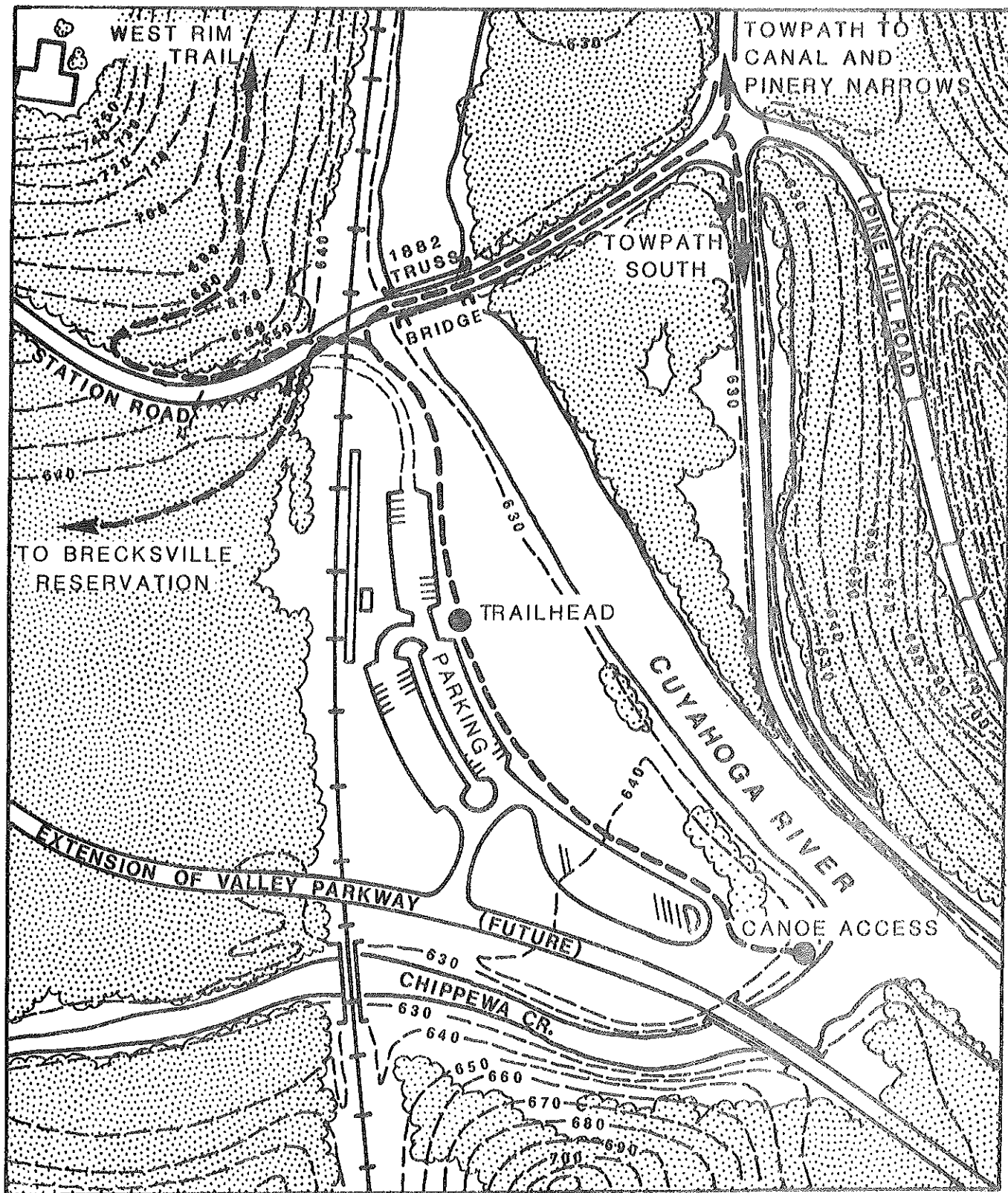


APPENDIX A TRAILHEAD SITE PLANS

The following sketches show the plan's intent concerning the layout of trailhead parking areas. Siting is approximate and will be adjusted to field conditions before construction.

The basemaps are traced from the Cuyahoga County Sanitary Engineer's 1"=200' Orthophoto Maps, taken in 1978, (c/o Graphco, Cleveland, Ohio), except those for (G) Ira, (K) Wetmore Horse Center, (M) Everett Bridge, (P) Old Orchard, and (S) Yellow Creek: no accurate topographic mapping for these sites is available. No map is shown for the Fawn Pond Trailhead (see Trail Priority 12: West Rim Trail - South Section) since its development is part of the fishing pond program. The two trailheads (Highland and Sunset Knob) associated with future trails beyond the scope of this plan are not shown.



CVNRA TRAIL PLAN

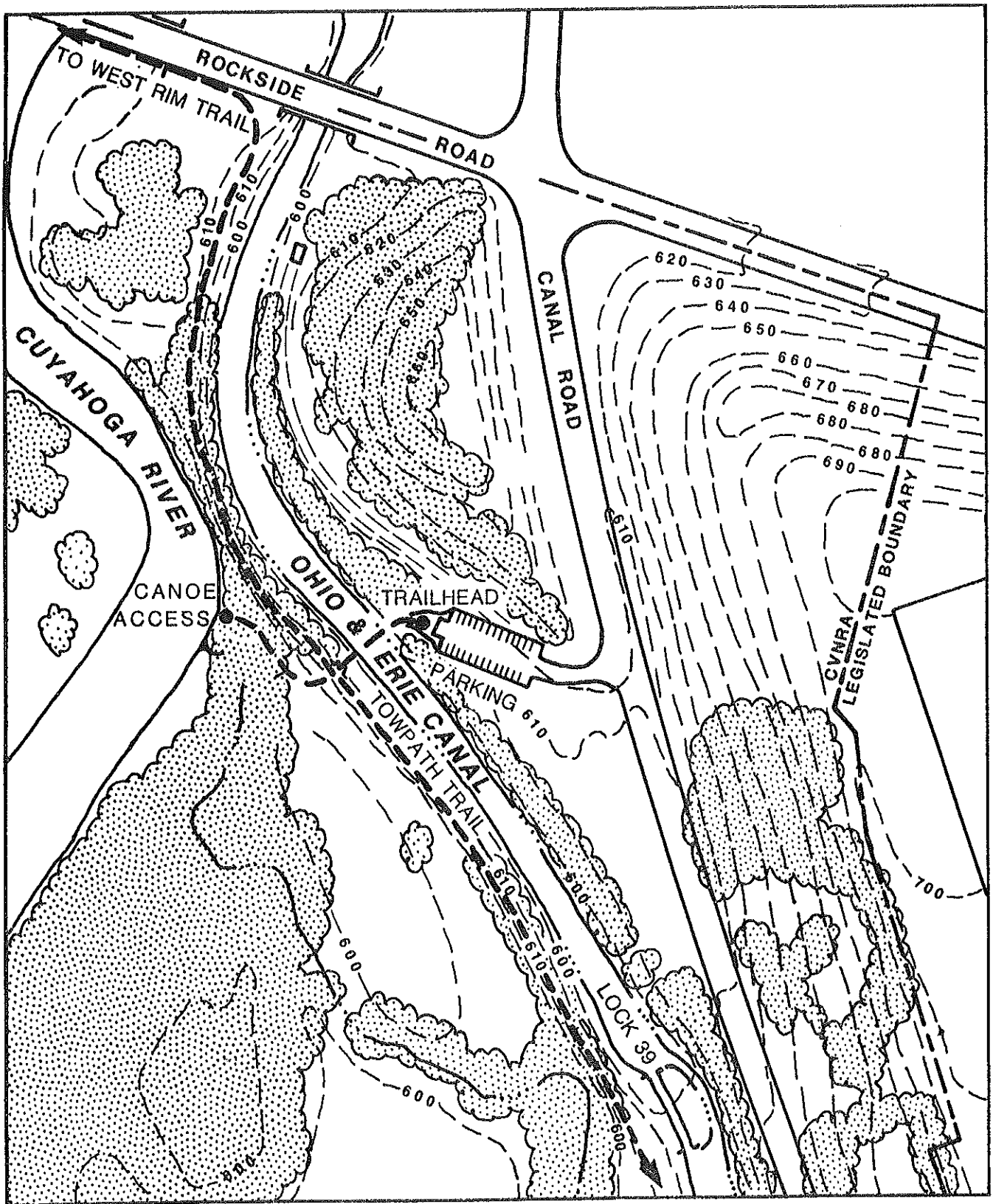
United States Department of the Interior
National Park Service

A STATION ROAD TRAILHEAD

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CVNRA	OCT. 84



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CVNRA TRAIL PLAN

United States Department of the Interior
National Park Service

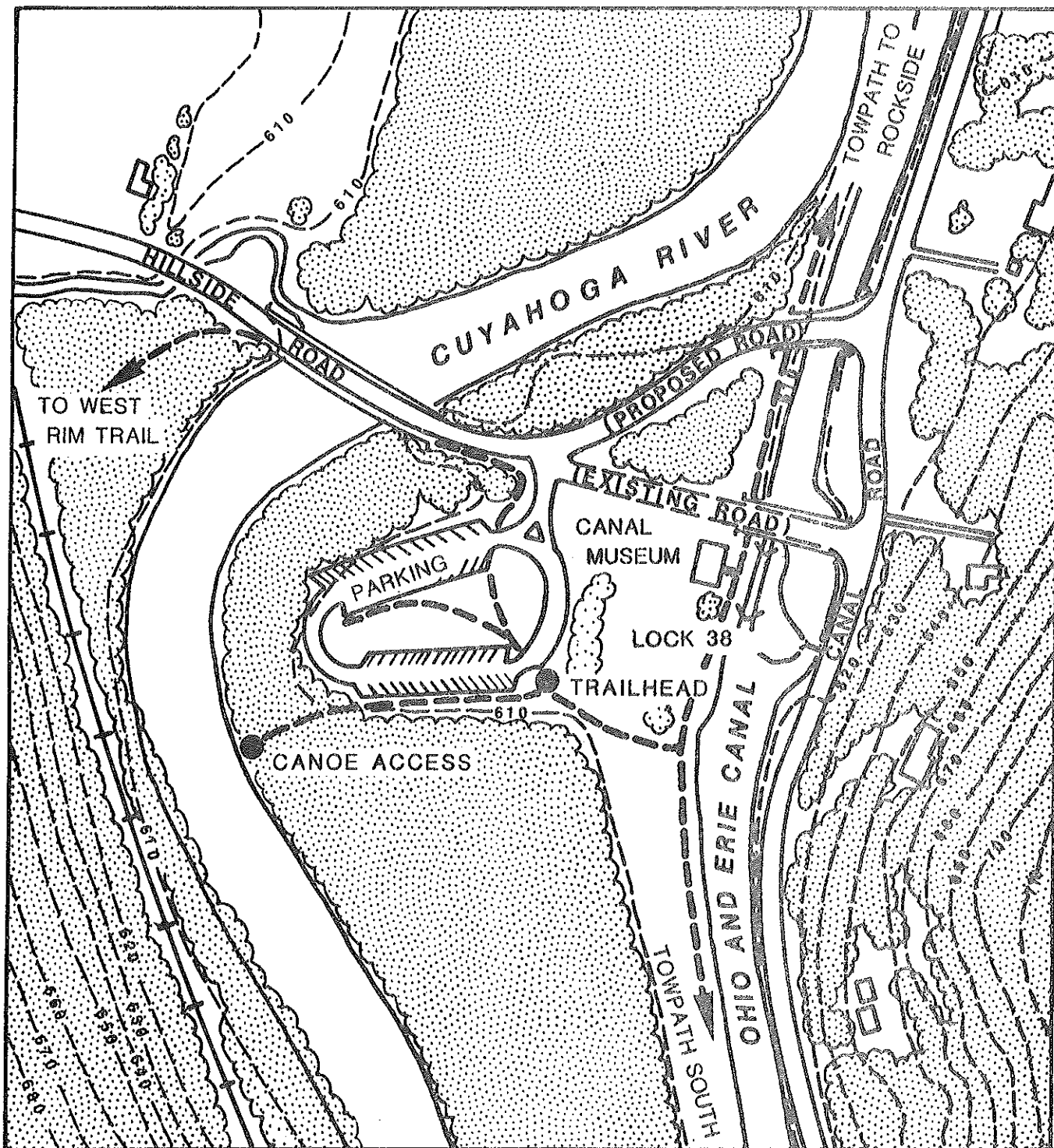
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LOCK 39 TRAILHEAD

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CVNRA TRAIL PLAN

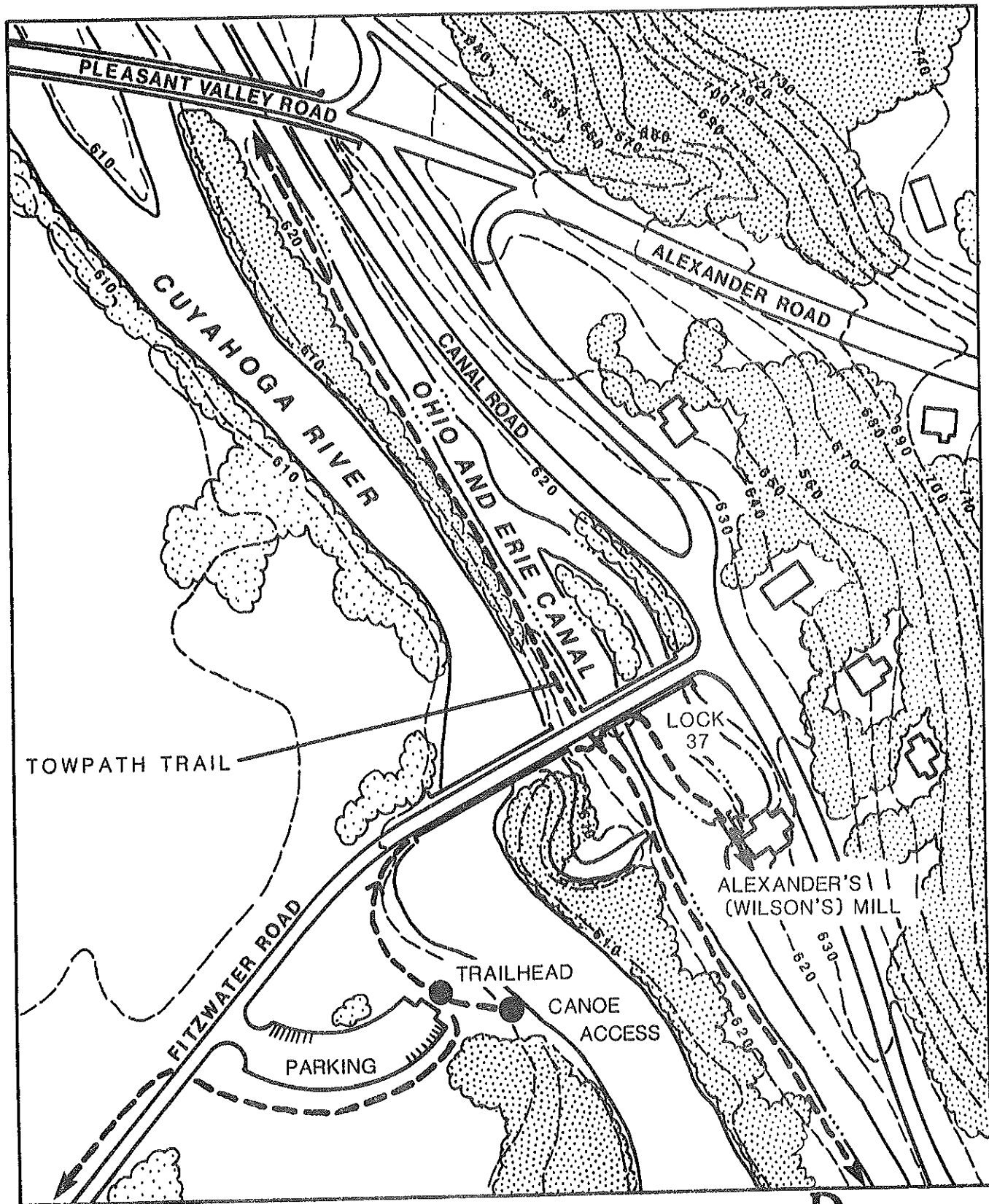
United States Department of the Interior
National Park Service

