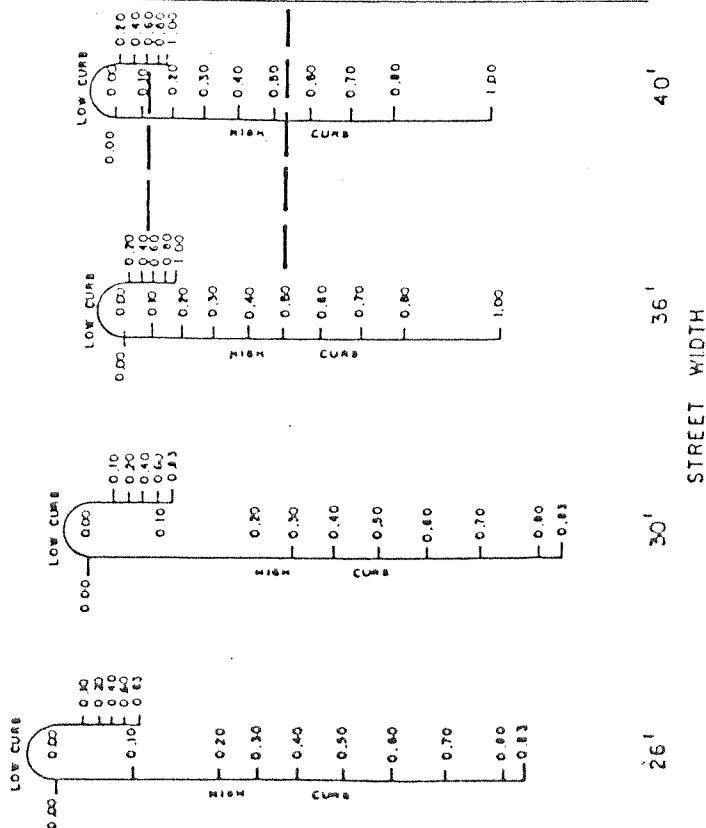
When Both Curbs are of the Same Elevation the Capacity Obtained from this Nomograph is the Capacity of a Single Gutter



EXAMPLE

Known;
 Minor Street
 Pavement Width = 36'
 Gutter Slope = 0.80%
 Gutter Difference = 0.5

Find:
 Gutter Capacity of High Curb
 Gutter Capacity of Low Curb



Solution;

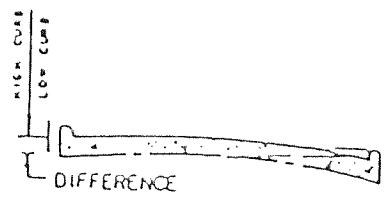
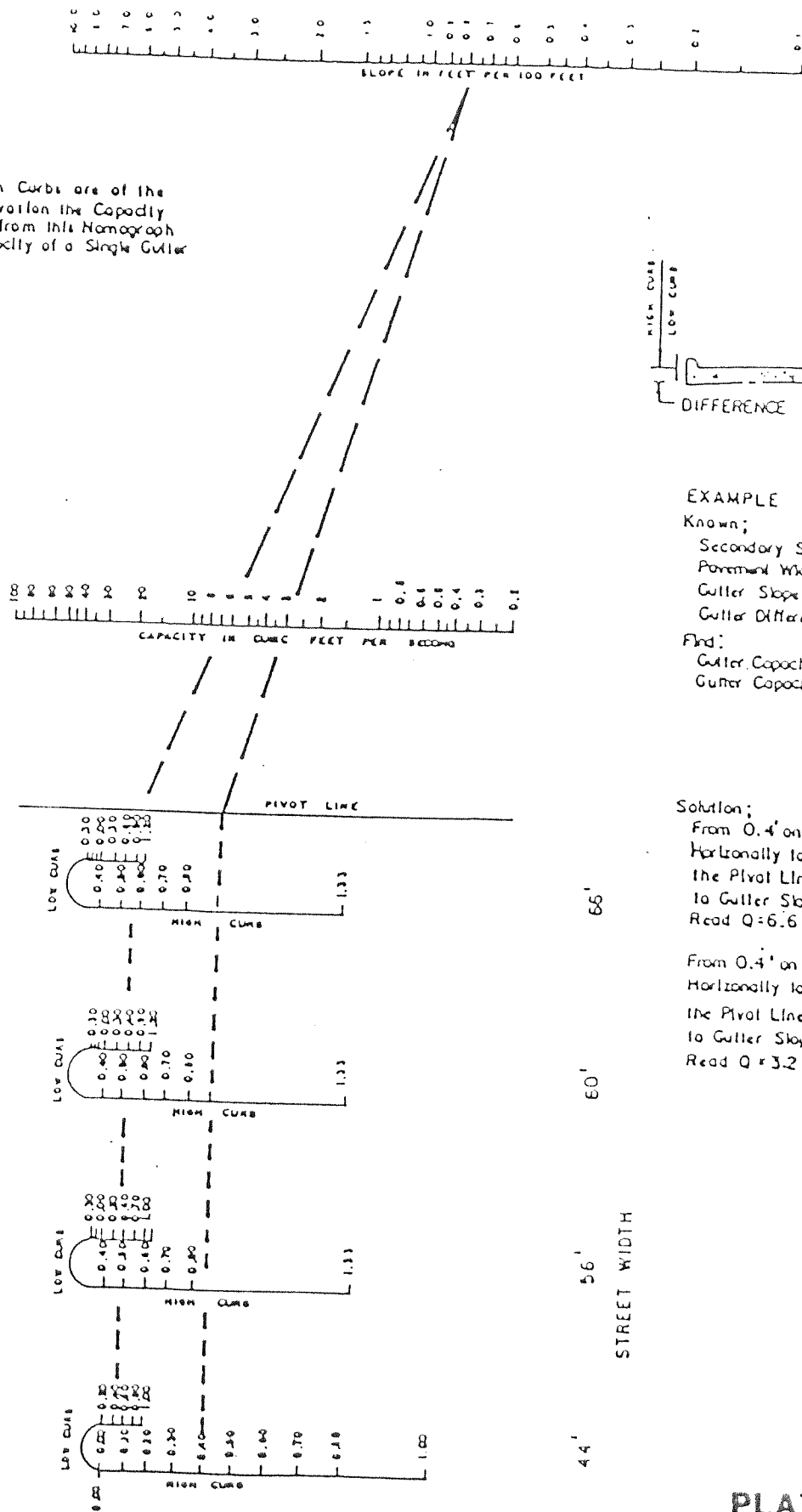
From 0.5' on the Low Curb Project Horizontally to the Pivot Line From the Pivot Line Draw a Straight Line to Gutter Slope = 0.80%
 Read Q = 5.7 c.f.s. for Low Curb

