B

TORNADO PROJECT SUMMARY SHEET

F=0 ONT

1. DATE AND TIME MON AUG 25, 1975 1630 EST

2. LOCATION OR PATH (attach map) 1 MILE NORTH OF CUMBERLAND BEACH (N of ORILLIA)

0697605

3. PATH LENGTH ☐ NOT KNOWN ☐ <1mi; ☐ 1-4mi; ☐ 5-10mi; ☐ 11-50mi; ☐ LENGTH IF>50mi

4. PATH WIDTH ☐ 5. TORNADO PART OF SQUALL LINE? ☐ YES; ☐ NO; ☐ UNKNOWN:

6. ANY UNUSUAL COLORATION? ☑ YES; ☐ NO; ☐ UNKNOWN

7. ANY UNUSUAL SOUND? ☑ YES; ☐ NO; ☐ UNKNOWN

8. IF ANSWER TO 6 OR 7 YES, ELABORATE; (6) Sky orange-green colour. (7) Noise like a freight train

9. LIST ANY ASSOCIATED PHENOMENA (Such as hail, vivid lightning heavy rain, no rain, etc.)

10. TOTAL DAMAGE ESTIMATE $ U 11. TOTAL DEATHS NONE

12. TOTAL INJURED NONE 13. TOTAL HOMELESS U

14. LIST ALL REFERENCES

Personal communication with JACK THOMAS, Ontario Weather Centre employee

15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS.

(a) no remarks

(b) Mr Thomas said that the tornado caused tree damage along a track ESE'wds across Lk Couchiching & Lake St John (in the vicinity of Orillia Airport). He didn't actually see a funnel.