C CANAL MUSEUM TRAILHEAD

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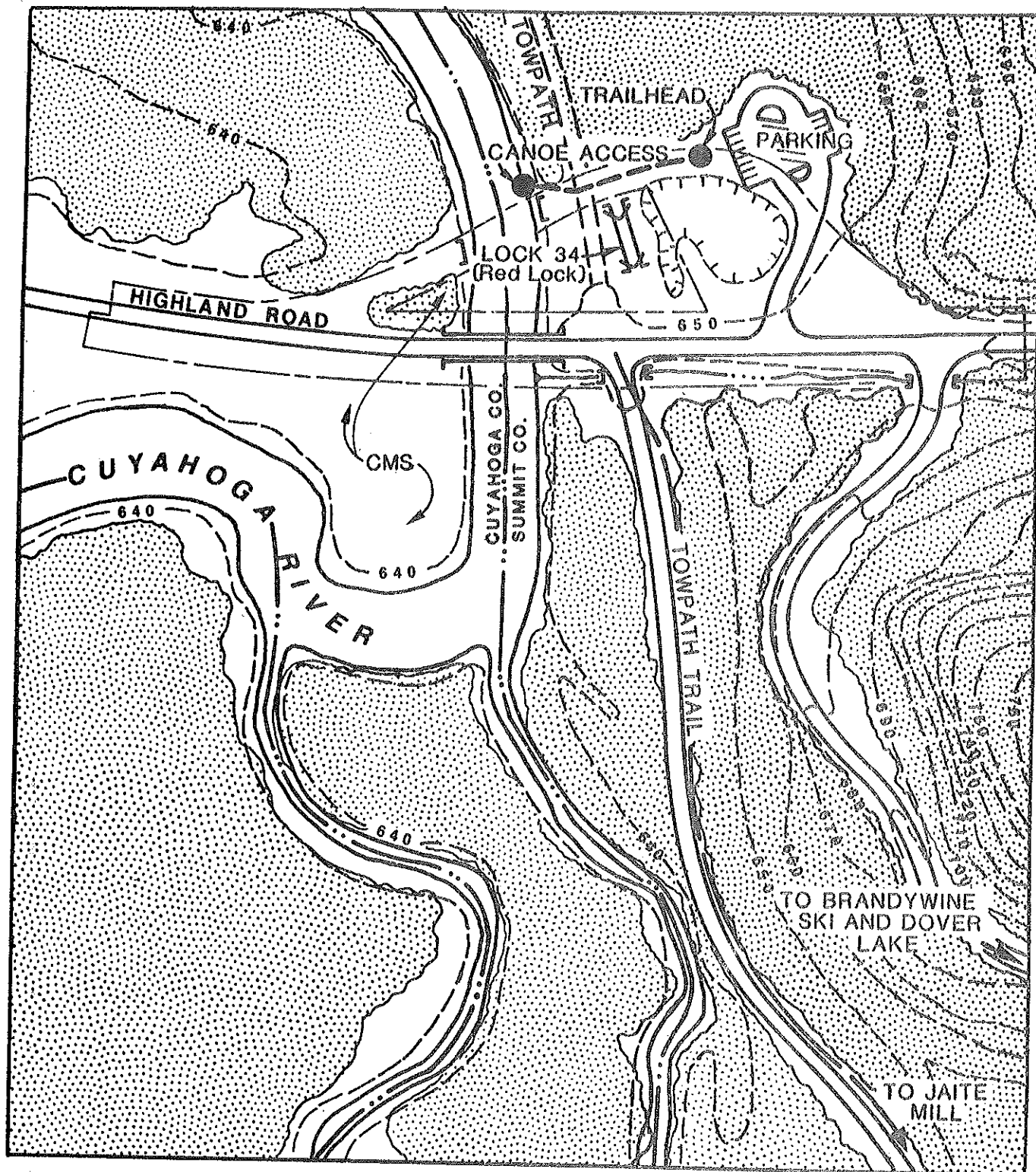
United States Department of the Interior
National Park Service

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CVNRA	OCT. 84



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D ALEXANDER MILL TRAILHEAD



CVNRA TRAIL PLAN

United States Department of the Interior
National Park Service

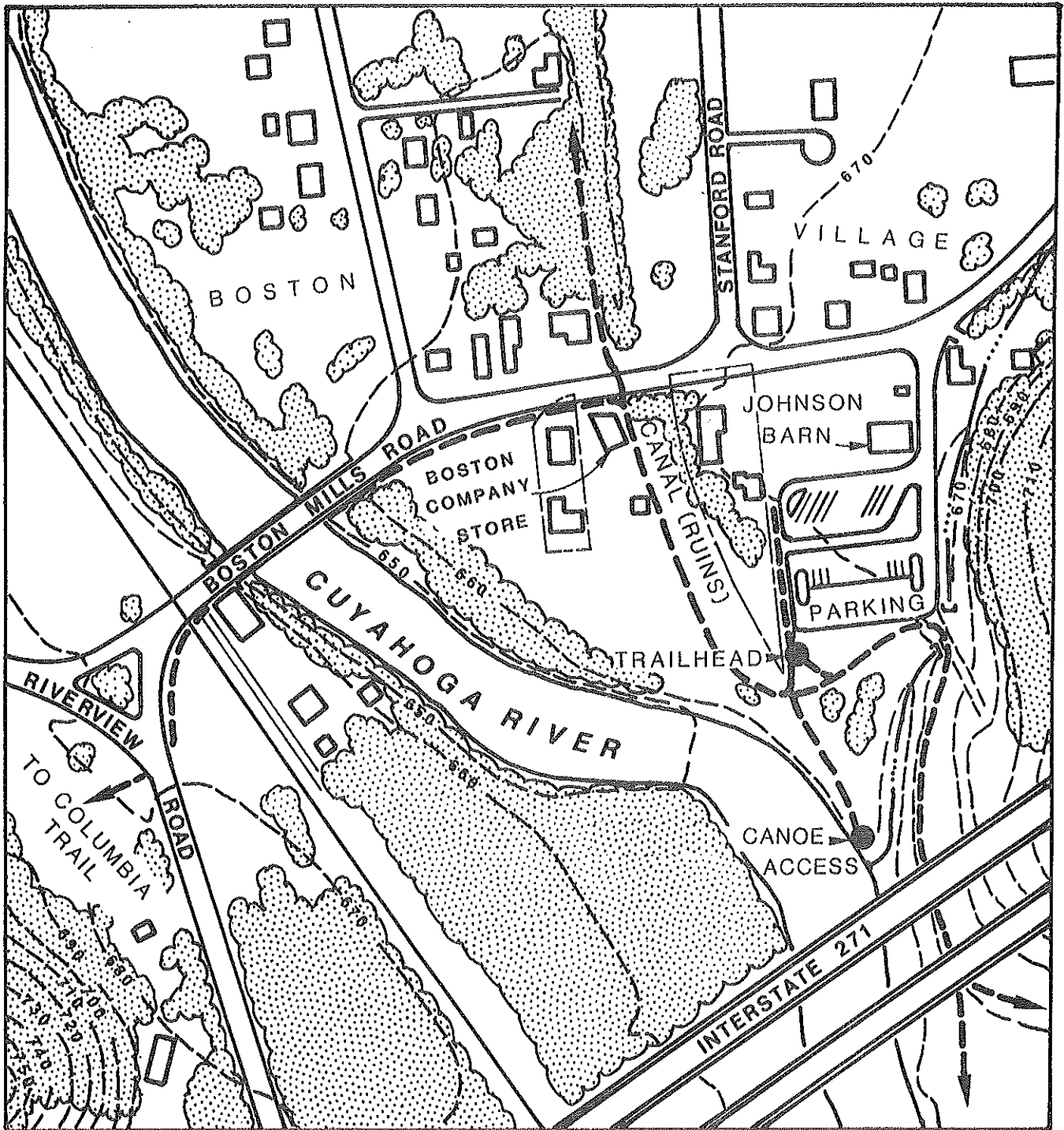
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E RED LOCK TRAILHEAD



CVNRA TRAIL PLAN

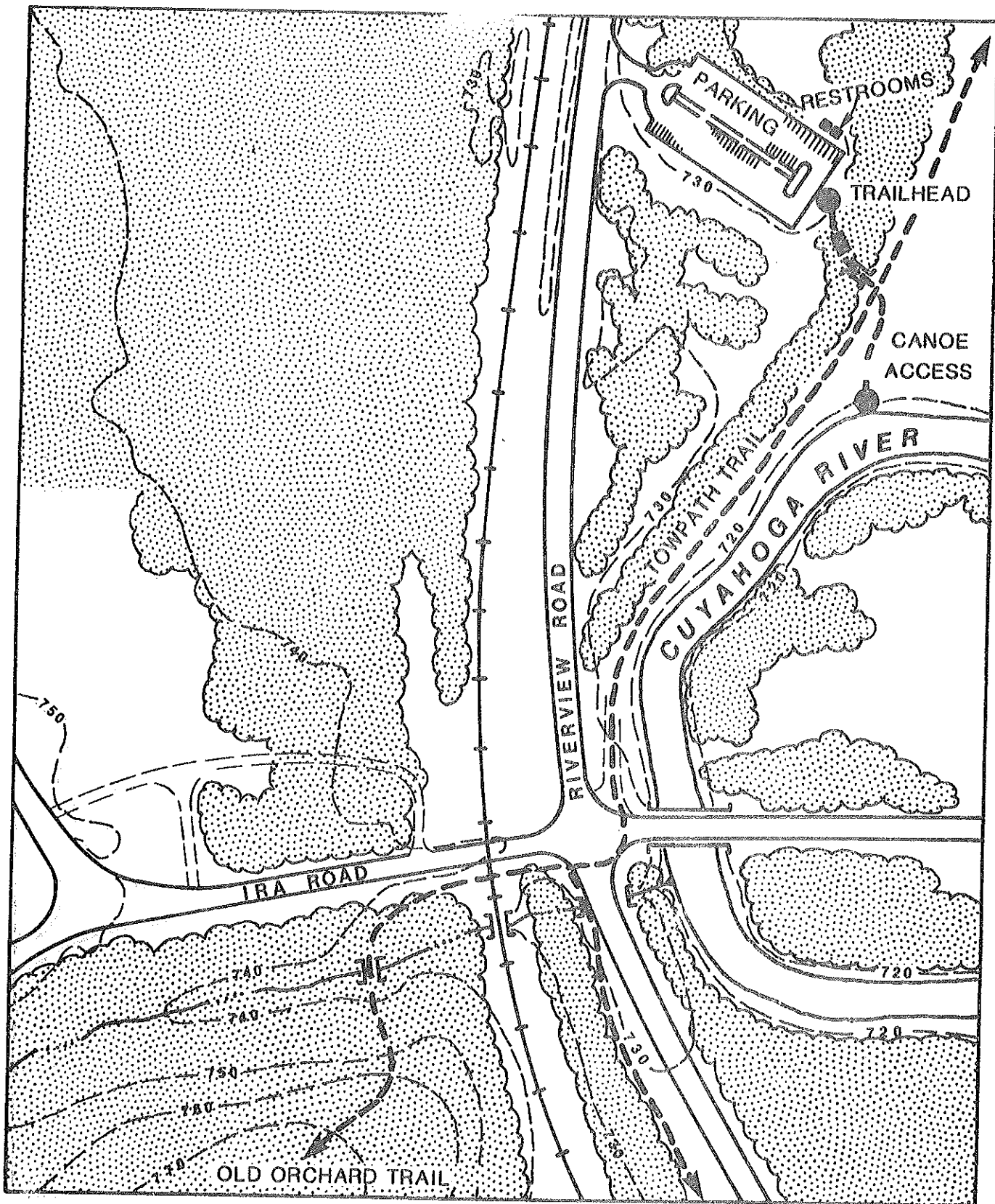
United States Department of the Interior
National Park Service

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F BOSTON TRAILHEAD



CVNRA TRAIL PLAN

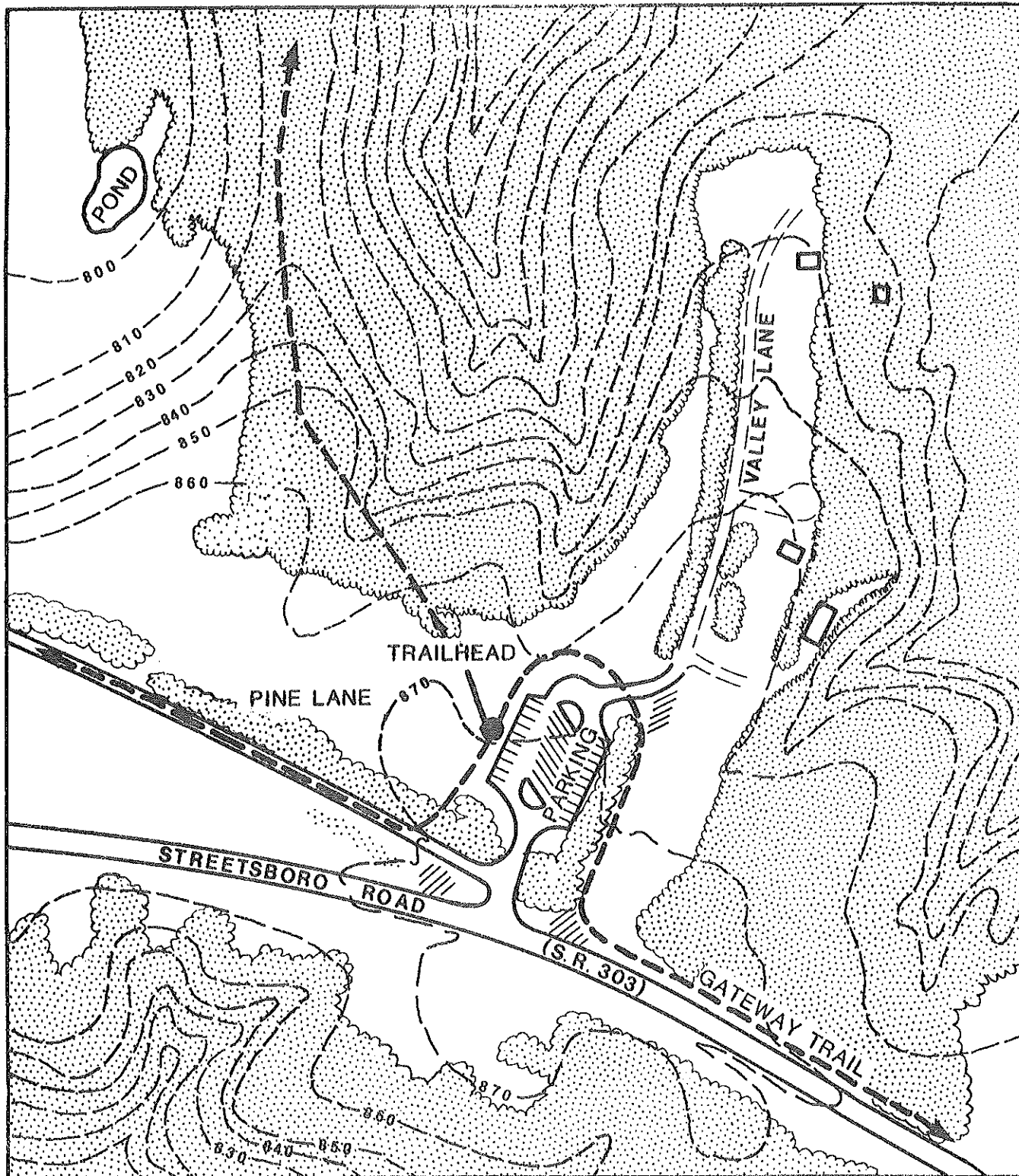
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G IRA TRAILHEAD



