

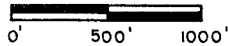
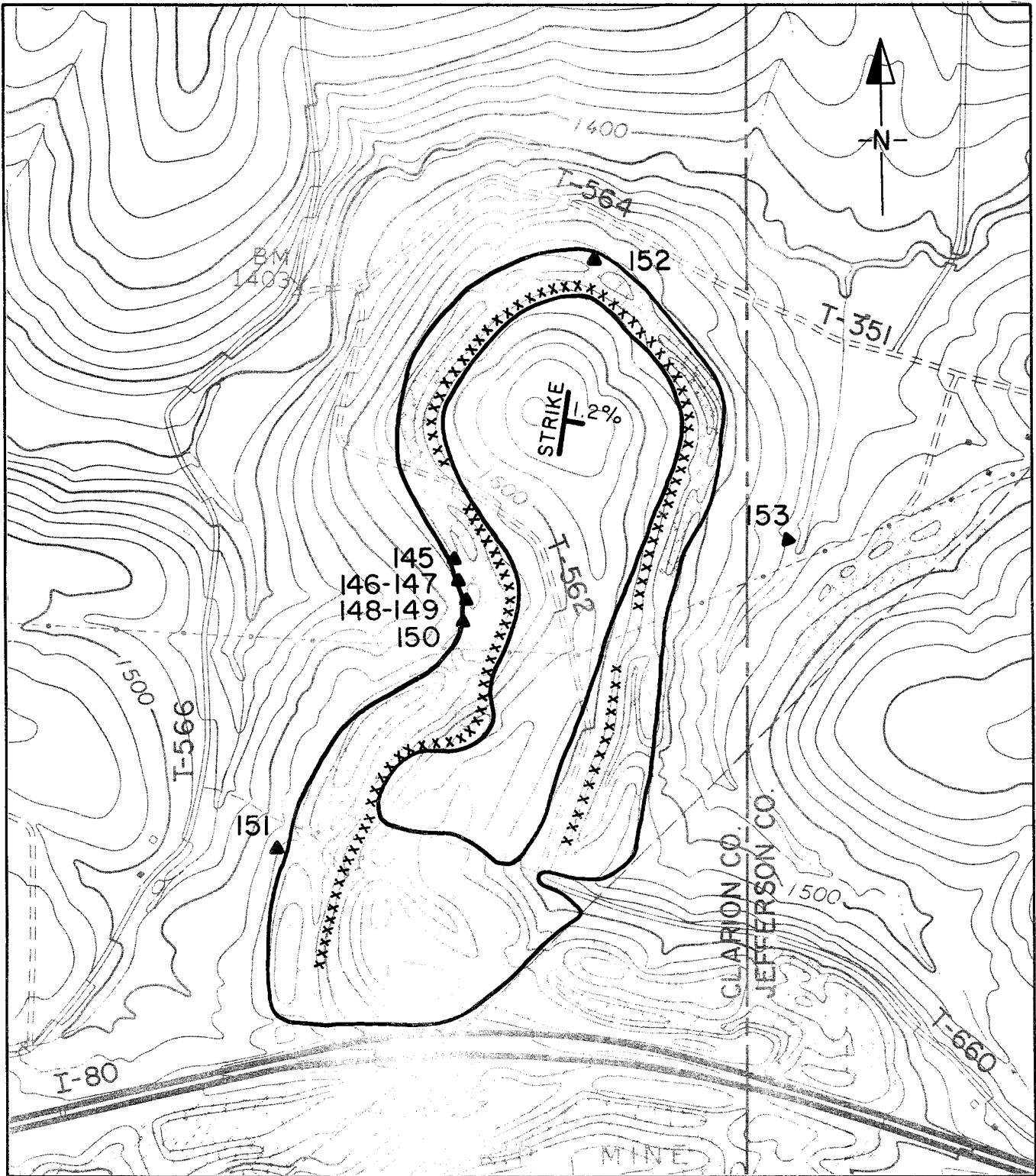
AREA XXVI

This contour strip mine located along the side of a hillside is unreclaimed. The Upper Clarion and Lower Kittanning coals were mined. Several impoundments are present, the largest of which is the source of several subsurface discharges of acid mine drainage.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
145	7.6	.09	4
146 - 147	8.9	.04	12
148 - 149	16	.32	16
150	30	.11	18
151	2.4	.01	1
152	4.5	.03	5
153	21	.54	30
Total	90	1.14	

This area was being restored under Pennsylvania Department of Environmental Resources Contract No. S.L. 133-4-101.1. Work has since been halted at this location as C & K Coal Company has expressed an intent to re-affect this area. As a result, no reclamation proposal is made for this area.

# PROJECT AREA XXVI



AREA XXVII

This area has been strip mined for the Lower Kittanning coal leaving a long deep strip cut. The spoil material is reasonably well vegetated, especially the outer slopes to the south along Interstate Route 80 which are covered with crown vetch.

Water collects in the strip cut and seeps through the spoil bank on the north side. A total of four acid mine drainage discharges originate from this strip mine. One of the discharges was impossible to weir.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
154	1.8	.01	12
155	6.3	0	4
156	5.6	.14	7
157	4.2	.21	8
	Total 14	.36	

Proposed Reclamation Plan -Priority No. 37

The acid mine drainage at this location can be best abated by constructing a drainage channel along the entire length of the strip cut to drain impounded water, provide positive drainage, and limit percolation of surface water through the side slopes. The cut area and northern spoil area should be revegetated.

Estimated Cost:

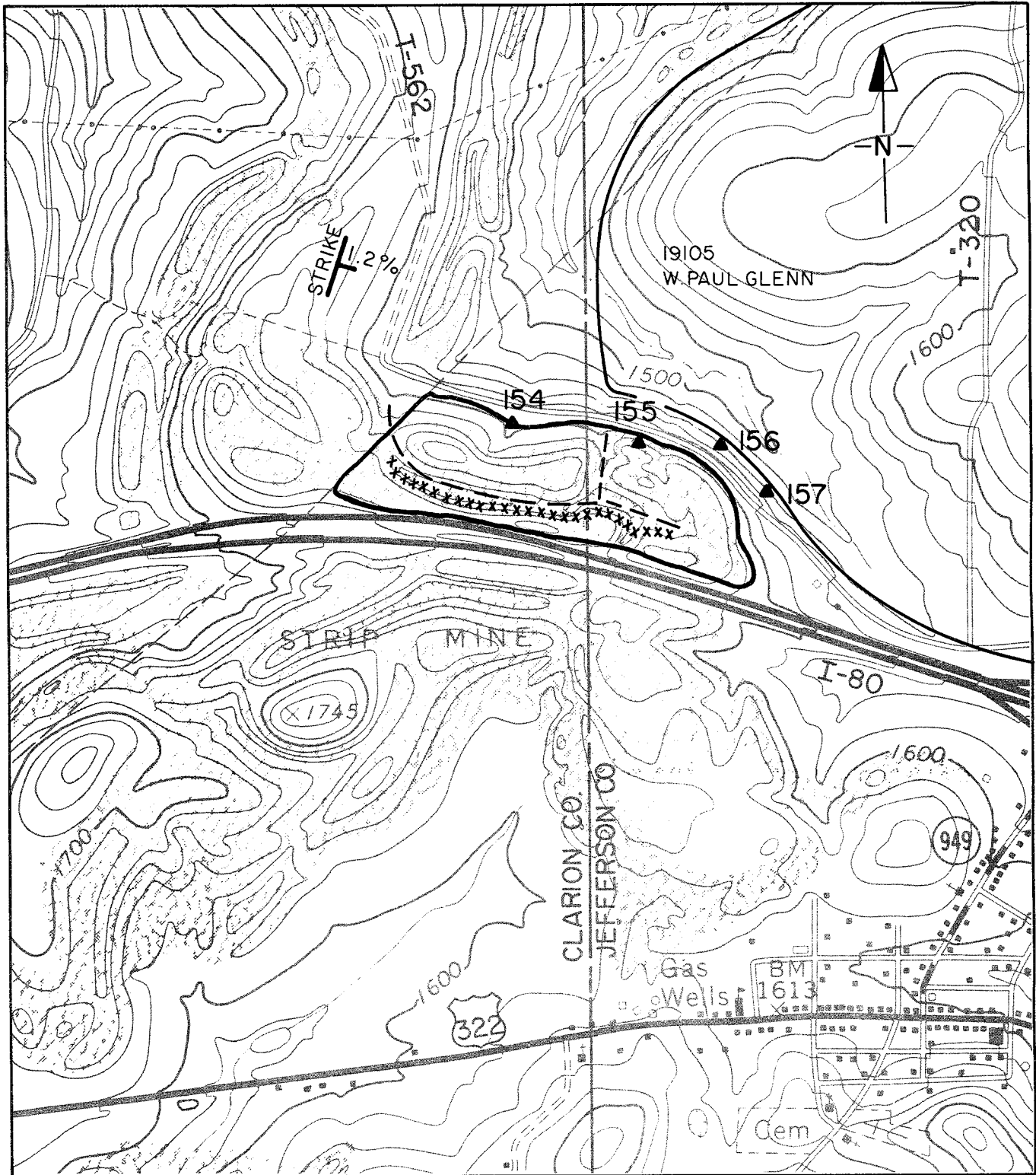
Drainage Channel	2800 Feet @ \$30/Ft.	= \$84,000
Revegetation	41 Acres @ \$700/Acre	= \$28,700
	Total Cost	= \$112,700

Approximate Amount of Acid to be Abated 55%

Total Acid Abated 8 lbs/day

Cost of Abatement per lb. of acid per day \$14,088

# PROJECT AREA XXVII



PROPOSED RECLAMATION PLAN

AREA XXVII

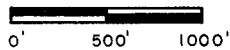
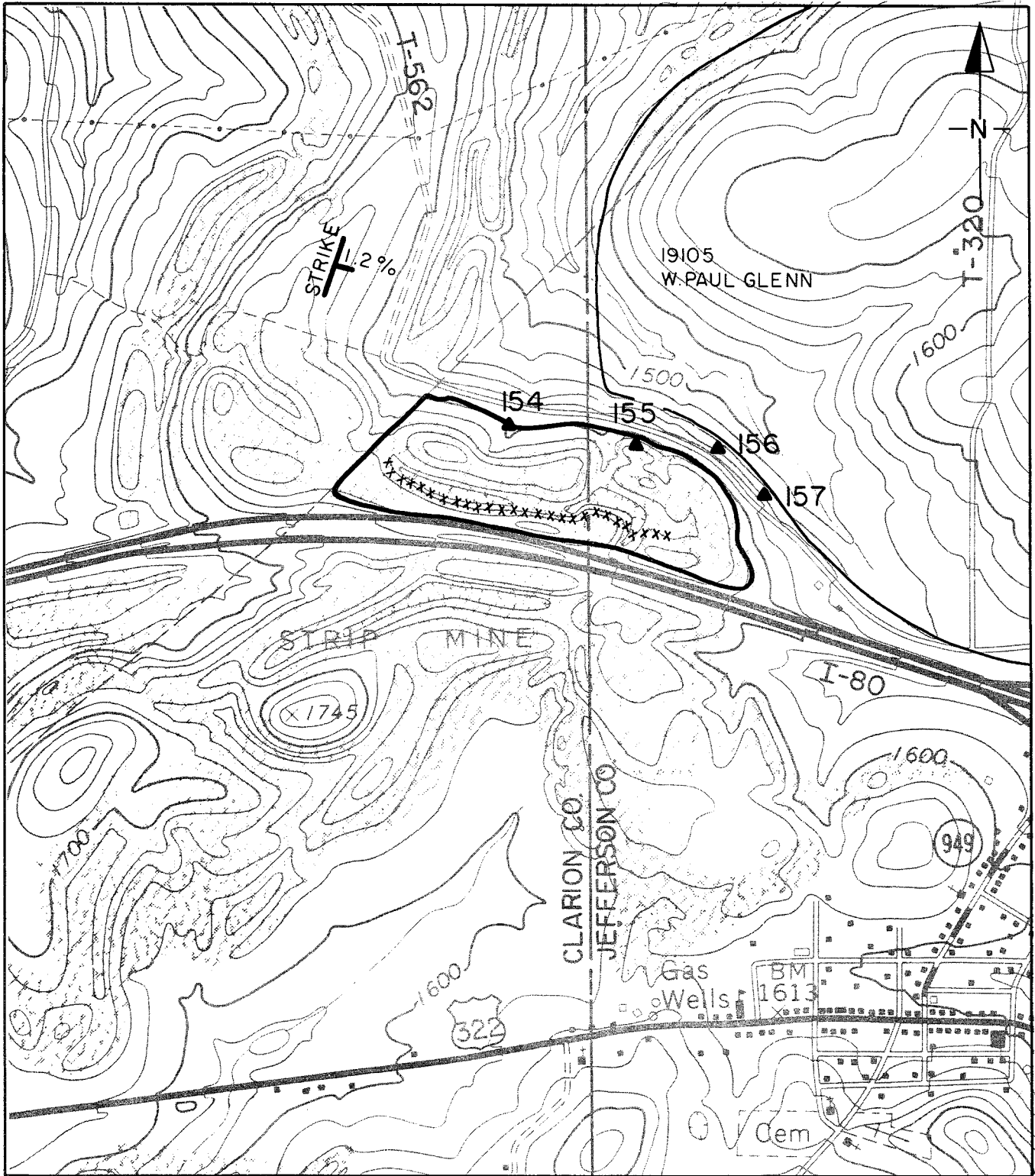
Alternate Reclamation Plan - Priority No. 33

Nearly the same results could be achieved with minimal regrading rather than dewatering trenches. The cut area would be regraded to provide positive drainage and permit exit from the cut. The same area would need be revegetated.

