

**1996 Monitoring Program
Environmental Surveillance:**

Off-site Direct Radiation

Sample Location Code	Monitoring/Reporting Requirements	Sampling Type/Medium	Collection Frequency	Total Annual Sample Collections	Analyses Performed/ Composite Frequency
<p>DFTLD Series Thermoluminescent Dosimetry (TLD) Off-site:</p> <p>#1-16 At each of 16 compass sectors at nearest accessible perimeter point</p> <p>#17 "5 Points" landfill, 19 km SW (background)</p> <p>#20 1,500 m NW (downwind receptor)</p> <p>#21 Springville 7 km N</p> <p>#22 West Valley 6 km SSE</p> <p>#23 Great Valley 29 km S (background)</p> <p>#37 Nashville 37 km NW (background)</p> <p>#41 Sardinia-Savage Road 24 km NE (background)</p>	<p>Direct radiation around facility</p> <p><u>Reported in:</u></p> <ul style="list-style-type: none"> • QEMDR • SER 	<p>Integrating LiF TLD</p>	<p>→ Quarterly</p>	<p>→ 5 TLDs at each of 23 locations collected 4 times per year</p>	<p>→ Quarterly gamma radiation exposure</p>

Sampling Rationale

DOSIMETRY DOE/EH-0173T, 5.5 and DOE/EP-0023, 4.6.3.

Off-site

TLDs offer continuous integrated environmental gamma-ray monitoring and have been deployed systematically about the site. Off-site TLDs are used to verify that site activities have not adversely affected the surrounding environs.

In addition to general NRC crosschecks at selected sites, a biennial HPIC gamma radiation measurement is completed at all TLD locations.

- Sampling locations are shown on Figures A-7 and A-9 (pp. A-51 and A-53).

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<p>DNTLD Series Thermoluminescent Dosimetry (TLD) On-site:</p> <p>#18, #19, #33 At three corners of SDA</p> <p>#24, #26-32, #34 (9) at security fence around site</p> <p>#35, #36, #38-40 (5) On-site near operational areas</p> <p>#25 Rock Springs Road 500 m NNW of plant</p> <p>#42 SDA T-1 Building</p> <p>#43 SDA West Perimeter Fence</p>	<p>Direct radiation on facility grounds</p> <p><u>Reported in:</u></p> <ul style="list-style-type: none"> • QEMDR • SER 	<p>Integrating LiF TLD</p>	<p>→ Quarterly</p>	<p>→ 5 TLDs at each of 20 sites collected 4 times per year</p>	<p>→ Quarterly gamma radiation exposure</p>

Sampling Rationale

DOSIMETRY DOE/EH-0173T, 5.4 and 5.5.

On-site

On-site TLDs monitor waste management units and verify that the potential dose rate to the general public (i.e., at Rock Springs Road) is below 100 m^r/annum (1 mSv/annum) from site activities.

In addition to general NRC crosschecks at selected sites, a biennial HPIC gamma radiation measurement is completed at all locations.

Potential TLD sampling locations are continually evaluated with respect to site activities.

- Sampling locations are shown on Figure A-8 (p. A-52).

