

the Skyline Drive

Landscape Report



HAZEL MOUNTAIN OVERLOOK

The INSTITUTE
for the HISTORY of TECHNOLOGY
and INDUSTRIAL ARCHAEOLOGY

INSTITUTE FOR THE HISTORY OF TECHNOLOGY & INDUSTRIAL ARCHAEOLOGY
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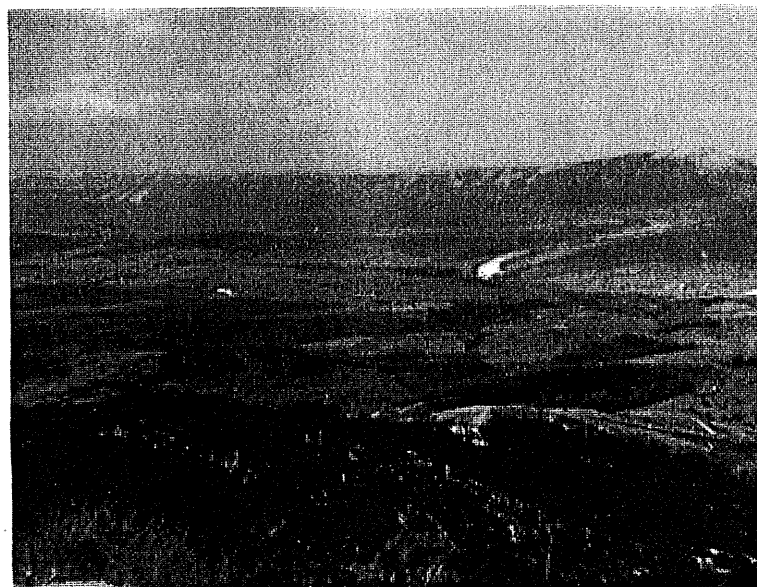
Section I: *Historic Overview*

SKYLINE DRIVE LANDSCAPE REPORT

Historic Overview

The Skyline Drive is a scenic park road that runs along a portion of the ridge of the Blue Ridge Mountains of northern Virginia. It was built between 1931 and 1939 and is the main access road for Shenandoah National Park. The concept for the Drive was can be found in the report of the Southern Appalachian National Park Committee in 1924. It was stated in this report that "the greatest single feature,... is a possible skyline drive along the mountain top following a continuous ridge and looking down westerly on the Shenandoah Valley from 2,500 to 3,500 feet below, and commanding a view of the Piedmont Plain stretching easterly to the Washington Monument... few scenic drives in the world could surpass it." ¹ This committee recommended this portion of the Blue Ridge Mountains be selected as the site for the creation of a national park.

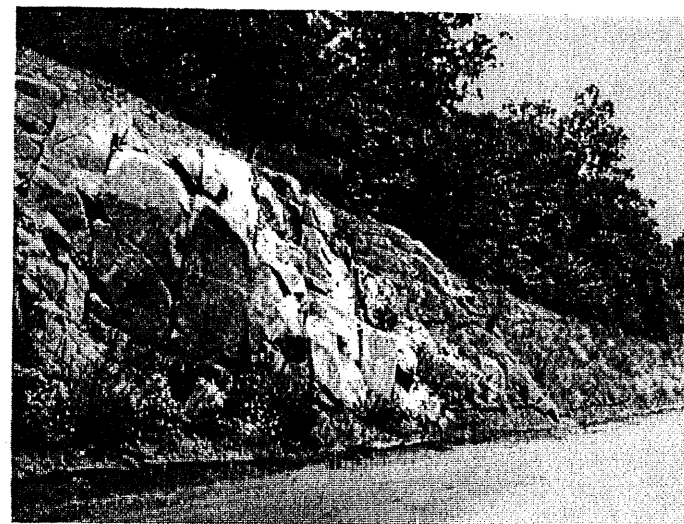
The Drive is 105.5 miles long with over seventy scenic overlooks. There is nothing outstanding about the techniques that built the Drive, however it is a masterpiece. The road alignment brings tourists to some of the most spectacular scenery in the Eastern United States while remaining unobtrusive on the landscape. The design concept for the Drive was to create a road that is to be used for pleasurable driving while exposing the magnificent vistas.



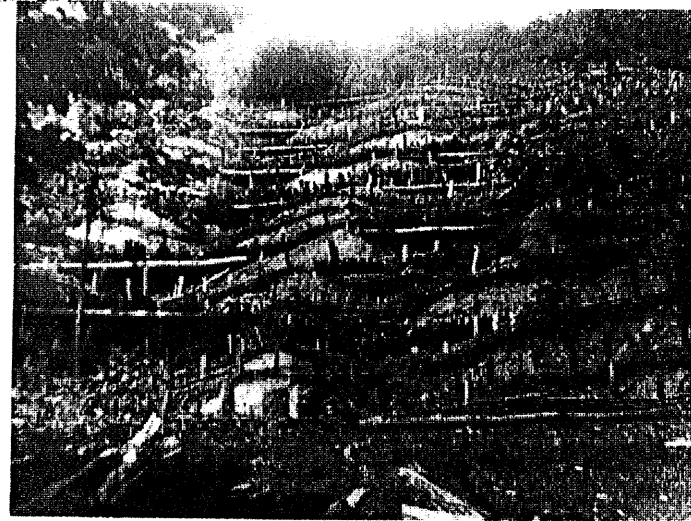
¹ Committee on Public Lands, Providing for the Acquisition of Lands in the Southern Appalachia Mountains for Park Purposes: Report to Accompany H.R. 11980, 68th Cong. 2nd Sess., 1925, H. Rept. 1320, 5.

Motoring along the Drive at thirty-five miles per hour is a very pleasing driving experience. Drawing on mountain road building experiences gained in the western parks, the designers of the Drive chose a road alignment that kept the curves broad and easy to maneuver. The minimum radius for a horizontal curve is 200 feet. They also kept the slopes easy to drive with the maximum grade being eight percent. Overall the road alignment is quite graceful.

The broad curves and gentle slopes not only make driving easier they also make the Drive seem less disruptive to its surroundings. The way the Drive blends with the surrounding landscape is a testament to the foresight and vision of its designers. The road alignment follows the natural topography of the land, thus minimizing the number and severity of cut and fill areas needed to build the road.



In areas where cut and fill was inevitable the slopes were rounded and warped to fit the natural landform. Vegetation was also planted on the slopes to further reduce the scars and soil erosion. The Civilian Conservation Corps (CCC) enrollees provided the manpower to complete the planting and the erosion control work.



The plants that were used along the Drive were either transplanted from within the park or propagated at one of two CCC operated nurseries in the park. The nurseries were located near the north entrance and near Big Meadows.



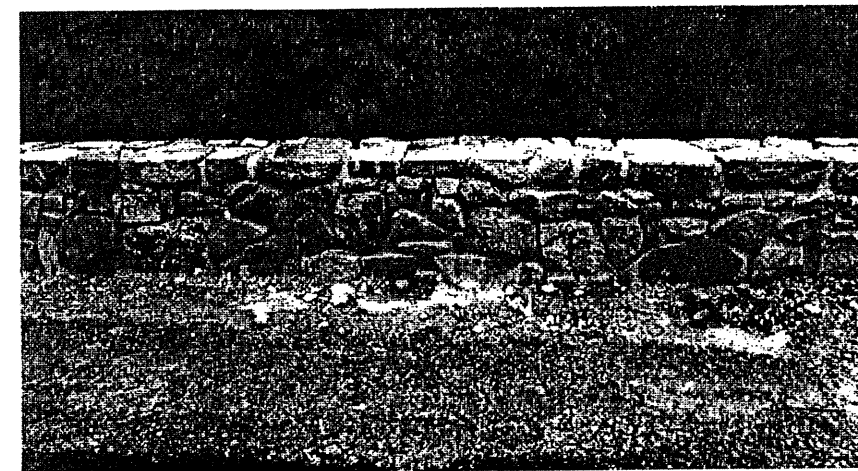
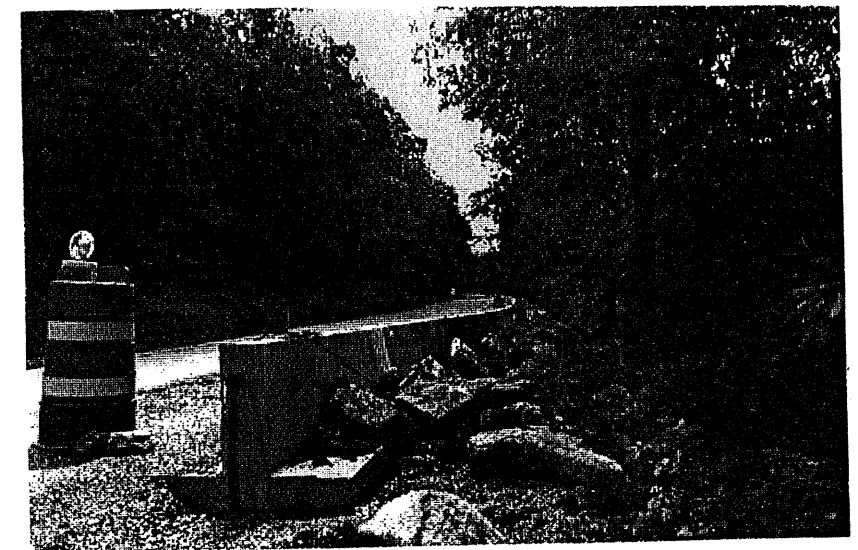
The work that was done by the CCC along the Drive directly affected the present appearance of the Drive. The land surrounding the Drive has changed in its appearance drastically since it was first opened to the public. Much of the land surrounding the Drive was open fields with scrubby first succession vegetation with a few stands of mature forest. Big Meadows was the most predominant open meadow along the Drive and is still maintained as an open meadow because of its historic significance. The forest along the Drive has been aesthetically enhanced by the development of woodland bays. These bays are made up of masses of ferns or masses of mountain laurel and azaleas. They provide interest to the Drive by creating changes in texture and color and providing breaks in the forest edge. Historically views from the Drive and its overlooks were broad sweeping panoramas. Today most of the land along the Skyline Drive has been allowed to return to forest.

Present Considerations

The return of the forest growth has enhanced the character of the Drive by reclaiming what was once overworked farm and pasture lands. Growth of the forest also presents a maintenance challenge. The challenge is to decide how much of the forest should be allowed to grow into the views. The broad sweeping panoramas of the 1930s are now replaced by forest vegetation. There are several drive-by vistas along the Drive that are kept open to show off particularly scenic views that do not have a stopping point. Parking overlooks and road widenings are the most challenging from a maintenance stand point. The limits of the view must be determined in order to decide how much vegetation must be removed to maintain the view. It must also be determined if any specimen plants within the overlook clearing should be saved. The decision to save specimens in this instance is very delicate because the specimens must enhance the overlook and not compete with the scenery within the vista. Specimens within the overlook clearing must be chosen judiciously to keep the clearing from getting a head start on its natural tendency to become overgrown. Most of the vistas from the overlooks have changed to some degree. The change from an open panorama to a series of views framed by trees is the most common change. The reason for the change is due to the policy of the Shenandoah National Park to let the land within the park revert to forest.

The vegetation between the road and the treeline requires routine maintenance. The road shoulders are covered with grass which is mowed 4-6 times a year or as needed to keep sightlines open for motorists. The vegetation between the shoulders and the treeline is mowed with a tapered cut on a yearly basis this keeps the vegetation from growing into the sightpath of motorists using the Drive. Because of the safety standards involved, the maintenance plan for the road shoulders must be strictly followed. The guardwalls along the Drive have been changed because more stringent safety standards have been adopted by the Federal Highways Administration. The original walls were dry laid stone with the top course set in mortar and deeply raked.

The early walls fit very well with the rustic design scheme that was followed throughout the Drive and Park however they are not strong enough to serve their original purpose and needed to be upgraded to modern standards. The upgraded walls consist of a concrete "Jersey Barrier" faced with a veneer of stone cut from the original stone guardwalls.



Other changes that have occurred along the Drive are the upgrading and addition of visitor facilities such as entrance stations, waysides, campgrounds, and visitor centers. The entrance stations have been upgraded in order to provide quicker entry for increasing numbers of visitors. The number of trail head parking areas has also increased because of increased trail usage.

Recommendations

In a natural landscape setting such as the Shenandoah National Park, change is expected due to the dynamic character of natural processes. Since the original Park plan was to allow the surrounding land to forest it would go against the intent of the designers to try to restore the landscape to the open pasture and farmland that existed when the Drive was first opened to the public. Such a restoration would require phenomenal amounts of capital for the initial work as well as the later maintenance and management. It would be more logical to interpret a landscape mosaic that is chronologically layered and not memorializing a single moment in time.² It is important to understand the intent of the designers and the concepts put forth in their design, and use these ideas as a guide for the maintenance of the vegetation along the Drive. Similar thinking guided the vista restoration at Stan Hywet Hall in Akron, Ohio. In that case the restoration team saved some mature oak trees that formed a "roof" over one overlook based on the original designers knowledge of plant material.³

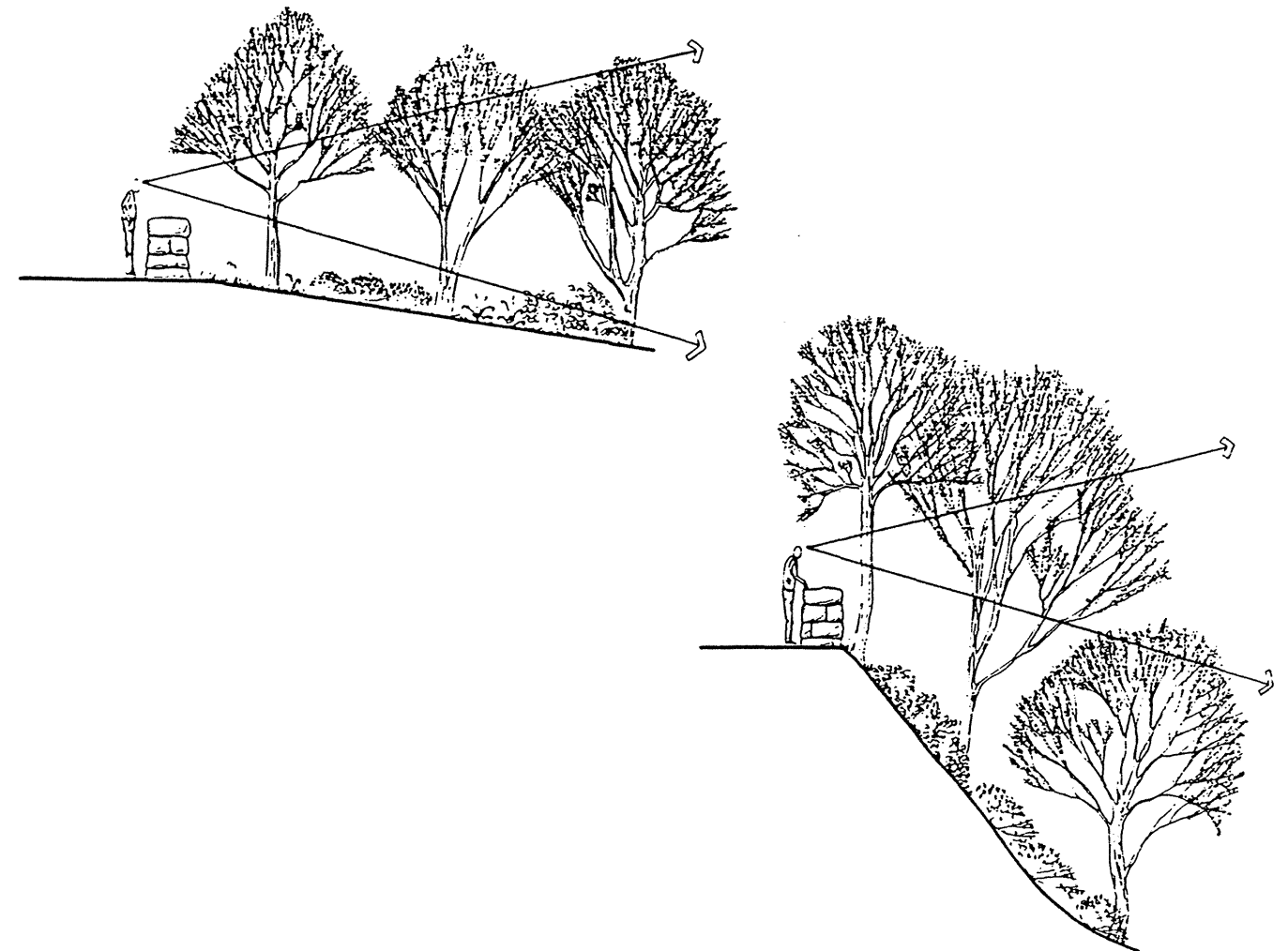
The intent of the designers of the Skyline Drive was to create a scenic park road. This concept must guide every decision that could change the appearance of the Drive. The Drive's scenic quality should not be diminished by man-made occurrences. Maintenance of the vegetation along the Drive must be ongoing in order to be effective. Consistency will eliminate the need for intense pruning which is done for quick results on overgrown plants. Some plants can tolerate heavy pruning but it is not recommended because it can cause stress on the plant. In a stressed state plants lose vigor and become more susceptible to disease and pest infestation. Vistas should be cleared routinely to keep the vegetation from becoming overgrown. Unless the vista holds some significance, clearing an overgrown drive-by-vista may not be feasible if the vegetation has reached a certain level of maturity. The better choice may be to let the vegetation grow and create another vista in an area that has natural openings such as gypsy moth damage or wind damage. The

² Charles A. Birnbaum, "The End of the Period for Period Landscapes," Historic Preservation News, July/August 1993, p. 6.

³Fred J. Robinson, "Management and Treatment of Historic Views and Vistas Stan Hywet Hall, Akron," Cultural Resources Management Information for Parks Federal Agencies, Indian Tribes, States, Local Governments and the Private Sector, 16 (1993): 37.

existing gypsy moth damage in the park creates many opportunities to test this option.

In the case of overgrown vistas at road widenings and parking overlooks, many factors must be evaluated when determining the proper treatment. The factor requiring the most attention would be the significance of the view. Considerations should be made for the maturity of the offending vegetation and the amount of maintenance required to keep the view open. In some cases the gentle grade below the overlook would require a lot of vegetation to be removed in order for the view to be visible.



When an overgrown vista is renovated, care must be taken to avoid changing the natural shape of the trees, and to keep them from looking sheared.⁴ Pruning cuts should be made where they are not noticeable. The branches of adjacent trees can be used to visually soften the trees that are pruned with long branchless

⁴ Ibid.

sections of trunk.⁵ The renovated vista should look as if no pruning had occurred. If it is determined that vista renovation is not possible then alternative uses for the overlook should be explored. Trail head parking is an option that is already being used successfully.

Conclusions

The Skyline Drive has had some changes over the years. None of the changes are so drastic that they are blatantly obvious. The changes that were made by the Park Service were done to improve the safety of the park or to improve the quality of service to the park's visitors. The changes are usually done in a manner that is sympathetic to the original design intent of the parks designers. It is obvious that three of the entrance stations have been replaced. There was no attempt made to copy the style of the original stations but the design and choice of building material make the new stations a harmonious substitute for the originals. The new trail head parking areas were born-out of necessity to provide safe parking for campers who were at one time parking on the road shoulders. Whenever possible they are situated inconspicuously from the Drive. With the exclusion of the catastrophic events such as chestnut blight and gypsy moth infestation the changes that have occurred naturally happened subtly over greater spans of time, therefore the natural changes are only obvious to people who can remember the earlier conditions or to people who have photographs for comparison.

It is important to realize that the Skyline Drive and its surroundings will change with time. The impact of the natural changes can be lessened by consistently following a routine maintenance plan. In order for the Drive to retain its historic integrity any man made changes should be guided by the intent of the original designers.

Methodology

The purpose of this study of the Skyline Drive is the preparation of a National Register of Historic Places nomination. In order for the Drive to be placed on the National Register, the determination must be made that the Drive is historically significant and that enough historic fabric remains so that the original character of the Drive is not compromised. When the Drive was completed and opened to the public over fifty years ago, the landscape surrounding the Drive was in the early stages of forest succession. Therefore, policies were enacted by the National Park Service to restore the surrounding landscape to a mature eastern forest in order to help reduce soil loss to erosion, enhance the beauty of the Park and the Skyline Drive, and create habitat to

attract wildlife to the park. This plan like other landscape plans is a long term one. Any type of landscape plan does not show results immediately because the plants that are used in the design need time to grow. The amount of time it takes for the vegetation to reach its mature size depends on several variables, such as the plant species and growing conditions. Growing conditions can be further divided into shade tolerance, soil pH, soil texture, soil nutrients, temperature extremes and water supply. However, as a general rule, landscape architects do planting design with plant sizes at fifteen to twenty years growth under optimum conditions.

The historic condition of the land surrounding the Drive was determined through research of the available literature, construction documents and historic photographs.

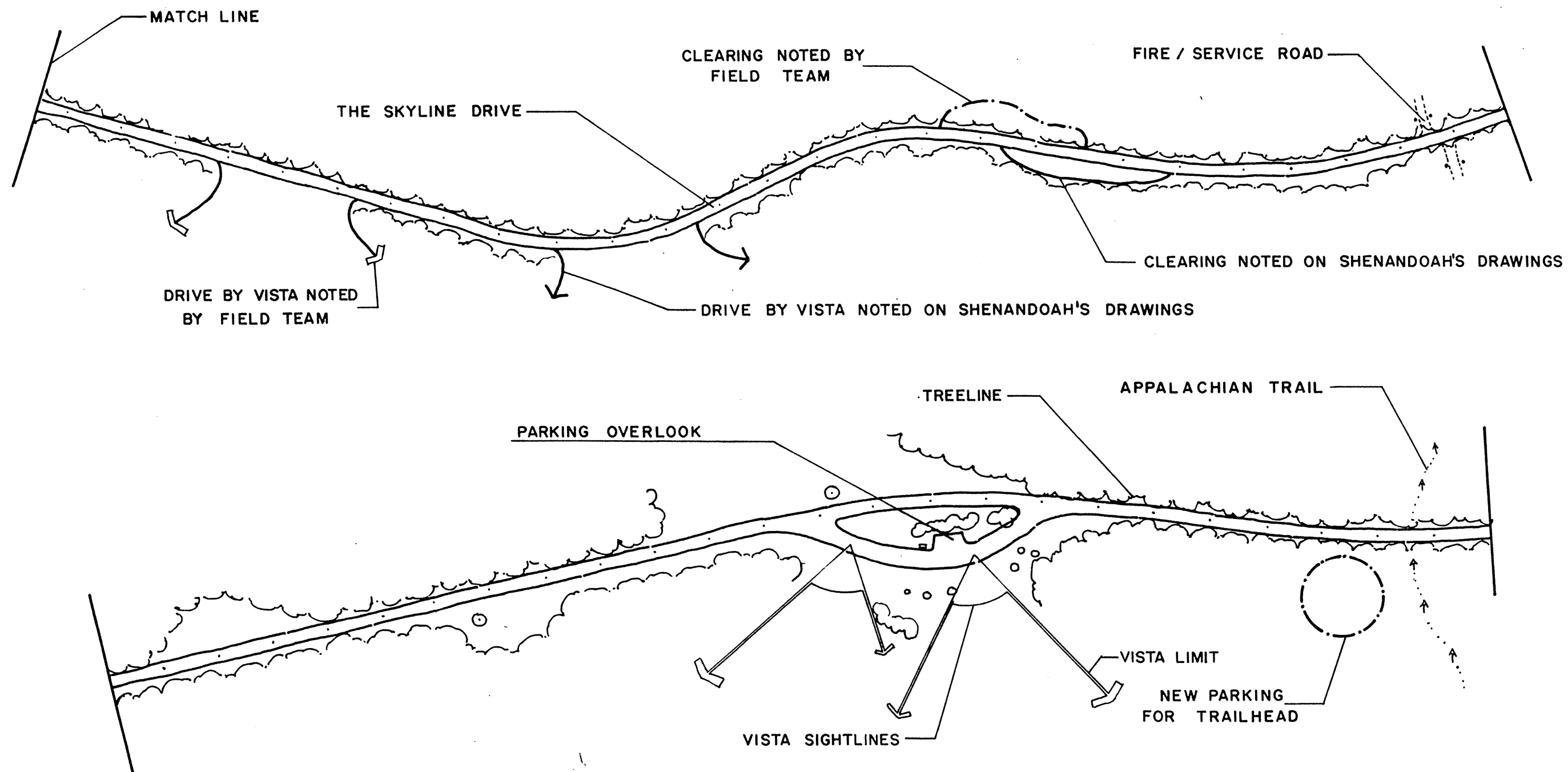


⁵ Ibid.

Drawings in this report were copied and adapted from drawings in the Park's collection. The areas that are delineated as historic clearings were taken from notes that were written on prints of the original Plan and Profile drawings of the Drive. These notes were probably written during the mid 1950s and used as the maintenance plan for the vegetation around the overlooks and along the Drive. By the mid 1950s, vegetation planted or existing when the Drive was built would have had time to mature thus requiring maintenance. This information was then compared to existing conditions along the Drive. Prints of original drawings of individual overlooks were also used to compare proposed designs with existing conditions. Not all the overlooks were studied in this manner because drawings were not available for every overlook.

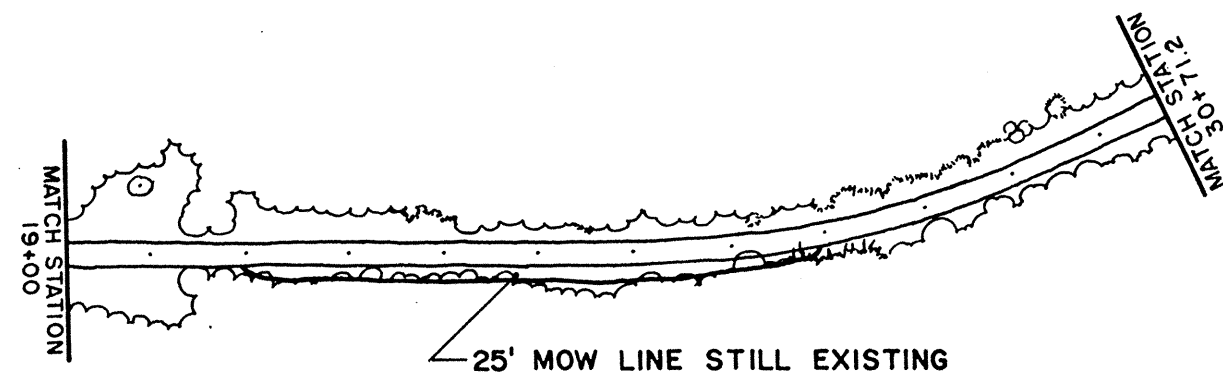
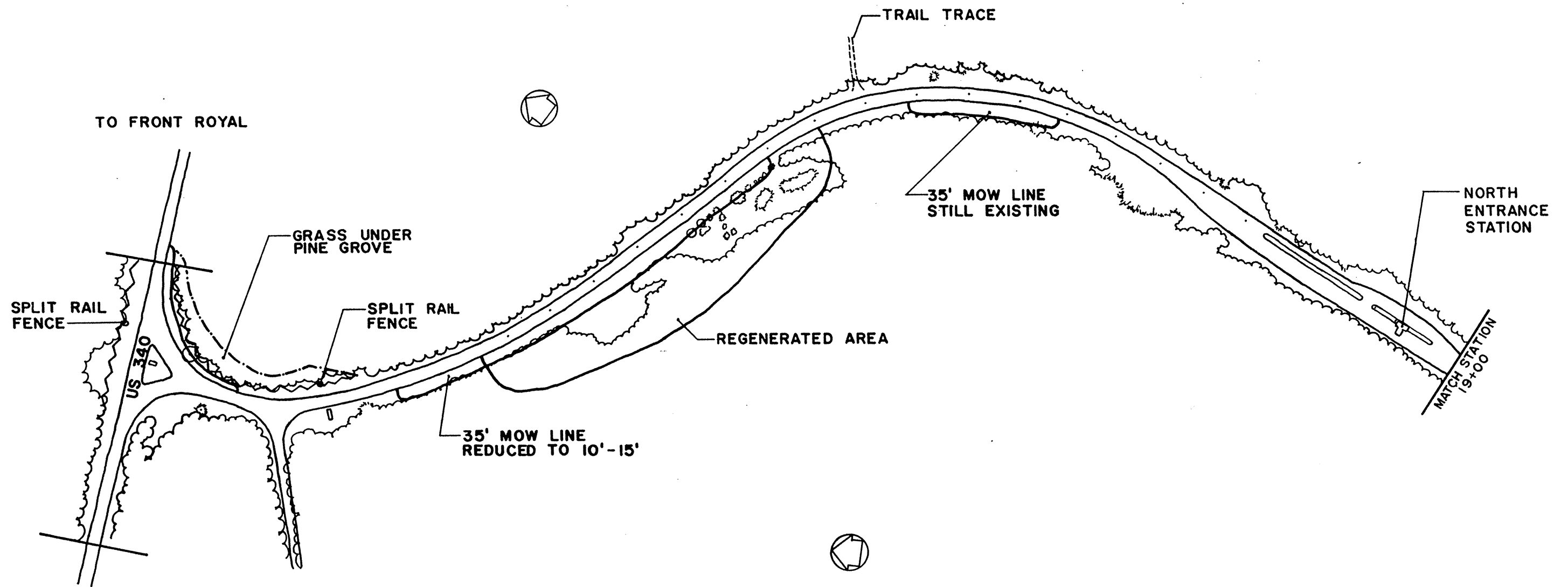
This study was made by a team consisting of landscape specialists Kevin McClung and Paul Boxley, landscape architecture student David Sobina with the guidance of consulting landscape architects George Longenecker and Marc Malik. Historic research was conducted with the help of historians Lee Maddex and Jeff Drobney.

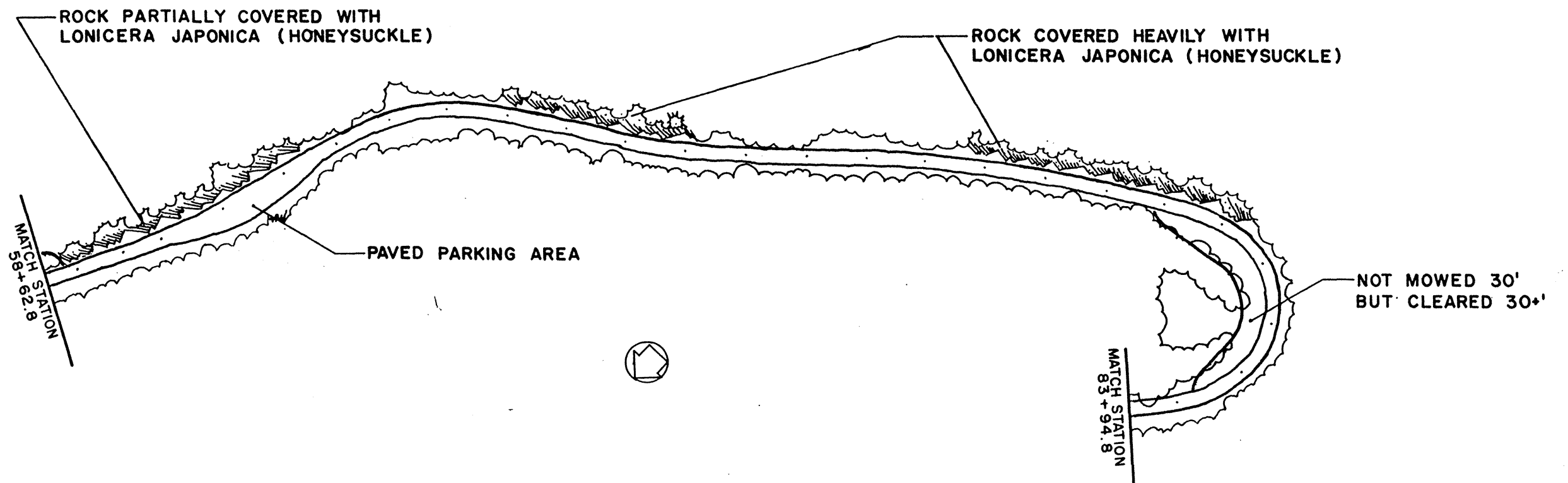
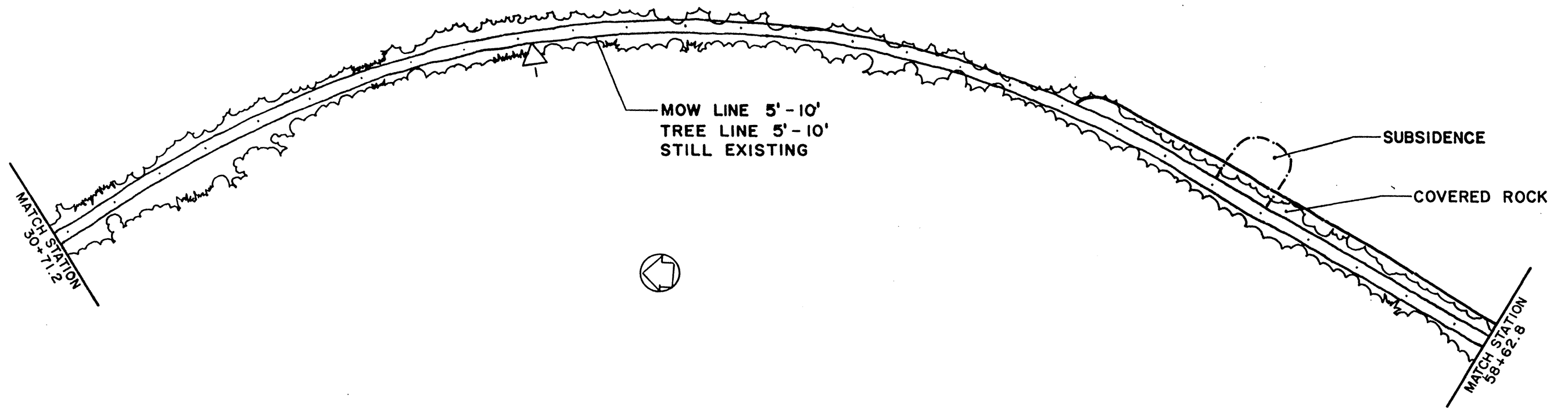
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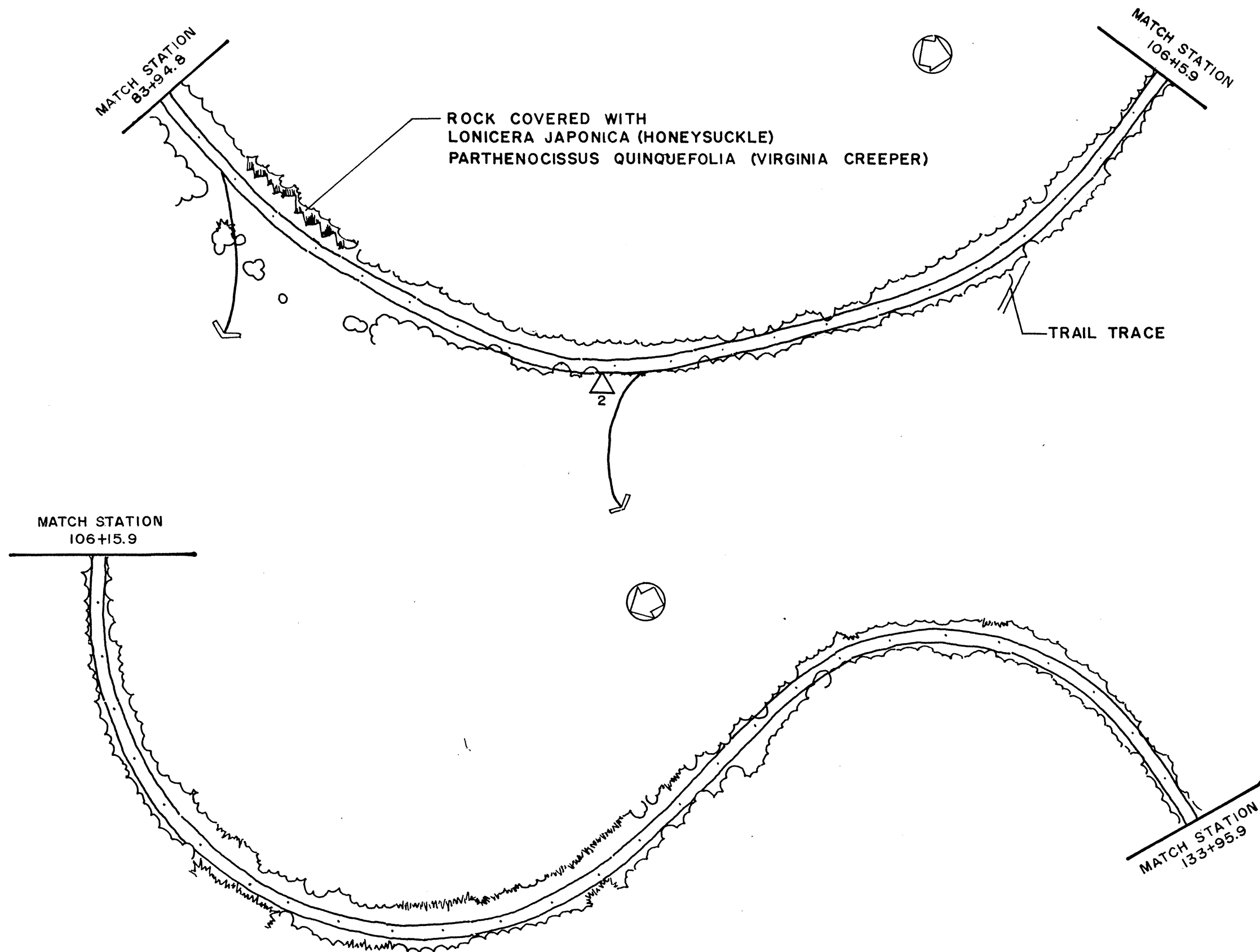


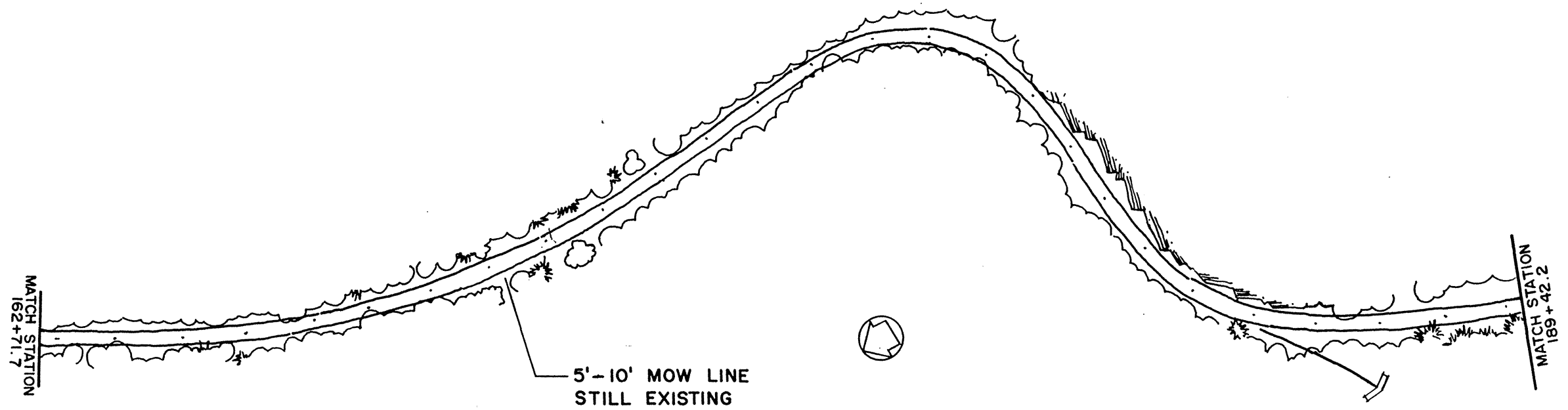
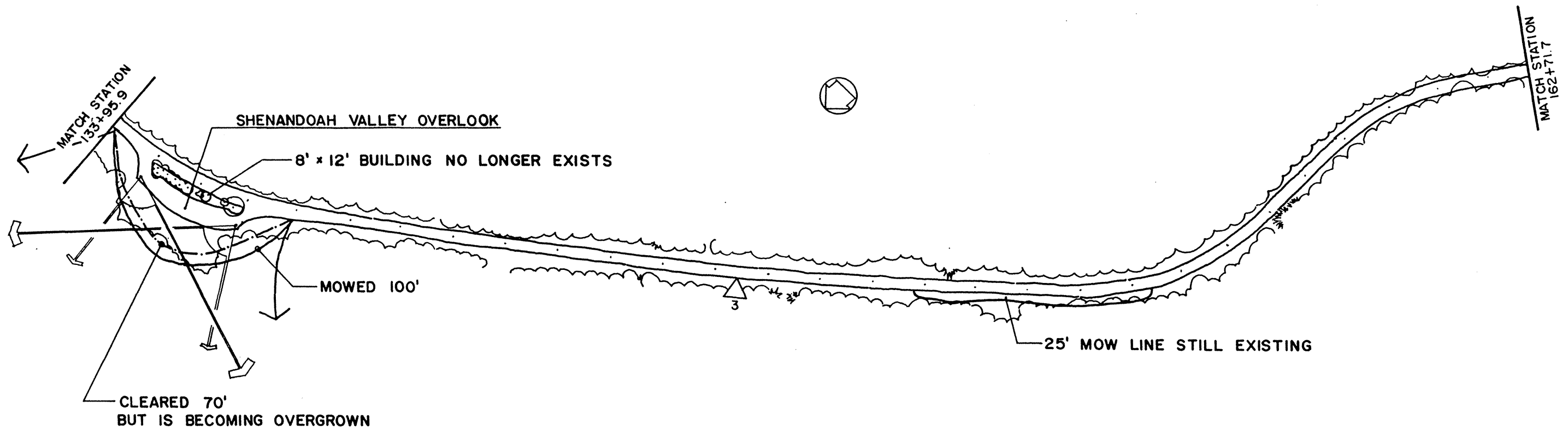
LEGEND

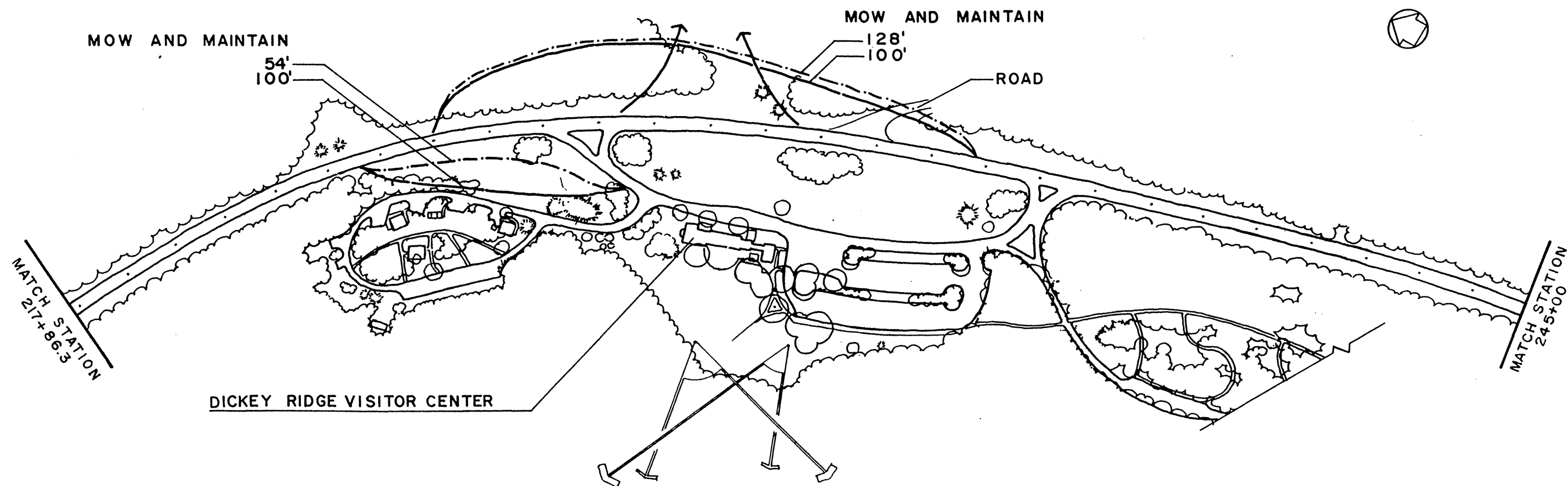
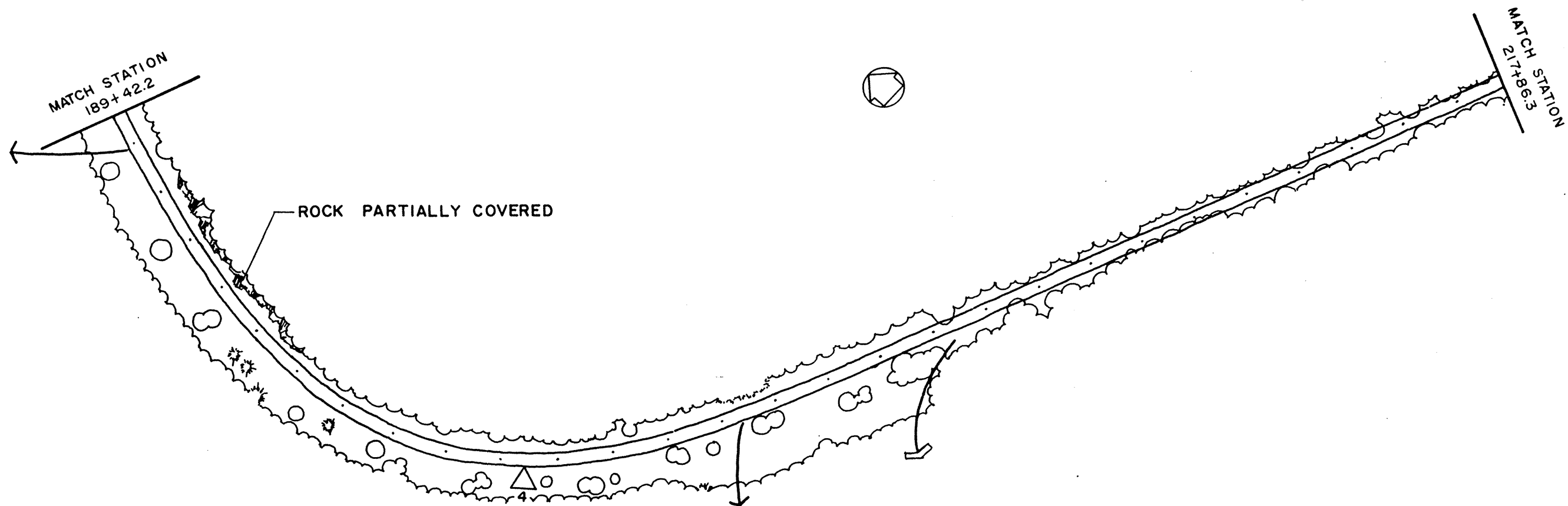
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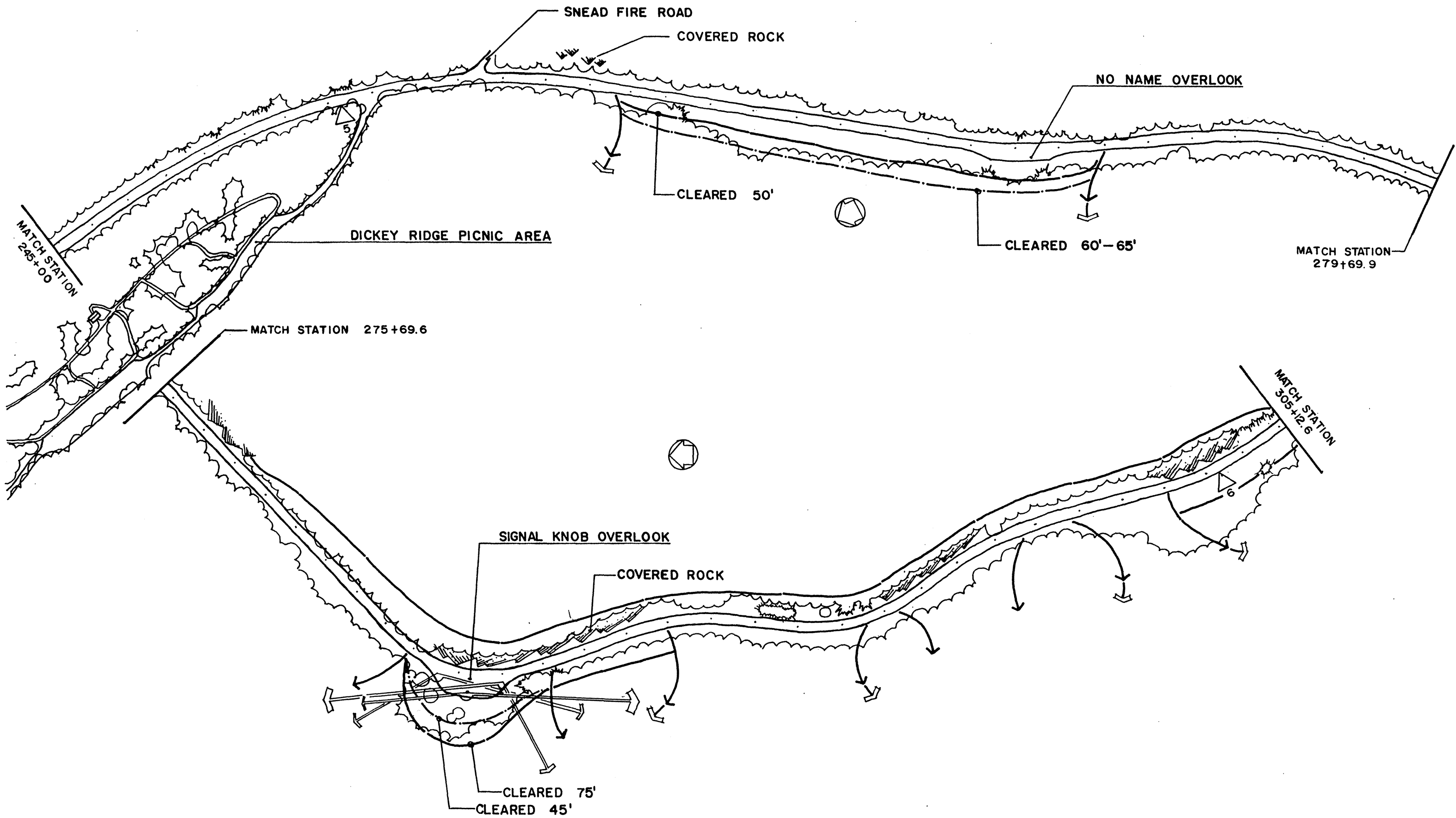