Estimated Costs

Minimal Regrading	30 Acres @ \$500/Acre	= \$15,000
Revegetation	41 Acres @ \$700/Acre,	= 28,700
	Total Cost	= \$43,700
Approximate Amount of Acid to be Abated - 40%		
Total Acid Abated - 6 lbs/day		
Cost of Abatement per lb. of acid per day		\$7,283

# PROJECT AREA XXVII



ALTERNATE RECLAMATION PLAN

AREA XXVIII

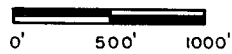
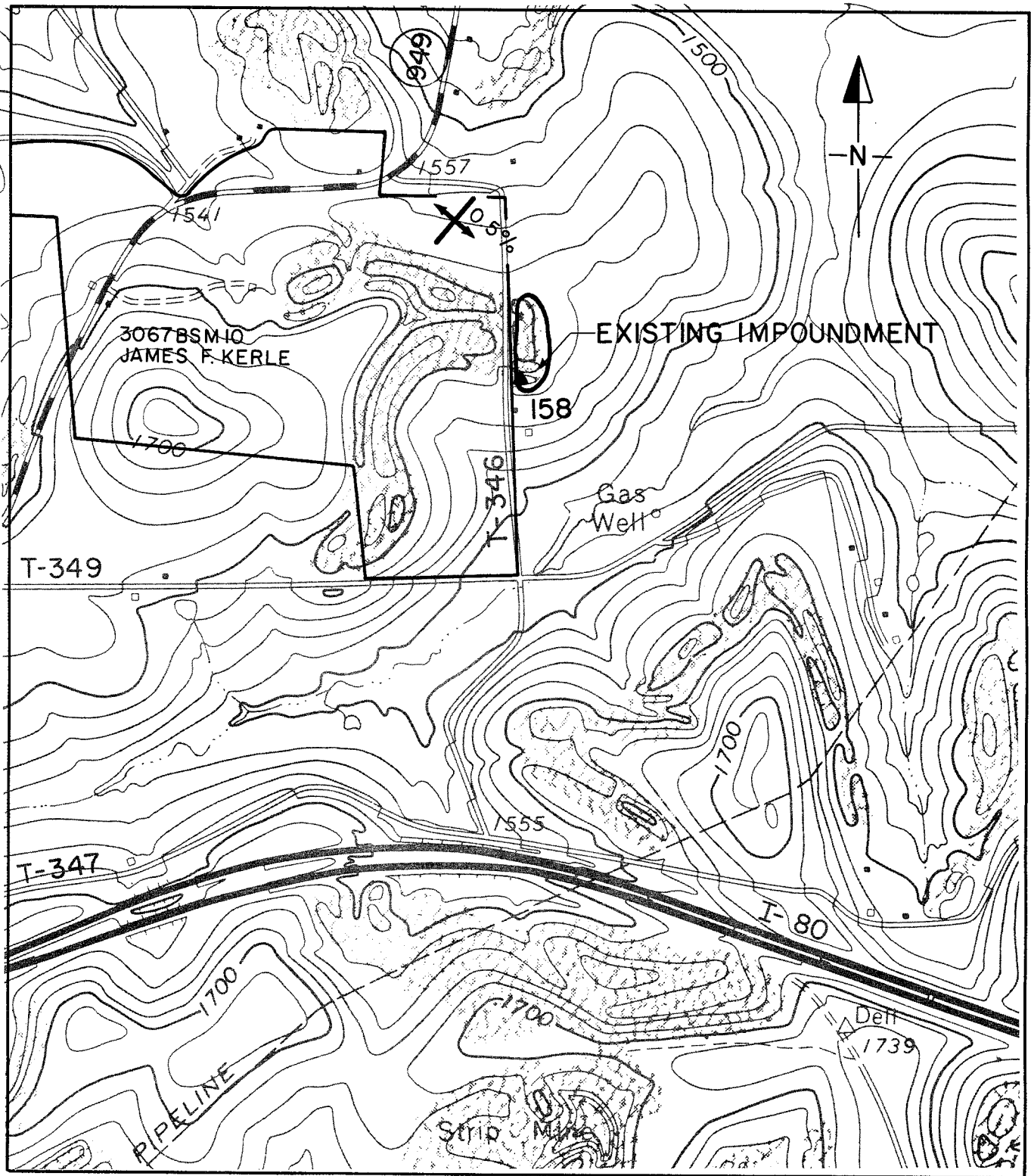
This is the site of a strip mine impoundment which produces an occasional discharge during periods of overflow. The area was strip mined for the Lower Kittanning coal. The adjacent spoil area is heavily forested with mature evergreens. The impoundment is perennial and apparently derives at least a portion of its flow from groundwater or subsurface flow.

During the period since the first sampling an adjacent drilling operation has been using the impoundment for drill water, keeping the level below overflow and thus eliminating the discharge.

Discharges:	Avg. Acidity (lbs/day)	Total Fee (lbs/day)	Avg. Flow (g.p.m.)
158	0	0	1

Due to the very small acid load (less than 1 lb./day) at this location it would be economically infeasible to attempt abatement. Consequently, no abatement method has been proposed for this project area.

# PROJECT AREA XXVIII





AREA XXIX

This project area is the location of a strip mine covered under strip mine drainage permit 19105-M (1966) of W. Paul Glenn. Much of the area is covered with small to moderate size trees. There is an unreclaimed highwall generally about 20. feet high on the Upper Clarion coal.

Two discharges of acid mine drainage flow from the lower slopes. of the spoil.

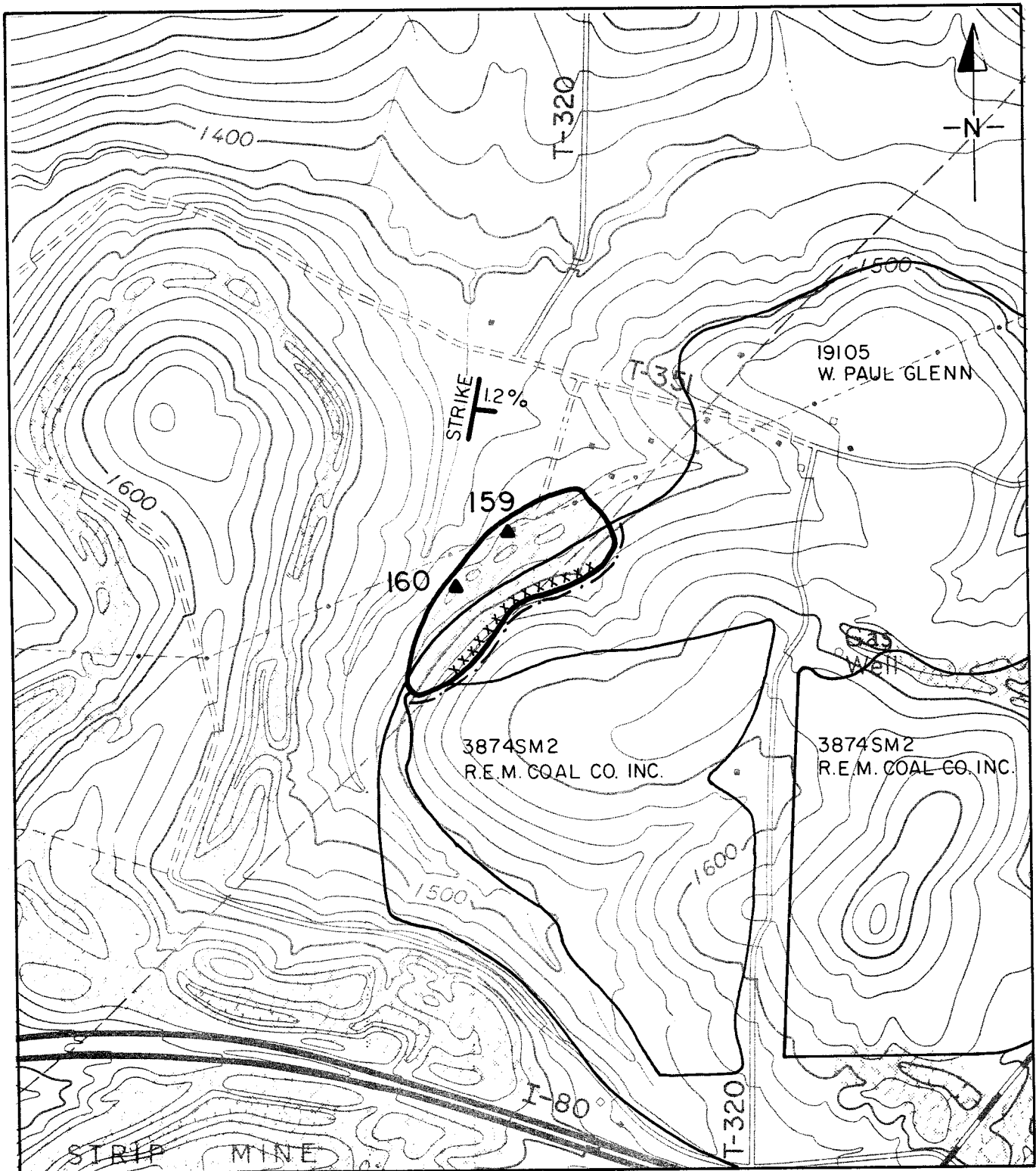
Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
159	121	1.8	97
160	1.5	.09	2
<u>Total</u>	<u>123</u>	<u>1.9</u>	

Proposed Reclamation Plan -. Priority No. 3

A greater degree of abatement could be achieved by terrace backfilling the entire strip mine although this would mean destroying many moderate sized evergreens. A diversion ditch should then be constructed along the top of highwall and the entire area be revegetated.

Estimated Cost:		
Terrace Backfill	19 Acres @ \$2000/Acre	= \$38,000
Diversion Ditch	1800 Feet @ \$3.00/Ft.	= 5,400
Revegetation	19 Acres @ \$700/Acre	= 13,300
	<b>Total Cost</b>	<b>= \$56,700</b>
Approximate Amount of Acid to be Abated		70%
Total Acid Abated		86 lbs/day
Cost of Abatement per lb. of acid per day		\$659

# PROJECT AREA XXIX



0' 500' 1000'  
PROPOSED RECLAMATION PLAN

AREA XXIX

Alternate Reclamation Plan - Priority No. 14

A drainage channel should be constructed along the base of the highwall to carry surface runoff from the spoils as quickly as possible. The surface of the strip is covered with carbonaceous shale in places. This area should have minimal regrading to remove the carbonaceous shale and expose better quality material. The entire area should then be planted with grasses to retard erosion.

Estimated Cost:

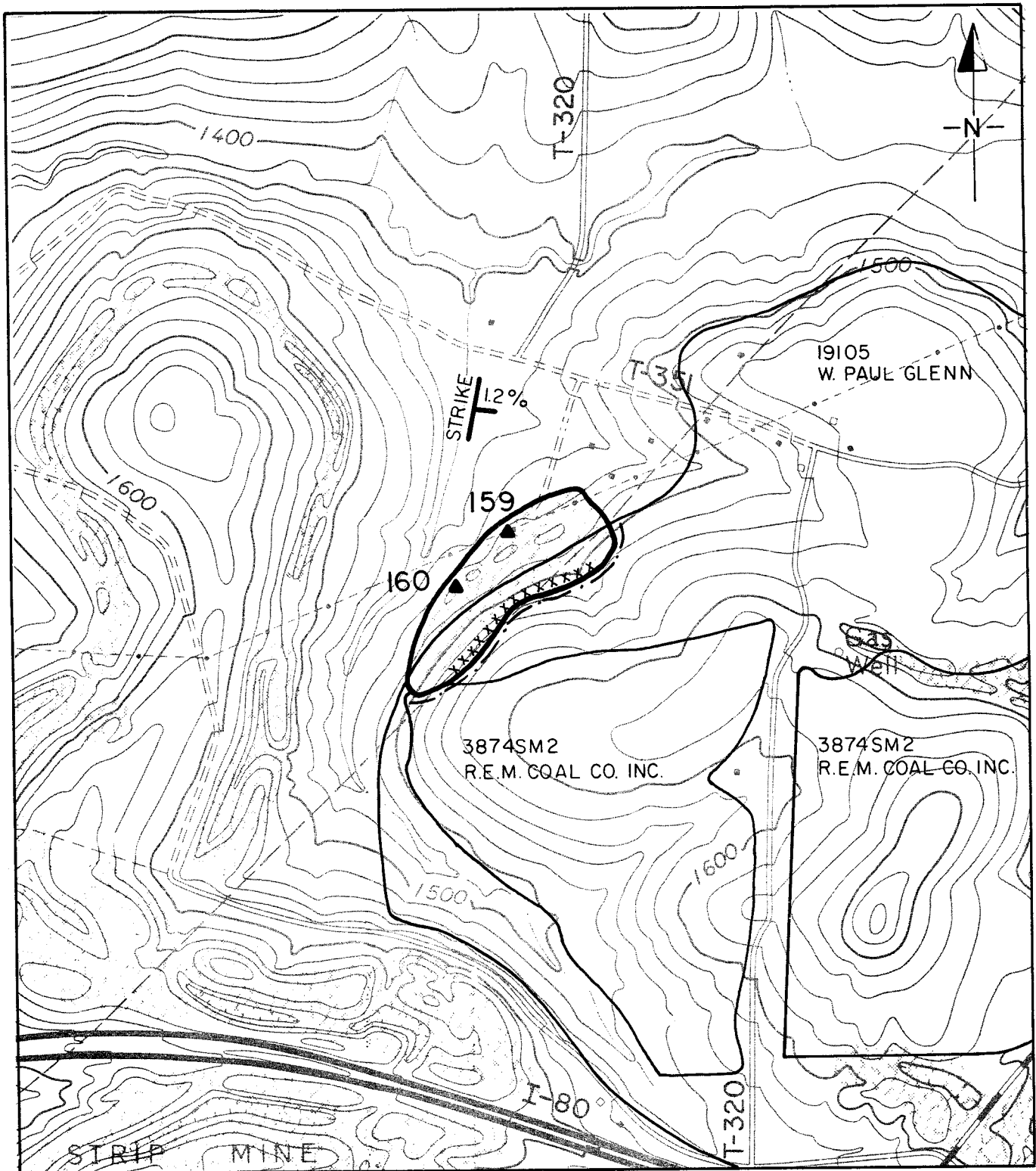
Minimal Regrading	8 acres@ \$500/ acre	= \$4,000
Drainage Control	2400 feet @ \$20/ft	= \$72,000
Revegetation	19 acres @ \$700/acre	= \$13,300
	TOTAL	= \$89,300

