

**LOCATION PLAN  
QUICK START #1**



## QUICK-START PROJECTS

### Project No. 1

The headwaters of Alder Run were strip mined in 1956 and a portion of the stripping intercepted the old Morrisdale Coal Company workings. As a result, the entire stream was diverted into these old workings which have discharges on another watershed, Hawk Run.

It was proposed to re-channel the submergence area (source 158) to return these headwaters to the Alder Run watershed. The benefits from such a project are:

- (1) Prevention of additional degradation of the diverted waters by contact with acid-forming material while flowing through the old deep mine workings.
- (2) Reduction in the pollution load to Hawk Run, the site of a proposed \$2.5 million ion-exchange plant.
- (3) Improvement of stream quality of Alder Run by dilution of highly polluted stream water from headwaters which, although acid in nature, is of better quality than the principal tributary, Browns Run.



The channel is presently (June, 1970) under construction and approximately 50% completed. The total cost of the project is \$117,100.

### Project No. 2

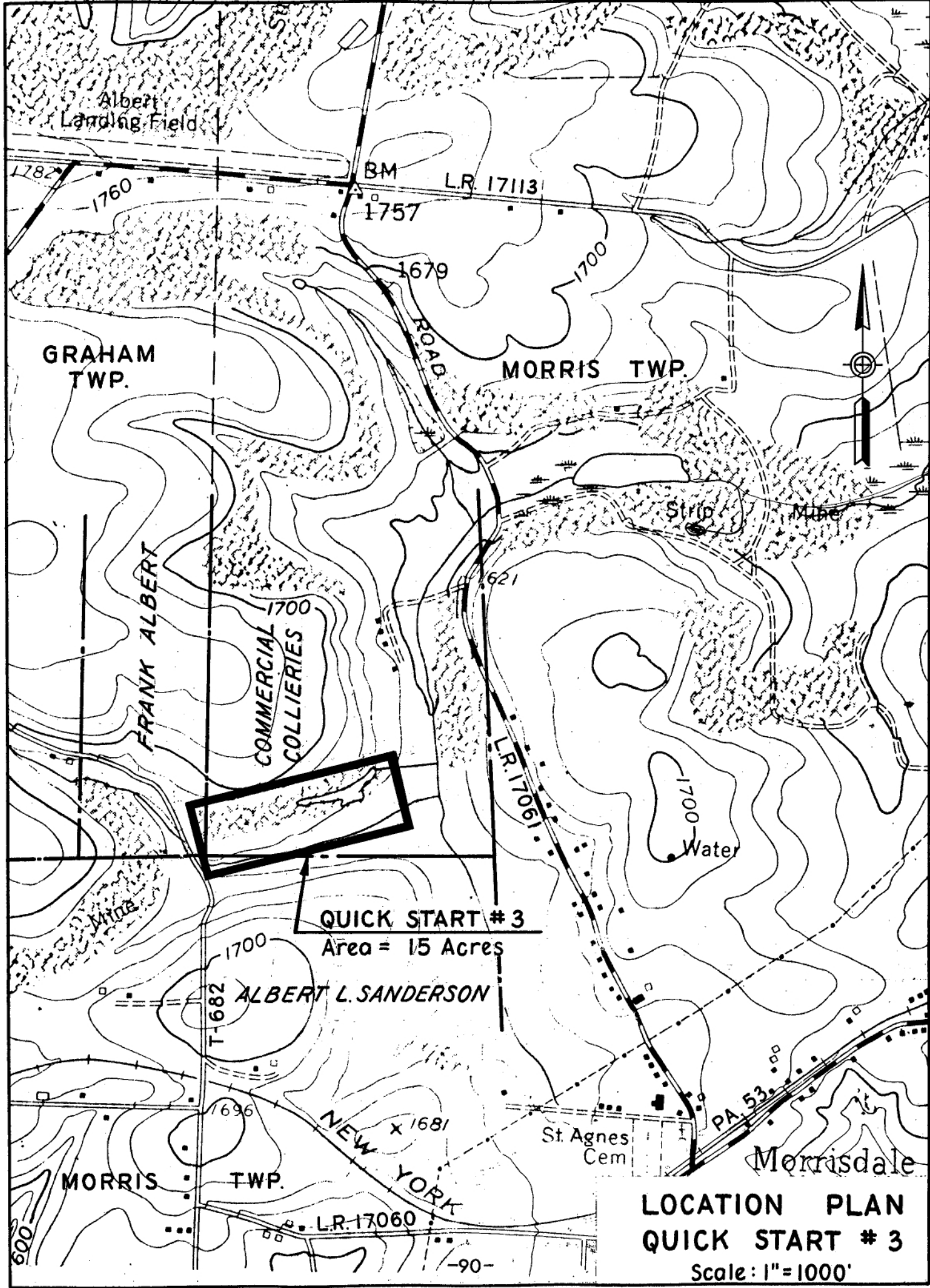
This pollution source is located immediately adjacent to Interstate Route 80, 2 miles west of Kylertown. The field station number for this source is 132.