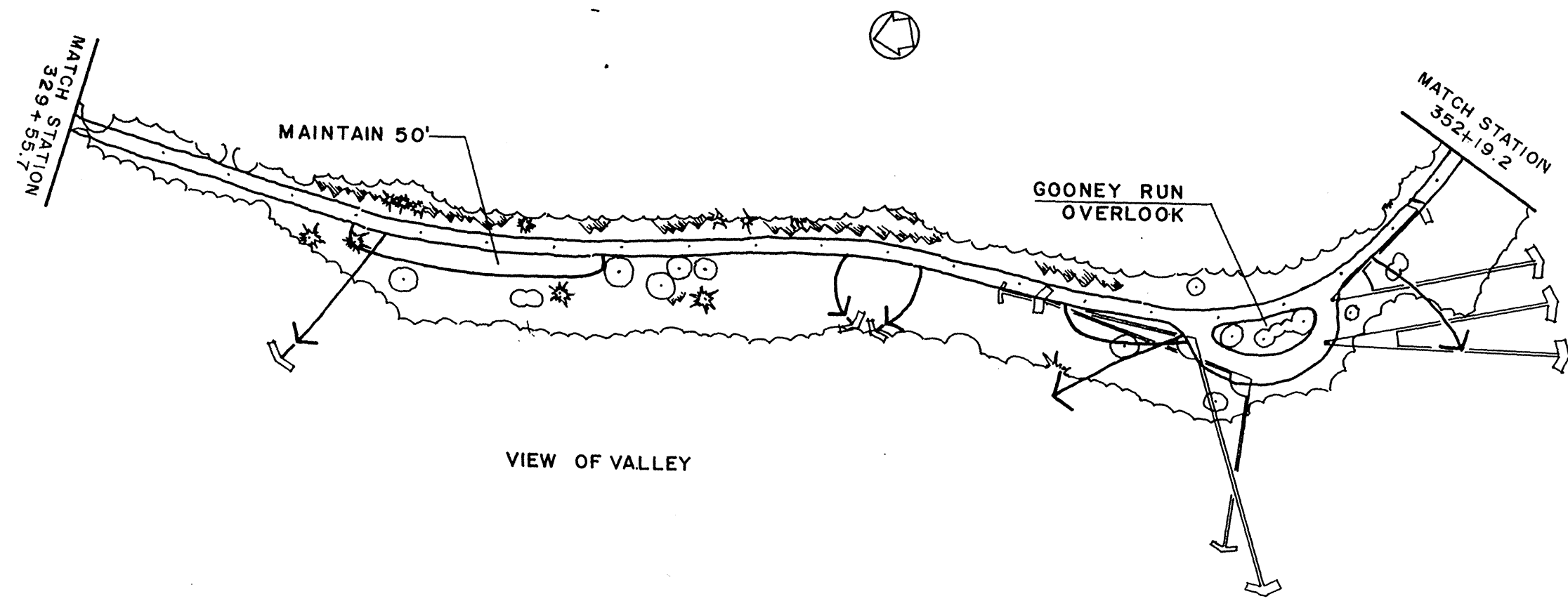
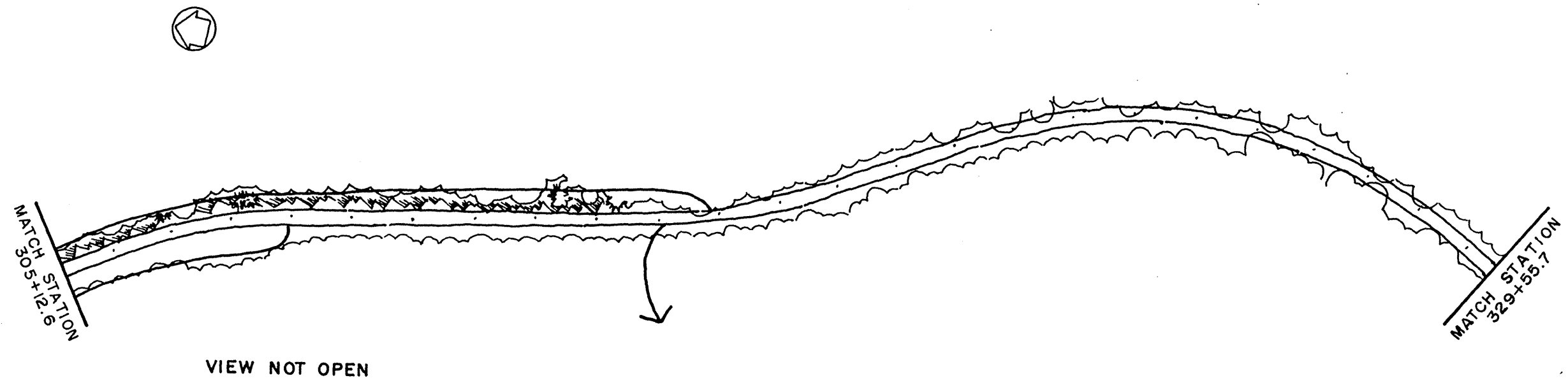


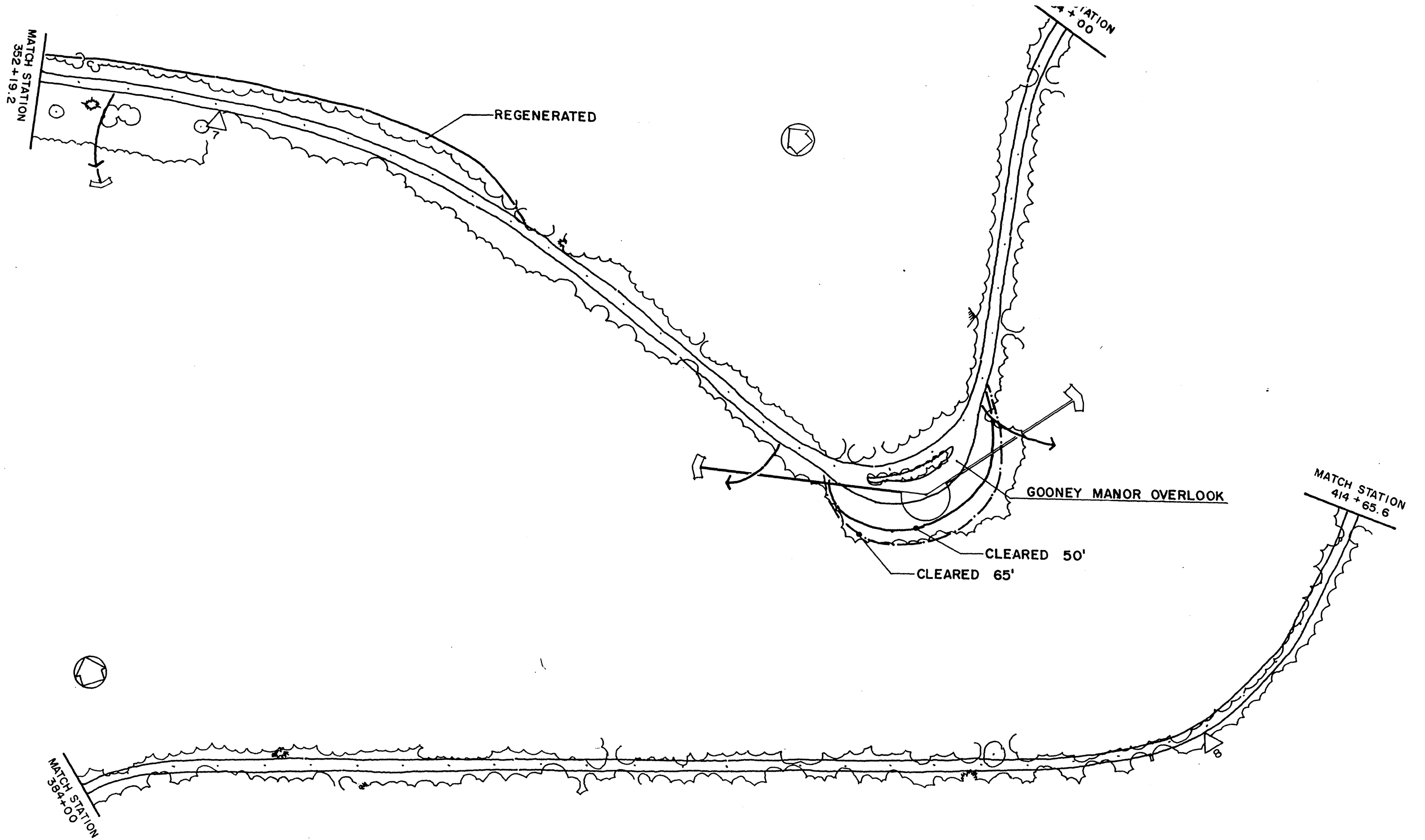












VIEW OF MOUNTAIN
NOT OPEN

MATCH STATION
414+65.6

MATCH STATION
445+23.2

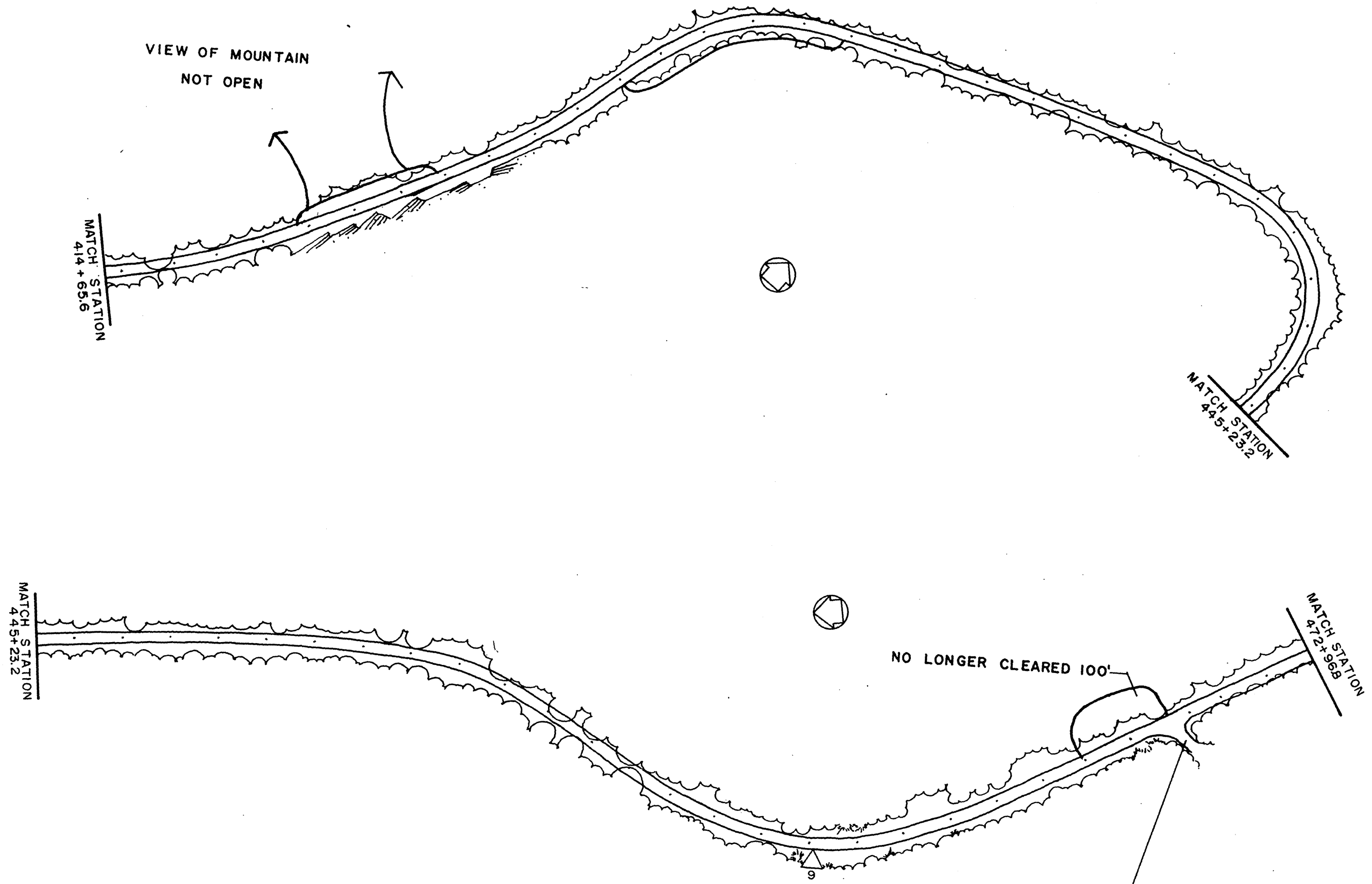
MATCH STATION
445+23.2

MATCH STATION
472+96.8

NO LONGER CLEARED 100'

LANDS RUN GAP
FIRE ROAD

9



MATCH STATION
472 + 96.6

REGENERATING SLOPE

100' CLEARING IS
OVERGROWN

DEAD QUERCUS SP. (OAKS)
RESULTING FROM GYPSY
MOTHS

75' CLEARING IS
OVERGROWN

GRAVEL PARKING AREA

MATCH STATION
503 + 64

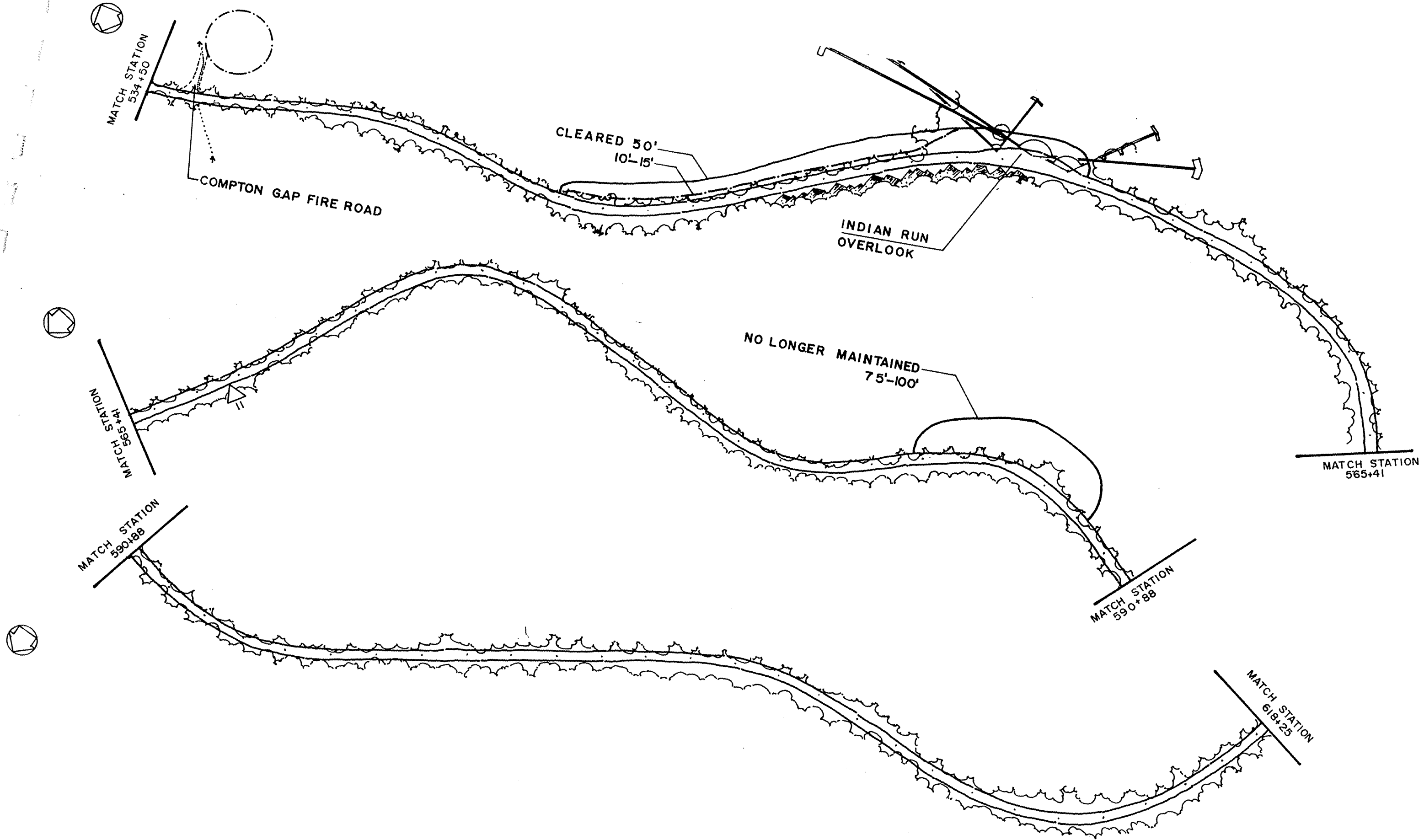
REGENERATING

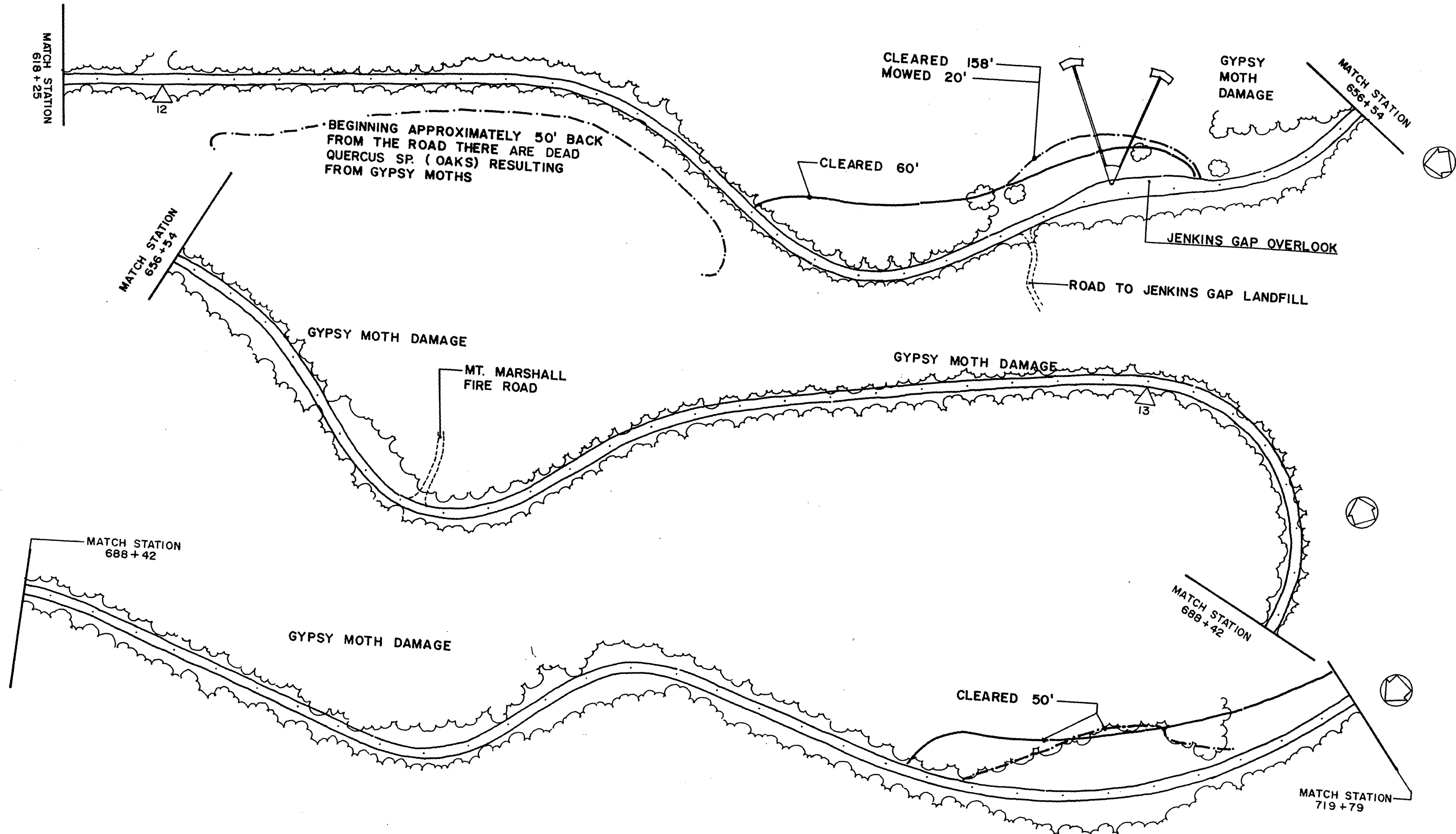
LOOSE ROCK AND SOIL
STILL EXISTING BUT
STARTING TO REGENERATE

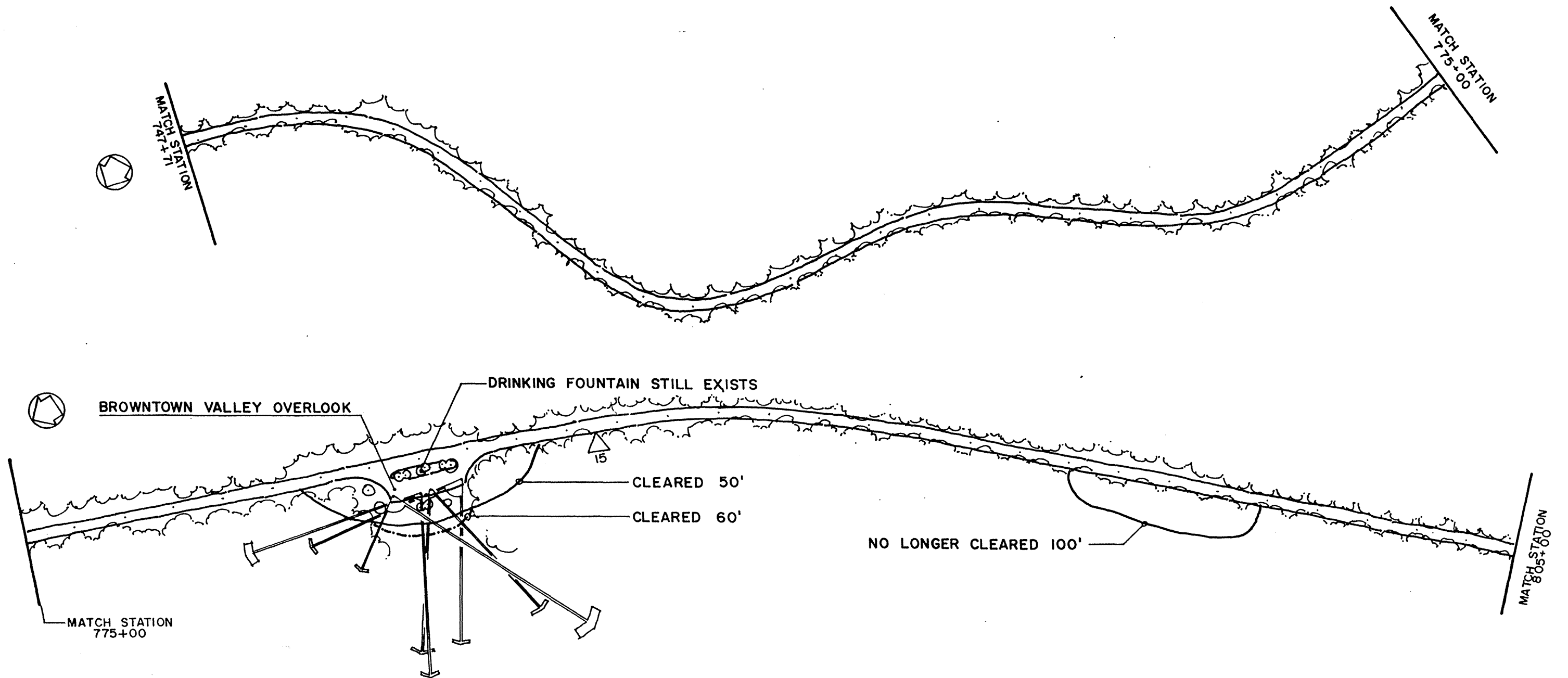
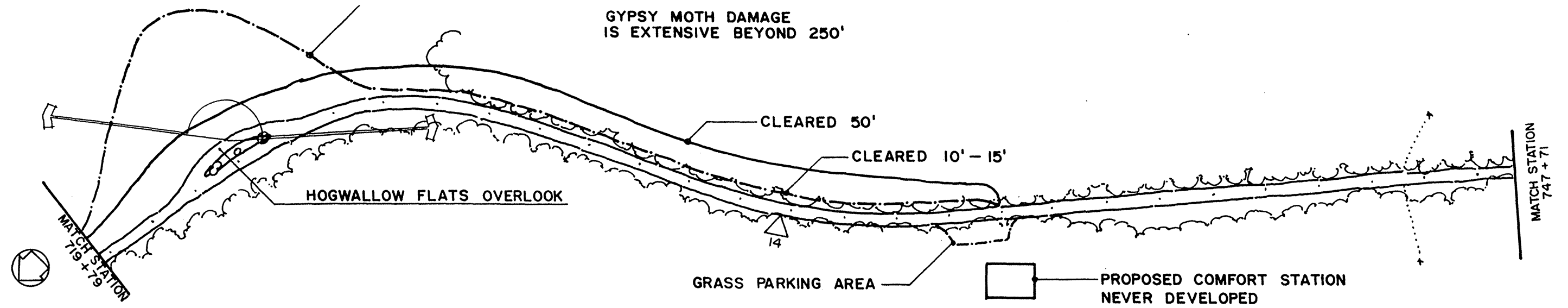
VIEW OVERGROWN WITH
MOSTLY RHUS SP.
(SUMAC)

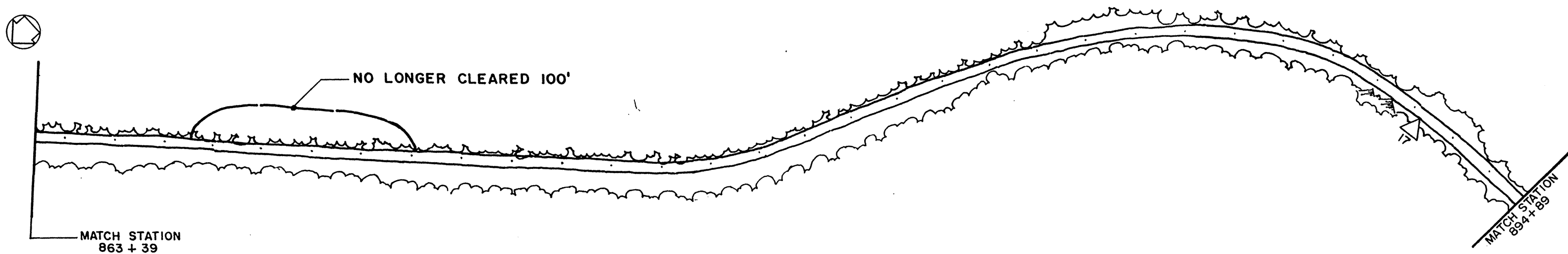
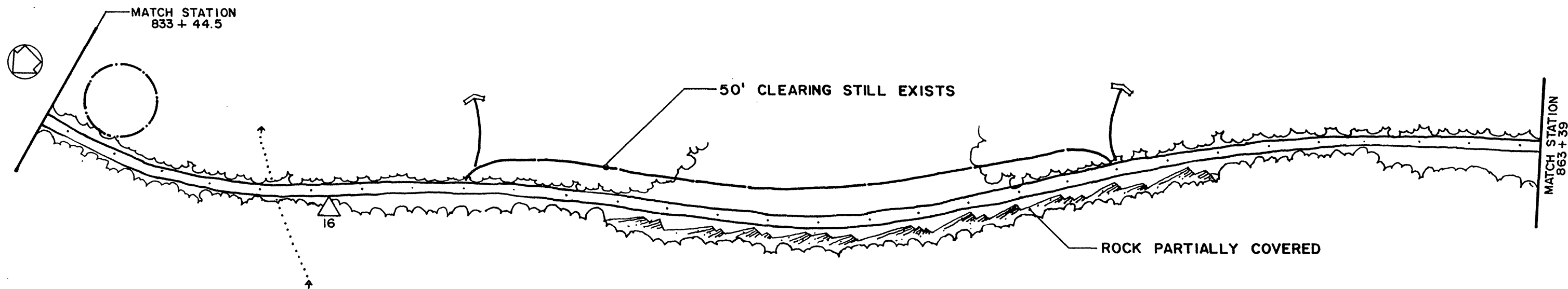
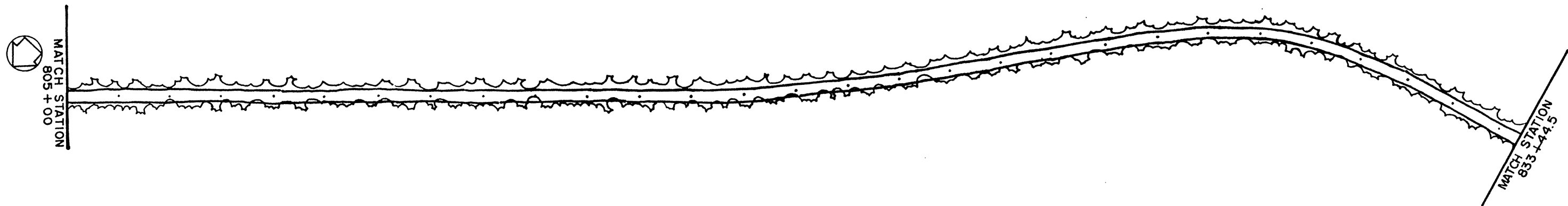
MATCH STATION
503 + 64

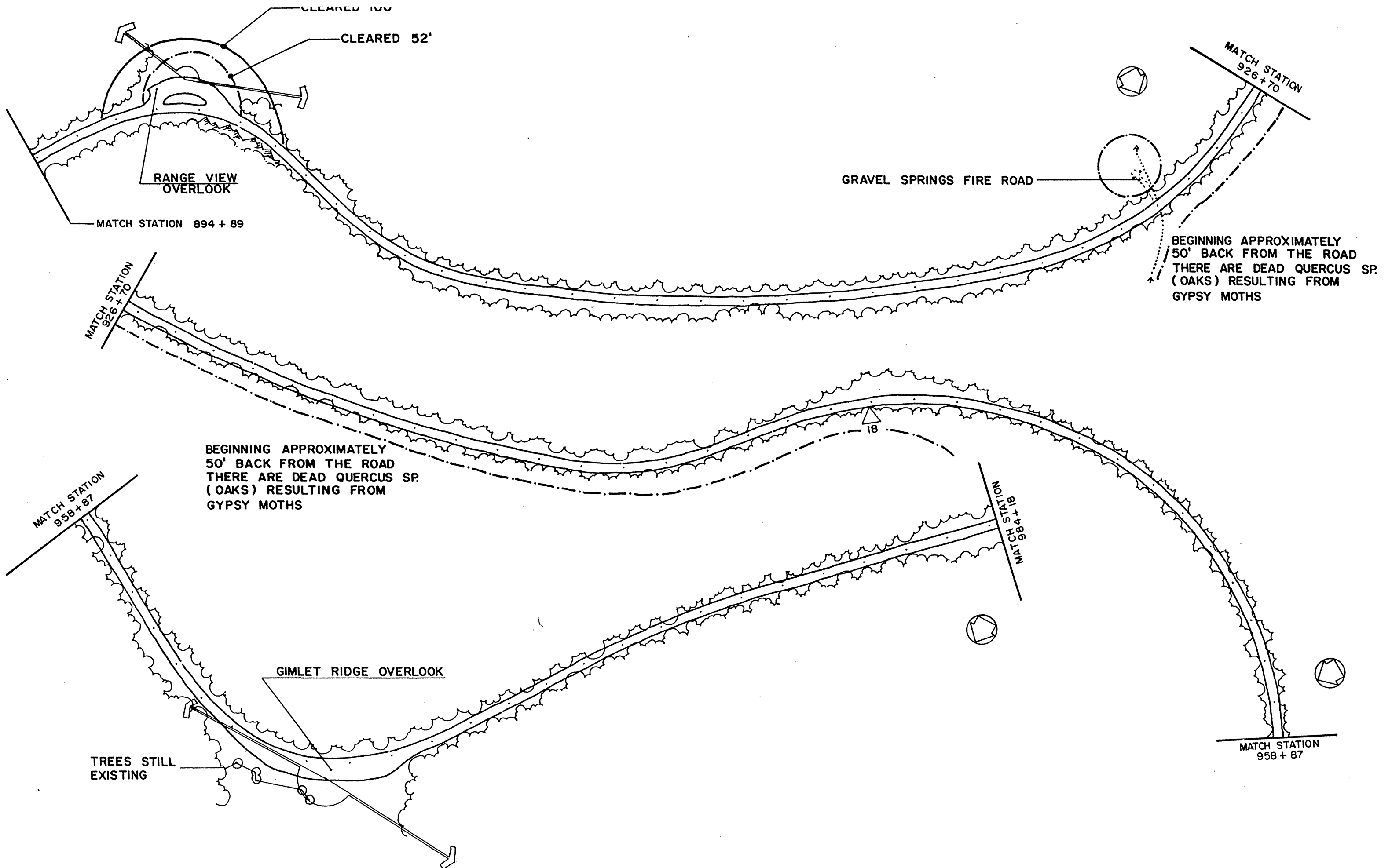
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534 + 50
END SECTION 2A