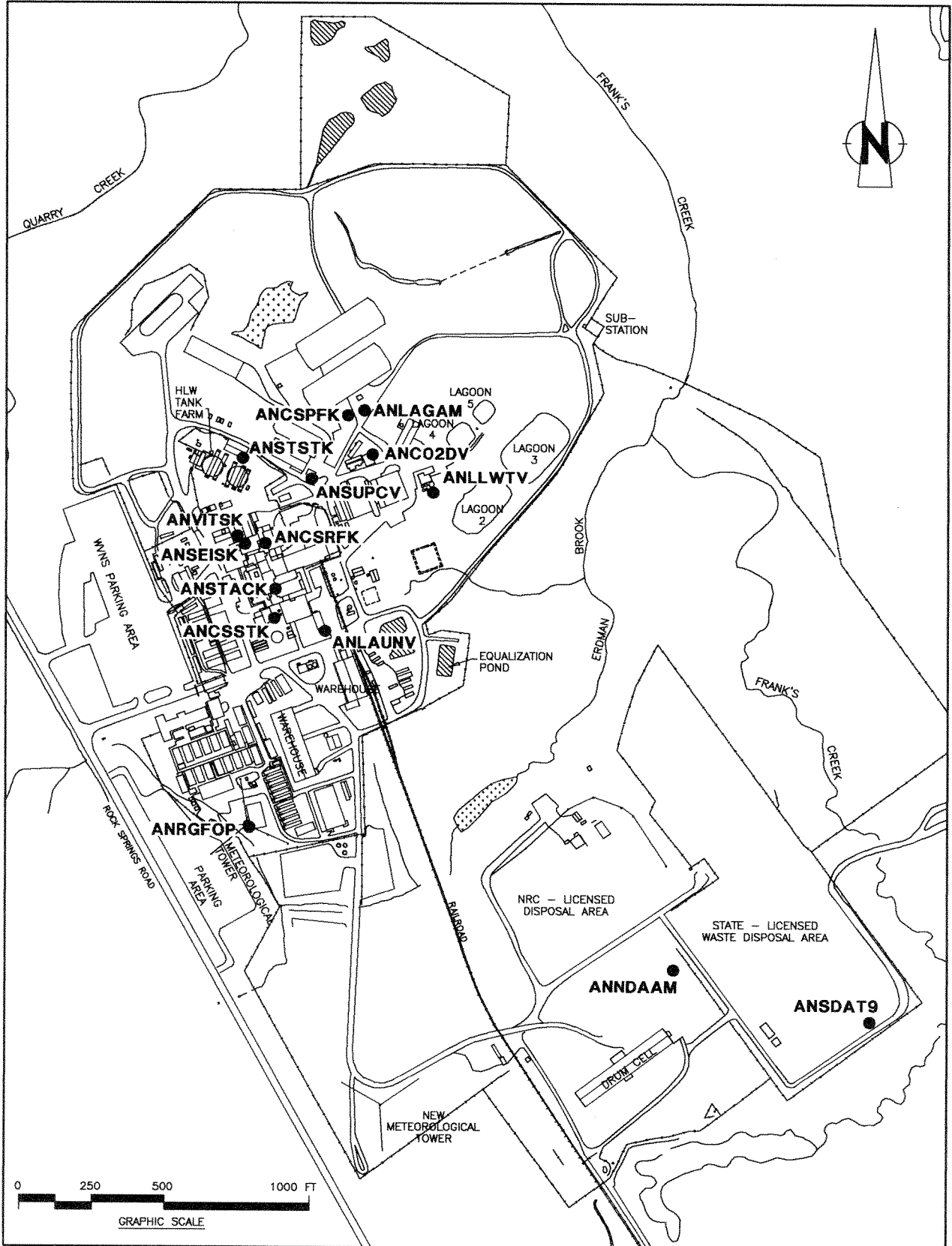


Figure A-1. On-site Air Monitoring and Sampling Points.