From 0.5 on the High Curb Project Horizontally to the Pivot Line From the Pivot Line Draw a Straight Line to Gutter Slope = 0.80%
 Read Q = 1.9 c.f.s. for High Curb

PLATE 4

CAPACITY OF
 PARABOLIC GUTTERS
 (26', 30', 36', 40' STREET WIDTHS)

When Both Curbs are of the Same Elevation the Capacity Obtained from this Nomograph is the Capacity of a Single Gutter



EXAMPLE

Known;
 Secondary Street Type S-A
 Pavement Width = 44'
 Gutter Slope = 0.76%
 Gutter Difference = 0.4'

Find:
 Gutter Capacity of High Curb
 Gutter Capacity of Low Curb

Solution;

From 0.4' on the Low Curb Project Horizontally to the Pivot Line From the Pivot Line Draw a Straight Line to Gutter Slope = 0.76%
 Read Q = 6.6 c.f.s. for Low Curb

From 0.4' on the High Curb Project Horizontally to the Pivot Line From the Pivot Line Draw a Straight Line to Gutter Slope = 0.76%
 Read Q = 3.2 c.f.s. for High Curb

STREET WIDTH

44'

56'

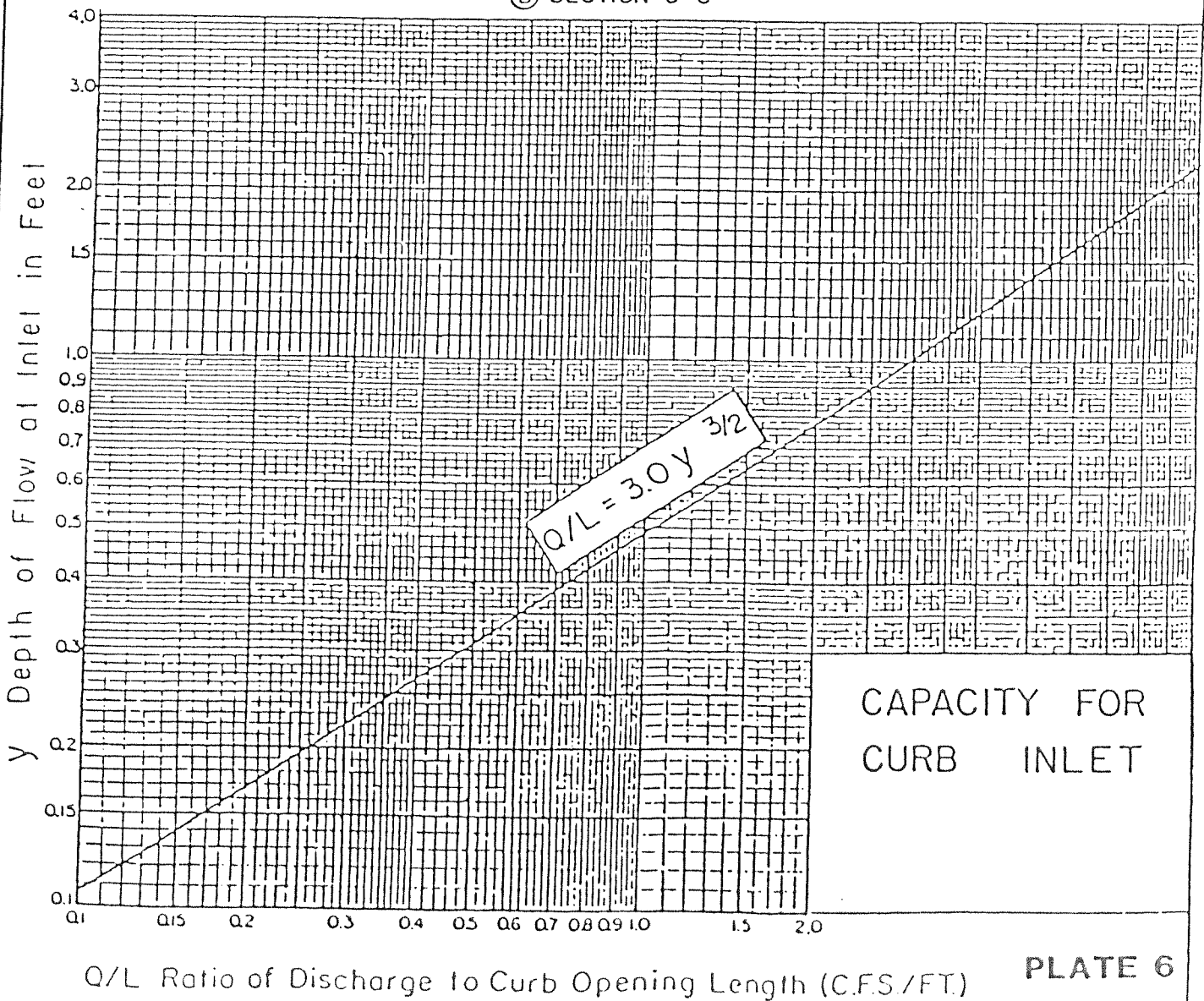
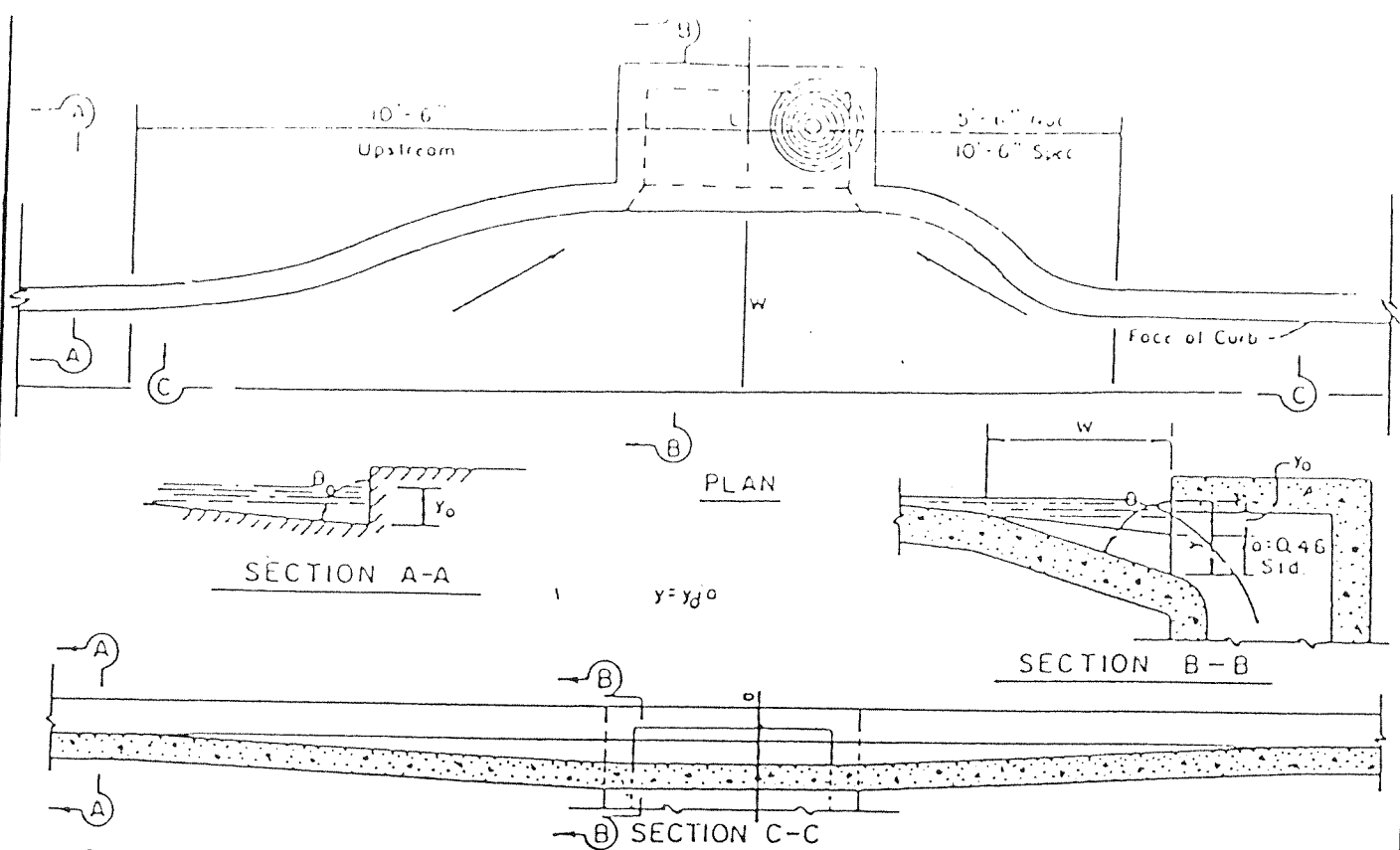
60'

66'

PLATE 5

CAPACITY OF
 PARABOLIC GUTTERS

(44', 56', 60', 66' STREET WIDTHS)



CAPACITY FOR CURB INLET

Q/L Ratio of Discharge to Curb Opening Length (C.F.S./FT.)

FIGURE 1

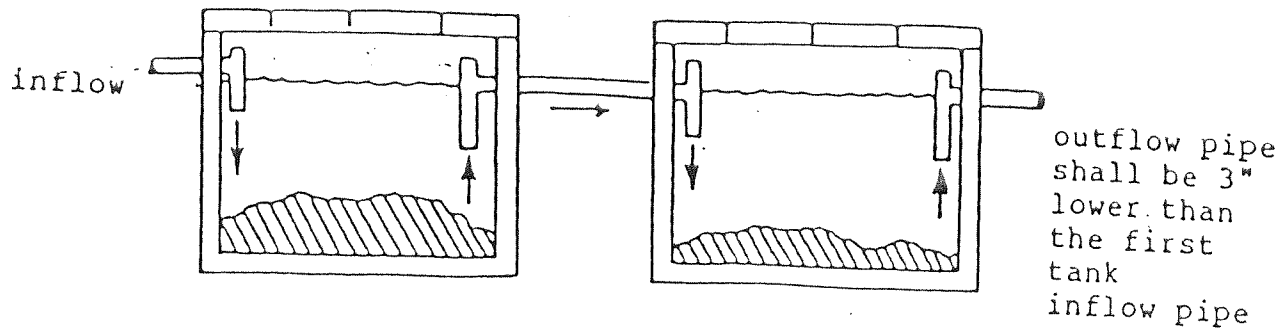


FIGURE 1A

First compartment should be 2 to 3 times larger than second compartment.

