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PLAN FOR THE DEVELOPMENT

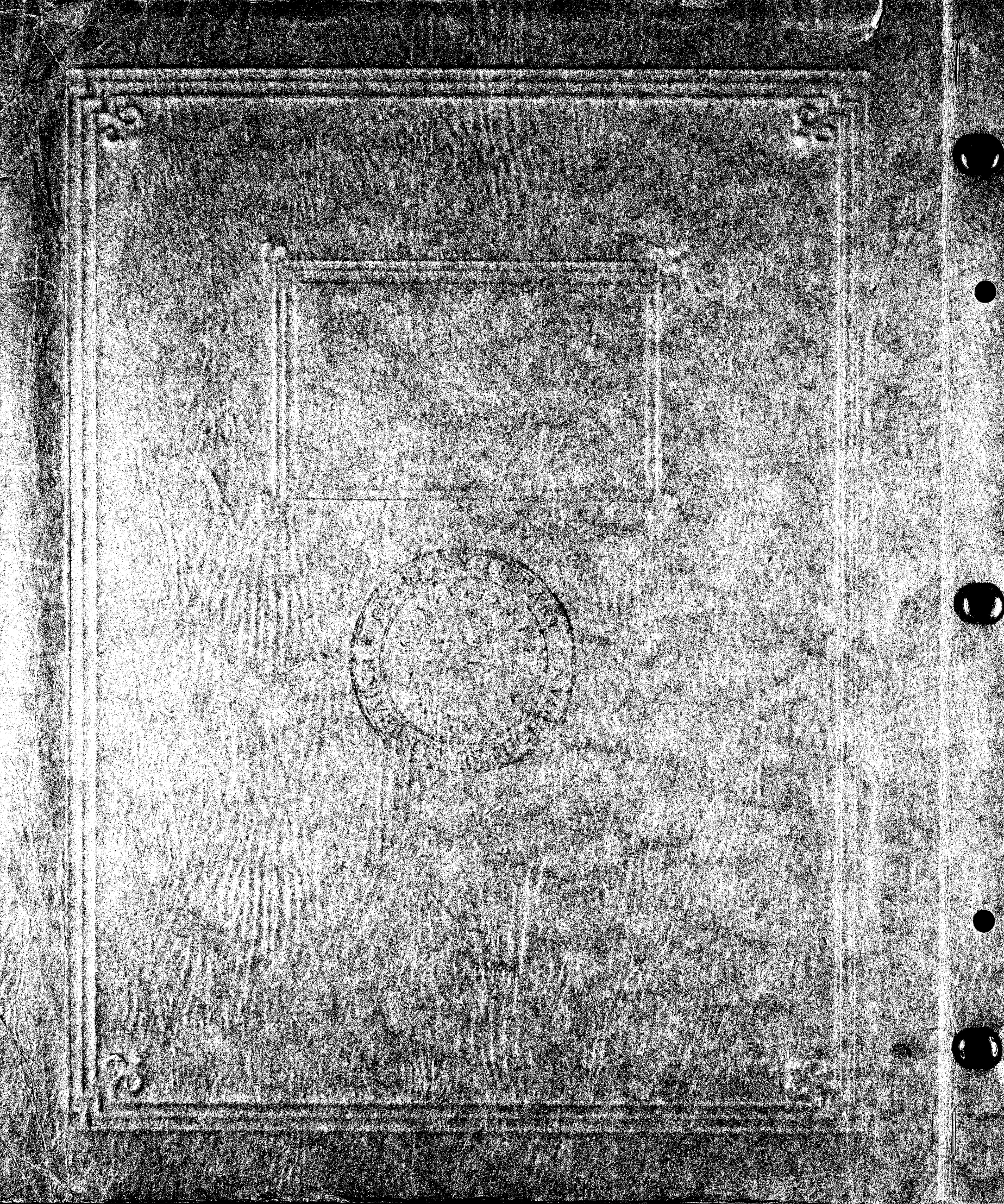
of

FOREST PARK

Norman F. Smith June 8, 1937

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of

FOREST PARK

Norman F. Smith

June 8, 1937

This report is submitted in partial fulfillment of the requirements for the degree of Master of Forestry in Forest and Park Administration.