The origin is a large strip pond 200 feet long by 250 feet wide. The area has been extensively strip mined, and the area to the east has also been deep mined. The area northeast of this location is currently being stripped. A relatively high discharge suggests drainage of a deep mine opening; however, intensive investigation and search of deep mine data points to the conclusion that the flow is attributable to precipitation which occurred just prior to the field explorations.

The only property owner involved with this reclamation project is the County National Bank.

The source area contributes 1019 pounds of acid and 1746 pounds of sulfate daily into Mons Run. This is equivalent to 6% of the daily acid level at the mouth of Alder Run, and 5% of the sulfate load.

Recommended abatement method is to excavate, remove, and bury the acid producing material; backfill the pit and regrade to terrace the area outlined on the exhibit; provide drainage facilities and planting.



**QUICK START # 3**  
Area = 15 Acres

**ALBERT L. SANDERSON**

**LOCATION PLAN**  
**QUICK START # 3**  
Scale: 1"=1000'

The estimated construction cost for this work is \$60,000. This estimate has been computed by two different methods. Photogrammetrics on a scale of 1" = 200' were obtained from the Pennsylvania Department of Highways (this was produced for the location of Interstate Route 80 in 1960). Cross sections were developed from this mapping, excavation and backfill quantities computed, with the cost then computed on a cubic yard basis. This cost was compared with the cost computed on a per acre basis with prices taken from current reclamation projects.

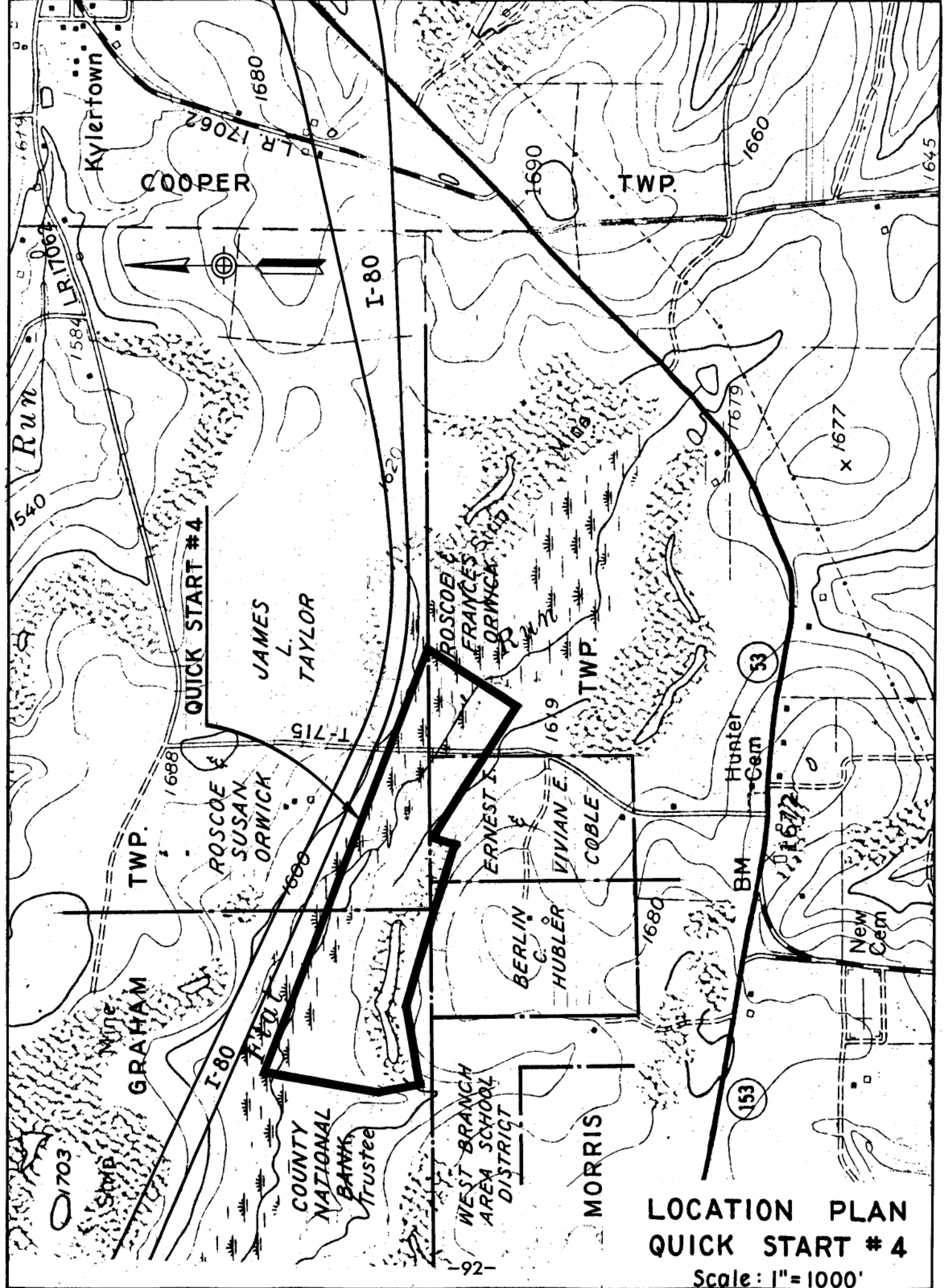
Construction plans and specifications are currently being prepared.