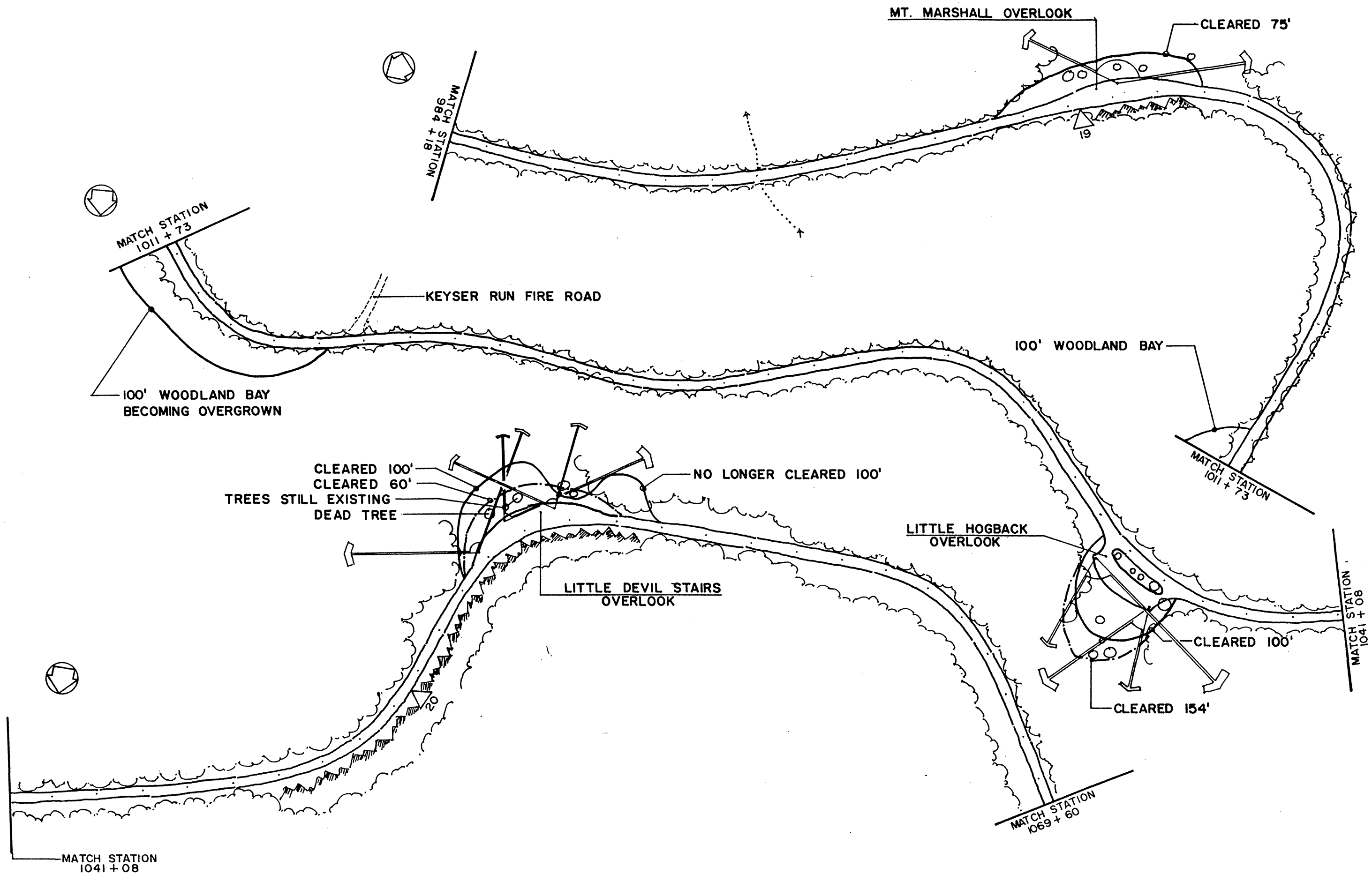


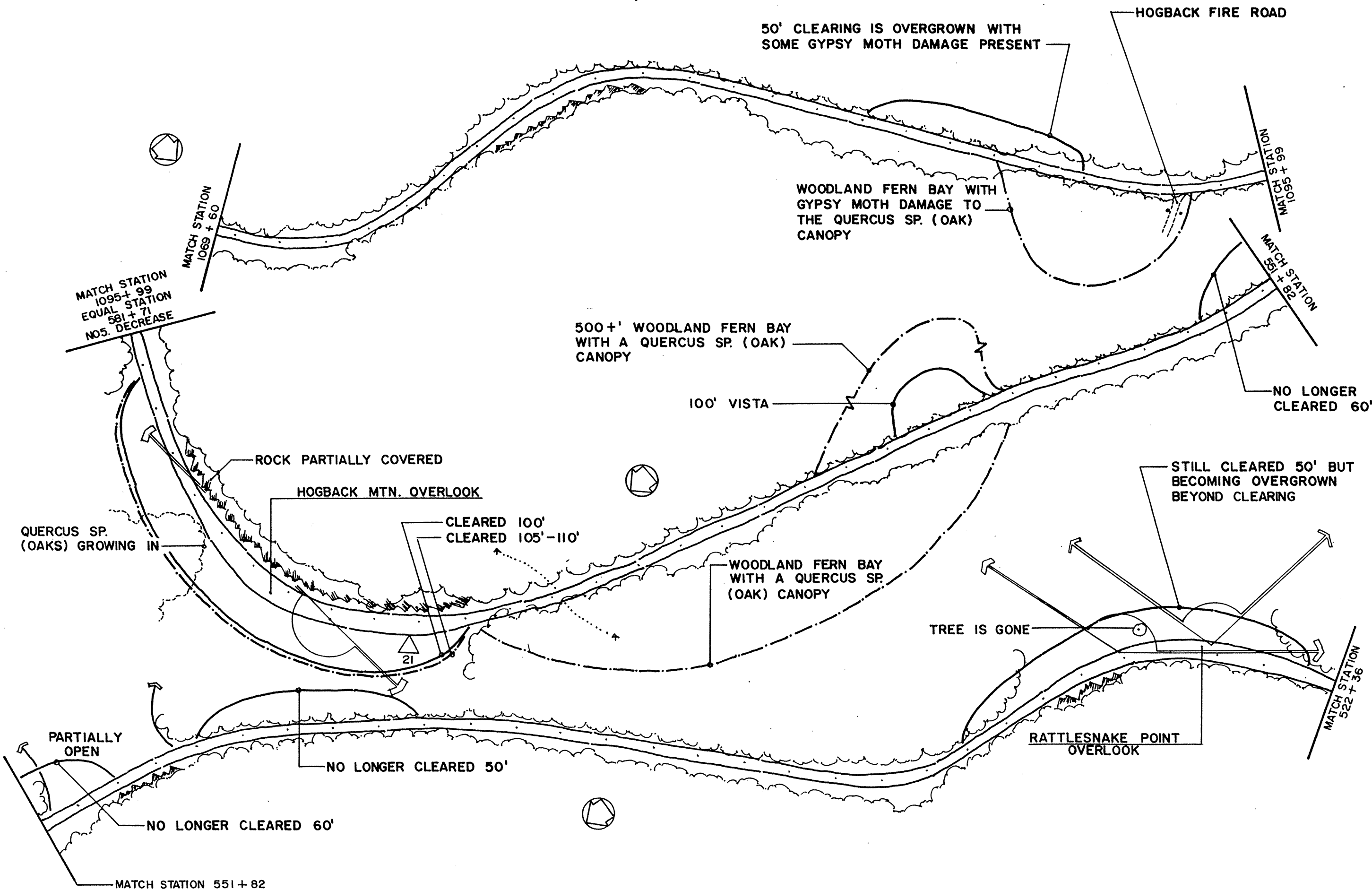


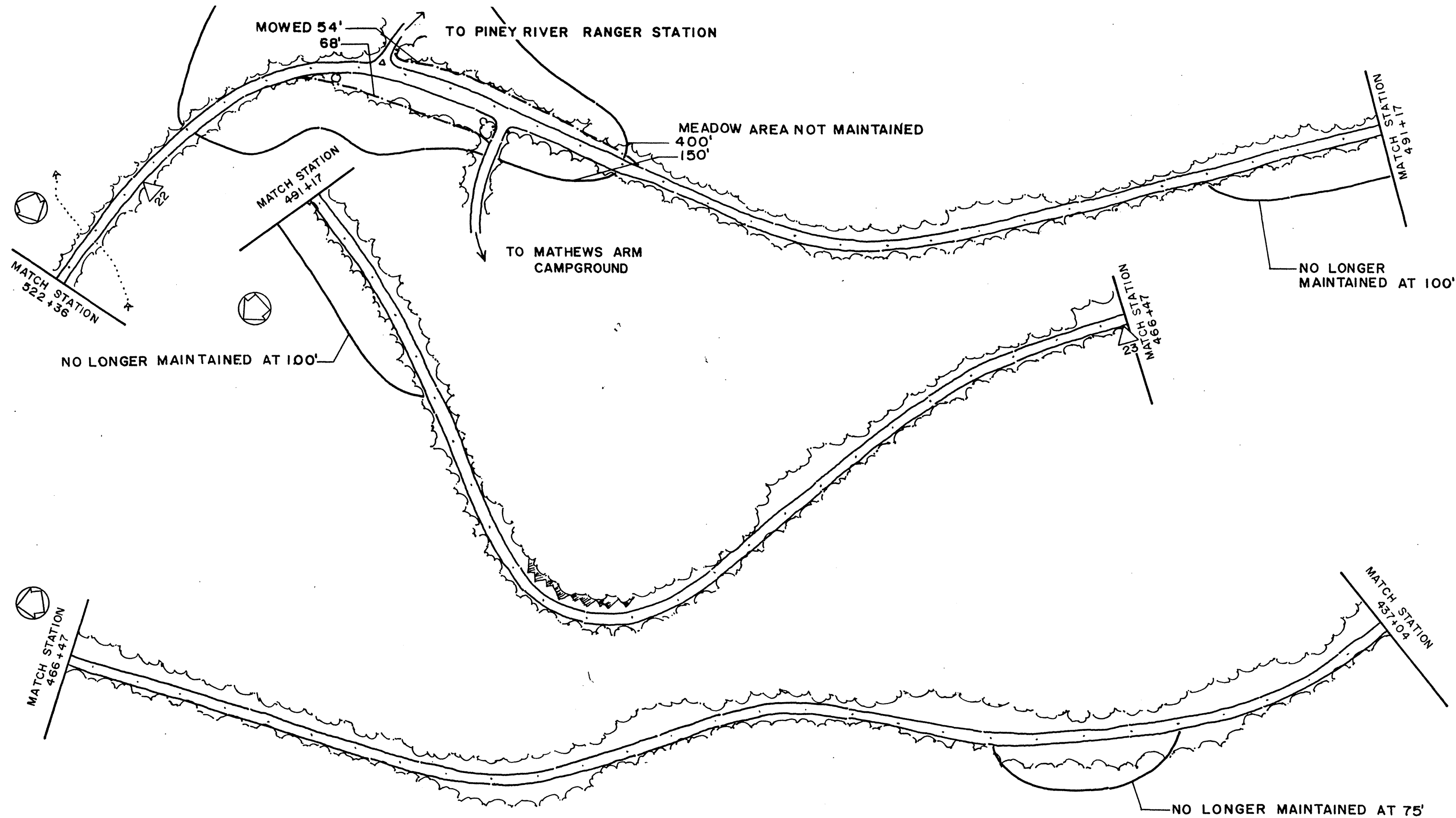




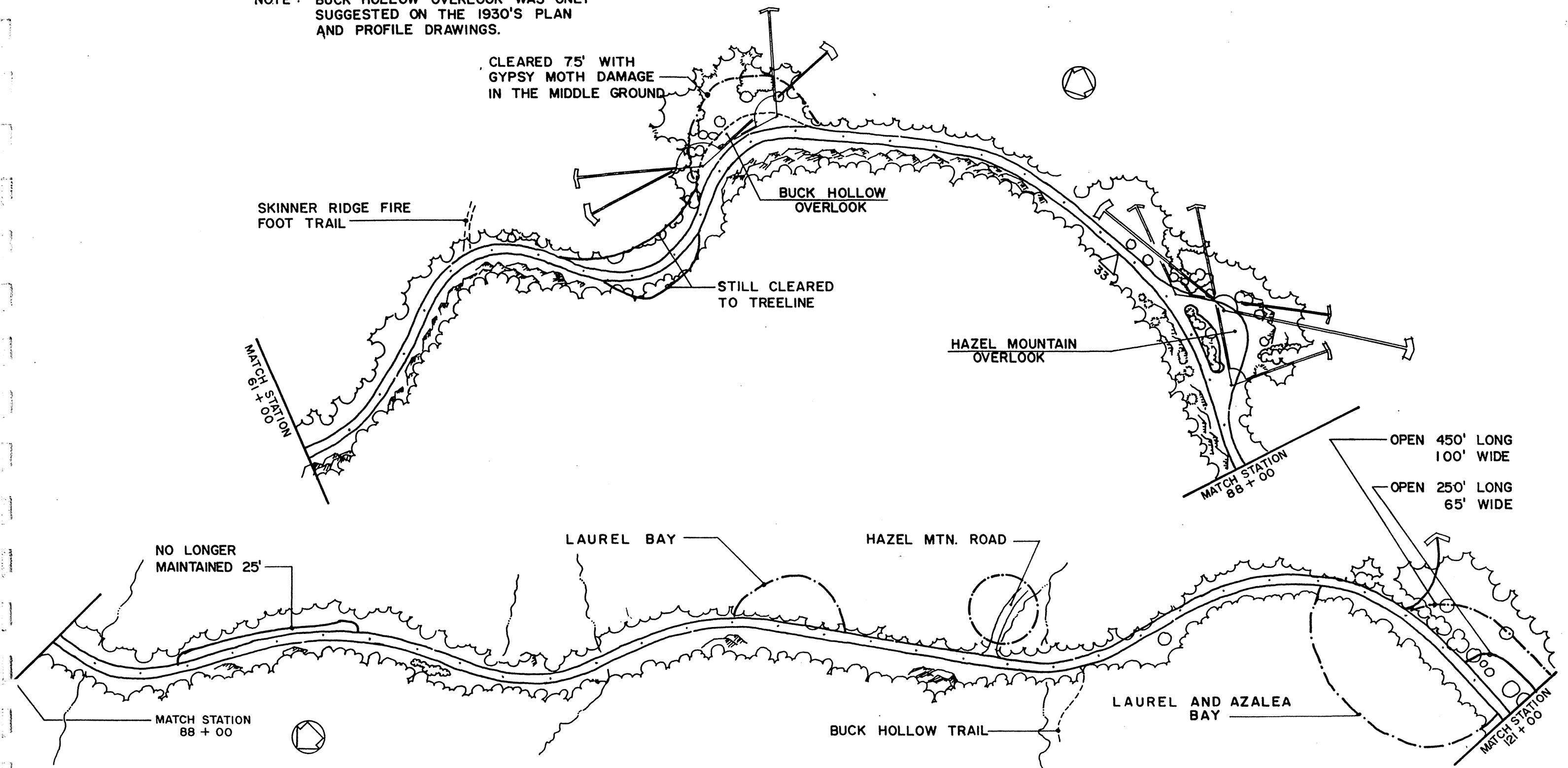


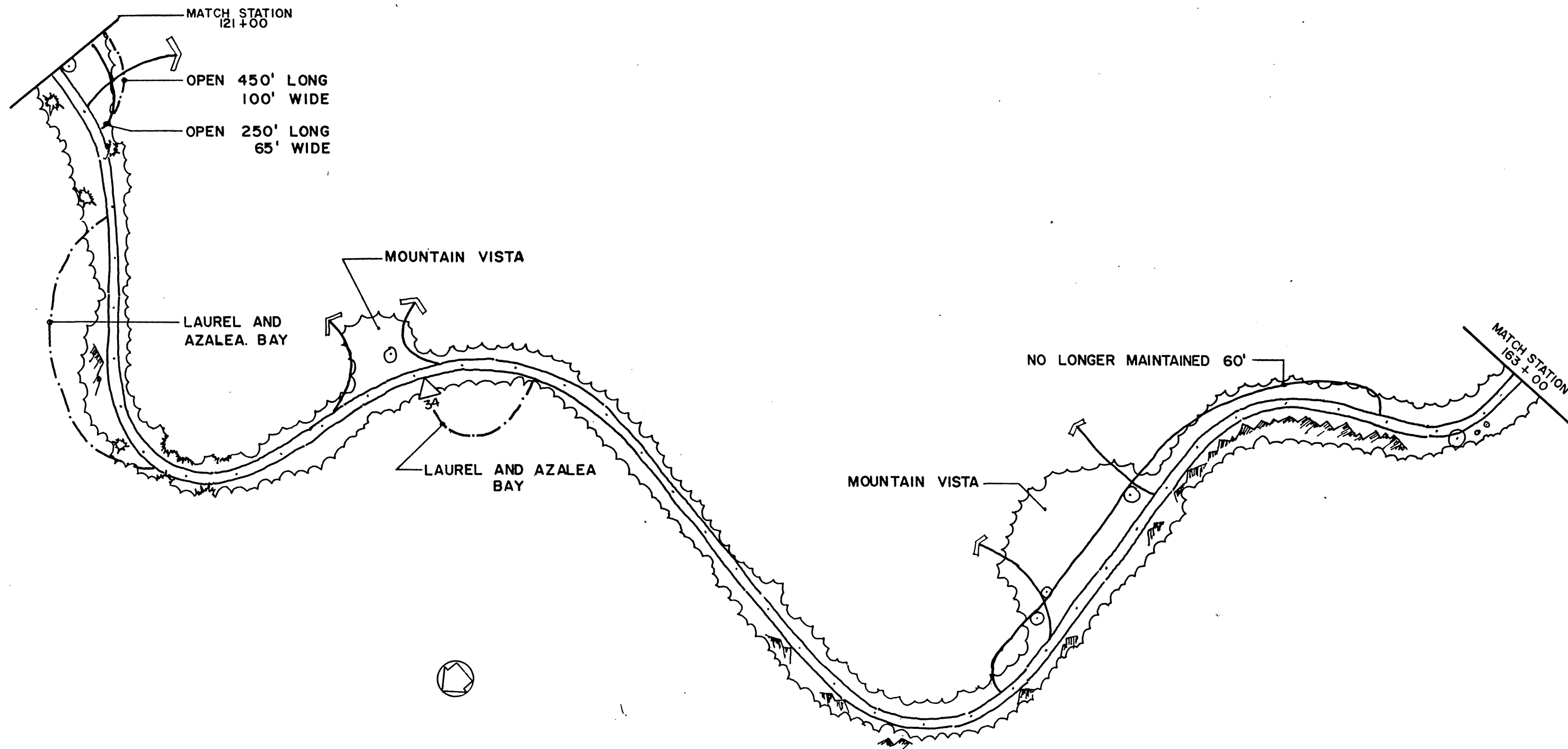


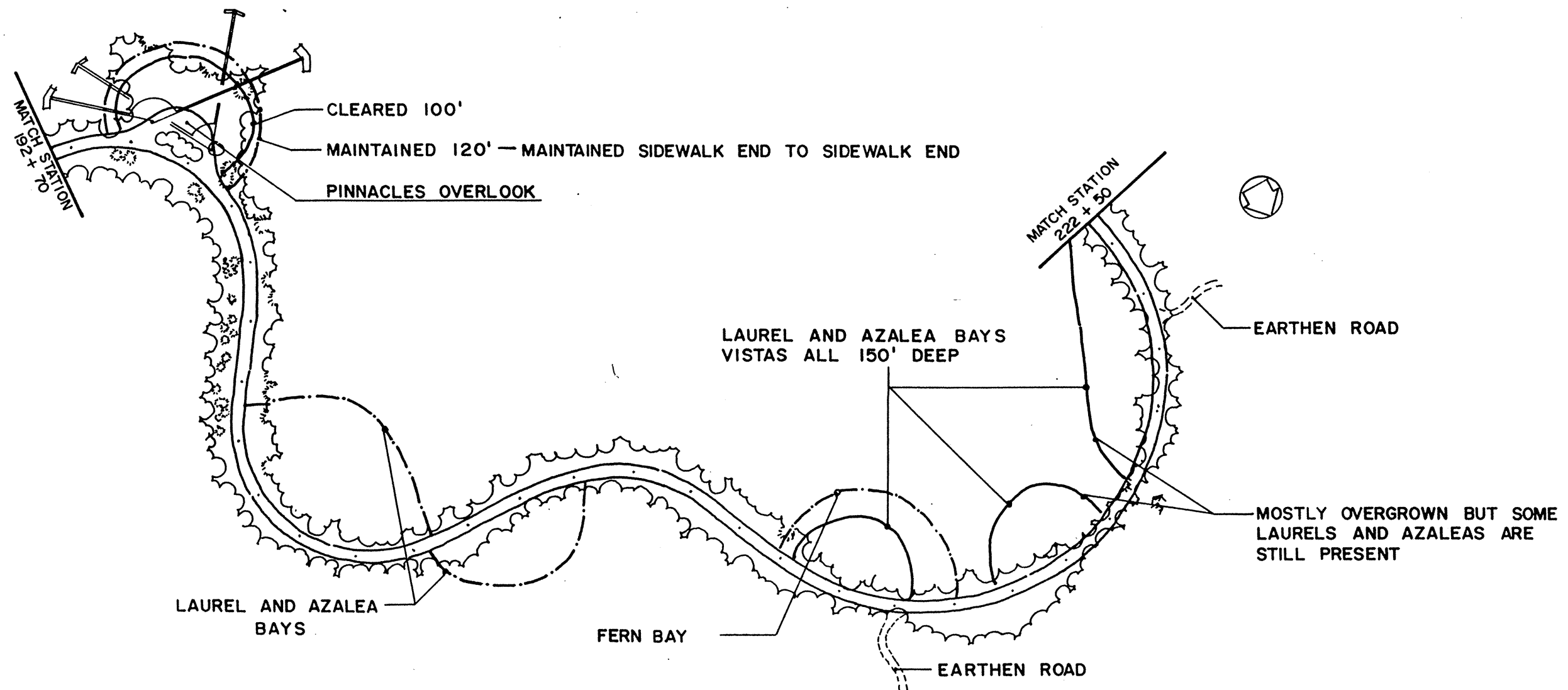
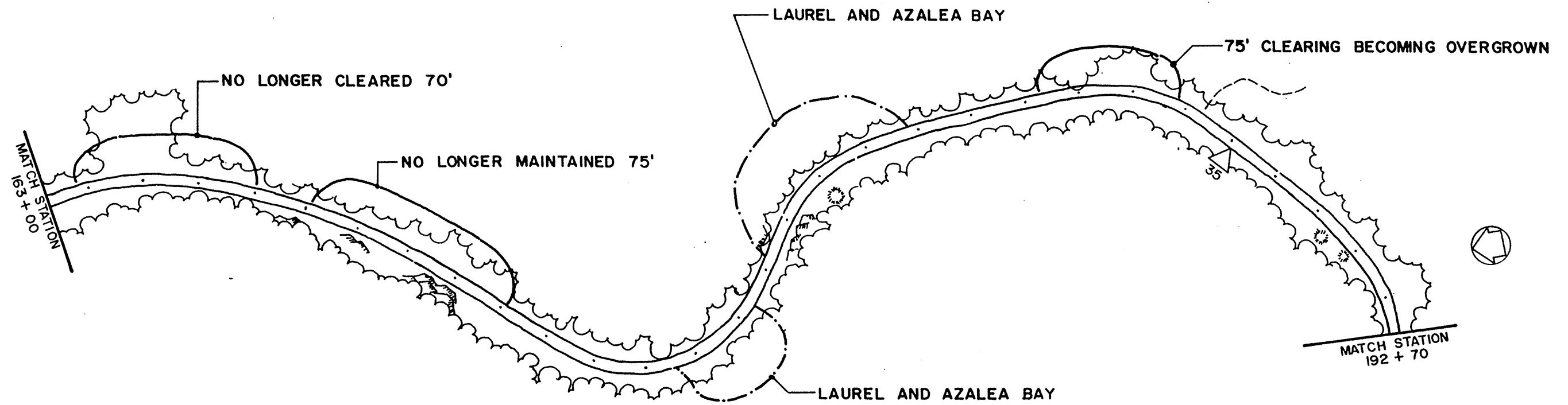


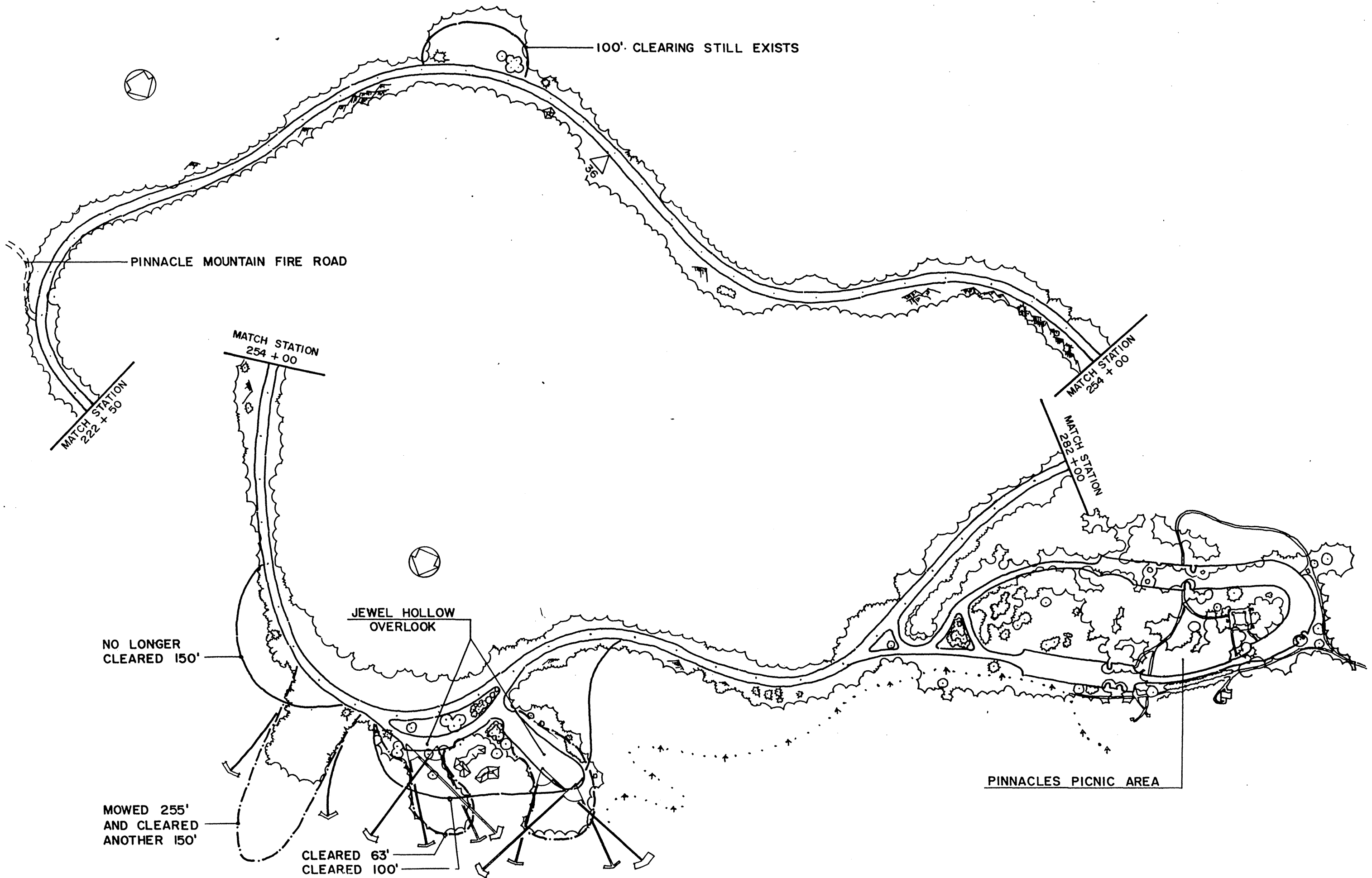


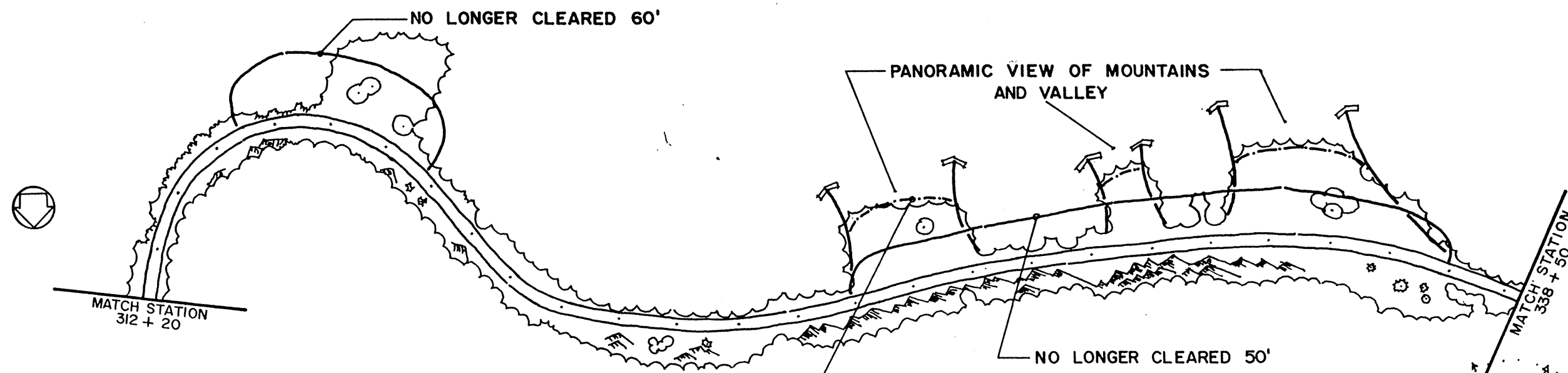
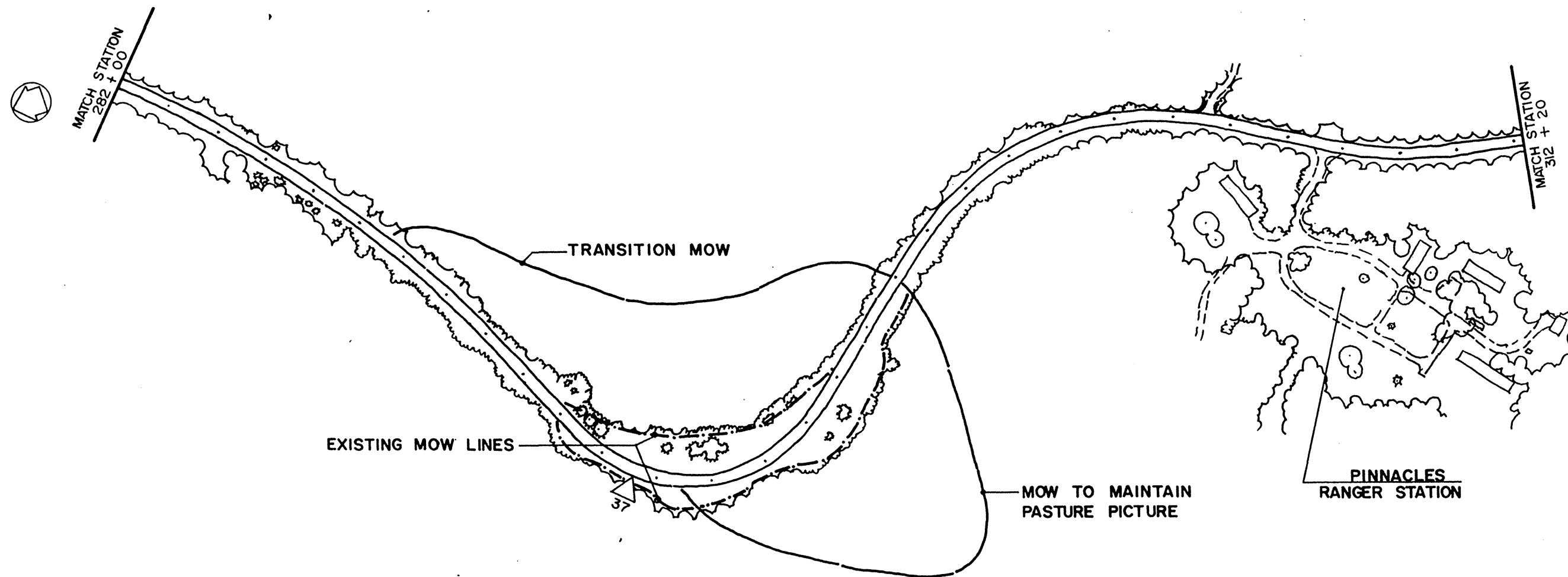
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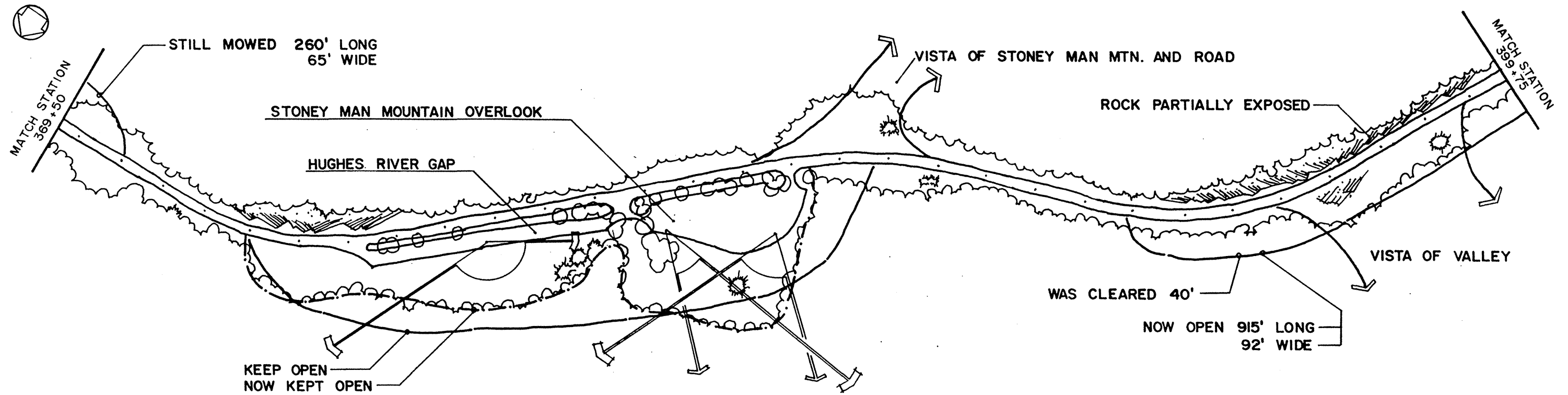
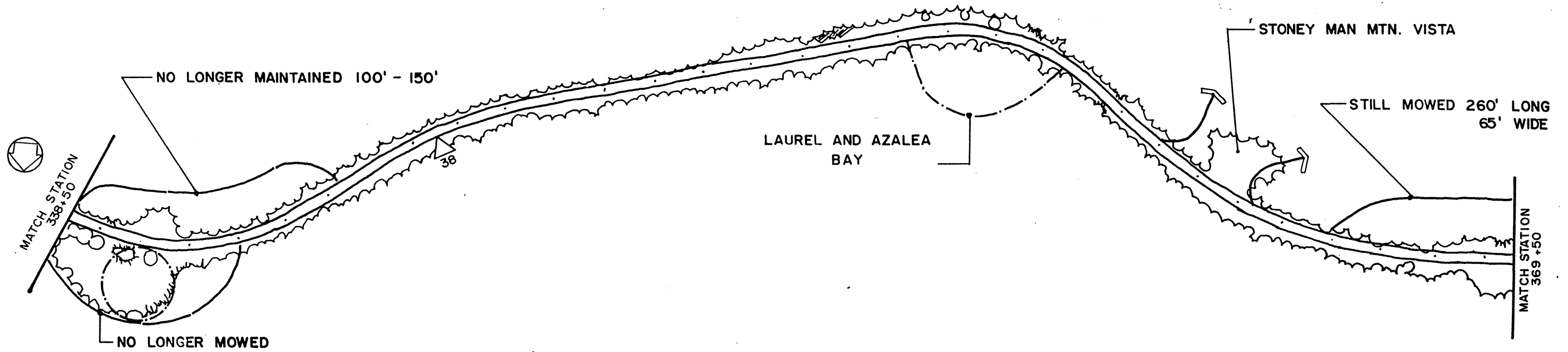


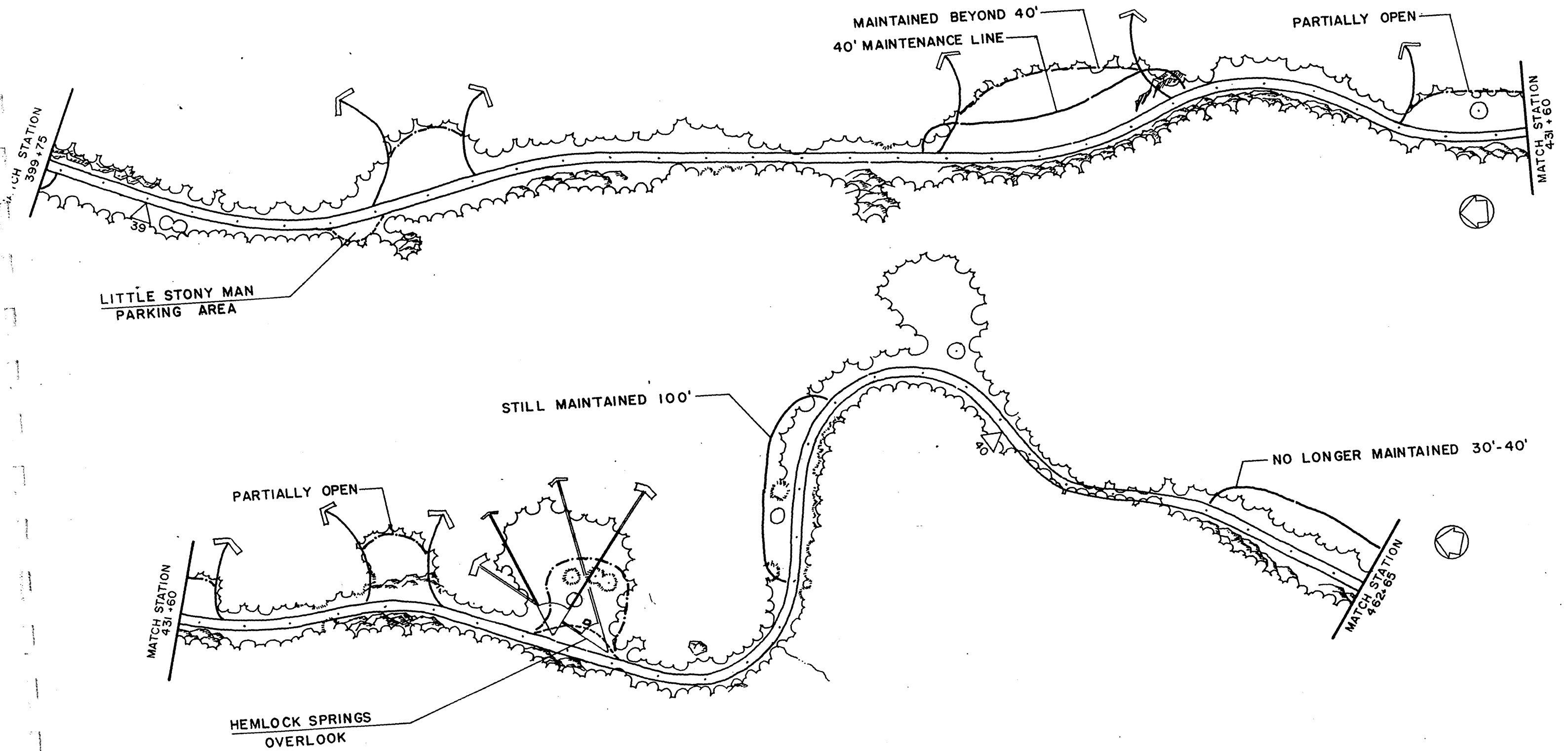




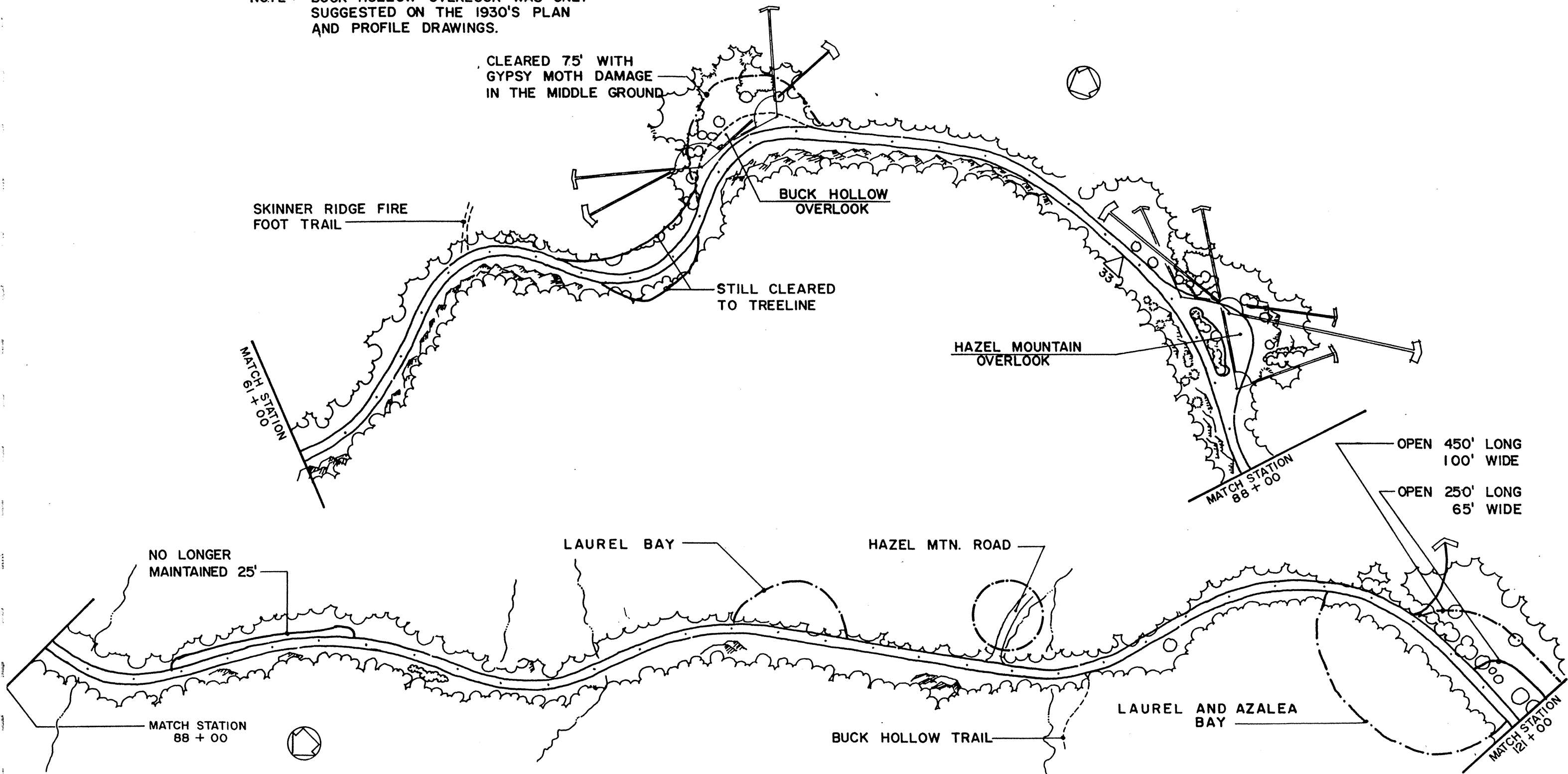


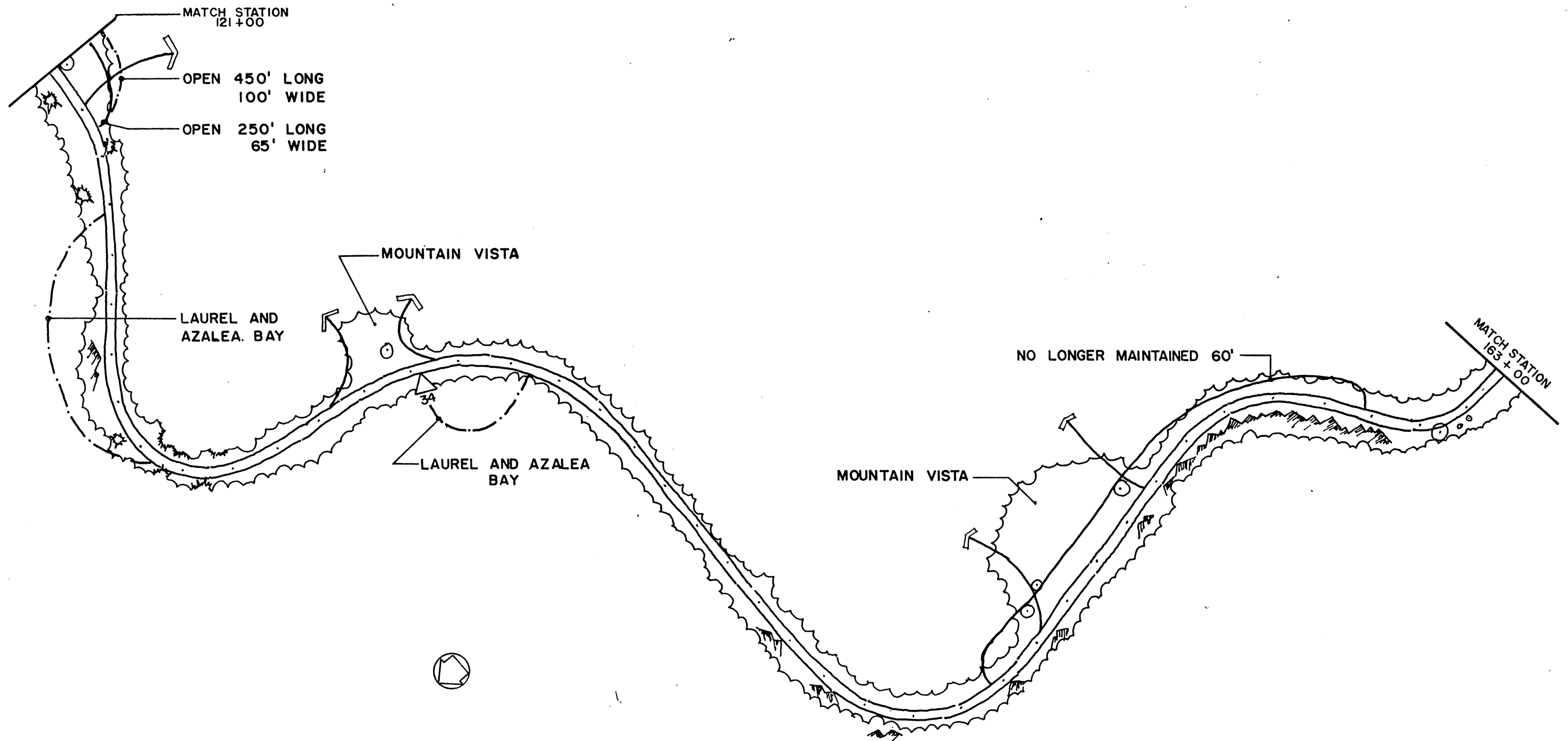
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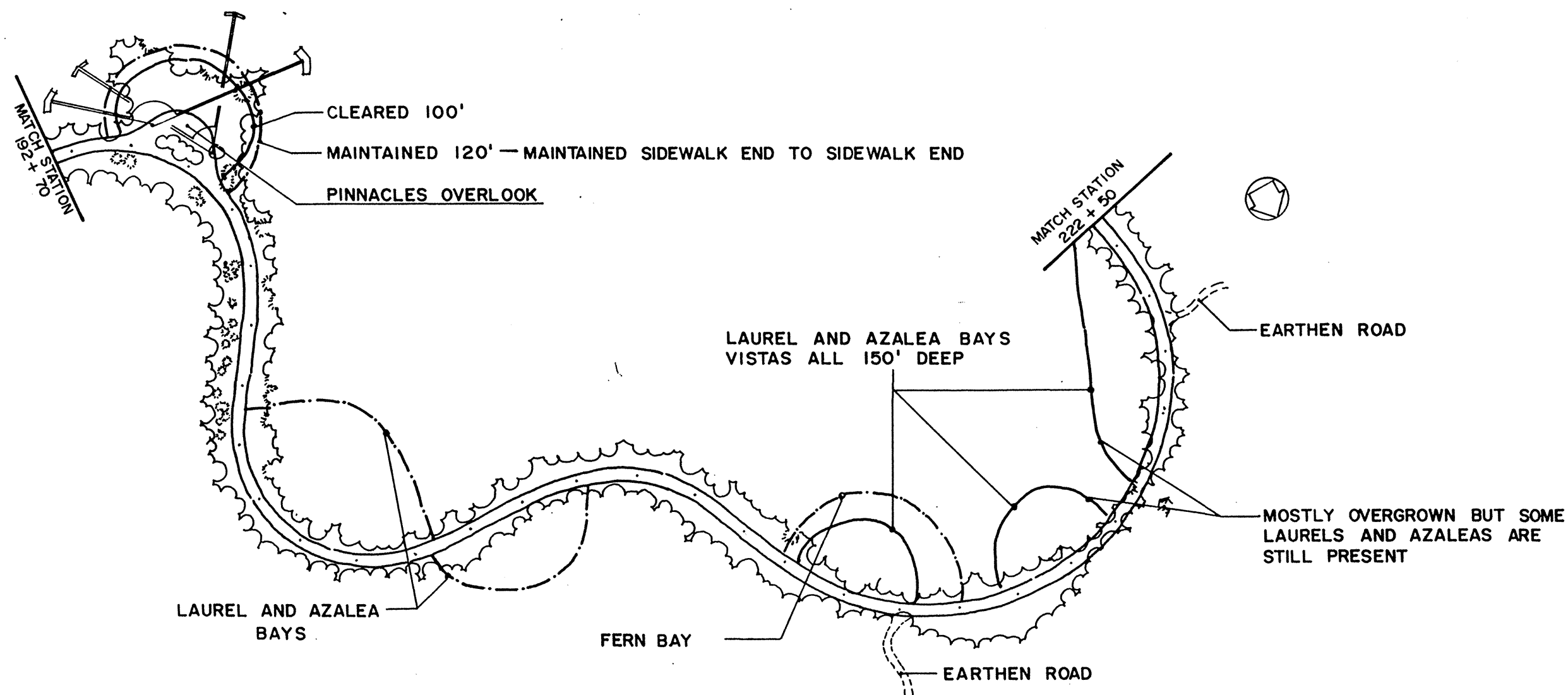
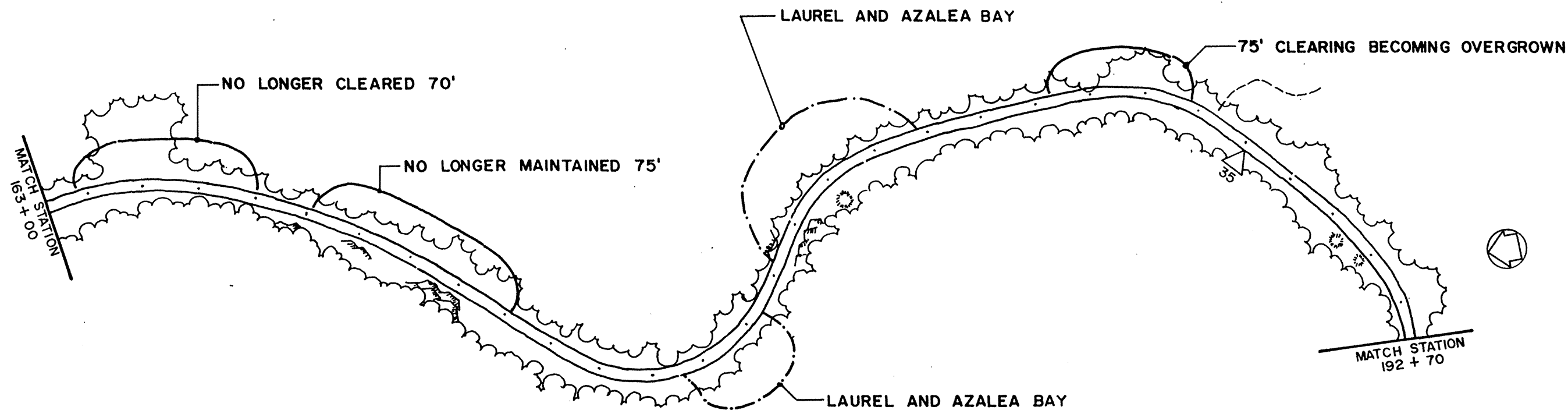


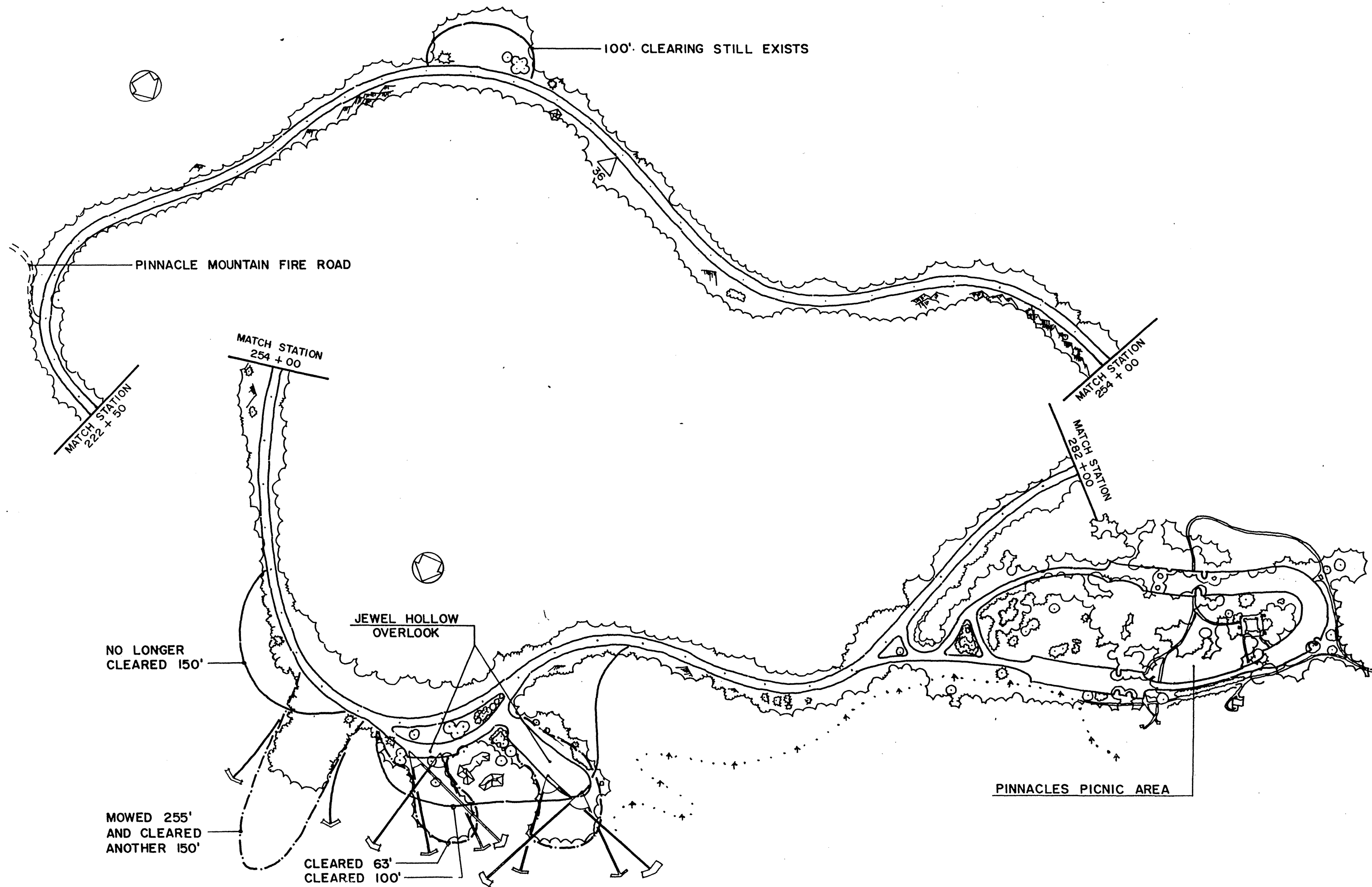


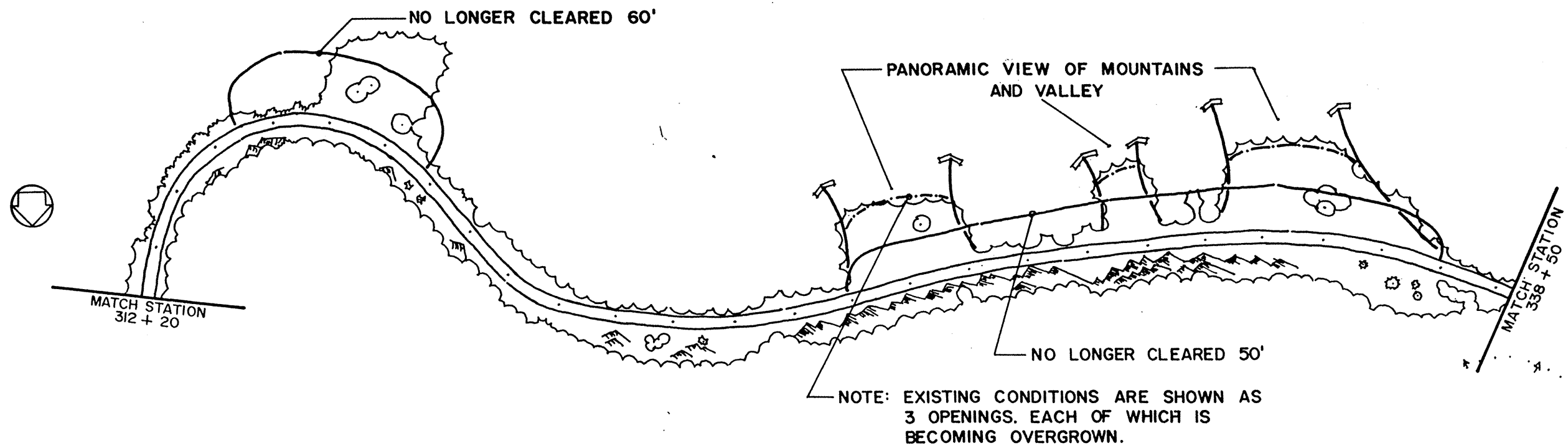
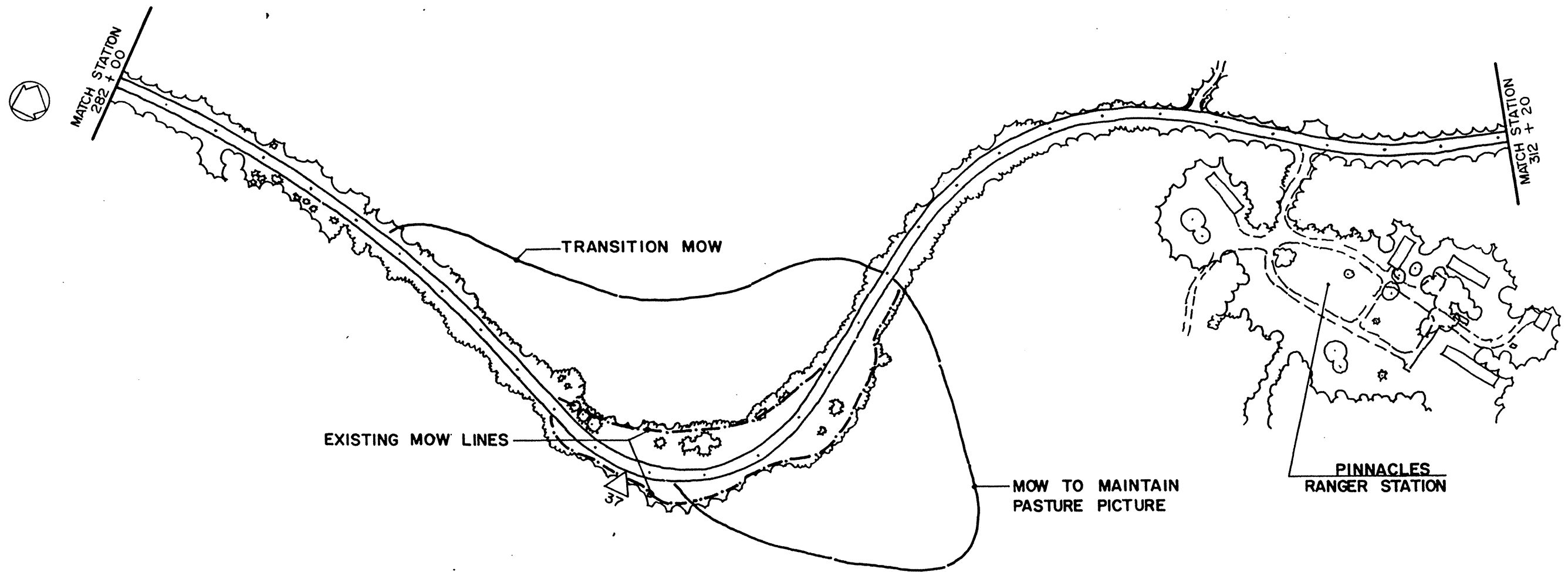
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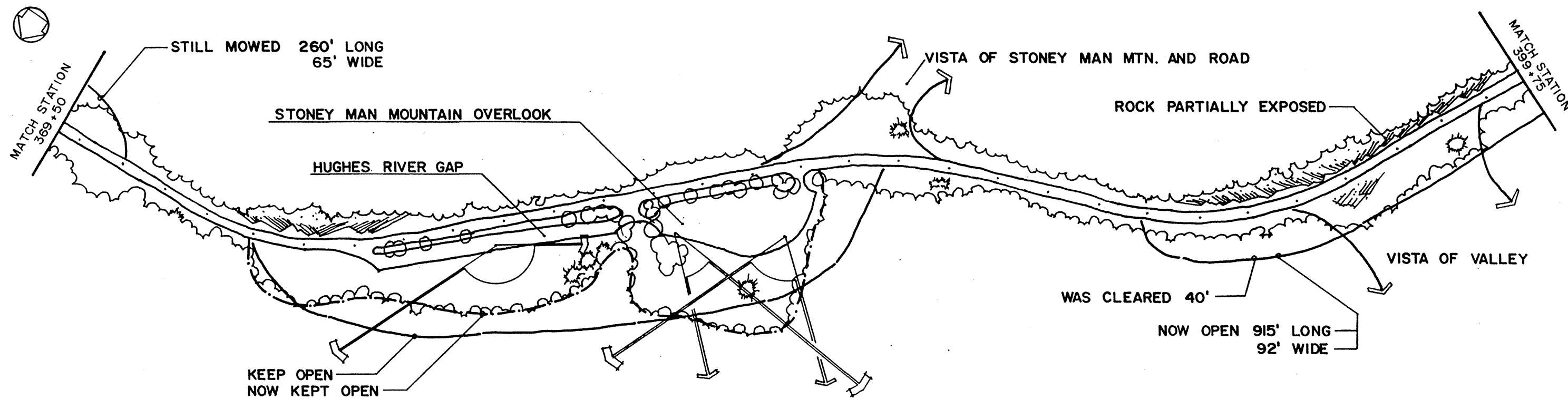
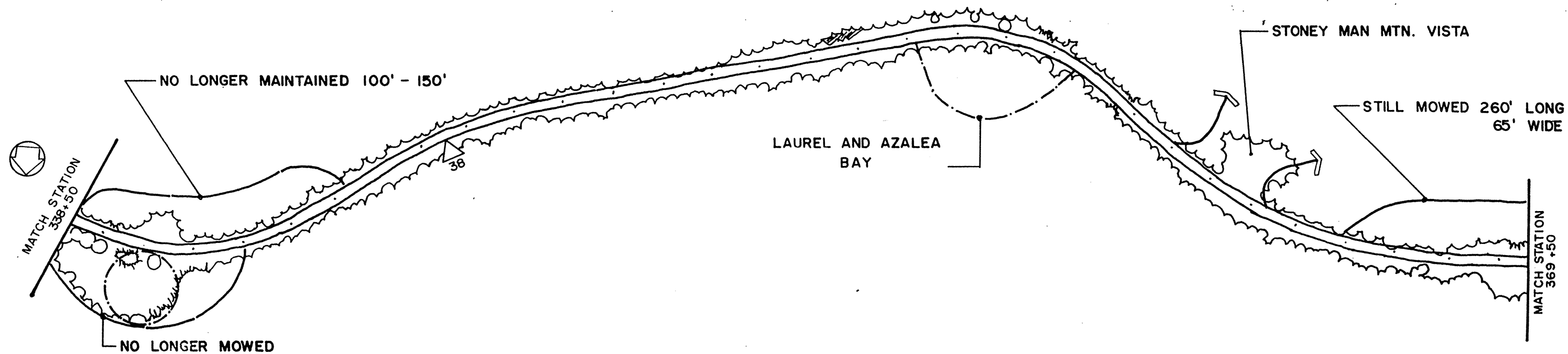


