Confirmed Tornado
Essa, Ontario
May 31, 1985

Date- Local: Friday, May 31st, 1985.
UTC: Friday, May 31st, 1985.
Time-Local: 16:57
UTC: 20:57
Location: Essa
Region: Dufferin - Innisfil
Classification: Confirmed Tornado
Category: A
Casualties: None
Track Length: 0.5km
Width: None Available
Motion: 240°
Damage Estimate: $150 million (for the 5 tornadoes in this storm)
F-Scale Rating: F1
Code: TS
Damage Survey: yes
Spotter Reports: None
Other Documents:

Logged event citing tornado, part of Barrie Tornado.
The May Thirty-First Tornado Outbreak in Southern Ontario report.

Tornado F-Scale Assessment

Marci Vanhoucke
Tornado Data Production Assistant, Environment Canada
July 21, 2005.

Classification: Confirmed Tornado
Date: Friday, May 31st, 1985.
Location: Essa, Dufferin – Innisfil

Assessment: F1
F-Code: TS
Explanation of Assessment: There is a Tornado Outbreak report stating that a half kilometer long track of tree damage was evident from aircraft investigation. Due to the damage cited, this tornado is rated an F1.

CLASSIFICATION: Severe Thunderstorm
SOURCE/WATCHER ID:
EVENT TIME (UTC): 20-57 **EVENT DAY:** 31.0 **MONTH:** 5.0 **YEAR:** 1985.0 **EVENT DURATION (HR):** 0.0 **(MIN):** 0.0
DAY OF THE WEEK:
EVENT LOCALE: Essa
ASOCTD PUBLIC RGN: Barrie-Huronia
DETAILED DESCRIPTION: part of Barrie tornado
INITIAL ASSESSMENT: YES
SPL WX STATEMENT IN EFFECT ?: UKN **STATEMENT LEAD TIME (HR):** **(MIN):**
WATCH IN EFFECT ?: UKN **WATCH LEAD TIME (HR):** **(MIN):**
WARNING IN EFFECT ?: UKN **WARNING LEAD TIME (HR):** **(MIN):**
TORNADO: YES F?
WINDSPEED: ?
RAINFALL: ? MM **RAIN DURATION:**
HAIL DIAMETER: MM **HAIL DESCRIPTION:**
EVENT DESCRIPTION: Tornado
Mesoscale ?: **Synoptic ?:** **Big Event ?:**
Statement Est Hit/Miss:
Watch Est Hit/Miss:
Warning Est Hit/Miss:
Separate Event (30km/30min): YES
Vetted by:
Vetted date:

THE MAY THIRTY-FIRST TORNADO OUTBREAK IN SOUTHERN ONTARIO

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Acknowledgements:

We wish to acknowledge the contribution of all staff from the Ontario Weather Centre, Scientific Services Division, Peterborough Weather Office and the Kingston Weather Office who conducted on site investigations or aerial surveys of the tornado paths during the week following the tornado outbreak.

THE MAY THIRTY-FIRST TORNADO OUTBREAK IN SOUTHERN ONTARIO

by

W. Lawrynuik - Chief, Forecast Operations
B. Greer - Chief Meteorologist
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O. Jacobsen - Meteorologist

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1. Introduction

During the afternoon of May 31, 1985 a powerful cold front moved through Southern Ontario triggering a series of very damaging tornadoes. Twelve people were killed and scores of others injured as the storms moved across the Province. Property damage is estimated well over $100 million.

This report will outline the weather pattern of May 31 which led to the storms as well as the Ontario Weather Centre's response to the real time events of the day. The report will document through detailed maps the tracks of all the tornadoes confirmed to this date (June 10). A general description of the damage and a best estimate of the time of the tornadoes will be included. Some preliminary recommendations are put forward as a consequence of the May 31st tornado outbreak.

2. Meteorological Conditions and Severe Weather Watches

On May 30th hot, humid tropical air became established across the Central United States. The air was also very unstable meaning that with any sort of lifting mechanism very intense thunderstorms could develop. During the early afternoon of May 30th a weak disturbance moved across Lake Erie and allowed some of this tropical air to move into extreme southwestern Ontario.

Another weak disturbance during the morning hours of May 31st pushed the warm humid air northeastward producing thunderstorms across all of Southern Ontario. No damage was reported from these thunderstorms in Ontario but the arrival of the warm very unstable airmass set the stage for the very dramatic events of later that day.

While the warm humid air was becoming established across the south half of Ontario an intense spring storm was developing just west of the Great Lakes. A low pressure centre with strength more typical of a mid winter storm tracked across upper Michigan during the morning of May 31st to north of Sudbury by evening. A very sharp cold front trailed southward from this low pressure system.

The morning analysis at Environment Canada's Ontario Weather Centre indicated that the thermodynamic and dynamic features necessary for the possible development of severe thunderstorms were present. The thermodynamic instability of the airmass was confirmed from the radiosonde reports east of the cold front crossing Michigan. The air above one km was

2. **Meteorological Conditions and Severe Weather Watches** - Cont'd...

very dry and cool while the tropical airmass near the surface was very hot and moist. The dynamic features (triggering mechanisms) were strong, that is, a sharp cold front and a sharp upper trough crossing Michigan and a very strong westerly jet stream above 10 km with winds of approximately 400 km/h (200 knots). The cold front and upper trough were expected to cross Southern Ontario during the afternoon and early evening.

As a result, the severe weather watch originally issued at 2:40 a.m. May 31st, was updated and extended for all of Southern Ontario at 7:00 a.m., 9:20 a.m. and 1:50 p.m. advising of the potential for the development of severe thunderstorms later in the afternoon and early evening. It was anticipated that these thunderstorms would be very strong since the cold front and trough were crossing the province about the time of maximum surface heating (late afternoon), which would produce the maximum thermodynamic instablity in the airmass.