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CVNRA TRAIL PLAN

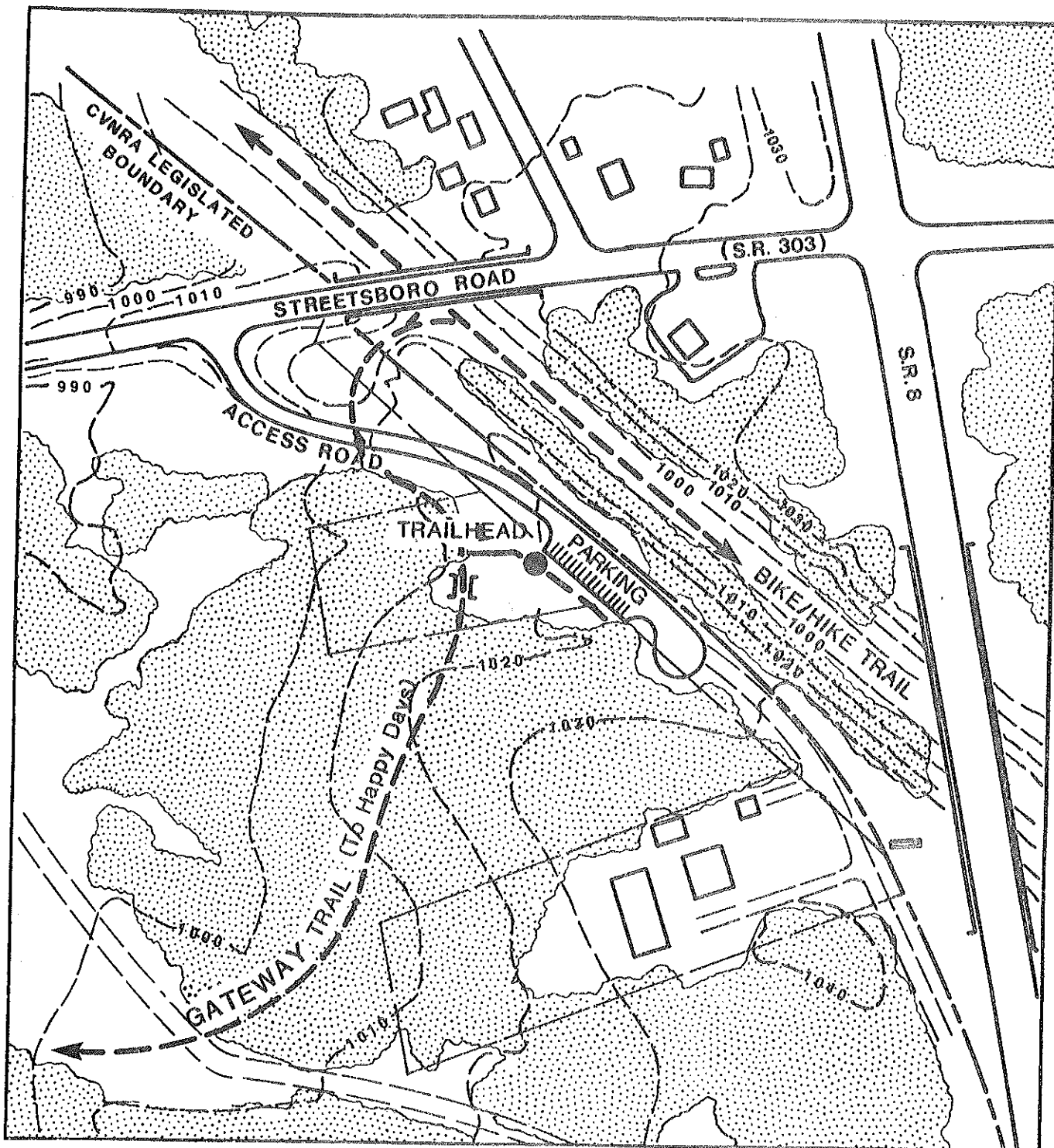
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H PINE LANE TRAILHEAD



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United States Department of the Interior
National Park Service

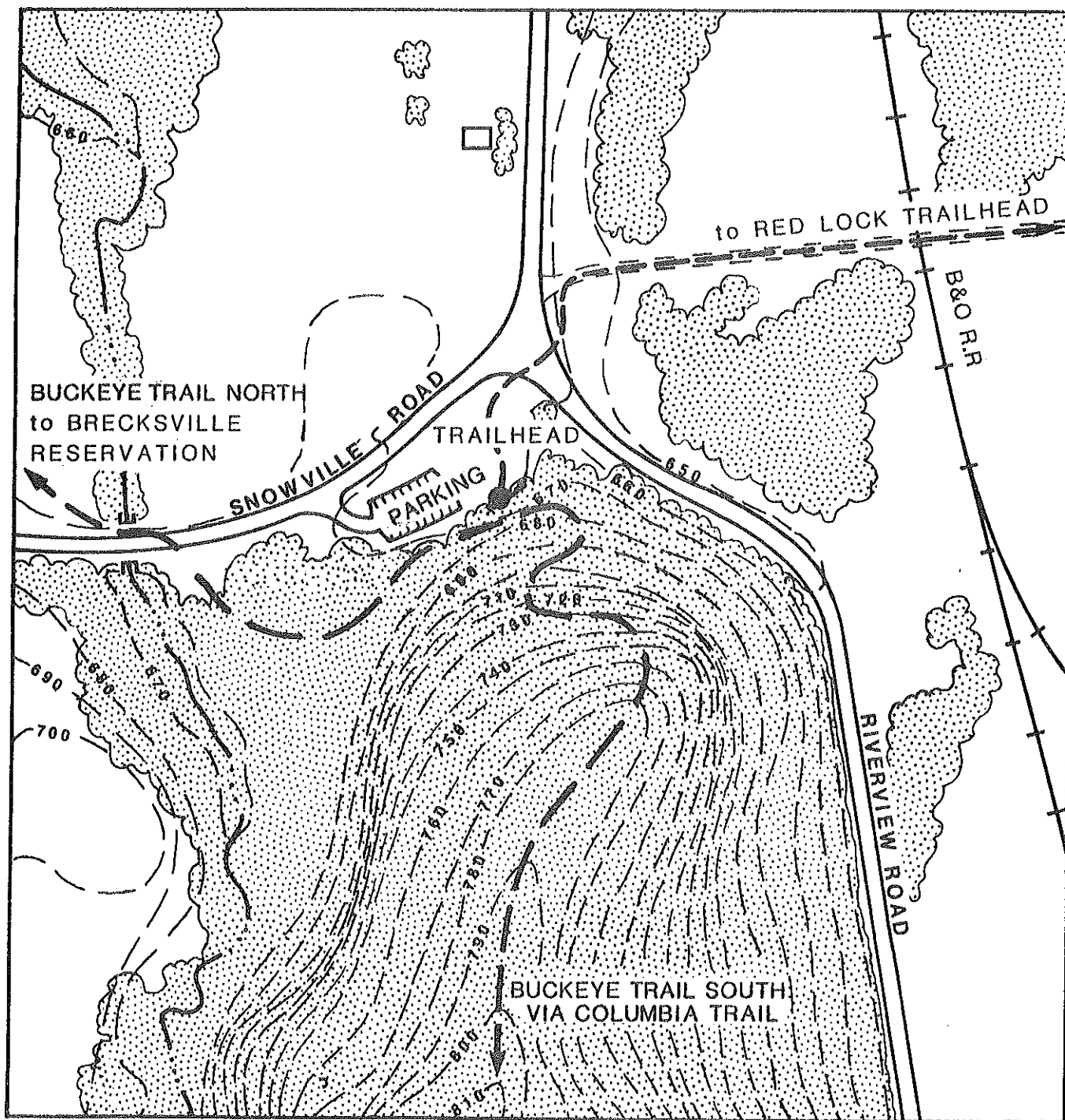
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I GATEWAY TRAILHEAD



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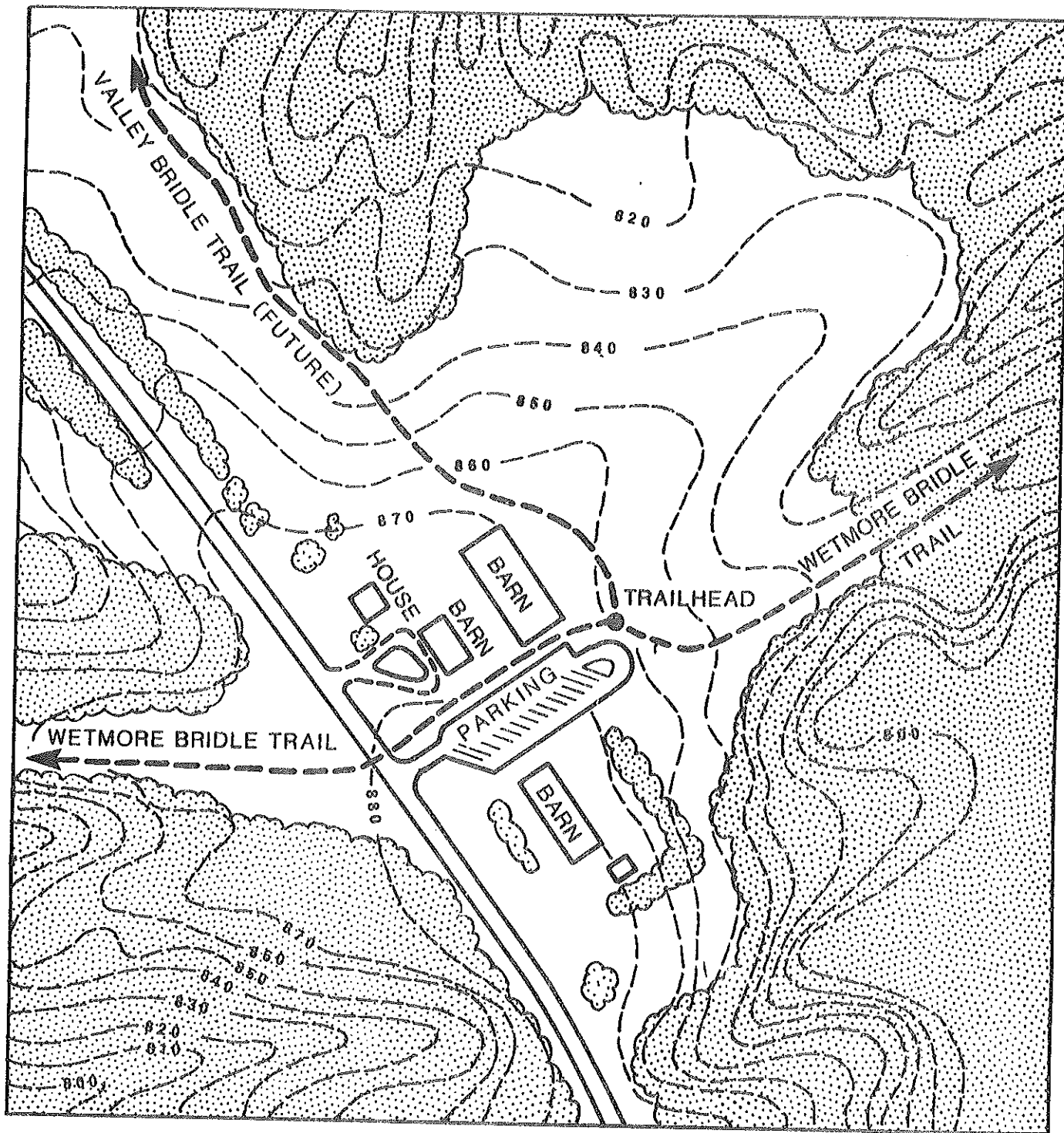
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National Park Service

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J SNOWVILLE TRAILHEAD



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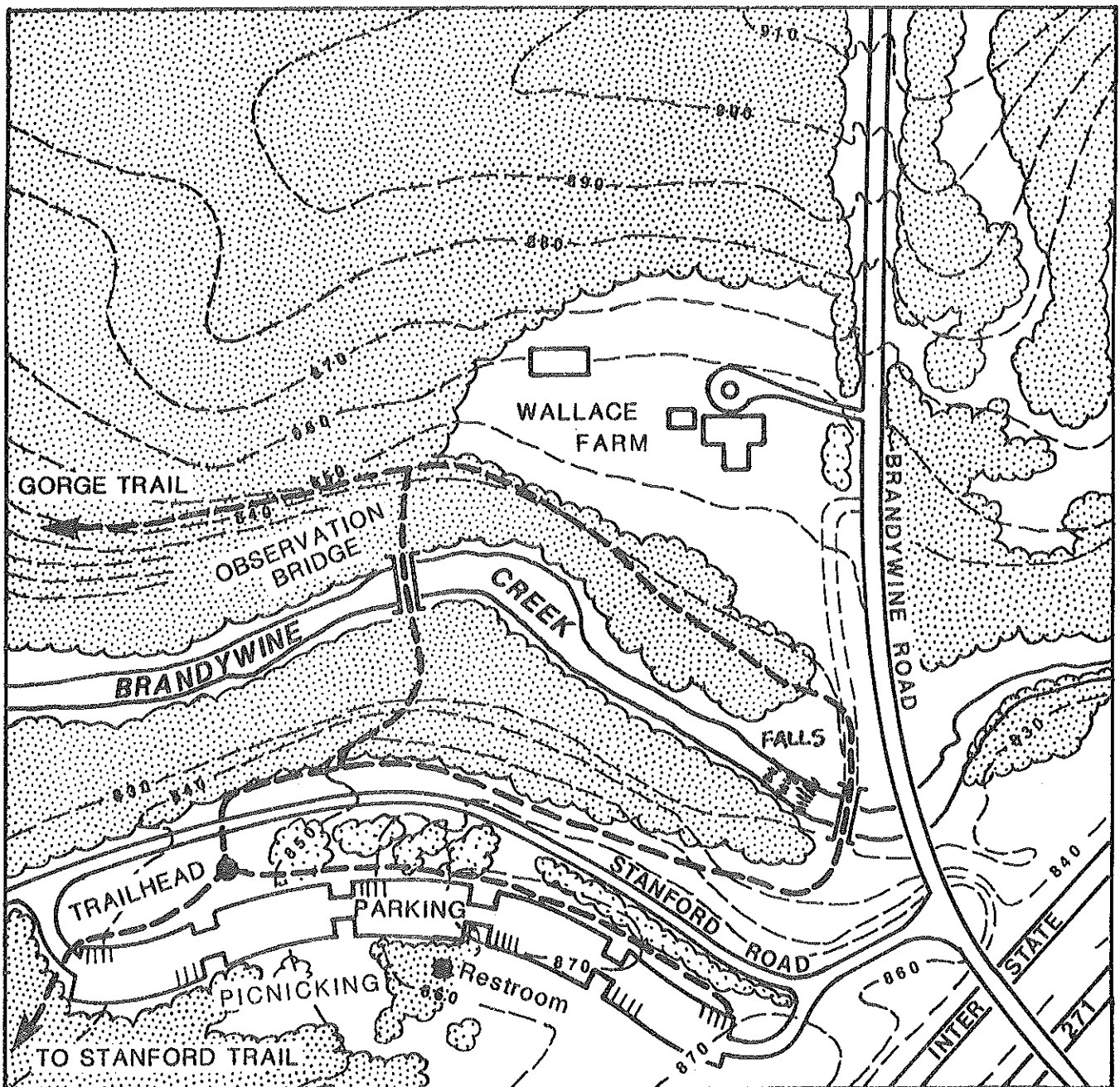
United States Department of the Interior
National Park Service