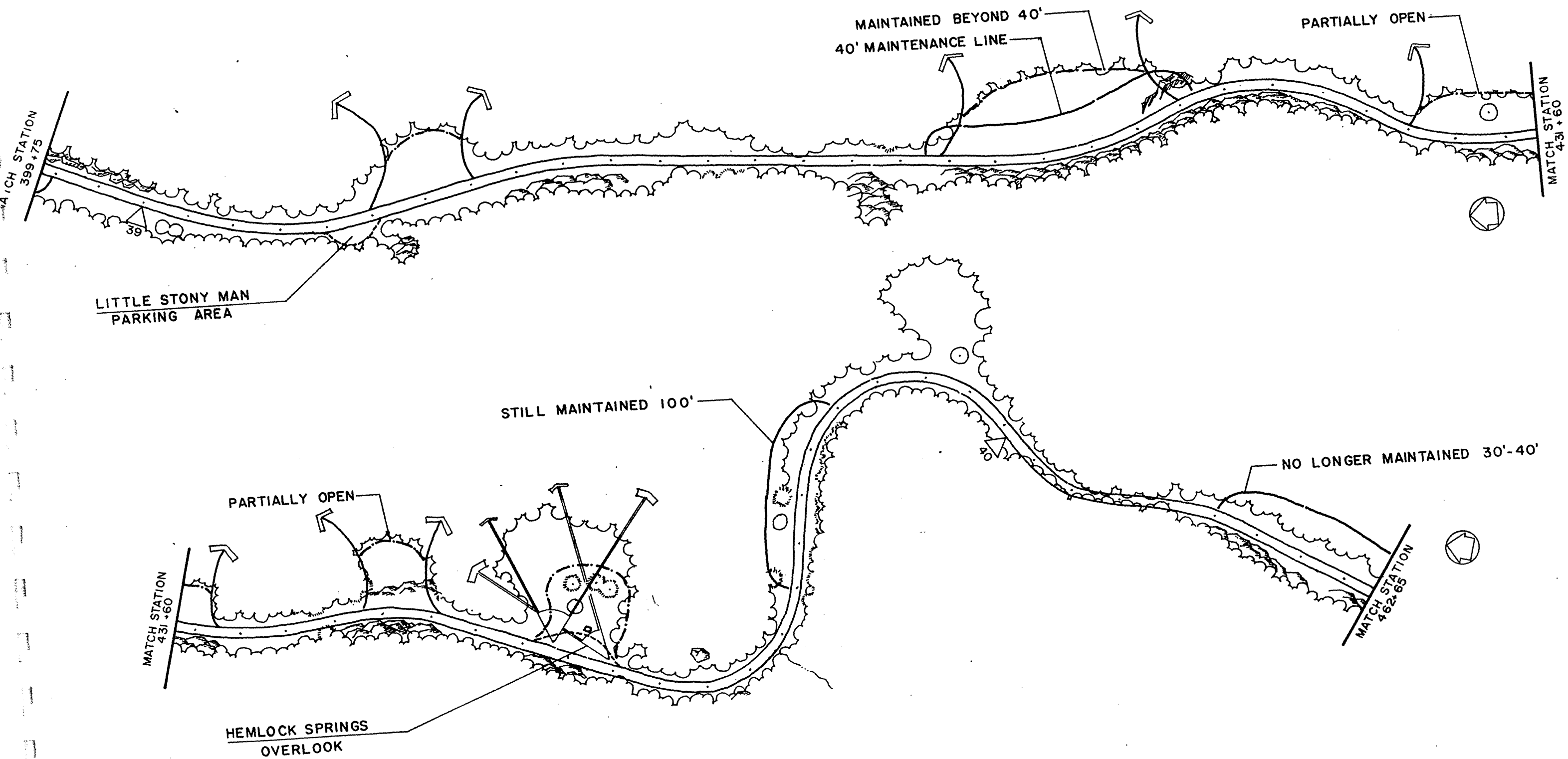


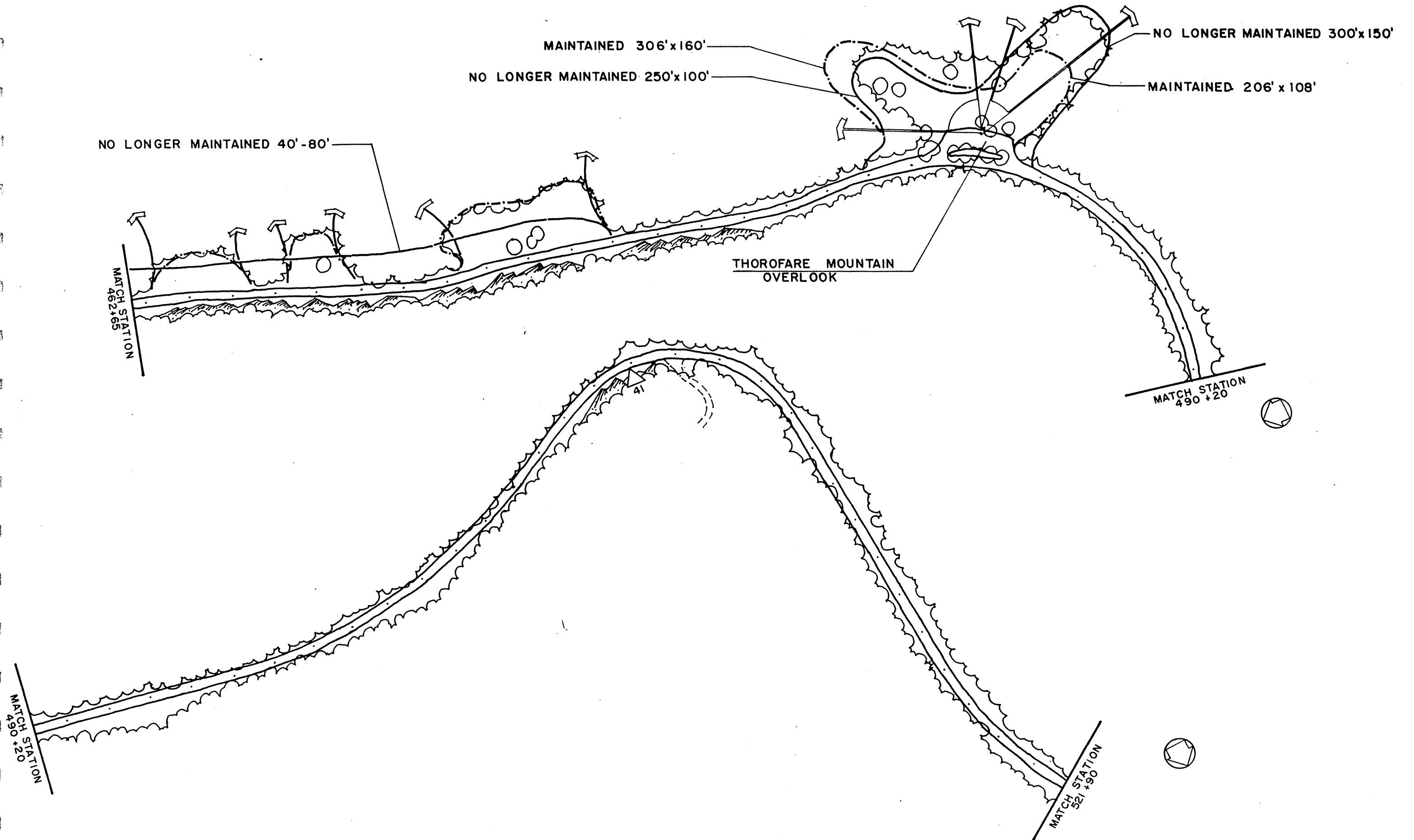












MAINTAINED 306'x160'

NO LONGER MAINTAINED 250'x100'

NO LONGER MAINTAINED 300'x150'

MAINTAINED 206' x 108'

NO LONGER MAINTAINED 40'-80'

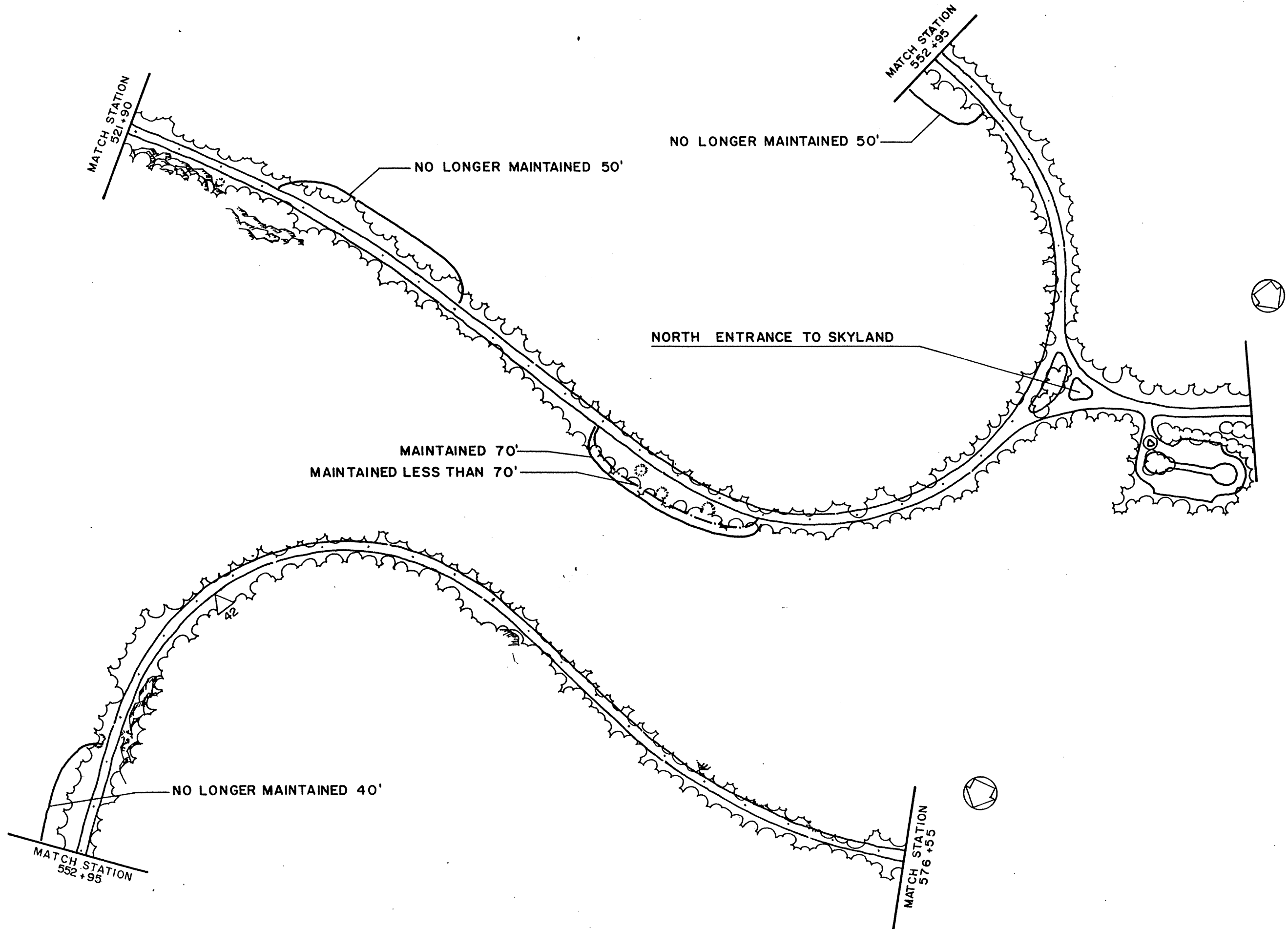
THOROFARE MOUNTAIN
OVERLOOK

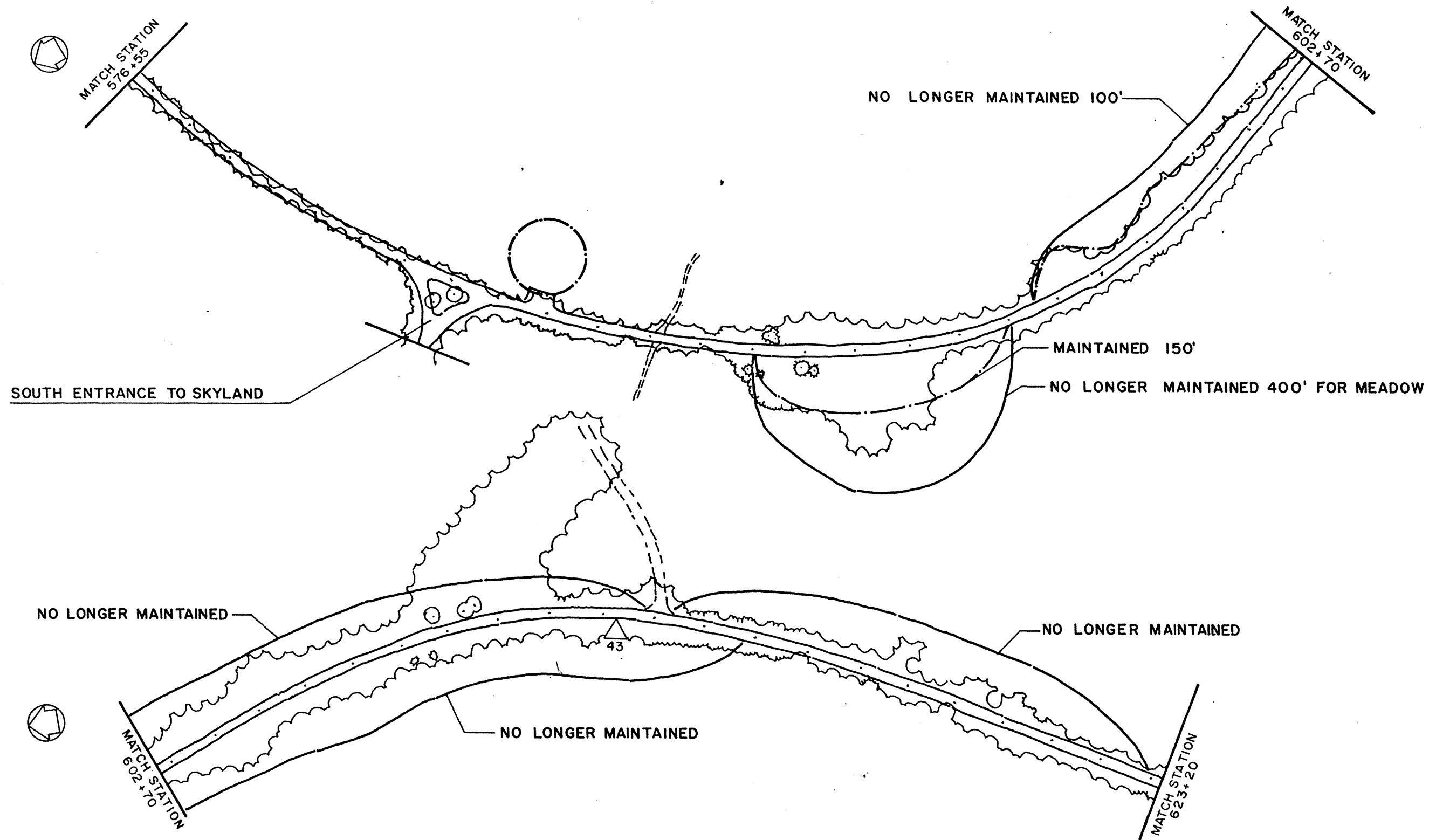
MATCH STATION
462+65

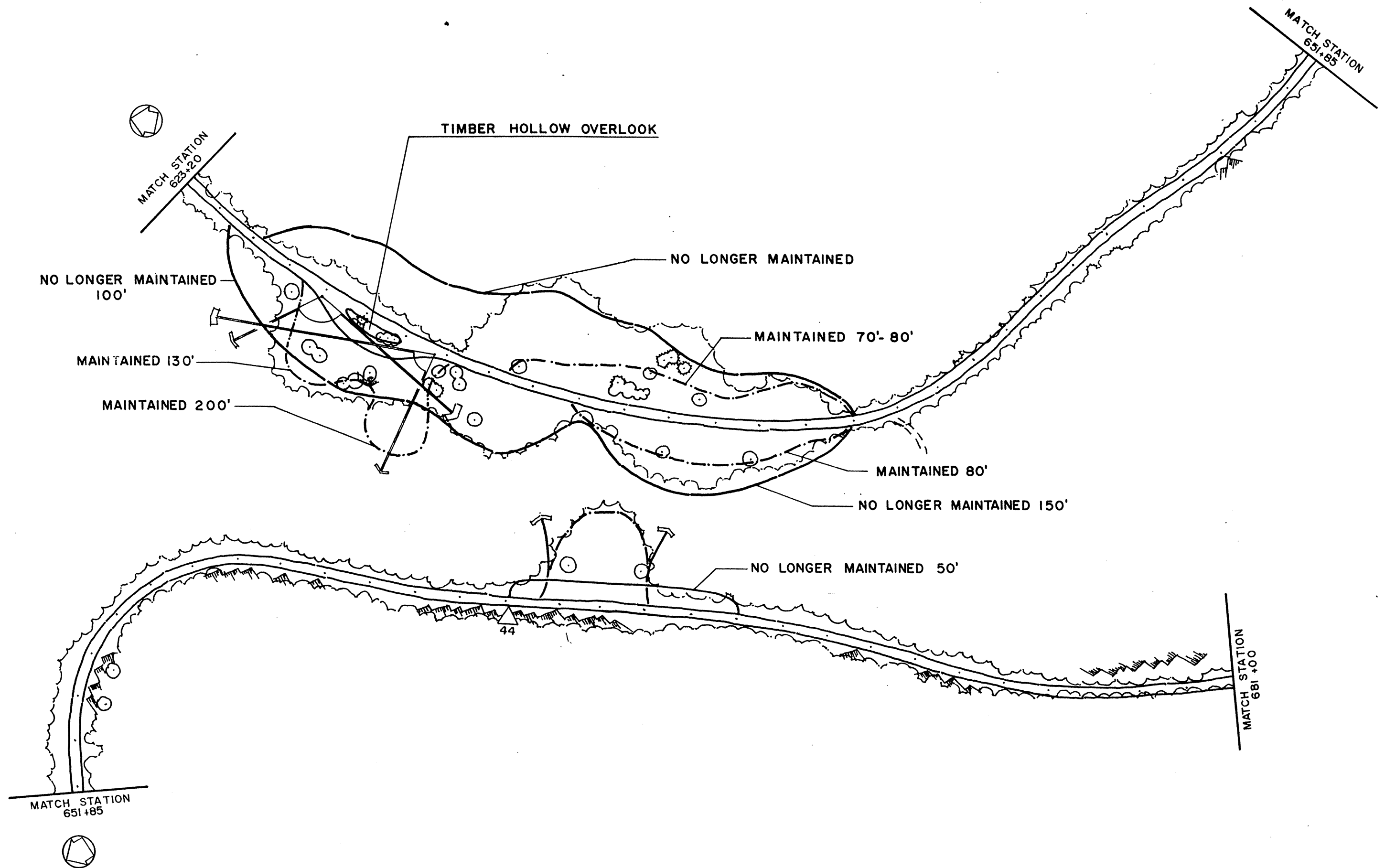
MATCH STATION
490+20

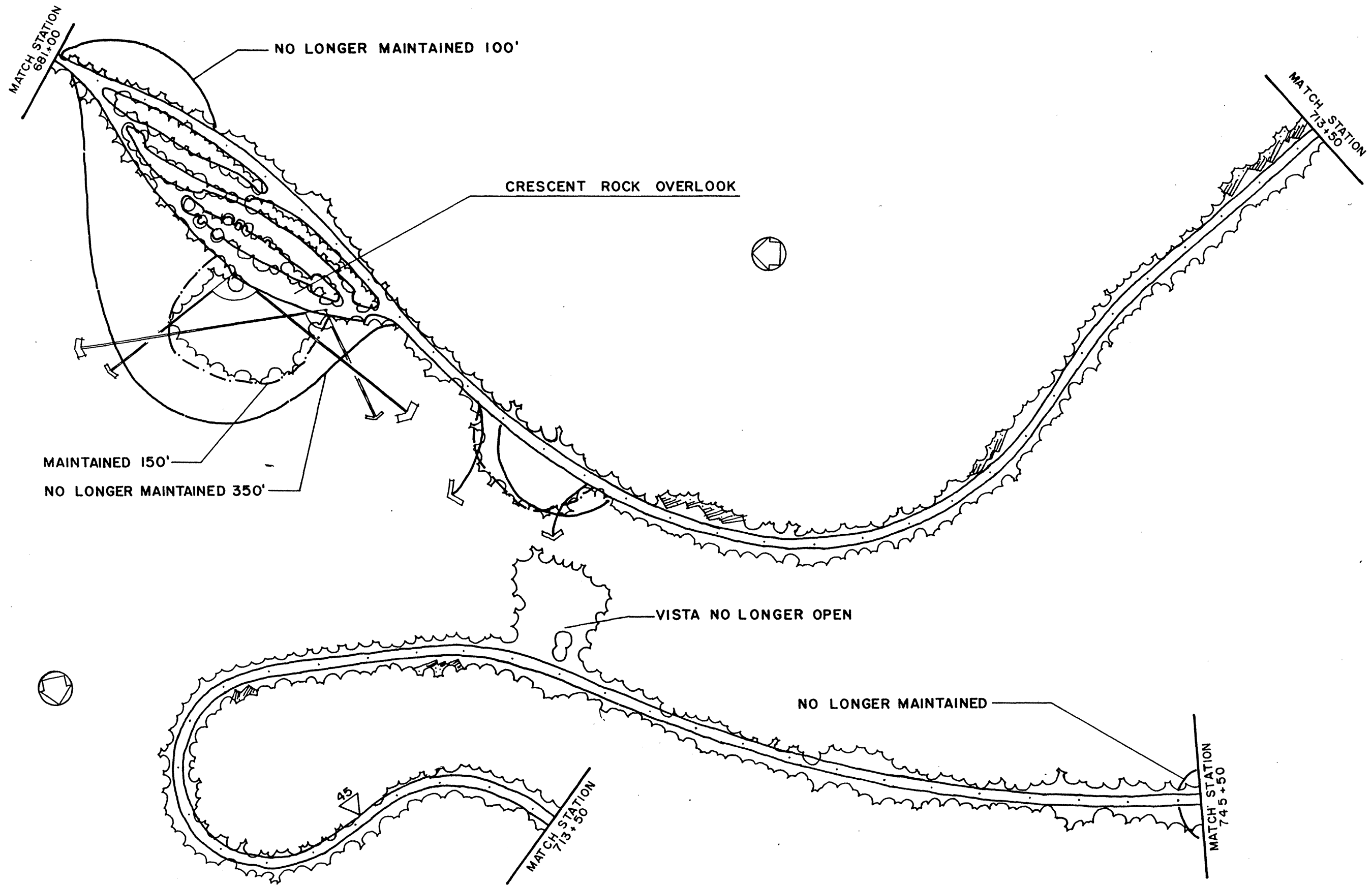
MATCH STATION
490+20

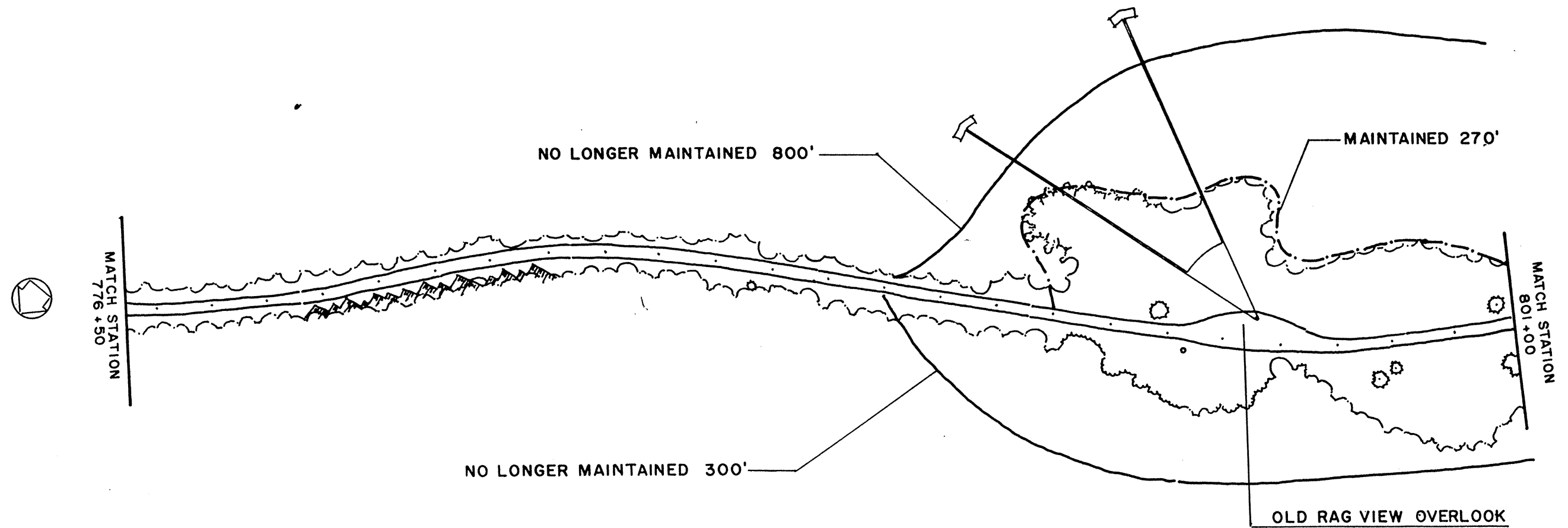
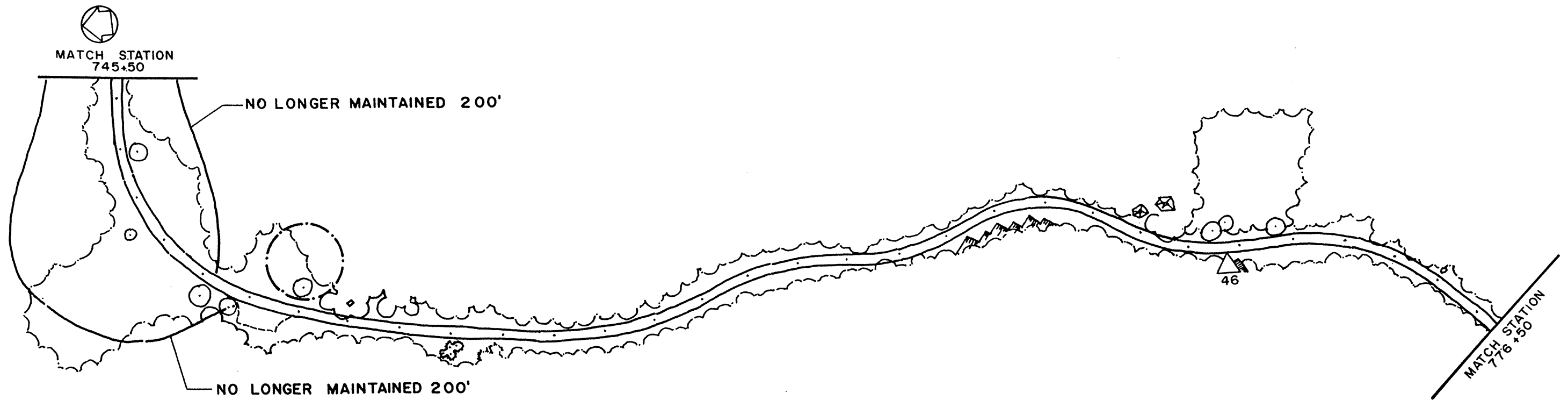
MATCH STATION
521+90

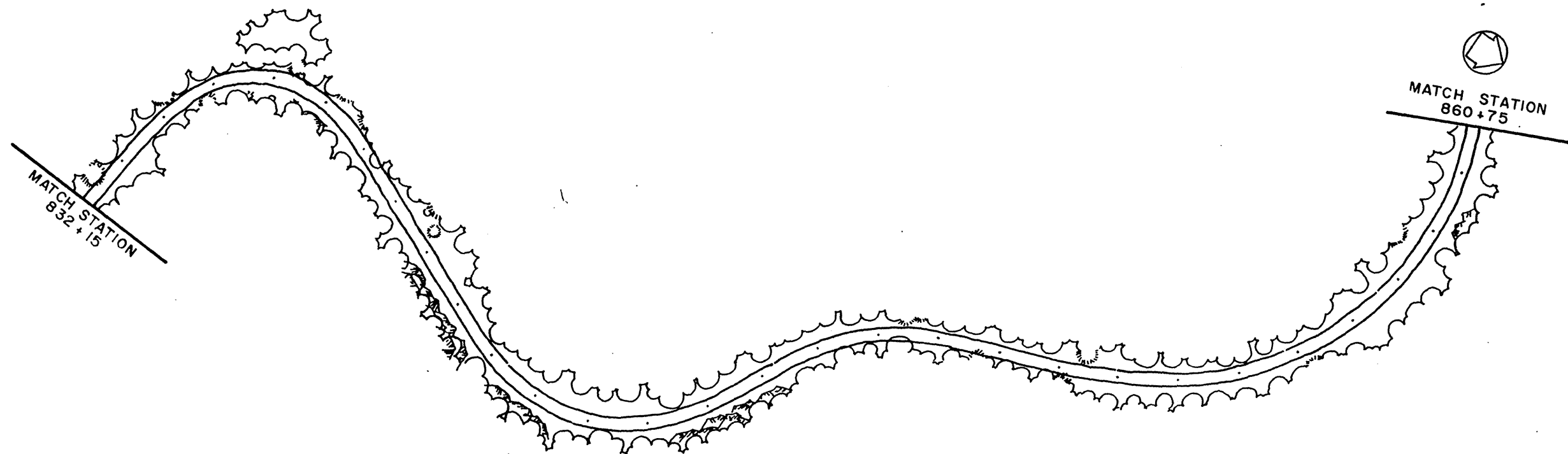
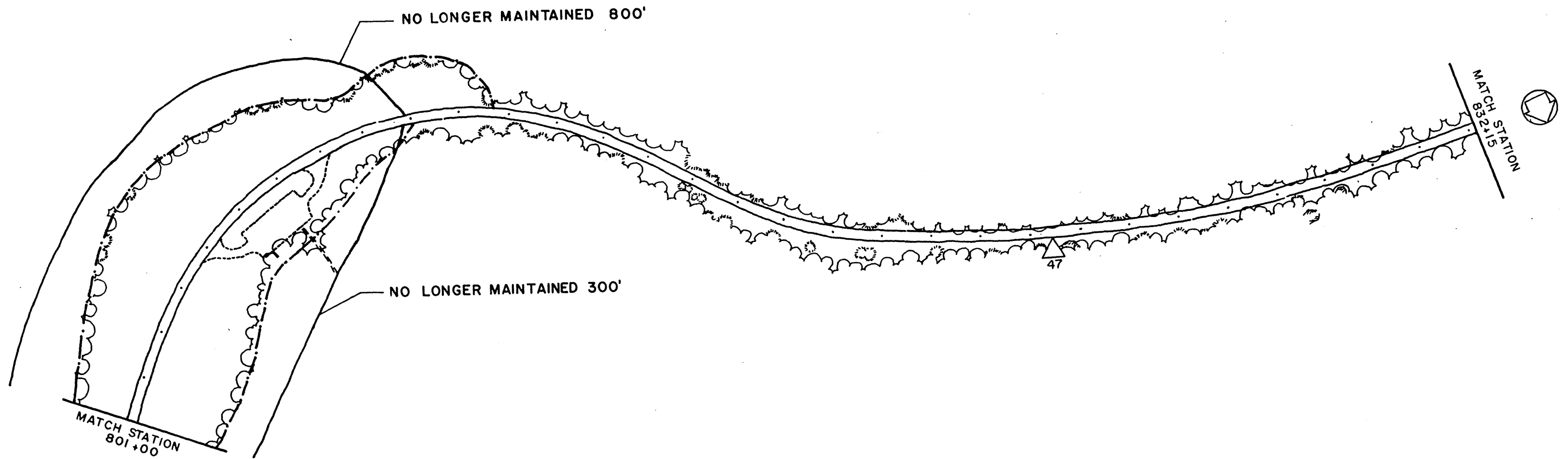


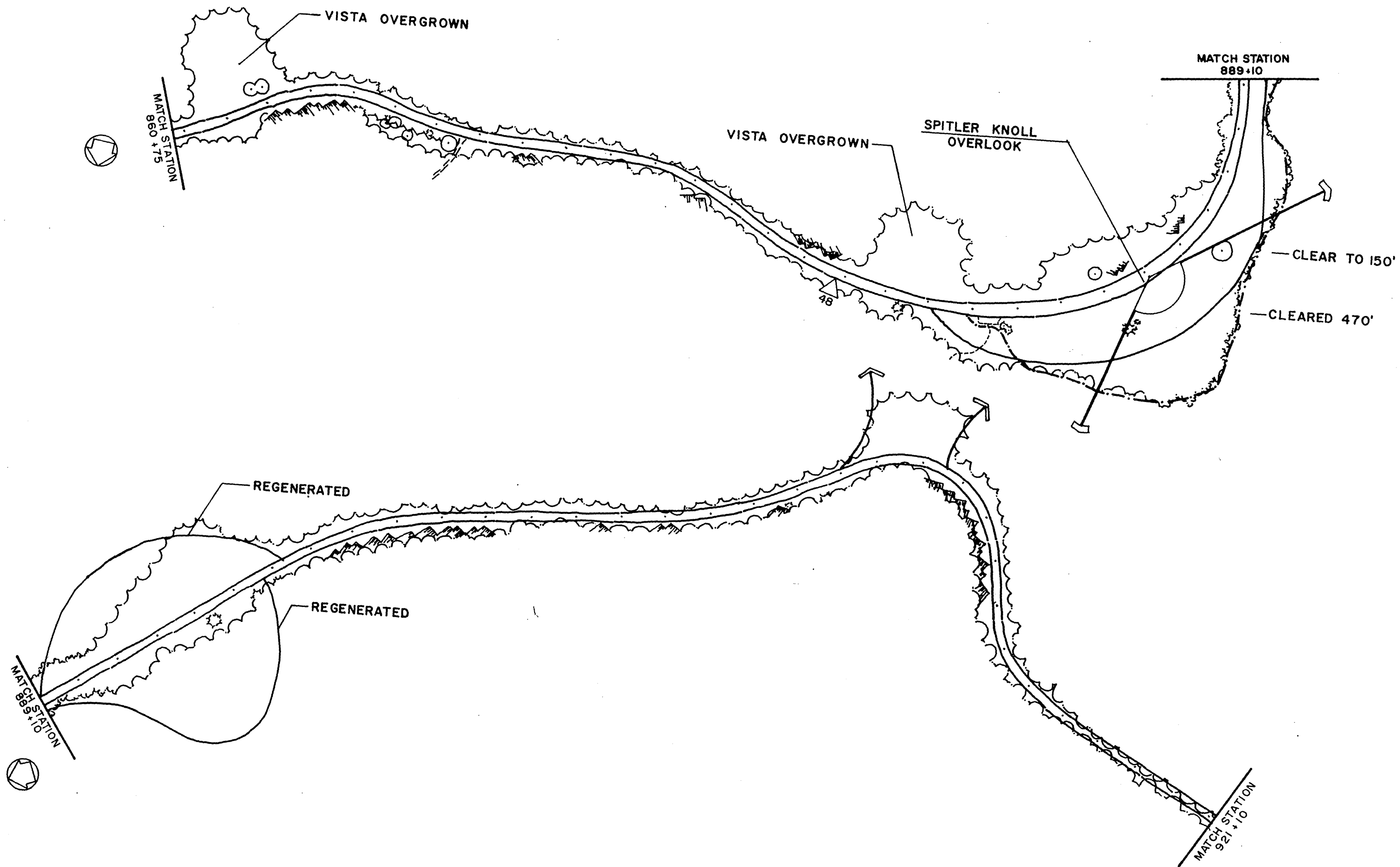


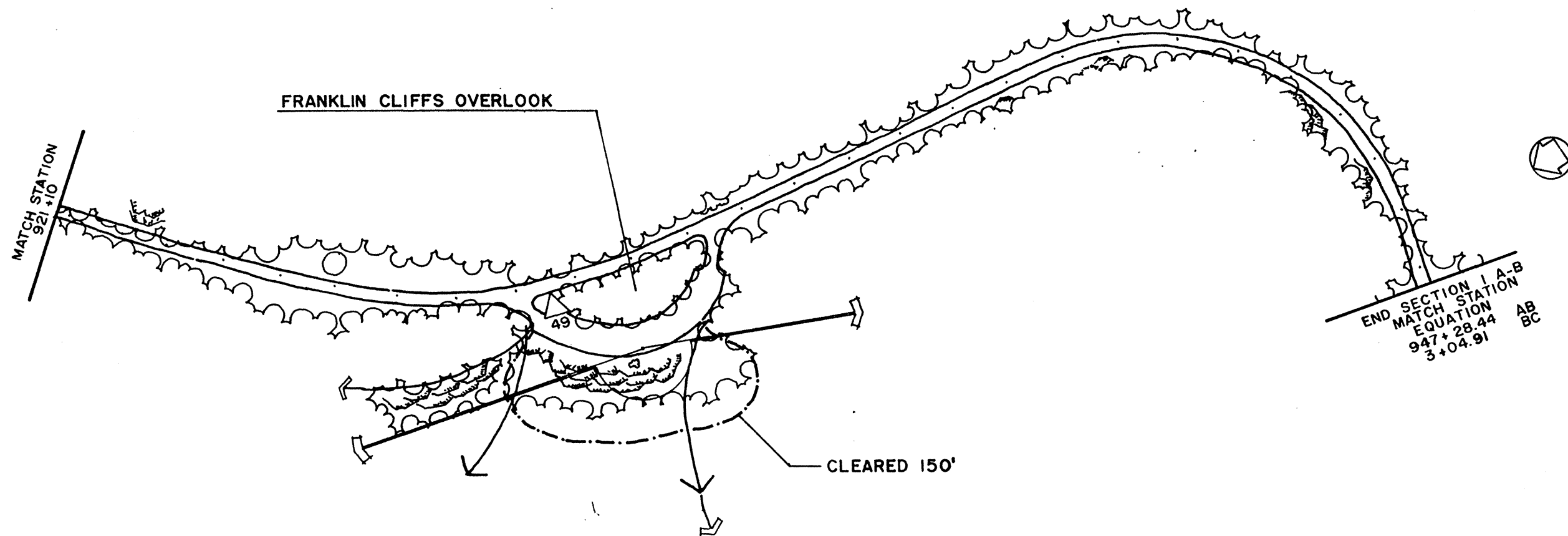


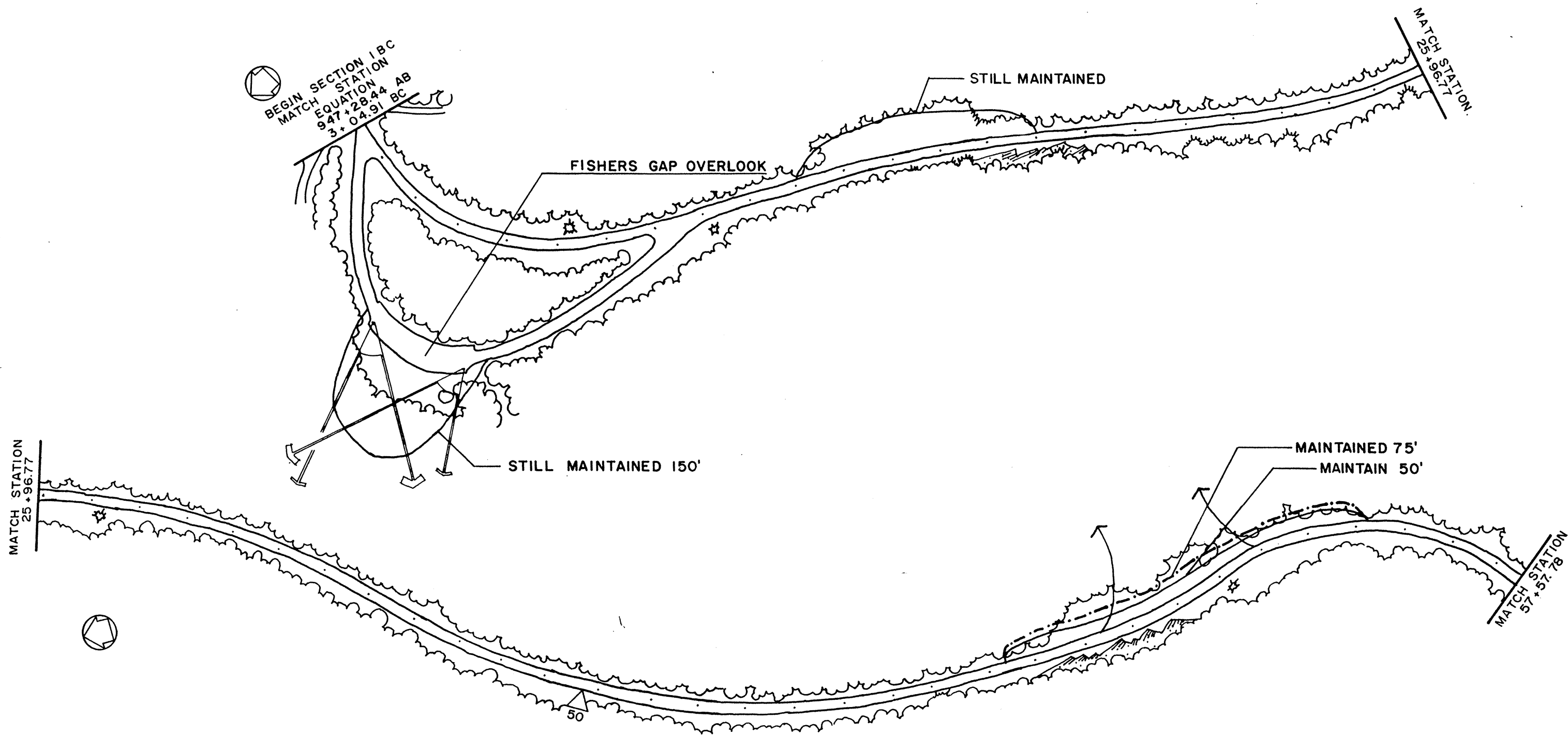


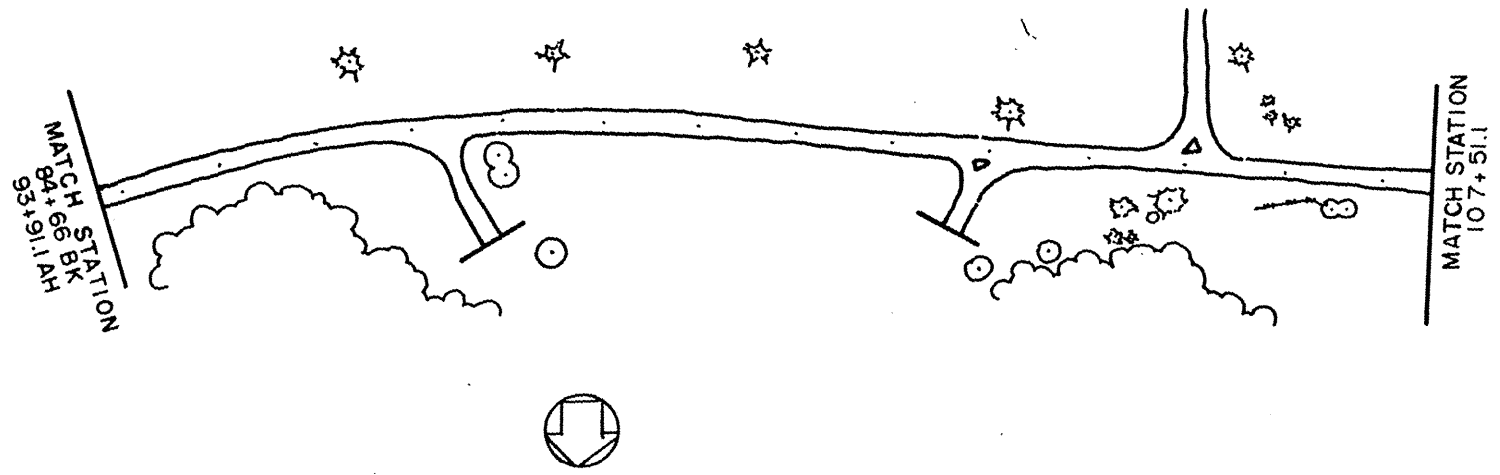
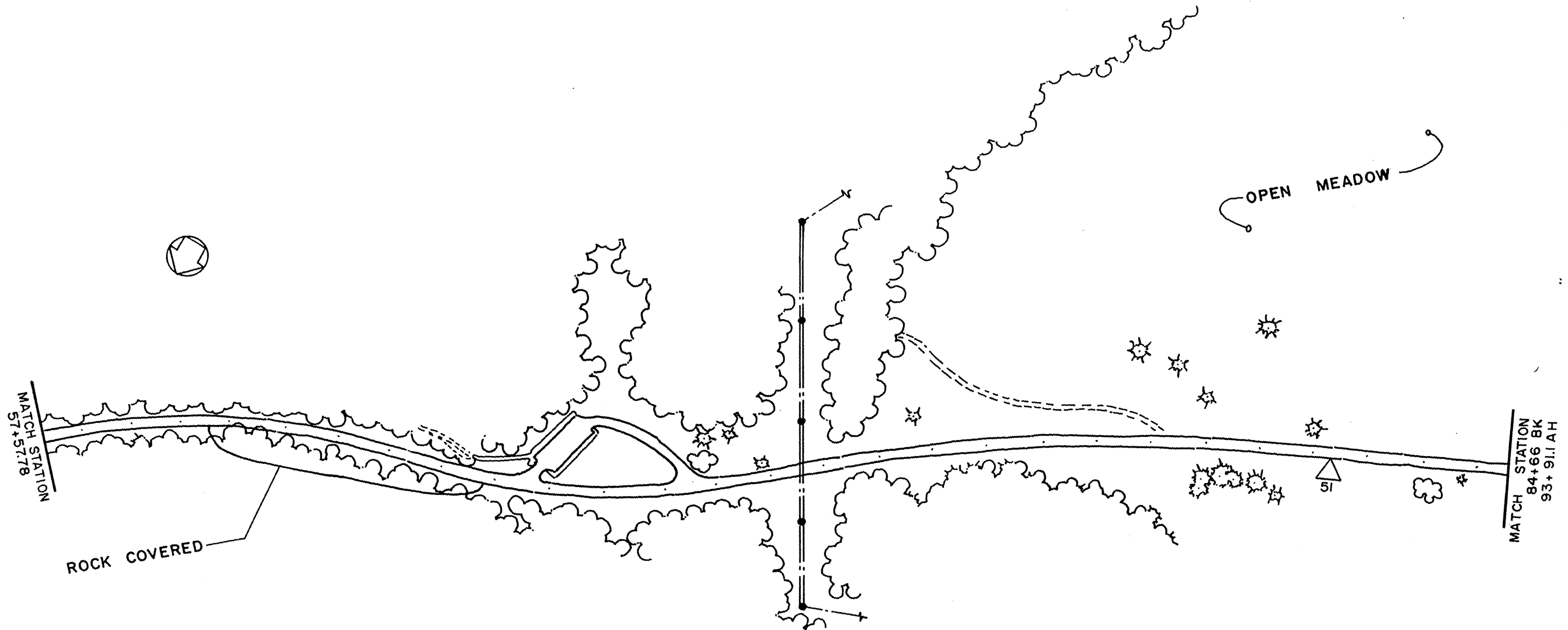












