

A

TORNADO PROJECT SUMMARY SHEET

F=0 ONT

1. DATE AND TIME July 18, 1981 1600 EST

2. LOCATION OR PATH (attach map) Burlington, Ont 0698111

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

4. PATH WIDTH  Unknown 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;

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

10. TOTAL DAMAGE ESTIMATE \$ Unknown 11. TOTAL DEATHS none

12. TOTAL INJURED none 13. TOTAL HOMELESS none

14. LIST ALL REFERENCES M. Ratigue (Hamilton W.O.) Paul Legall (Spectator Newspaper) Ont Wx Centre, Operations Log, Sat July 18, 1981 The Spectator, July 20

15. SUMMARIZE REMARKS PERTAINING TO (a) FUNNEL; (b) INTERESTING OR CAPRICIOUS EVENTS. (a) Funnel sighted (b) Large trees uprooted and broken

WORKSHEET  
IDTO

① ORIGIN  $x$  1.7594500  
 $y$  4861500

⑤ Standard Error  $S_x$   
144R

② LIFT-OFF  $x_1$   
 $y_1$

⑥ Standard Error  $S_y$

③  $(x_1 - x) =$

④  $(y - y_1) =$

⑦ DAMAGE LENGTH

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

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

③ + ④  $\rightarrow r, \theta =$

$x \leftrightarrow y =$

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

⑤ + ⑥  $\rightarrow r, \theta =$

⑩  $\beta = \frac{\tan^{-1} S_L}{L}$

⑦ + ⑨  $\rightarrow r, \theta$   
 $x \leftrightarrow y =$

NE Quad  $\phi = 90 - \alpha$

SE quad  $\phi = 90 + \alpha$

NW Quad  $\phi = 270 + \alpha$

SW Quad  $\phi = 270 - \alpha$

⑪  $\phi =$



JULY 18, 1981 1600 EST

MS  
170  
O.W.C ATTN C.KLAPONSKI

~~526-3333~~

2 mi / QEW  
+ 1/2 mi east Grant St.

DAMAGE REPORT 18 JULY 1981 BTWN 1730 DST- 1745 DST.  
PAUL LEGALL OF SPECTATOR NEWSPAPER CALLED TO REPORT  
DOZENS OF LARGE TREES WERE SMACKED OF THEIR TRUNKS AND  
SOME COMPLETELY UPROOTED. SMALL FUNNEL CLD WAS SIGHTED  
ACCOMPANIED BY TSTM AND MARBLE SIZE HAIL. AREA BOUNDED BY  
HWY QEW AND HWY 25 (NORTH EAST BURLINGTON. NORTH OF QEW UPPER  
MIDDLE ROAD AND CAVINDISH DR ).  
M. RAFIQUE HAMILTON W.O

Funnel swooped down  
at 5:00 pm.

637-3875

Sharon Miller, of Cavendish Dr.

neighbour

Jean Thomas

30cm maple knocked over.  
Cavendish Woods, Townhouse Development

1821 YXU SA 2100 E30 BKN 220 BKN 10 146/27/20/1204/997/TCU6CI CB ASOCTD  
SE 611 ?8668?=  
1822 YXU SA 2200 E30 BKN 220 BKN 8 143/28/20/1907/997/TCU6 CI2=  
1823 YXU RS 2300 30 BKN 7T 142/25/19/1807/996/TCU9 CB W APCHG FUNNEL CLD  
RPTD PARKHILL AREA PST HR ?4499?=  
1822  
YXU 182311 30 SCT 100 SCT /BKN 6H OCNL C30 BKN 100 OVC 2TRW-F RISK  
TIL 03Z C8 OVC 1/2TRW+AF



# Rain, wind pound area on weekend

Spectator Staff

THE AREA took a beating over the weekend as summer thunderstorms roared through Saturday night and early yesterday.

A break is expected tomorrow — the weather office predicts sunny skies, less humidity and northerly winds.

The storm snapped trees like twigs, tossed boats like corks, flipped camping trailers, and left parts of Hamilton in the dark as high winds, rain and lightning wrought havoc.

## Blackouts

Three residential areas had power failures Saturday night — the Beach Strip, the west Mountain and the west end — as lightning struck transformers, hydro poles and wires.

Burlington, Dundas and Stoney Creek also reported blackouts in isolated spots.

In Hamilton, lightning set off a barrage of bells and buzzers as security alarms were tripped. Firefighters were called out to douse several small blazes on hydro poles struck by bolts.

Four trailers, one a house trailer, were flipped over and some tents were blown down by gusting winds that hit Confederation Park about 5:30 p.m. But injuries were confined to scrapes and bruises.

A spokesman for the

Hamilton Weather Office said the gusts at one point reached 50 mph (80 km/h).

Campers at the park said hailstones the size of 25 cent pieces pounded the area just after the wind gusts and before the rain poured down.

Fifteen trees, some ripped up by the roots, were knocked down along the beach strip, and garbage, branches and large steel garbage drums scattered by the wind littered both sides of Beach Boulevard.

In Burlington above the QEW, residents scurried for cover as trees toppled and homes rattled in high winds. On the lake, a dozen boats were washed ashore at Confederation Park and others in the canal and harbor were overturned.

Heavy rains made for dangerous driving at times. Police chalked up half a dozen accidents to the storm but no major injuries were reported.

About 1½ inches (34 millimetres) of rain was dumped on Hamilton during two squall periods, from 8 to 9 p.m. and midnight to 2 a.m., said a spokesman for the Hamilton Weather Office.