K WETMORE HORSE CENTER

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CVNRA	OCT. 84



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CVNRA TRAIL PLAN

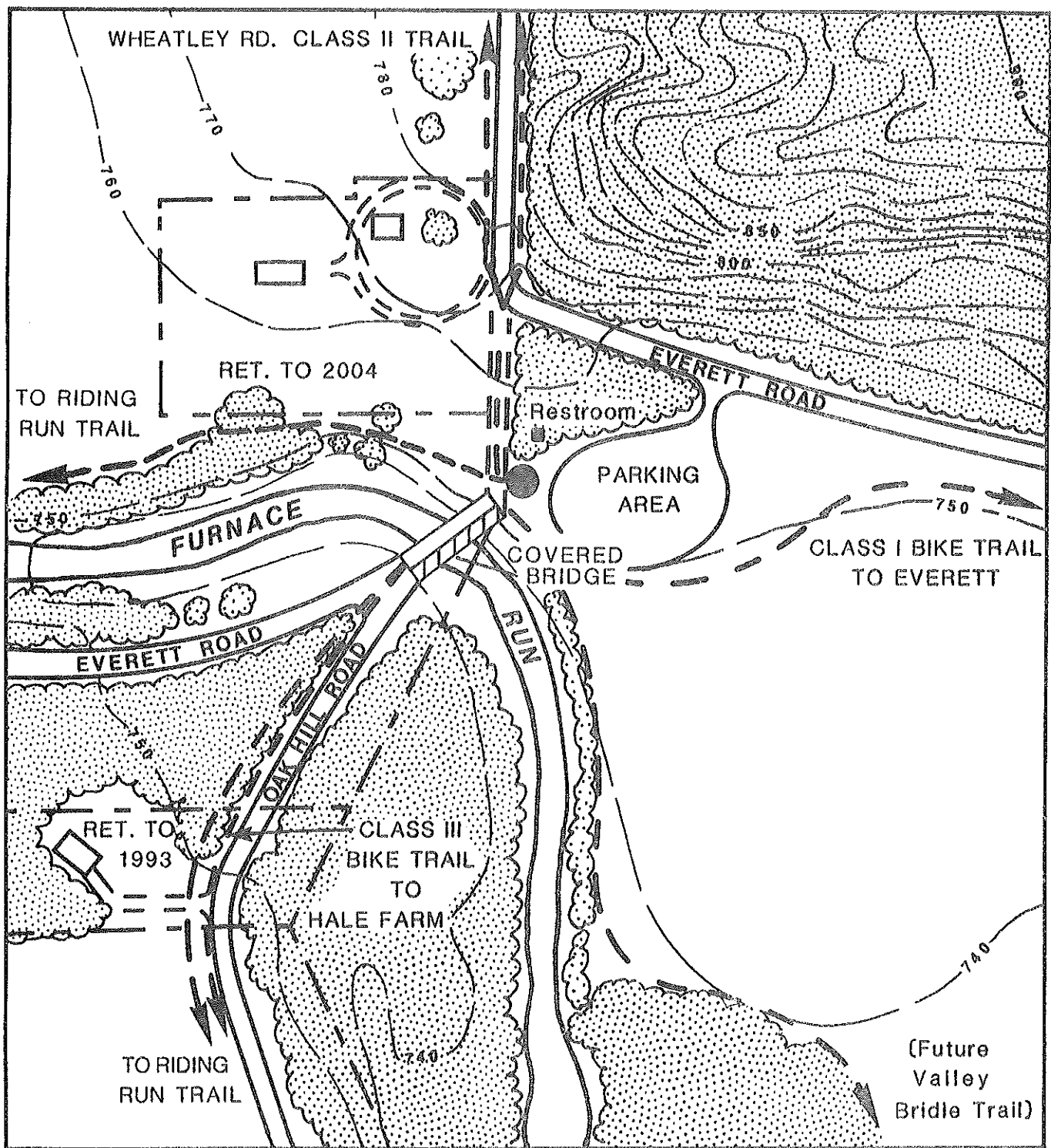
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CVNRA	OCT. 84



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L BRANDYWINE FALLS TRAILHEAD



CVNRA TRAIL PLAN

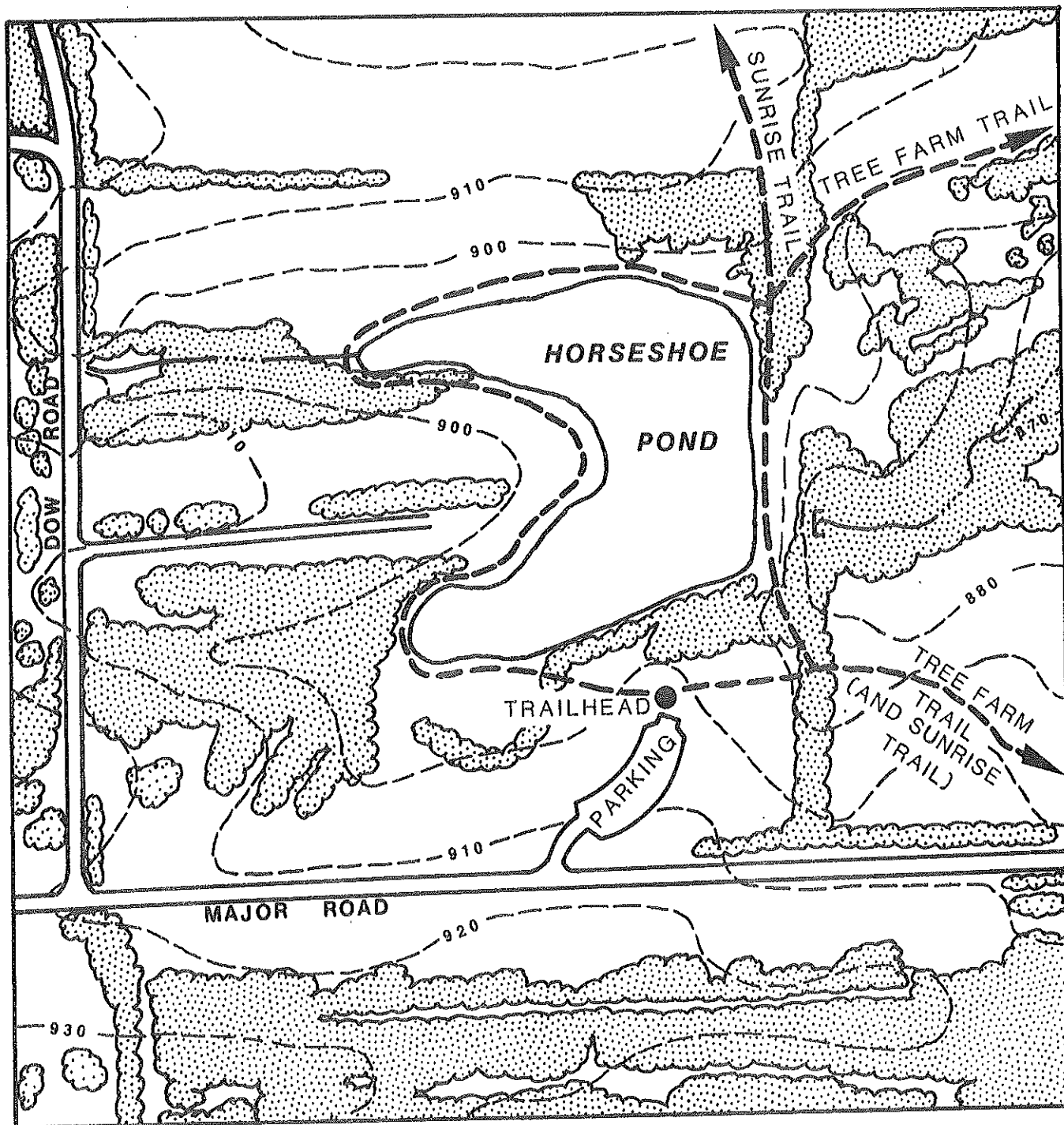
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M EVERETT BRIDGE TRAILHEAD



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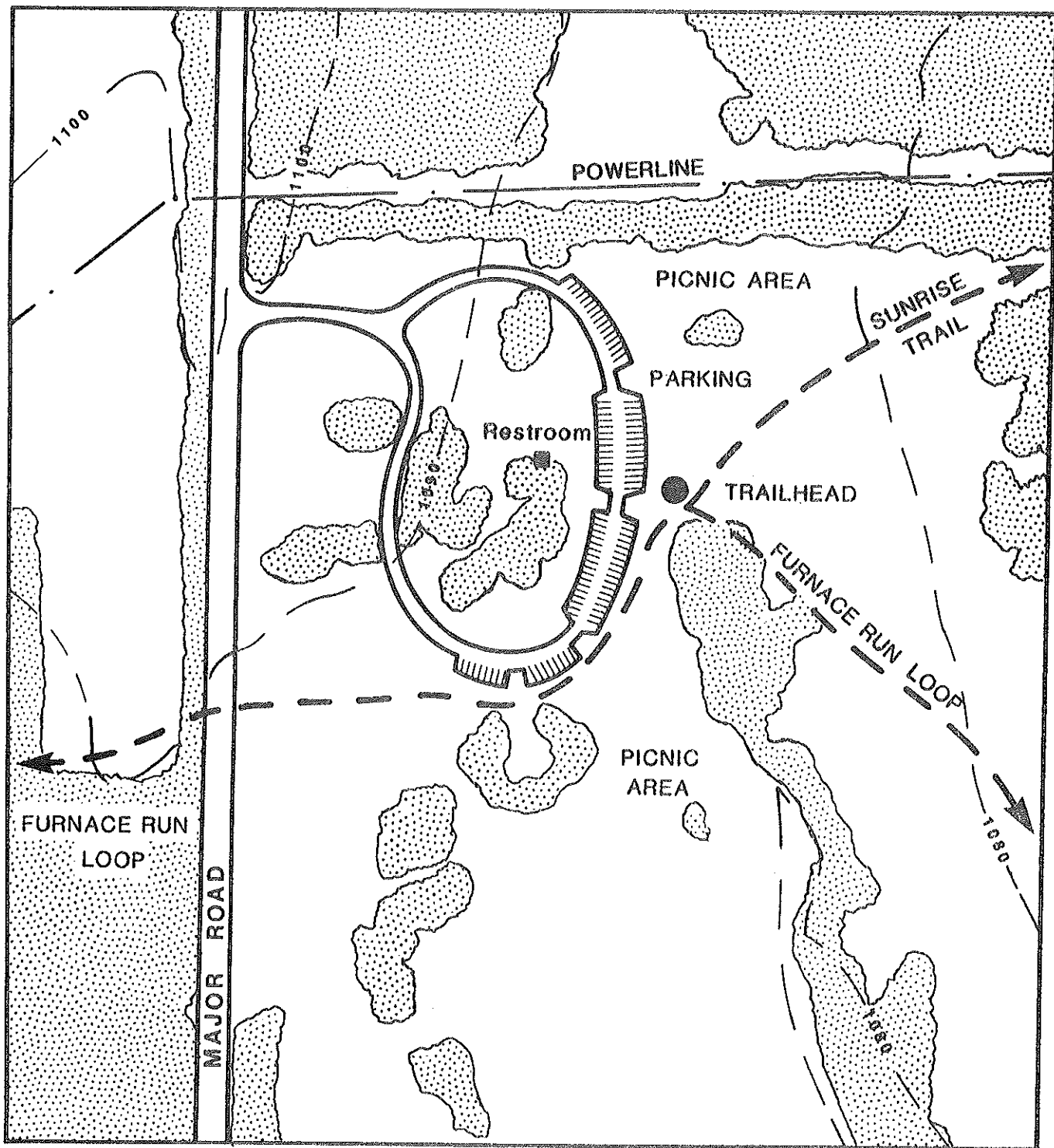
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National Park Service

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N HORSESHOE POND



CVNRA TRAIL PLAN

United States Department of the Interior
National Park Service

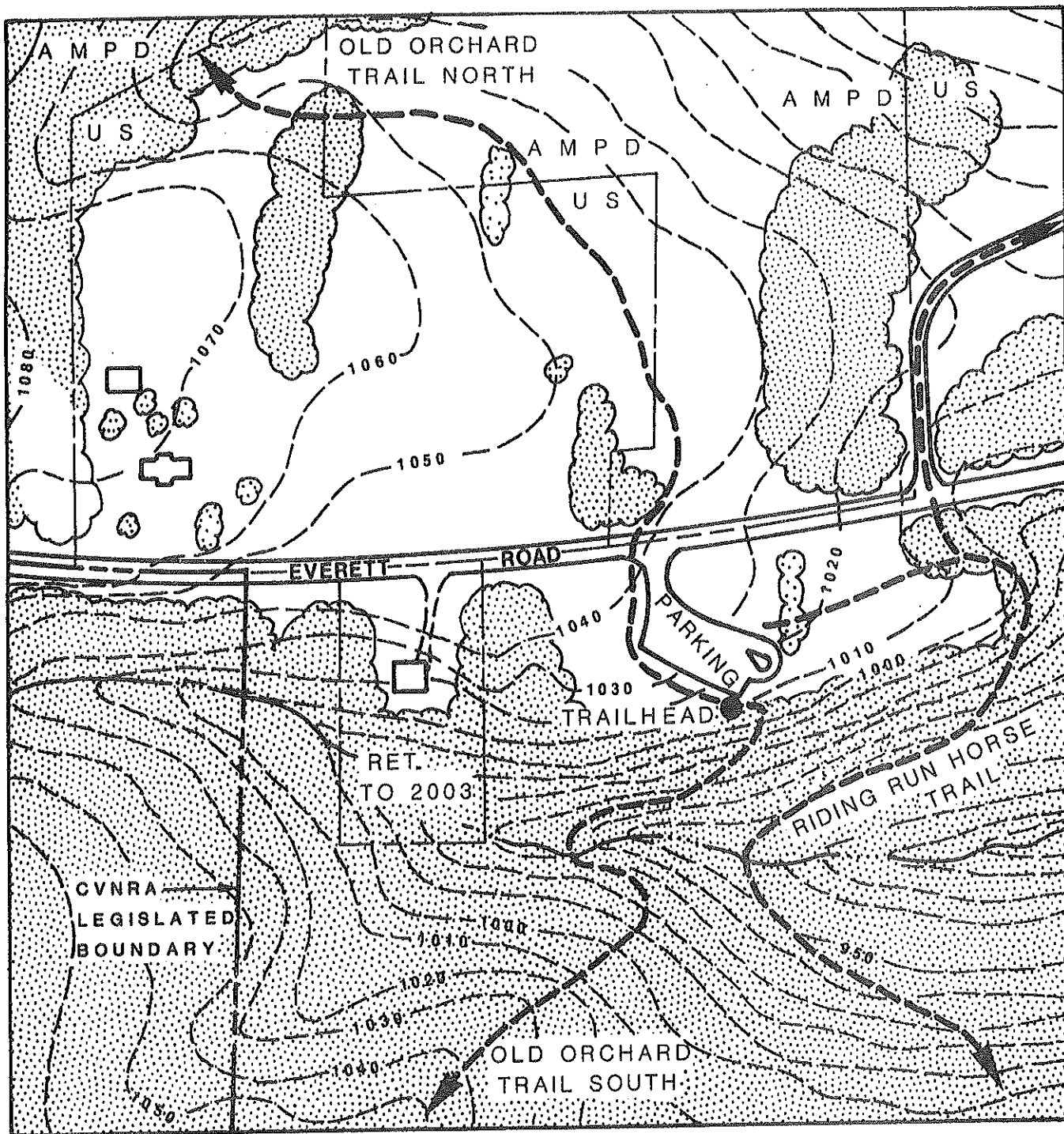
O

HEADWATERS TRAILHEAD

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CVNRA TRAIL PLAN

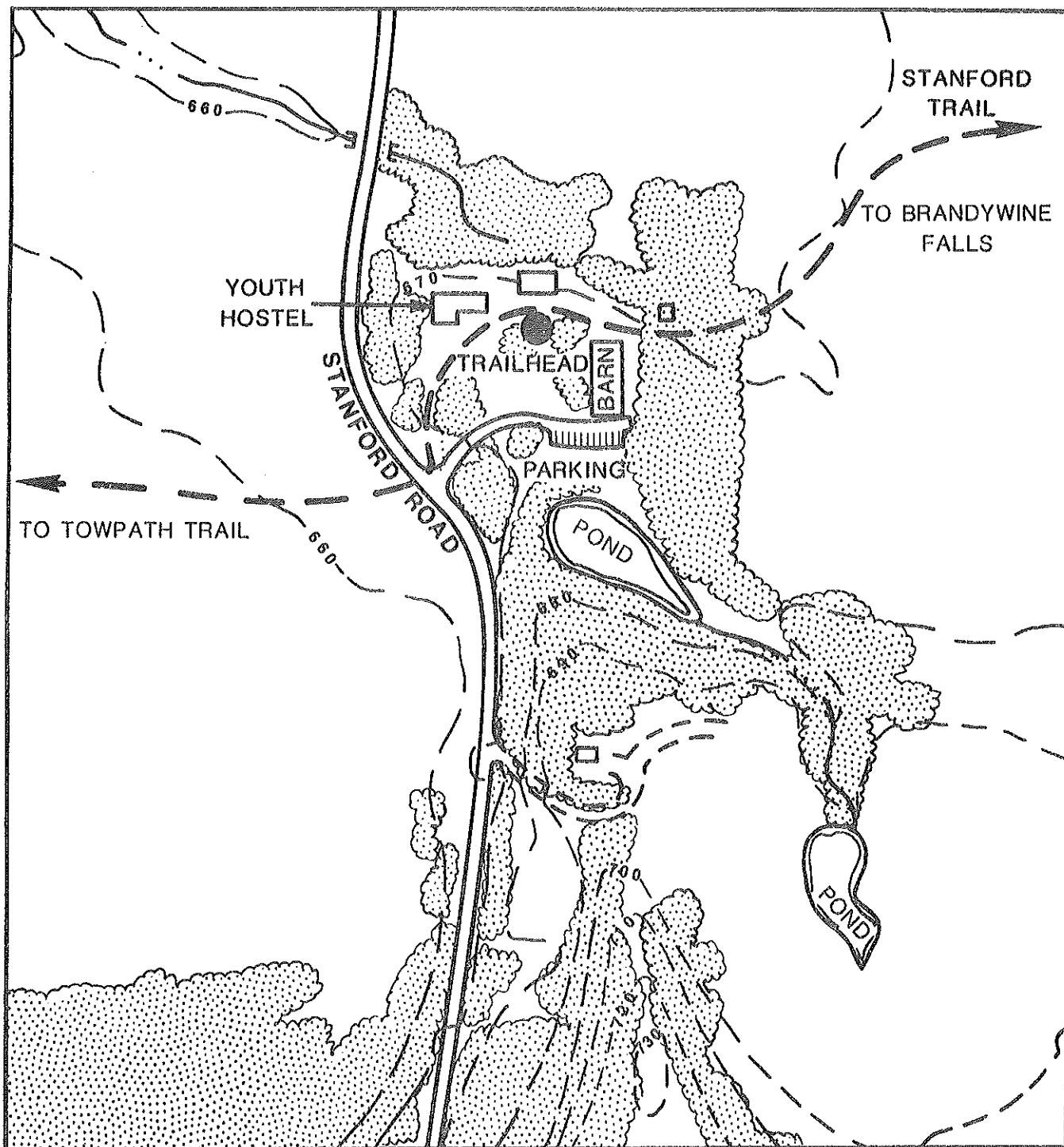
United States Department of the Interior
National Park Service