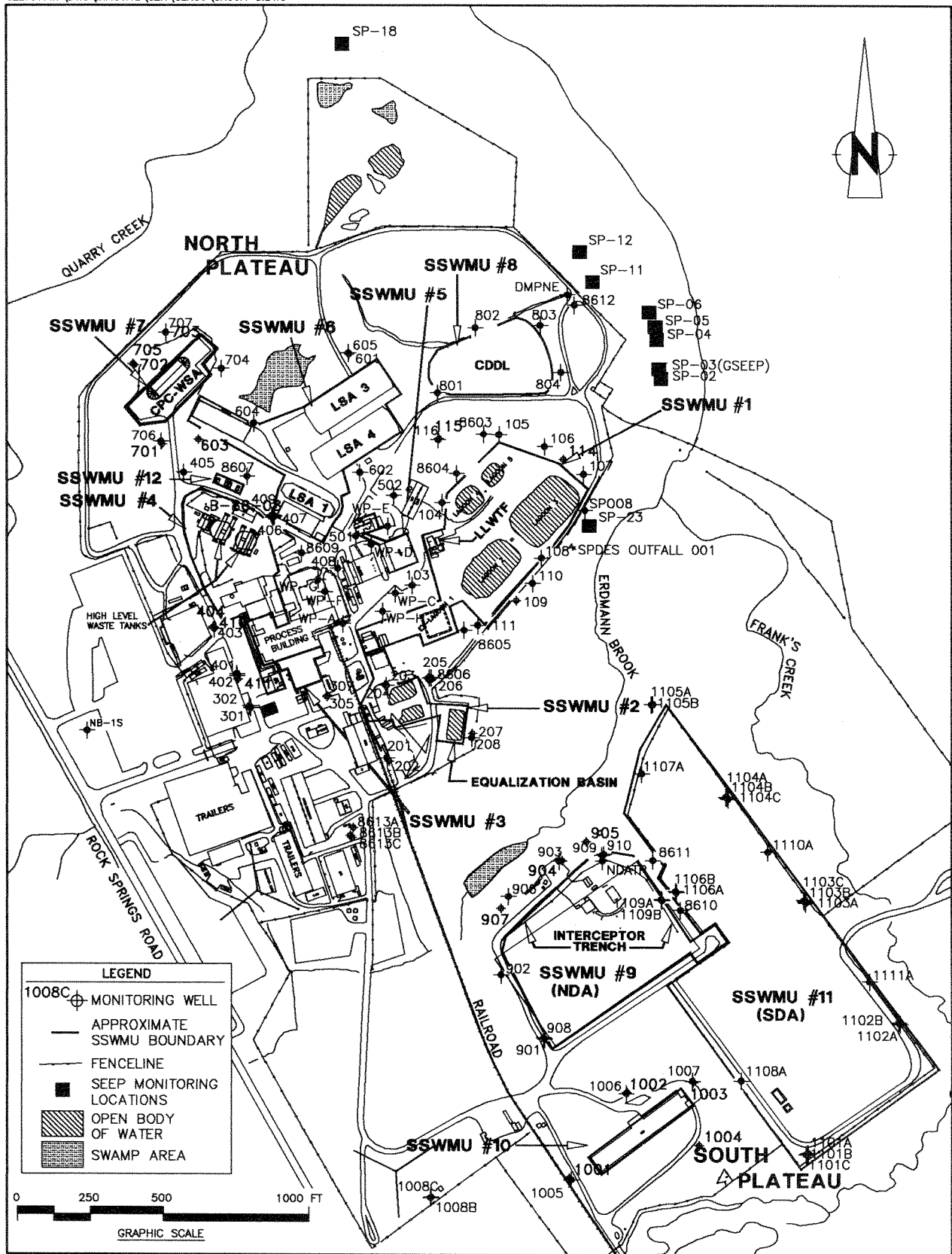


Figure A-3. On-Site Groundwater Monitoring Network (Includes wells not actively monitored following May 1995 but used for water level measurements).