MATCH STATION
107+51.1

MATCH STATION
138+58.5

REFORESTED AREA

TANNER'S RIDGE OVERLOOK

MEADOW AREA
OVERGROWN

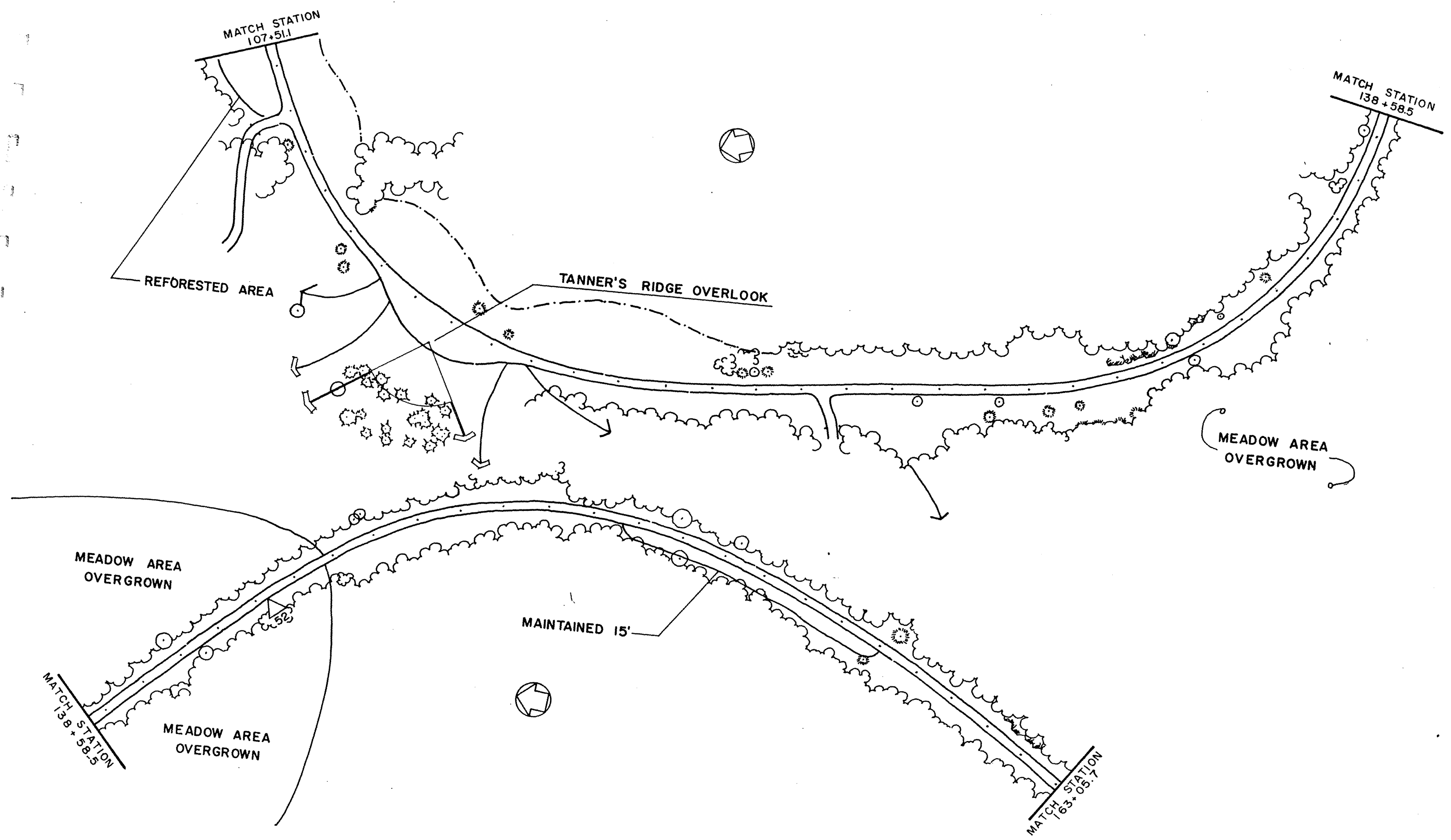
MEADOW AREA
OVERGROWN

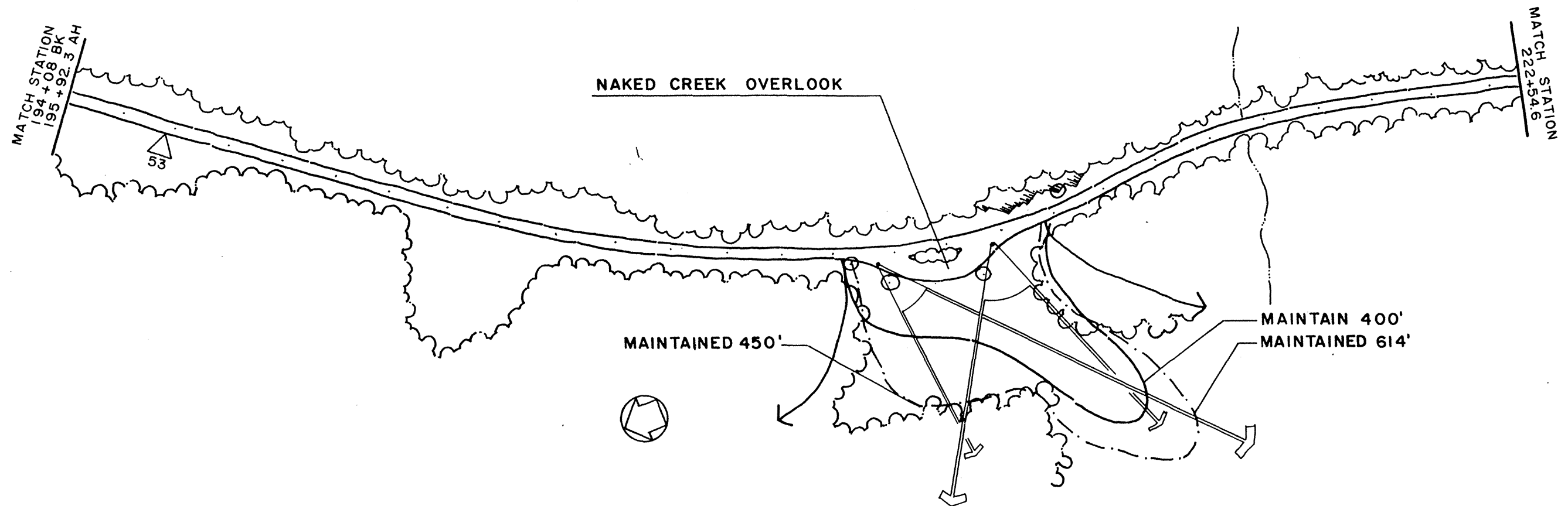
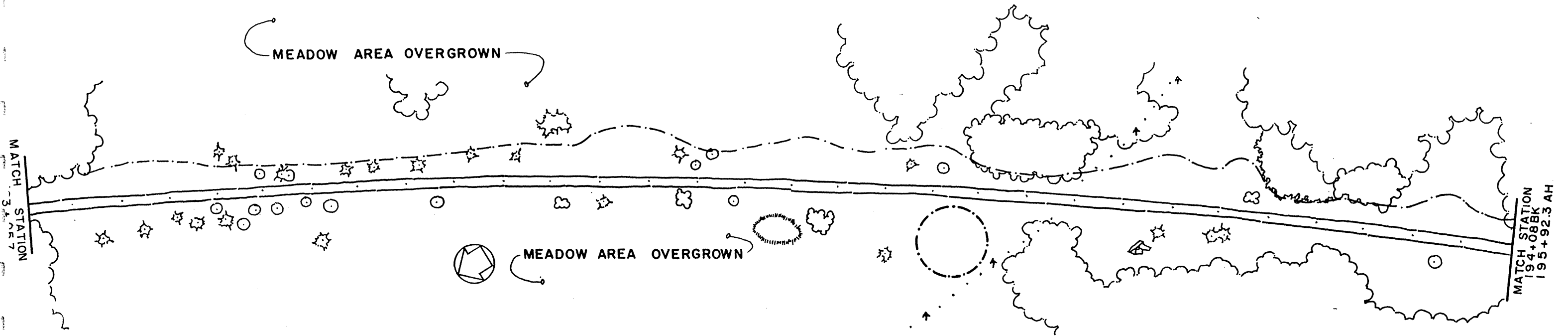
MAINTAINED 15'

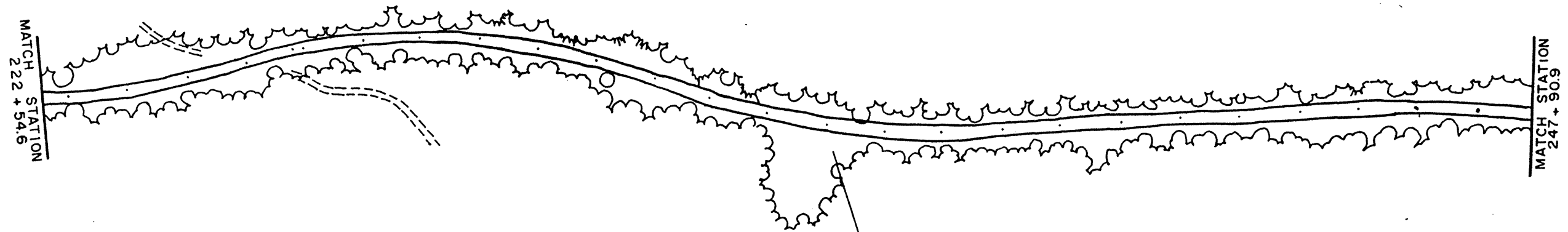
MEADOW AREA
OVERGROWN

MATCH STATION
138+58.5

MATCH STATION
163+05.7

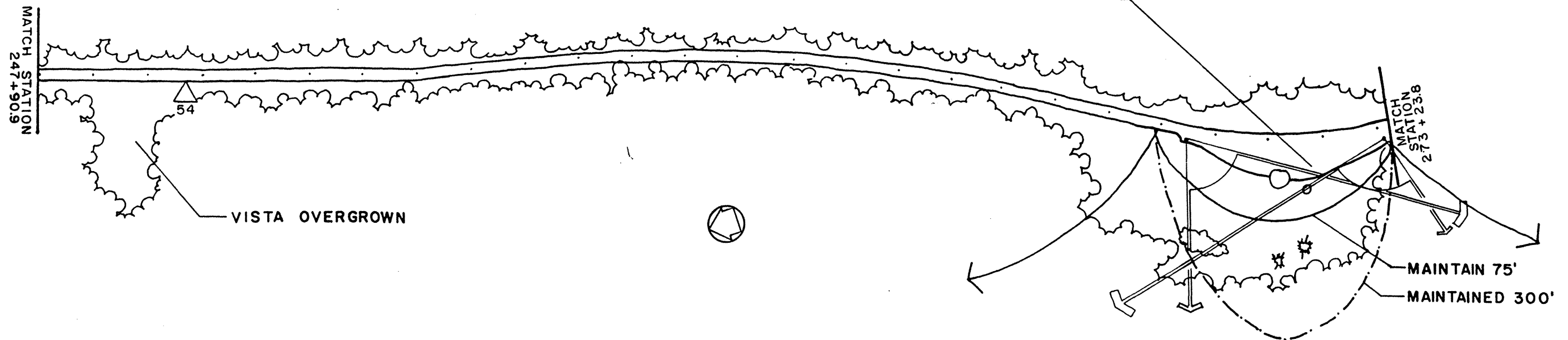






VISTA OVERGROWN

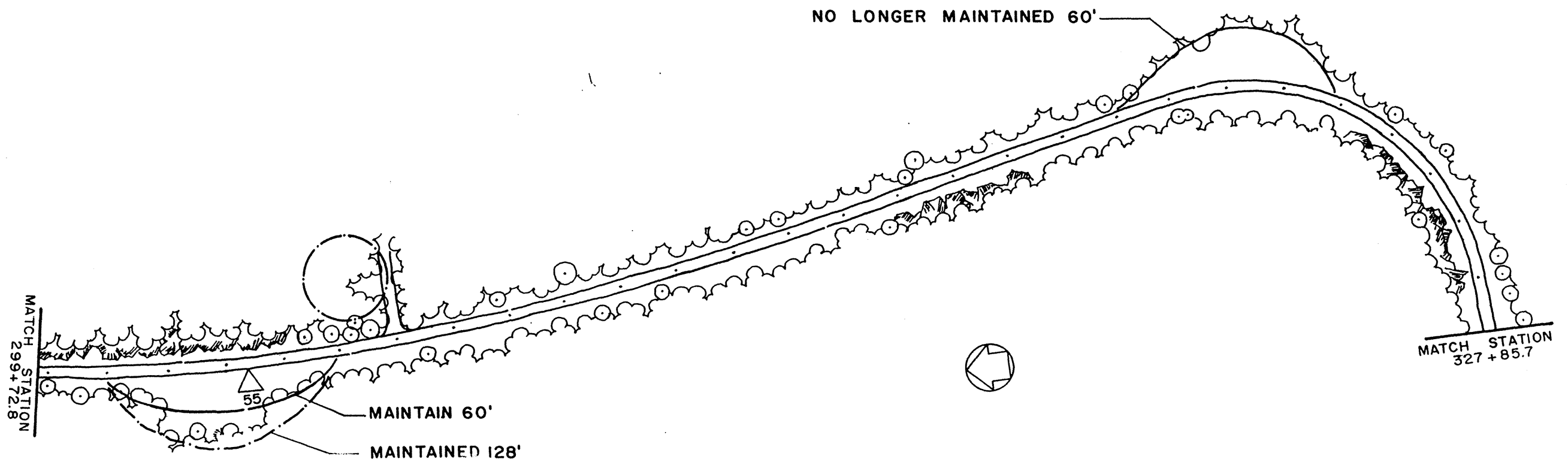
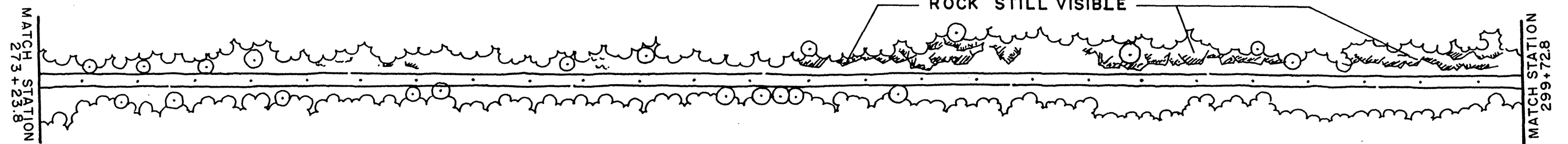
HAZELTOP RIDGE OVERLOOK



VISTA OVERGROWN

MAINTAIN 75'

MAINTAINED 300'



MATCH STATION
327 + 85.7



THE POINT OVERLOOK

MAINTAINED 128'

ROCK PARTIALLY OVERGROWN

MAINTAIN 50'

MAINTAINED 140'

MATCH STATION
353 + 90.9

MATCH STATION
353 + 90.9

56

MAINTAIN 50'

MAINTAINED 70'

MAINTAIN 100'

MAINTAINED 55'

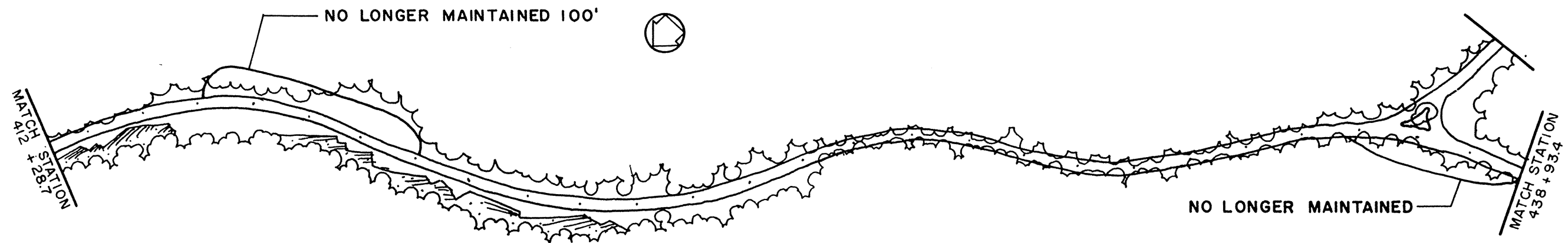
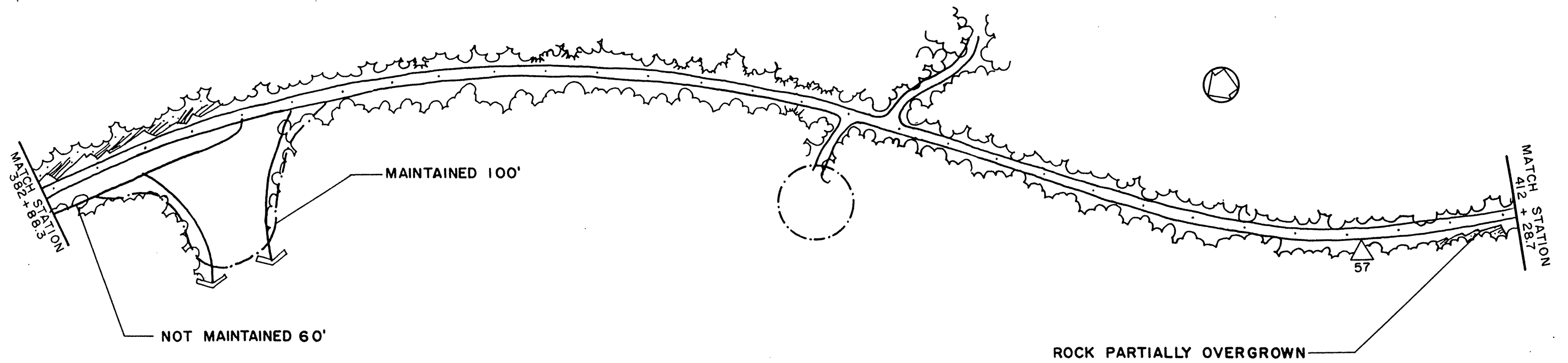
MAINTAINED 100'

MAINTAINED 10'

MAINTAIN 60'

MATCH STATION
362 + 88.5





MATCH STATION
438 + 93.4

MATCH STATION
468 + 34.1

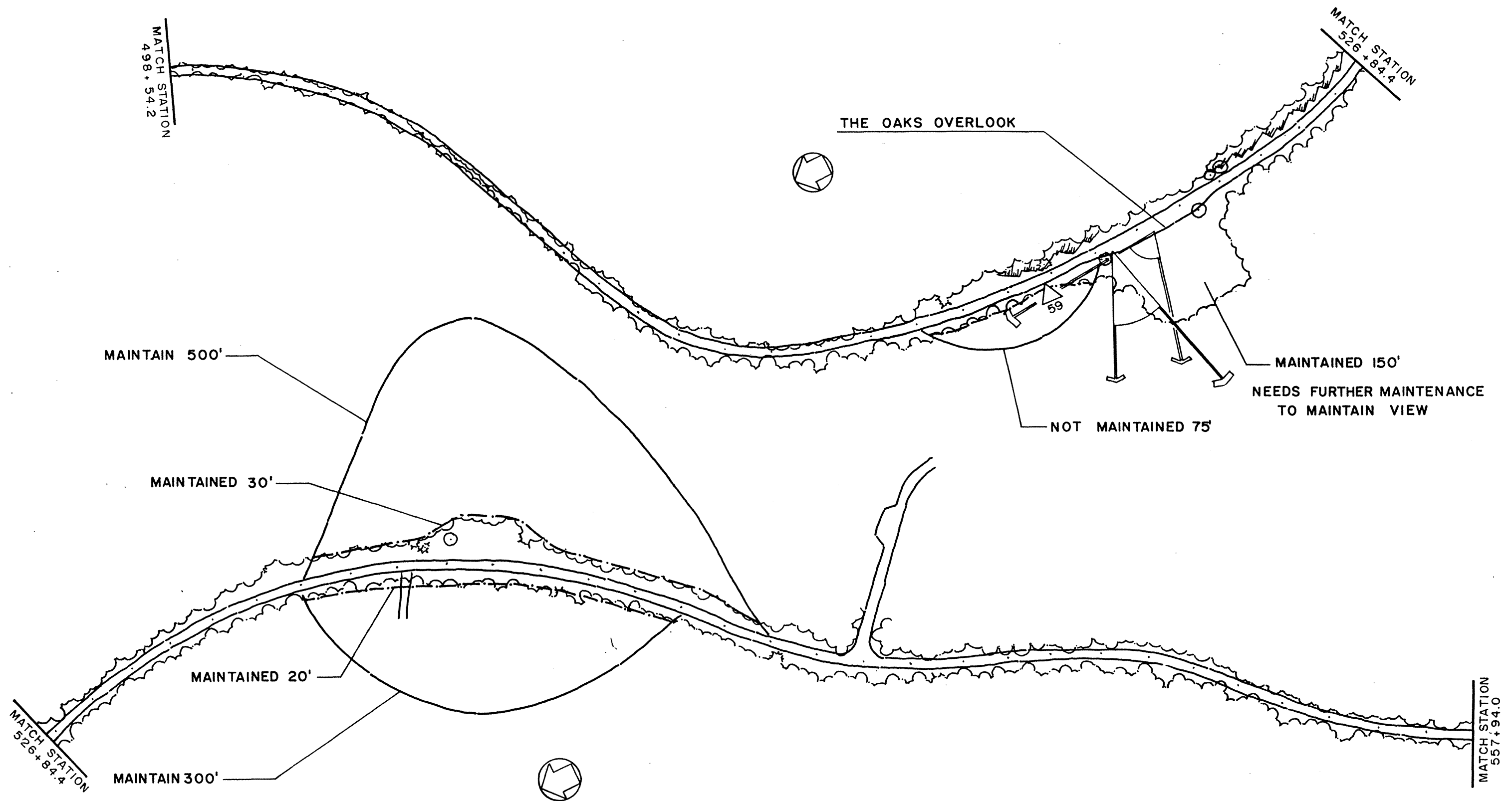
POWERLINE

NO LONGER MAINTAINED

58

MATCH STATION
468 + 34.1

MATCH STATION
498 + 54.2



MATCH STATION
498+54.2

THE OAKS OVERLOOK

MATCH STATION
526+84.4

MAINTAIN 500'

MAINTAINED 150'

NEEDS FURTHER MAINTENANCE
TO MAINTAIN VIEW

NOT MAINTAINED 75'

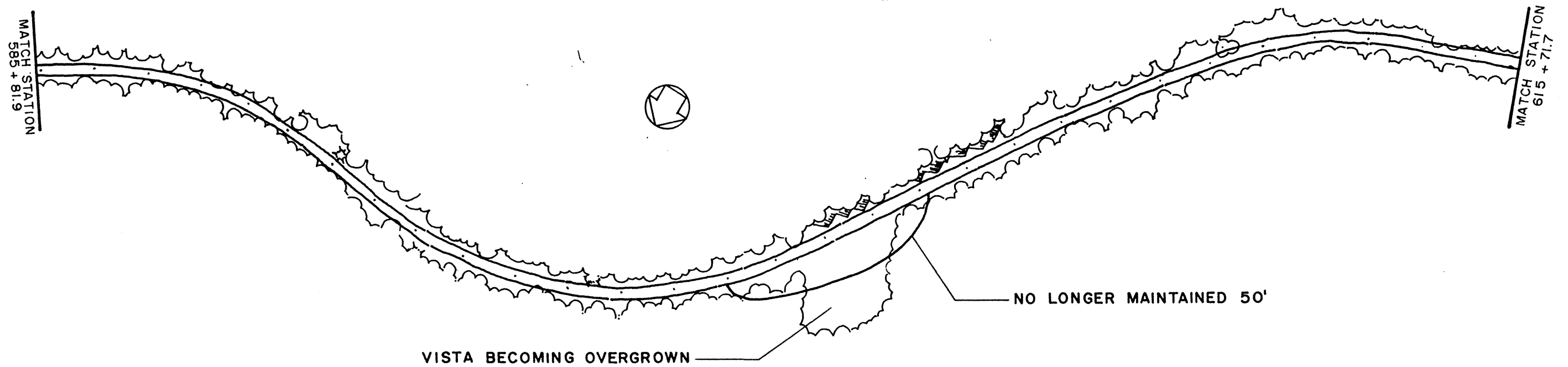
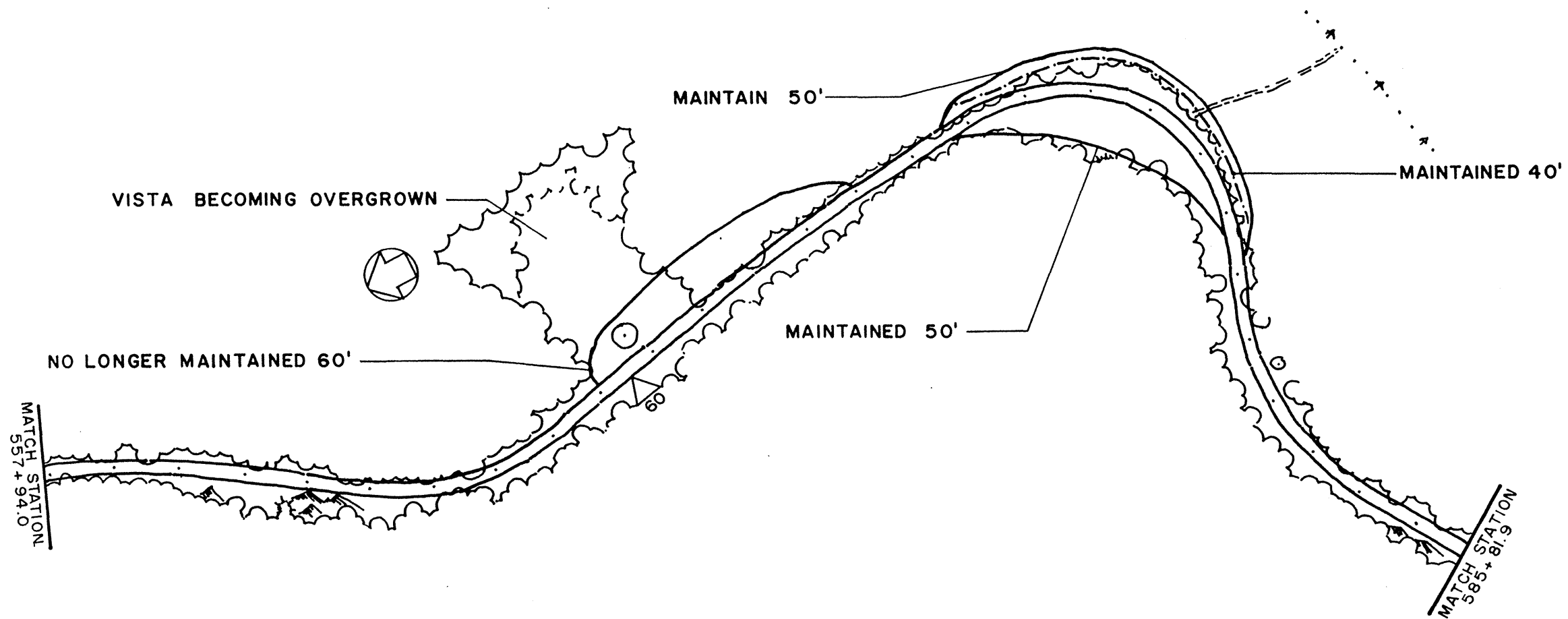
MAINTAINED 30'

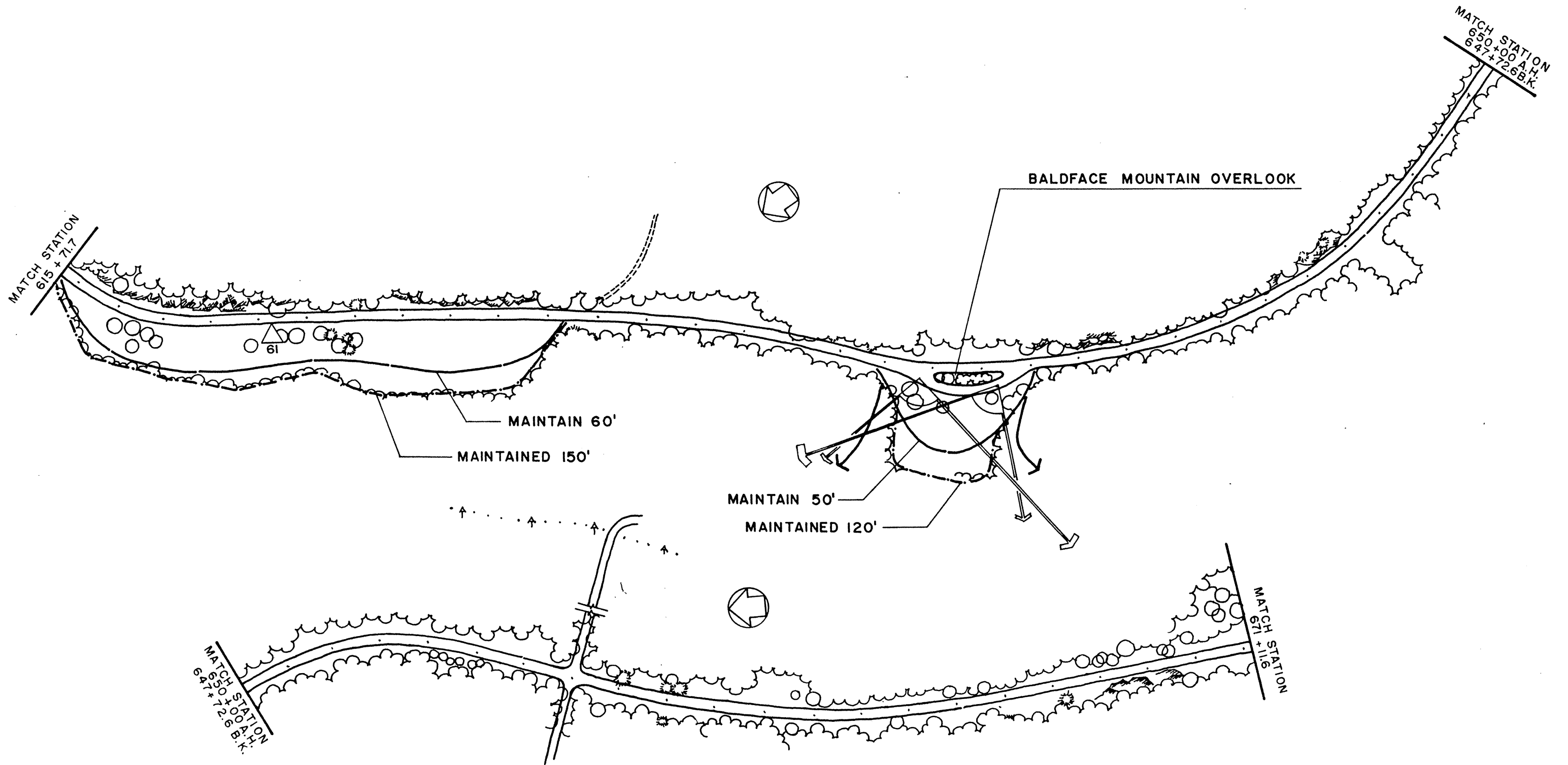
MAINTAINED 20'

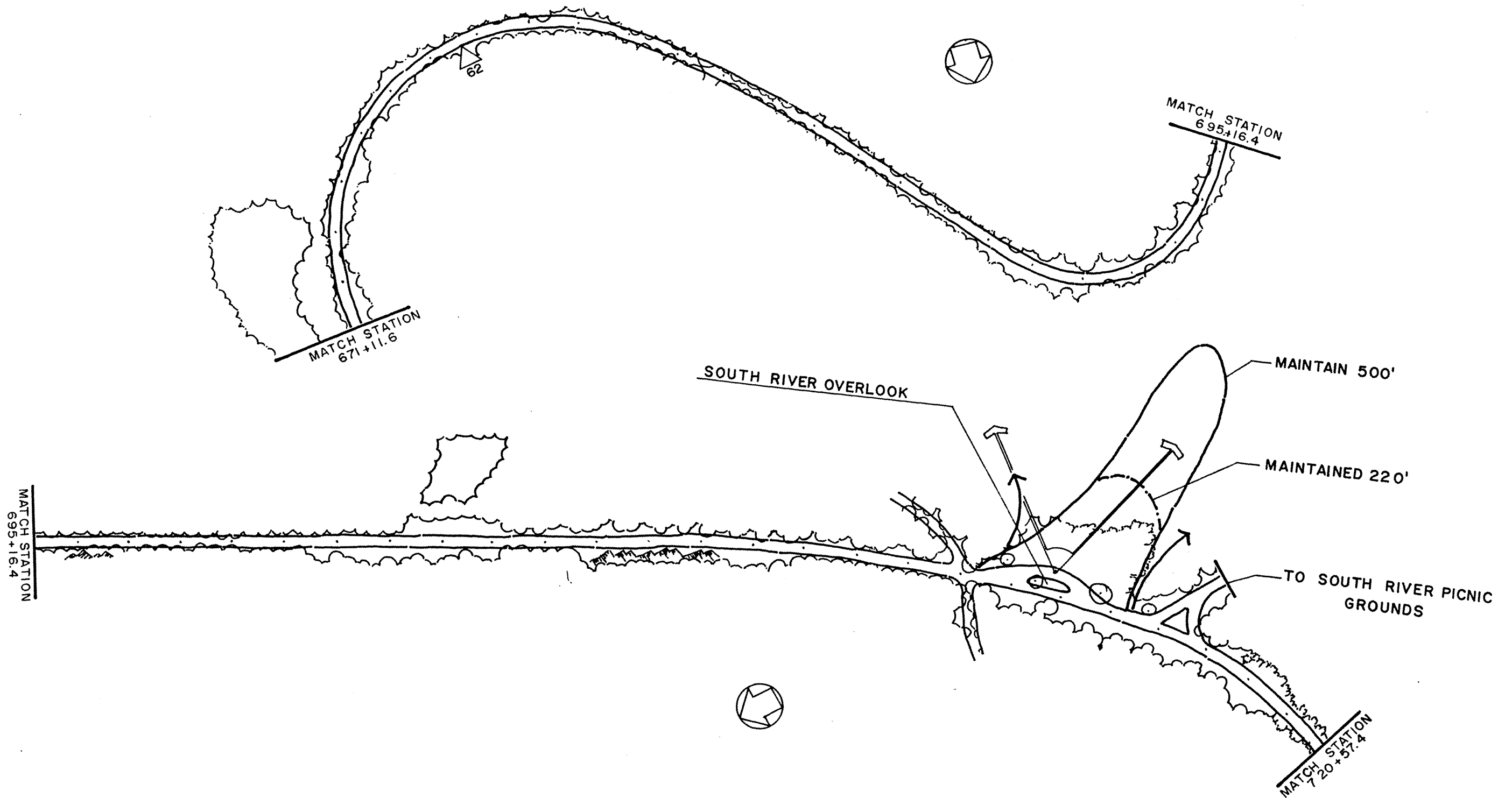
MAINTAIN 300'

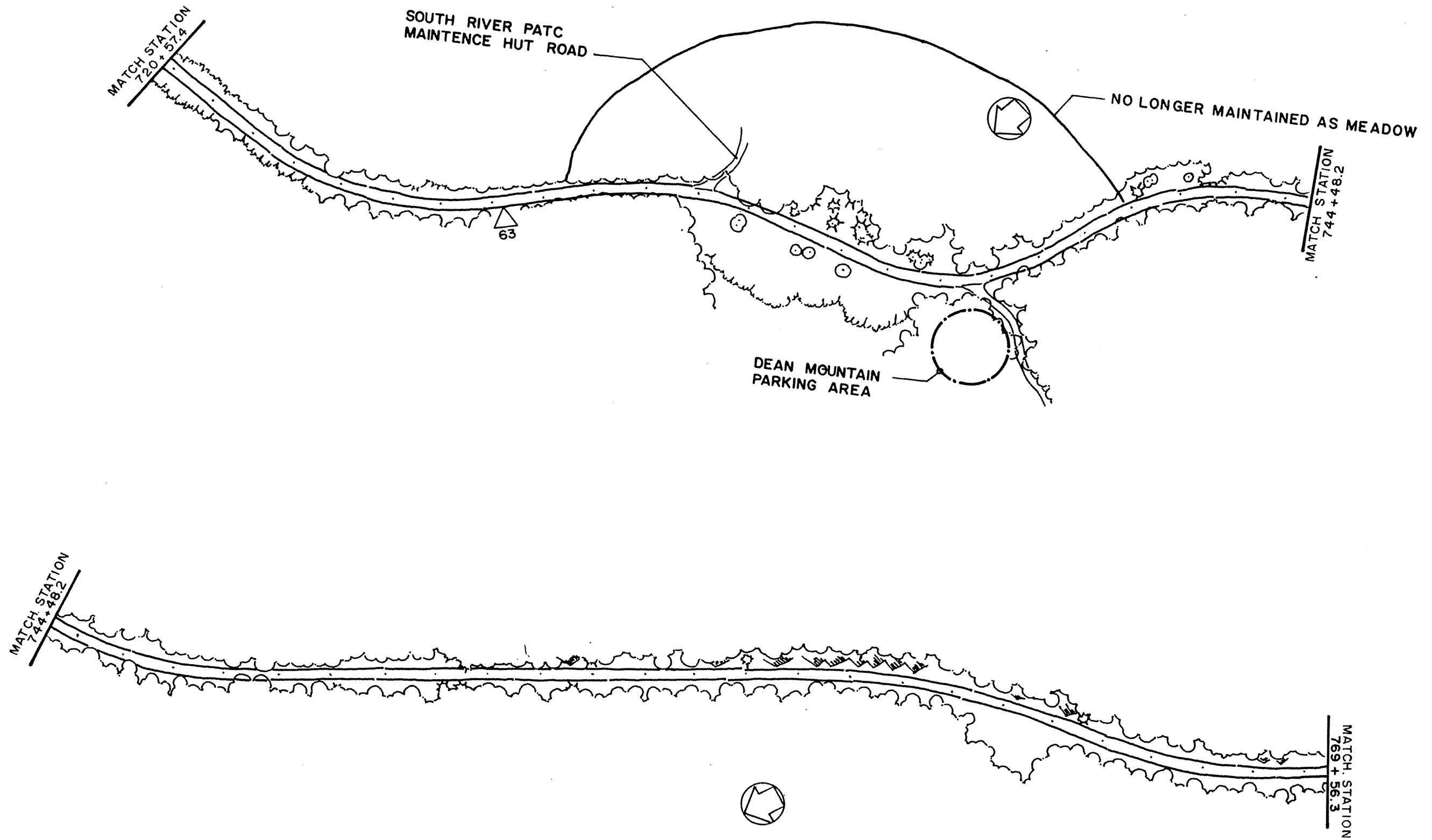
MATCH STATION
557+94.0

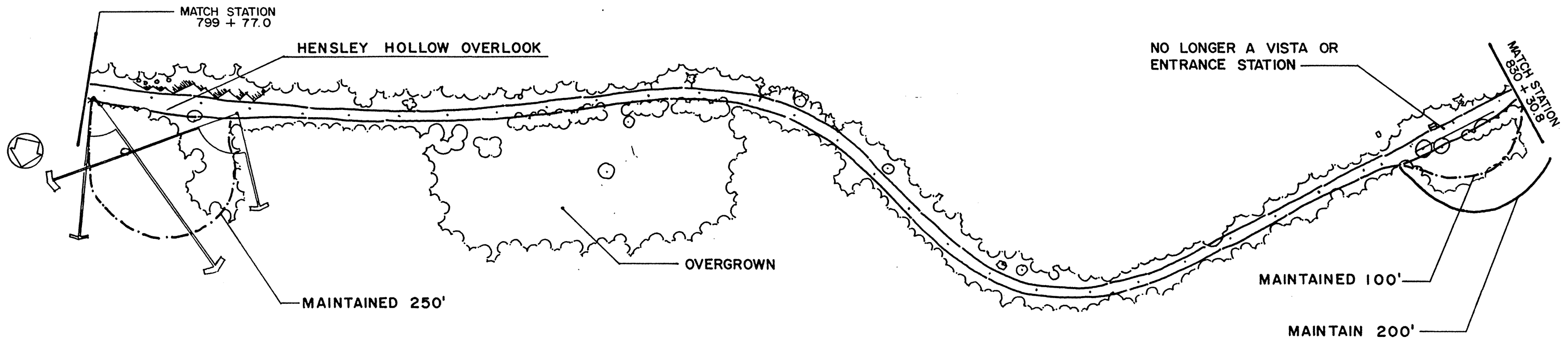
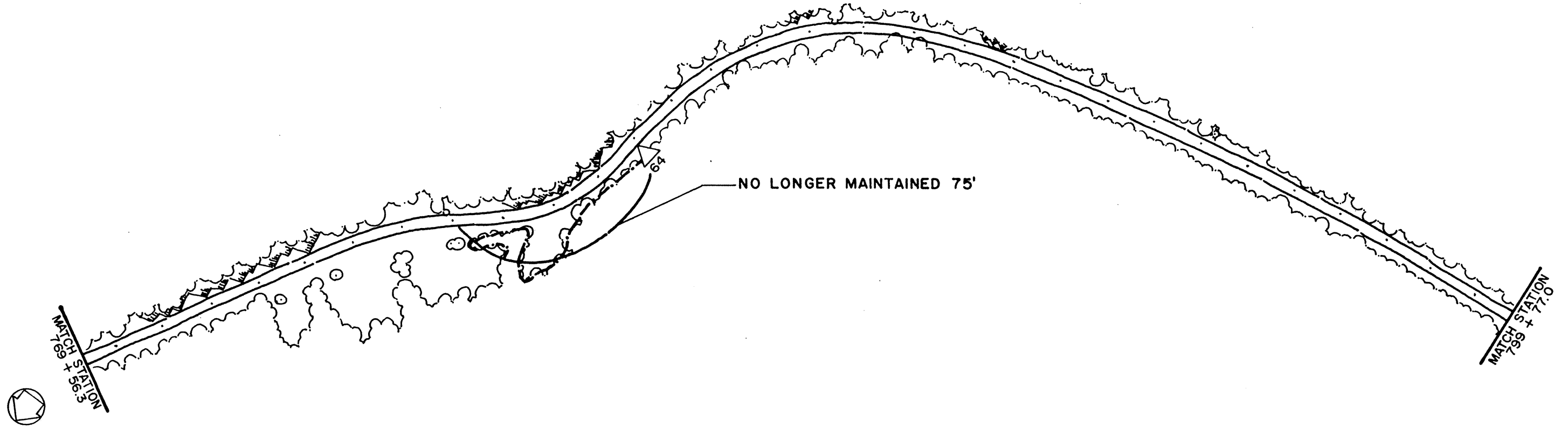
MATCH STATION
526+84.4