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CVNRA	OCT. 84



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P OLD ORCHARD TRAILHEAD



CVNRA TRAIL PLAN

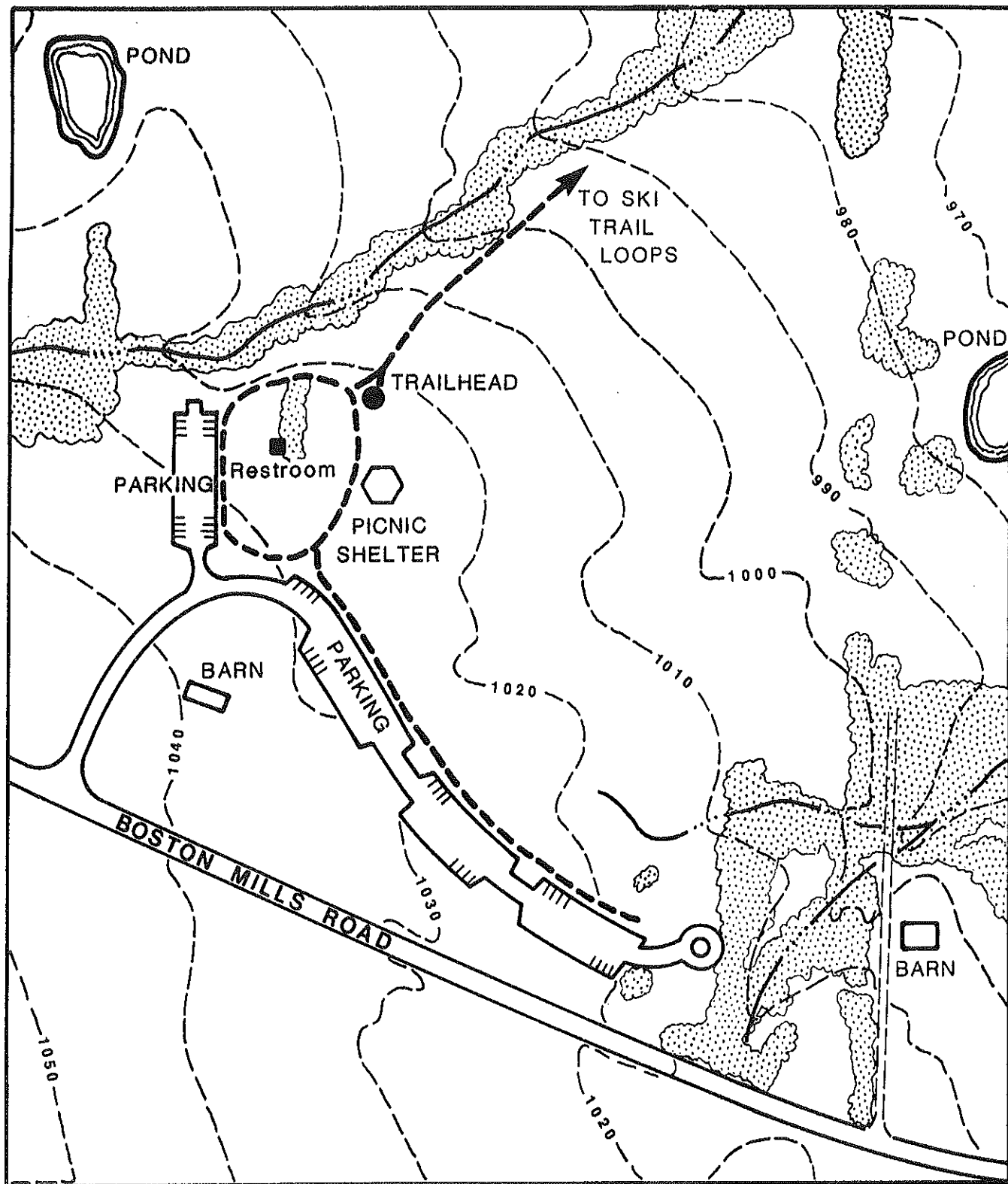
United States Department of the Interior
National Park Service

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CVNRA	OCT. 84



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Q STANFORD HOSTEL TRAILHEAD



CVNRA TRAIL PLAN

United States Department of the Interior
National Park Service

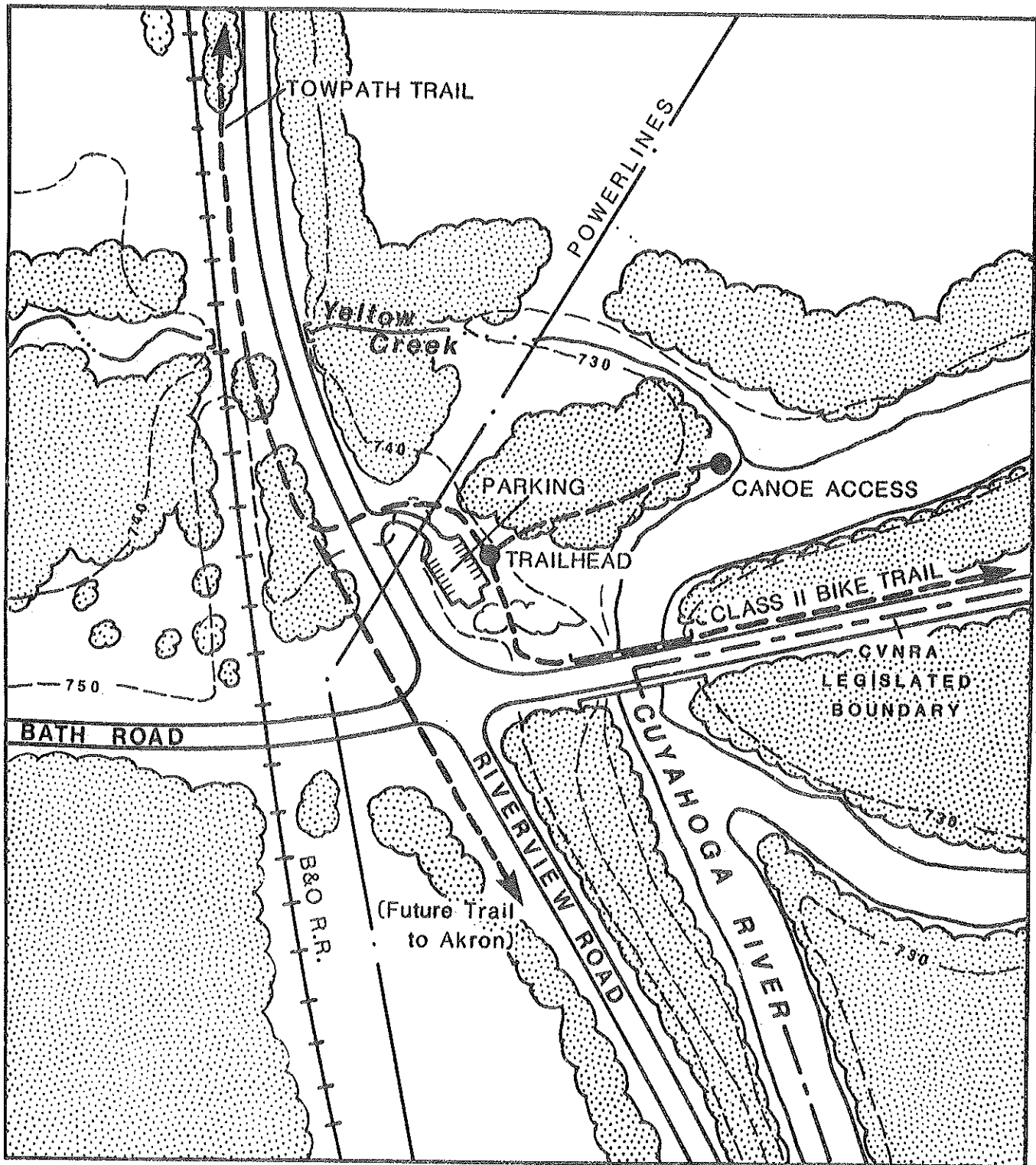
R

HIGH MEADOW FARM

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CVNRA	OCT. 84



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FEET



CVNRA TRAIL PLAN

United States Department of the Interior
National Park Service

644	60,139
CVNRA	OCT. 84



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FEET
100

S YELLOW CREEK TRAILHEAD

APPENDIX B
TRAILS RANKED BY LENGTH

<u>name</u>	<u>priority</u>	<u>length (miles)</u>
Riverview Road / A-P Road and Crossovers	10	19.4
Towpath Trail	1	19.2
Riding Run Bridle Trail (and Connector)	7	8.3
Kendall Loop Trail	8	8.1
Wetmore Bridle Trail	6	7.1
Plateau Trail (Oak Hill)	5	6.1
Old Orchard Trail	17	5.8
Old Carriage Trail	4	4.5
Columbia Trail	3	4.4
West Rim - North Section	14	4.3
Furnace Run Trail	16	4.2
High Meadow Farm	20	4.2
West Rim - South Section	12	3.9
Gateway Trail	2	3.1
Tree Farm Trail	15	3.1
Hale Farm Bike Loop	11	2.7
West Rim - Central Section	13	2.2
Sunrise Trail	18	2.1
Brandywine Falls Trail	9	1.2
Stanford Trail	19	1.1

APPENDIX C
TRAILS RANKED BY COST
(including trailheads)

<u>name</u>	<u>priority</u>	<u>type</u>	<u>cost</u> <u>(\$1000s)</u>	
Towpath Trail	1	multi-use	\$ 2,895	38%
Riverview Road & A-P Road and crossovers	10	multi-use	1,100	15
Kendall Loop Trail	8	multi-use	555	7
High Meadow Farm	20	hike/ski	465	6
Brandywine Falls Trail	9	hike	355	5
Furnace Run Trail	16	hike	345	4
Gateway Trail	2	multi-use	330	4
Valley Bridle Trail	7	horse	320	4
Wetmore Bridle Trail	6	horse	285	4
Hale Farm Bike Loop	11	bikes	190	3
Old Carriage Trail	4	bike/hike & ski	180	2
Old Orchard Trail	17	hike	115	2
Plateau Trail	5	ski	90	1
Tree Farm Loop	15	hike/ski	85	1
West Rim - North Section	14	hike	70	
West Rim - South Section	12	hike	50	
West Rim - Central Section	13	hike	40	
Stanford Trail	19	hike	40	4
Columbia Trail	3	hike	35	
Sunrise Trail	18	hike	30	
			<hr/>	<hr/>
			\$ 7,575	100%

APPENDIX D

NON-FEDERAL TRACTS AFFECTED BY PROPOSED TRAILS

<u>priority trail</u>	<u>tract</u>	<u>distance in miles</u>	<u>name</u>	<u>comments</u>
1. Towpath Trail	101-33	3.60	State of Ohio	Permit to build and cross under I-271 and I-80 (OTC) outside park boundaries.
	103-75	4.90	State of Ohio	
	105-32	0.30	Cleveland Metro Park System	
	107-74	0.03	Summit Co. ROW	
	118-59	1.00	State of Ohio	
	118-39	0.40	KSU - Ohio	
	118-61	1.00	State of Ohio	
	112-73	0.06	Hunker	
	112-46	3.10	Akron Metro Park	
	121-57	2.60	State of Ohio	
	116-57	0.10	City of Akron	
2. Gateway Trail	113-54	0.02	Ohio Edison	Access road, pipelines and ODOT crossing of Bike and Hike Trail at 303.
	113-51/52	0.04	Empire Wood Products	
	113-20	0.10	Peninsula Players	
	(113-01	0.04	LE: Holland)	
	(113-22	0.10	2003: Marsh)	
3. Columbia Trail	103-93	0.60	Cleveland Metroparks System	
	107-48	0.02	Akron Metro Park	
	118-22	0.03	Ohio Nat. Guard	
4. Old Carriage Trail	107-107	0.30	Weirich	Minor boundary extension east to Bike & Hike Trail.
5. Plateau Trail				
6. Wetmore Bridle Trail	119-24	2.70	AMPD	

<u>priority trail</u>	<u>tract</u>	<u>distance in miles</u>	<u>name</u>	<u>comments</u>
7. Riding Run Bridle Trail and Connector	112-46	0.6	AMPD	
	114-73	0.2	Szalay	Along edge of fields.
	120-01	3.0	AMPD	Along edge of Furnace Run.
	121-09	0.2	Camp Mueller	Follows 1832 Road as feasible.
	120-35	0.6	Hale Farm	
8. Kendall Loop Trail	113-23		BSA	(in road right-of-way adjoining)
	113-29		AMPD	" "
	119-24		AMPD	" "
	(115-36	0.20	1988:Armington)	May require additional settlement with Armington.
9. Brandywine Falls	107-94	0.10	Katzenmeyer	May be needed if long trail loop built.
10. River Corridor Bike Trails	104-28	0.50	Priest	May be needed if alternate route built.
11. Hale Farm Bike Loop	112-46	0.60	AMPD	
12. West Rim Trail - South Section	104-04	trace	Cuyahoga County	
	103-93	1.90	CMS	
	103-39	0.05	Teschner	
13. West Rim Trail - Central Section	103-24	0.30	Cuyahoga County Engineer	
	103-13	0.10	CMS	
	126-02	0.10	Lapchynski	
14. West Rim Trail - North Section	124-25	0.30	CMS	
	124-26	0.10	N. Adams	
	124-59	0.06	Boodjeh	

<u>priority trail</u>	<u>tract</u>	<u>distance in miles</u>	<u>name</u>	<u>comments</u>
	124-55	0.05	Boodjeh	
	124-53	0.10	Savioli	
	124-52	0.10	Smiechewicz	
	124-50 to 44	0.40	(various rear lots)	
	124-29	0.30	Boyas	
	124-74	0.80	Republic Steel (LTV)	
	124-28	0.30	Boyas	
	124-20	0.20	Vanario	
	124-07	0.40	Ind. Board of Education (coop. agreement)	
	124-03	0.40	Cleveland Trust Co.	
	124-04	0.02	Garson	
15. Tree Farm Trail		(All Federal)		
16. Furnace Run Trail	112-16	0.20	Delaware Co.	(currently easement)
	111-91	0.50	Delaware Co.	(currently easement)
	111-78	0.20	Semonin	
	111-34	0.06	Kormanik	All are rear portions
	111-85	0.04	Hawkins	of Scobie Road
	111-38	0.10	Slivka	residences.
	111-80	0.10	Devereaux	
17. Old Orchard Trail	120-01	1.10	AMPD	
	120-64	trace	Su. Co. Com. ROW	
	120-65	trace	Su. Co. Com. ROW	
	120-35	0.70	W.R. Hist. Soc.	Crossing agreement needed.
	116-07	0.04	Giglio	Term ret. to 2003.
18. Sunrise Trail	112-65	0.20	Harpham/Welton	
	111-91	0.10	Delaware Co.	
	112-39	0.10	AMPD	Deep Lock Quarry Parking
19. Stanford Trail	107-57	0.60	AMPD	
20. High Meadow	107-48	+ 1.00	AMPD	
Total Public		30.80		
Total Private		<u>8.10</u>		
TOTAL		38.90 miles		

A P P E N D I X E

ENVIRONMENTAL ASSESSMENT

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INTRODUCTION

Many projects and parts of projects covered in this plan have already been assessed environmentally in the 1977 General Management Plan (GMP) and its associated Environmental Assessment. All of the proposals in the GMP resulted in a Finding of no significant impact. The trails proposed in this plan which are not covered in the GMP follow the intent of the GMP although the alignments and magnitude of trails are different.