Approximate Amount of Acid to be Abated - 55%

Total Acid Abated - 68 lbs/day

Cost of Abatement per lb. of acid per day \$1,313

# PROJECT AREA XXIX



0' 500' 1000'  
PROPOSED RECLAMATION PLAN

AREA XXX

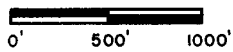
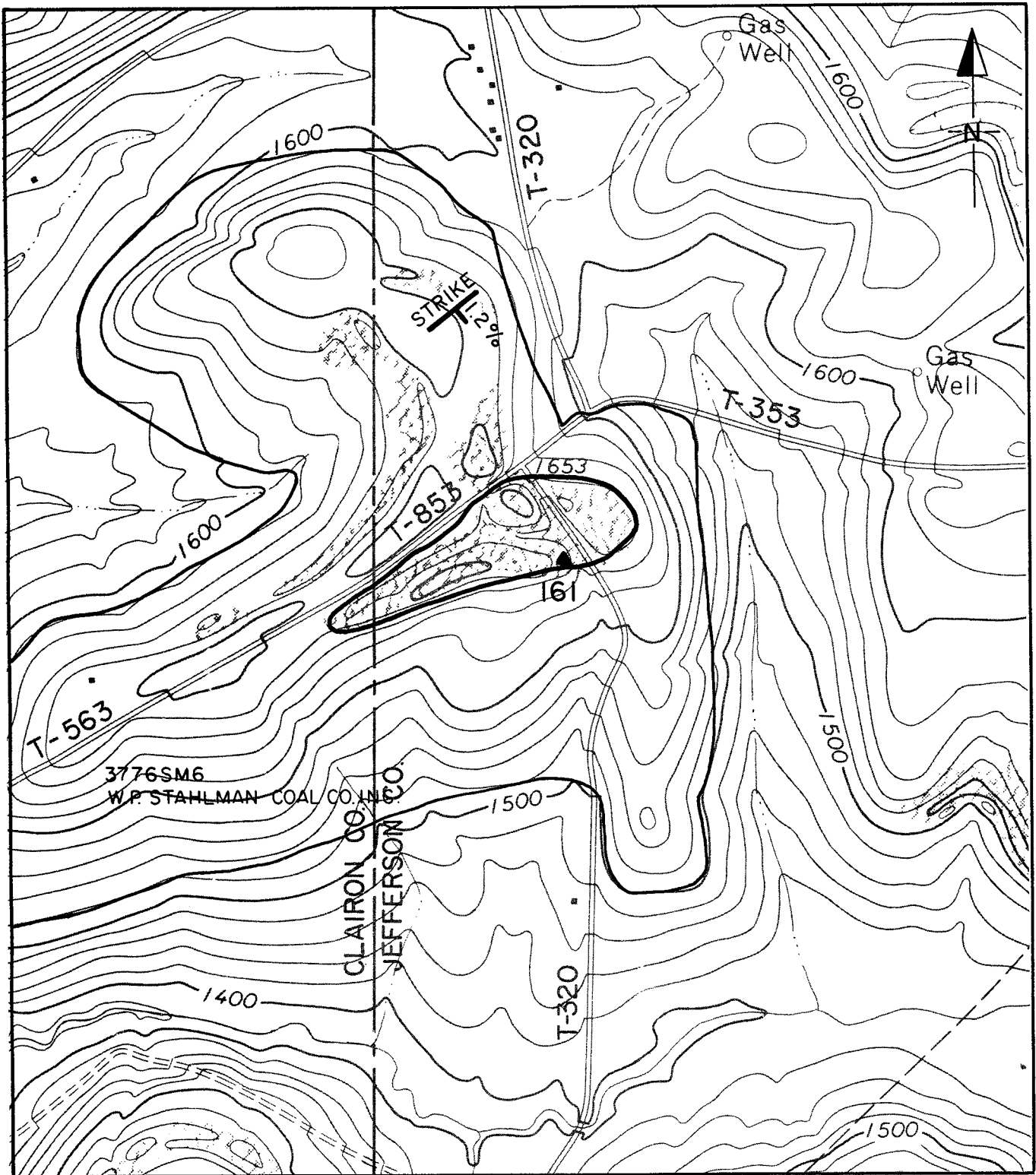
This strip mine was operated for the Lower Kittanning coal. It appears quite old and heavily forested with mature evergreens. A series of elongate ponds occur along the northwest periphery bordering the township road.

Mine drainage seeps from the strip mine area on the west side of Township Road 320, flows along the road, reenters the strip mined area and exits through a gravity drain cut in the spoil. Several other discharges occur from this strip mine along the southern toe of spoil but these discharges all proved to be nearly neutral or slightly alkaline in nature.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)	
	161	1	.02	18

The well grown up condition of this strip mine and low acid loads of the discharges preclude the feasibility of attempting to further reclaim this area.

# PROJECT AREA XXX



AREA XXXI

This project area was strip mined for the Brookville and Lower Clarion coals. The southeastern half of this area is essentially unreclaimed with highwalls still present, an impoundment along the base of the highwall, no vegetation, and an abundance of carbonaceous shale on the surface. The northwestern area is apparently more recently stripped and has been backfilled and planted by H & G Coal and Clay Company, permit 3066BSM66.

One discharge of acid mine drainage originates from the southern area. The discharge seeps from the eastern toe of spoil and is probably related to the impounded water along the base of the highwall 400 feet upslope of the discharge.

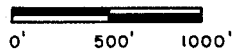
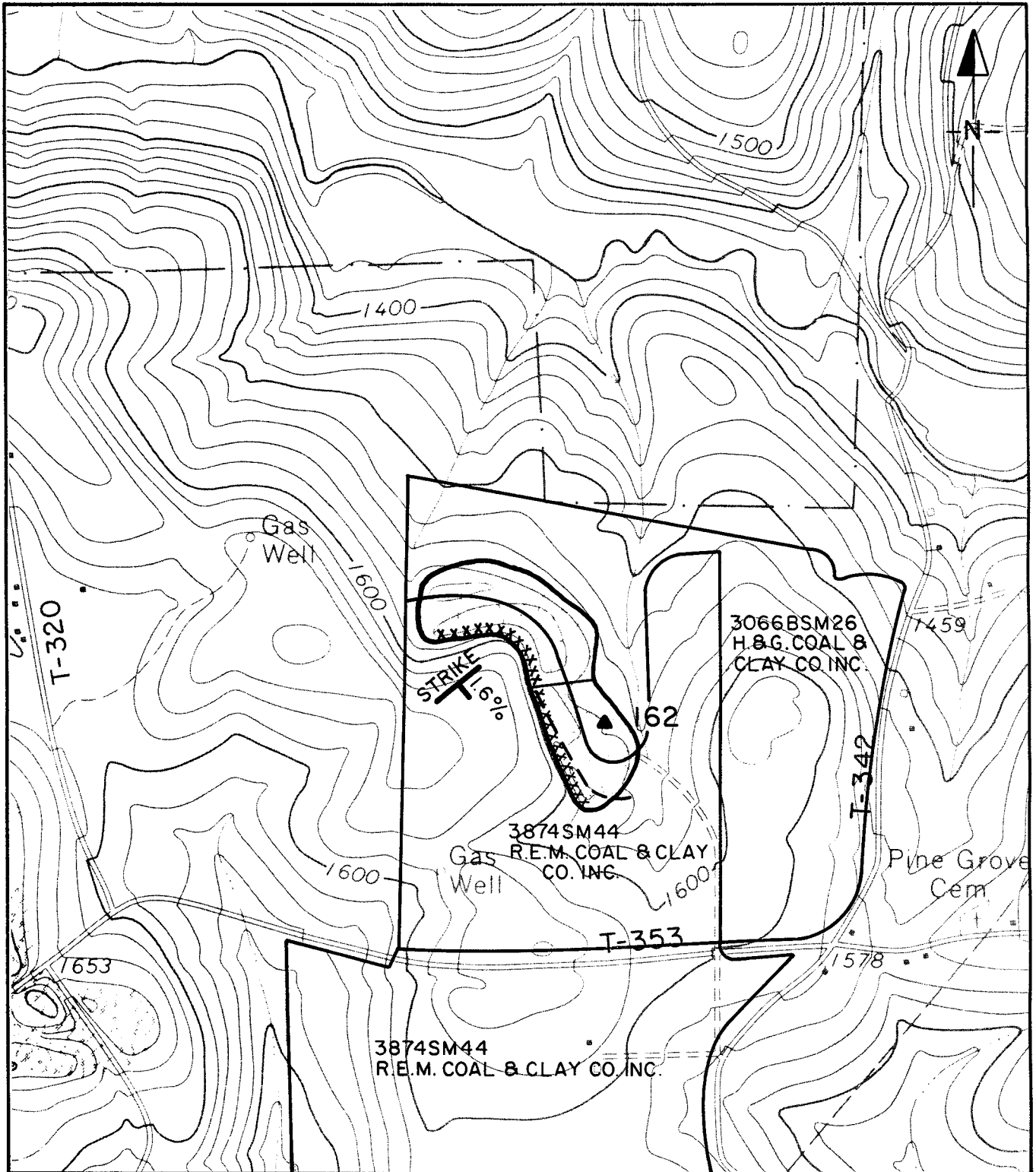
Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
	162	13	.17
			6

Proposed Reclamation Plan - Priority No. 32

To abate the mine drainage at this project area a drainage channel should be constructed along the base of the highwall draining the impoundment and providing rapid runoff of surface water. The affected southern portion of the area should have minimal regrading as necessary to remove carbonaceous material from the surface. This should limit acidity in surface runoff which comes in contact with the pyritic materials present on the surface. The entire southern area should be revegetated to prohibit erosion and utilize precipitation through interception, evaporation, and transpiration,

Estimated Cost:		
Drainage Channel	1000 Feet @ \$30/Ft.	\$30,000
Minimal Regrading	10 Acres @ \$500/Acre	5,000
Revegetation	10 Acres @ \$700/Acre	7,000
	Total Cost	= \$42,000
Approximate Amount of Acid to be Abated		55%
Total Acid Abated		7 lbs/day
Cost of Abatement per lb. of acid per day		\$6,000

# PROJECT AREA XXXI





Cost of Abatement per lb. of acid per day  
129

\$974

AREA XXXII

This is a very large strip mined area. The area is unreclaimed with the highwall unbackfilled and little or no vegetation. The Lower and Middle Kittanning coals were mined at this location. There is a large seepage area located at the western edge of the strip mine workings. A 1941 geologic map shows a drift at this location. The drift is on the Lower Kittanning coal. There is no empirical evidence to support the existence of the drift.

Although the strip mined area is extensive with numerous cuts and depressions only one.. discharge was located. It should be noted that it was impossible to achieve satisfactory fall from weir 165, and consequently the flows are probably unrealistically high.

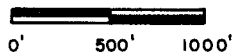
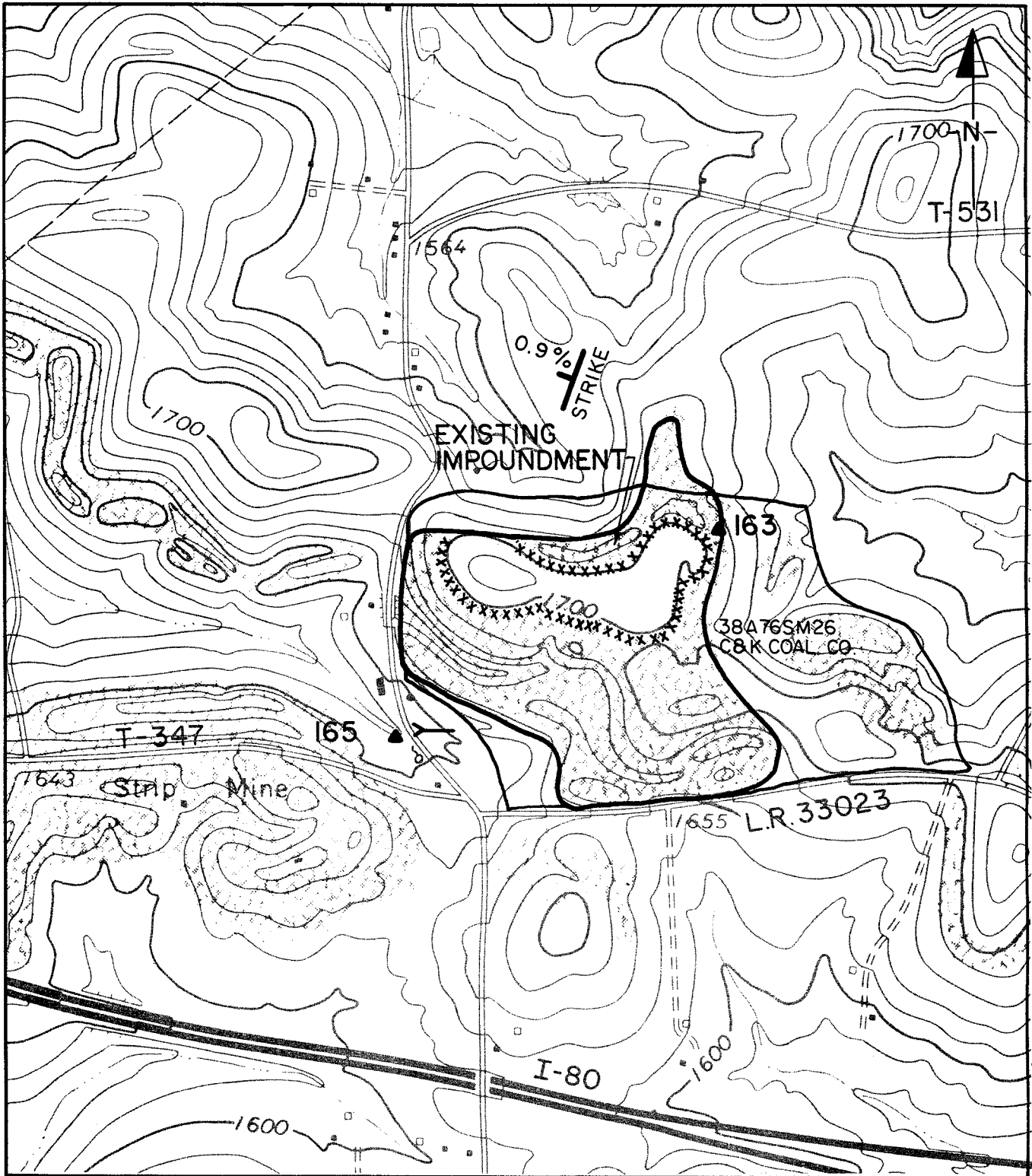
Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
163	3.7	.01	3
165	142	4.5	117
Total	146	4.5	

Proposed Reclamation Plan - Priority No. 22

The strip mine should be terrace backfilled and revegetated to best abate the mine drainage from this source. The existing impoundment should be treated, if necessary , and drained.