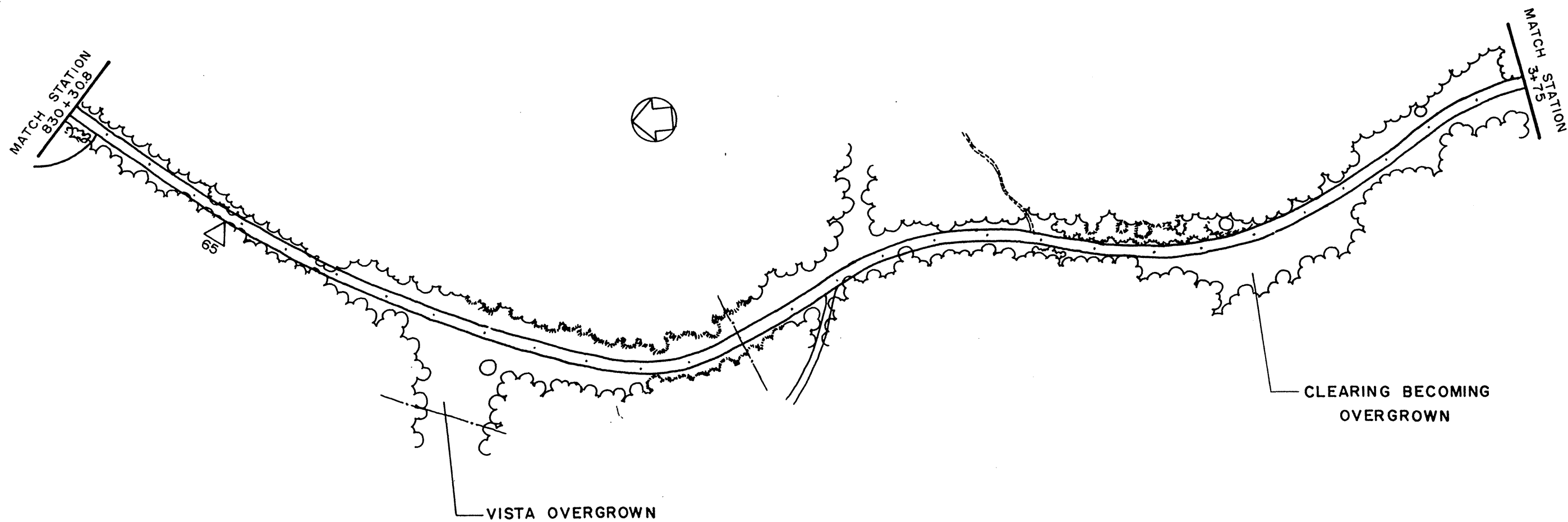


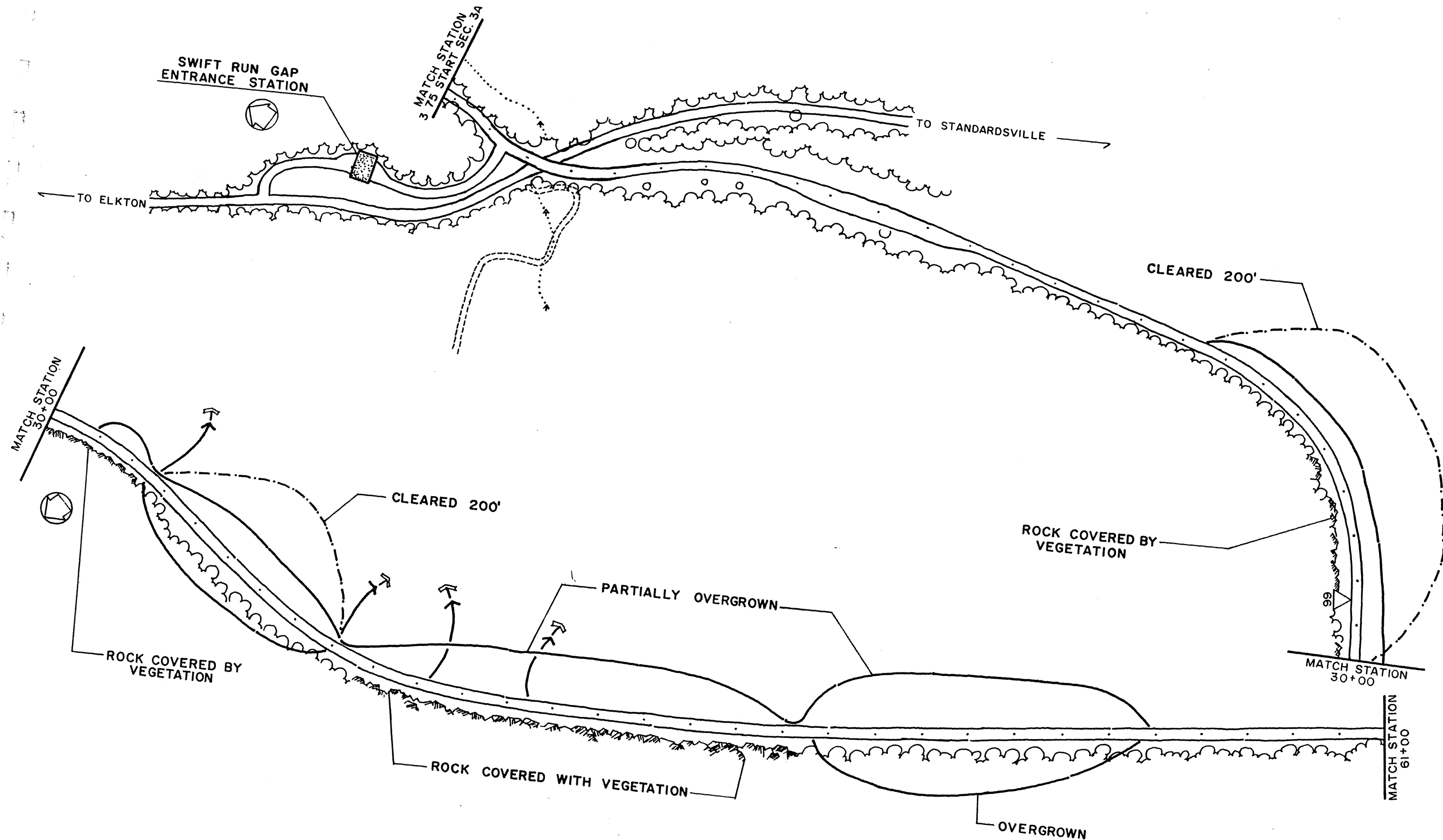


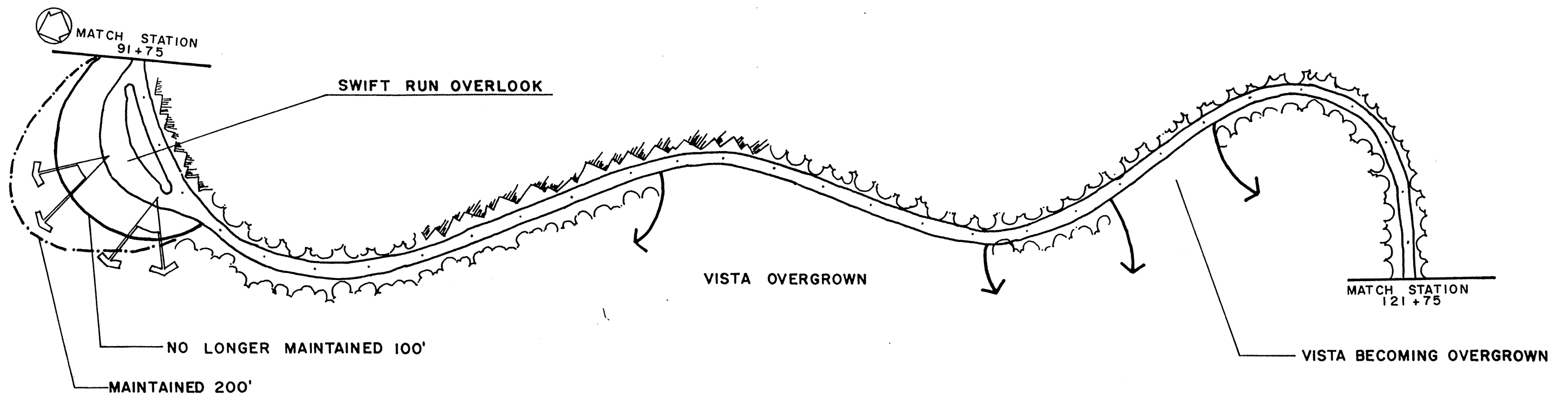
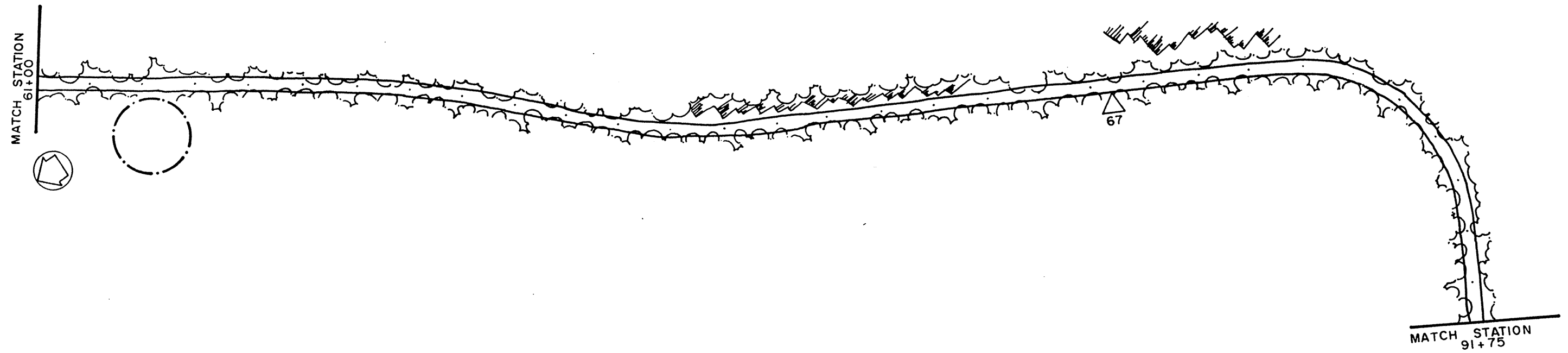


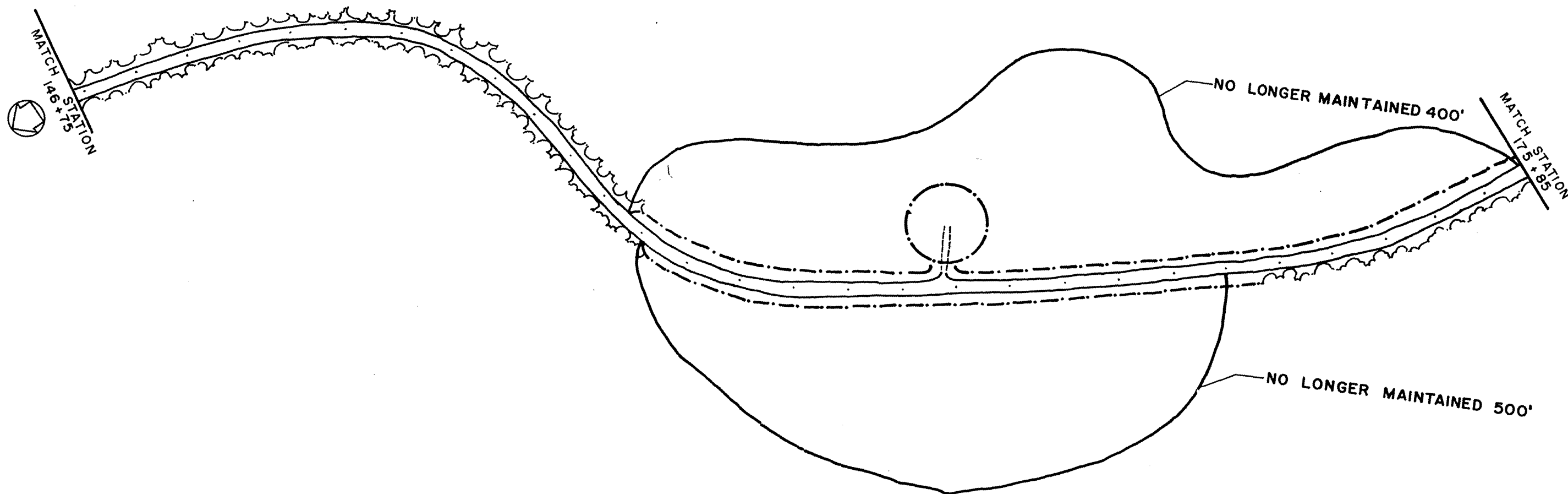
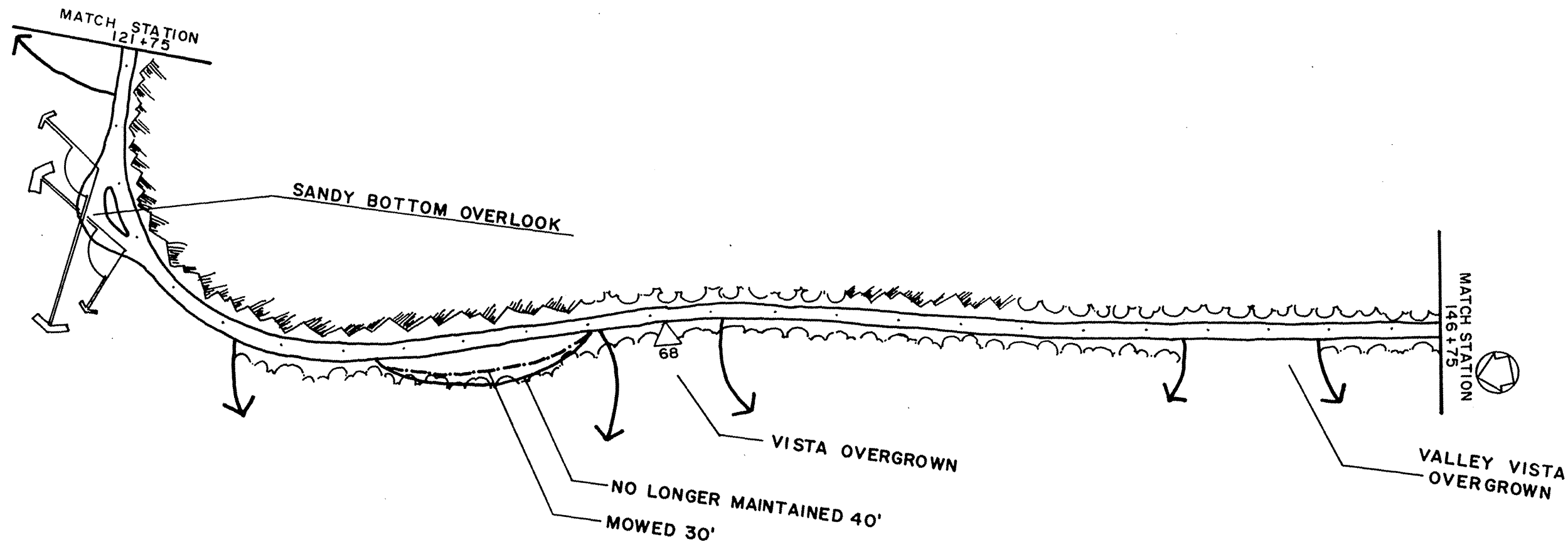


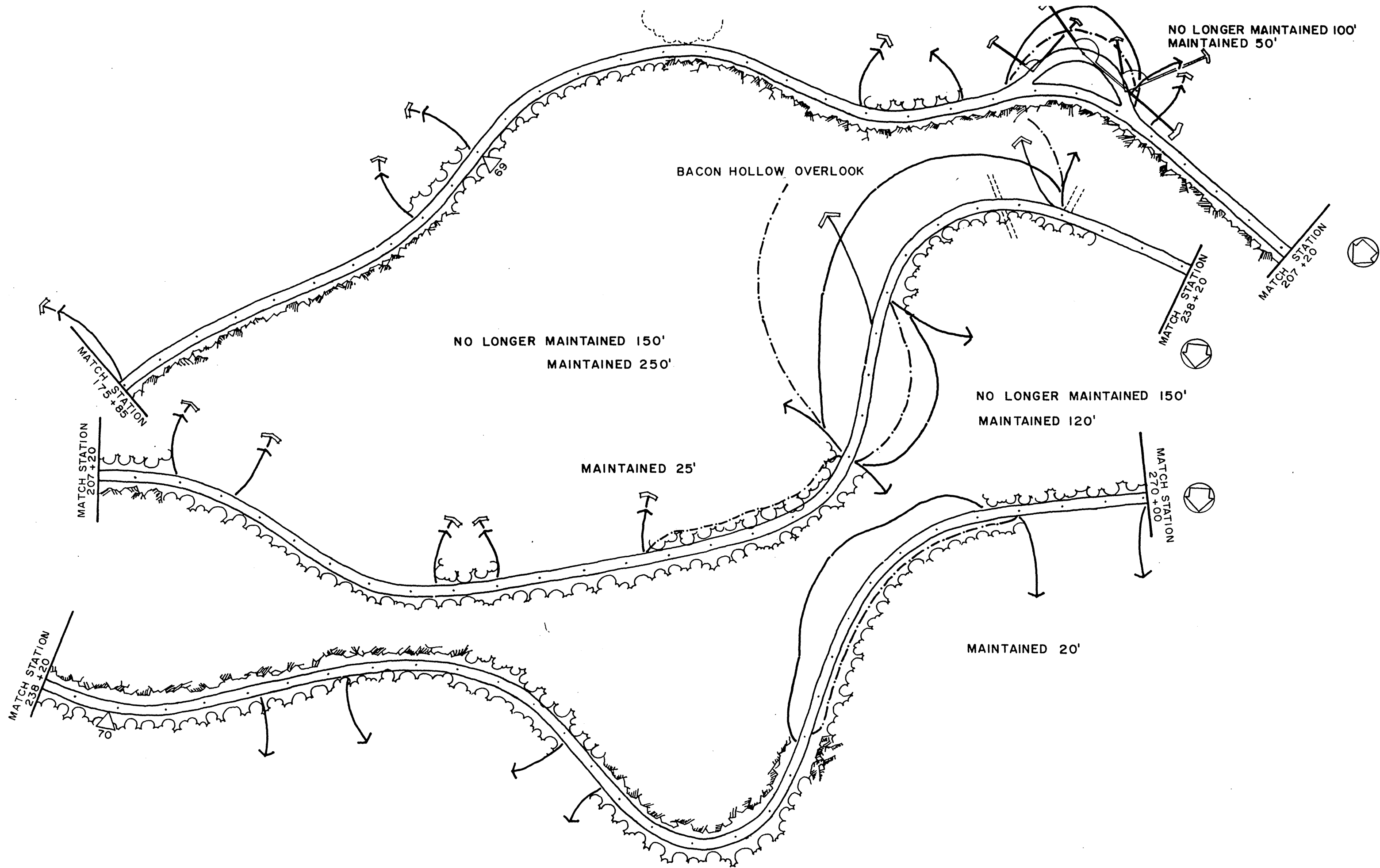


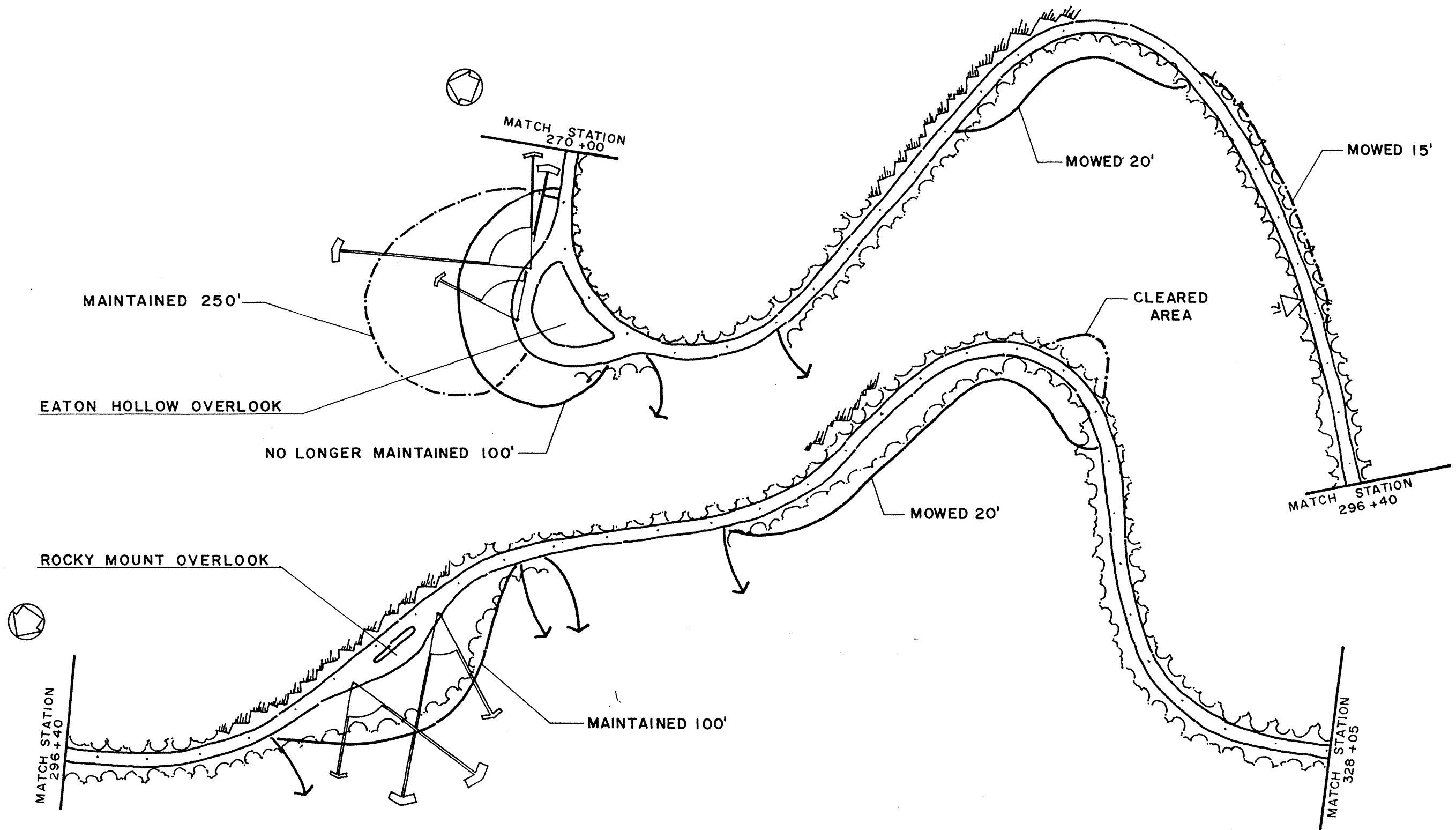


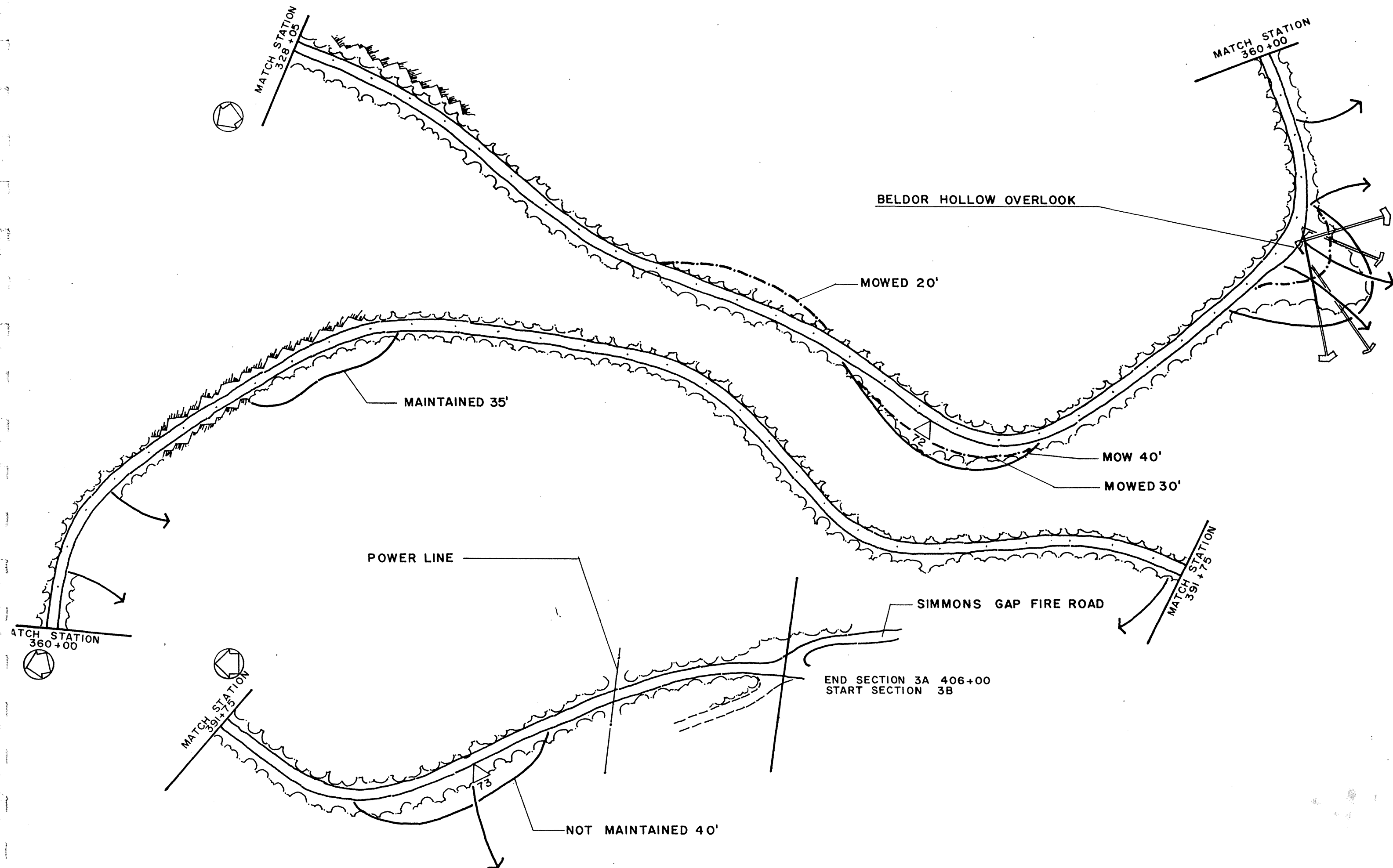


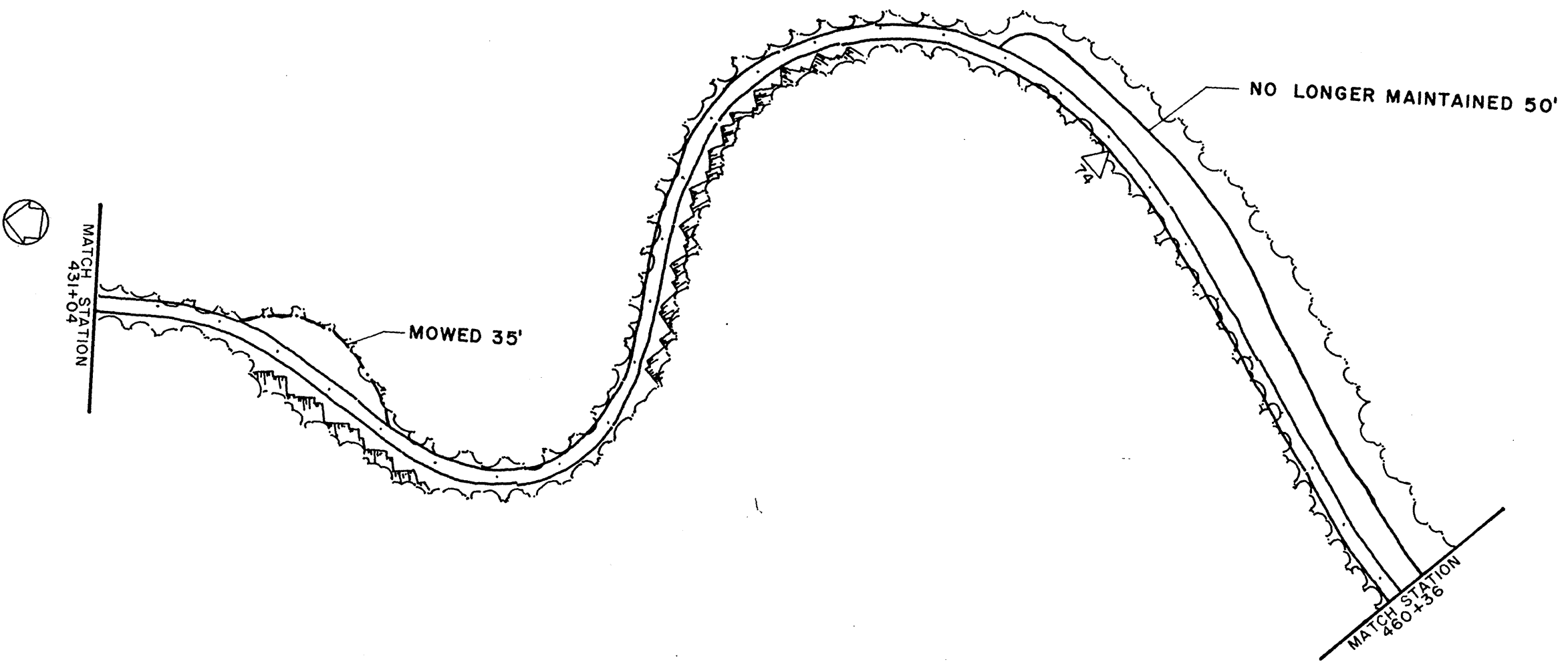
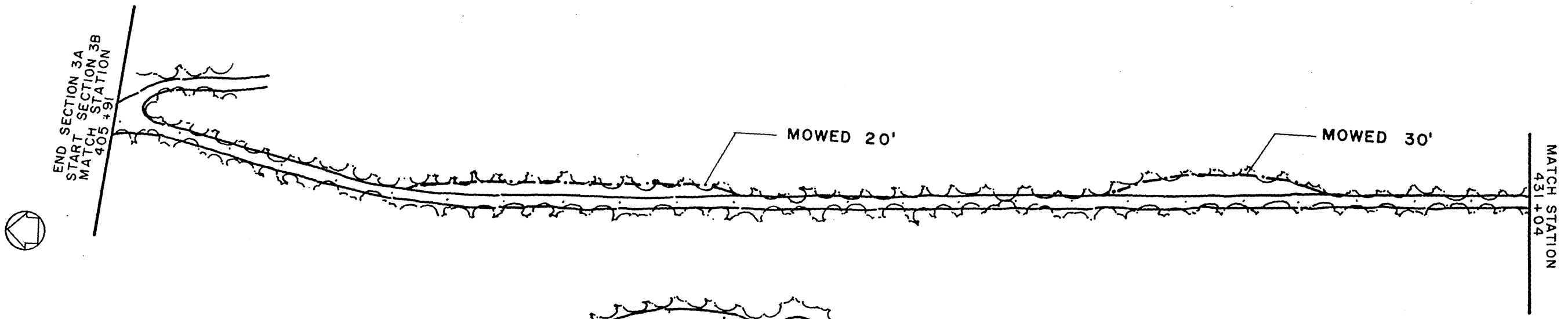


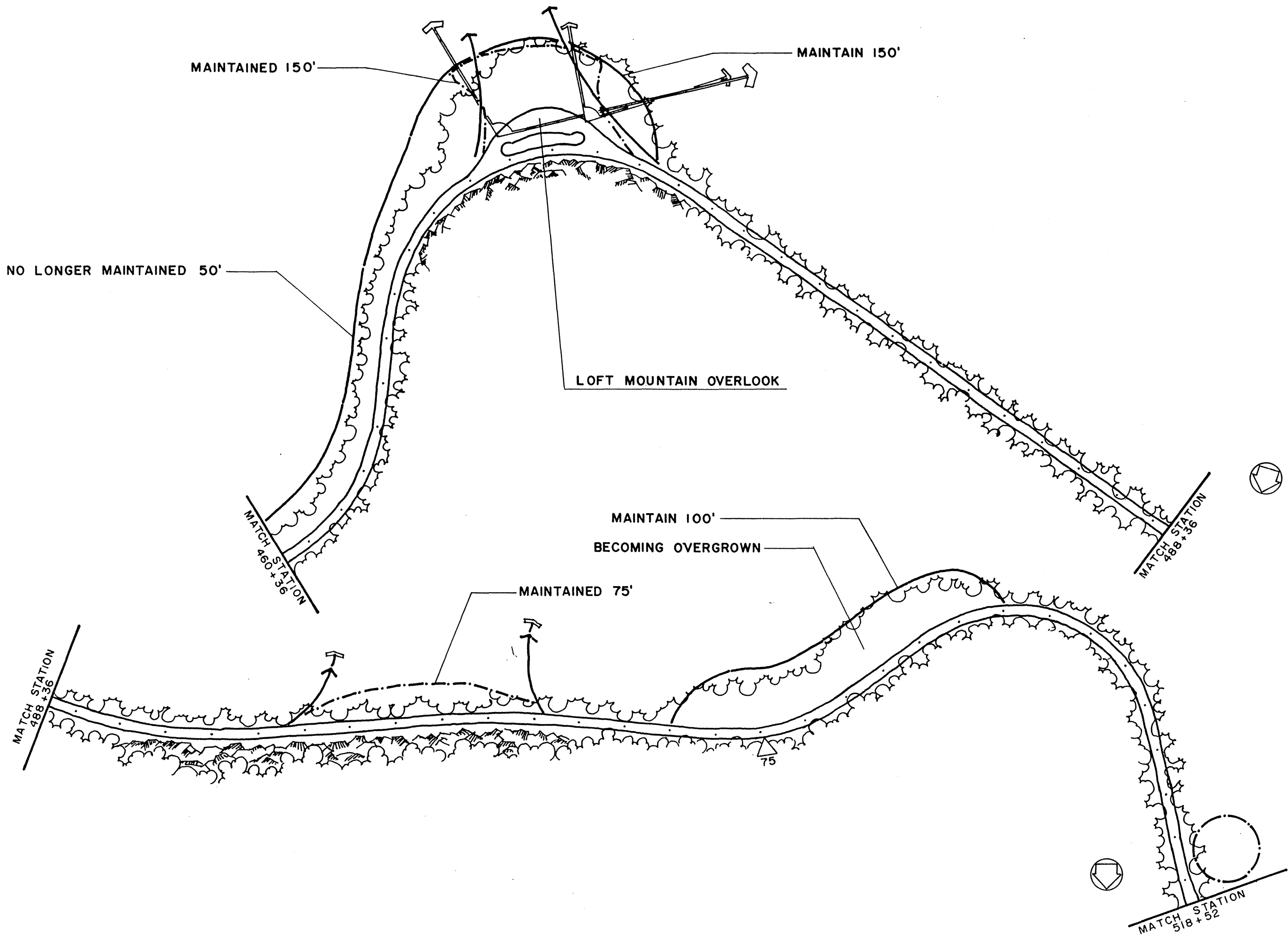


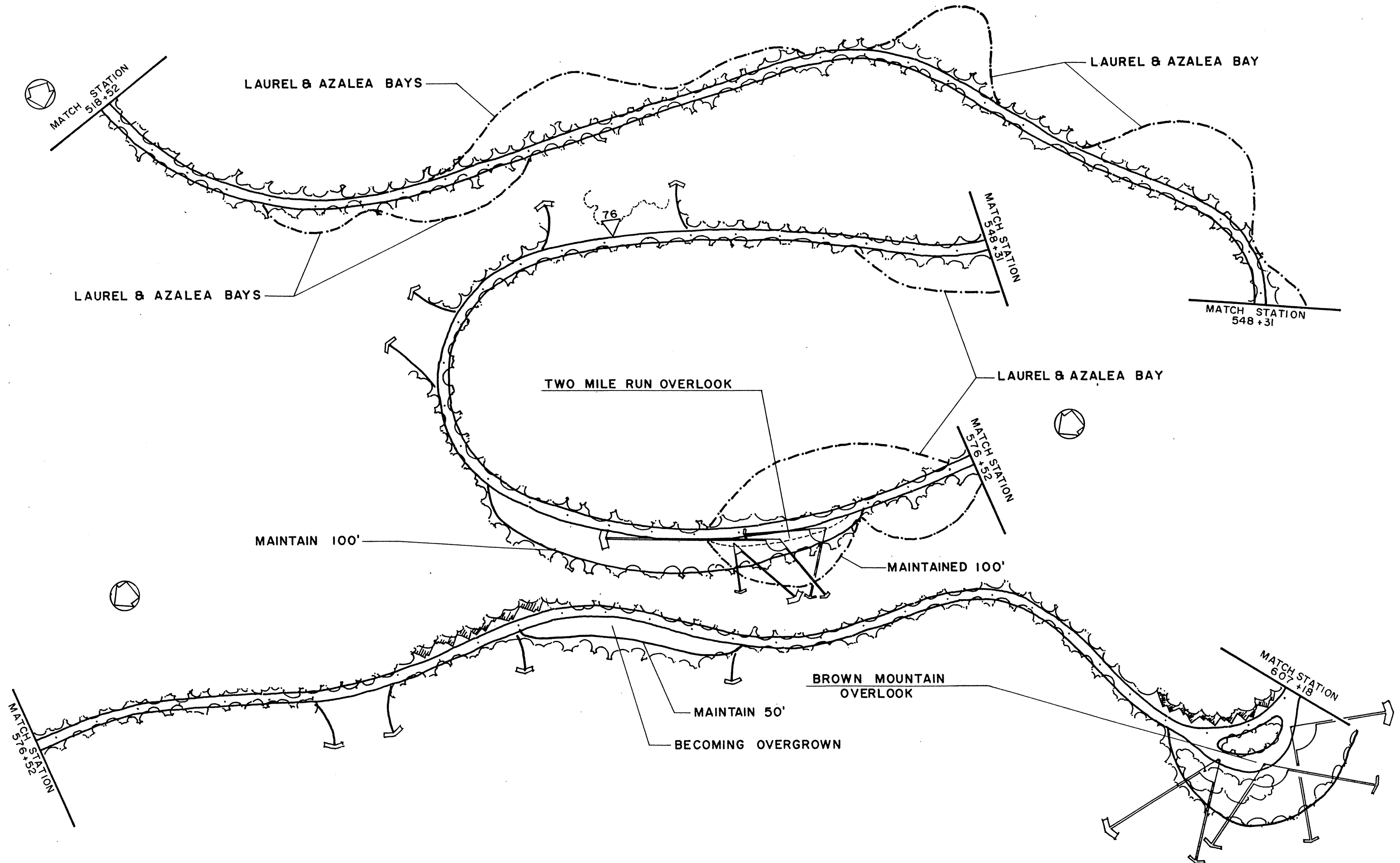


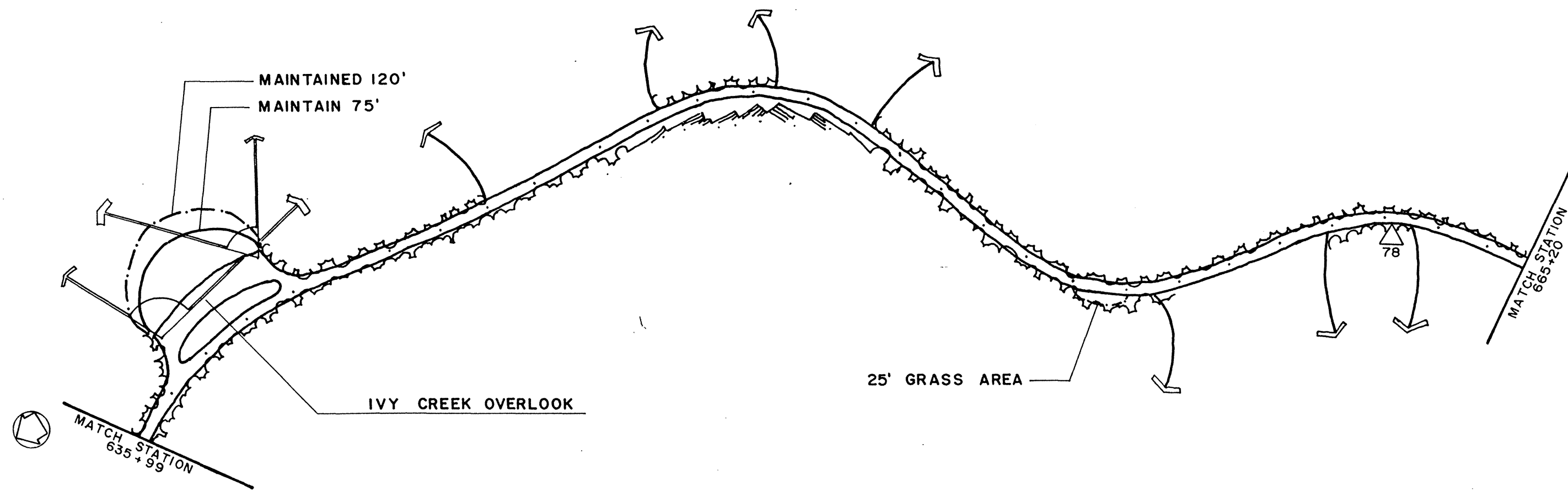
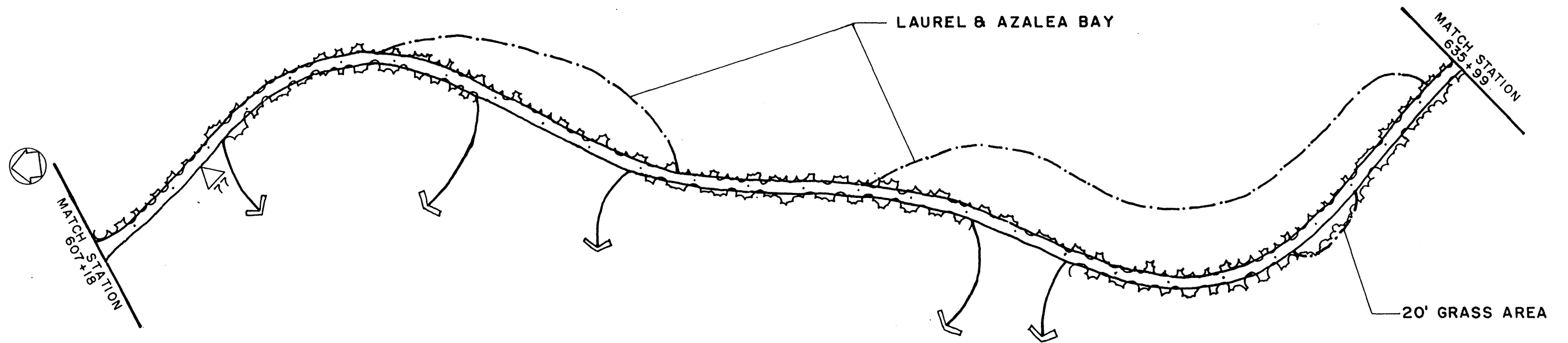


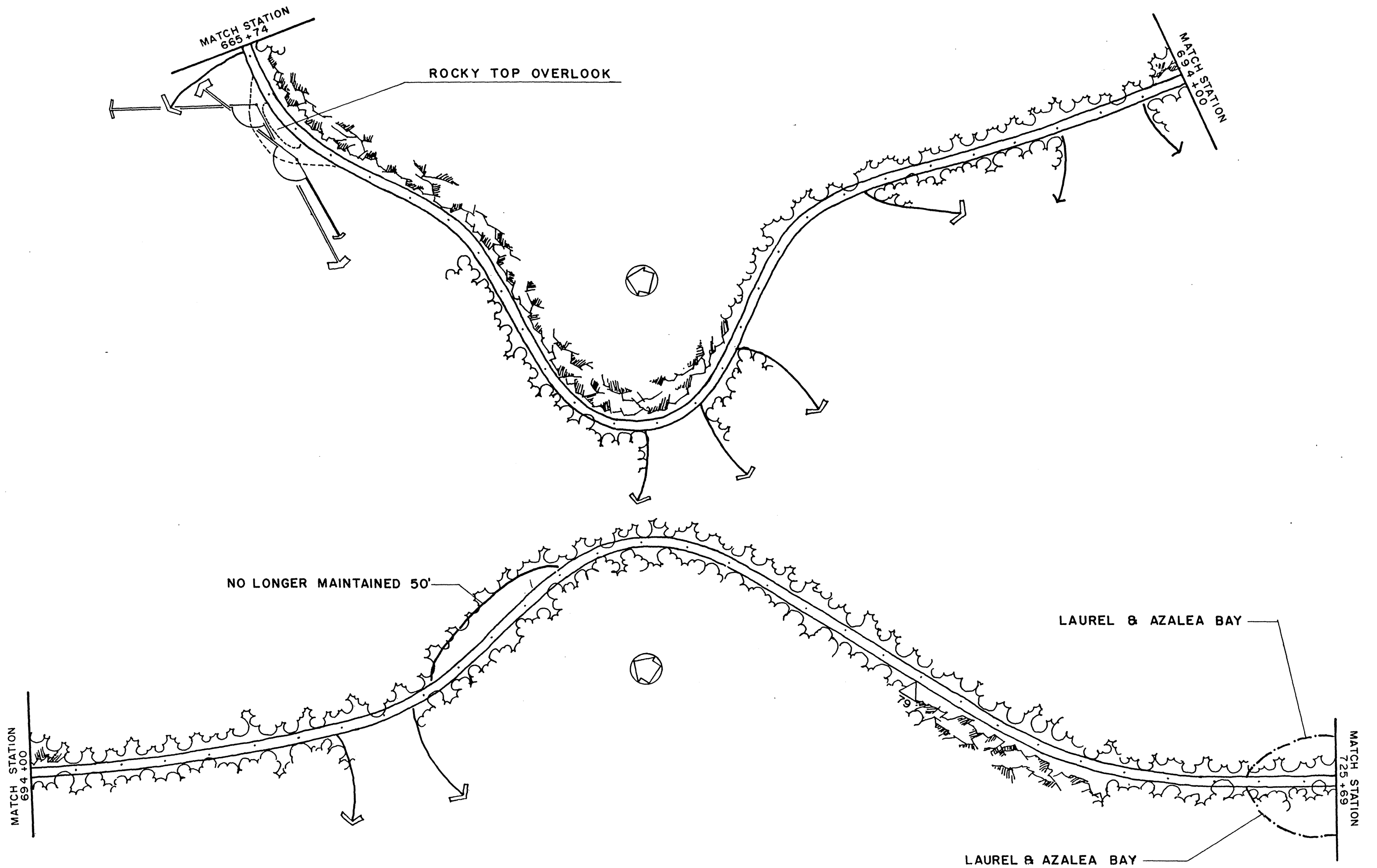


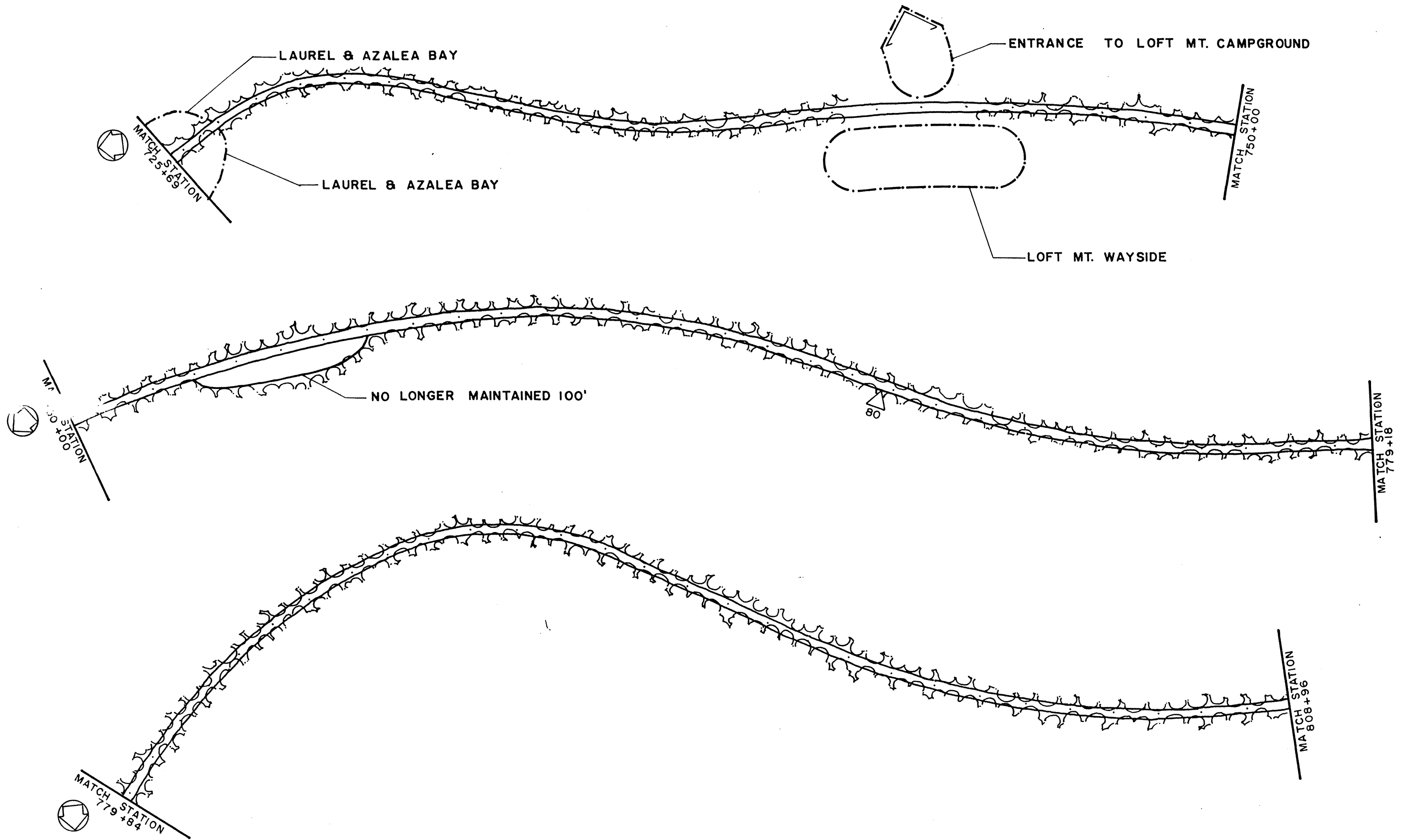


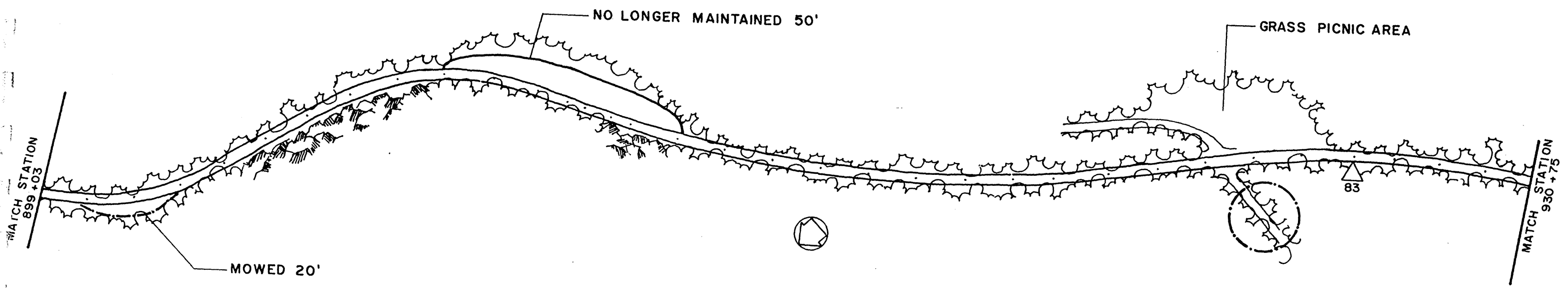
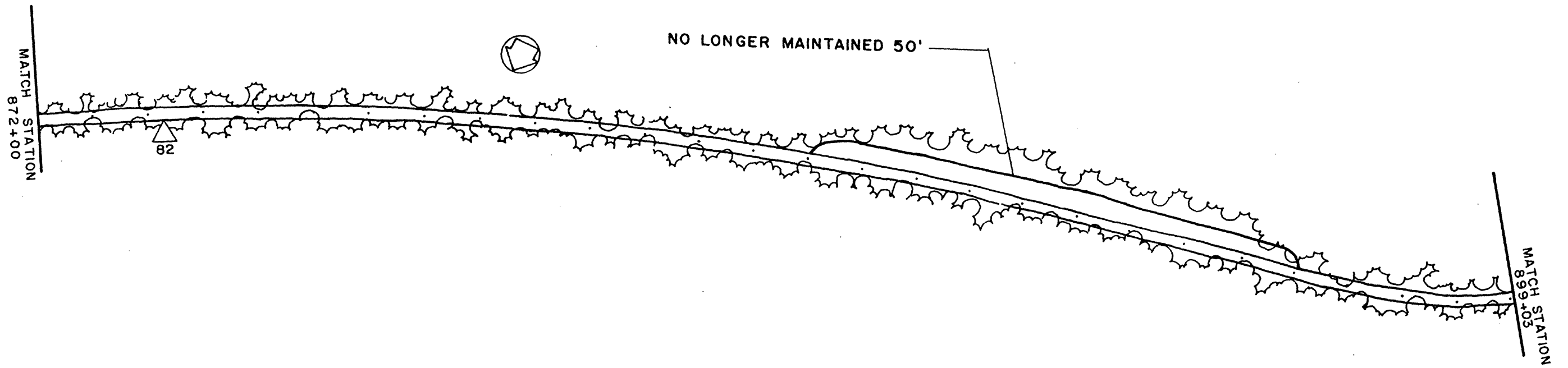


