



Bound Reports

1720

RECEIVED

OCT 15 1997

~~4-069-0326AM~~ 4 ERP

PDS
ORLANDO
SJR WMD

DANBURY MILL BLVD. EXTENSION
@ KINGS RIDGE
STORMWATER CALCULATIONS

FARNER, BARLEY & ASSOCIATES, INC.
350 North Sinclair Avenue
Tavares, Florida 32778

By:



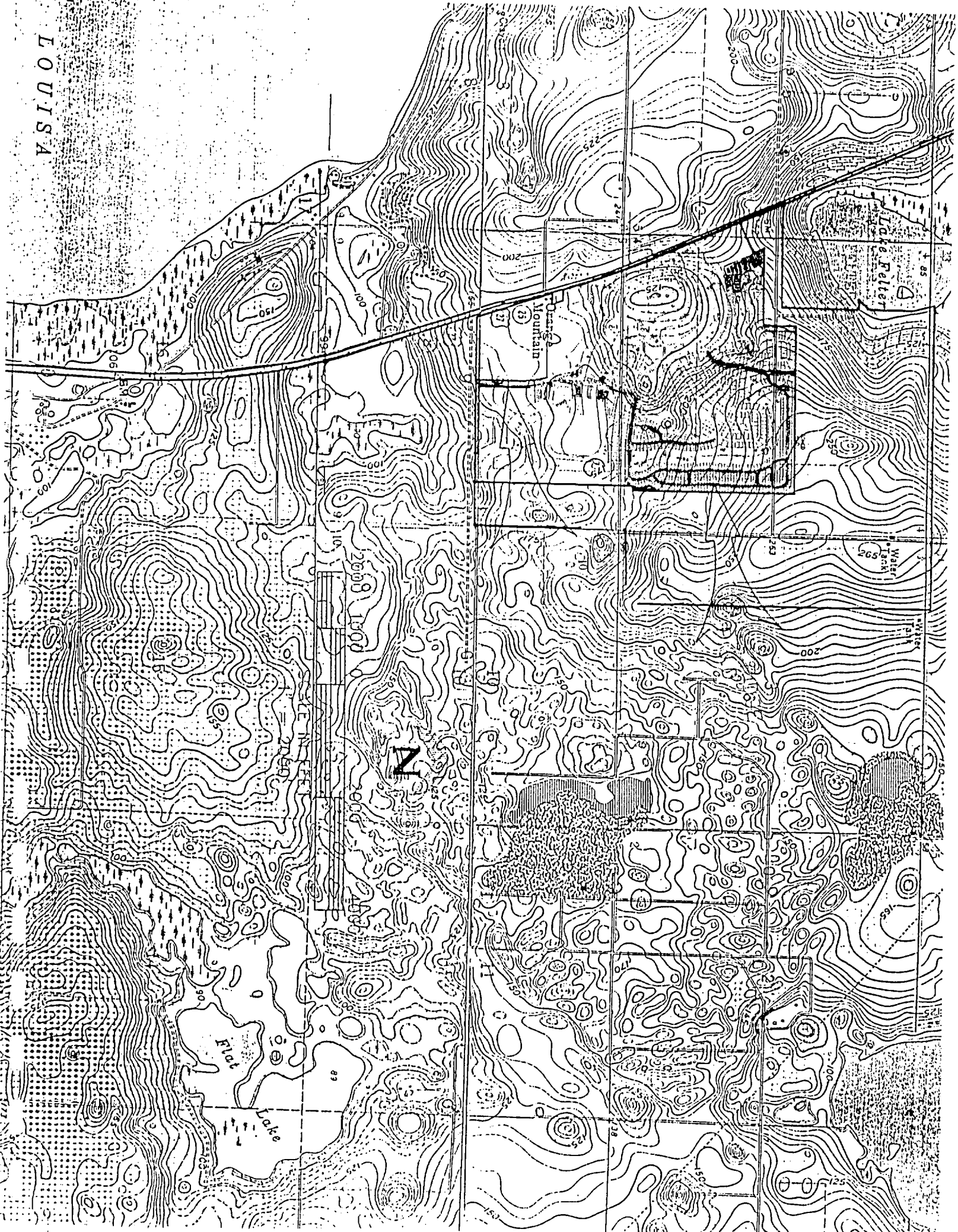
OCT 14 1997

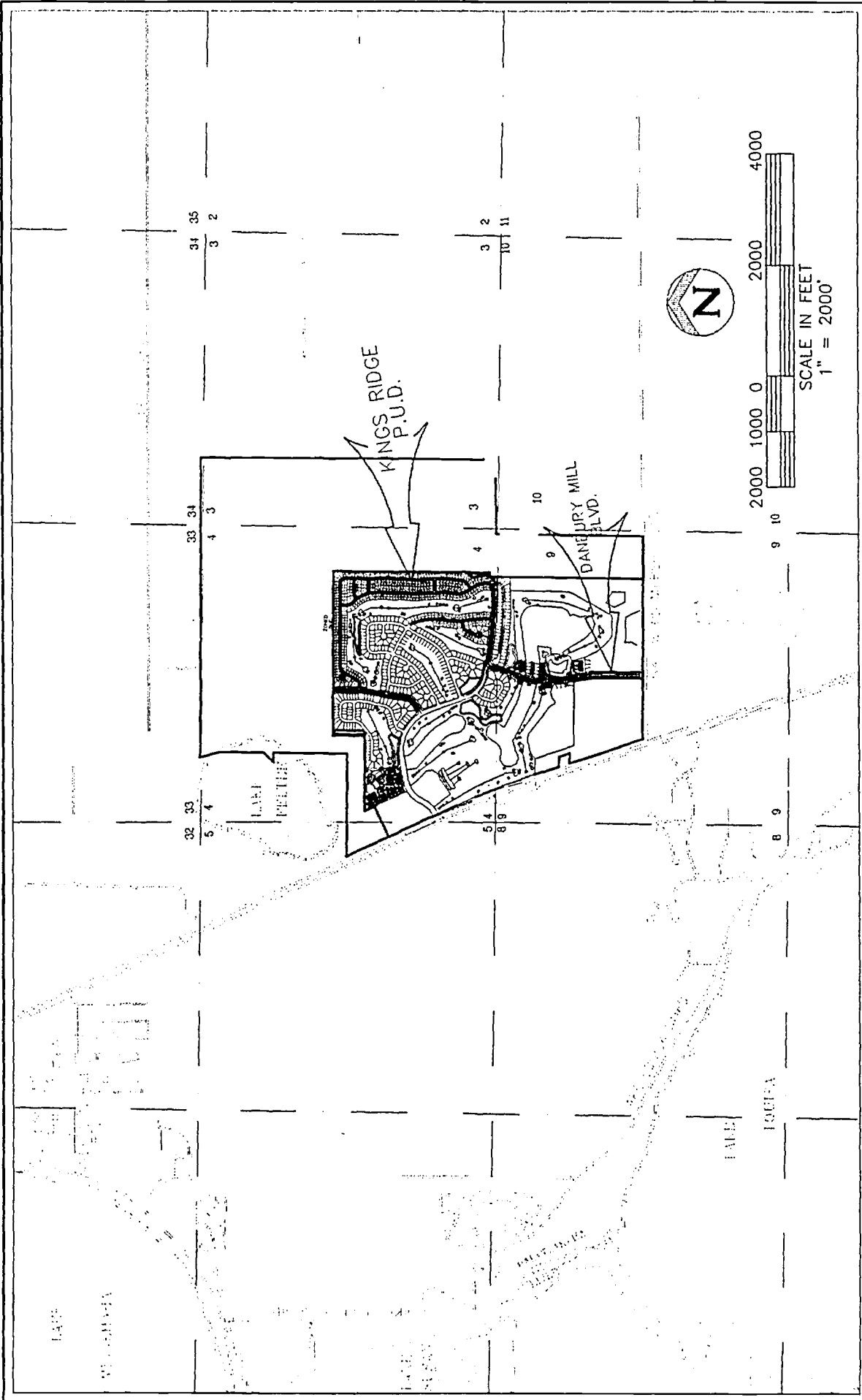
Duane K. Booth, P.E. #44631

TABLE OF CONTENTS

SECTION 1	LOCATION MAP
SECTION 2	PROJECT SUMMARY
SECTION 3	DEVELOPED SITE CONDITIONS
SECTION 4	STORM SEWER TABULATIONS

LOUISIANA





VICINITY MAP

**DANBURY MILL BOULEVARD EXTENSION
@ KINGS RIDGE