### Project No. 3

Approximately 0.8 miles northwest of Morrisdale, just west of Deep Creek Road, is pollution source station 149. This source is similar to the Quick Start No. 2 source, with a large strip pond discharging into Alder Run. Discharges emerge from the strip high wall, base of spoil piles, and a series of ground level locations where the ground water table was interrupted by the stripping operations.

Property owners are Commercial Collieries and Frank Albert.

This pollution source contributes an average 300 pounds of acid daily (2% of the total), and 948 pounds of sulfate per day. A weir was constructed at this location last July, with flow measurements and sample testing accomplished on a regular basis since that time.



**LOCATION PLAN  
QUICK START #4**

Scale: 1" = 1000'

In order to accomplish abatement at this location, the acid forming material will be segregated and buried near the high wall, and the strip pond and pit will have to be backfilled. The top portion of the high wall will be removed and used as backfill, and the ground water level restored to its approximate previous height. This procedure will preclude oxidation of the acid forming materials and substantially reduce the acid mine drainage.

The estimated construction cost of this work is \$37,000. Photogrammetrics were not available for this location, but 1" = 300' aerial photographs of the stripping were obtained. The photos and water permit maps, together with field explorations were adequate to obtain the preliminary cost estimate for this project.

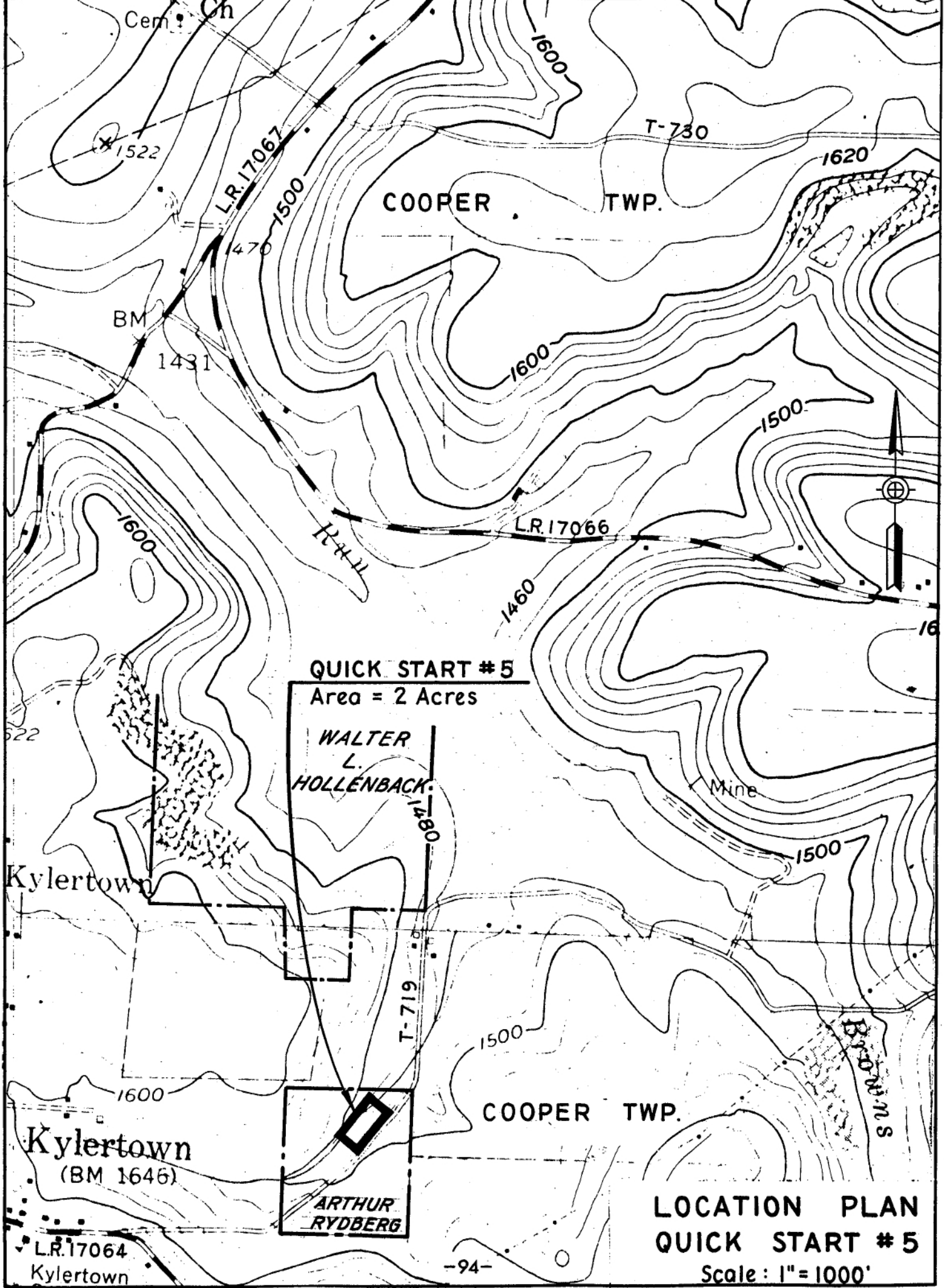
Construction plans and specifications for this work are currently being prepared.

#### Project No. 4

Less than a mile southeast of the location of Quick Start No. 2, and immediately adjacent to the Interstate Route 80 eastbound lanes, the pollution source along Flat Run is parallel to the highway. For a length of nearly 3000' Flat Run is swampy and passes along and through spoil banks and old refuse piles. A strip pond just above Flat Run in this location discharges to Flat Run and compounds the problem.