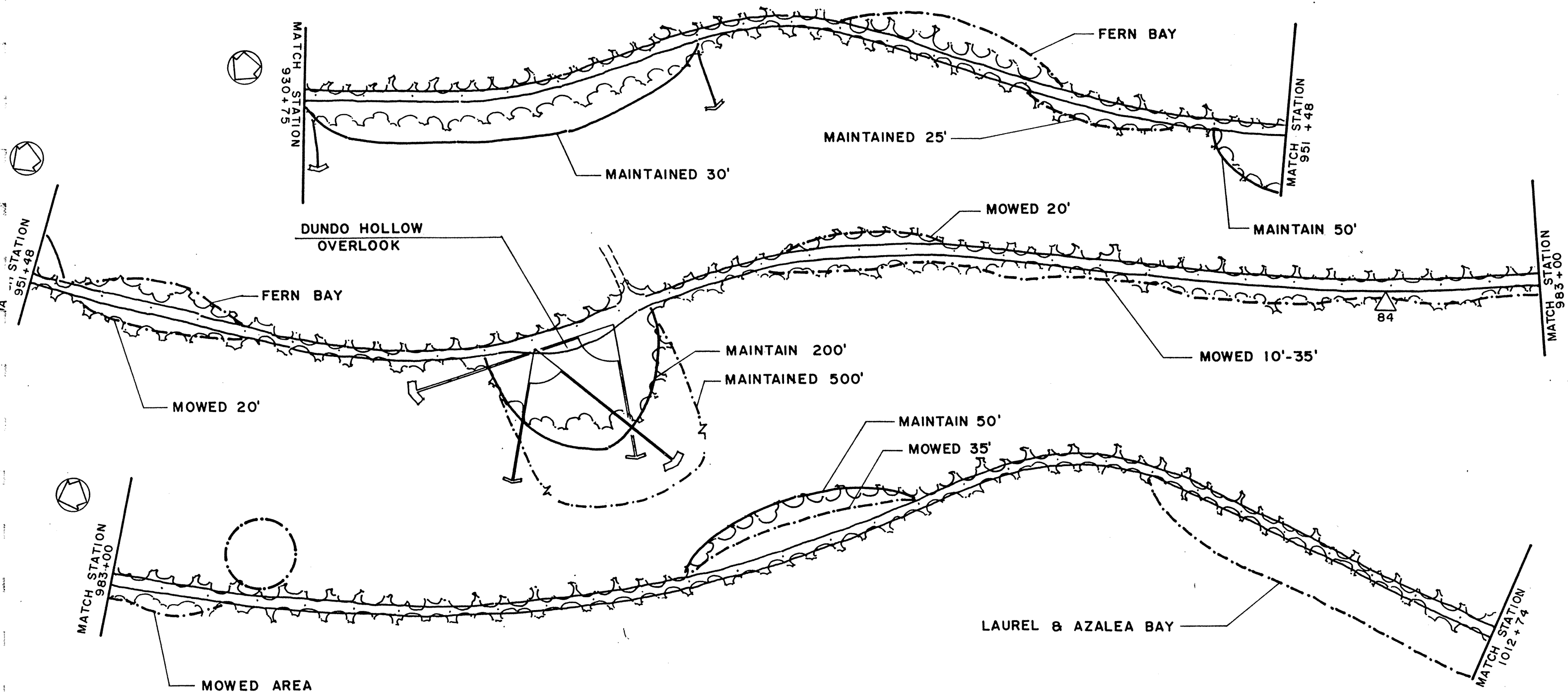


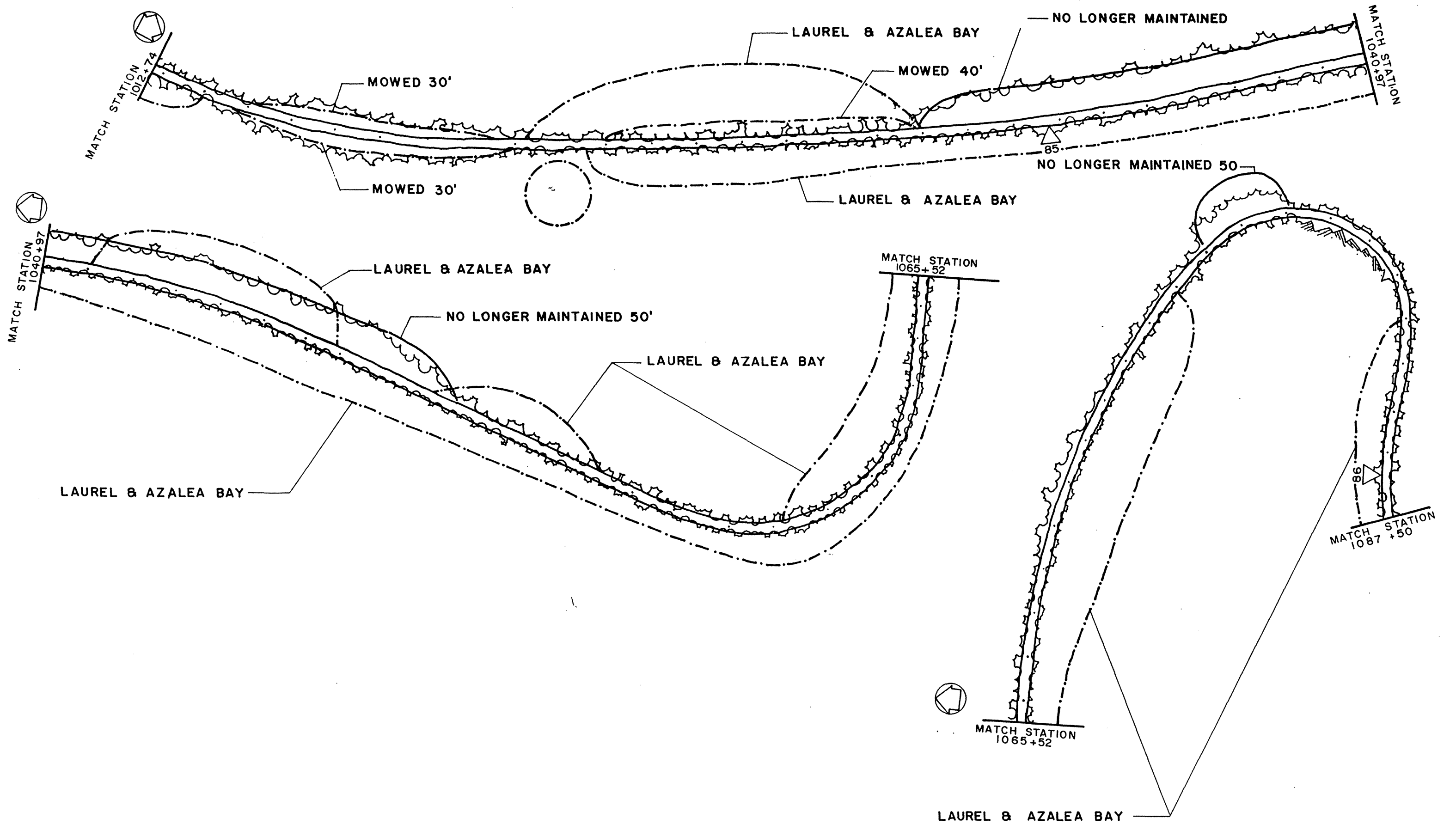


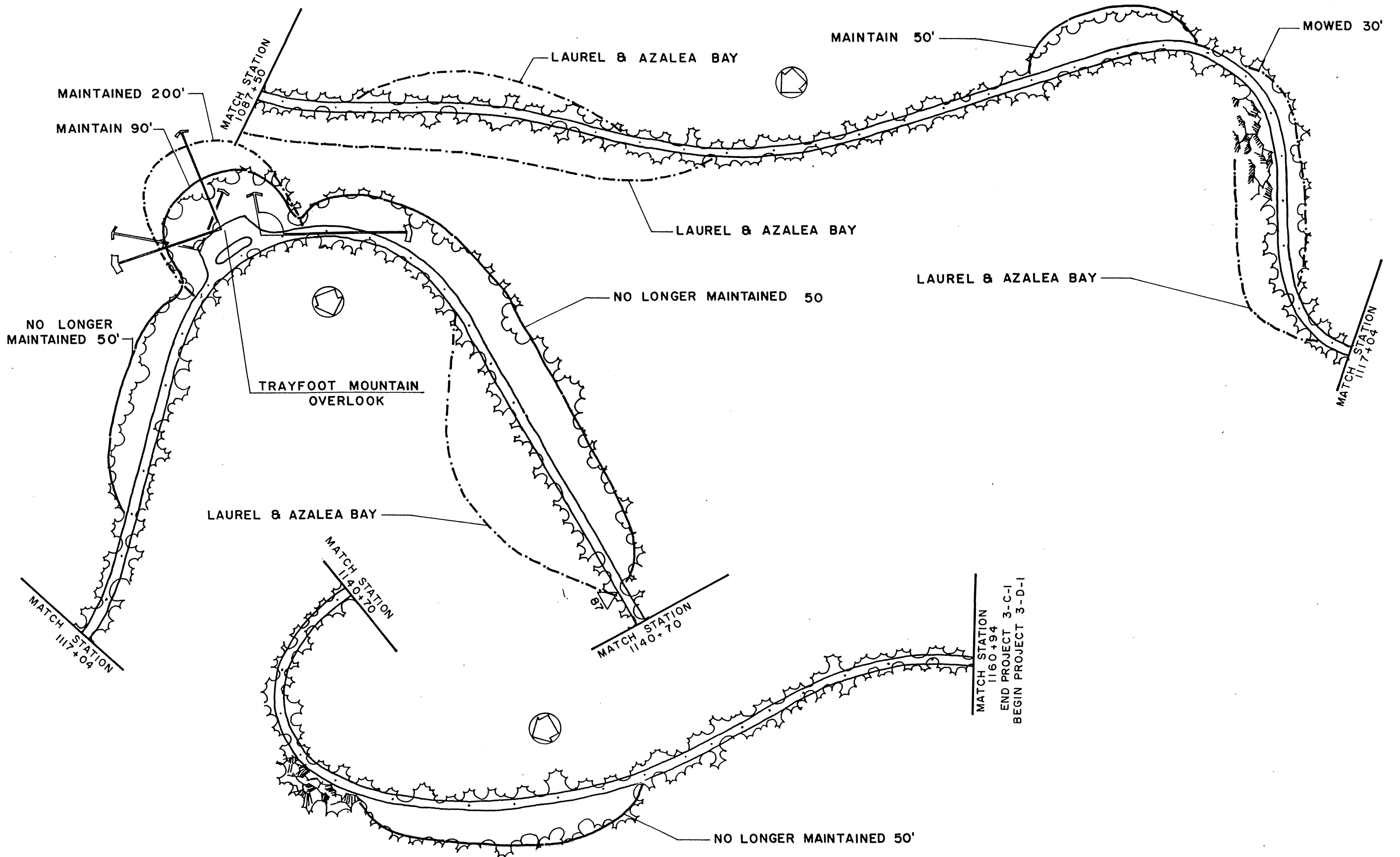










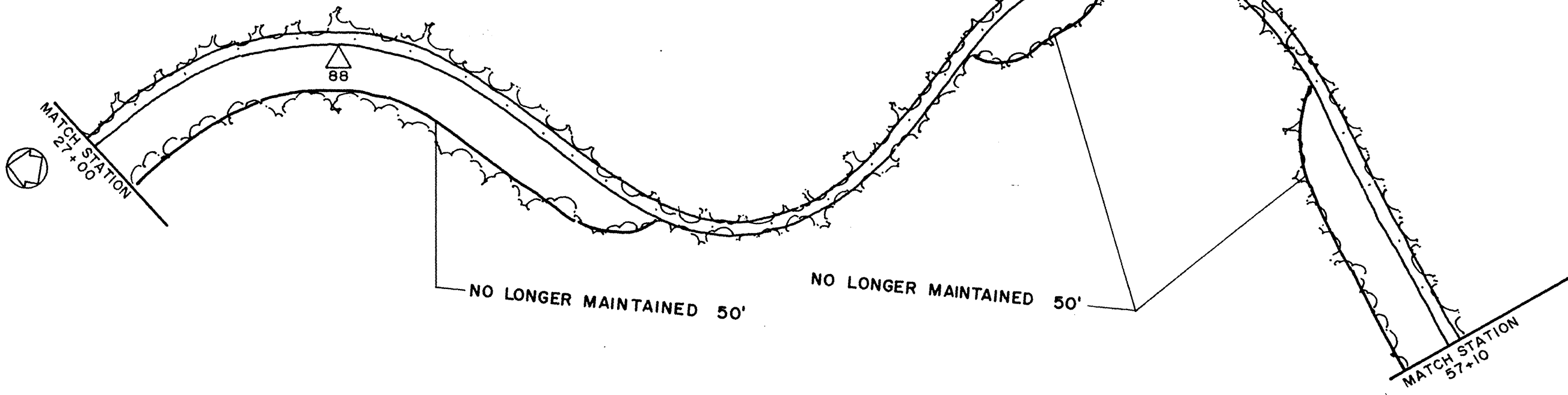


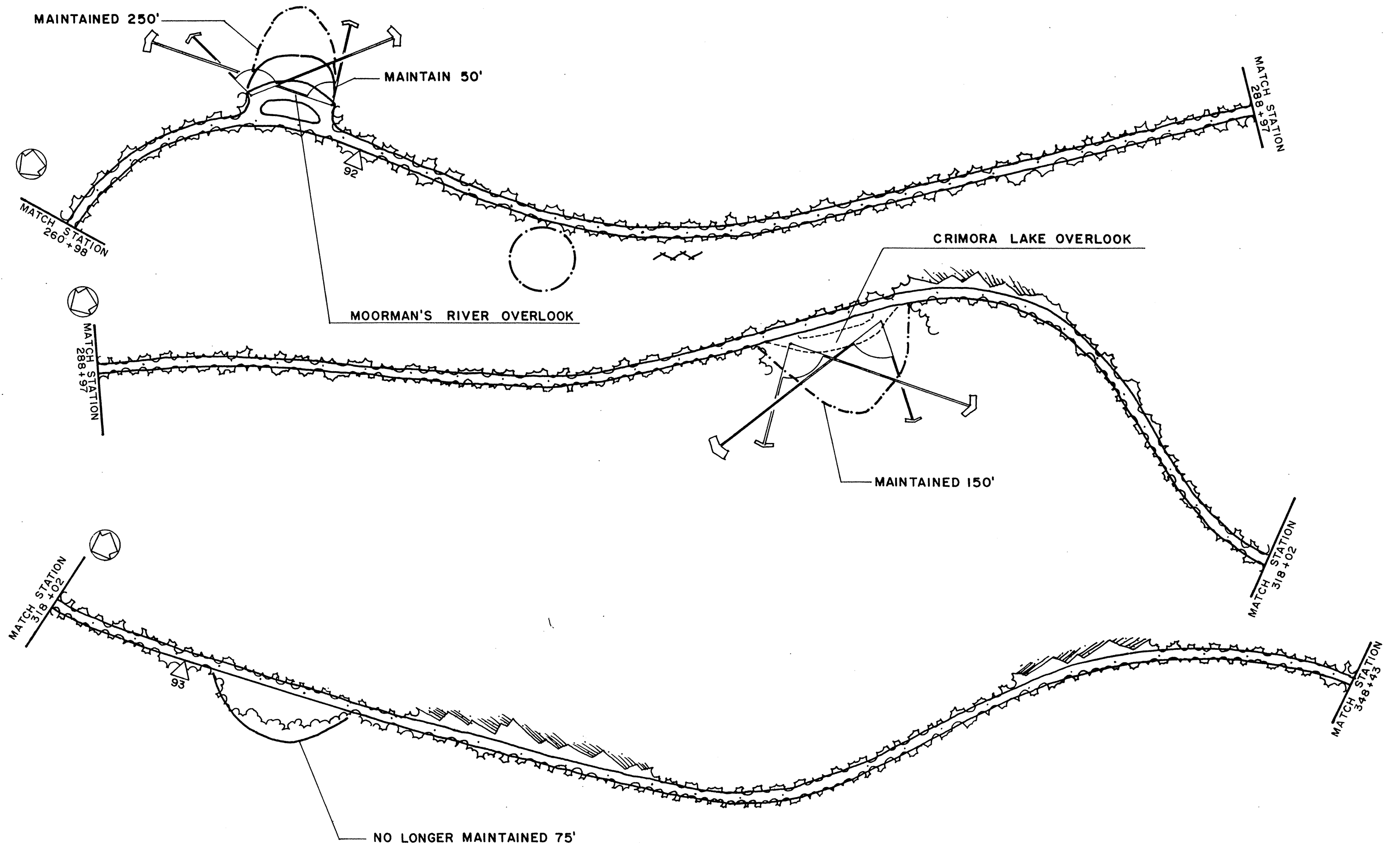
MATCH STATION
1160+94
END PROJECT 3-C-1
BEGIN PROJECT 3-D-1

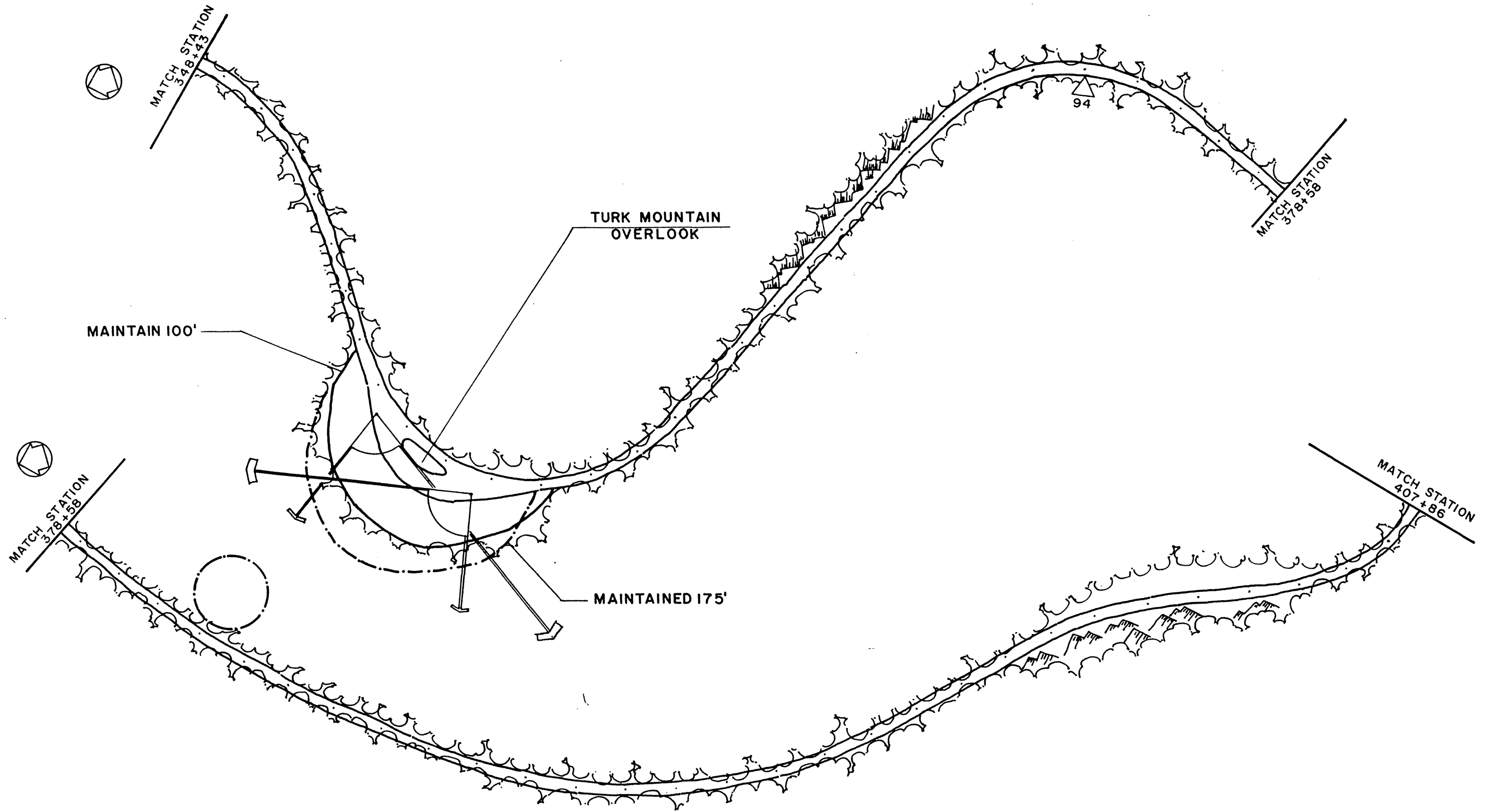
END SECTION 3-C-
BEGIN SECTION 3-D-1
MATCH STATION
1160+72=0+00

MATCH STATION
27+00

NO LONGER MAINTAINED 50'







NO LONGER MAINTAINED 50'

NO LONGER MAINTAINED 50'

MATCH STATION
437+78

MATCH STATION
407+86

SAWMILL RUN OVERLOOK

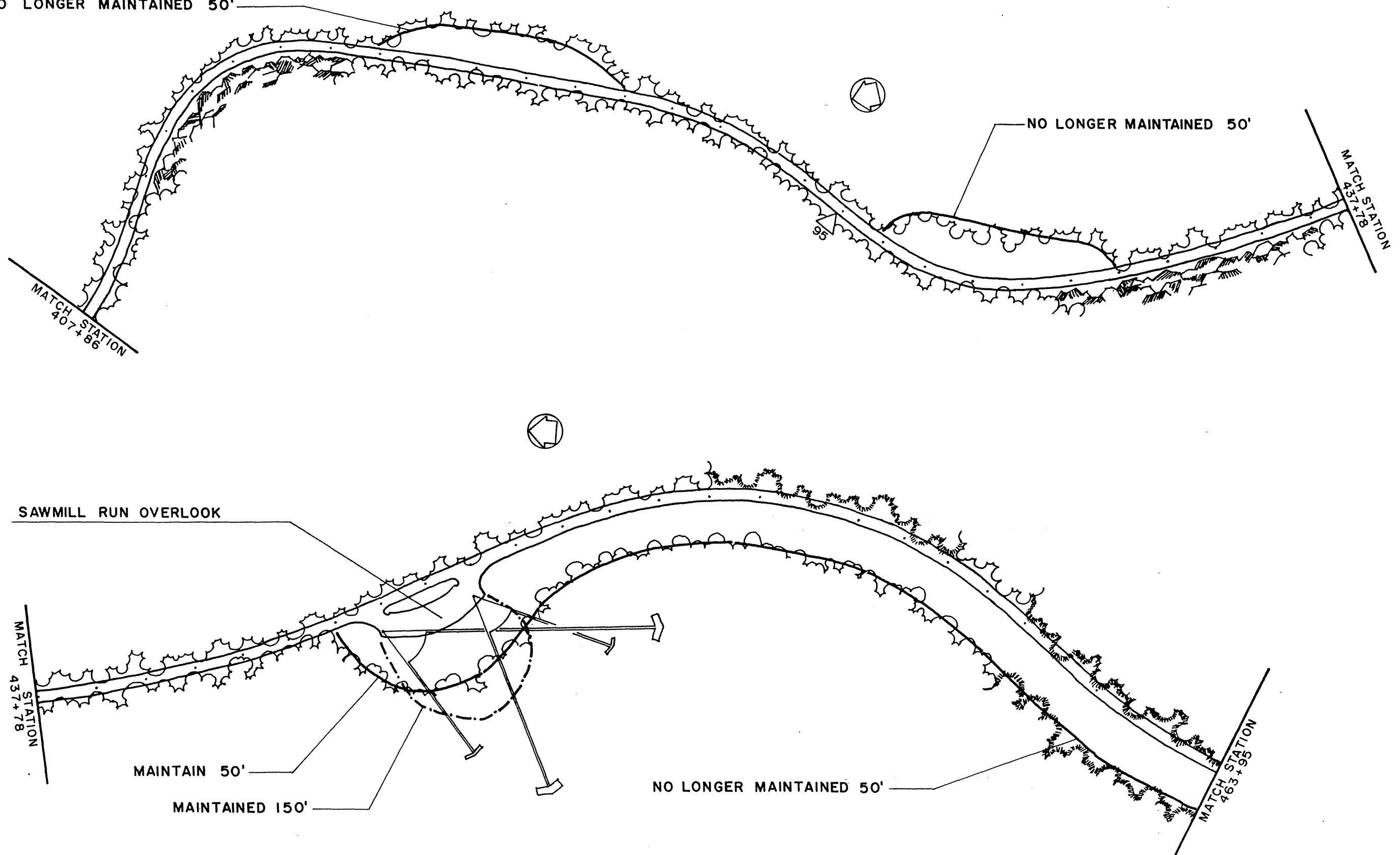
MATCH STATION
437+78

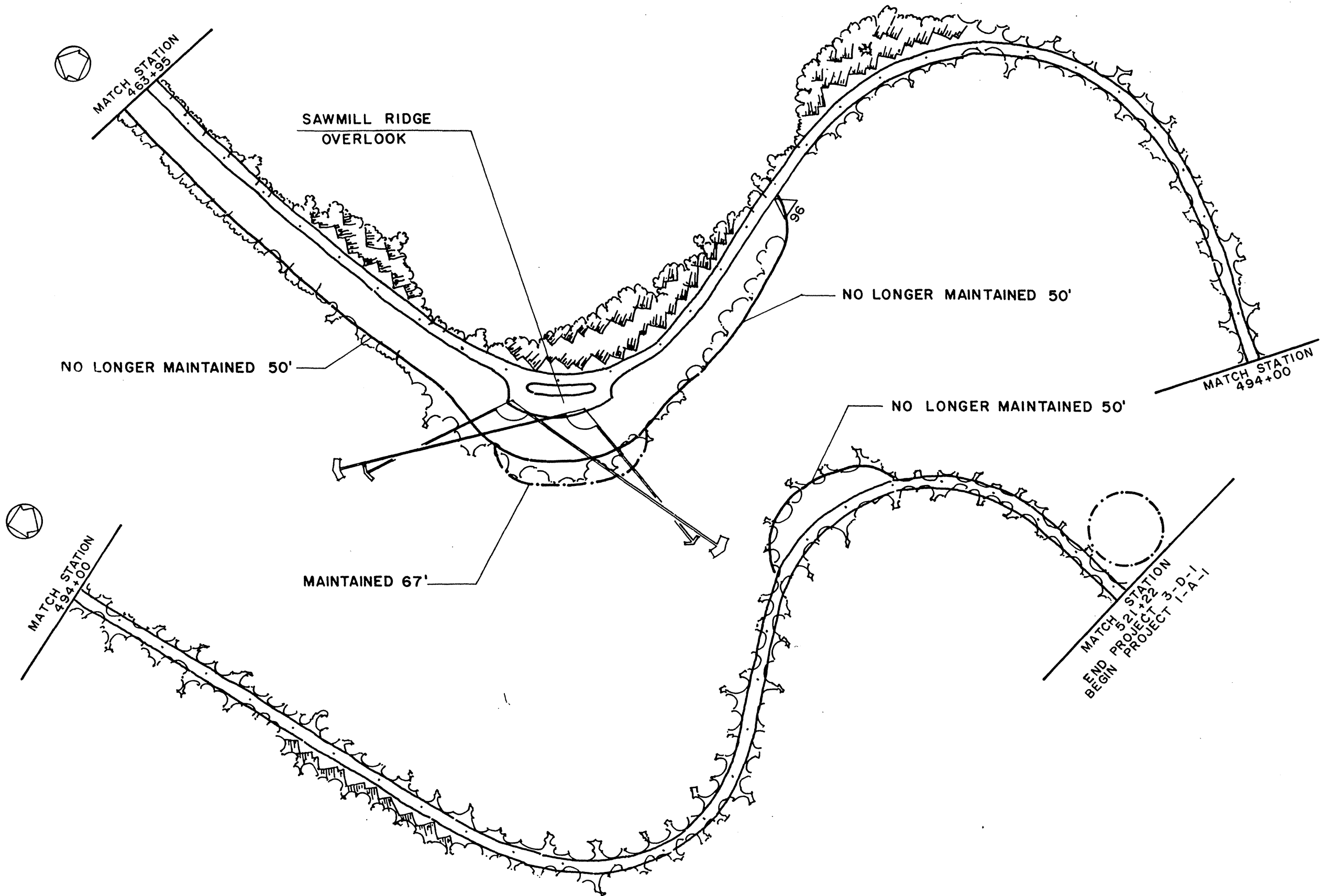
MAINTAIN 50'

MAINTAINED 150'

NO LONGER MAINTAINED 50'

MATCH STATION
463+95





MATCH STATION
463+95

SAWMILL RIDGE
OVERLOOK

NO LONGER MAINTAINED 50'

NO LONGER MAINTAINED 50'

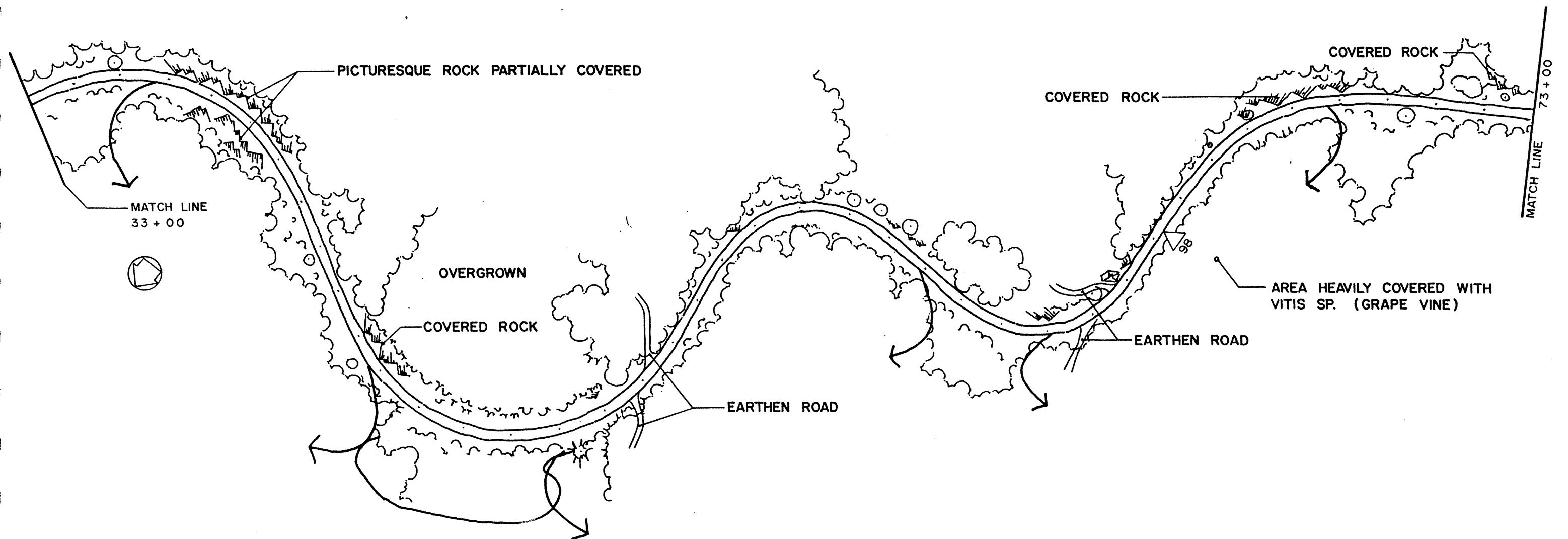
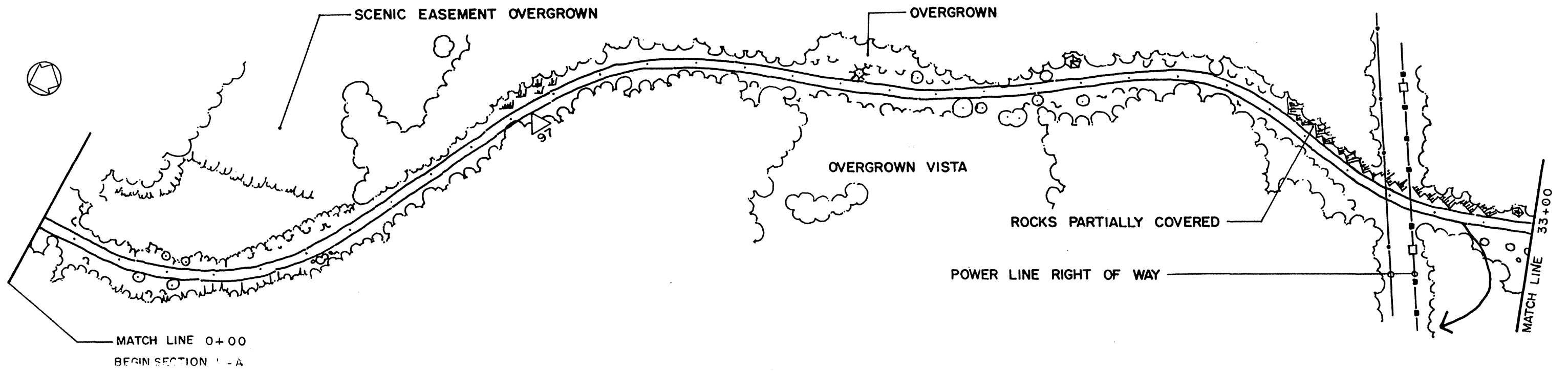
MATCH STATION
494+00

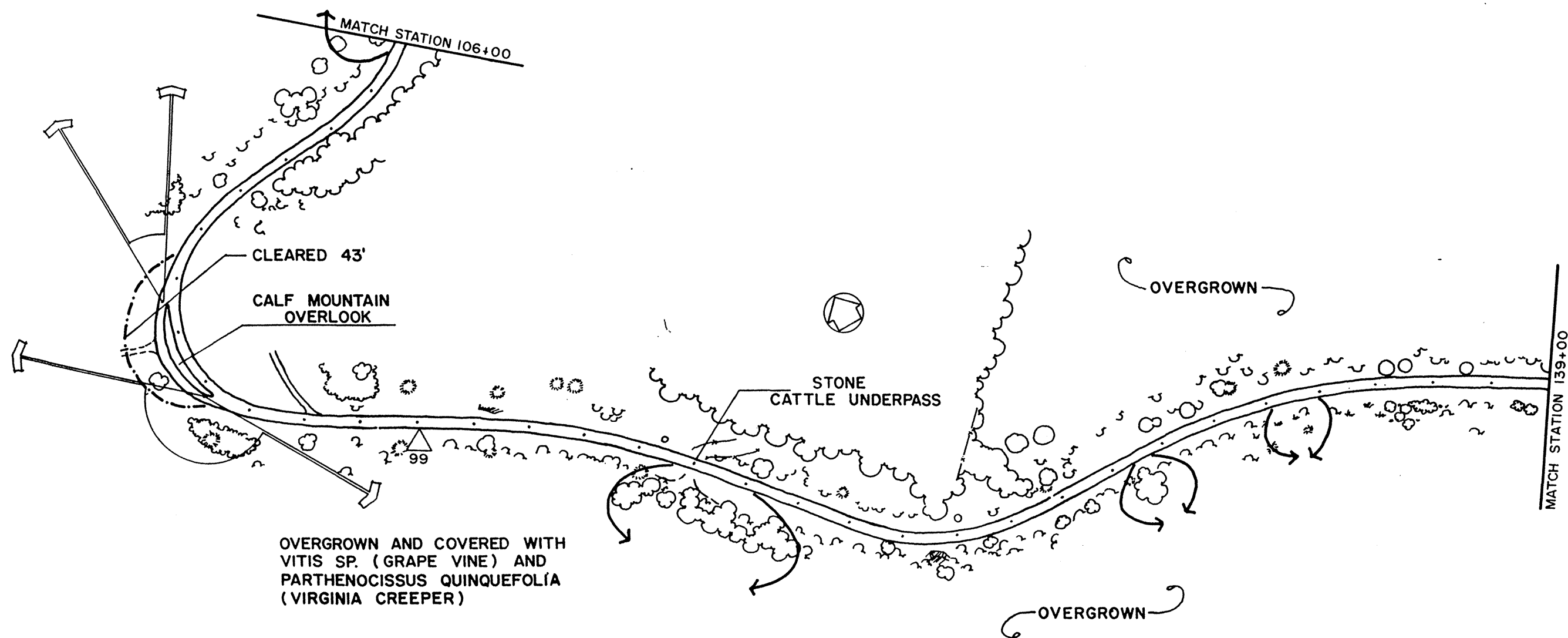
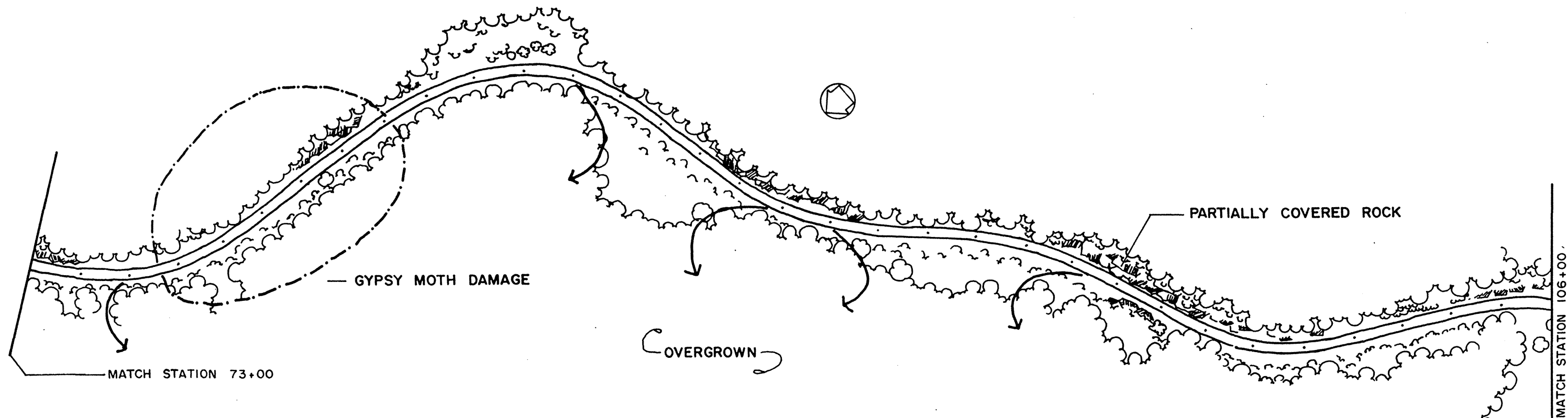
NO LONGER MAINTAINED 50'

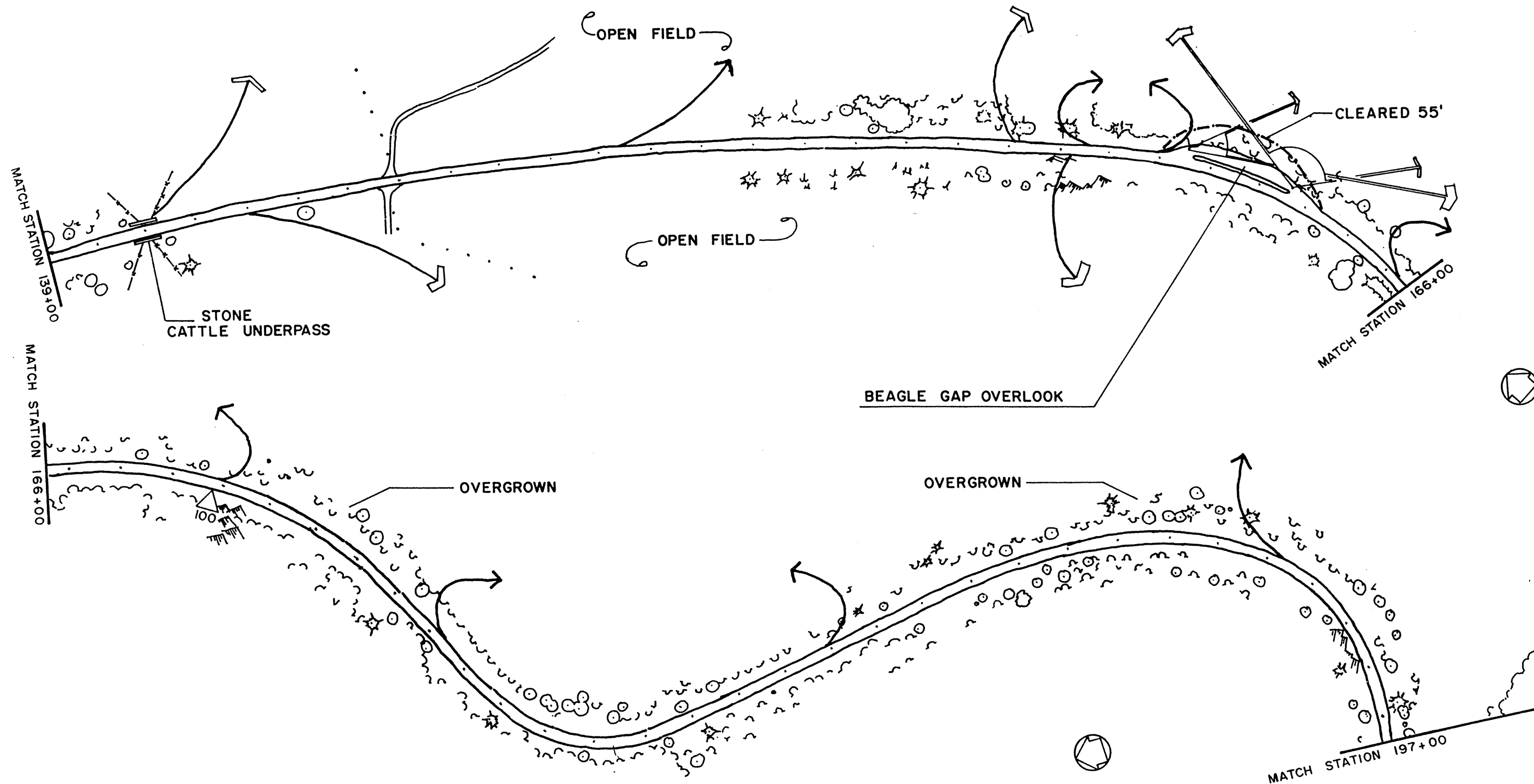
MAINTAINED 67'