Liquid surface is same level in both tanks.

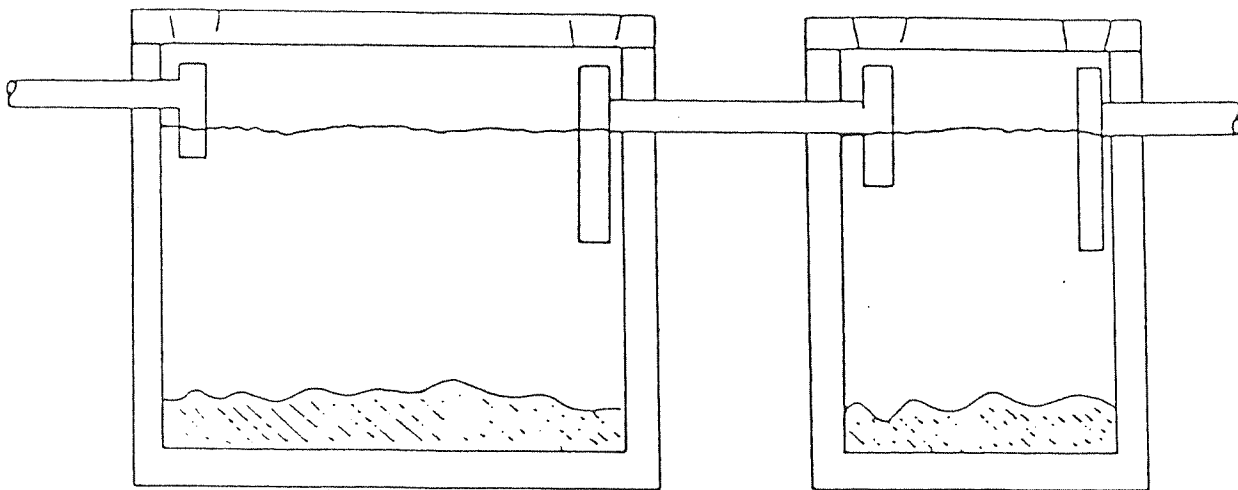


FIGURE 2

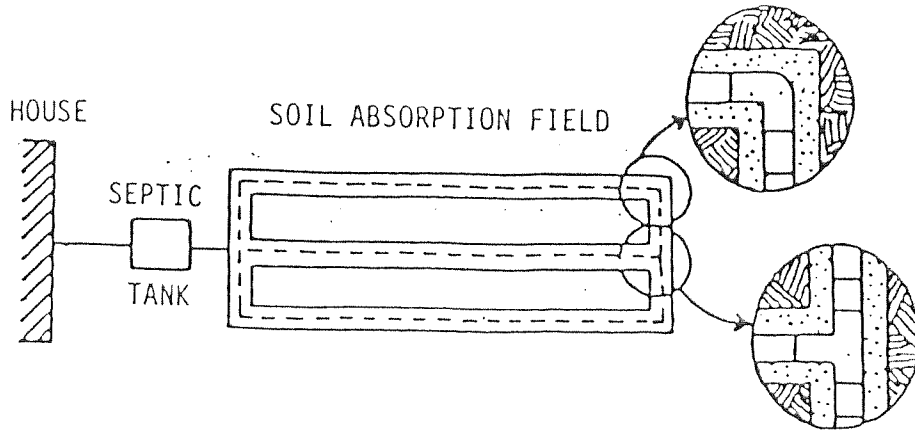
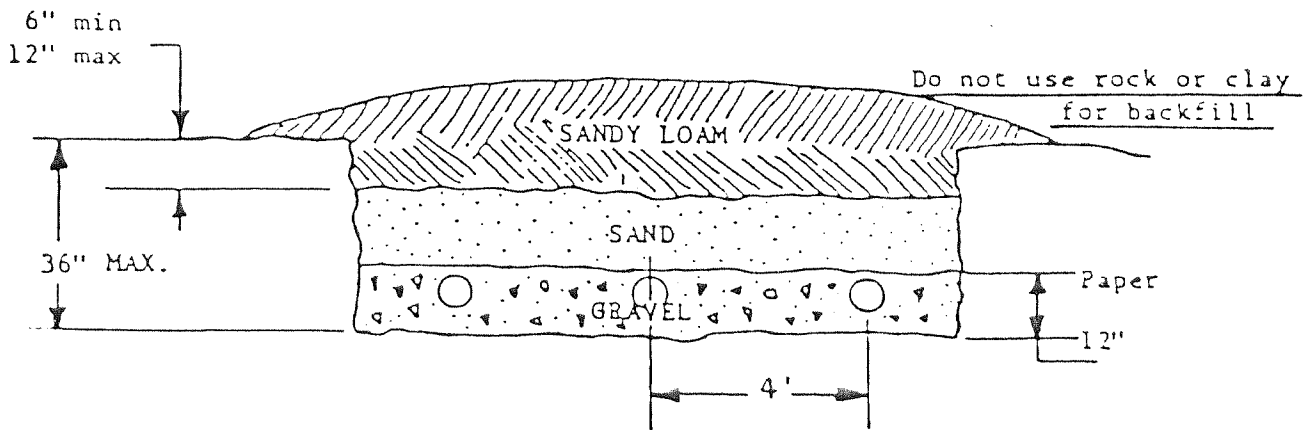


FIGURE 3



Absorption Bed System

(If the terrain is such, so as to make it impractical to install a level field, an alternate method of emplacement is shown in Figure 4, in which level runs of the line have sloping connectors.)