The GMP is based on the recreation area's enabling Act and specifically addresses the "recreational ... needs of the visiting public". The tremendous potential for recreational development in the valley is mentioned (page 11) as well as the significant limitations presented by soils and topography. Trails are specifically mentioned as being compatible with the plan's management objectives and policies (pages 17-22), specifically the objective calling for appropriate recreational settings encourages a variety of dispersed trail types as proposed in this plan.

A variety of recreational uses and the opening up of new areas is mentioned on page 4, with the specific citation of "hiking, biking, horseback riding." Networks of use are mentioned as an excellent way to disperse visitor use in the relatively fragile ecosystems of the recreation area. Recreation uses are to be compatible with the resources -- trails are generally excellent at this. Natural resource protection and visitor development is to

be balanced -- hiking trails are specifically mentioned as one type of recreational use which can penetrate into otherwise protected zones. In general, (page 8) trails are an excellent way to allow recreational use while preserving scenic and natural qualities.

Specific trails projects are also listed in the GMP. The towpath, where it exists, is to be stabilized the entire length of the National Recreation Area (page 7). Selected historic structures are proposed for adaptive re-use -- the towpath is an excellent example for such treatment. Starting on page 37 the towpath is specifically mentioned in the development plans for several of the management units as a hiking "interpretive" trail. Another project specifically mentioned in the GMP (page 26) is the ORV area: it is shown between the two interstates west of Riverview Road and standards for operation and environmental impact are described. In later sections of the GMP (pages 45-69) a whole list of individual programs and facilities are cited, including many of those covered in more detail in the Trail Plan. Most of these are also mapped in a schematic form. Such projects include: trails for horseback riding and hiking, the stabilization of the Towpath Trail, bike trails and bike lanes along existing roadways, canoe access to the river, cross country skiing routes in fields and on the towpath, rest areas along the bike and hike trails, trailside and walk-in camping areas, the ORV area, the perpetuation of the Buckeye Trail, and interconnecting trails along certain streams and tributaries of the Cuyahoga River (for example, Furnace Run).

In the costs sections at the end of the GMP total development for the recreation area comes to over 40 million dollars. Of that, 13 million dollars describes trail and trailhead development that is similar in scope to the projects described in this plan. The largest single amount (4.6 million dollars) is for biking trails. Trailhead development comes to 4.4 million, horse trail development comes to 2.3 million, hiking trails are estimated to cost .7 million, and the ORV area is priced at .7 million. Comparing these projected costs (in 1980 \$s) to those in the body of this plan, it is clear that subsequent planning has refined and minimized unnecessary expenditures to achieve the intent of the General Management Plan without the full expense originally proposed.

The specific areas of the proposed projects in this plan which have already been covered by the 1977 Environmental Assessment (EA) are the following:

1. Towpath Trail: The stabilization of the towpath trail for most of its length for hiking purposes, plus the trailheads at Rockside, Alexander's Mill, Station Road, and Yellow Creek.
3. Columbia Trail: The EA for this project was produced in the summer of 1983, and the Finding of No Significant Impact is dated October of 1983.
5. Plateau Trail: Horse and hiking trails are mentioned in the GMP but only crossing the site, not linked into a multi-loop system.
7. Riding Run Trail: Some of the horse trails were shown in the GMP but not the entire system.
10. River Corridor: In the GMP, transportation planning is left to a future Transportation Plan which has now been approved (1983). However, an environmental assessment on this project has yet to be completed.

16. Furnace Run Loop: Part of this trail is shown in the GMP as well as what is called in the Trail Plan "Headwaters" Trailhead.
20. High Meadow: This area is shown in the GMP as a picnic ground with 40 sites - however, no cross-country skiing is indicated.

The major changes in the evolution of trail planning for the recreation area since the General Management Plan (and its Environmental Assessment) involve a more complete upgrading of the Towpath Trail for multi-purpose use. This would coincide with the recommended historic restoration of the valley's most significant historical resource, the Ohio and Erie Canal. Cross-country skiing is introduced as a visitor activity which has special areas, such as Plateau, Tree Farm, and High Meadow Farm, as well as common use on the multi-purpose trails. Horse trails that are shown in the GMP west of the Cuyahoga River between I-271 and the Brecksville Reservation have been deleted, replaced with hiking trails in that general area (Columbia Trail). New trails are added in various locations, often linking together existing trail loops and segments (such as the Kendall Loop Trail, which ties together many of the smaller trail facilities already existing in the Kendall Unit). Other trails that are proposed in this plan take advantage of existing trails or otherwise disturbed alignments that had not been explored or mapped at the time of the GMP.

NEED FOR PLAN

The Cuyahoga Valley's complex landscape and intricate topography provide a wide opportunity for many types of trails. The GMP establishes the policy of dispersed visitor use -- implying a network of low-density visitor activity such as trails. Now that the recreation area has been established for ten years there is need to respond to intense public interest and pressure to open up the recreation area to appropriate visitor uses. At the same time the facilities must maximize protection of the park's resources while opening up some of the more "remote" areas for both visitor use and ranger patrol.

This Plan is an outgrowth of previous plans which responded to the area's recreational potential. These plans started in the mid-1960s and were written by state and local agencies before the Federal Government was involved with the Valley. The General Management Plan layed out only schematic trail corridors which were too nebulous to implement as specific projects. This plan specifies bicycling, hiking, horseback, and other recreation needs from the wide variety that are possible. Looking at many alternatives and different alignments, both park staff and citizen volunteers have selected the most suitable available alignments. The Plan is needed to set priorities so that available funds are used efficiently, and to prevent wasteful and damaging piecemeal development. Without a systematic plan established with open public and agency review, only piecemeal trails will be installed (if any are installed at all) -- very likely causing damage to the valley's resources without satisfying the diverse recreational needs of the valley's many visitors.

ALTERNATIVES CONSIDERED

Although this Plan shows one preferred alignment for each project proposed, the projects -- as well as the overall plan -- have evolved through a series of conceptual and layout alternatives. Earlier trail and transportation plans (ODNR 1974, GMP 1977, CVNRA

Citizens Advisory Commission 1983) presented different schemes based on somewhat different concepts and limitations. The Valley offers almost unlimited trails opportunities, making choices and priorities difficult.

The principal difference between the 1983 citizen plan and the one herein proposed regards the Towpath Trail: earlier plans avoided improvements between Boston and Peninsula to minimize impact to Stumpy Basin. This plan, however, proposes extending the multi-use Towpath Trail along the general canal alignment in that section. Even as the 1983 plan evolved, alignments were adjusted to seek drier ground, more scenic overlooks, and otherwise maximize recreational value while minimizing environmental damage.

The following outline indicates the principle alternatives considered for each trail project and indicates the preferred alternative by underlining. Brief reasons are shown why alternatives were preferred or rejected.

- | <u>priority</u> | <u>trail name / alternatives</u> |
|-----------------|---|
| 1. | Towpath Trail <ul style="list-style-type: none">a. no action (unacceptable due to importance of resource)b. hiking and horseback only as in GMP (inconsistent use of important resource)c. partial multi-use (does not connect recreation area together)d. <u>full multi-use</u> (links whole recreation area together; provides for most users) |
| 2. | Gateway Trail <ul style="list-style-type: none">a. no action (promotes unsafe cycling on 50 mph road)b. Class II roadside lanes (unsafe due to speeds, difficult to coordinate with ODOT)c. <u>Class I off-road trail</u> (allows many types of users more safely - quieter, more scenic) |
| 3. | Columbia Trail (part of Buckeye Trail) <ul style="list-style-type: none">a. no action (leaves Buckeye Trail on less scenic road alignment)b. <u>primitive hiking</u> (3 alignments considered, least damaging chosen, provides appropriate access to prime natural area)c. horse trail as in GMP (too disruptive to sensitive natural area) |
| 4. | Old Carriage Trail <ul style="list-style-type: none">a. no action (loss of existing scenic trail traces)b. bicycles only (objections by adjoining residents)c. <u>multi-use connector between Towpath and Bike and Hike Trail</u> (short connection on already disturbed corridor)d. <u>skiing and hiking</u> (scenic, quiet environment north of multi-use connector) |
| 5. | Plateau Trail <ul style="list-style-type: none">a. no action (not possible, area already features new 100-car parking lot)b. minimal hiking as in GMP (under-utilization of largest roadless area in NRA)c. horse trails (plenty of existing horse trails already available elsewhere)d. <u>premier cross-country ski course</u> (topographic and scenic diversity ideal for skiing)e. full development per 1980 Plan (too disruptive to environment, especially utilities system.) |

<u>priority</u>	<u>trail name / alternative</u>
6.	Wetmore Bridle Trail <ul style="list-style-type: none"> a. no action (too late - trails already exist) b. <u>consolidate existing trails</u> (capitalize on existing formal and informal trails to minimize environmental damage) c. re-align, build new trail (soils unstable, redundant)
7.	Riding Run Bridle Trail and Connector <ul style="list-style-type: none"> a. no action (too late - trails already exist) b. <u>consolidate existing trails</u> (capitalize on existing formal and informal trails - less costly) c. <u>re-align, build new trail</u> (connecting trail generally on already cleared land - minimum environmental damage; ties park together east to west)
8.	Kendall Trail Loop <ul style="list-style-type: none"> a. no action (ignores obvious need to connect Bike and Hike Trail to developed visitor facilities) b. hiking and ski connector (under-utilization of newly constructed corridor) c. <u>multi-use loop on existing roads where possible</u> (provides all-season connector to many trails and visitor facilities) d. all off-road multi-use trails (too environmentally damaging -- in some places, topographically impossible)
9.	Brandywine Falls Trail <ul style="list-style-type: none"> a. no action (public health hazard and steep cliffs in area of intense public interest) b. <u>well designed scenic trail</u> (optimizes visitor enjoyment of one of Ohio's highest waterfalls)
10.	River Corridor Bike Trails <ul style="list-style-type: none"> a. no action (promotes unsafe cycling on busy roads) b. Class III on-road bike lanes (promotes unsafe cycling on busy roads) c. <u>roadside Class II lanes</u> (traffic volumes suggest Class II lanes; do not detract from designated scenic road corridors) d. off-road Class I trail (too damaging to scenic road corridors)
11.	Hale Farm Bike Loop <ul style="list-style-type: none"> a. no action (perpetuates visitor confusion) b. <u>Class III on-road bike lanes</u> (low traffic volumes suggest directional signs only) c. roadside Class II lanes (damaging to historic setting) d. off-road Class I trail (damaging to historic setting, yet not precluded if need arises)
12,13,14	West Rim Trail <ul style="list-style-type: none"> a. no action (leaves critical and scenically diverse portions of NRA unaccessed and unpatrollable) b. <u>primitive hiking trail</u> (adds additional north-south park linkage; creates loops with Towpath as return route; promotes patrolling of otherwise remote areas)

<u>priority</u>	<u>trail name / alternative</u>
15.	<p>Tree Farm Trail</p> <ul style="list-style-type: none"> a. no action (loss of views by growth of vegetation) b. <u>clearing only for skiing</u> (ideal topography and scenic diversity) c. full scale day-use development (would disturb excellent birding habitat; near settled residential area)
16.	<p>Furnace Run Trail</p> <ul style="list-style-type: none"> a. no action (misses opportunity for dramatic highland / floodplain contrasts) b. <u>primitive hiking</u> (appropriate low-key use in fragile floodplain ecosystem) c. horse trail as in GMP (too disruptive in fragile ecosystem; redundant to already existing trails)
17.	<p>Old Orchard Trail</p> <ul style="list-style-type: none"> a. no action (leaves critical and scenically dramatic portions of NRA unaccessed and unpatrollable) b. <u>primitive hiking</u> (ideal for long-distance hiking, tying together various visitor activity areas)
18.	<p>Sunrise Trail</p> <ul style="list-style-type: none"> a. no action (miss opportunity to complete long-distance hiking loop) b. <u>primitive hiking</u> (completes major long-distance loop; one of few east-west trails in NRA)
19.	<p>Stanford Trail</p> <ul style="list-style-type: none"> a. no action (channels interested hikers to use steep, unsafe road) b. <u>primitive hiking</u> (connects youth hostel to nearby natural attraction)
20.	<p>High Meadow Farm</p> <ul style="list-style-type: none"> a. no action (loss of excellent distant views) b. picnic area as in GMP (area too majestic and diverse for this only) c. <u>day-use area with extensive cross-country ski loops</u> (overlap of several visitor uses maximizes enjoyment of views, topography, and scenic diversity)

Trailheads were not generally conceived as alternatives -- but as strategic visitor access points which dispersed off-road parking and maximized (to the extent possible) relation to existing utility systems. When possible, existing or proposed visitor facilities (such as the Canal Visitor Center, High Meadow Farm, and Everett Road Covered Bridge) also double as trailhead parking. Early on in the planning process, the preference was made to locate visitor parking outside the Village of Peninsula to minimize conflict with village interests.

During the evolution of this plan, 9 projects were considered and rejected for various reasons:

<u>trail</u>	<u>(reason rejected)</u>	<u>type</u>	<u>length</u>
Brecksville - Boston Connector	(replaced by Valley Bridle Trail east of river)	horse	7.4
Peninsula - Everett Connector	(replaced by Valley Bridle Trail & Wetmore/Riding Run Connector)	horse	4.0
Pinnacle Horse Trail	(replaced by Valley Bridle Trail)	horse	2.0
Oak Hill Spur	(conflicts with other proposed uses; no tie-in to connecting horse trails)	horse	1.0
Oak Hill - Towpath Loop	(conflicts with other proposed uses)	hiking	2.5
Boston Run Primitive Trail	(pristine ravine best left unaccessed, paralleled by Gateway Trail)	hiking	2.1
Pinnacle Hiking Trail	(replaced by Towpath Trail running around base of Pinnacle)	hiking	2.0
Dickerson Run Loop	(conflicts with Wetmore Horse Trails; already plenty of trails in Kendall Unit)	hiking	1.3
Pinery Overlook Trail	(no parking site, no connector to other trails)	hiking	1.3

IMPACTS

A number of the projects proposed in this Plan have either already been assessed for environmental impacts, or they are excluded under current Departmental environmental guidelines. Those already assessed are:

<u>priority</u>	<u>project</u>	<u>environmental documentation</u>
1	Stabilization of Towpath for hiking and interpretation, plus trailheads at Rockside, Alexanders Mill, Station Road, and Yellow Creek	1976 GMP Environmental Assess.
2	Gateway Trailhead	1976 GMP Environmental Assess.
3	Columbia Trail	E.A. and FONSI, October 1983
16, 18	Furnace Run Loop (part) and Headwaters Trailhead	1976 GMP Environmental Assess.
20	High Meadow Farm as 40-site picnic area	1976 GMP Environmental Assess.

Those projects which are considered categorical exclusions under Interior Departmental Manual 516 (1984) are the following. The exclusions are based on 2 clauses: C-12 (use of existing logging routes or other established corridors of disturbance) and C-17 (small improved parking areas in previously disturbed or developed areas).