PROJECT SUMMARY**

Danbury Mill Boulevard Extension is 1,016 Linear Feet of road with the associated stormwater collection and conveyance system. This project lies within the Kings Ridge Planned Unit Development for which a master stormwater plan has been previously permitted and constructed as part of Kings Ridge Phase IV to which a St. Johns individual permit was issued. Permit No. 4-069-0326AM2-ERP. The developed site condition summary shows that the actual curve number to date including this project is lower than the curve numbers assumed for build-out within these stormwater calculations permitted under the above referenced project.

**DANBURY MILL BOULEVARD EXTENSION
@ KINGS RIDGE
DEVELOPED SITE CONDITION**

Project Area = 1.633
 Impervious Area = 0.886 (54.29%)

CN = 54.29% x 98 (Impervious)
 = 45.71% x 39 (Grass Good Condition "A" Soils)

Weighted CN = 71 for project limits

Basin CN = 4.18% x 98 (Impervious)
 95.82% x 39 (Pervious) = 41 Basin CN 13% Complete

Project within Previously permitted Basins

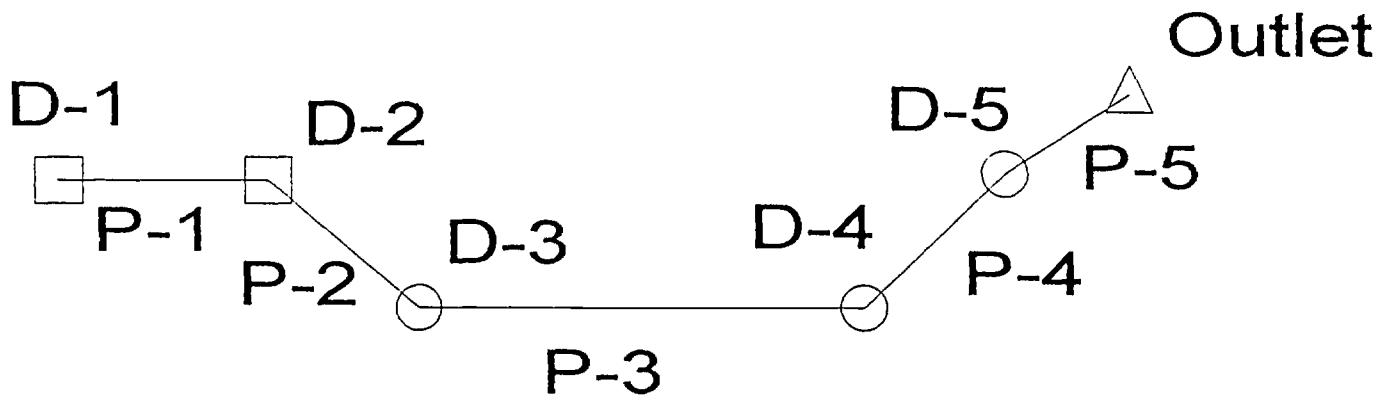
3-D

BASIN SUMMARY

BASIN	AREA (Ac)	CN (Permitted)	CN (Actual) including this page	BASIN STATUS
3-D	1.633	79	41	13% COMPLETE