Estimated Cost:		
Terrace Backfill	73 Acres @ \$2000/Acre	= \$146,000
Treat and Drain Impoundment		= 1,000
	Total Cost	= \$198,100
Approximate Amount of Acid to be Abated		
Total Acid Abated		60 88 lbs/day

# PROJECT AREA XXXII



PROPOSED RECLAMATION PLAN

AREA XXXII

Alternate Reclamation Plan - Priority No. 27

Construct drainage channels through the strip mined area to promote rapid runoff of surface water thus limiting infiltration. The channels should drain the existing impoundment as well as other major depressions. The entire area should be revegetated.

Estimated Cost:

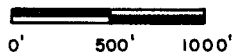
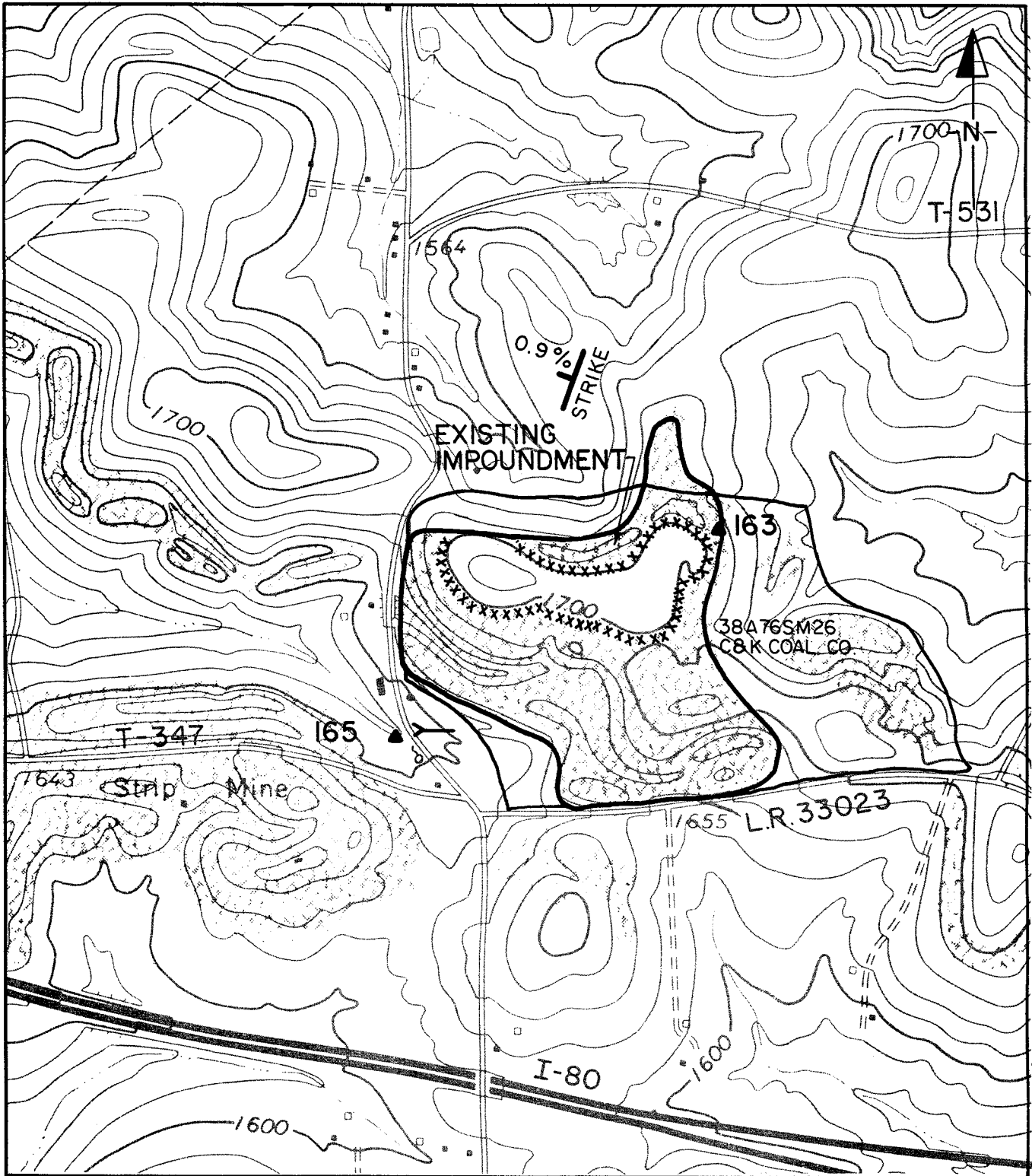
Drainage Channels	5000 feet @ \$30/foot	= \$150,000
Revegetation	73 acres @ \$700/acre	= \$ 51,100
	TOTAL Cost	= \$201,100

Approximate Amount of Acid to be Abated - 40%

Total Acid Abated - 58 lbs/day

Cost of Abatement per lb of acid per day - \$3,467

# PROJECT AREA XXXII



PROPOSED RECLAMATION PLAN

AREA XXXIII

This project area is the site of a strip mine on the Middle Kittanning coal. An unbackfilled highwall nearly 50 feet high is present along the southern part of the strip mine. The strata dips to the west. The spoil bank at the low wall end of the stripping has a sparse growth of small trees, and slopes toward the base of the highwall.

A single discharge of acid mine drainage emerges down dip to the west along a township road.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.)
164	66	.18	10

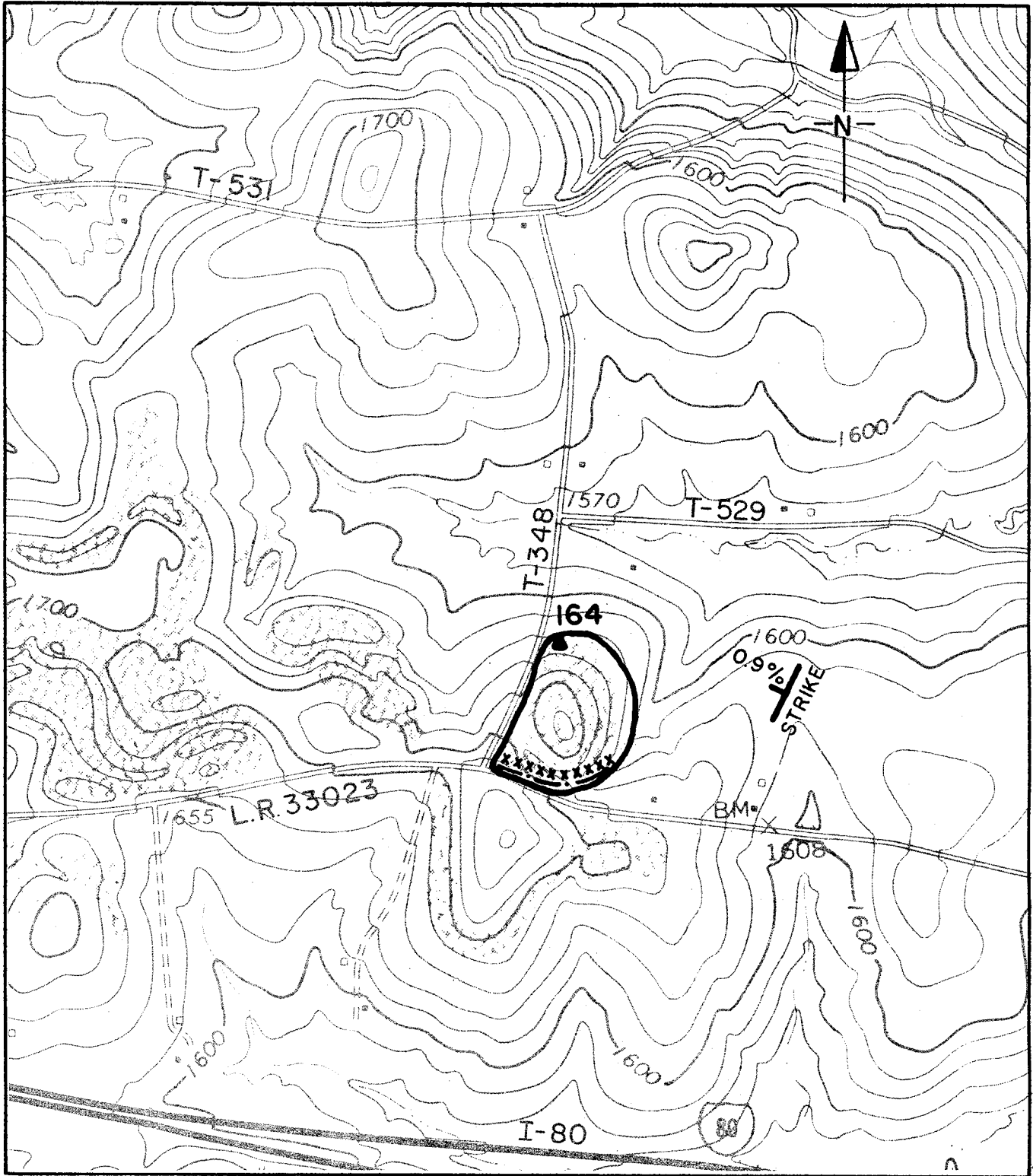
Proposed Reclamation Plan - Priority No. 4

This area should be terrace backfilled, eliminating the depression at the base of the highwall which is apparently responsible for impounding surface water where subsequent infiltration is responsible for the discharge. A diversion ditch should be constructed along the top of highwall to divert surface water away from the backfilled area. The backfilled area should be revegetated with grasses utilizing a soil binder to prevent erosion of the slopes prior to growth of the grasses.

Estimated Cost:

Terrace Backfill	18 Acres @ \$2000/Acre	= \$36,000
Diversion Ditch	1000 Feet @ \$3.00/Ft.	= 3,000
Revegetation	18 Acres @ \$700/Acre	= 12,600
	Total Cost	= \$51,600
Approximate Amount of Acid to be Abated		80%
Total Acid Abated		53 lbs/day

# PROJECT AREA XXXIII



0' 500' 1000'

AREA XXXIV

This area was strip mined for the Lower Kittanning coal. The majority of the area is forested with evergreens. The Pennsylvania Geological Survey's Atlas #54 shows a drift at the location of discharge #166 although field investigations were unsuccessful in determining its location. A pond at the southern end of the strip mine is filled from a spring located across the township road. The embankment forming the pond is comprised of spoil material from the strip mine and is not impervious. The water quality in the pond is good with a pH near neutrality although upon seeping through the embankment becomes quite acidic.

Discharge #166 comes from the area of the alledged drift and is primarily of a wet weather nature, being dry throughout the summer months. Elimination of the data from the 10th sampling period which had an unusually high flow would indicate the acid load from this source was less than 1 lb/day. Discharge #168 is the collection of seepage through the pond embankment. Acid mine drainage sources 170 through 172 flow from the western edge of the strip mine, and are dry through the summer months. During high flow months the acid produced by these three discharges has reached 95 lbs./day.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
166	6.7	.01	7
170	6.1	0	3
171	14	0	6
172	.58	.01	2
<u>TOTAL</u>	<u>27</u>	<u>.02</u>	

Proposed Reclamation Plan - Priority No. 34

The area around discharge 166 is well forested and the acid load from the discharge small. This area should be allowed to remain in its present condition. To abate the acid mine drainage originating in the strip mine, drainage channels should be constructed as needed to insure rapid runoff of surface water. The affected area should then be planted with appropriate grasses.

AREA XXXIV

Estimated Cost:

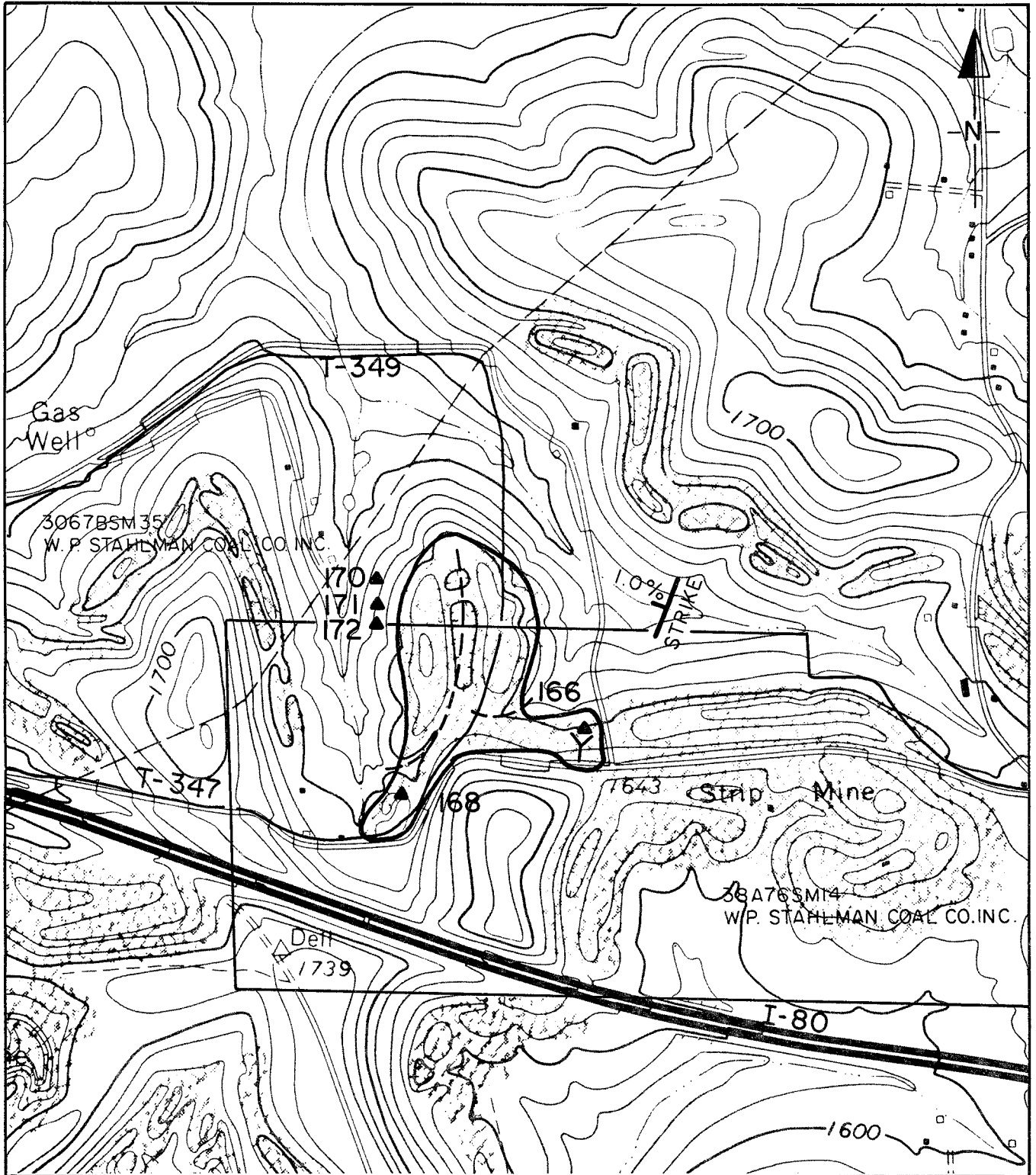
Drainage Channels	1800 feet@ \$30/ft.	= \$54,000
Revegetation	30 acres @ 700/acre	= \$21,000
	TOTAL COST	= \$75,000