Four property owners are involved: County National Bank; Roscoe Orwick; Berlin Hubler; and Ernest Coble. This project encompasses pollution source stations 141 and 142.





Cem. Ch

X 1522

L.R. 17067

T-730

COOPER TWP.

1620

BM 1431

1600

1500

L.R. 17066



**QUICK START #5**

Area = 2 Acres

WALTER  
L.  
HOLLENBACK

087148

Mine

1500

Kylertown

T-719

1500

COOPER TWP.

BROWN'S

Kylertown  
(BM 1646)

ARTHUR  
RYDBERG

**LOCATION PLAN  
QUICK START #5**

Scale: 1" = 1000'

L.R. 17064  
Kylertown

Daily contribution from this source is 332 pounds of acid, and 930 pounds of sulfate. The acid load is equivalent to 2% of the total at the mouth of Alder Run.

Removal and burial of the spoil and refuse piles, backfilling and grading the strip pond and pit will effectively reduce this pollution load. Due to the close proximity of the Interstate Highway, and the flat gradient here, it is not possible to relocate Flat Run to avoid the refuse piles.

Estimated construction cost of this work is \$76,000. Here again, because of the Interstate Highway 1" =200' photogrammetrics were available for use in preparing this cost estimate.

Construction plans and specifications are being prepared.

#### Project No. 5

Pollution source 110 is located one-half mile east of Kylertown, along Township Road No. 719, on a tributary to Browns Run. This area involves a deep mine tipple which was constructed on spoil piles in the stream. The stream now must pass along the spoil bank, acquiring acidity.

This property is owned by Arthur Rydberg, and the area involved with this particular project is rather small .

By removing the mine spot ls from along the length of the stream, or by relocating the stream away from the spoil, approximately 220 pounds of acid per day can be eliminated from Browns Run.

The relatively minor construction cost of removal of the spoils is \$2,000. Plans and specifications for removal are now being prepared for this project.