By noon on May 31st the thunderstorm activity associated with the weak disturbance which had affected Southern Ontario overnight had virtually ceased. There was no evidence from radar reports of any thunderstorms along the cold front approaching the Bruce Peninsula from Lake Huron.

3. **The Severe Weather Event and the Severe Weather Warnings**

At 1:40 p.m. radar indicated the first thunderstorm cells developing west and north of the Bruce Peninsula. By 2:20 p.m. a line of potentially severe storms was indicated by radar from the mouth of the French River to just off the Bruce Peninsula with more cells beginning to form further south. The first severe thunderstorm warnings * were issued for Bruce County and Parry Sound District at 2:25 p.m. The line of severe storms continued to develop. Warnings were issued for Huron, Perth, Grey, Northern Wellington and northern Waterloo Counties at 3:15 p.m. The most severe storms on radar appeared to be from Meaford to Perth County. Initial on site observations of the severity of the storms were received by the Ontario Weather Centre at around 4:00 p.m. indicating that 2 cm hail and very high winds had occurred near Meaford and in the Dundalk area. However, no damage was indicated up to that time.

Around 4:00 p.m. radar revealed a line of severe thunderstorms from near Collingwood to Eastern Perth County. The line was moving east at 60 to 70 km/h. At 3:45 p.m. severe thunderstorm warnings were in effect to cover areas downstream as far east as Simcoe County and northern Peel Counties. Between 4:20 and 4:40 p.m. there were indications that the southern end of the line was intensifying and at 4:53 p.m. warnings were issued to cover the counties along the west end of Lake Ontario from Hamilton-Wentworth to

*** These severe thunderstorm warnings issued by the Ontario Weather Centre contained the statement: "Remember some severe thunderstorms produce tornadoes."**

3. **The Severe Weather Event and the Severe Weather Warnings** - Cont'd...

Durham and Victoria Counties. Following a confirmed report of a tornado at Shelburn, a tornado warning was issued at 5:00 p.m. for Southern Simcoe, Northern Peel and York Counties.

Reports of the tornadoes at Grand Valley and Barrie were received by the Ontario Weather Centre at 5:00 and 5:20 p.m. respectively. Tornado warnings were issued at 5:40 p.m. for the downstream areas of Northern Durham, Victoria and Haliburton counties. Radar reports between 5:20 and 5:40 p.m. also indicated the very rapid development of storms moving across Eastern Lake Erie to the Niagara Peninsula. As a result at 5:50 p.m. severe storm warnings were issued for the Haldimand-Norfolk and Niagara Regional municipalities.

Further details on tornadoes in Orangeville and in the Tottenham area came in to the Ontario Weather Centre between 5:30 and 6:00 p.m. Based on the continuing strength of the radar echoes, tornado warnings were extended to Southern Durham and Peterborough Counties at 6:05 p.m. and to Haliburton, Northumberland, Prince Edward and Hastings counties at 6:25 p.m. At 7:00 p.m. all watches and warning messages were cancelled for all regions except for Haliburton and Lake Ontario east of Oshawa. Between 6:40 and 7:20 p.m. reports were received of tornadoes just southwest of Peterborough and in Rawden Township of Southern Hastings county.

At 7:10 p.m. the tornado warning was extended east again to include Lennox and Addington, Renfrew and Frontenac counties which mark the eastern most areas served by the Ontario Weather Centre. At about the same time the Quebec Weather Centre in Montreal, which handles forecasts for the Ottawa - Cornwall and vicinity, was notified of the continuing presence of tornadoes in the storms headed their way.

Finally at 9:20 p.m. the remaining watches were cancelled for Eastern Ontario.

4. **Tornado Paths and Estimated Time of Occurrence**

The tornado paths and time estimates contained in this report were determined from aerial surveys and on-site investigations of the tornado paths by Ontario Weather Centre staff, from provincial police reports, photographs, newspaper clippings, weather watcher reports, eye witness accounts, etc. Only information assembled before June 10th was available to prepare this report.

General information concerning all tornadoes and other related reports of severe weather are given in this section mostly in map form. Detailed accounts for individual tornadoes are provided in the next section.

4. **Tornado Paths and Estimated Time of Occurrence** - Cont'd...

Numerous reports of large hail and damaging winds were received on May 31st as the severe thunderstorms developed and moved across Southern Ontario. In particular, over the Southern Niagara Peninsula hail as large as softballs was reported. Fortunately, these storms missed the fruit belt north of the escarpment. However, in the Welland and Port Colbourne areas there was numerous reports of damage to cars and property due to the extremely large hailstones. An estimated 40 people suffered minor cuts due to flying glass. Preliminary reports are that damage in excess of $1 million resulted from this hail storm.

The general area affected by severe thunderstorm activity as determined from reports received to date is depicted in Figure 1. This figure also shows the approximate location of all tornadoes confirmed to date.

Figures 2, 3 and 4 depict the tornado paths in different parts of Southern Ontario as determined from the investigation using all information sources. Estimated times of occurrence (Eastern Daylight Saving Time) are also shown for various points along the tornado paths. In most cases these were determined from eye witness accounts or weather watch reports. The lengths of the individual tornado paths are also shown in these figures. It should be noted that the tornado paths from Mount Forest to Barrie may have resulted from different tornadoes formed under the same severe thunderstorm complex.