WORKSHEET

IDTO 069505

(1) ORIGIN x 1762800

y 4953000

(2) LIFT-OFF x_1 1763300

y_1 4947700

(3) $(x_1 - x)$ = 5300

(4) $(y - y_1)$ = 5300

(5) Standard Error S_x C1000

(6) Standard Error S_y C1000

(7) DAMAGE LENGTH

$$L = [(x_1 - x)^2 + (y - y_1)^2]^{1/2}$$

(3)+(4) $\boxed{\rightarrow r,\theta}$ = 7495

(8) $\alpha = \tan^{-1} \dfrac{|y - y_1|}{|x - x_1|}$

$\boxed{x \leftrightarrow y}$ = 45°

(9) Standard Error $S_L = (S_x^2 + S_y^2)^{1/2}$

(5)+(6) $\boxed{\rightarrow r,\theta}$ = 1414 m C

(10) $\beta = \dfrac{\tan^{-1} S_L}{L}$

(7)+(9) $\boxed{\rightarrow r,\theta}$

$\boxed{x \leftrightarrow y}$ = 11°

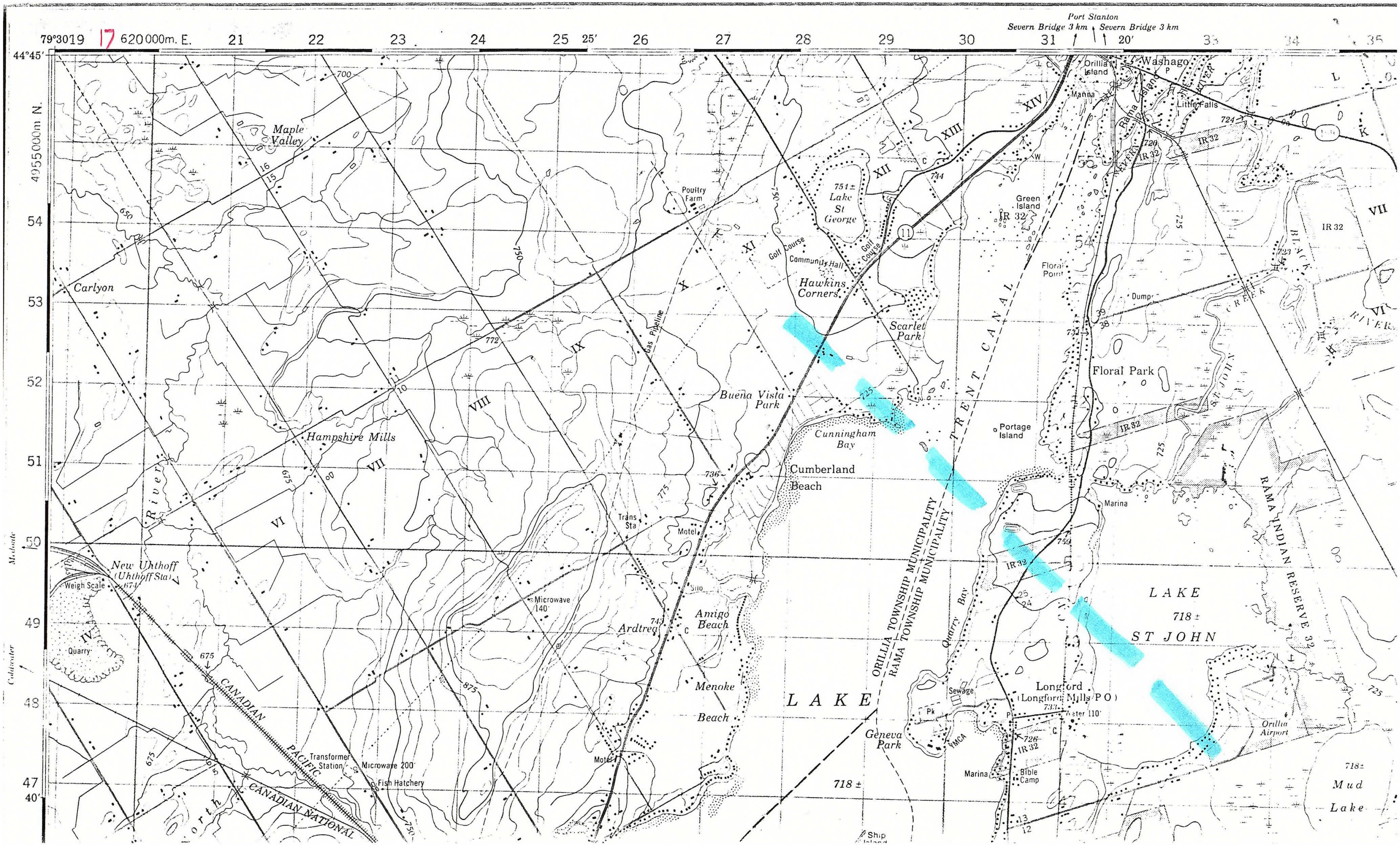
NE quad $\phi = 90 - \alpha$

NW quad $\phi = 270 + \alpha$

SW quad $\phi = 270 - \alpha$

SE quad $\phi = 90 + \alpha$

(11) ϕ = 315°



79°30'
19
17
620000m. E.
21
22
23
24
25
25'
26
27
28
29
30
31
20'
33
34
35
Port Stanton
Severn Bridge 3 km
Severn Bridge 3 km
44°45'
4955000m N.
54
53
52
51
50
49
48
47
40'
Washago
Orillia Island
Manna
Rama Island
Little Falls
Severn River
Black River
IR 32
Maple Valley
Carlyon
Hampshire Mills
New Uhthoff (Uhthoff Sta)
Weigh Scale
Quarry
Poultry Farm
Lake St George
Golf Course
Community Hall
Hawkins Corners
Green Island
Floral Point
Dump
Scarlet Park
Floral Park
Buena Vista Park
Cunningham Bay
Portage Island
Cumberland Beach
Trans Sta
Motel
Silo
Microwave 140
Amigo Beach
Ardtrea
Menoke Beach
Marina
Quarry Bay
LAKE ST JOHN
718 ±
Creek
St John
RAMA INDIAN RESERVE 32
ORILLIA TOWNSHIP MUNICIPALITY
RAMA TOWNSHIP MUNICIPALITY
TRENT CANAL
LAKE
Geneva Park
Sewage
YMCA
Longford (Longford Mills P O)
Water 110'
Bible Camp
Orillia Airport
Mud Lake
Gas Pipeline
Transformer Station
Microwave 200'
Fish Hatchery
CANADIAN PACIFIC
CANADIAN NATIONAL
North River
Ship Island