Norman F. Smith

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PLAN FOR THE DEVELOPMENT
OF FOREST PARK

In the plan here presented for the recreational development of the area known as Forest Park, an effort is made to give the public an opportunity to enjoy a wooded area which will be left as far as possible in its natural state, and yet which will be provided with such modern conveniences as are necessary for the comfort and enjoyment of the people.

The plan is presented as follows: After a brief description of the area the proposed uses are discussed. The various improvements necessary to fulfill the plan are then presented, followed by the plan of operation of the park after it is established. An estimate of improvement and maintenance costs is then given. The work already done and a brief plan for expansion are also included. A map of the area showing location of developments and illustrations of these developments appear in the form of plates.

DESCRIPTION OF THE AREA

Location, Size, and Boundaries.

Forest Park is located on the Huron River, $4\frac{1}{2}$ miles from Ann Arbor. It can be reached from Ann Arbor by taking either the Huron River Drive or Geddes Road to the village of Geddes on the Dixboro Road, and turning in on the driveway around the disposal plant.

The park is 51 acres in size, and is divided into two

sections by Fleming Creek and also by the Ann Arbor-Superior township line, both divisions placing 33 acres in the western section and 18 acres in the eastern section. This whole area, however, is not available for park purposes, as the Sewage Disposal Plant and grounds occupy a large part of the western section. The area is bounded on the north side by the Michigan Central Railroad, and on all other sides by the Huron River. Reference to the map will show these boundaries.

Topography.

With the exception of a 15-20 foot rise in ground along the north boundary in the eastern section the topography is very level. Several low, wet spots occur in the eastern section and a long, narrow, muddy depression, half filled with water, projects from the Huron River far into the section starting toward the north-east side and curving toward the north-west. A group of elevated springs close to Fleming Creek in the eastern section are of considerable interest. They are small, marshy rises in the ground, covered with typical marsh vegetation such as cow-slips and skunk cabbage, and from which tiny streamlets overflow and run down into the creek.

The attractive landscape features of the park are the Huron River, and clear, cool Fleming Creek. Another feature, though not of the park itself, is the steep wooded bank across the river, which gives the park a closed-in effect.

Use.

Until about a year and a half ago the eastern section was grazed by cattle. Quite a few trees have been cut in both sections. This was confined mostly to the high ground in the

east section, and none has been cut within the past four years.

Fishing in both the creek and the river seems to be an important use at present.

Forest Cover.

The parts of the area that are to be included in the park are generally wooded; hard maple, elm, willow, oaks, ash and hawthorn being the predominating species.

Following is a complete list of the tree species found on the area:

1. Hard Maple (Acer saccharum)
2. Black Maple (Acer saccharum nigrum)
3. Soft Maple (Acer saccharinum)
4. American Elm (Ulmus americana)
5. Cork Elm (Ulmus racemosa)
6. Slippery Elm (Ulmus fulva)
7. White Oak (Quercus alba)
8. Black Oak (Quercus velutina)
9. Bur Oak (Quercus macrocarpa)
10. Red Oak (Quercus rubra)
11. Pin Oak (Quercus palustris)
12. Swamp White Oak (Quercus bicolor)
13. White Ash (Fraxinus americana)
14. Willow (Salix sp.)
15. Basswood (Tilia americana)
16. Shagbark Hickory (Carya ovata)
17. Bitternut (Carya cordiformis)
18. Hackberry (Celtis occidentalis)
19. Sycamore (Platanus occidentalis)
20. Black Walnut (Juglans nigra)
21. Ironwood (Ostrya virginiana)
22. Red Cedar (Juniperus virginiana)
23. Ground Juniper (Juniperus communis)
24. Black Cherry (Prunus serotina)
25. Box Elder (Acer Negundo)
26. Kentucky Coffee (Gymnocladus dioica)

Ground Cover.

