6A ENGINEERING ANALYSIS

HYDROLOGY/HYDRAULIC COMPUTATIONS

WSEL	A	P	R	$R^{2/3}$	$AR^{2/3}$	$KAR^{2/3}$
2	531.2	72.1	7.37	3.79	2011	1778
3	1157.7	729.7	1.586	1.36	1574.5	1392
3.5	1542.3	824.8	1.87	1.52	2340.9	2070
4	1974.4	921.9	2.14	1.66	3280.5	2901
4.5	2733.6	1775.5	1.54	1.33	3645	3223
5	3725.8	2242.1	1.66	1.40	5227	4622
5.5	5035.6	2741.4	1.84	1.50	7552.7	6678
6	6107.8	3240.6	1.88	1.52	9319	8240

Q_{10}	Q_{50}	Q_{100}	Q_{500}
1616	3034	3854	6373
3.2	4.1	4.7	5.5

NORMAL DEPTH CALCULATIONS

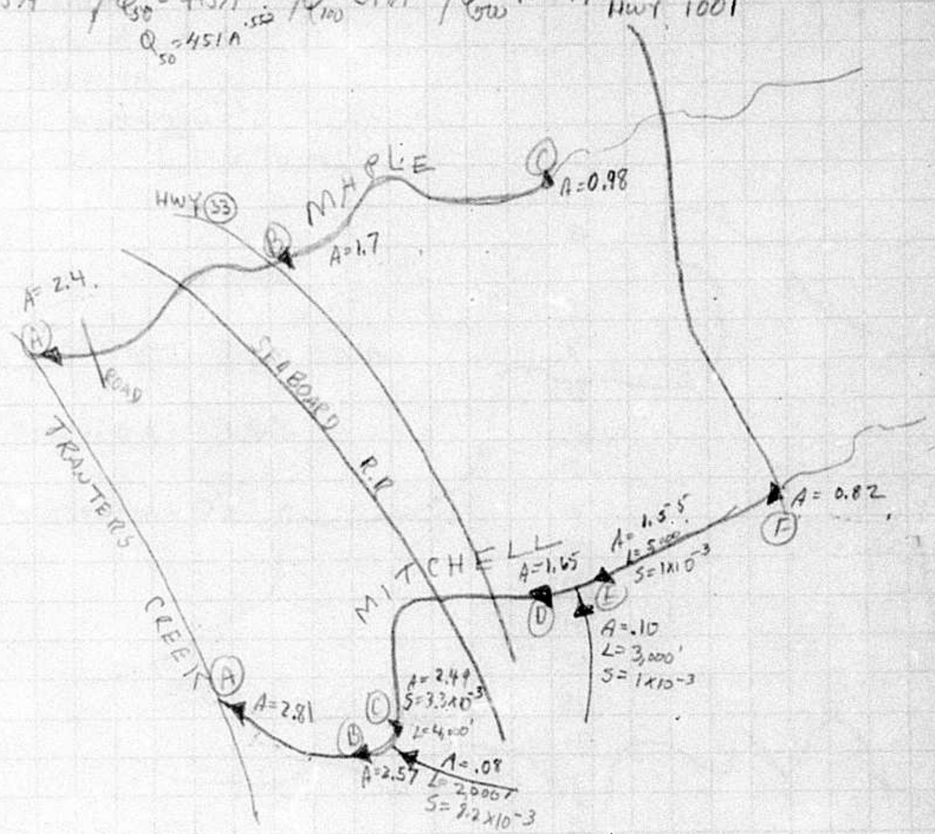
CHOCOWINITY CREEK

X-SECT : S-A

TETRA TECH INC. PASADENA, CALIF.	SUBJECT Washington City N.C. Maple Branch + Mitchell Branch	PROJECT N.C
	COMPUTED Frank G. CHECKED	FILE NO
		DATE 9/12/80 PAGE 1 OF 1 PAGES

$Q_{10} = 215A^{.584}$ / $Q_{50} = 445A^{.562}$ (451) / $Q_{100} = 592A^{.54}$ / $Q_{500} = 1080A^{.514}$

$Q_{50} = 451A^{.552}$



WASHINGTON QUAD. N.C. 7.5 MINUTE

NOTE: Slopes + lengths are representative for each particular reach
Areas D/S of confluence represent the cumulative.

Detailed areas represented in red
Green lines represent structures.

Maple	Q_{10}	Q_{50}	Q_{50}	Q_{100}
A	360	731	960	1695
B	295	604	795	1420
C	[illegible]5	446	595	1080

Mitchell	Q_{10}	Q_{50}	Q_{100}	Q_{500}
A	395	798	1045	1840
B	375	759	995	1755
C	370	746	980	1730
D	290	595	785	1400
E	280	574	760	1355
F	195	404	540	980

TETRA TECH INC.
Jacksonville, Fla.

SUBJECT: Estimate of Impervious Surface & Storm Sewered Areas

COMPUTED: WS CHECKED:

PROJECT: NC Flood Ins.

FILE NO: 3380 (Beaufort Co.)