FIGURE 4

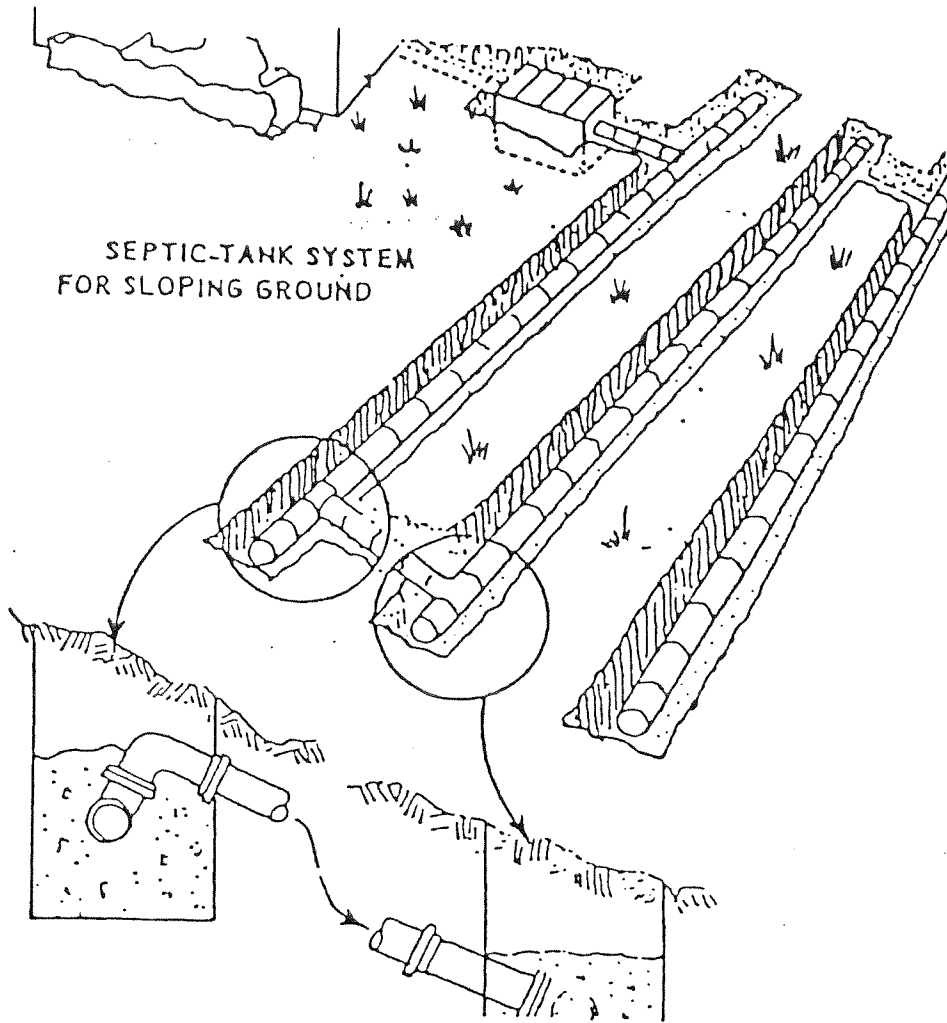


FIGURE 5

Note Cover or Tar Paper Strip
for Joint Protection

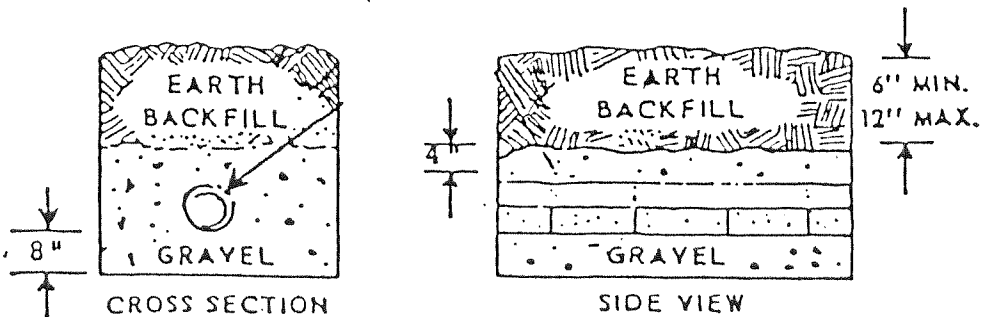


FIGURE 6

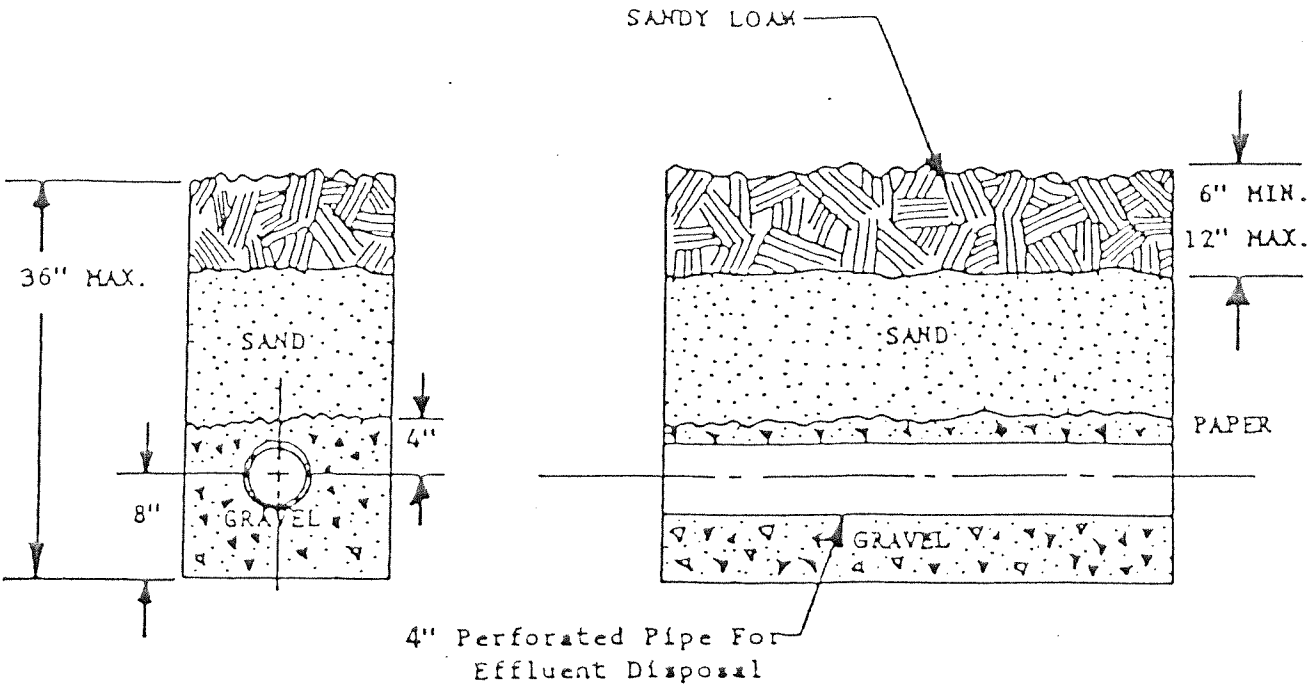
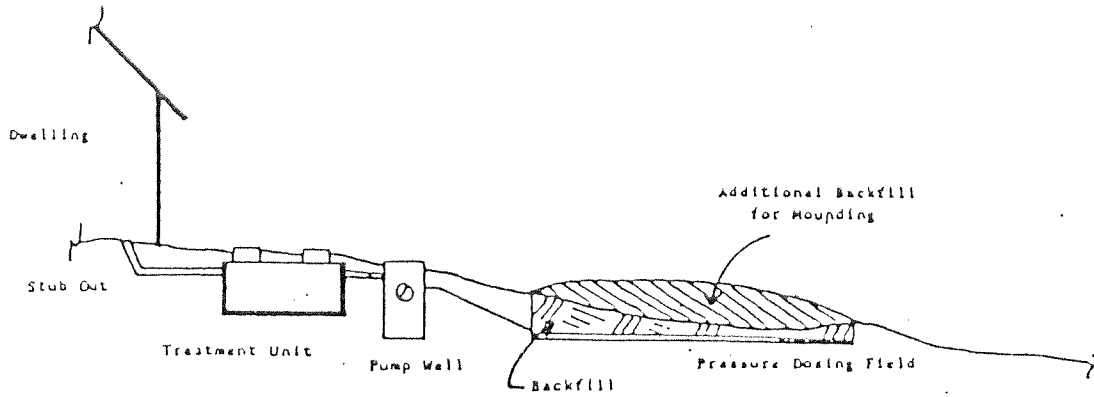


FIGURE 7

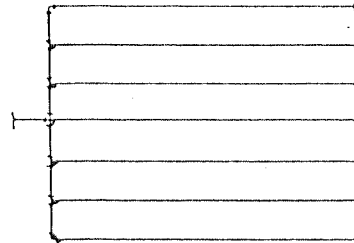
TYPICAL PRESSURE DOSING SYSTEM