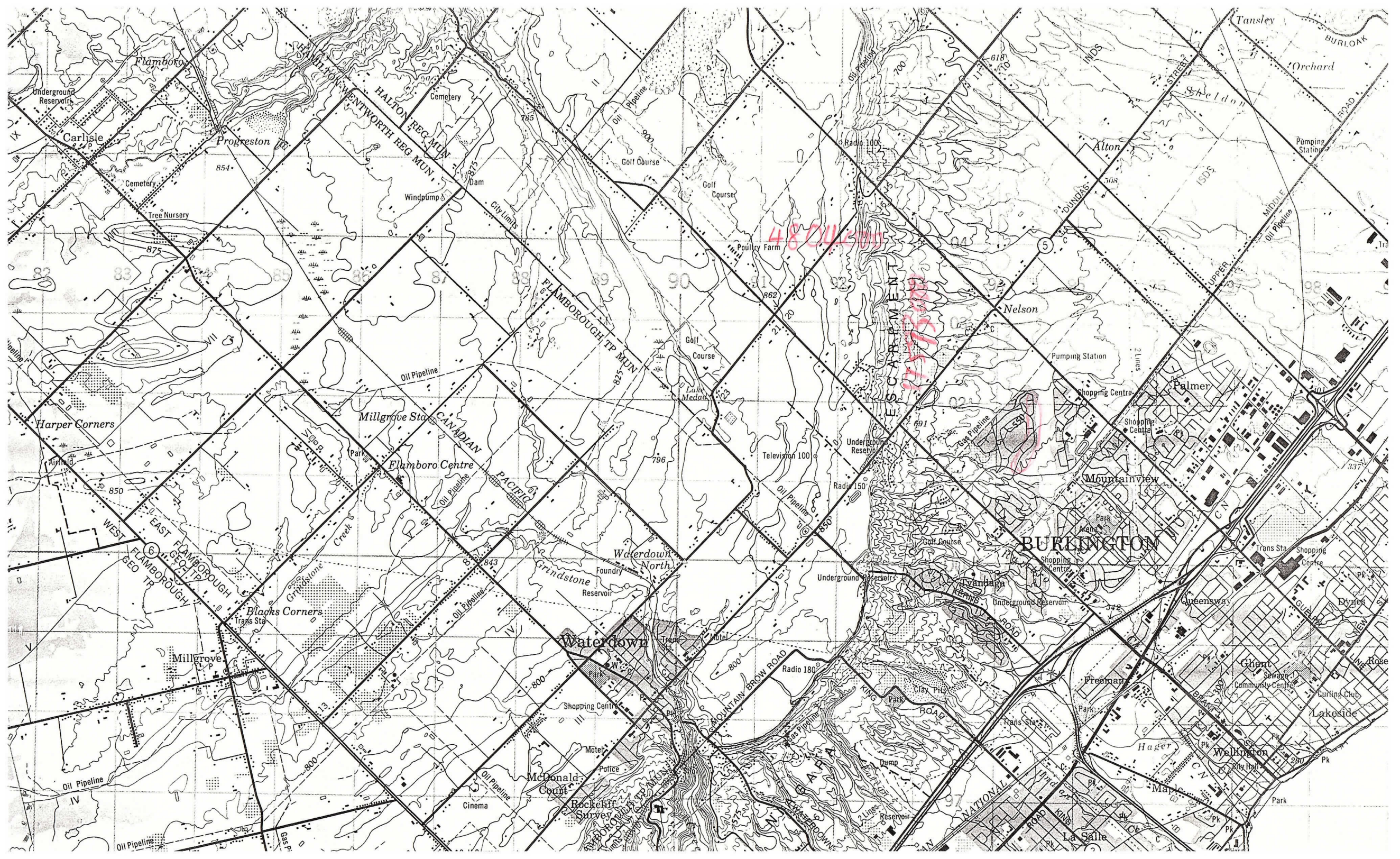
The police spokesman said many homeowners reported flooded basements.

- Campers, page 7
- Tornado, page 11









480 OILS

LUSCAPELINT

BURLINGTON

Carlisle

Progression Tr.

HALTON REG. MUN.  
WENTWORTH REG. MUN.

FLAMBOROUGH TP. MUN.

Nelson

Alton

Steele Don

Harper Corners

Millgrove Sta.

Flamboro Centre

Waterdown North

Mountainview

Palmer

Blacks Corners

Millgrove

Waterdown

Wandaan

Queensway

Freeman

Ghent

Wellington

La Salle

Lakeside

Rose

Dixies

Trans Sta.

Shopping Centre

Shopping Centre

Shopping Centre

Pumping Station

Orchard

Tansley

BURLOAK

Oil Pipeline

Oil Pipeline

Oil Pipeline

Oil Pipeline

1500

1000

500

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691

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Television 100

Radio 150

Radio 100

Radio 100

Radio 100

Radio 100

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Radio 100

Radio 100

Radio 100

Golf Course

Golf Course

Golf Course

Golf Course

City Limits

Dam

Cemetery

Cemetery

Cemetery

Windpump

Dam

Cemetery

Cemetery

Cemetery

Tree Nursery

Cemetery

Cemetery

Cemetery

Underground Reservoir

Underground Reservoir

Underground Reservoir

Underground Reservoir

Pumping Station

Pumping Station

Pumping Station

Pumping Station

1500

1000

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Television 100

Radio 150

Radio 100

Radio 100

Radio 100

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Underground Reservoir

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Pumping Station

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Television 100

Radio 150

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