HYDROLOGY

F19/D6b
ONE PLAN

F19/D6b

1 Plan

LITTLE TURTLE TOWNHOUSES
DRAINAGE PLAN

DETERMINE FLOW RATE OF UNDEVELOPED SITE
FOR 100 YEAR - 6 HOUR STORM

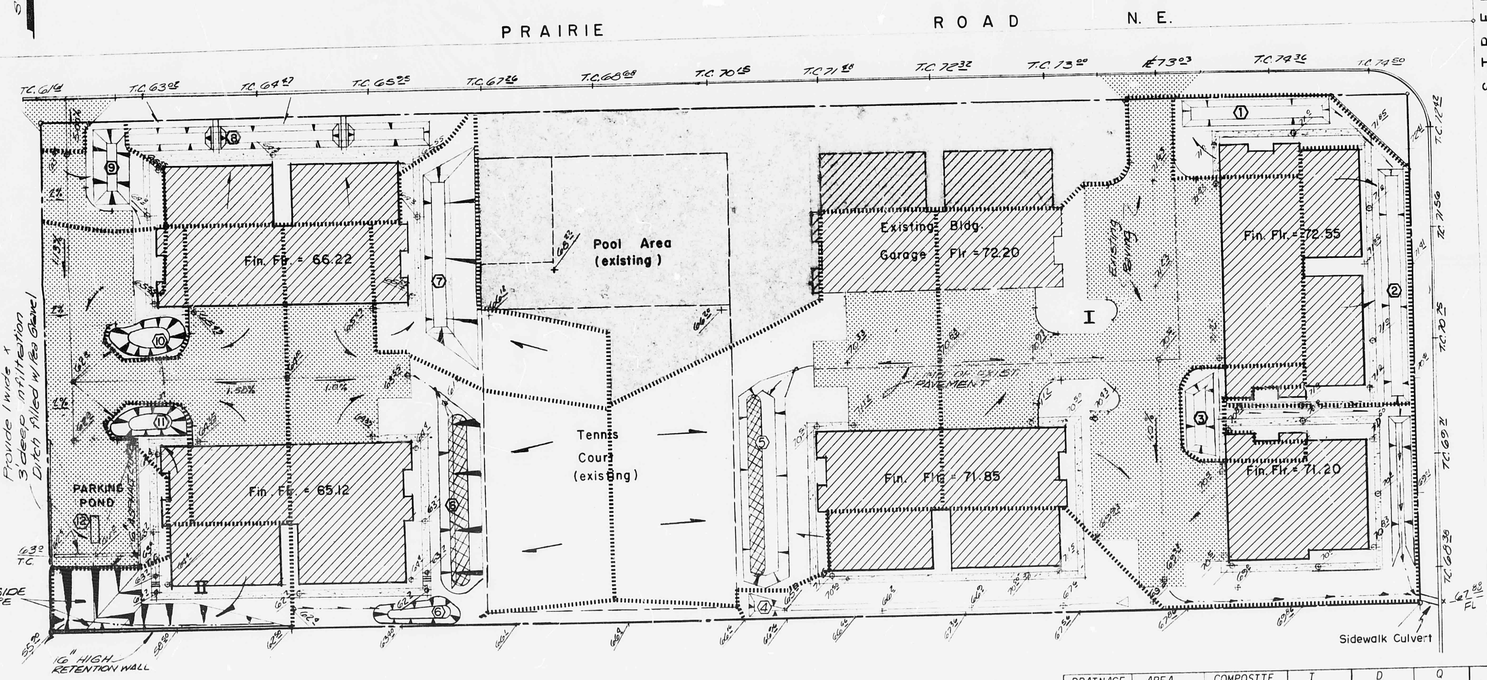
DESIGN DATA:
C = 0.35
I = 5.4
D = 2.6"
A = 136,800 S.F.
= 3.14 AC