Typical pipe used is 1 1/4 dia. to 2" dia. PVC with 1/8" holes drilled through the pipe on approximately (3) three inch centers.

Trenches are no closer than 18" and line length restricted to 100 ft. or less to minimize pressure flow in the pipe.

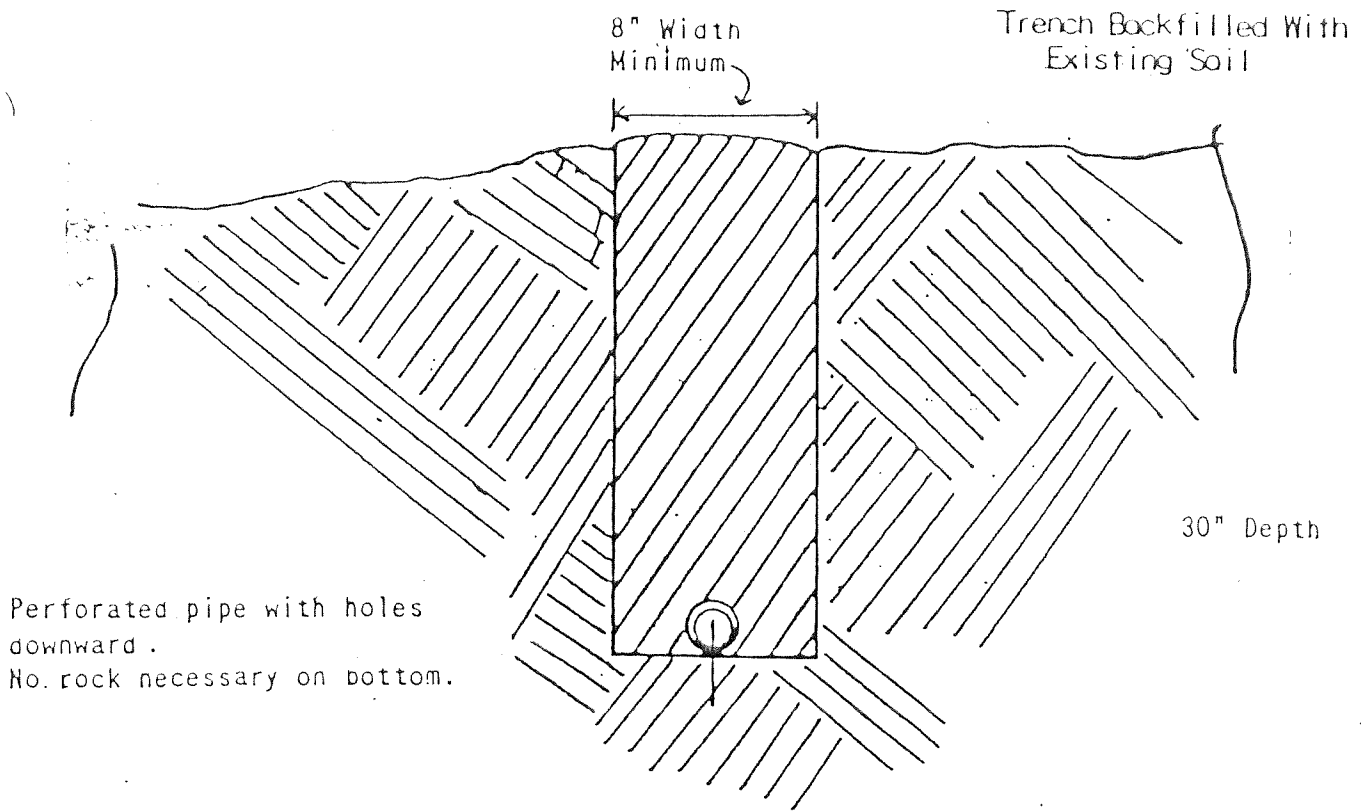
Typical 4 bedrock home approximately 1800 linear feet of line.