Table I provides a detailed comparison of the time of occurence of tornadoes in each county with the time of issue of severe thunderstorm warnings and tornado warnings. For counties west of Lake Simcoe severe thunderstorm warnings were issued 45 minutes to 1 hour in advance of the occurrence of the tornadoes. From Lake Simcoe eastward, once tornadoes had been reported, tornado warnings were issued 15 to 45 minutes in advance of the tornado occurrences.

5. **Damage and Descriptions of Individual Tornadoes**

Investigations over the past week have brought to light 9 separate damaging tornadoes across Ontario on May 31, 1985. The following is a description of each of these storms in the chronological order they first touched down. Figures 2 through 5 show the tracks of these storms.

5.1 **Rush Cove Tornado - Figure 4**

About 3:00 p.m. a small tornado touched down about 1.6 km southwest of the coast of Georgian Bay near Rush Cove and moved northeast out over Barrow Bay. Rush Cove is located about 25 km due north of Wiarton. One barn and three outbuildings were completely destroyed. One older house had its chimney blown off, siding torn off, and windows blown out. A 9 metre sailboat was lifted from a trailer and dropped 1200 metres away. There were no reports of any personal injuries with this storm.

5.2 Barrie Tornado - Figure 2

About 4:10 p.m. a funnel cloud dipped down from a severe thunderstorm in Egremont Township about 4 km southwest of Hopeville. For the next 50 minutes the severe thunderstorm travelled east-northeastward at 75 km/h over a distance of 85 km. It appears to have generated a series of 5 tornadoes which culminated in the devastating storm which struck southern portions of the city of Barrie. It is also conceivable that the damage paths could have resulted from one or two tornadoes touching down more than once.

a) Damage Area 1 (Hopeville)

Three concessions southwest of Hopeville to near Grey County Road 8.
Path Length: 17 km (the storm may have skipped occasionally)
Time: about 4:10 p.m.
Description of Damage: numerous barns and outbuildings were destroyed or severely damaged. Only minor damage to houses was indicated. No injuries were reported.

b) Damage Area 2 (Corbetton)

From 1 km southwest of Corbetton, a village southeast of Dundalk on Highway 10, to near Randwick at the intersection of Airport Road and the 25th Sideroad of Mulmur.
Time: struck Corbetton area at 4:17 p.m.
Path Length: 35 km
Description of Damage: the width of the damage path averaged 200 to 300 metres to just south of Honeywood where it narrowed to 50-100 metres. Through this area about 15 barns or outbuildings were destroyed and about 10 houses were heavily damaged. Cars and trucks were tossed around with some moved 60 metres. The storm continued to just south of Ruskview where it appears that a split occurred. A weakening portion appears to have lifted off the ground and moved northeast. Debris was found several km north of Ruskview. One sign which originated near Highway 24 was discovered near the the hamlet of Glencairn. It had travelled about 20 km. The southern part of the storm moved from south of Ruskview to south of Randwick where it also appears to have lifted off the ground.

c) Damage Area 3 (Lisle)

Two concessions east of Randwick the tornado appears to have touched down again. Tree damage is reported as far east as Camp Borden. Two barns were destroyed near Lisle. Investigators were not allowed onto Camp Borden but reports from the Base Police and aerial surveys indicate little damage on the Base and no damage further east.

d) **Damage Area 4 (Essa)**

South of Essa.
A brief touchdown occurred just South of Essa. A half km long track of tree damage was evident from aircraft investigations. Apparently no buildings were damaged.

e) **Damage Area 5 (Barrie)** - Figure 5

The final and most dramatic touchdown began about 2 km northwest of Holly. The path of the tornado through the city of Barrie is given in Figure 5. The tornado crossed Ardagh Road about 1 km west of Crawford Road. In this area a plantation of 10 metre pine trees was totally destroyed. Aerial photographs indicate that the damage path was at least 600 metres wide in this area. Moving eastward the tornado was extremely strong with winds likely in excess of 400 km/h. Crossing Crawford Road towards Patterson the storm totally destroyed many houses. Cars were blown hundreds of metres into the bush. Further east with a width of 350 to 450 metres the storm crossed towards Highway 400. Twelve factories were destroyed just west of Highway 400 while at least 4 others near the edge of the track were heavily damaged. The storm moved just south of the Barrie racetrack with heavy damage to the horse barns and grandstand.

The tornado then moved into the Hillsdale subdivision. A townhouse complex on Adelaide was destroyed. Heavy damage occurred on Debra Crescent. Heavy damage was reported in a 300 metre swath from Marshall Street to Joanne Crescent. East of Tower Crescent the damage path narrowed abruptly to about 50 metres. Homes on Briar Road received only minor damage indicating the tornado may have lifted up somewhat. Yet at Trillium Crescent, the next street east, heavy property damage resulted. Further east the storm moved into an industrial area. Four warehouses were destroyed near Highway 11. The tornado crossed Yonge Street at Minets Point Road and headed towards the CNR tracks cutting a 100 metre wide swath through the trees. The storm hit the northwest corner of the Royal Oak Subdivision and felled many large trees. There was much less damage to houses here than in the Hillsdale Subdivision. The tornado next hit the Minet Point Marina. According to police reports thirty-five sailboats have completely disappeared. Amazingly, the heavy cement anchors embedded in the bottom of the lake holding the boats are also gone. Debris from the storm was spotted 5 km from shore on Lake Simcoe. No damage has been discovered on the opposite shore, although reports of debris from the tornado have been received from Oro township along the north shore of Lake Simcoe, Orillia and south of Bracebridge.