<u>priority</u>	<u>project</u>	<u>exclusion</u>
1	Towpath (except rebuilding, new fill, and replacement structures)	C-12
4	Old Carriage Trail (except new bridges)	C-12
6	Wetmore Horse Trail	C-12
7	Riding Run Trail (except connector across valley)	C-12
	All trailheads (except Boston, Brandywine Falls, and Everett Covered Bridge)	C-17

Before construction of those trail projects which affect cultural resources can commence, the necessary compliance process (e.g. XXX forms) should be completed.

The following tables concisely display various natural, cultural, and community impacts for the trails project alternatives not already assessed or excluded above. A narrative summary of these charts follows in the Conclusion section. A "yes" indicates that either a beneficial or an adverse effect is anticipated. A plus (+) indicates a positive or beneficial impact and a negative (-) the opposite. Those responses which are underlined are the most significant relating to the preferred alternative. Following the tables, the "Summary of Impacts" discusses the significant factors pertaining to these preferred alternatives.

POTENTIAL ENVIRONMENTAL IMPACTS

1. Towpath Trail (Added Fill and Replacement Structures Only)

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) hiking & horseback	(c) partial multi-use	(d) full multi-use
<u>Ecological Factors</u>				
Federally listed endangered or threatened species	no	no	no	no
State listed endangered or threatened species	no	no	no	yes(-)
Critical Habitat(s)	no	no	no	no
Floodplain	no	yes(-)	yes(-)	yes(-)
Wetlands	no	no	no	yes(-)
Wildlife	no	yes(-)	yes(-)	yes(-)
Vegetation	no	no	no	yes(-)
Air Quality	no	no	no	no
Water Quality	no	no	no	no
Noise	no	no	no	yes(-)

Aesthetic Factors

Visual intrusion(s) on the site	no	no	no	yes(+)
Visual intrusion(s) on recreationists	no	yes(-)	no	yes(+)

Historic/Cultural Factors

Property listed on the National Register of Historic Places	yes(-)	yes(+)	yes(+)	<u>yes(+)</u>
Property eligible for listing on the National Register of Historic Places	-	-	-	-
Property listed on the National Registry of Natural Landmarks (part)	yes(-)	no	no	yes(+)
On or near any known archeological sites	yes(+)	yes(+)	yes(+)	yes(+)
Conversion of prime farmland	no	no	no	no

Economic Factors

Regional employment trends	no	no	no	no
Local employment trends	no	no	no	yes(+)
Visitor expenditures	no	no	no	no
Local economics	no	yes(+)	yes(+)	yes(+)

Social Factors

Recreational opportunities	no	yes(+)	yes(+)	<u>yes(+)</u>
Visitor use patterns	yes(-)	yes(+)	yes(+)	<u>yes(+)</u>
Visitor travel patterns	no	yes(+)	yes(+)	<u>yes(+)</u>
Transients travel patterns	no	no	no	no
Local communities	no	no	yes(+)	yes(-)

Health and Safety Factors

Visitor and employee safety	yes(-)	yes(+)	yes(+)	yes(+)
Visitor and employee health	no	no	no	no
Transients and health	no	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

2. Gateway Trail

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) <u>no</u> <u>action</u>	(b) <u>Class II</u> <u>lanes</u>	(c) <u>Class I</u> <u>off-road trail</u>
<u>Ecological Factors</u>			
Federally listed endangered or threatened species	no	no	no
State listed endangered or threatened species	no	no	no
Critical Habitat(s)	no	no	no
Floodplain	no	no	no
Wetlands	no	no	no
Wildlife	no	no	yes(-)
Vegetation	no	no	no
Air Quality	no	yes(+)	yes(+)
Water Quality	no	no	no
Noise	no	no	no
<u>Aesthetic Factors</u>			
Visual intrusion(s) on the site	no	no	yes(-)
Visual intrusion(s) on recreationists	no	yes(-)	yes(+)
<u>Historic/Cultural Factors</u>			
Property listed on the National Register of Historic Places	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no
On or near any known archeological sites	no	no	no
Conversion of prime farmland	no	no	yes(-)
<u>Economic Factors</u>			
Regional employment trends	no	no	no
Local employment trends	no	no	yes(+)
Visitor expenditures	no	no	no
Local economics	no	no	yes(+)
<u>Social Factors</u>			
Recreational opportunities	no	yes(+)	yes(+)
Visitor use patterns	no	yes(+)	yes(+)
Visitor travel patterns	no	yes(+)	yes(+)
Transients travel patterns	no	yes(-)	no
Local communities	no	yes(-)	yes(-)
<u>Health and Safety Factors</u>			
Visitor and employee safety	yes(-)	yes(-)	yes(+)
Visitor and employee health	no	no	no
Transients and health	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

4. Old Carriage Trail (bridges only)

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES	
	(a) no <u>action</u>	(b) <u>bridges</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	yes(-)
Vegetation	no	yes(-)
Air Quality	no	no
Water Quality	no	no
Noise	no	yes(-)
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	yes(-)
Visual intrusion(s) on recreationists	no	<u>yes(+)</u>
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	no
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	yes(+)
Visitor expenditures	no	no
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	no	yes(+)
Visitor use patterns	no	no
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	<u>yes(+)</u>
<u>Health and Safety Factors</u>		
Visitor and employee safety	yes(-)	yes(+)
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

5. Plateau Trail

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b)&(c) <u>GMP Plan</u>	(d) ski <u>course</u>	(e) full 1980 <u>plan</u>
<u>Ecological Factors</u>				
Federally listed endangered or threatened species	no	no	no	no
State listed endangered or threatened species	no	no	no	no
Critical Habitat(s)	no	no	no	no
Floodplain	no	no	no	no
Wetlands	no	no	no	no
Wildlife	no	no	no	no
Vegetation	no	no	yes(-)	yes(-)
Air Quality	no	yes(-)	<u>yes(-)</u>	yes(-)
Water Quality	no	no	no	no
Noise	no	no	no	yes(-)
				no
<u>Aesthetic Factors</u>				
Visual intrusion(s) on the site	yes(-)	no	no	yes(-)
Visual intrusion(s) on recreationists	no	no	no	no
<u>Historic/Cultural Factors</u>				
Property listed on the National Register of Historic Places	no	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no	no
On or near any known archeological sites	no	no	no	no
Conversion of prime farmland	no	no	no	no
<u>Economic Factors</u>				
Regional employment trends	no	no	no	no
Local employment trends	no	no	no	no
Visitor expenditures	yes(-)	no	<u>yes(+)</u>	yes(+)
Local economics	yes(-)	no	no	no
<u>Social Factors</u>				
Recreational opportunities	yes(-)	no	<u>yes(+)</u>	yes(+)
Visitor use patterns	no	yes(+)	<u>yes(+)</u>	yes(+)
Visitor travel patterns	no	no	no	no
Transients travel patterns	no	no	no	no
Local communities	no	no	yes(-)	yes(-)
<u>Health and Safety Factors</u>				
Visitor and employee safety	no	no	no	no
Visitor and employee health	no	no	no	no
Transients and health	no	no	no	yes(-)

POTENTIAL ENVIRONMENTAL IMPACTS

8. Kendall Loop Trail

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) hike/ski <u>connector</u>	(c) multi-use <u>loop</u>	(d) Class I <u>loop</u>
<u>Ecological Factors</u>				
Federally listed endangered or threatened species	no	no	no	no
State listed endangered or threatened species	no	no	no	no
Critical Habitat(s)	no	no	no	no
Floodplain	no	no	no	no
Wetlands	no	no	no	no
Wildlife	no	yes(-)	yes(-)	yes(-)
Vegetation	no	yes(-)	<u>yes(-)</u>	yes(-)
Air Quality	no	no	yes(+)	yes(+)
Water Quality	no	no	no	no
Noise	no	no	no	no
<u>Aesthetic Factors</u>				
Visual intrusion(s) on the site	no	no	no	yes(-)
Visual intrusion(s) on recreationists	no	no	no	no
<u>Historic/Cultural Factors</u>				
Property listed on the National Register of Historic Places	no	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no	no
On or near any known archeological sites	no	no	no	no
Conversion of prime farmland	no	no	no	no
<u>Economic Factors</u>				
Regional employment trends	no	no	no	no
Local employment trends	no	no	yes(+)	yes(+)
Visitor expenditures	no	yes(+)	<u>yes(+)</u>	yes(+)
Local economics	no	no	no	no
<u>Social Factors</u>				
Recreational opportunities	yes(-)	yes(+)	<u>yes(+)</u>	yes(+)
Visitor use patterns	no	yes(+)	yes(+)	yes(+)
Visitor travel patterns	no	no	no	no
Transients travel patterns	no	no	no	no
Local communities	no	no	no	no
<u>Health and Safety Factors</u>				
Visitor and employee safety	yes(-)	yes(+)	<u>yes(+)</u>	yes(+)
Visitor and employee health	no	no	no	no
Transients and health	no	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

2. Brandywine Falls Trail

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES	
	(a) no <u>action</u>	(b) scenic <u>trail</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	yes(-)	<u>yes(+)</u>
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	yes(-)
Visual intrusion(s) on recreationists	no	yes(+)
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	yes(-)	<u>yes(+)</u>
Property eligible for listing on the National Register of Historic Places	-	-
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	yes(-)	yes(-)
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	yes(-)	yes(+)
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	yes(-)	<u>yes(+)</u>
Visitor use patterns	yes(-)	<u>yes(+)</u>
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	yes(+)
<u>Health and Safety Factors</u>		
Visitor and employee safety	yes(-)	yes(+)
Visitor and employee health	yes(-)	yes(-)
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

10. River Corridor Bike Trails

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) Class III <u>Trail</u>	(c) Class II <u>Trail</u>	(d) Class I <u>Trail</u>
<u>Ecological Factors</u>				
Federally listed endangered or threatened species	no	no	no	no
State listed endangered or threatened species	no	no	no	no
Critical Habitat(s)	no	no	no	no
Floodplain	yes(-)	yes(-)	yes(-)	yes(-)
Wetlands	no	no	no	yes(-)
Wildlife	no	no	no	yes(-)
Vegetation	no	no	yes(-)	yes(-)
Air Quality	yes(-)	no	<u>yes(+)</u>	yes(+)
Water Quality	no	no	no	no
Noise	yes(-)	yes(-)	yes(+)	yes(+)
<u>Aesthetic Factors</u>				
Visual intrusion(s) on the site	no	no	yes(-)	yes(-)
Visual intrusion(s) on recreationists	no	no	no	yes(+)
<u>Historic/Cultural Factors</u>				
Property listed on the National Register of Historic Places	no	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no	no
On or near any known archeological sites	yes(+)	yes(+)	yes(-)	yes(-)
Conversion of prime farmland	no	no	no	no
<u>Economic Factors</u>				
Regional employment trends	no	no	no	no
Local employment trends	no	no	no	no
Visitor expenditures	no	no	<u>yes(+)</u>	yes(+)
Local economics	no	no	yes(+)	yes(+)
<u>Social Factors</u>				
Recreational opportunities	yes(-)	yes(+)	yes(+)	yes(+)
Visitor use patterns	no	yes(-)	yes(+)	yes(+)
Visitor travel patterns	yes(-)	yes(+)	yes(+)	yes(+)
Transients travel patterns	no	no	no	no
Local communities	no	yes(-)	<u>yes(-)</u>	yes(-)
<u>Health and Safety Factors</u>				
Visitor and employee safety	yes(-)	yes(-)	<u>yes(+)</u>	yes(+)
Visitor and employee health	no	no	no	no
Transients and health	no	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

11. Hale Farm Bike Loop

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) <u>no</u> <u>action</u>	(b) <u>Class III</u> <u>trail</u>	(c) <u>Class II</u> <u>trail</u>	(d) <u>Class I</u> <u>trail</u>
<u>Ecological Factors</u>				
Federally listed endangered or threatened species	no	no	no	no
State listed endangered or threatened species	no	no	no	no
Critical Habitat(s)	no	no	no	no
Floodplain	no	no	no	yes(-)
Wetlands	no	no	no	no
Wildlife	no	no	no	no
Vegetation	no	no	yes(-)	yes(-)
Air Quality	no	yes(+)	yes(+)	yes(+)
Water Quality	no	no	no	no
Noise	no	no	no	no
<u>Aesthetic Factors</u>				
Visual intrusion(s) on the site	no	no	yes(-)	yes(-)
Visual intrusion(s) on recreationists	no	no	no	yes(+)
<u>Historic/Cultural Factors</u>				
Property listed on the National Register of Historic Places	no	yes(+)	yes(+)	yes(-)
Property eligible for listing on the National Register of Historic Places	-	-	-	-
Property listed on the National Registry of Natural Landmarks (part)	-	-	-	-
On or near any known archeological sites	no	no	yes(-)	yes(-)
Conversion of prime farmland	no	no	no	no
<u>Economic Factors</u>				
Regional employment trends	no	no	no	no
Local employment trends	no	no	no	no
Visitor expenditures	yes(-)	yes(+)	yes(+)	yes(+)
Local economies	no	no	no	no
<u>Social Factors</u>				
Recreational opportunities	yes(-)	yes(+)	yes(+)	yes(+)
Visitor use patterns	no	no	yes(+)	yes(+)
Visitor travel patterns	no	no	no	no
Transients travel patterns	no	no	no	no
Local communities	no	yes(+)	yes(-)	yes(-)
<u>Health and Safety Factors</u>				
Visitor and employee safety	yes(-)	yes(+)	yes(+)	yes(+)
Visitor and employee health	no	no	no	no
Transients and health	no	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

12., 13., 14., West Rim Trail

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) primitive <u>hiking</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	no
Visual intrusion(s) on recreationists	no	yes(+)
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	no
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	no	no
Local economies	no	no
<u>Social Factors</u>		
Recreational opportunities	yes(-)	yes(+)
Visitor use patterns	no	yes(+)
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	no
<u>Health and Safety Factors</u>		
Visitor and employee safety	yes(-)	yes(+)
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

15. Tree Farm Trail

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) skiing <u>trail</u>	(c) full-scale <u>day-use</u>
<u>Ecological Factors</u>			
Federally listed endangered or threatened species	no	no	no
State listed endangered or threatened species	no	no	no
Critical Habitat(s)	no	no	no
Floodplain	no	no	no
Wetlands	no	no	no
Wildlife	yes(+)	no	yes(-)
Vegetation	no	yes(-)	yes(-)
Air Quality	no	no	no
Water Quality	no	no	no
Noise	no	no	no
<u>Aesthetic Factors</u>			
Visual intrusion(s) on the site	yes(-)	no	yes(+)
Visual intrusion(s) on recreationists	no	no	no
<u>Historic/Cultural Factors</u>			
Property listed on the National Register of Historic Places	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no
On or near any known archeological sites	no	no	no
Conversion of prime farmland	no	no	no
<u>Economic Factors</u>			
Regional employment trends	no	no	no
Local employment trends	no	no	yes(+)
Visitor expenditures	yes(-)	yes(+)	yes(+)
Local economics	yes(-)	no	no
<u>Social Factors</u>			
Recreational opportunities	yes(-)	yes(+)	yes(+)
Visitor use patterns	no	yes(+)	yes(+)
Visitor travel patterns	no	no	no
Transients travel patterns	no	no	no
Local communities	no	no	no
<u>Health and Safety Factors</u>			
Visitor and employee safety	no	no	no
Visitor and employee health	no	no	no
Transients and health	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

16. Furnace Run Loop

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) no <u>action</u>	(b) hiking <u>trail</u>	(c) horse <u>trail</u>
<u>Ecological Factors</u>			
Federally listed endangered or threatened species	no	no	no
State listed endangered or threatened species	no	no	no
Critical Habitat(s)	no	no	no
Floodplain	no	no	yes(-)
Wetlands	no	no	yes(-)
Wildlife	no	no	yes(-)
Vegetation	no	no	no
Air Quality	no	no	no
Water Quality	no	no	yes(-)
Noise	no	no	no
<u>Aesthetic Factors</u>			
Visual intrusion(s) on the site	no	no	yes(-)
Visual intrusion(s) on recreationists	no	yes(+)	yes(+)
<u>Historic/Cultural Factors</u>			
Property listed on the National Register of Historic Places	no	no	no
Property eligible for listing on the National Register of Historic Places	no	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no	no
On or near any known archeological sites	no	no	no
Conversion of prime farmland	no	no	no
<u>Economic Factors</u>			
Regional employment trends	no	no	no
Local employment trends	no	no	no
Visitor expenditures	no	yes(+)	yes(+)
Local economies	no	no	no
<u>Social Factors</u>			
Recreational opportunities	yes(-)	<u>yes(+)</u>	yes(+)
Visitor use patterns	no	no	yes(+)
Visitor travel patterns	no	no	no
Transients travel patterns	no	no	no
Local communities	no	no	yes(-)
<u>Health and Safety Factors</u>			
Visitor and employee safety	no	no	no
Visitor and employee health	no	no	no
Transients and health	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