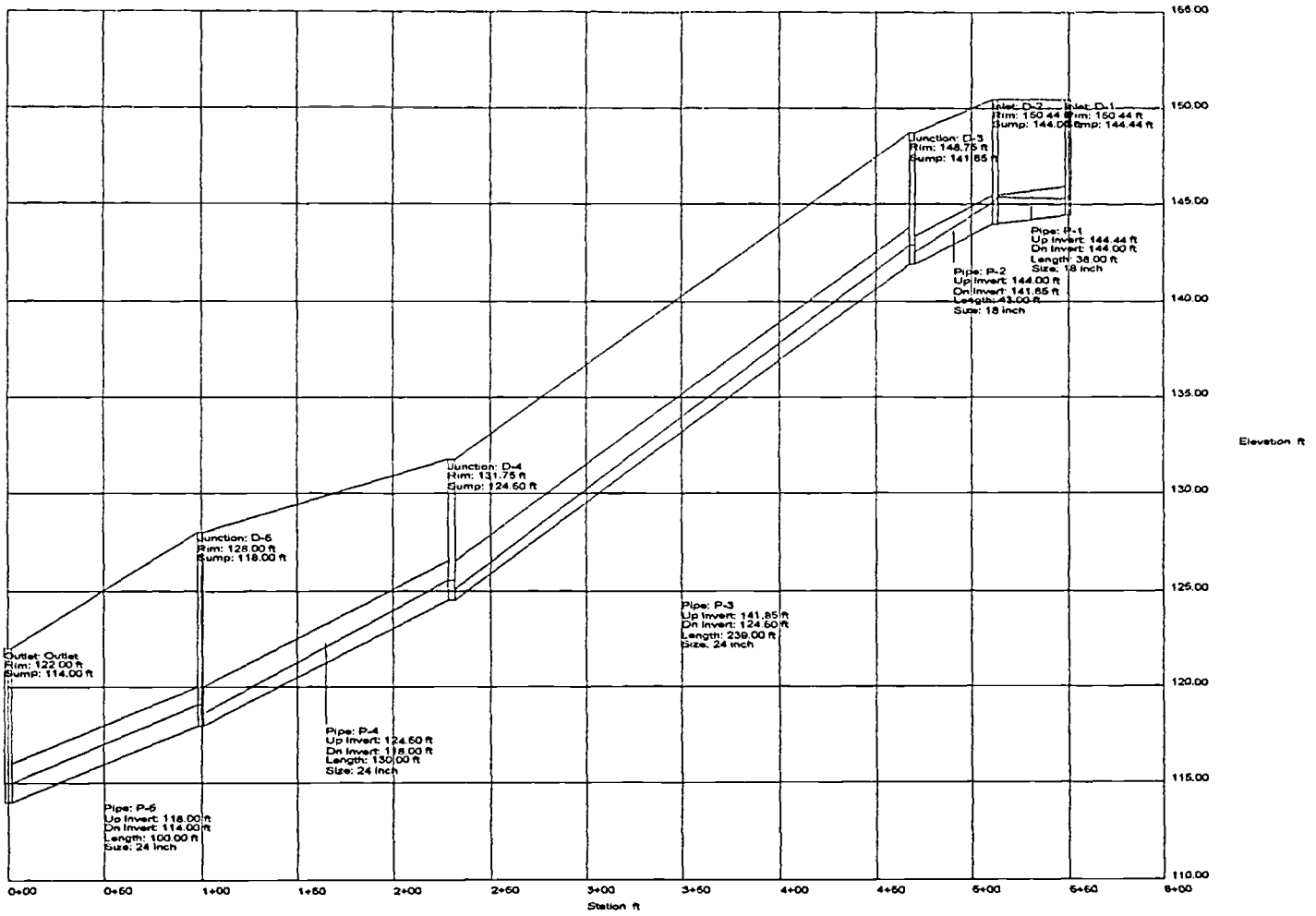
STORMWATER TABULATIONS

Structures D-1 through D-6 can be found on the following pages.