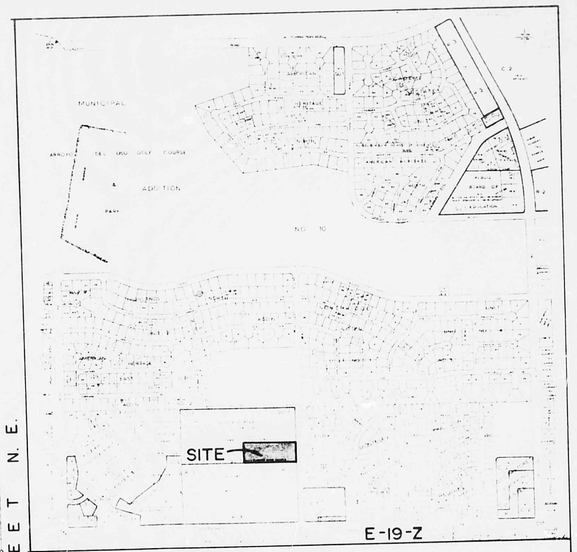
Q = CIA
= (0.35)(5.4)(3.14)
= 6 cfs

V = CDA($\frac{1}{12}$)
= (0.31)(2.6)(136,800)($\frac{1}{12}$)
= 10,374 cu. ft.

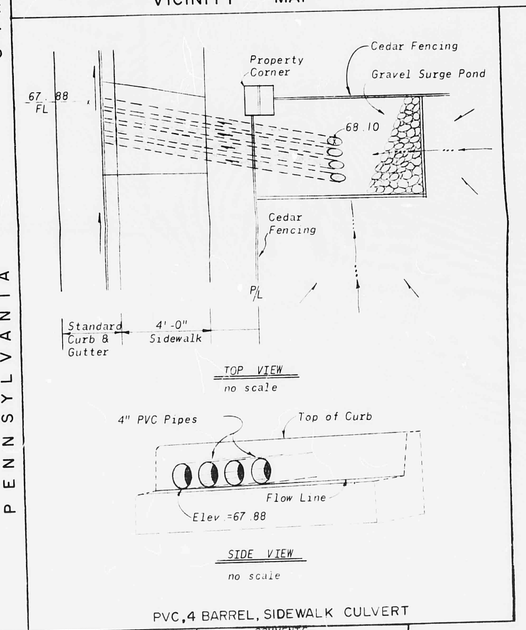
SCALE: 1" = 30'

F-19 D13





VICINITY MAP



PVC, 4 BARREL, SIDEWALK CULVERT

POND DATA			
POND Nº ⬡	BERM ELEV	BOTTOM ELEV	VOLUME
①	71.0	70.0	300 ft.³
②	70.0	69.0	720 ft.³
③	70.4	69.7	170 ft.³
④	66.2	64.5	400 ft.³
⑤	66.0	64.5	3000 ft.³
⑥	62.2	61.0	2500 ft.³
⑦	64.3	63.3	640 ft.³
⑧	64.0	63.0	800 ft.³
⑨	64.0	62.0	400 ft.³
⑩	62.5	61.5	180 ft.³
⑪	62.5	61.5	180 ft.³
Parking Pond ⑫	63.0	61.0	2760 ft.³

LEGEND

- Proposed Building
- Proposed Asphalt Paving
- Proposed Concrete Walkways
- Grass & Landscape
- Pond
- Top of Berm 3:1 Side Slopes
- Existing Elevation
- Proposed Elevation
- Infiltration Trench

DRAINAGE BASIN (POND)	AREA (sq. ft.)	COMPOSITE "C" FACTOR	I ("/hr)	D (in.)	Q (cfs)	V (cu. ft.)	POND CAPACITY (cu. ft.)	COMMENTS
1	2520	0.50		2.6		270	300	
2	5610	0.55		2.6		670	720	
3	1420	0.60		2.6		185	170	Overflow To Run Offsite
4	6340	0.55		2.6		755	400	Overflow To Pond ⑤
5	16980	0.65		2.6		2391	3000	Rock Infiltration Trench
6	17610	0.65		2.6		2480	2500	Rock Infiltration Trench
7	6300	0.45		2.6		614	640	
8	5690	0.60		2.6		740	800	
9	2070	0.70		2.6		315	400	
10	900	0.60		2.6		120	180	
11	1130	0.60		2.6		150	180	
12	12730	0.85		2.6		2350	2760	Rock Infiltration
I	29660	0.75	4.7	2.6	2.4	4820		Flows To Pennsylvania
II	4000	0.45	5.4	2.6	0.2	390		

AS BUILT DRAWINGS

LITTLE TURTLE TOWN HOMES
DRAINAGE PLAN

CCIC
Consulting Civil Engineers of Indianapolis

JOB NO. 478-4
DATE MAY 1978
SHEET 1 OF 1