17. Old Orchard Trail

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES	
	(a) no <u>action</u>	(b) primitive <u>hiking</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	no
Visual intrusion(s) on recreationists	no	yes(+)
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	no
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	no	yes(+)
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	yes(-)	yes(+)
Visitor use patterns	no	no
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	no
<u>Health and Safety Factors</u>		
Visitor and employee safety	no	yes(+)
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

18. Sunrise Trail

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES	
	(a) no <u>action</u>	(b) <u>hiking</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	no
Visual intrusion(s) on recreationists	no	no
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	no
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	no	yes(+)
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	no	yes(+)
Visitor use patterns	no	no
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	no
<u>Health and Safety Factors</u>		
Visitor and employee safety	no	no
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

19. Stanford Trail

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES	
	(a) no <u>action</u>	(b) <u>hiking</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	no
Visual intrusion(s) on recreationists	no	no
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	yes(+)	yes(+)
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	yes(+)	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	no	no
Local economies	no	no
<u>Social Factors</u>		
Recreational opportunities	yes(-)	yes(+)
Visitor use patterns	no	yes(+)
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	no	no
<u>Health and Safety Factors</u>		
Visitor and employee safety	no	no
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

20. High Meadow Farm (ski loop trails only)

ENVIRONMENTAL CONSIDERATIONS	ALTERNATIVES		
	(a) no <u>action</u>	(b) GMP <u>plan</u>	(c) ski loops
<u>Ecological Factors</u>			
Federally listed endangered or threatened species	no	no	no
State listed endangered or threatened species	no	no	no
Critical Habitat(s)	no	no	no
Floodplain	no	no	no
Wetlands	no	no	no
Wildlife	no	no	no
Vegetation	no	no	no
Air Quality	no	no	no
Water Quality	no	no	no
Noise	no	no	yes(+)
<u>Aesthetic Factors</u>			
Visual intrusion(s) on the site	yes(-)	no	no
Visual intrusion(s) on recreationists	no	yes(+)	yes(+)
<u>Historic/Cultural Factors</u>			
Property listed on the National Register of Historic Places	no	no	no
Property eligible for listing on the National Register of Historic Places	yes(-)	yes(+)	yes(+)
Property listed on the National Registry of Natural Landmarks (part)	no	no	no
On or near any known archeological sites	no	no	no
Conversion of prime farmland	yes(-)	yes(+)	no
<u>Economic Factors</u>			
Regional employment trends	no	no	no
Local employment trends	no	no	no
Visitor expenditures	yes(-)	yes(+)	<u>yes(+)</u>
Local economics	no	no	no
<u>Social Factors</u>			
Recreational opportunities	yes(-)	yes(+)	<u>yes(+)</u>
Visitor use patterns	no	yes(+)	<u>yes(+)</u>
Visitor travel patterns	no	no	<u>yes(+)</u>
Transients travel patterns	no	no	no
Local communities	no	no	no
<u>Health and Safety Factors</u>			
Visitor and employee safety	no	no	no
Visitor and employee health	no	no	no
Transients and health	no	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

F. Boston Trailhead

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) <u>by Johnson Barn</u>	(b) <u>by Boston Mills Ski Resort</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	yes(-)	yes(-)
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	yes(-)	no
Visual intrusion(s) on recreationists	no	no
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	no
Property eligible for listing on the National Register of Historic Places	<u>yes(-)</u>	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	perhaps	no
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	yes(+)	no
Visitor expenditures	yes(+)	yes(+)
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	<u>yes(+)</u>	yes(-)
Visitor use patterns	<u>yes(+)</u>	yes(+)
Visitor travel patterns	no	no
Transients travel patterns	no	no
Local communities	yes(-)	no
<u>Health and Safety Factors</u>		
Visitor and employee safety	yes(+)	yes(-)
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

L. Brandywine Falls Trailhead

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

	(a) south of <u>Stanford Road</u>	(b) north of <u>Wallace House</u>
<u>Ecological Factors</u>		
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
<u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	yes(-)
Visual intrusion(s) on recreationists	no	no
<u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	no	yes(-)
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	yes(-)
Conversion of prime farmland	no	no
<u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	yes(+)	yes(+)
Local economics	no	no
<u>Social Factors</u>		
Recreational opportunities	yes(+)	yes(+)
Visitor use patterns	yes(+)	yes(+)
Visitor travel patterns	yes(+)	yes(+)
Transients travel patterns	no	no
Local communities	yes(+)	yes(+)
<u>Health and Safety Factors</u>		
Visitor and employee safety	yes(+)	yes(+)
Visitor and employee health	no	no
Transients and health	no	no

POTENTIAL ENVIRONMENTAL IMPACTS

M. Everett Covered Bridge Trailhead

ENVIRONMENTAL CONSIDERATIONS

ALTERNATIVES

<u>Ecological Factors</u>	(a) <u>no action</u>	(b) <u>30-car lot</u>
Federally listed endangered or threatened species	no	no
State listed endangered or threatened species	no	no
Critical Habitat(s)	no	no
Floodplain	no	no
Wetlands	no	no
Wildlife	no	no
Vegetation	no	no
Air Quality	no	no
Water Quality	no	no
Noise	no	no
 <u>Aesthetic Factors</u>		
Visual intrusion(s) on the site	no	yes(-)
Visual intrusion(s) on recreationists	yes(-)	no
 <u>Historic/Cultural Factors</u>		
Property listed on the National Register of Historic Places	yes(-)	yes(+)
Property eligible for listing on the National Register of Historic Places	no	no
Property listed on the National Registry of Natural Landmarks (part)	no	no
On or near any known archeological sites	no	no
Conversion of prime farmland	no	<u>yes(-)</u>
 <u>Economic Factors</u>		
Regional employment trends	no	no
Local employment trends	no	no
Visitor expenditures	yes(-)	yes(+)
Local economics	no	no
 <u>Social Factors</u>		
Recreational opportunities	yes(-)	yes(+)
Visitor use patterns	yes(-)	<u>yes(+)</u>
Visitor travel patterns	no	yes(+)
Transients travel patterns	no	yes(+)
Local communities	yes(-)	<u>yes(+)</u>
 <u>Health and Safety Factors</u>		
Visitor and employee safety	yes(-)	yes(+)
Visitor and employee health	no	no
Transients and health	no	no

SUMMARY OF IMPACTS

Pertain only to preferred alternatives illustrated in Plan.

	<u>negative</u>	<u>positive</u>
1. Towpath (d)	Possible disturbance to Stumpy Basin's recognized fragile habitats. All Towpath development is in floodplain and may affect those parts of the canal bed which have become wetlands. Use of Towpath through Peninsula may be considered a negative impact by community.	Restoration as multi-use trail will enhance appearance and stability of Towpath, replace missing aquaduct towpath decking, and provide significant long-distance recreational opportunities and increased tourism. Short-term benefits include local contract construction.
2. Gateway (c)	Some clearing of vegetation and along edges of fields. Use of trail into Peninsula may be considered a negative impact by community.	Offers safe off-road route for cyclists, joggers, and skiers, and provides opportunity for contract construction without disturbing significant park resources.
4. Old Carriage Trail Bridges (c)	Some clearing of forest vegetation and local, temporary disturbance to wildlife.	Hikers and skiers will welcome dramatic, safe ravine crossings which also provide short-term opportunity for contract construction. Adjoining community may view public use negatively, although bridges keep trail users away from nearby residences.
5. Plateau Trail (d)	Clearing of vegetation is the principal impact. Local communities may object to increased traffic if site used for special events.	If developed as competition ski course, facility will encourage overnight visitor stays in local motels and restaurant business.
8. Kendall Loop Trail (c)	Major negative impact is clearing of more mature woodland for connector. Effect to wildlife would be minimal.	Ties together several existing trail loops for extended recreational use, encouraging longer visitor stops and more local expenditures. Safety is enhanced by using existing S.R. 303 underpass.
9. Brandywine Falls (b)	If done poorly, this project could adversely affect a noted early 19th c. mill site and could expose the visiting public to occasional high levels of water pollution in Brandywine Creek.	When developed, this loop trail will provide for safe visitor enjoyment to one of Ohio's most scenic waterfalls and early settlement sites, increasing tourist expenditures.

	<u>negative</u>	<u>positive</u>
10. River Corridor Bike Trails (c)	Use of village streets to tie bike route across river may be considered negatively by community.	Class II routes will improve safety, reduce conflicts between motorists and cyclists, joggers, etc. Encouraging cycling will promote cleaner air and more visitor expenditure at local equipment and rental businesses.
11. Hale Farm Bike Loop (b)	None apparent.	This Class III route ties the historically significant Hale Farm area to the River Corridor Trails (#10) using existing roads.
12, 13, 14 West Rim Trail (b)	Possible encroachment into fragile floodplain habitats.	Trail opens up diverse variety of scenic features, also allowing more regular patrols and safety access.
15. Tree Farm Trail (b)	Minimal disturbance to diverse plant and bird life which now characterizes this overgrown Christmas tree farm.	By providing a back-up skiing and hiking loop with magnificent views, peak loads are lowered at heavily-used Kendall and Oak Hill day-use areas.
16. Furnace Run Loop (b)	Minor affects of introducing limited human access to area.	Ideal area for exploring diverse scenic and natural features, creating some demand for nearby services.
17. Old Orchard Trail (b)	None apparent.	Creation of large distance hiking trail for serious long-distance hiker.
18. Sunrise Trail (b)	None apparent.	Opens up major east-west alignment connecting 3 established access points.
19. Stanford Trail (b)	None apparent.	Provides trail access for youth hostellers to nearest dramatic scenic feature --- also easier patrolling of inaccessible areas.
20. High Meadow Farm (c)	None apparent.	By providing back-up skiing and hiking loops with magnificent views, visitor use is dispersed. Plenty of room can accommodate many other compatible site activities.

	<u>negative</u>	<u>positive</u>
F Boston Trailhead	Site development at LCS-listed Johnson Barn must be sensitive and compatible to nearby village, canal, and former agricultural lands.	Site provides ideal multi-use off-road access point to trails, Boston Company Store, river, and adaptively re-used barn.
L Brandywine Falls Trailhead	None apparent.	Moving off-road parking away from falls and historic Wallace Farm minimizes intrusion into historic scene. Safe off-road parking allows area to become a major visitor attraction of NRA's east side.
M Everett Covered Bridge Trailhead	Degree of visual intrusion of trailhead depends on sensitivity of design. About 2 acres of an 80-acre field will be used.	Safe off-road parking for this beloved bridge provides scenic interest as well as access to various trails and streamside activities.

In sum, the recreational values and exposure to significant scenic and cultural resources outweighs the short- and long-term disturbances caused by the construction and use of these trails. The cumulative effect of these impacts will be minor, since the proposed work is small-scale and dispersed. Most of the intensive construction (e.g. Towpath Trail) occurs on already disturbed corridors.

CONCLUSION

The 1976 Environmental Assessment for the national recreation area's General Management Plan assessed a wide variety of proposed projects, including a park-wide trail network. In magnitude and location it was similar to that proposed herein, except no mention was made of bicycle or cross-country ski trails.

The foregoing project-by-project analysis of impacts reveals a distinct pattern: high-priority multi-use and horseback trails have both more positive and negative impacts than the lower-profile (and generally lower priority) skiing and hiking trails. The Towpath Trail, the Gateway Trail, the Old Carriage Trail multi-use corridor, and the various road-side bicycle trails will involve the greatest construction disturbance while attracting the greatest magnitude of visitor use. In the case of the Towpath Trail, rehabilitation for trail use exactly coincides with the efforts of historic preservation to stabilize the canal corridor as the valley's most significant historic resource. The high priority projects which involve construction also have the most to contribute to local economics through construction contracts and visitor dollars. The low impact hiking and ski trails can be installed with minimal environmental disturbance, but will also generate the least visitation.

During the implementation of these projects, certain mitigating actions will help minimize the negative impacts listed; such actions include sensitive design, trail relocation, and volunteer participation. Sensitive design keeps channelled drainage at trailheads to a minimum, keeps intrusive modern facilities away from fragile cultural or historic features, promotes safety, and reduces the need for future maintenance. Trail relocation is an ongoing process to avoid unstable slopes, areas of high use, and erosion; it may also be appropriate if sensitive cultural materials are found on or near the original alignment. Volunteers serve many functions in this Plan: they provide continuity during times of staff turnover; they can organize work and maintenance crews; they provide input from interested area organizations; and they can be invaluable in monitoring trail conditions and hazards. Such mitigating actions will go far in ensuring the long-term success of this trail planning effort.

PARTICIPATION AND COORDINATION

AD HOC TRAILS COMMITTEE of the CVNRA ADVISORY COMMISSION

Jack Craig
Janet Hutchison (Chairperson)
Sue Klein

SUBCOMMITTEES

BICYCLE

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Martin Cooperman
Don Dunstan
Chris Goddard
Jeffrey Goss
Tom Jenkins
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Mark Schwarz
Mike Zuccaro (chairperson)

CROSS-COUNTRY SKI

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HORSEBACK and MOUNTS

Jack Craig
Hugh Freeman
Jan Geho (co-chairperson)
Roy Hager
Bill Lewis
Harry Walkup
Annette Wasinski (co-chairperson)

Chairman's Choice
Escudero
Goldie
Gypsy
Hawkeye
Jubilee
Mark
Moose
Raider
Reno
Robroy
Shotgun
Sunny

NATIONAL PARK SERVICE

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Mark Gatewood
Marc Hill
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Mary Kay Newton
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PARTICIPATION AND COORDINATION (Continued)

Members of CVNRA Advisory Commission
Officials of communities affected by plan
Members of Cuyahoga Valley Communities Council

In addition to these participants, the plan has been reviewed by the following individuals and group representatives:

Akron Metropolitan Area Transportation Agency (AMATS)
Armington, Jim; Buckeye Sports Center
Barbernitz, Pete; Boy Scouts
Barnett, Jim; Basecamp Outfitters
Bethel, Greg; CVNRA Volunteer
Buckeye Trail Association
Buerling, Siegfried; Hale Farm and Village
Camp Mueller, c/o Phillis Wheatley Assoc., Cleveland
Cleveland Hiking Club
Daley, John; Akron Metropolitan Park District
Davis, M/M William; Subcommittee on Employment of the Handicapped
Dover, Clarence; Brandywine Ski Center
Easter, Gary; Cleveland Roadrunners
Fahlman, Chris; Blossom Center
Galamore, Don; Boy Scouts of America
Guilford, James; Lake Erie Wheelers
Harper, Dale; National Association of the Physically Handicapped
Horton, Ed; Ohio Department of Transportation
Jackson, Robert; VSM Corporation
Kiefer, David C.; National Handicapped Sports and Recreation Assoc.
Lerch, Pat; Ohio Department of Natural Resources
Ludwig, Richard; Boston Mills Ski Center
Mowrey, Debbie; Girl Scouts
Noice, Dianne; Independence Public Schools
Northeast Ohio Group, Sierra Club
Portage Trail Group, Sierra Club
Rowe, Dave; Smythe - Cramer Co.
Snyder, Jerry; National Association of the Physically Handicapped
Tirpac, Paul; Astorhurst Golf Club
Tsipis, Lou; Cleveland Metropark System
Voltz, Jim; Three Trackers of Ohio
Wilson, Pete; Old Trail School
Yablonski, Thomas; CVNRA Volunteer
Yesberger, Earl; Brandywine Golf Club

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Boldizar, Frank V.
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Macias, Joann
Millican, James T.
Penacho, Mark
Welmer, Hal

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