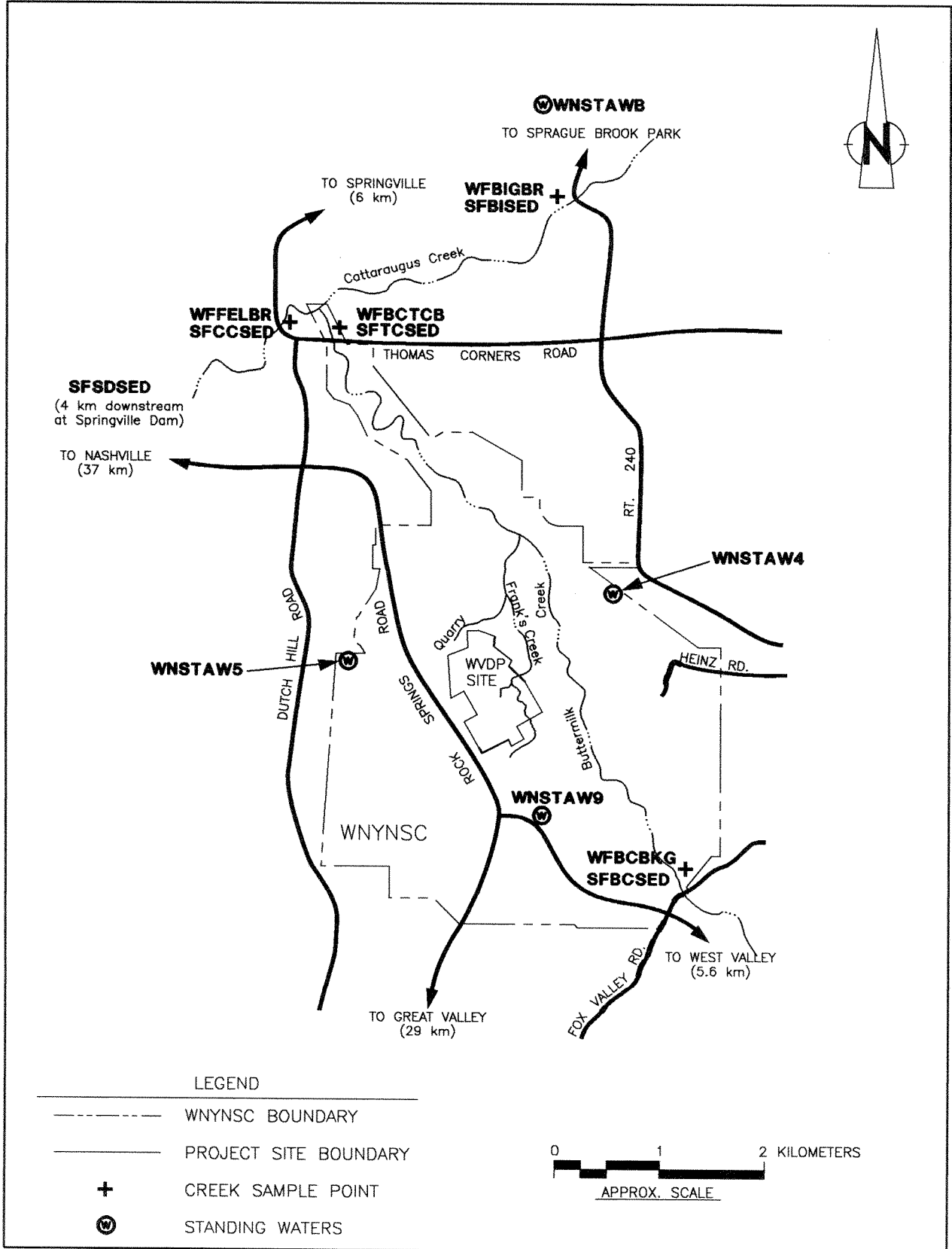


Figure A-4. Off-site Surface Water and Sediment Sampling Locations.