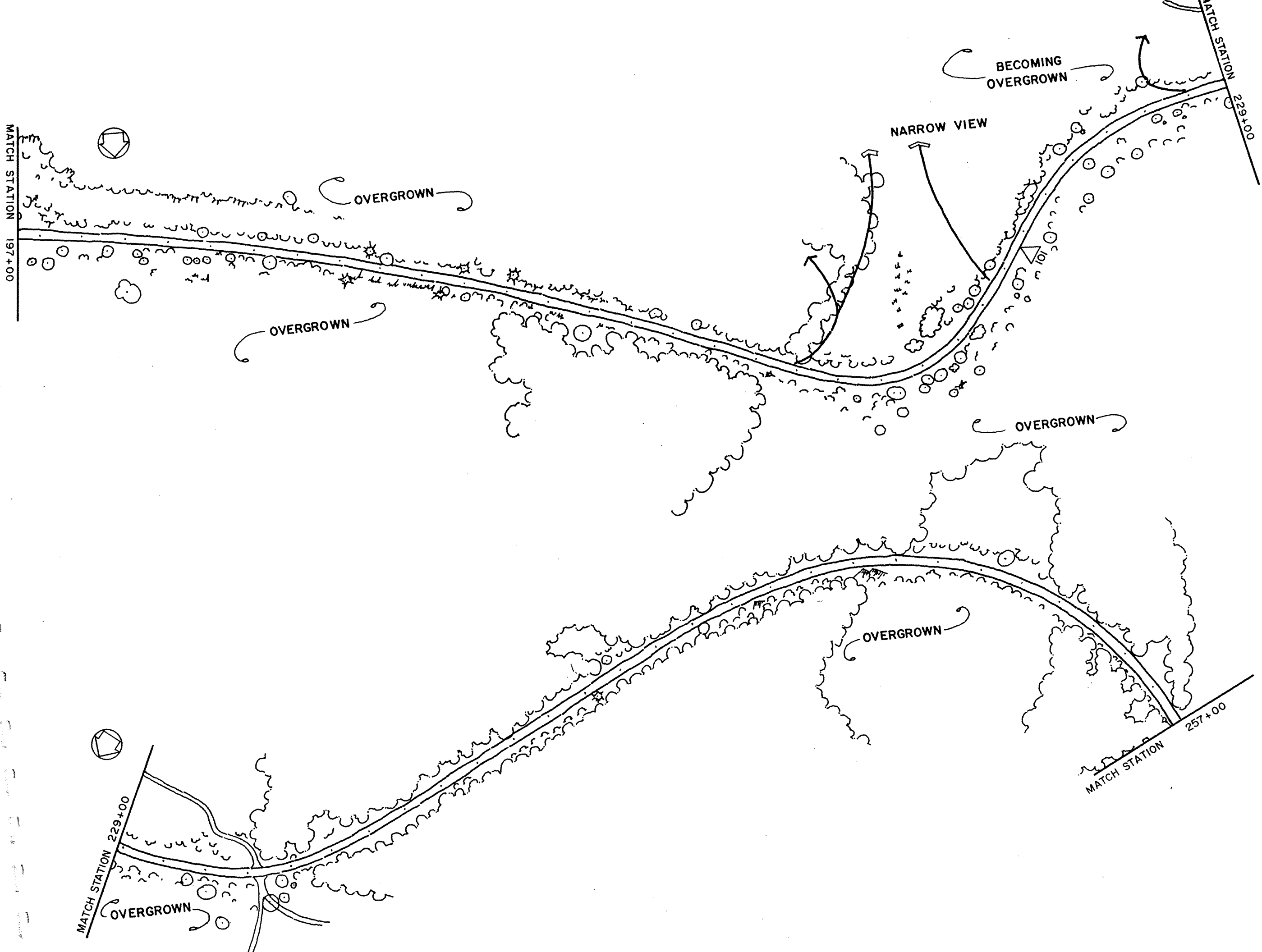
MATCH STATION
494+00

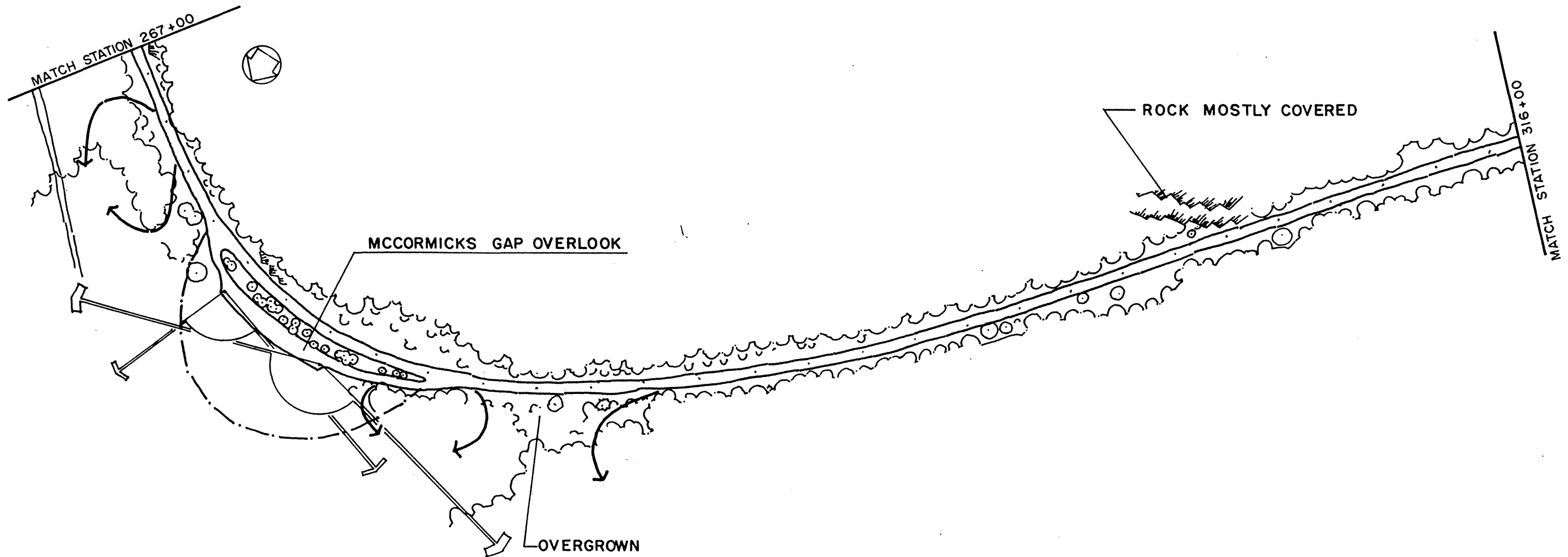
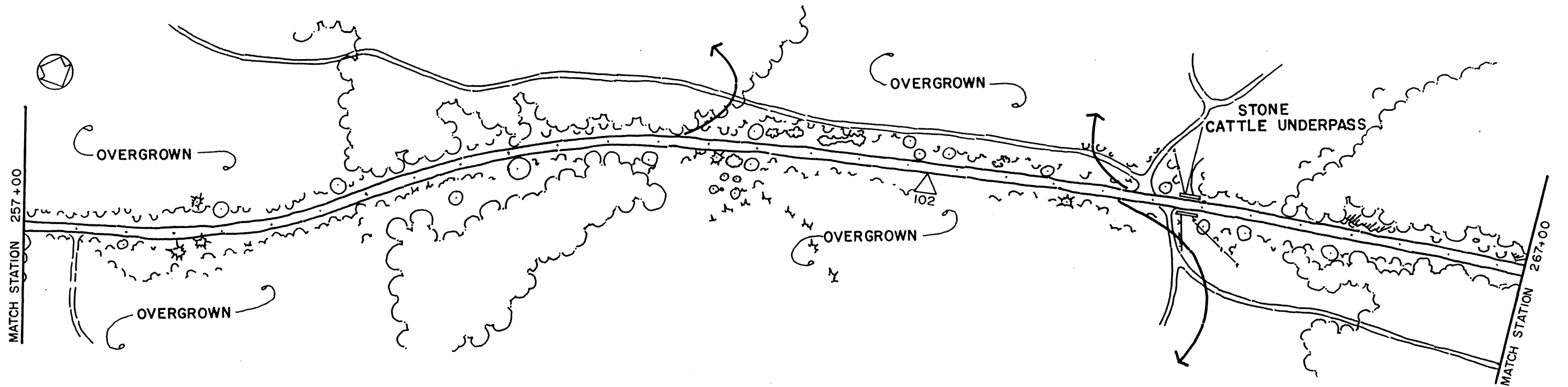
MATCH STATION
521+22
END PROJECT 3-D-1
BEGIN PROJECT 1-A-1

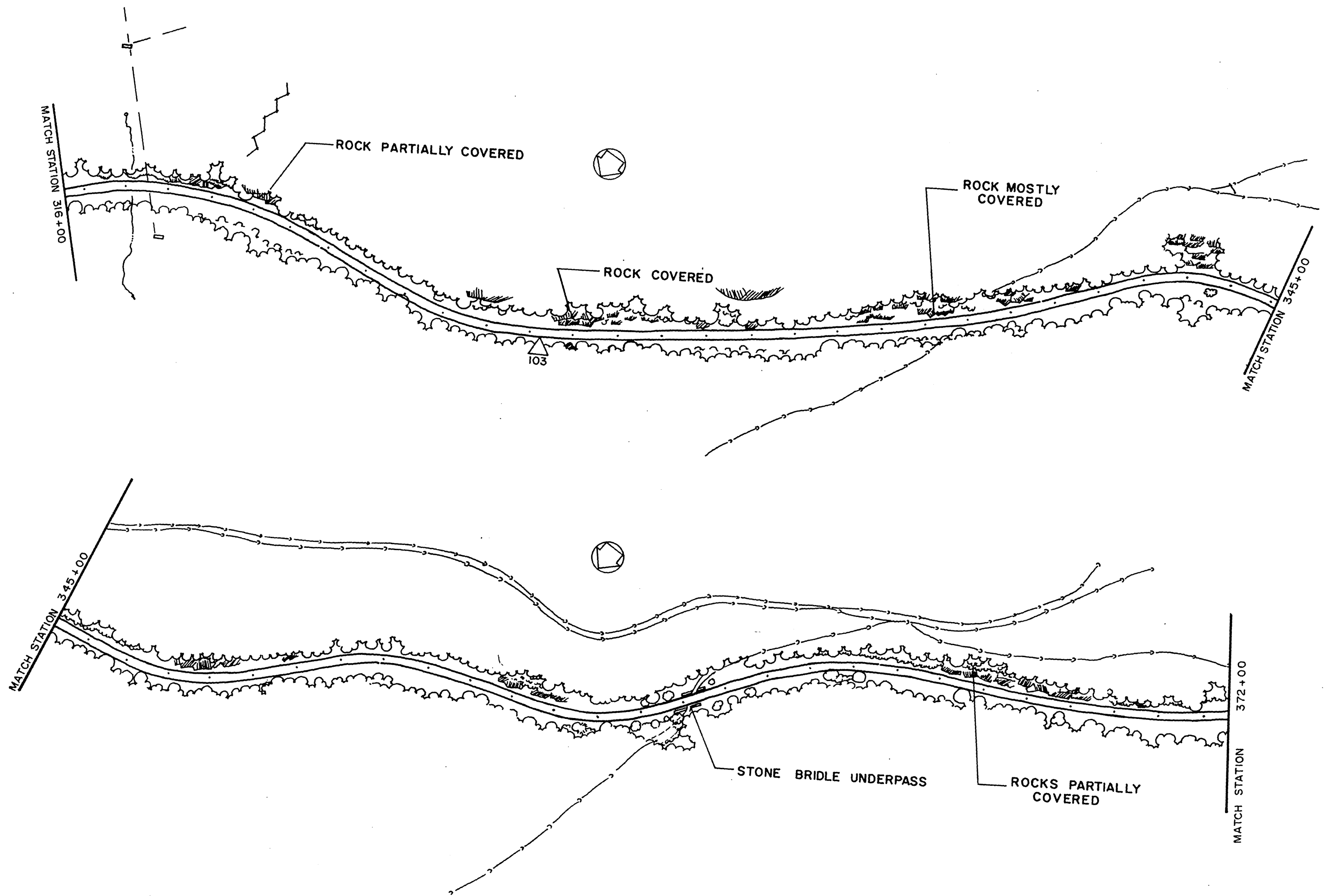


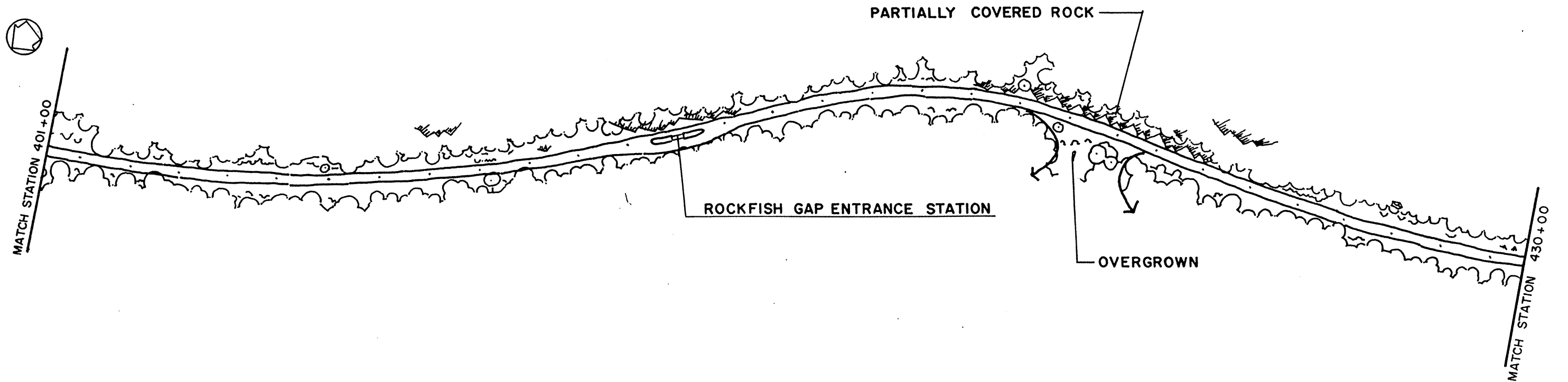
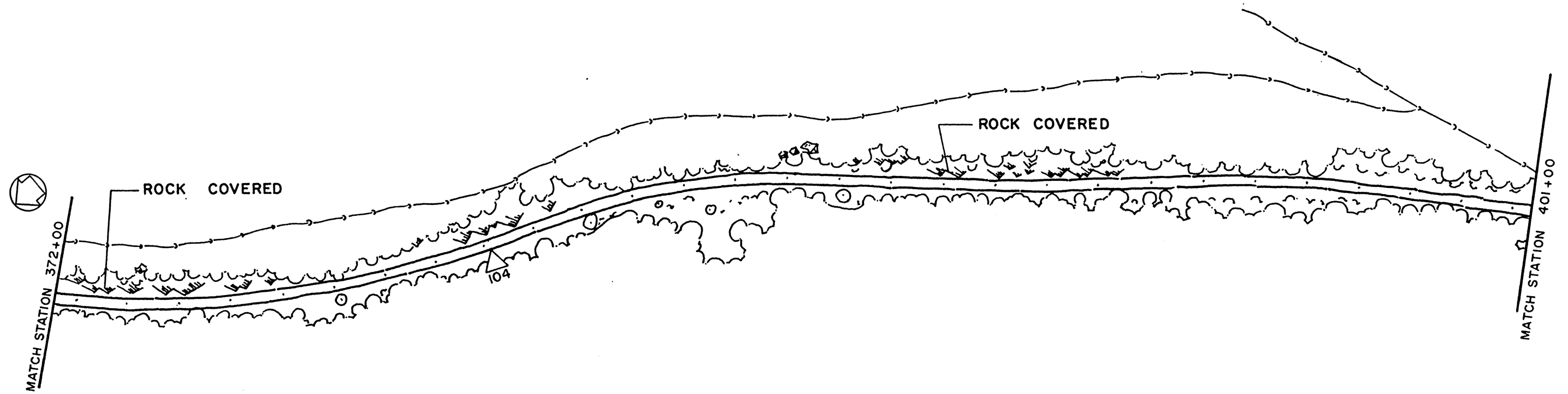


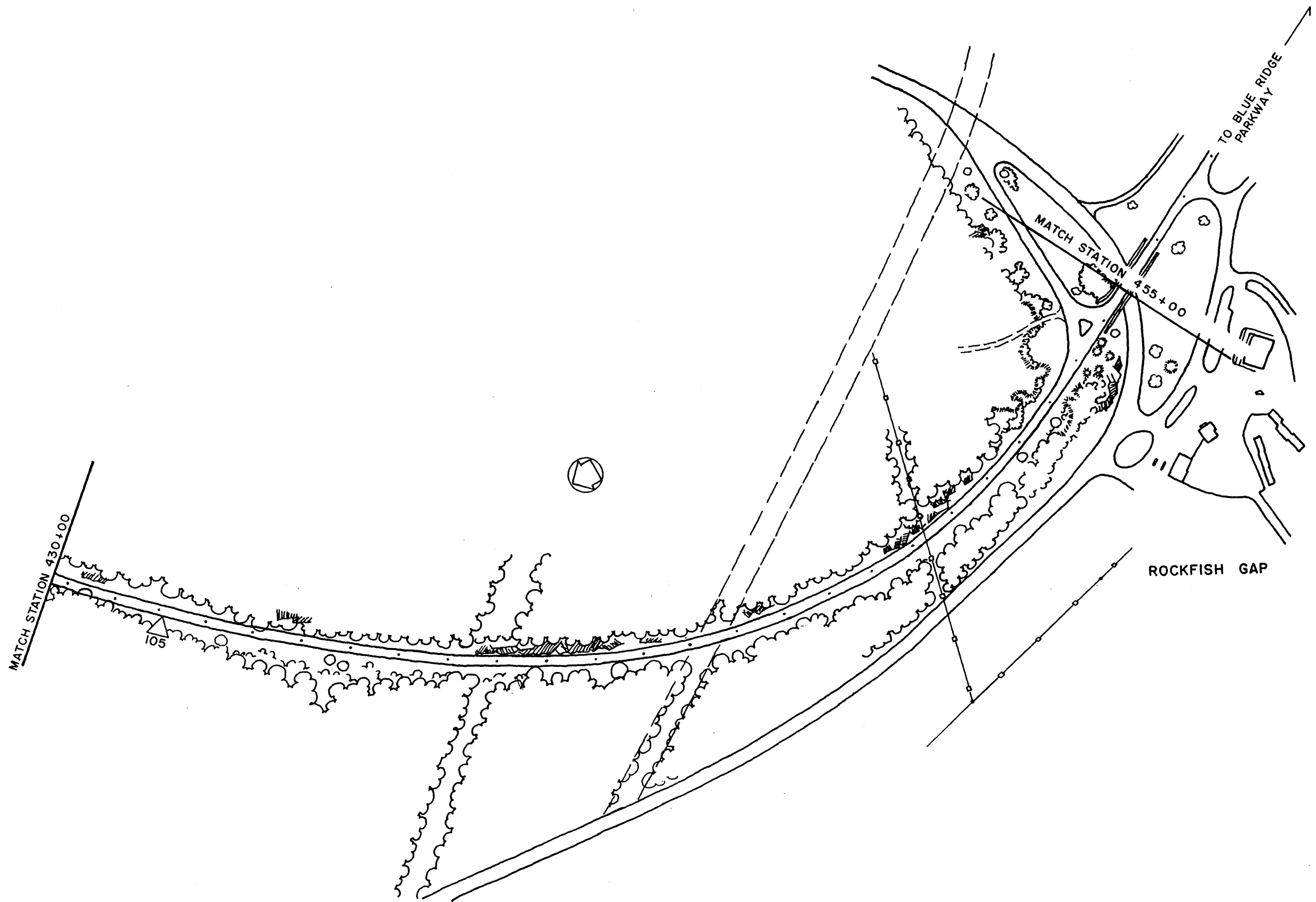




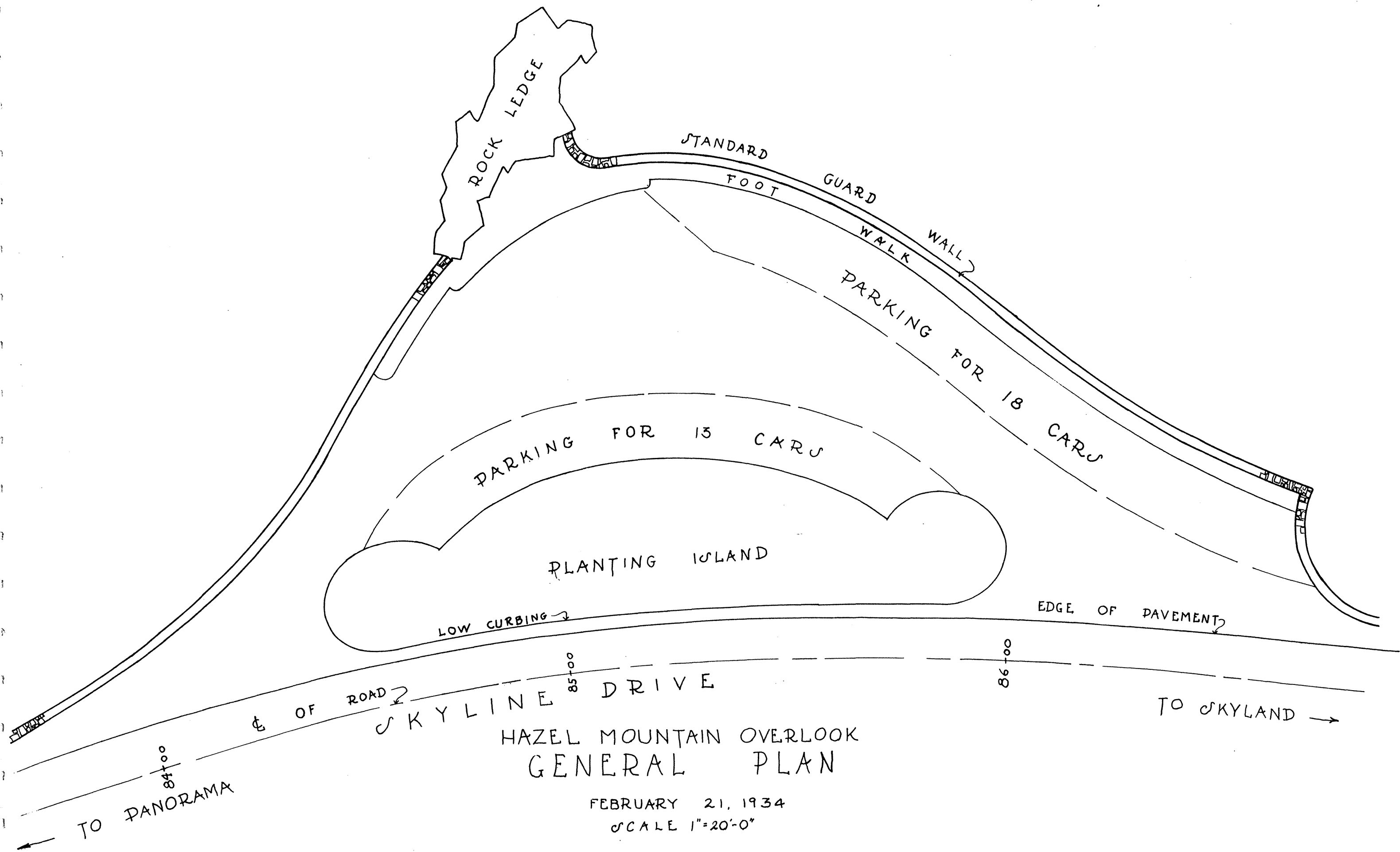








Section III:
Hazel Mountain
Overlook;
General Plan
Rockfish Gap
Entrance Station;
Drawings



ROCK LEDGE

STANDARD

FOOT

GUARD

WALK

WALL

PARKING FOR 18 CARS

PARKING FOR 13 CARS

PLANTING ISLAND

LOW CURBING

EDGE OF PAVEMENT

SKYLINE DRIVE

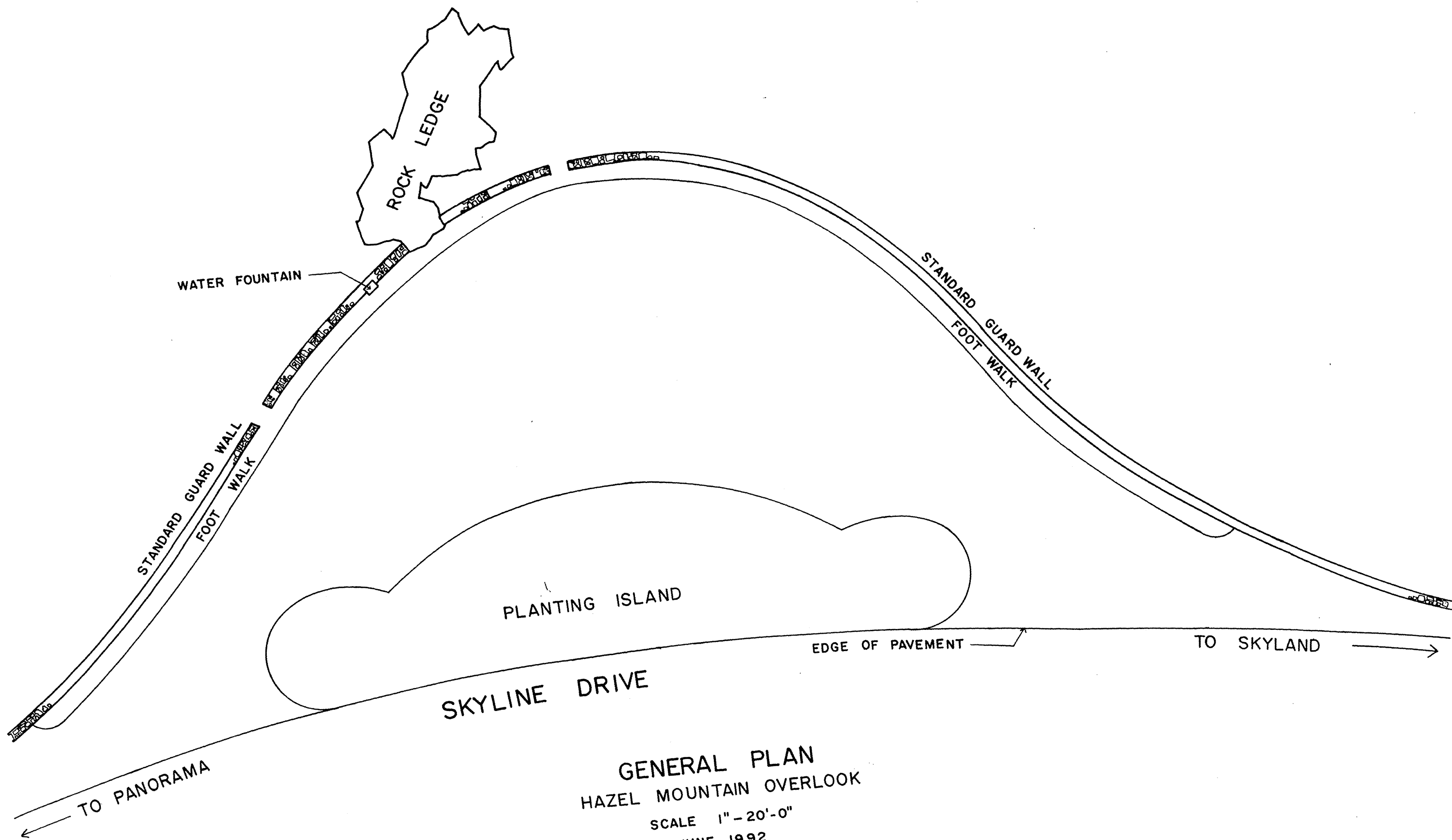
HAZEL MOUNTAIN OVERLOOK
GENERAL PLAN

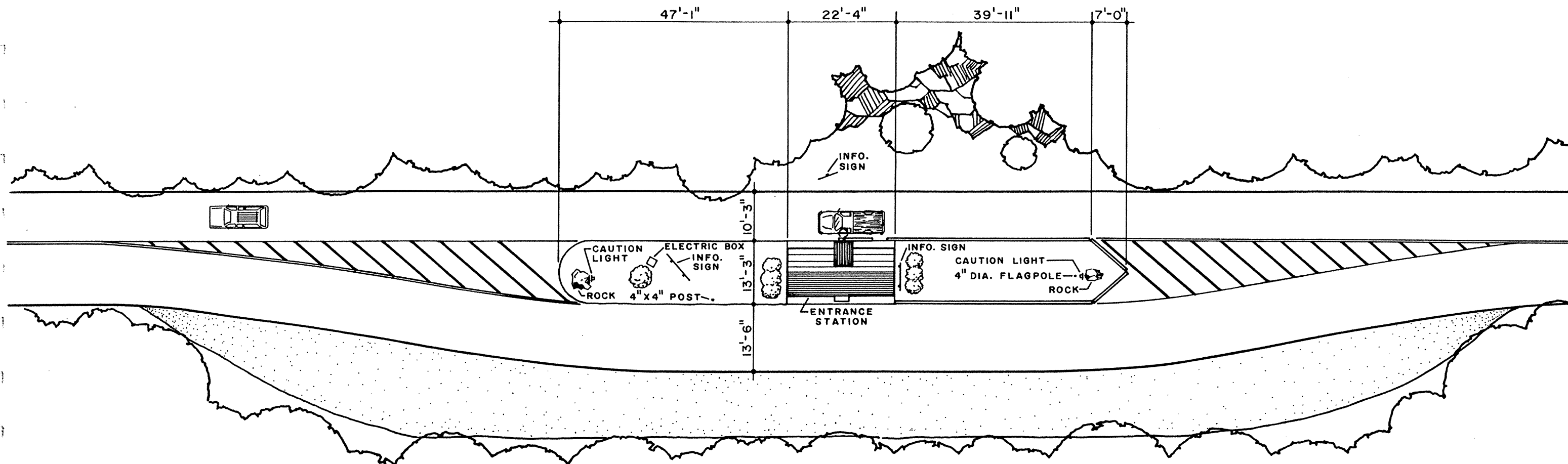
FEBRUARY 21, 1934

SCALE 1"=20'-0"

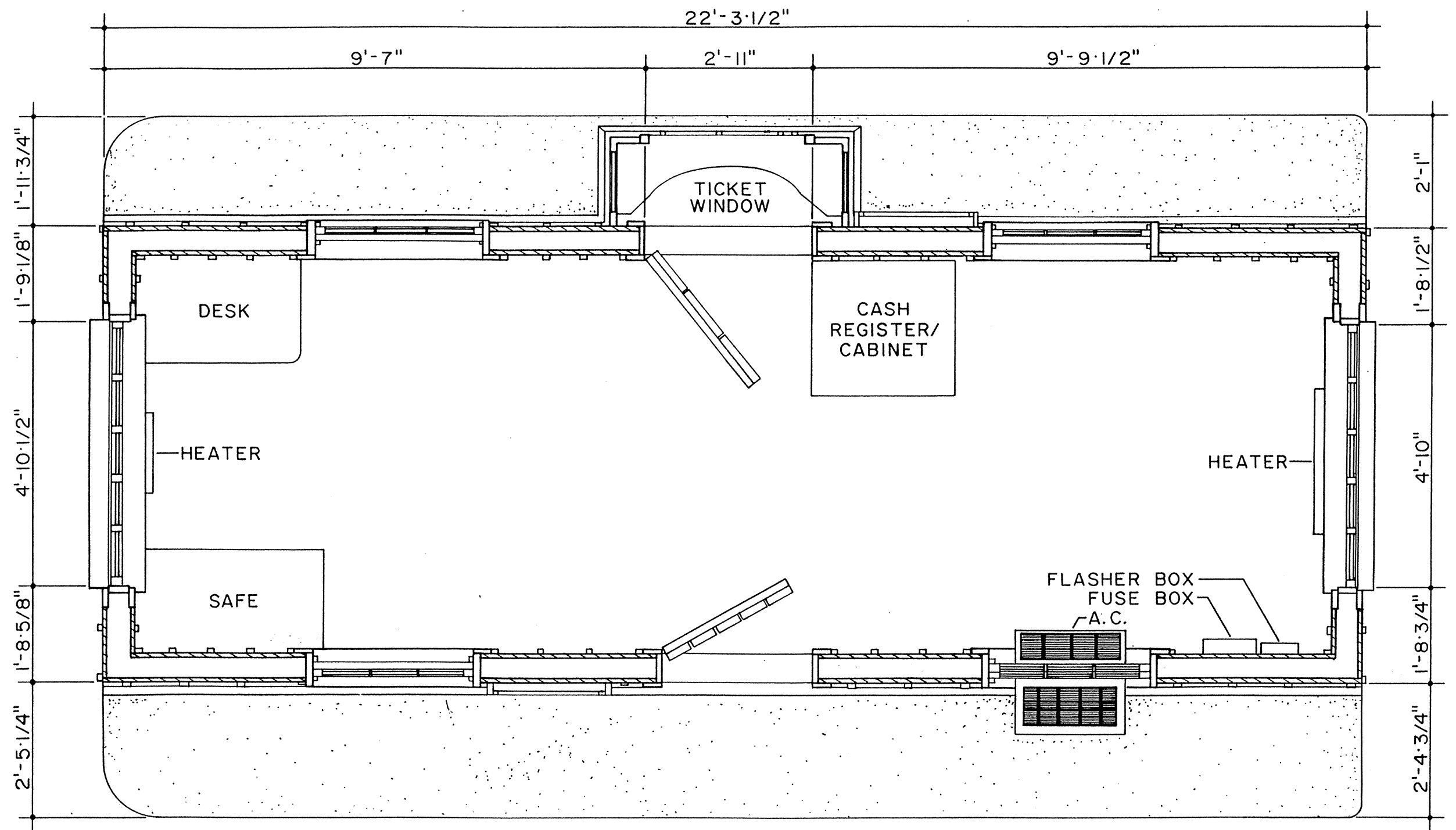
TO PANORAMA

TO SKYLAND

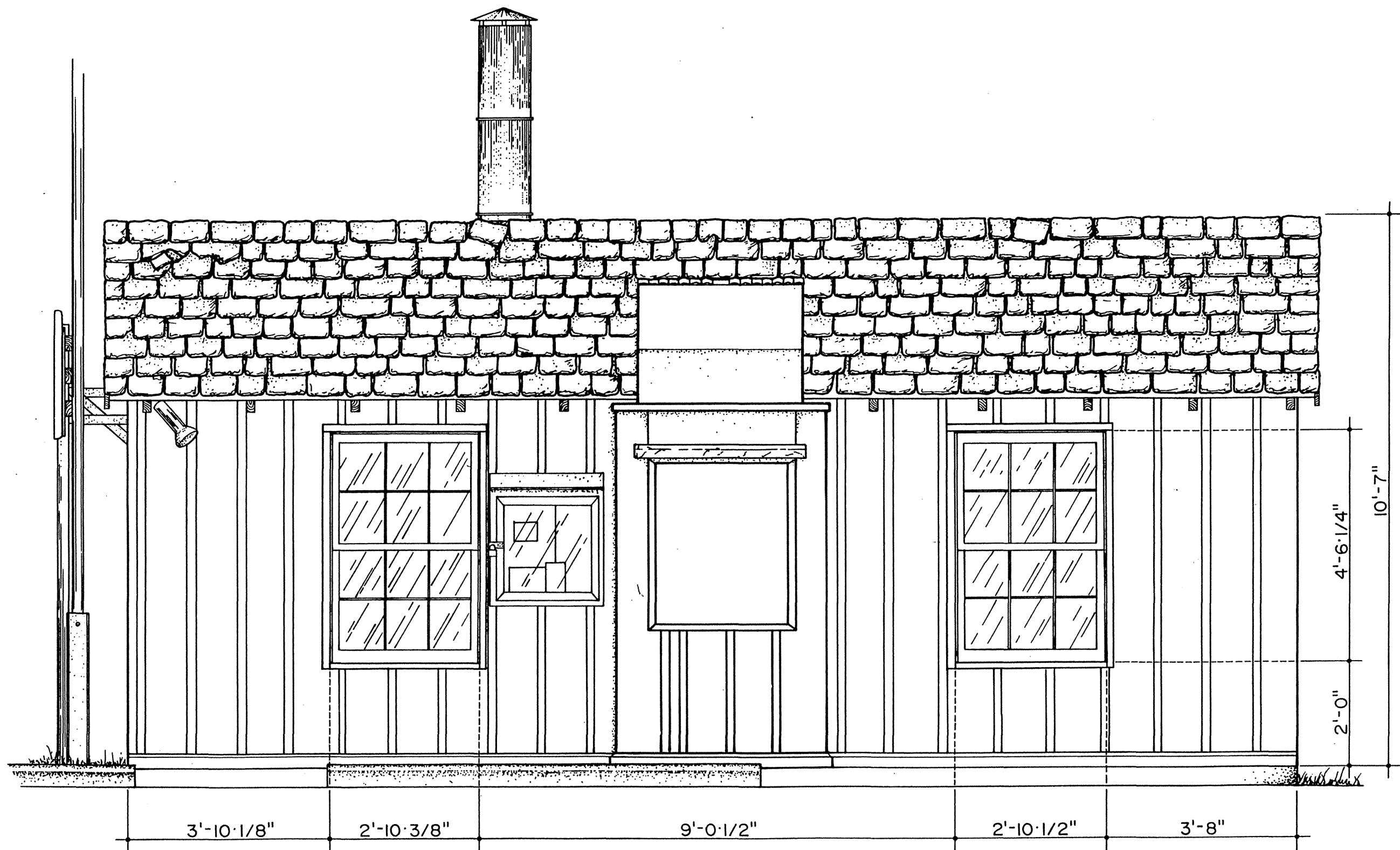




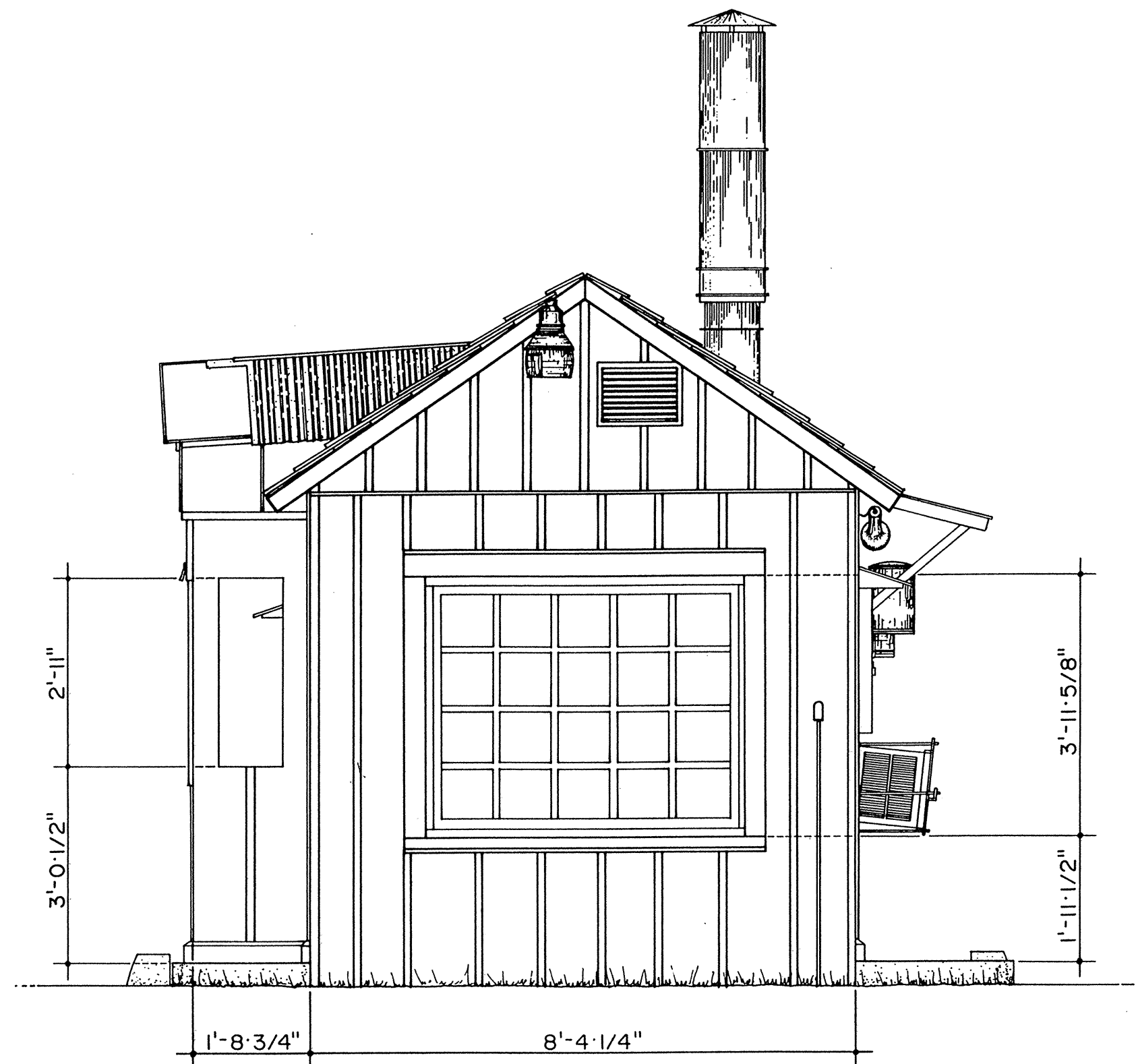
SITE PLAN
 ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
 .7 MILES TO I-64/250 UNDERPASS
 JULY 1, 1992



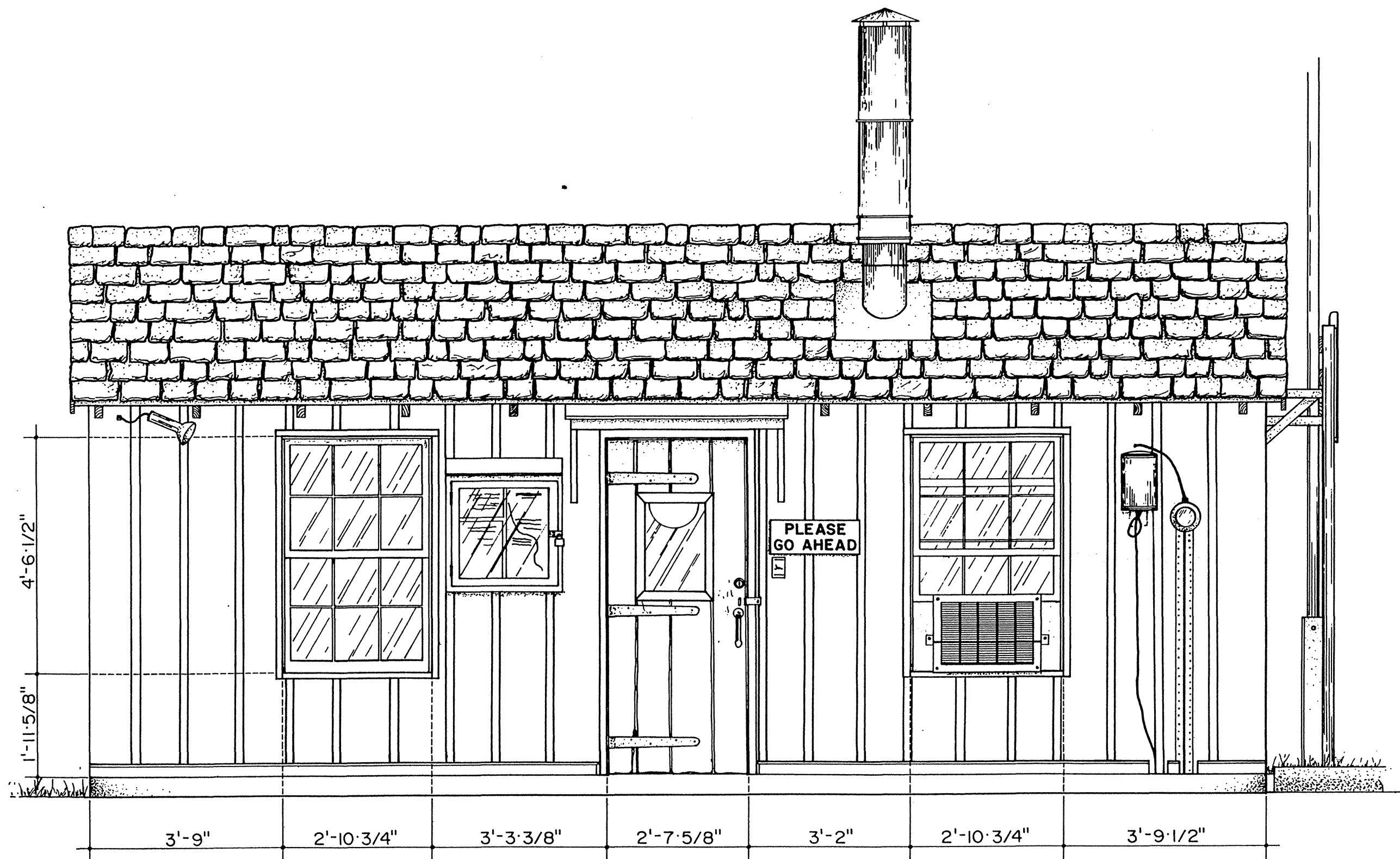
FLOOR PLAN
 ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
 JULY 2, 1992



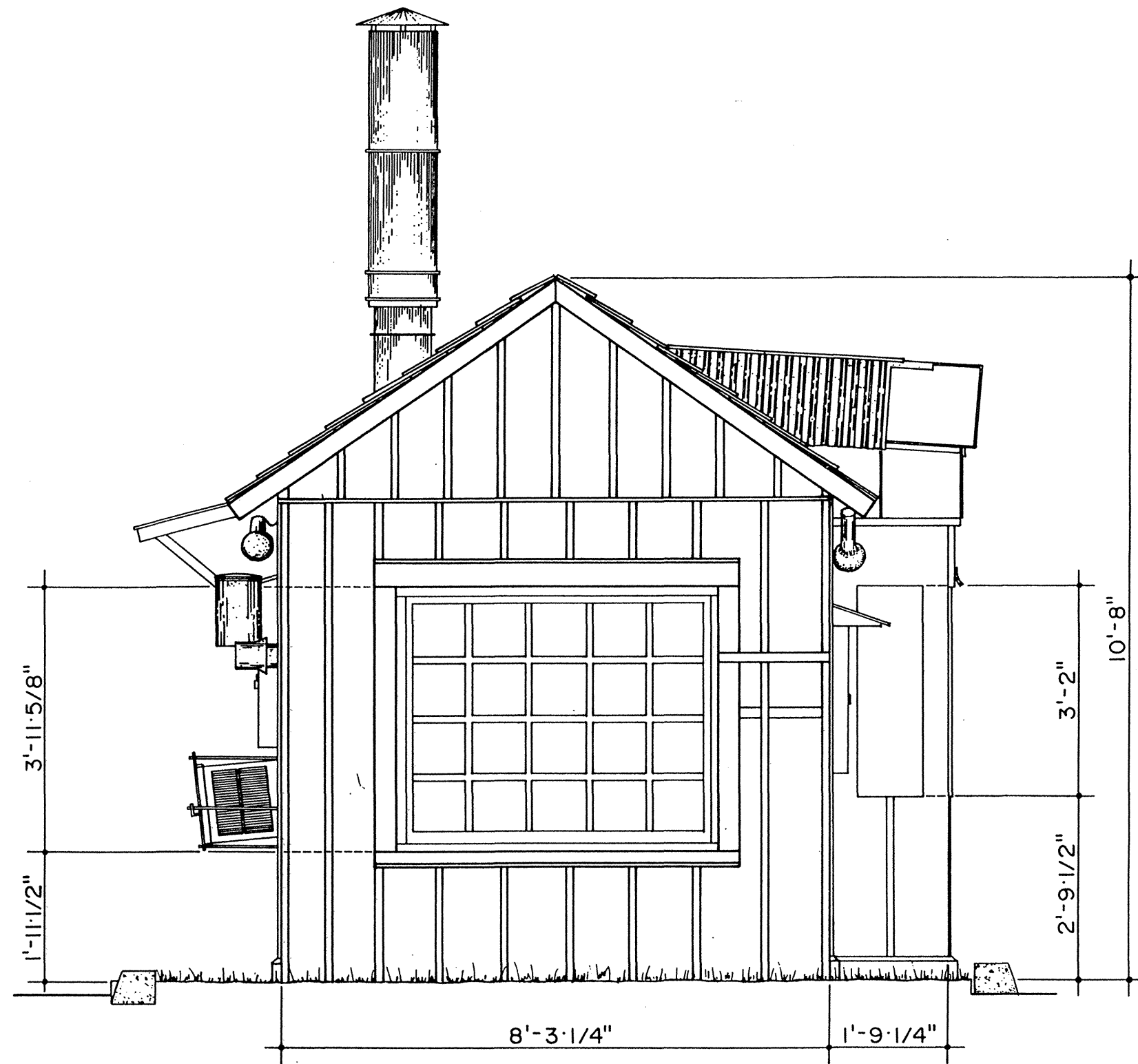
EAST ELEVATION
ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
JULY 1, 1992



NORTH ELEVATION
ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
JULY 1, 1992



WEST ELEVATION
ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
JULY 1, 1992



SOUTH ELEVATION
ROCKFISH GAP ENTRANCE STATION TO THE SKYLINE DRIVE
JULY 1, 1992