Pipe Diameter Varies between 1 1/2" and 2"

Perforated Pipe on 18" or greater centers.

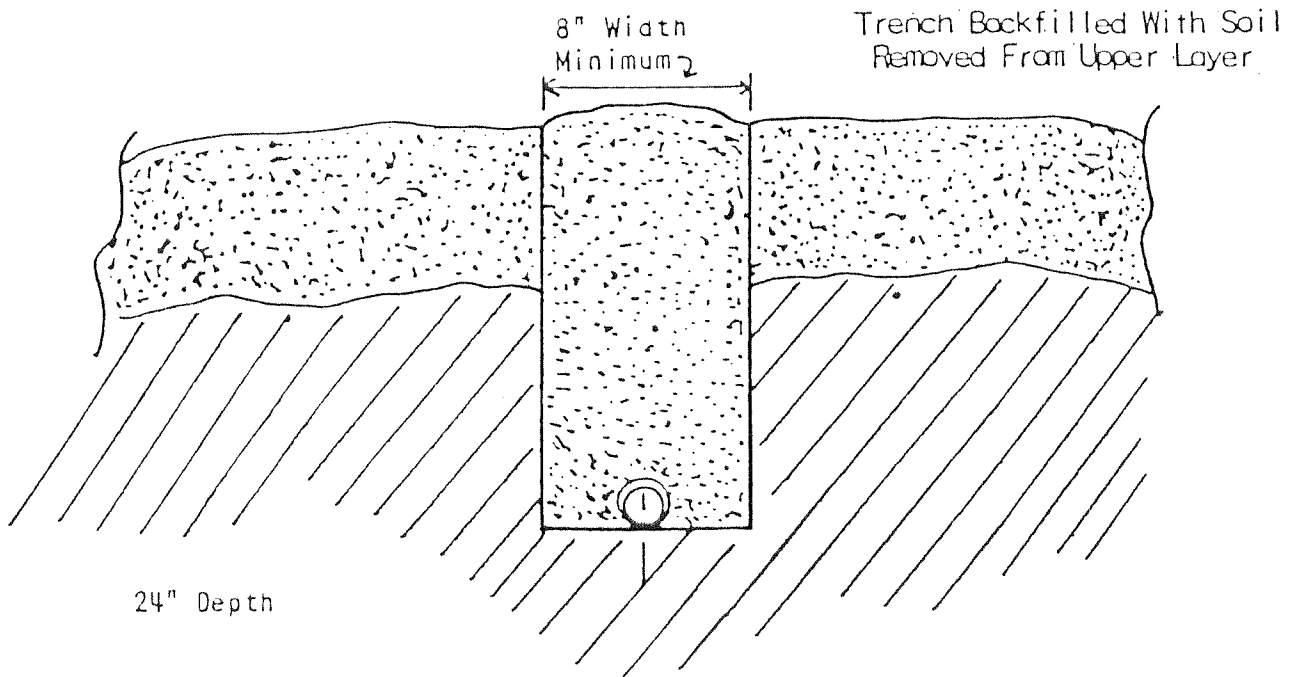
FIGURE 8



TYPICAL CROSS SECTION OF A PSD TRENCH IN SOIL WITH MEDIUM TO LOW PERMEABILITY

Depth of trench may vary from 18" to 30" - in very tight clay soils, the trenches are shallow - 18 inch. The 30-inch are used in sandy soils.