5.3 The Grand Valley-Tottenham Tornado - Figure 2

At 4:15 p.m., only a few minutes after the start of the storm which would hit Barrie, another tornado touched down just north of Arthur. This same tornado remained on the ground for an incredible 90 km as it tracked east-northeast at 85 km/h to the east end of the Holland Marsh. It then skipped along a further 17 km before lifting off for good near Mount Albert.

The damage path width varied from about 150 metres to 400 metres occasionally up to 600 metres wide. Nearly all structures within this track were damaged. Well over 100 homes were seriously damaged or destroyed with at least that many barns and outbuildings destroyed.

From Arthur to Grand Valley the damage path ranged from 150 to 400 metres wide. Estimates are that 40 buildings were seriously damaged or destroyed. In the town of Grand Valley an estimated 40 to 50 homes near the centre of the tornado track were destroyed. Winds with the tornado are estimated to have exceeded 400 km/h. Dozens of other buildings on the edge of the track suffered varying degrees of damage. One indication of the intensity of the storm was the roof of the Library being lifted and thrown 200 metres before crashing down on a house. Two people were killed in the town.

From east of Grand Valley to Orangeville the swath of damage continued 150 to 300 metres wide. The most noteworthy damage was at Mono Plaza north of Orangeville. The plaza was levelled. East of Orangeville all the way to Holland Marsh the damage swath continued with a similar degree of damage occurring. Particularly hard hit was the area just south of Tottenham where about 15 homes were extensively damaged or levelled and two deaths were reported. There was some evidence all along the track of a second weak swath of tree damage a few hundred metres south of the main track but little property damage has been noted.

The tornado moved down into the Holland Marsh just southeast of Dunkerron and followed the canal road eastward and then northeastward about 5 or 6 km. It destroyed hundreds of trees along the canal and did considerable damage to buildings along the north canal road. The tornado then headed directly eastward across the marsh hitting the village of Ansnorveldt after destroying three hydro transmission towers. East of the Holland Marsh the storm began skipping with less serious intermittent damage reported. The storm appears to have lifted off for the last time near Mount Albert.

5.4 **Alma Tornado - Figure 3**

Time: approximately 4:15 - 4:30 p.m.
Path Length: 33 km (continuous damage over 8 km skipping over remaining 25 km) Details of Damage: In Peel Township near Alma 4 houses were extensively damaged, 10 barns and outbuildings destroyed, some damage to 1 other house and 2 boats.
From East of Lake Belwood to just southeast of Dufferin County road 3 - a narrow path of damage - 1 house reported destroyed.
From County Road 3 to east of Hillsburgh - light damage, the tornado appeared to be aloft most of the time.

5.5 **Wagner Lake Tornado - Figure 3**

Time: 5:40 p.m.
Path Length: 5 km
Details of Damage: 1 barn demolished, some tree damage

5.6 **Reaboro Tornado - Figure 3**

Time: 6:05 p.m.
Path Length: 8 km
Details of Damage: 2 barns heavily damaged, 1 shed levelled, scattered tree damage.

5.7 **Ida Tornado - Figure 3**

Time: 6:20 p.m.
Path Length: 9 km
Details of Damage: Church 1 km south of Ida badly damaged. Stone home across street completely destroyed, spotty barn and tree damage further east along track.

5.8 **Rice Lake Tornadoes - Figure 3**

Time: 6:20 - 6:30 p.m.
Path Lengths: 7 km and 11 km
Details of Damage: 5 barns destroyed. House trailers blown over, several boats sunk, several cabins destroyed, hundreds of trees with diameters up to 1 metre downed. Estimates of damage of to $2 million mainly in Birdsall Beach area.

5.9 **Minto Tornado - Figure 3**

Time: 6:35 p.m.
Path Length: 1 km
Details of Damage: very narrow path of damage 10 - 15 metres wide. Two large barns and two wooden sheds destroyed.

6. Recommendations

The following recommendations are made as a result of the preliminary investigation conducted by the Ontario Weather Centre.

6.1 A public education program needs to be undertaken to make people more aware of the nature of severe storms. For example there seems to be a widespread misconception that severe thunderstorms and tornadoes are independent events. Also, the public in general, and emergency officials in particular, need to understand the steps they should take when a watch is in effect; when a warning is in effect; or, when a severe storm appears imminent.

6.2 The methods in use for distributing warnings to the public and to emergency officials needs to be reviewed in detail.

a) Consultation with the media and emergency officials should be an integral part of this review.

b) Evaluation of the public awareness of and reaction to Environment Canada's weather watches and warnings should be undertaken.

6.3 The Weather Centre needs to improve its ability to detect severe thunderstorms and tornadoes:

a) Doppler Radar has been shown to be a fairly effective, though far from a foolproof method of detecting severe thunderstorms which may produce tornadoes. Research should be accelerated to assess the abilities of the newly acquired Doppler Radar at King City.

b) Additional severe weather watchers in rural areas of Ontario especially upstream of population centres need to be recruited.

c) The Ontario Weather Centre should undertake a development project with a view to identifying any new knowledge resulting from this survey and report the data collected on this storm that would improve future forecasts.

d) The Ontario Weather Centre will review its severe weather procedures in consultation with other regional units in view of the May 31st experience.

7. Conclusion

Tornadoes do occur in Southern Ontario though the majority of them are fairly weak and small scale. Storms of the power of the May 31st, 1985 event, though much less frequent, have occurred in the past and will occur again. As populations through Ontario increase, especially in more and more centres, the odds will increase of further major tornado events occurring in populated centres. Through education and further research, Environment Canada's goal should be to give the public a better understanding of the nature of these storms, and in conjunction with other federal and provincial agencies, and the media, a longer warning time in which to take action, and a knowledge of the steps to take to protect themselves in the event of severe storms.