DOT Report

Pipe	-Node- Upstream Downstream	Inlet Area (acres)	Inlet CA (acres)	Total CA (acres)	-Ground- Upstream Downstream (ft)	-HGL- Upstream Downstream (ft)	-Slope- Energy Constructed (ft/ft)	-Section- Discharge Capacity (cfs)	-Section- Shape Size	Length (ft)	Average Velocity (ft/s)	Description
P-1	D-1	1.27	0.71	0.71	150.44	145.32	0.002897	5.24	Circular	38.00	3.93	
	D-2				150.44	145.44	0.011579	11.30	18 inch			
P-2	D-2	0.81	0.49	1.20	150.44	145.15	0.027779	8.82	Circular	43.00	8.70	
	D-3				148.75	142.53	0.050000	23.49	18 inch			
P-3	D-3	N/A	N/A	1.20	148.75	142.91	0.064253	8.81	Circular	239.00	9.51	
	D-4				131.75	125.01	0.072594	60.95	24 inch			
P-4	D-4	N/A	N/A	1.20	131.75	125.55	0.039646	8.72	Circular	130.00	8.63	
	D-5				128.00	118.56	0.050000	50.58	24 inch			
P-5	D-5	N/A	N/A	1.20	128.00	119.05	0.040000	8.67	Circular	100.00	5.19	
	Outlet				122.00	115.05	0.040000	45.24	24 inch			



Licensed to: Farner Barley & Assoc Inc., Tavares, FL 32778

Project : DANBURY MILL BLVD. EXTENSION

Sta 37+92.17

INPUT

Intens.= 7.00 C1=0.56 A1= 1.27 Qadd = 0.0 Slope1= 3.0000 Gutter= 1.50 Area = 7.18
CB ID = D-1 C2=0.00 A2= 0.00 Qrunoff= 5.0 Slope2= 0.1070 a = 0.25 Lgrate= 1.83
Com P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0000 Slope3= 0.0200 W = 4.00 Length=14.00

OUTPUT

Flowby= 0.0 Qtotal= 5.0 Qint= 5.0 Flowby dn= 0.0 Depth=0.17 Spread= 1.83 Veloc= 0.00

Sta 37+92.17

INPUT

Intens.= 7.00 C1=0.60 A1= 0.81 Qadd = 0.0 Slope1= 3.0000 Gutter= 1.50 Area = 7.18
CB ID = D-2 C2=0.00 A2= 0.00 Qrunoff= 3.4 Slope2= 0.1070 a = 0.25 Lgrate= 1.83
Com P-1-7/8 C3=0.00 A3= 0.00 Grade = 0.0000 Slope3= 0.0200 W = 4.00 Length=14.00

OUTPUT

Flowby= 0.0 Qtotal= 3.4 Qint= 3.4 Flowby dn= 0.0 Depth=0.14 Spread= 1.27 Veloc= 0.00

CRITERIA

Runoff computed by Rational Method Manning's n Gutter=0.013 Manning's n Pavement=0.022

Clogging Factors in Sag Location:

----- Curb Opening= 1.25 Grate= 1.25 Slotted Drain= 1.00 Comb-Curb= 1.00 Comb-Grate= 1.00

Clogging Factors on Continuous Grade:

----- Curb Opening= 1.00 Grate= 1.00 Slotted Drain= 1.00 Comb-Curb= 1.00 Comb-Grate= 1.00

Prepared by:

Date:08/15/97

Time:10:14:16

Checked by:

Date:

Pavement Drainage Program (C), 1991 Copyright by SMF Engineering Corporation, Phoenix, AZ