Approximate Amount of Acid to be Abated

166	0%
170-172	40%
Total Acid Abated	
166	0 lbs/day
170 - 172	8 lbs/day
	8 lbs/day
Cost of Abatement per lb. of acid per day	\$9,375



# PROJECT AREA XXXIV



0' 500' 1000'

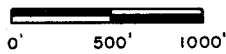
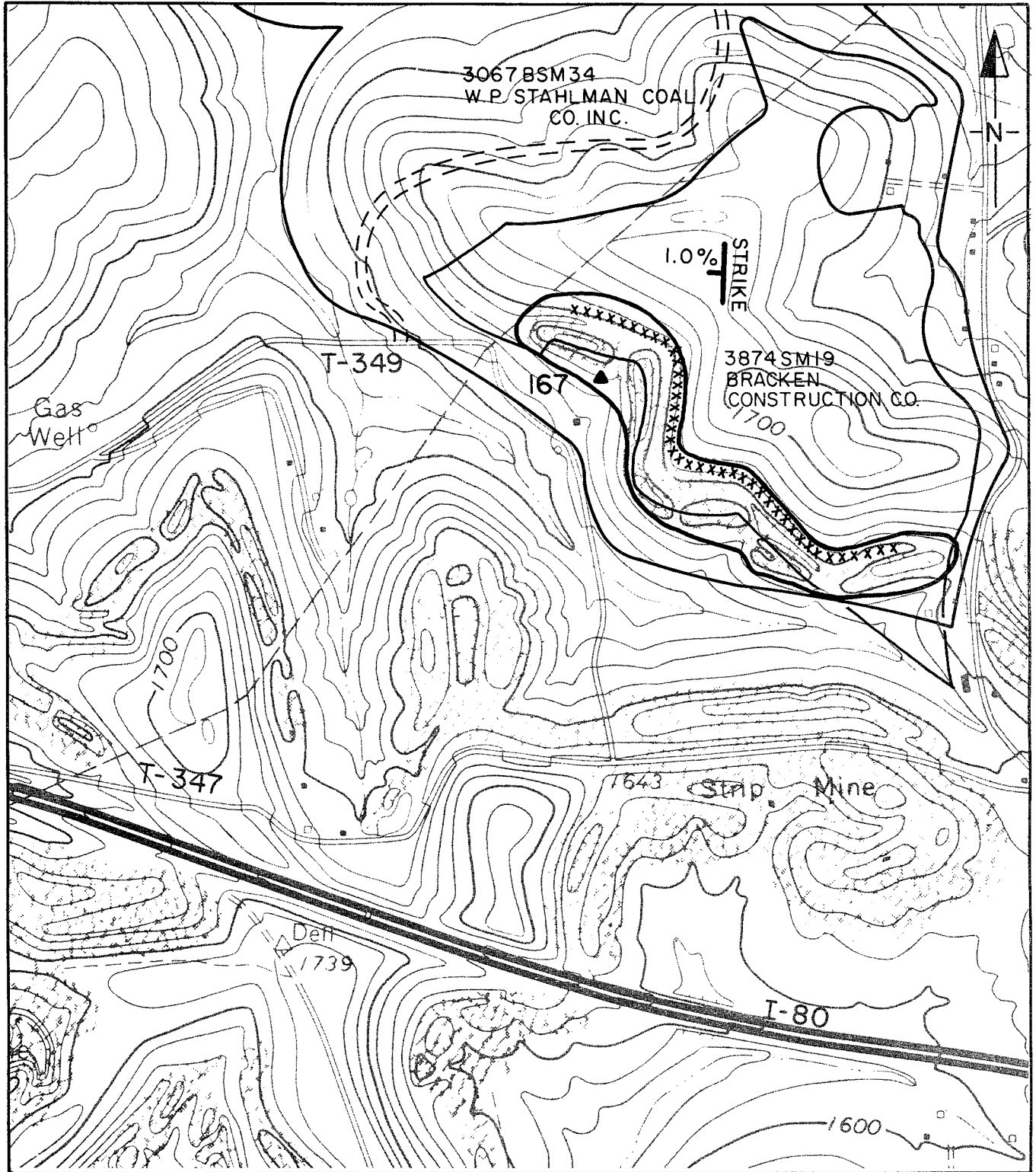
AREA XXXV

This area was strip mined for-the Lower Kittanning\_ coal. The discharge at this location has been eliminated-by an active strip mining operation by Bracken Construction Company, drainage permit 3874SM19o The area is also covered by permit 3067BSM34, W. P. Stahlman Coal Company.

Discharges:	Avg. Acidity (lbs/day (g.p.m.)	Total Fe (lbs/day)	Avg. Flow	
	167	3.6	0	11

No reclamation plan is proposed for this area.

# PROJECT AREA XXXV



AREA XXXVI

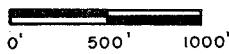
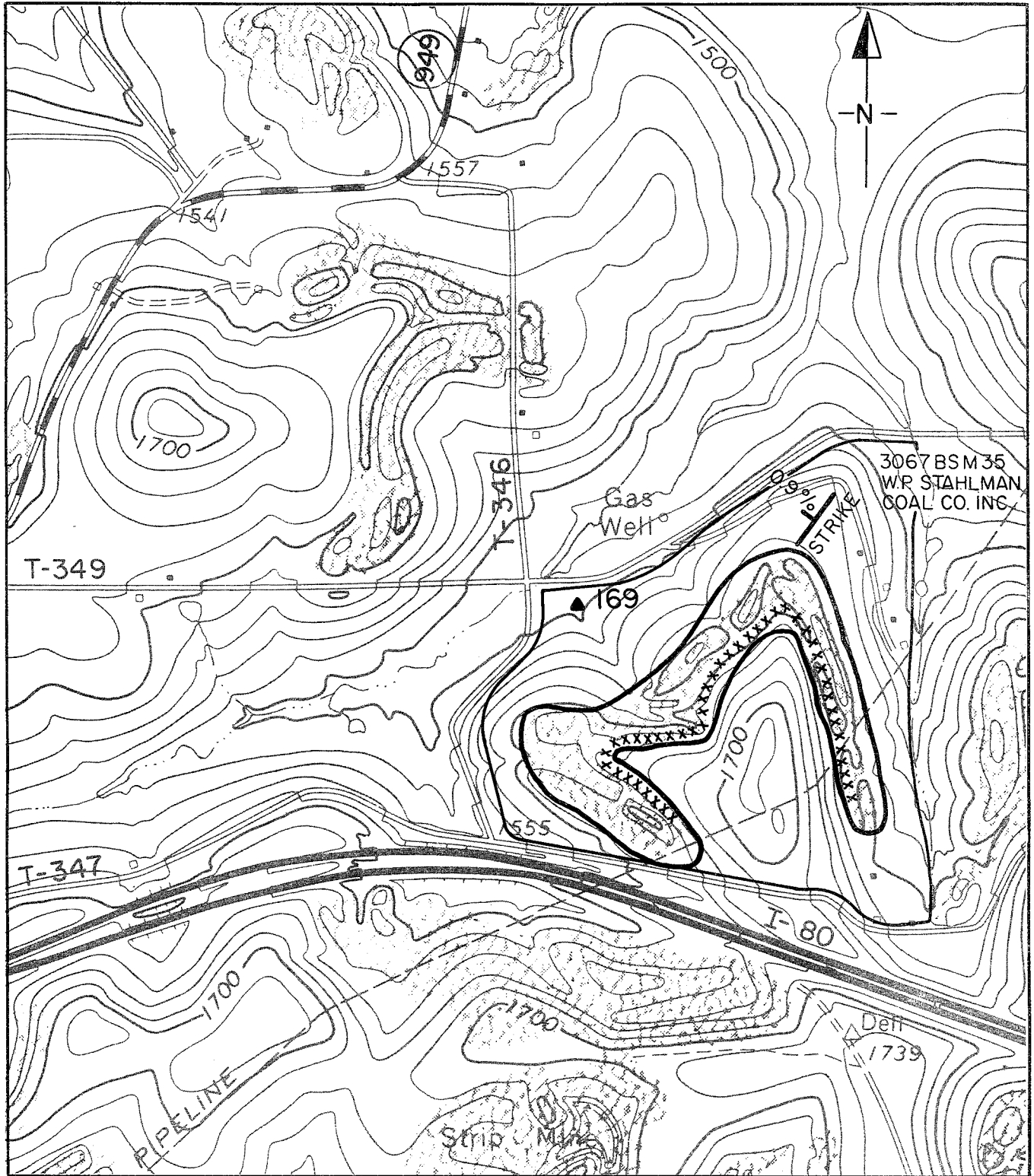
This large hilltop strip mine was left unreclaimed. The area was strip mined for the Lower Kittanning-coal in 1966 by We P. Stahlman Coal Company. The drainage permit-numbers were 17016, and 3067BSM35. Most of the area is grown-up with small trees. There are no impoundments or mine drainage sources located within the strip mined area.

A springlike discharge is located several hundred feet downslope of the strip mined area.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
169	17	.10	32

It is unlikely that any reclamation proposed for this area would abate the acid mine drainage from this source. No reclamation plan is proposed for this project area.

# PROJECT AREA XXXVI



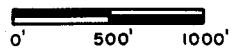
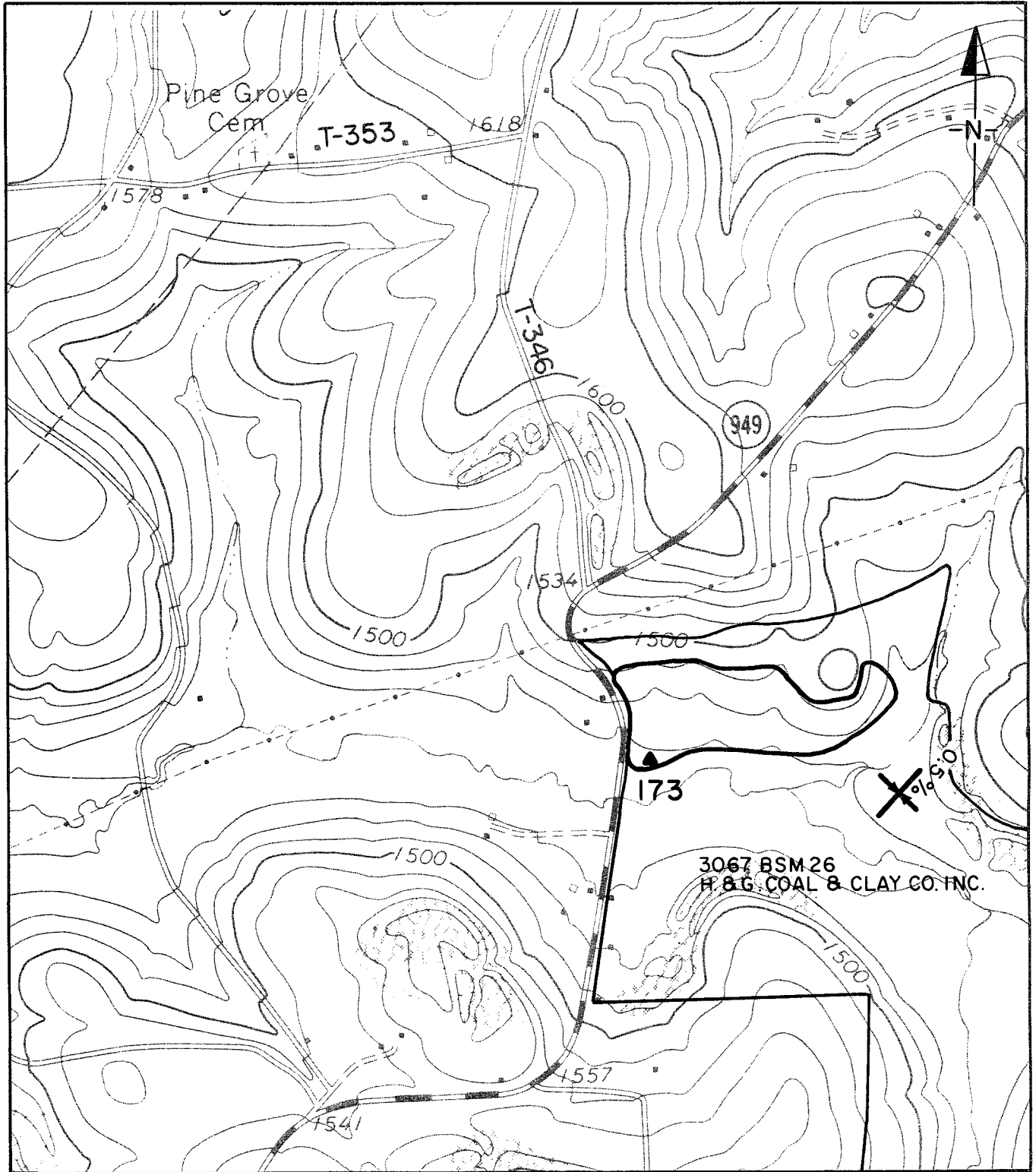
AREA XXXVII

This area has been strip mined at least twice, Apparently the Lower Clarion coals were mined initially and the Upper Clarion coal stripped later by the H & G Coal Company under permit 3067BSM26. This latter stripping has been backfilled and planted with evergreens. The-Upper Clarion strippings are badly eroded and have several discharges, only one of which is acid.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
173	.40	.01	1

Due to the small flow and acid contribution from this source it would be economically infeasible to attempt abatement. The bond held under the H & G Coal Co. permit has not as yet been released. No reclamation plan is offered for this area.