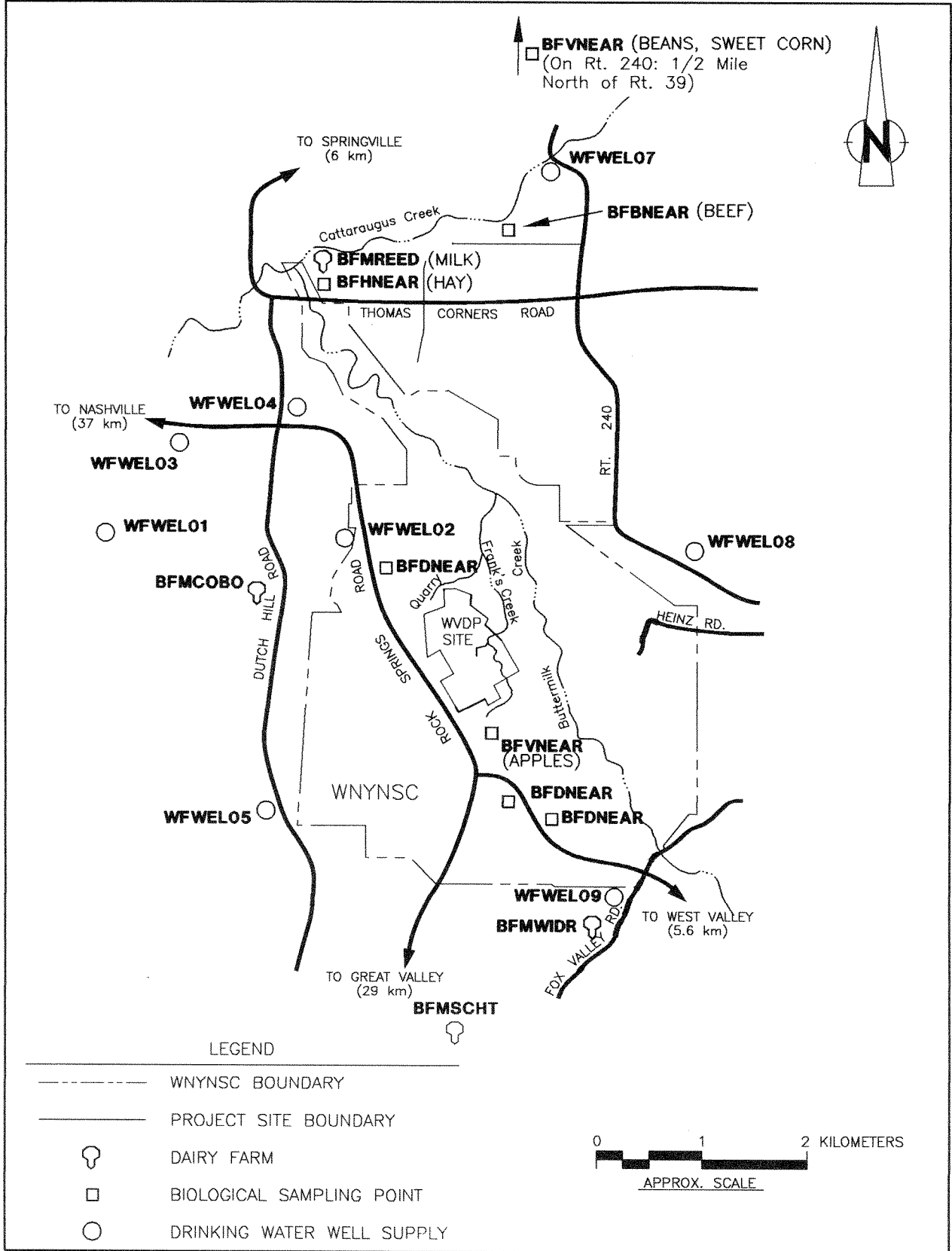


Figure A-5. Near-site Drinking Water and Biological Sample Points.