The most common species of bushes composing the ground cover are:

1. Red Osier Dogwood (Cornus stolonifera)
2. Alternate-leaved Dogwood (Cornus alternifolia)
3. Sumac (Rhus typhina)

4. Poison Ivy (Rhus toxicodendron)
5. Pussy-willow (Salix sp.)
6. Hazle-nut (Corylus americana)
7. Honeysuckle (Lonicera sp.)

The herbaceous ground cover consists of grass, burdock, and many species of wild flowers such as violets, cowslips, anemone, buttercups, daisies, dandelions, cow vetch, phlox, Solomon's seal, ground ivy, clover, cranesbill and many others.

Birds.

Some of the more common species of birds found on the area are robins, bluebirds, flickers, song sparrows, ruby-crowned kinglets, white-breasted nut-hatches, downy woodpeckers, red-winged black birds, mourning doves, crows, and wrens. Other frequent visitors are ducks, geese, cranes, and mergansers.

PROPOSED USES

The Forest Park area presents a variety of opportunities for recreational activities of both an active and passive nature. Picnicking, walking and strolling, nature study, wading, horse-shoes, and baseball are all to be enjoyed within this limited area.

Picnicking.

Picnicking will be confined to the area west of Fleming Creek. In this way paper and other picnic refuse and all picnic facilities will be kept in this one area, leaving other areas free to be developed along different lines. The scattering of tables and fireplaces throughout the eastern section of the park would greatly detract from its natural beauty.

Picnic tables, fireplaces, garbage and refuse pails.

will be provided. One large, circular fireplace with seats around it will be constructed; and a drinking fountain with equipment for both drinking and drawing water for picnic use will be centrally placed in the picnic area. Fuelwood will be provided for the fireplaces, and it will be produced on the area. Restrooms will be located in the park house.

Walking and Strolling.

A series of paths will be provided in the eastern section of the park for walking. No regular paths will be constructed in the picnic area. Two bridges across Fleming Creek/^{will}connect the two sections of the park. Benches will be placed at intervals along these paths.

Nature Study.

This area offers excellent opportunity for botany and bird study. The abundance of wild flowers and shrubs, and the great variety of native trees should be a great attraction to those interested for purposes of study or as casual observers. Trees and the more important shrubs will be conspicuously labeled. Schools should find this a convenient place for outdoor study.

Wading.

A pool, especially designed for wading purposes, will be constructed in a shallow bend in Fleming Creek. The bottom will be of fine gravel and sand, and a bridge will form the downstream boundary of the pool to keep children from getting into deeper water.

Baseball and Horseshoes.

The flat, non-wooded section of the park to the south

and west of the Disposal Plant will be used for baseball and horse-shoes. Two soft-ball diamonds and three horseshoe courts will be provided. Neither baseball equipment nor horseshoes will be furnished, however.

This active recreation section is far enough from the picnic grounds not to cause any problem of dust or noise.

IMPROVEMENTS

Many different types of improvements must be made on the area before it can be used freely as a picnic area. The following sections will be devoted to each of these various items.

Grounds Improvement.

One of the first steps to be undertaken is the work on the grounds of the area. While the park is generally attractive, certain features are objectionable and must be remedied.

Filling in Low Places: There are several low places in the park which need to be filled with sand and dirt. Some of these are isolated spots which collect and hold water from rains; others are backwaters from the river. They offer ideal spots for mosquito breeding, are not attractive, the ground around them is soft, and in warm weather they have a very musty, swampy odor.

Most of these spots occur in the east section. A long, low, muddy strip runs through the center of this section. It would be a difficult job to fill this entire strip, so only the wettest places and the end near the Huron River need to be filled. Other small, isolated spots, however, should be filled in completely. Along the Huron River, in both sections of the park, small peninsulas occur, formed by still fingers of water which run back into

low muddy ground. The ends of these little bays should be filled in. In the west section an attractive point will be made available for picnic use by such a fill.

Poison Ivy Eradication: All the poison ivy in the picnic area must be eliminated. In the eastern section the eradication need not be so thorough, except along the trails, where it should be completely eliminated with the exception of a few specimen plants which will be labeled in the same manner that the specimen trees are labeled.