# PROJECT AREA XXXVII



AREA XXXVIII

This area is the location of an unreclaimed strip mine.. The Brookville coal was mined here. A stream enters the area from the south flowing down over the highwall and forming a large impoundment. The discharge from the impoundment flows along the base of the highwall and then through a gravity drain in the spoil bank. The stream which has a pH above 6.0 prior to entering the strip mine leaves the area with a pH around 3.5.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
174	38	7.1	147
175	27	4.8	21
TOTAL	65	12	

Estimated Cost:

Terrace Backfill	18 Acres @ \$2000/Acre	= \$36,000
Stream Relocation	1000 Fees @ \$50/Ft.	= \$50,000
Revegetation	18 Acres @ \$700/Acre	= \$12,600
	Total Cost	= \$98,600

Approximate Amount of Acid to be Abated 70%  
 Total Acid Abated 46 lbs/day

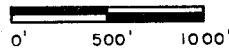
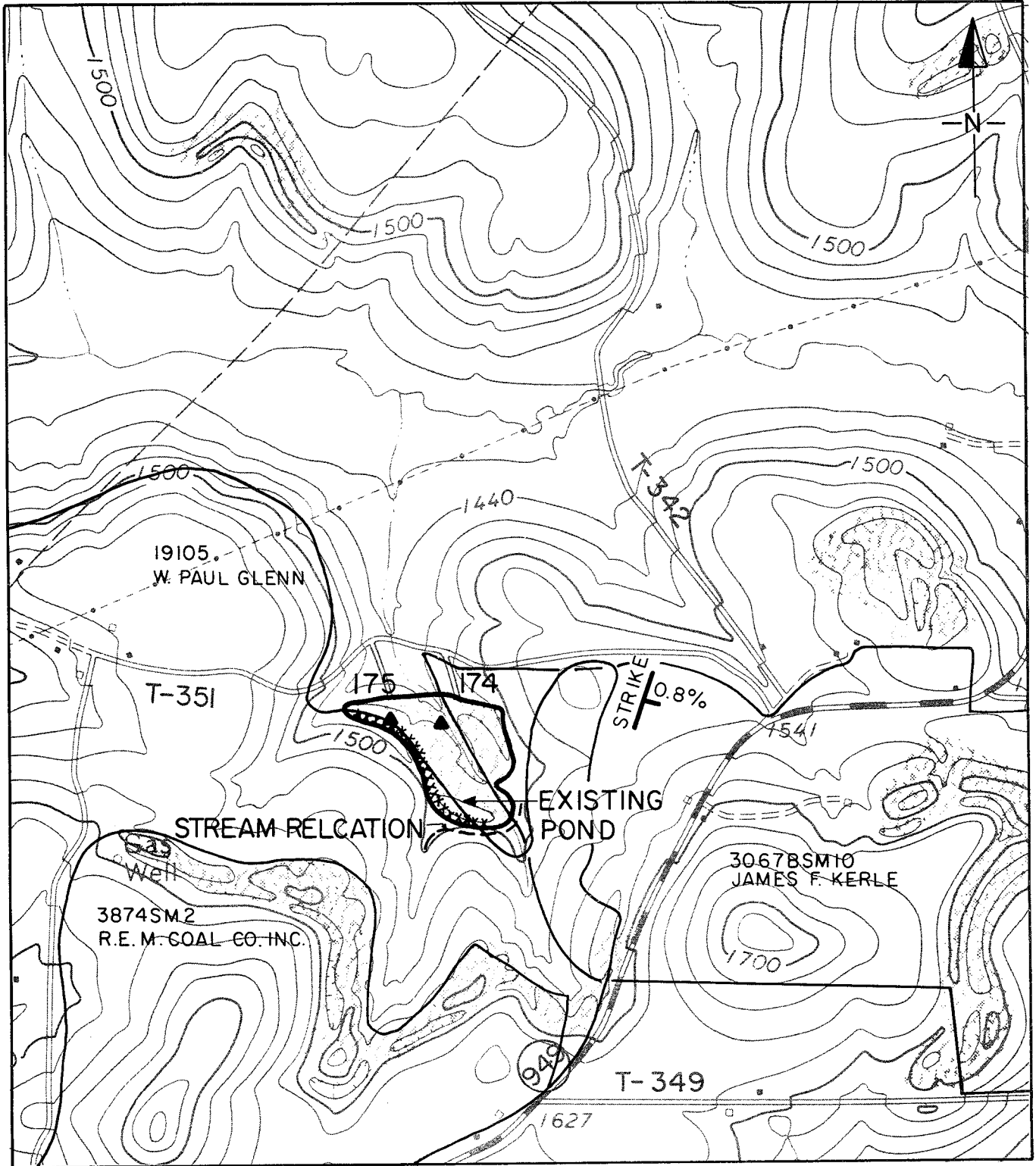
Cost of Abatement per lb. of acid per day \$2,143

Alternate Reclamation Plan - Priority No. 19

The western portion of the strip mine should be reclaimed by constructing a drainage ditch along the base of the highwall to facilitate rapid runoff of surface water. The surface should have minimal regrading where needed to remove carbonaceous shale from the surface and the area should then be revegetated. The stream entering the eastern area should be carried by a clay lined channel across the spoil to discharge into the main stream, an



# PROJECT AREA XXXVIII



PROPOSED RECLAMATION PLAN

AREA XXXVIII

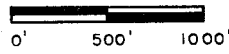
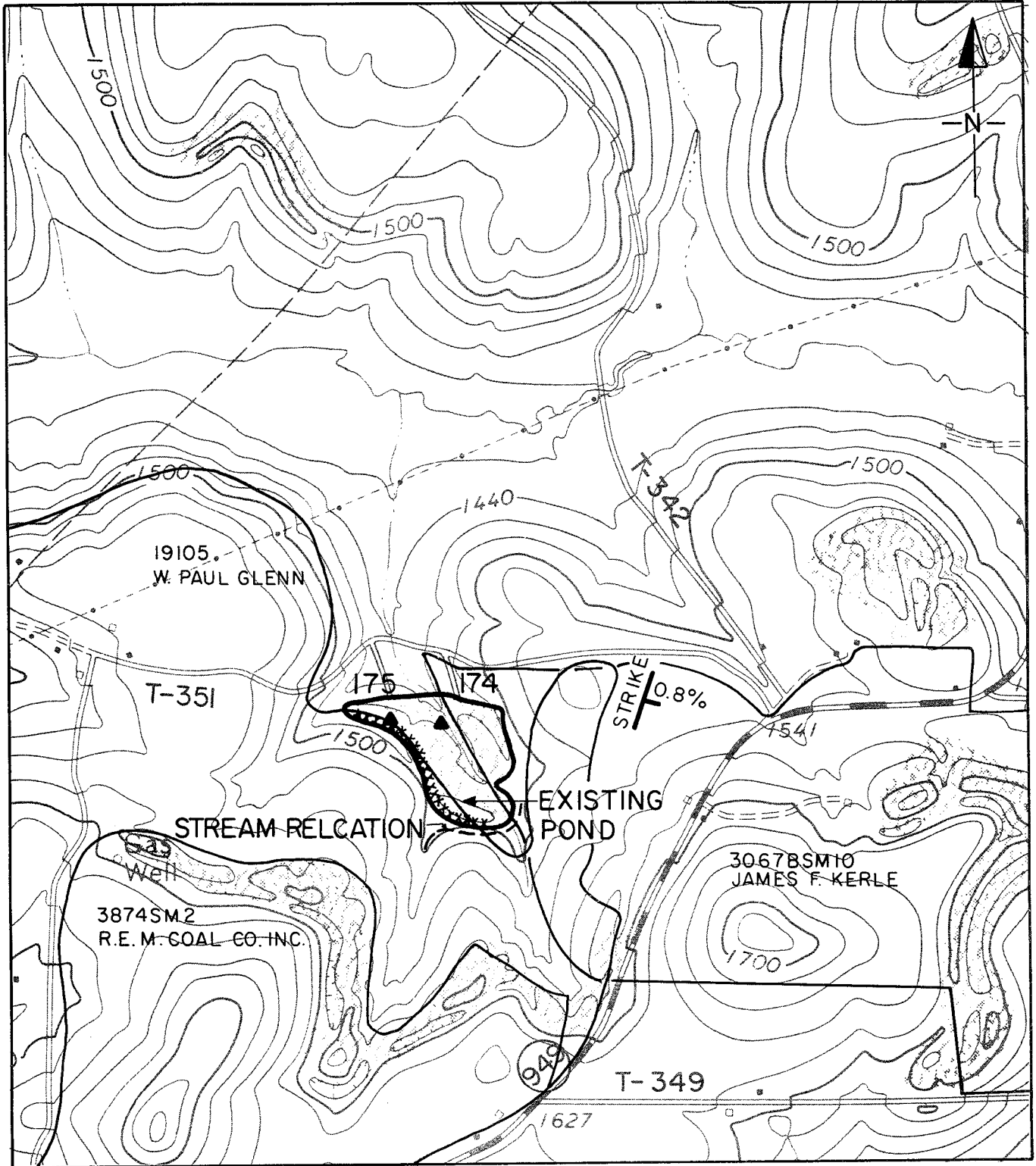
unnamed tributary to Little Mill Creek. The existing stream course through the strip mine should be improved and utilized to carry storm runoff from the area.

Carbonaceous material should be graded from the surface and the area planted with grass.

Estimated Cost:

Drainage Channels	2100 Feet @ \$30/Ft.	\$63,000
Lined Stream Channel	400 Feet @ \$50/Ft.	20,000
Minimal Regrading	6 Acres @ \$500/Acre	3,000
Revegetation	18 Acres @ \$700/Acre	12,600
	Total Cost	= \$98,600
Approximate Amount of Acid to be Abated		55%
Total Acid Abated		36 lbs/day
Cost of Abatement per lb. of acid per day		\$2,739

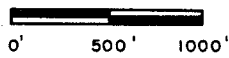
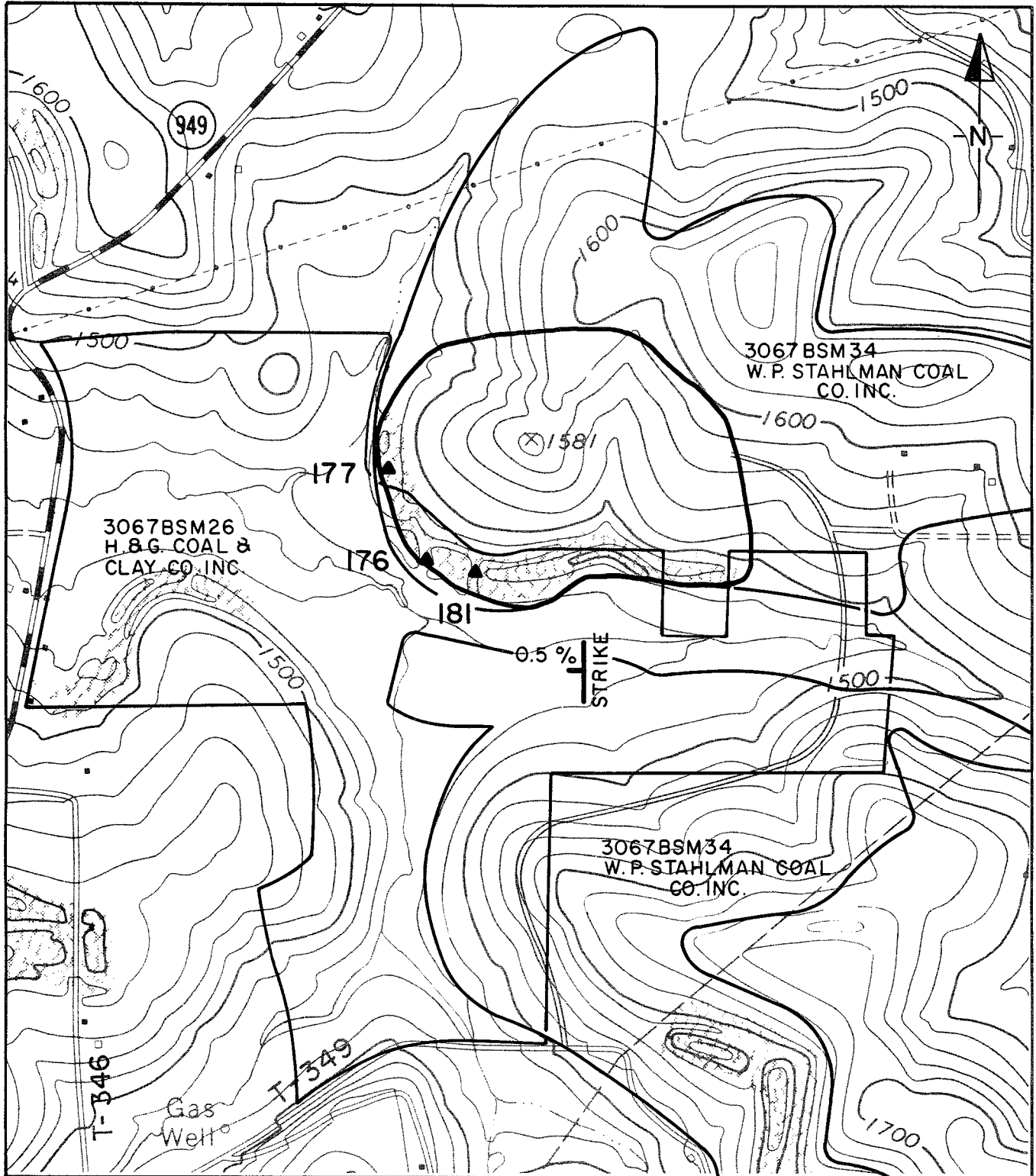
# PROJECT AREA XXXVIII



PROPOSED RECLAMATION PLAN



# PROJECT AREA XXXIX



AREA XL

The small strip mine has been backfilled and planted with a sparse growth of small evergreens. The Middle Kittanning coal was mined at this location. The ground slopes to the north with acid mine drainage seeping out at several places along the lower slopes adjacent to Route 322. The area is covered by mine drainage permits 2765BSM35, James Kerle Coal Co.; 2767BSM12, W. P. Stahlman Coal Co.; and 3675SM66, Midway Resources, Inc.