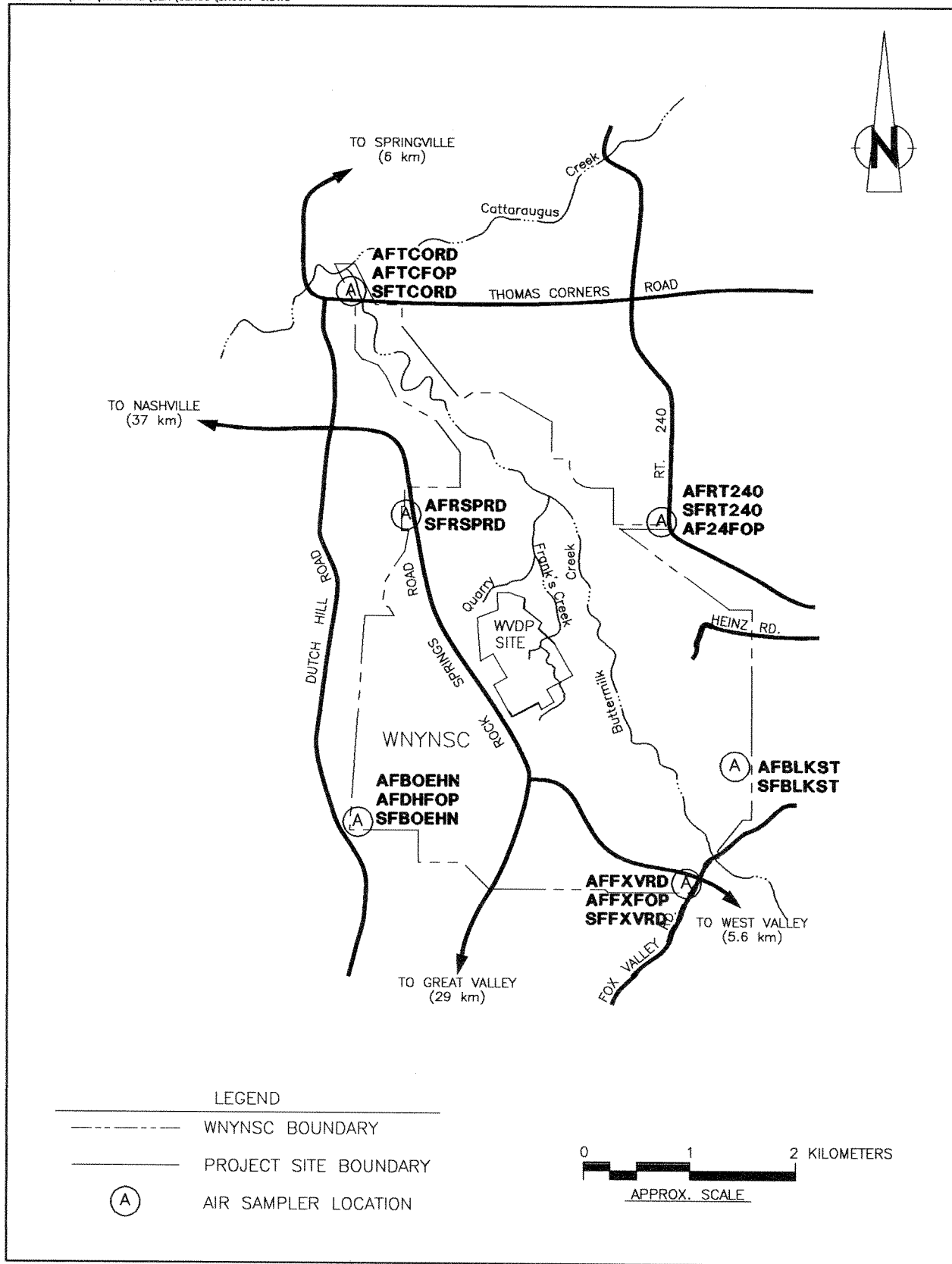


Figure A-6. Perimeter Air, Soil, and Fallout Sampling Point Locations.

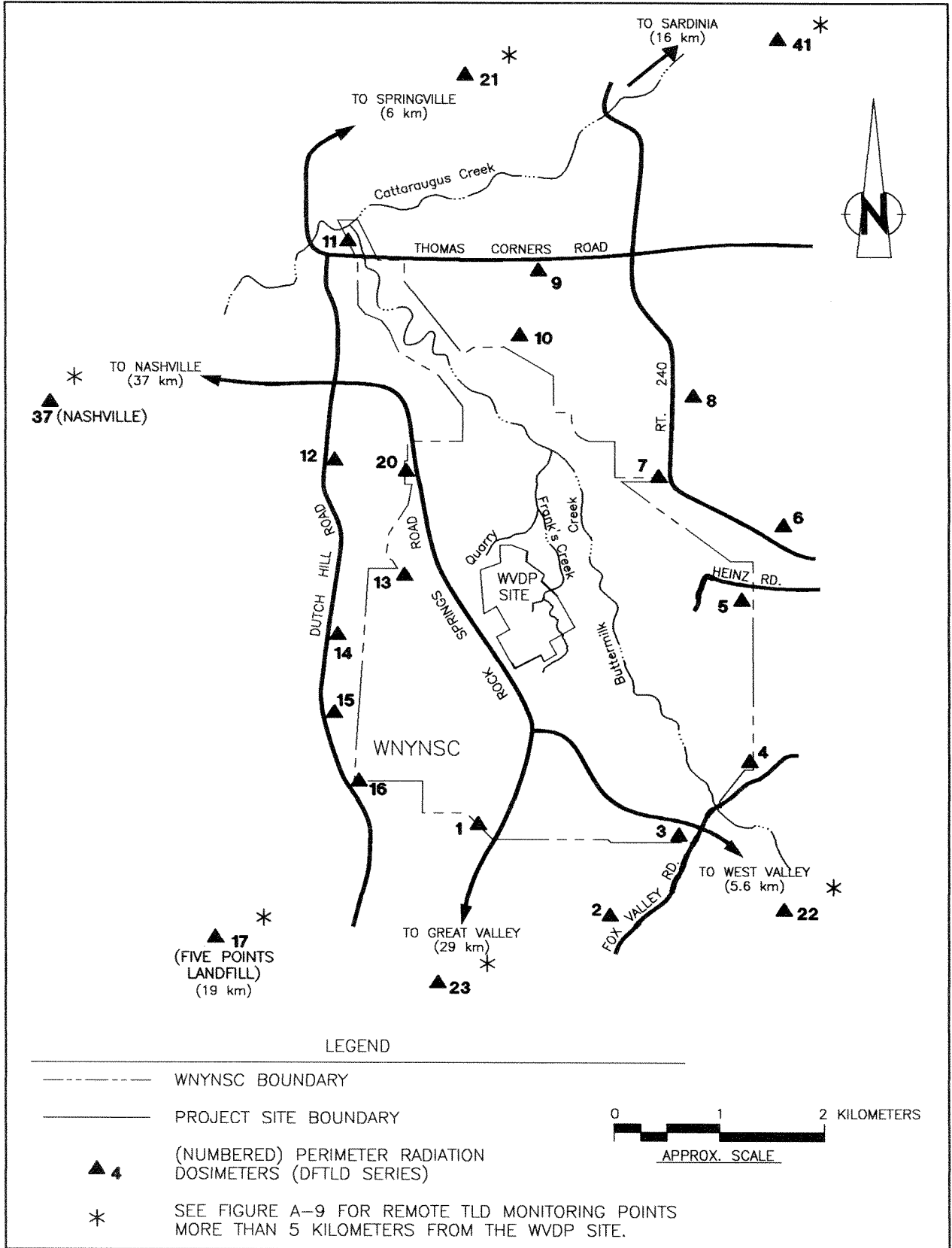


Figure A-7. Off-site Thermoluminescent Dosimeter (TLD) Locations.