FIGURE 9



TYPICAL TRENCH CROSS SECTION IN LAYERED SOIL WITH THE UPPER SOIL LAYER HAVING GOOD ABSORPTIVE CHARACTERISTICS

FIGURE 10

TYPICAL HOME WASTEWATER TREATMENT PLANT

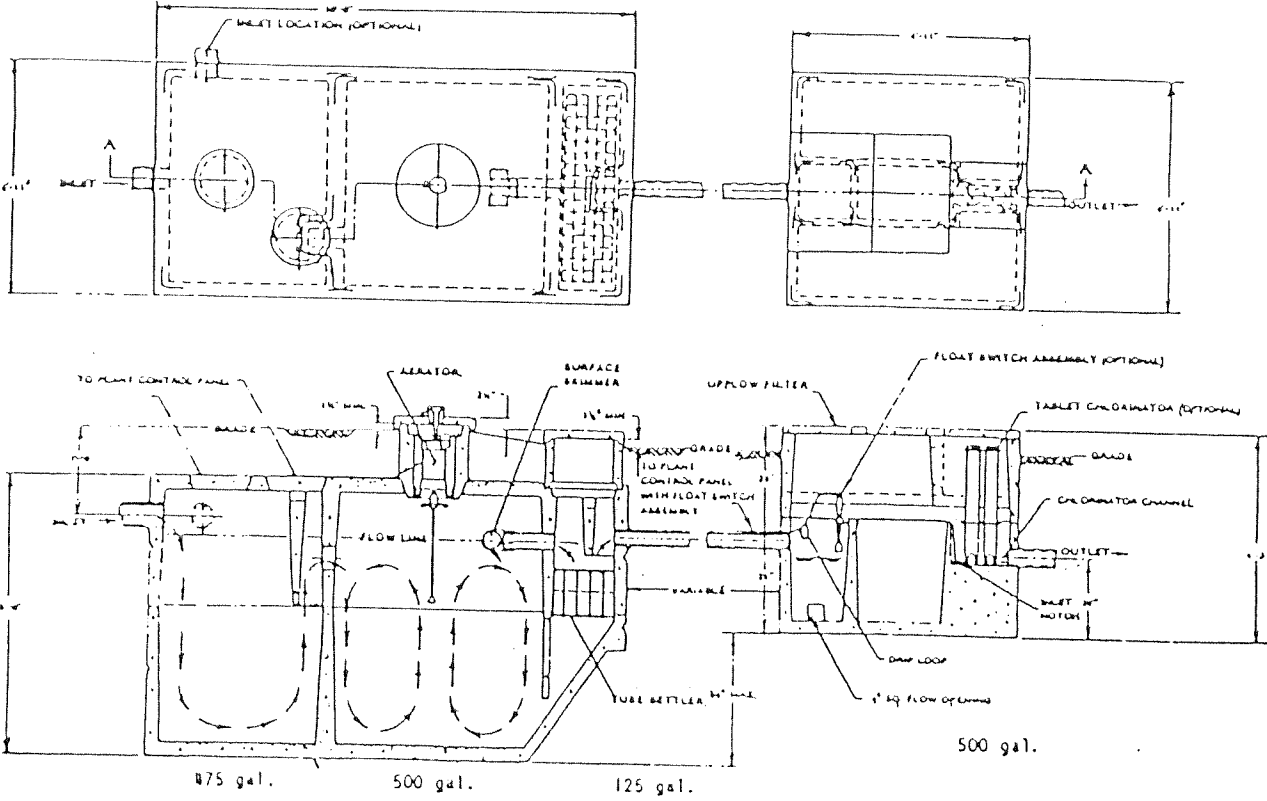


EXHIBIT A - DEVELOPER'S CONTRACT

C O N T R A C T

STATE OF TEXAS)
)
COUNTY OF COLLIN)

WHEREAS, a developer of property located in the corporate limits of the Town of Fairview, Texas must develop such property in compliance with the applicable ordinances and regulations of the Town of Fairview pertaining to the paving of streets, alleys, curbs, gutters, drainage facilities, water main and sanitary sewers in a subdivision, and may elect to make the improvements hereafter set out by himself or through a private contractor as provided by the Ordinances of the Town of Fairview and,

WHEREAS, the undersigned is the owner of a subdivision located in the corporate limits of the Town of Fairview and has elected to make the improvements hereinafter set out and has entered into an agreement with _____ for the installation of the following improvements for a total consideration of _____ (\$ _____) Dollars to be paid by the undersigned.

W I T N E S S E T H:

1.

_____ as Contractor undertakes, covenants and agrees to perform the work herein contracted to be done in every detail conforming to the to the standard Town of Fairview Specifications as stated in Section VI - Improvements, Land Development and Subdivision Regulations, Ord. No. _____, of the Code of Ordinances, Town of Fairview, Texas, and amendments thereto including any special provisions, plans, or working drawings, and as approved by Mayor of the Town of Fairview of the Town Council of the Town of Fairview where required. All work herein contracted for shall be completed on or before the _____ day of _____, 19____, time is of the essence.

_____ Addition, described as:

Street (Name)		Material
Alley (Block)		Strength (in
Storm Sewer (Pipe Size)	From To Length Width	concrete)

2.

It is hereby certified by each of the parties concerned by the signing of this contract, that a copy of the Town of Fairview specifications governing pavement placed within the Town of Fairview contained in Section VI - Improvements, Land Development

COPY

and Subdivision Regulations, Ord. No. _____, of Code of Ordinances, Town of Fairview, Texas, and amendments thereto is in the personal possession of each of the parties concerned, and that such specifications are made a part of this contract.

3.

It is hereby agreed that the Contractor shall upon completion of the work to be performed under this contract, but before acceptance of said work by the Town of Fairview, shall deliver to the Town of Fairview a properly executed Maintenance Bond as required by the Ordinances of the Town of Fairview.

In Testimony Whereof, _____, Owner and _____, Contractor, hereby bind themselves, their heirs, successors, assigns, and representatives, for the faithful and full performance of the terms and provisions of this contract, individually, jointly, and severally.

Executed this _____ day of _____, 19__.

Party of the First Part (Owner)

Party of the Second Part (Contractor)

By: _____
Title

By: _____
Title

Address: _____

Address: _____

Approved for Town of Fairview:

Mayor

Date: _____

Town Attorney

Date: _____