Discharges:	Avg. Acidity(lbs/day)	Total Fe(lbs/day)	Avg.Flow(g.p.m.)
	179	24	3.5
			6

Proposed Reclamation Plan - Priority No. 35

Drainage channels should be constructed as necessary to facilitate rapid runoff of surface water and avoid infiltration. The area should be planted with appropriate grasses.

Estimated Cost:

Drainage Channels	3200 Ft. @ \$30/Ft.	= \$96,000
Revegetation	33 Acres @ \$700/Acre	= <u>\$23,100</u>
	Total	\$119,100

Approximate Amount of Acid to be Abated	50%
Total Acid Abated	12 lbs/day
Cost of Abatement per lb. of acid per day	\$9,925

Alternate Abatement Plan - Priority No. 29

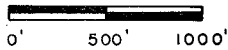
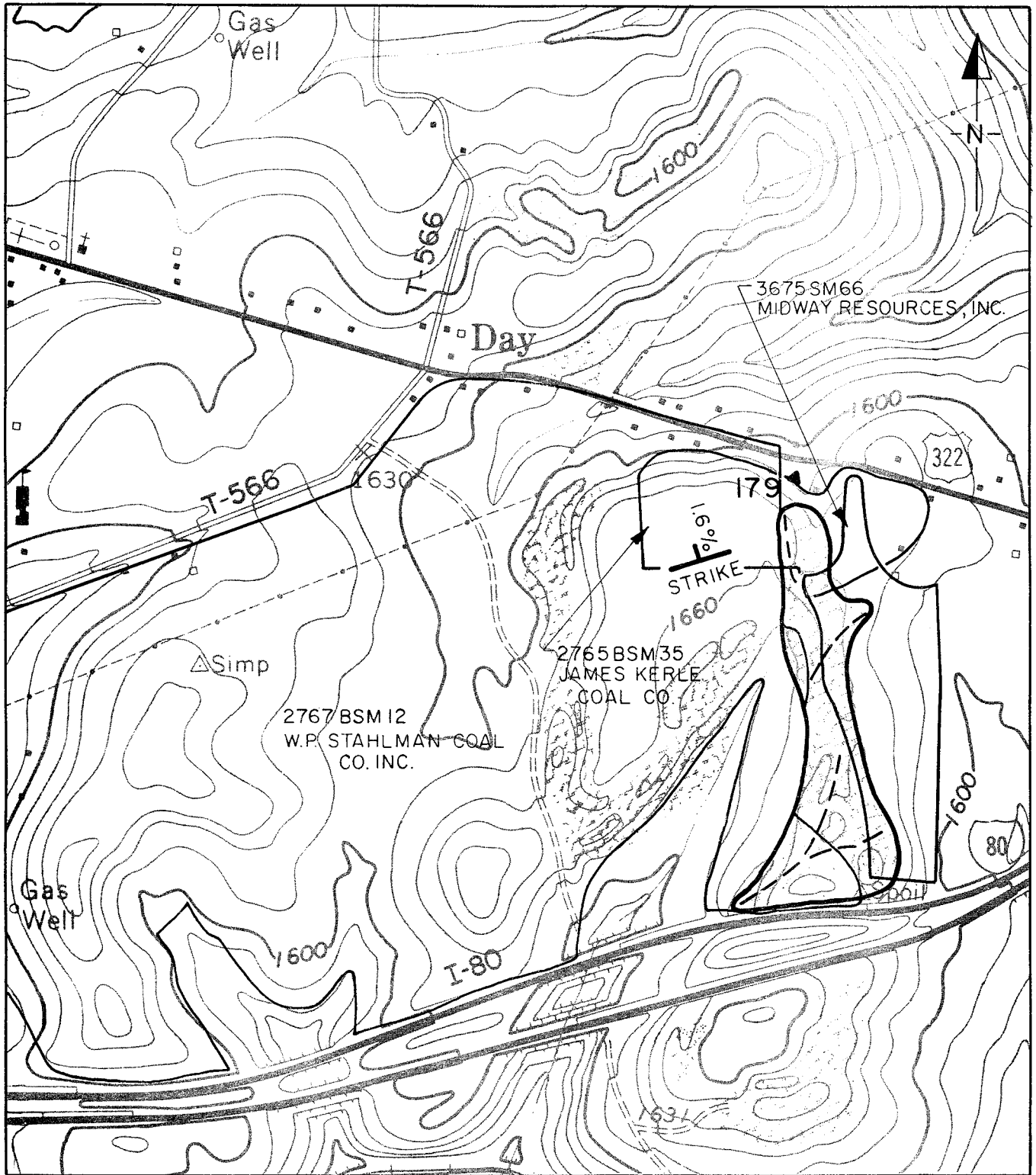
Abatement of some of the acid may be accomplished at less expense by regrading to eliminate depressions and facilitate rapid, positive drainage. The entire area should then be seeded with an appropriate grass mixture.

Estimated Cost:

Minimal Regrading	33 Acres @ \$500/Acre	= \$16,500
Revegetation	33 Acres @ \$700/Acre	= \$23,100
	Total	\$39,600

Approximate Amount of Acid to be Abated	35%
Total Acid Abated	8 lbs/day
Cost of Abatement per lb. of acid per day	\$4,950

# PROJECT AREA XL



PROPOSED RECLAMATION PLAN

AREA XLI

This area has been recently strip mined for coal. This area is quite extensive and it appears that the Lower and Upper Clarion, Lower Kittanning, and Middle Kittanning seams were removed. The area has been satisfactorily backfilled and planted with evergreens. Portions of this area are covered by mine drainage permits 3874SM19, Bracken Construction Co.; 3067BSM34, W. P. Stahlman Coal Co.; and 3067BSM26, H & G Coal and Clay Co.

Along the toe of spoil there are numerous areas of acid mine drainage seepage. This seepage collects in two separate channels.

Discharges:	Avg.Acidity(lbs/day)	Total Fe(lbs/day)	Avg.Flow(g.p.m.)
182	6	.37	7
187	9.3	4.5	5
Total	15	4.9	

Proposed Reclamation Plan - Priority No. 38

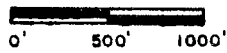
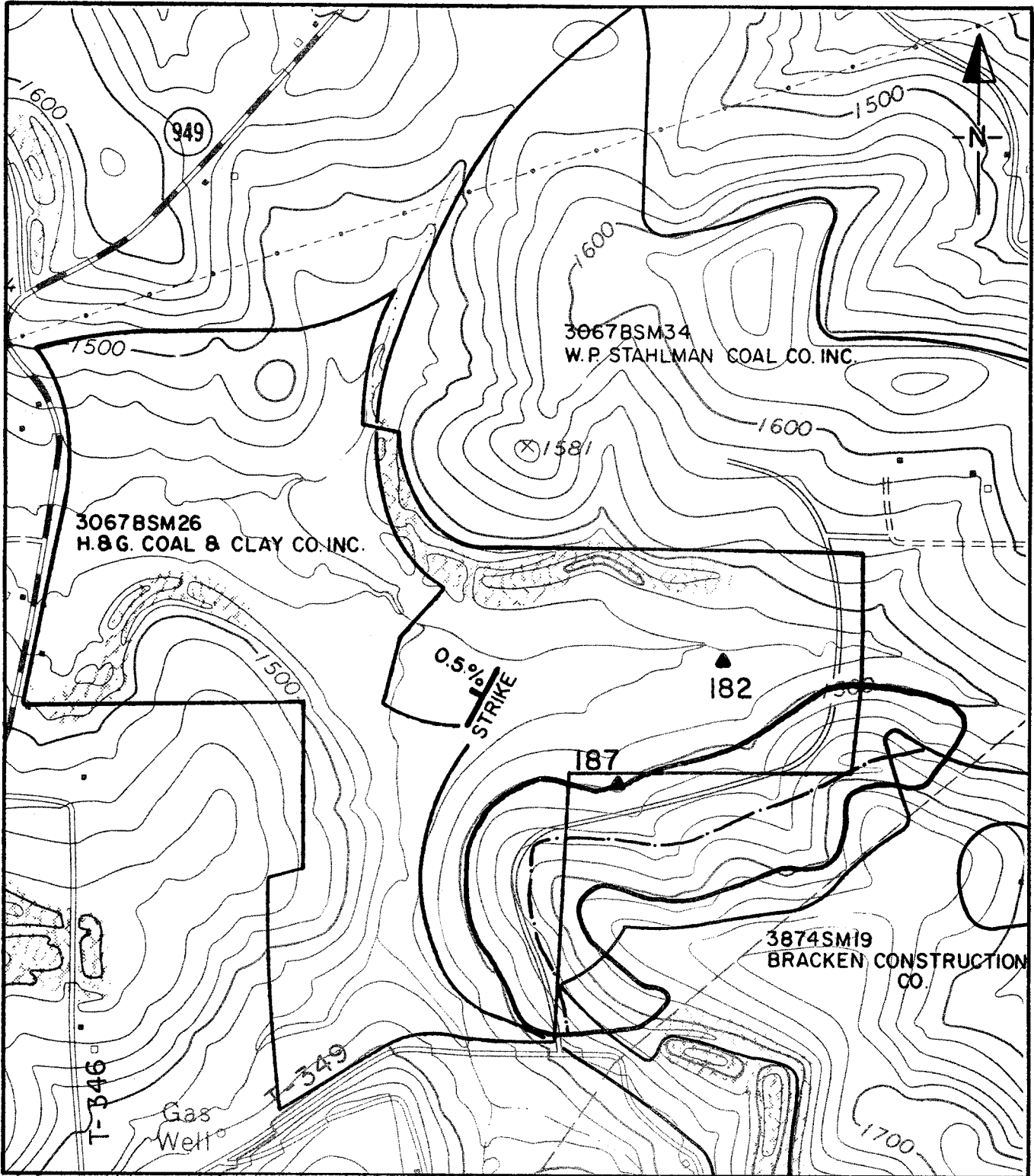
A diversion ditch should be constructed along the dirt road that bisects this area to prevent surface water from flowing across the lower area. The existing growth of small trees appears to be inadequate and the area should be planted with grasses to further limit the amount of precipitation which presently infiltrates into the spoil material.

Estimated Cost:

Diversion Ditch	4200 Ft. @ \$5.00/Ft.	= \$21,000
Revegetation	83 Acres @ \$700/Acre	= \$58 100
	Total	\$79,100
Approximate Amount of Acid to be Abated		30%
Total Acid Abated		5 lbs/day



# PROJECT AREA XLI



## AREA XLII

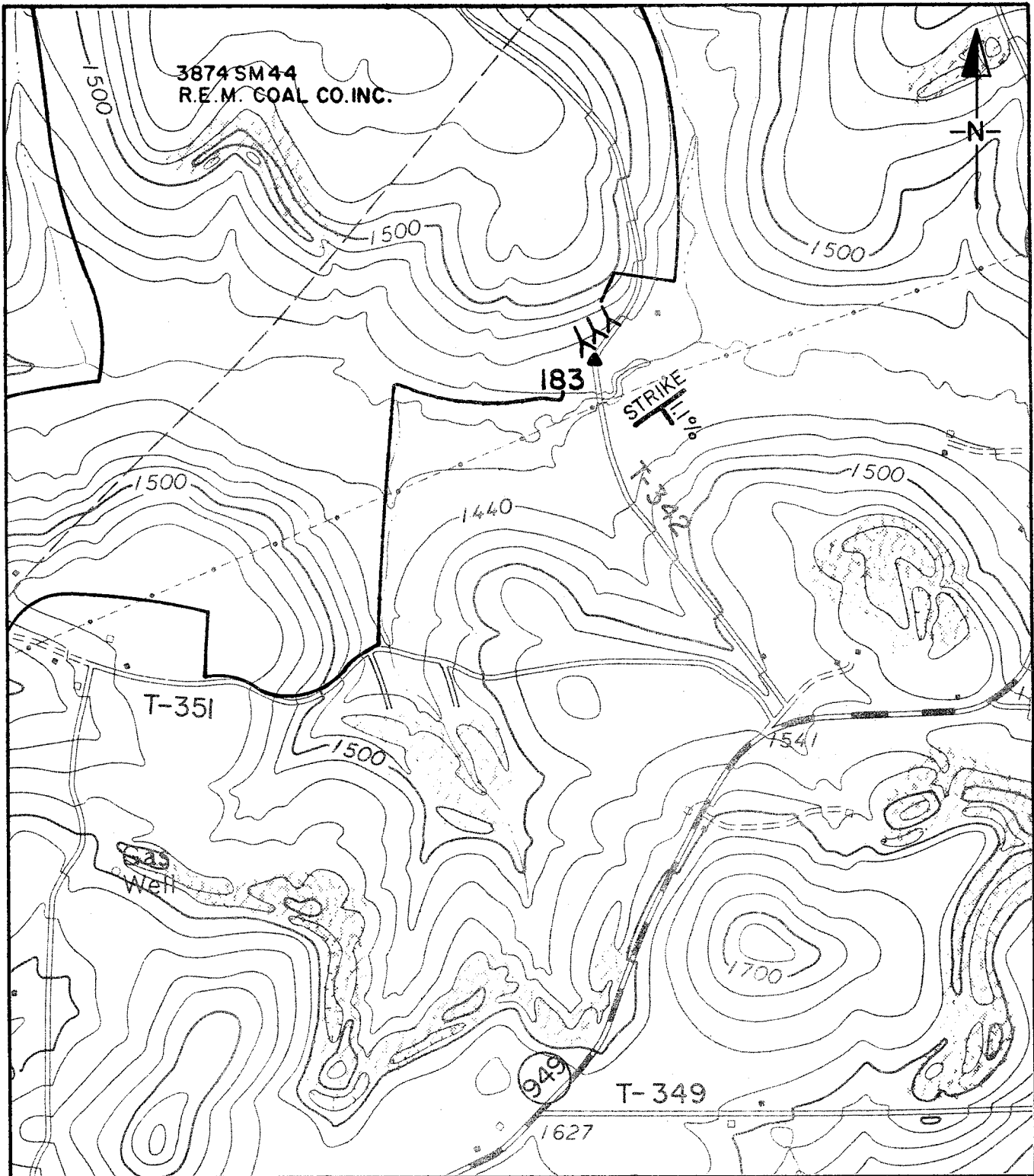
There are several small drifts at this location. The Brookville coal was apparently mined here. The area is well forested and the drifts appear to be quite old. The size of the refuse piles suggest that the workings are not extensive and probably not interconnected.