The ivy is of two types: the climbing, vine type and the low ground type. The stem of the climbing ivy should be cut, and the base and roots grubbed out. It is not necessary for the ivy to be pulled from the trees, for it will soon die and be of no danger. The ground ivy should likewise be grubbed out. Great caution should, of course, be taken in this work.

Each year the grounds should be inspected and the sprouts and new plants eradicated.

General Clean-up: While there is to be no attempt to convert this wooded area into a city park, nevertheless the cleaning up of certain parts will add greatly to its attractiveness.

Along the bank of the Huron River a strip of old dead branches, trees, brush and debris deposited by the river must be cleaned. This is especially true in the eastern section where the branches of overhanging trees collect floating material. Dead brush and dead and fallen branches throughout the whole area should be removed and burned. Sound dead and fallen trees should be cut and bucked for fuelwood purposes.

Dying or diseased trees which are endangering or hindering growth of more desirable trees should be removed.

Thinnings: No thinnings or cutting out of undesirable species or shrubs shall be conducted in the eastern section, except in the Fuelwood Forest, or where shrubs interfere with paths. In the picnic area, however, some shrubs and small trees such as elm and hawthorn will have to be removed to allow openings for picnic facilities. Whenever possible, small trees, and especially hawthorns, which are being removed should be transplanted to the edge of the park next to the Disposal Plant to aid in screening this structure out of view.

Picnic Facilities.

Picnic facilities to accommodate a maximum crowd of 120 people will be provided. This equipment will include tables, fireplaces, and garbage receptacles.

Picnic Tables: Twenty picnic tables, of the design shown on Plate 1, will be provided in the western section of the park. They will be of a size to accommodate six people, and will be placed singly and in groups of two and three, to provide for various sizes of parties without having to be moved. There will be two groups of three tables, three groups of two tables, and eight single tables. Whenever possible natural screens of hawthorn or shrubs will be used to separate the units and thus afford a certain degree of privacy.

Tables will be fastened to the ground by means of four iron rods, three feet long, driven through holes in the ground boards at each corner of the table.

Material for the tables will be rustic, with the exception of top and seats, which will be either of #2 White Pine or Cedar, 2 x 6 inch stock. The rustic framework should be preferably

of oak, peeled, and not exceeding 6 inches in diameter. All parts are to be bolted together and the tops and seats fastened with countersunk screws. The top and seats will have beveled edges, and all sharp edges in the framework will be rounded. The whole table will be given a clear varnish finish. This finish should be complete, and applied each year. In the winter the tables will be taken into the Park House and stored.

Fireplaces: For each unit, whether of one, two or three tables, a small stone fireplace will be provided. These will be made of ~~broken~~ stone and fire cement, and lined with fire brick. The iron grids on top will be inserted in the cement. The design for these appears on Plate 2.

One large circular fireplace will be constructed for camp-fire purposes out near the point. It will have a stone border, and will be surrounded by a single circle of benches made of half-logs. This is likewise shown on Plate 2.

Park House.

The only building to be erected on the area will be the Park House. It will be constructed of stone and concrete, and have a wood-shingle roof. Large amounts of stone have recently been taken from the park and piled, ~~and~~ will be available for use in the construction of the building.

The house will be located just inside the wooded area in the west section of the park, approximately 500 feet east of the disposal plant. In it will be located the rest rooms and a tool and supply room, in which will be an incinerator for garbage and refuse disposal, and a work bench, table and chair for the custodian.

The floor plan and sketch of this building appear on Plate 3.

Sanitary Facilities.

Modern sanitary facilities will add considerably to the attractiveness and usefulness of the area. These facilities include water supply, toilets, and garbage disposal.

Water Supply: Water for use in the park will be provided from the supply available at the disposal plant. This supply is obtained from a well near the plant, and will be piped from the plant to the Park House. It will be used in the toilets and lavatories, and for an outside drinking fountain. Approximately 500 feet of 3/4 inch pipe will be required to conduct the water from the disposal plant to the Park House, and 350 feet of 1/2 inch pipe to get water to the outside fountain, which will be constructed of stone and centrally located in the picnic area. A diagram of this fountain appears on Plate 4.