TABLE I

Time of Occurrence of Tornadoes by County

Counties	Issue Time of * Severe Thunderstorm Warning	Issue Time of Tornado Warning	Time of Actual Storm
Northern Bruce	2:25 p.m.	-	3:00 p.m. Rush Cove Tornado
Northern Wellington	3:15 p.m.	-	4:15 p.m. Tornado Touchdown near Arthur
Dufferin	3:54 p.m.	-	4:28 p.m. Grand Valley 4:45 p.m. Orange-ville
Southern Grey	3:15 p.m.	-	4:17 p.m. Tornado Touchdown near Corbetton
Southern Simcoe	3:54 p.m.	5:00 p.m.	5:18 p.m. Holland Landing.
Northern Simcoe	3:54 p.m.	-	5:00 p.m. Barrie
Northern York	4:53 p.m.	5:00 p.m.	5:25 p.m. Holt
Northern Durham	4:53 p.m.	5:20 p.m.	5:40 p.m. Wagner Lake
Southern Victoria	N/A	5:20 p.m.	6:05 p.m. Reaboro
Southern Peterborough	N/A	6:05 p.m.	6:20 p.m. Cavan 6:25 p.m. Birdsall
Southern Hastings	N/A	6:25 p.m.	6:35 p.m. Minto

* These severe thunderstorm warnings issued by the Ontario Weather Centre contained the statement: "Remember some severe thunderstorms produce tornadoes."

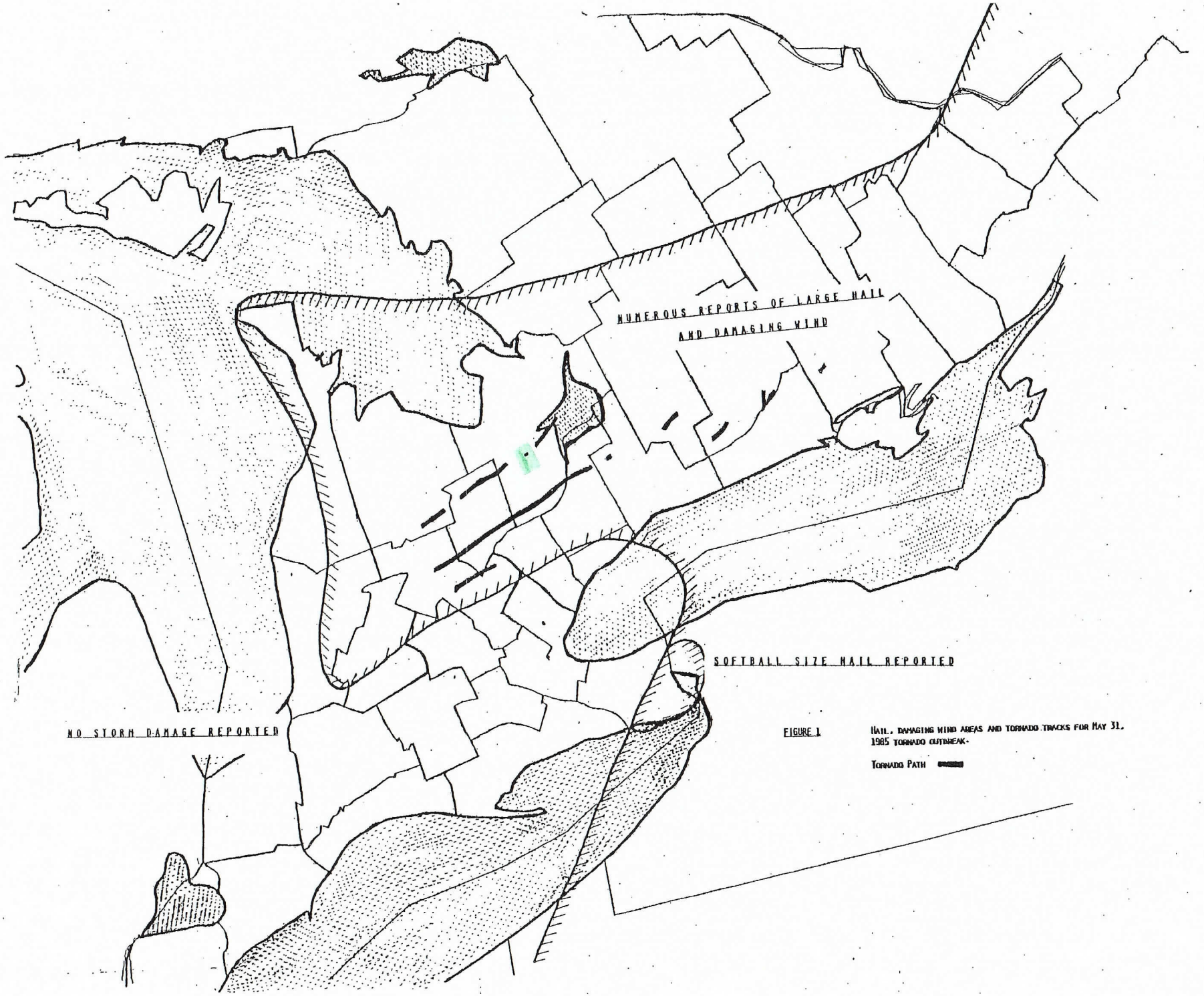


FIGURE 1 HAIL, DAMAGING WIND AREAS AND TORNADO TRACKS FOR MAY 31, 1985 TORNADO OUTBREAK.