Only one of the openings has a discharge.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
183	-.20	.10	8

Since this location is not contributing any acid to the adjacent Little Mill Creek no reclamation should be conducted at this location.

# PROJECT AREA XLII



AREA XLIII

This area is the location of three abandoned gas wells. Two of these wells were previously sealed under a Department of Environmental Resources gas well sealing project. All three wells are presently discharging. Discharge 185 is from UNG Well No. C-3178 and was previously sealed. The flow from this well is quite dissipated and difficult to weir. Discharge 203 is from UNG Well No. C-3179 and was also sealed previously. The third well (discharge 184) discharges a moderate flow of acidic water, forming a large swampy area. The dissipated nature of the discharge made it difficult to weir.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
184	est. 65	est. 18	est. 15
185	est. 23	est. 26	est. 8
203	est. 158	est. 28	est. 50
Total	est. 246	est. 72	

Proposed Reclamation Plan - Priority No. 12

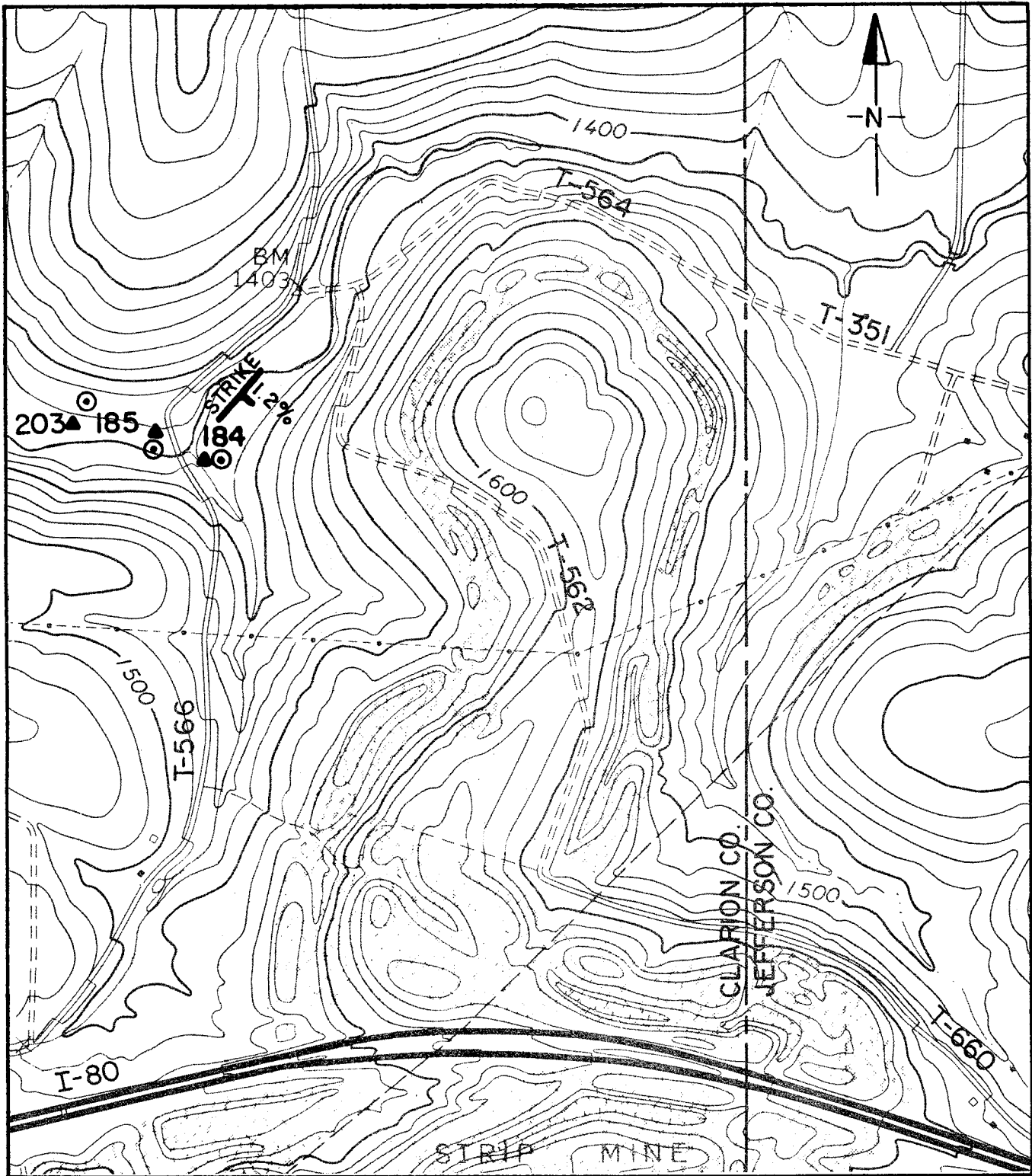
To abate this estimated 246 lb./day of acid these wells should be sealed with concrete. To prevent the possibility of one well serving to drain the others all three wells need be sealed.

Estimated Cost:

Seal Three (3) Abandoned Gas Wells = \$30,000

Approximate Amount of Acid to be Abated	85%
Total Acid Abated	209 lbs./day
Cost of Abatement per lb. of acid per day	\$144

# PROJECT AREA XLIII



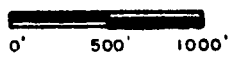
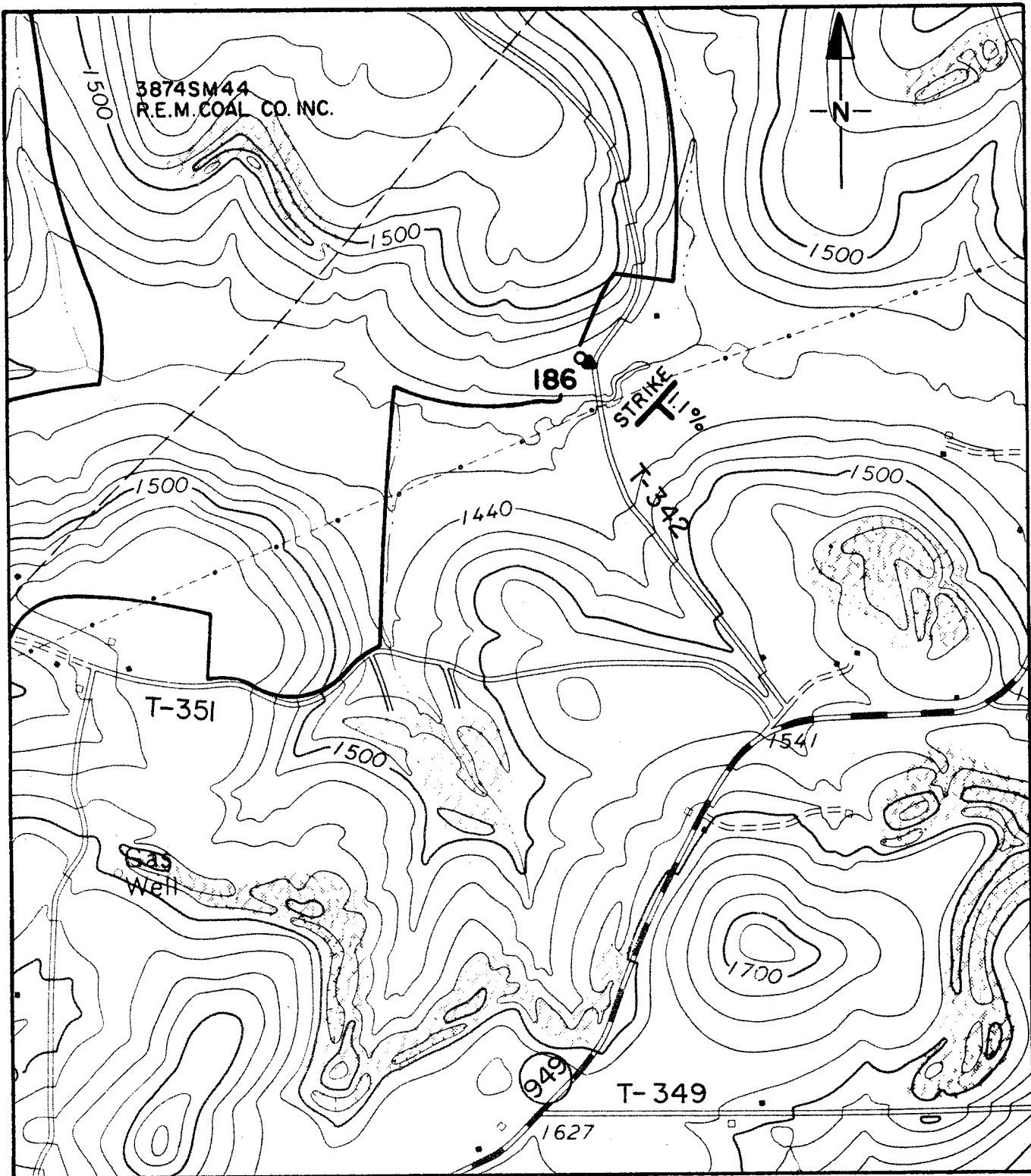
AREA XLIV

This is the site of the Phillips Well No. 3020, an abandoned gas well. This well was sealed under Department of Environmental Resources well sealing project S.L. 133-1. The well is now discharging a small flow of slightly alkaline water.

Discharge:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
186	0	.11	2

Due to the alkaline nature of the discharge from this well, no reclamation is proposed.

# PROJECT AREA XLIV



AREA XLV

This is the location of two (2) abandoned gas wells.

Discharges:	Avg. Acidity (lbs/day)	Total Fe (lbs/day)	Avg. Flow (g.p.m.)
101	48	22	14
188	est. 10	est. <u>3.9</u>	est. 5
Total	est. 58	est. <u>26</u>	

Proposed Reclamation Plan - Priority No. 13

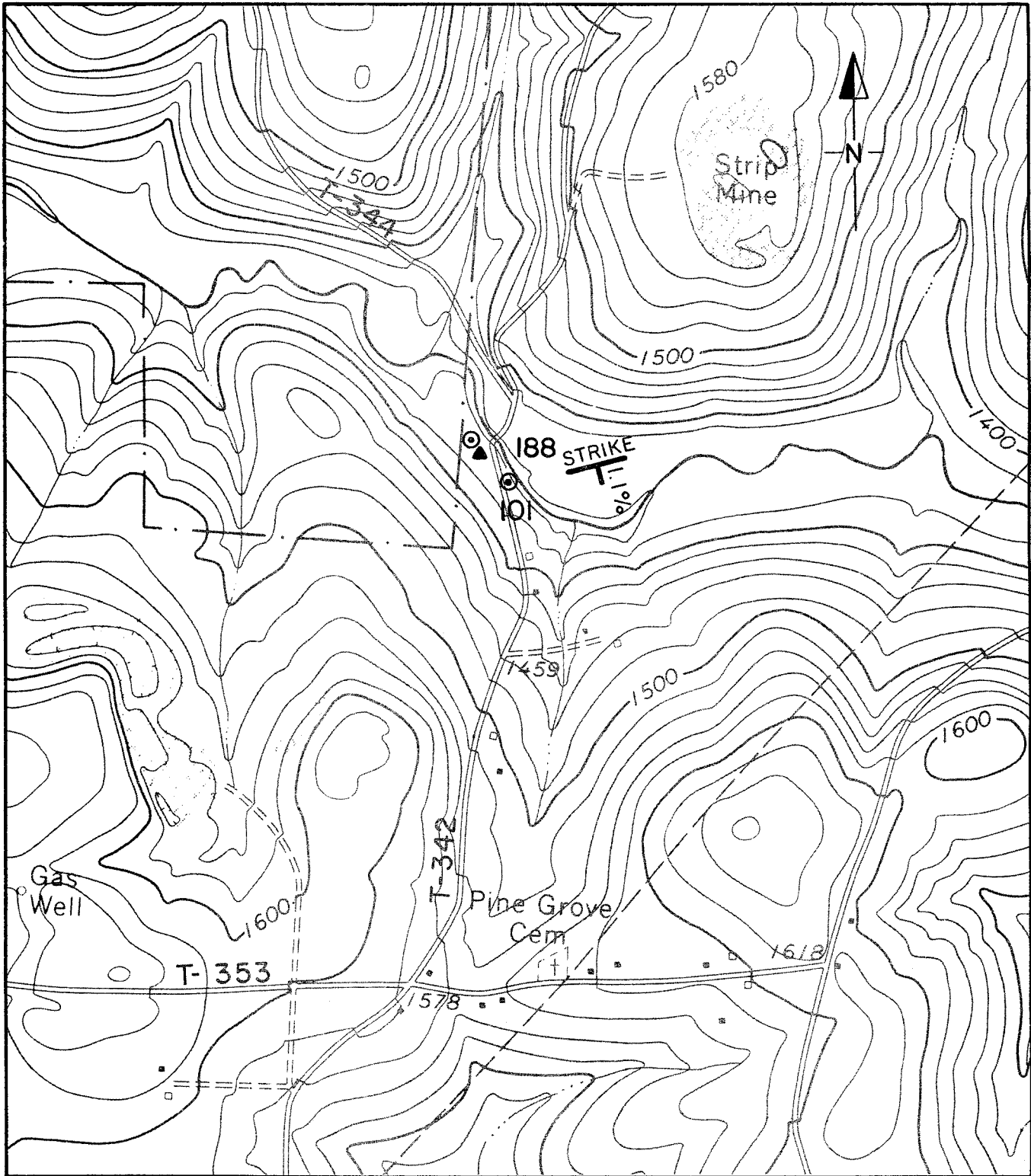
It is recommended that these wells be sealed to abate the input of acid into Mill Creek, which is less than 100 feet away from well #101. Sealing of this well should be done only if an adjacent well, Discharge 188, is also sealed.

Estimated Costs: Seal Two (2) Abandoned Gas Wells \$20,000

Amount of Acid to be Abated 85%  
 Total Acid Abated 49 lbs/day  
 Cost of Abatement per lb. of acid per day \$408



# PROJECT AREA XLV



0' 500' 1000'