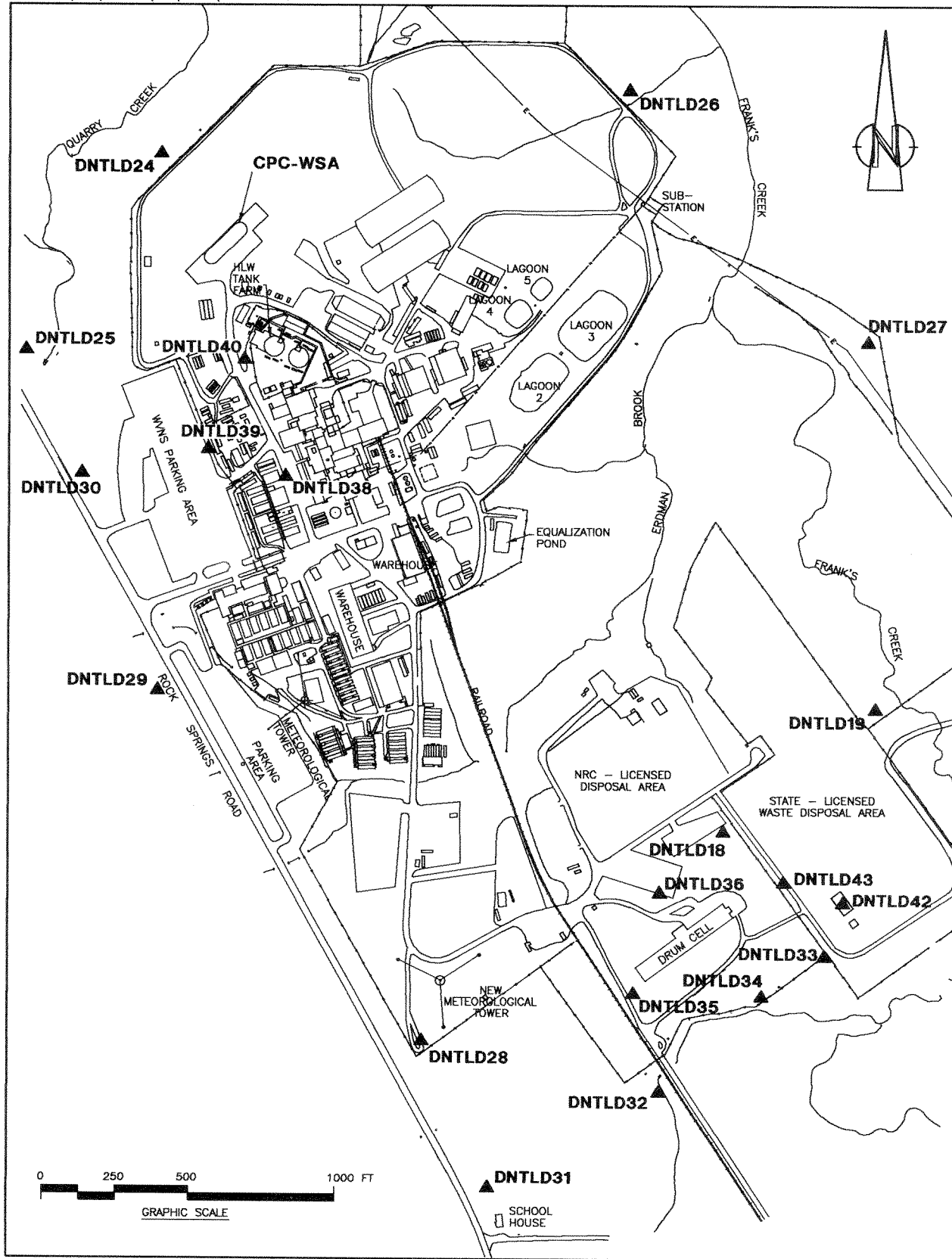
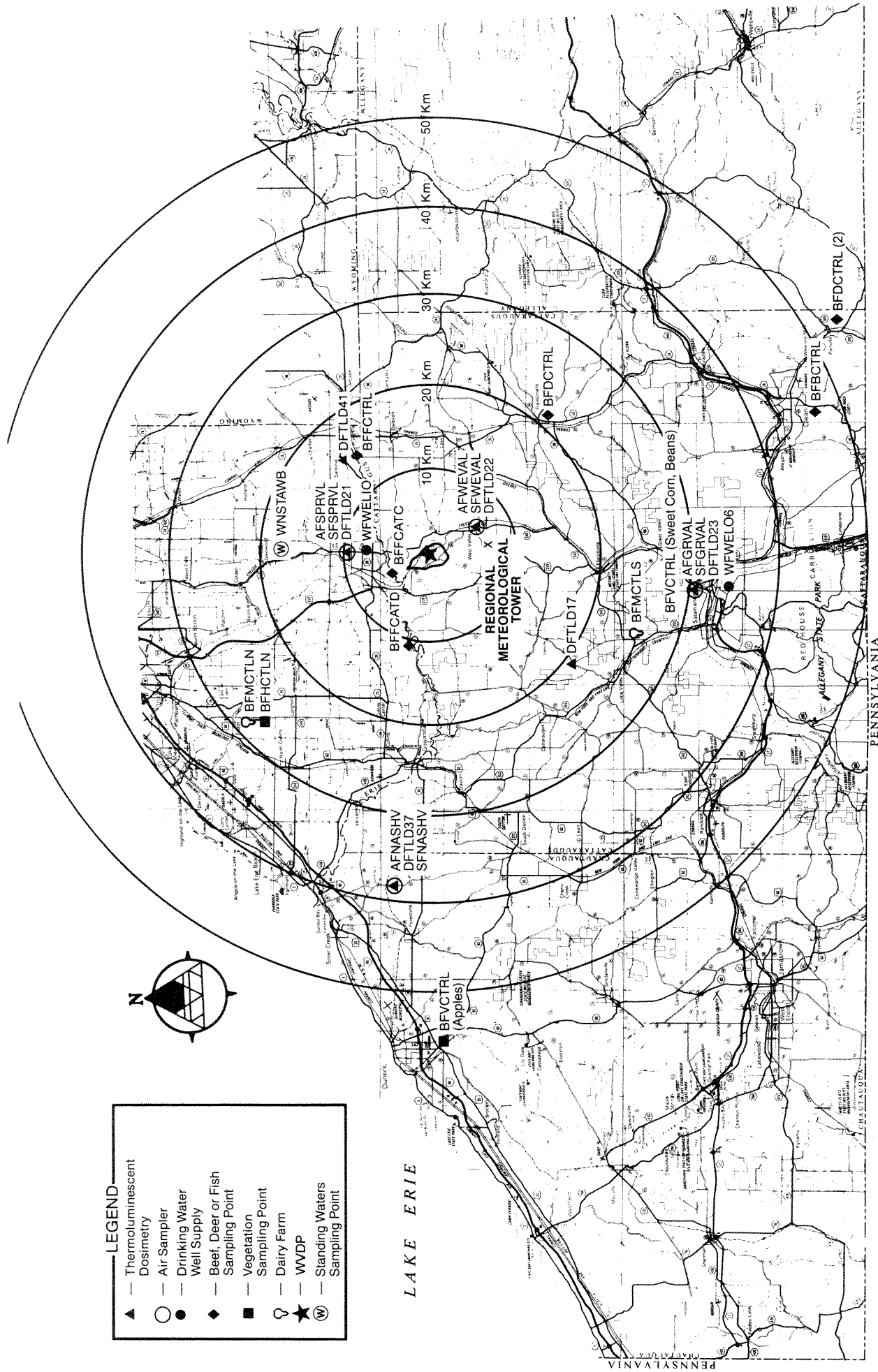


Figure A-8. On-site Thermoluminescent Dosimeters (TLD) Locations.



LEGEND

▲	Thermoluminescent
—	Dosimetry
○	Air Sampler
●	Drinking Water
◆	Well Supply
◆	Beef, Deer or Fish
◆	Sampling Point
—	Vegetation
○	Sampling Point
—	Dairy Farm
★	WVDP
—	Standing Waters
—	Sampling Point

REF: NYSDOT, New York State Map — West Sheet,
1:250,000, Revised 1982



Figure A-9. Environmental Sample Points more than 5 kilometers from the WVDP Site.