TORNADO PATH

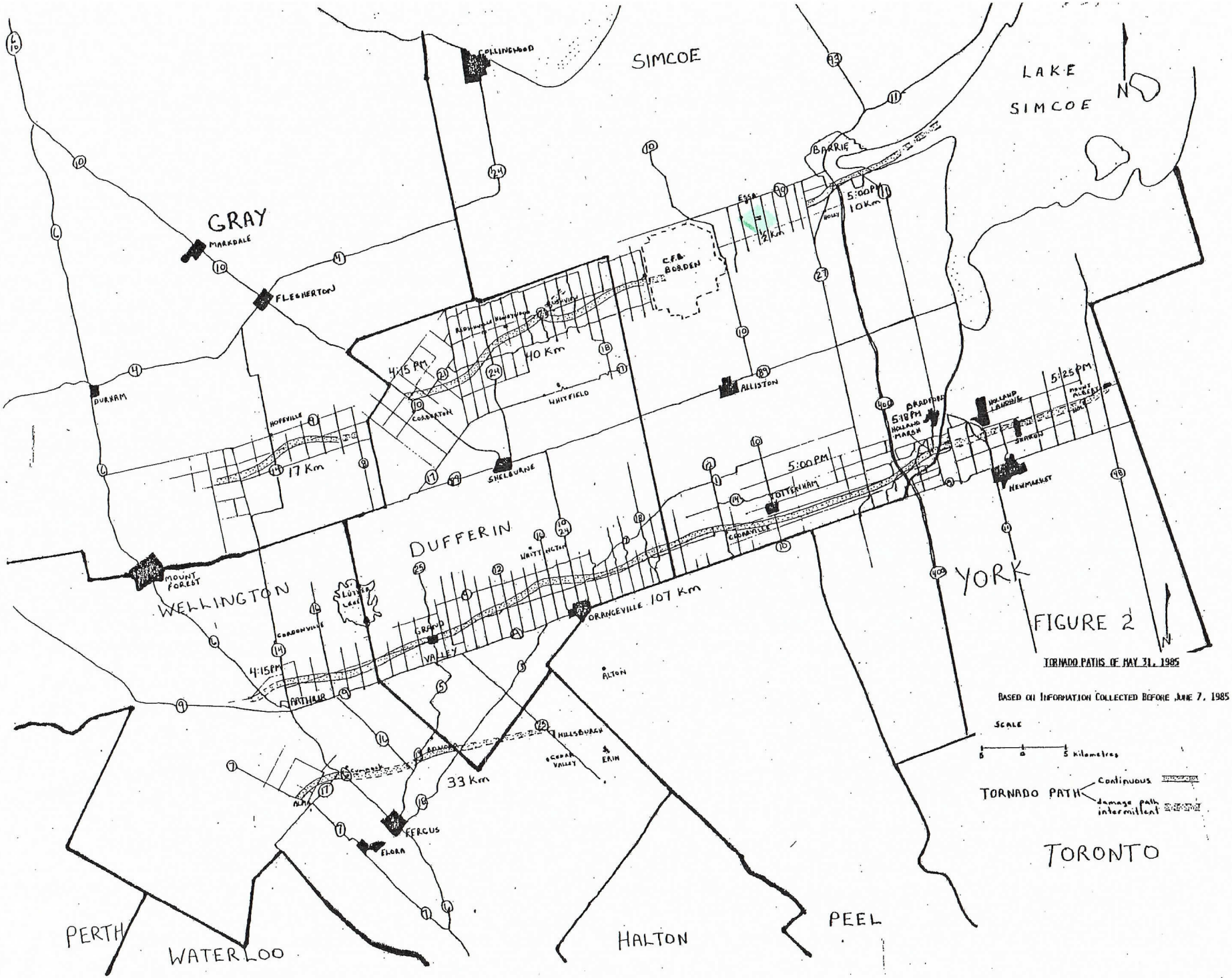


FIGURE 2

TORNADO PATHS OF MAY 31, 1985

BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985

SCALE

0 0 5 Kilometres

TORNADO PATH — Continuous

damage path intermittent

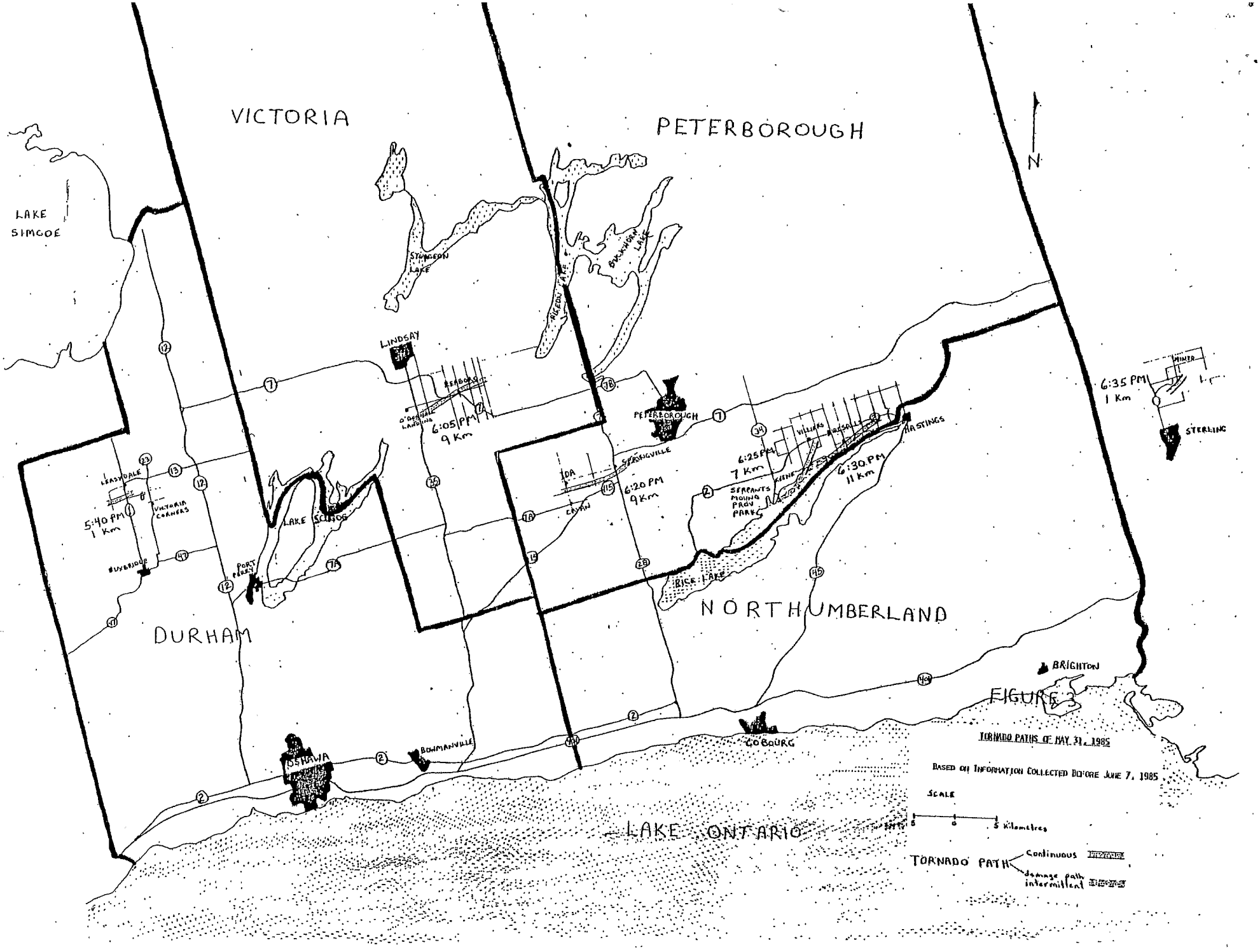


FIGURE 3

TORNADO PATHS OF MAY 31, 1985

BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985

SCALE

5 0 5 Kilometres