DATE: 7/2/82 PAGE: 1 OF: ___ PAGES

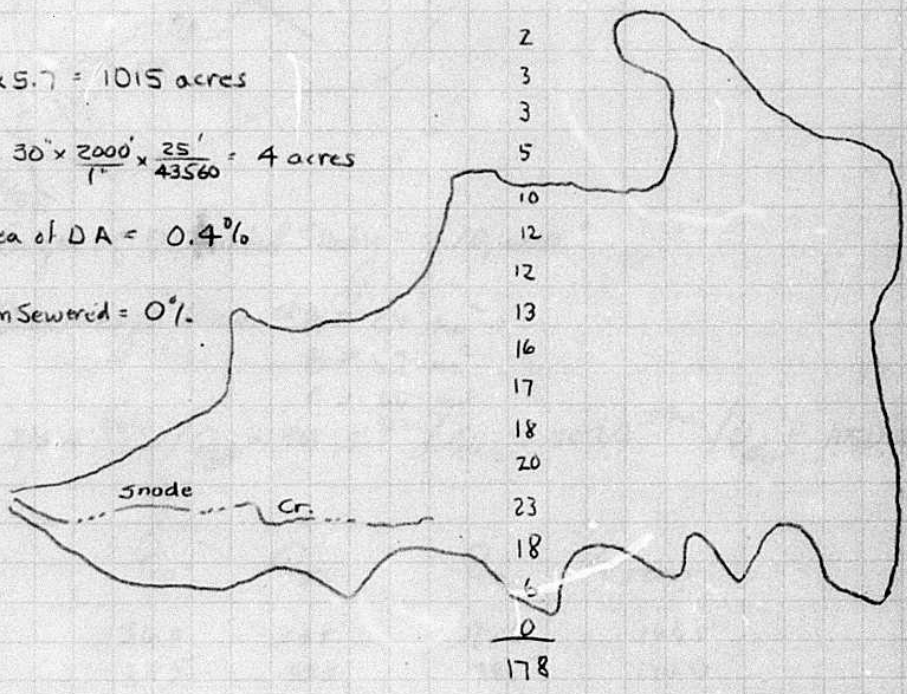
County: Beaufort
Town: Washington Park
Stream: Snode Cr.
Quad Sheet: Washington 7½
Scale: 1:24000 □ = 5.7 acres

D.A. = 178 × 5.7 = 1015 acres

Rd. Area = $30' \times \frac{2000'}{1''} \times \frac{25'}{43560} = 4$ acres

% Imp. Area of D.A = 0.4%

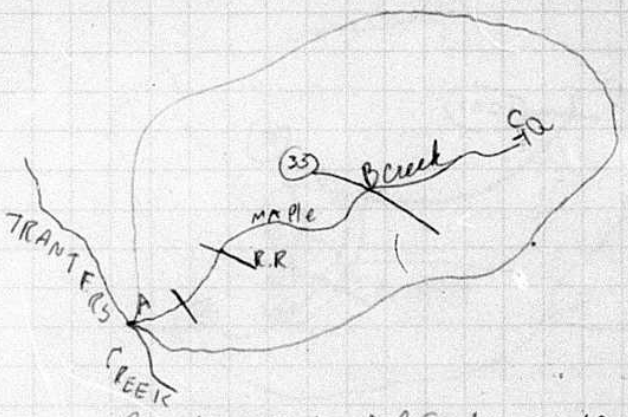
% of D.A Storm Sewered = 0%.



TETRA TECH INC.
PASADENA, CALIF.

SUBJECT Maple Creek
Beaufort County
COMPUTED Frank CHECKED

PROJECT North Carolina
FILE NO Group IV
DATE 9/9/80 PAGE 1 OF 1 PAGES



Length of Detailed Study = 10,000'

Drainage Area at A = 2.4 mi^2
B = 1.7 mi^2
C = 1.0 mi^2

$Q_{10} = 215 A^{.564}$ / $Q_{50} = 451 A^{.552}$ / $Q_{100} = 547 A^{.540}$ / $Q_{500} = 1080 A^{.514}$

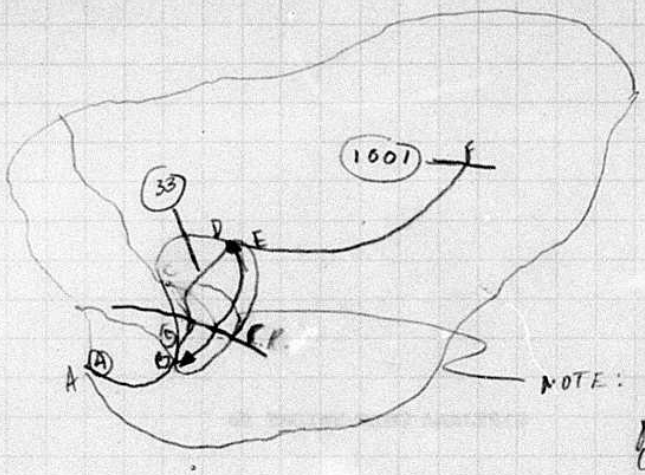
LOCATION	Q_{10}	Q_{50}	Q_{100}	Q_{500}
A	360	731	460	1695
B	295	604	795	1420
C	215	451	545	1080

DuP

TETRA TECH INC.
PASADENA, CALIF.

SUBJECT Mitchell Creek
Beaufort Co.
COMPUTED Frank CHECKED

PROJECT North Carolina
FILE NO Hydrology
DATE 9/9/80 PAGE 1 OF 1 PAGES



NOTE: these tributaries feed into Mitchell Creek. They are not studied in detailed

Length of Detailed Study = 11,000'

Drainage Area at A = 2.81
Drainage Area at B = 2.57
Drainage Area at C = 2.49
Drainage Area at D = 1.65
Drainage Area at E = 1.55
Drainage Area at F = .82

Location	Q_{10}	Q_{50}	Q_{100}	Q_{500}
A	395	798	1075	1840
B	375	759	995	1755
C	370	746	980	1730
D	290	595	785	1400
E	260	574	760	1355
F	195	404	540	980

DuP