TORNADO PATH — Continuous; damage path intermittent

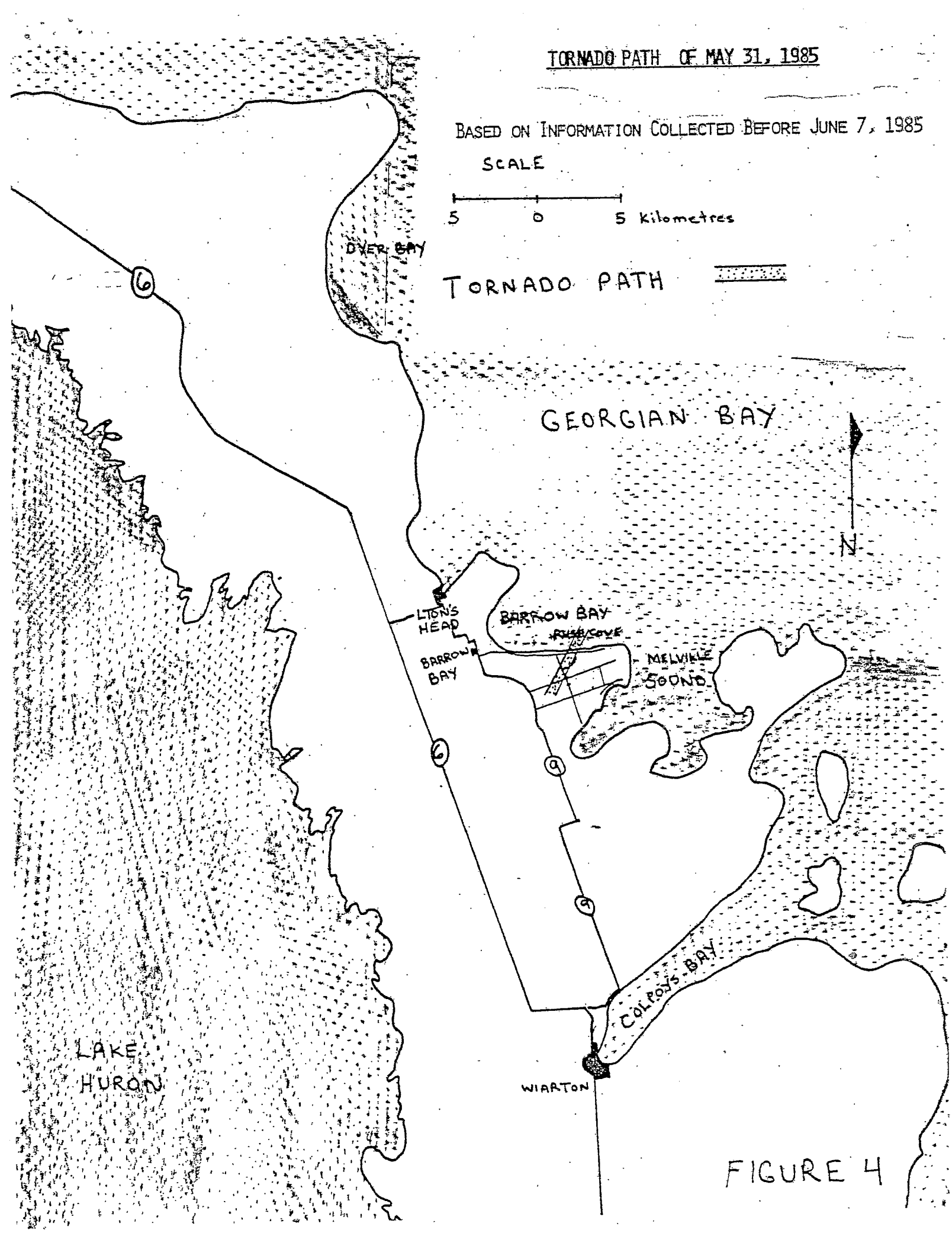
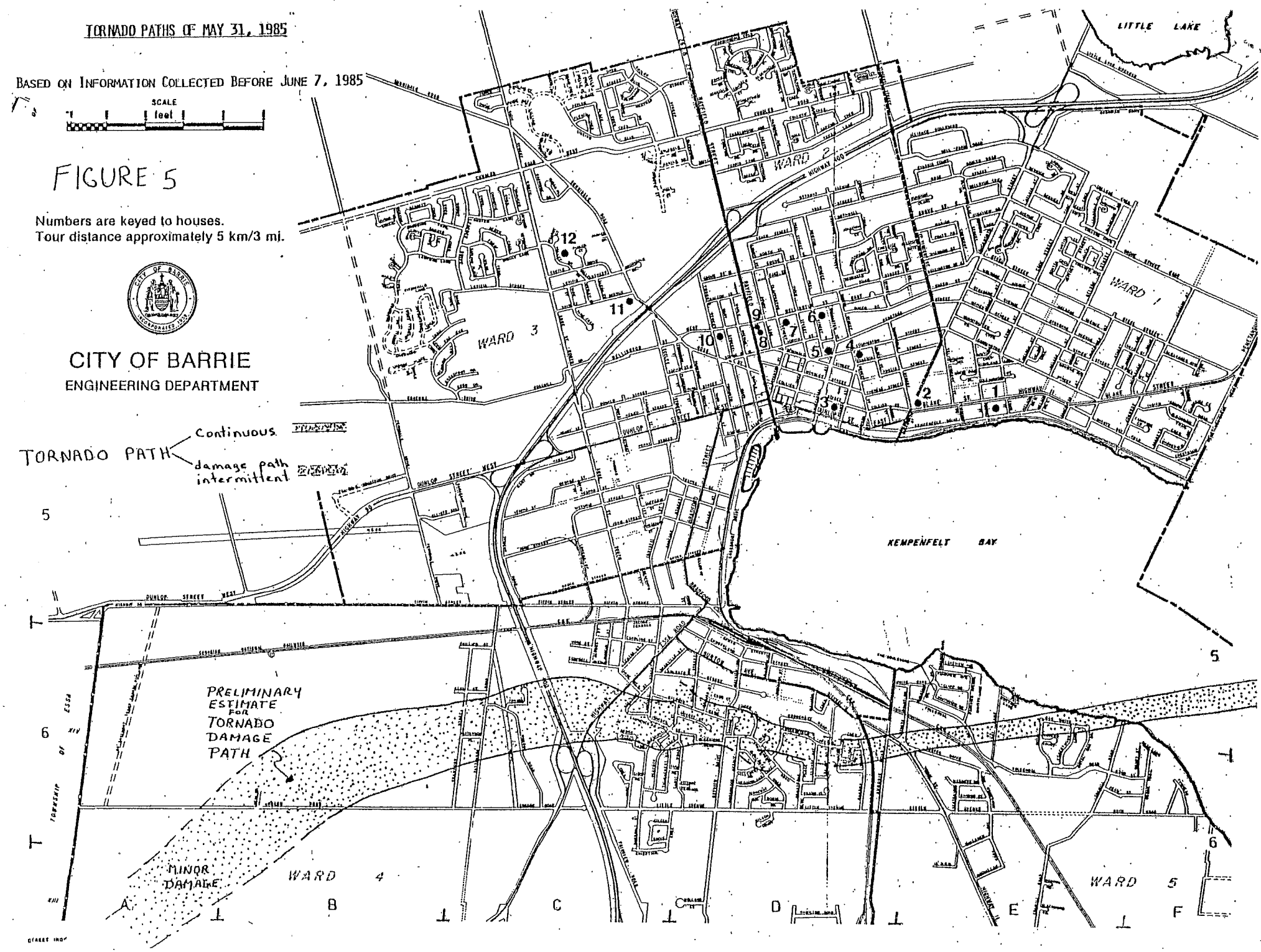

TORNADO PATH OF MAY 31, 1985
BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985
SCALE
5 0 5 Kilometres
TORNADO PATH
DYER BAY
GEORGIAN BAY
N
LTON'S HEAD
BARROW BAY
RUSH COVE
BARROW BAY
MELVILLE SOUND
COLPOYS BAY
WIARTON
LAKE HURON
6
9

FIGURE 4


TORNADO PATHS OF MAY 31, 1985
BASED ON INFORMATION COLLECTED BEFORE JUNE 7, 1985
SCALE
feet
FIGURE 5
Numbers are keyed to houses.
Tour distance approximately 5 km/3 mi.
CITY OF BARRIE
ENGINEERING DEPARTMENT
TORNADO PATH
Continuous
damage path intermittent
PRELIMINARY ESTIMATE FOR TORNADO DAMAGE PATH
MINOR DAMAGE
WARD 1
WARD 2
WARD 3
WARD 4
WARD 5
LITTLE LAKE
KEMPENFELT BAY
DUNLOP STREET WEST
HIGHWAY 400
HIGHWAY 11
A
B
C
D
E
F
5
6