Toilets: Since the Park House is at a lower elevation than the disposal plant, it would be a great expense to install equipment necessary to pump sewage from the Park House to the plant; therefore septic tanks will be used. Two rest rooms will be located in the Park House, as shown in the plan on Plate 4. The rest room equipment will include three toilets in the women's room, and three toilets and a urinal in the men's room. There will also be one washbowl, a paper towel holder, and a waste basket in each room.

The equipment necessary for the rest rooms and septic tanks is listed in the section on costs.

Garbage Disposal: Sunken garbage receptacles will be

placed around the area, one for each unit of tables and fireplace. These are available in heavy galvanized iron and equipped with a foot-lifting, iron top. Into the casing a garbage pail is inserted. The pails are removable only by lifting the whole top, rather than just the foot-pedal lid. These tops, therefore, must be equipped with locks so that the pails can be removed by the custodian only. A diagram of these garbage receptacles appears on Plate 5.

Every morning after the park has been used, the custodian will collect the refuse from these containers in a hand-cart similar to that shown on Plate 5. This material will then be taken to the incinerator for burning. This method of disposal will eliminate the quantities of half-consumed garbage in the fireplaces which so often greets the next people who use them.

Fuelwood.

The supplying of fuelwood for cooking purposes is one of the most difficult problems to be faced in the administration of picnic grounds and larger camping areas where people do not have free access to cut what wood they need. This problem will be solved in Forest Park by setting aside a small area to be known as the "Fuelwood Forest". This miniature forest comprises three acres along the northern boundary of the eastern section of the park. It is a strip approximately 210 feet wide and 630 feet long, beginning at the Superior Township line and running east. Some cutting has previously been done on this area; thus many old stumps occur, and large openings exist, making this area somewhat less attractive than the rest of the park. For this reason this area, rather than one more useful for park purposes, has been set aside.

A 100% cruise of these three acres showed that there were 181 trees, ranging from 2 to 28 inches in diameter, and a total volume (unpeeled) of approximately 3637 cubic feet. This is equivalent to 45.5 standard cords, or 136.5 short cords (16" lengths). Following is a table showing the percentage relations, by species, of the composition on the area:

Species	% of Total No. of Trees	% of Total Volume
Hard Maple	29	30
Red Oak	10	27
Elm	29	23
White Oak	12	11
Hickory	20	9

The stand is about 50% stocked, containing trees of all ages. As can be seen from the table, there are some large, overmature red oaks, good distribution in Maple, Elm, and White Oak, and a large amount of small hickory reproduction, much of which is Bitternut, ranging from 2 to 8 inches. Wood lots on similar sites, with similar stocking, yield about 1.5 short cords per acre per year. This would mean, for this area, a production of 4.5 short cords, or 192 cubic feet, per year, figured on the 50% stocking.

Elm reproduction is good, but other species are not restocking very well. Planting should therefore be started immediately, filling in all the open spots, and underplanting, particularly in the western half of the area. Later on, whenever trees are taken out, the openings should be planted. The site seems to

favor maple, so 1-0 maple stock (Acer saccharum) and 6 x 6 spacing should be used. Thinnings may be taken after the trees have reached a size suitable for fuelwood use. As the area becomes more fully stocked the total amount of growth will be greater, and more can be taken out. Some of the very large healthy red oaks and elms on the area should be left for their aesthetic value. From time to time certain of these largest trees will contribute to the yield by having to be cut because of broken tops, or death, or some other reason.

The trees that are to come out should be marked by the city forester, and cut and bucked by the custodian in the winter. Planting in the spring should be supervised by the forester. The volume of the area should be checked every five years.

It is believed that the 4 to 5 cords available every year will be nearly sufficient to provide the needs of the park for the ten or more weeks during which it will be used. On many days the area will not be used at all because of weather, at other times only a few will use it, and many who use it will not use fuelwood.

The boundaries of the Fuelwood Forest will be marked by a row of low, peeled posts, extending about $1\frac{1}{2}$ feet above the ground, and placed every 6 feet. A sign will be placed just inside the boundaries, briefly describing the purpose of the area and the way in which it is operated. The following statement is suggested for this sign:

FUELWOOD FOREST

This area of 3 acres is set aside to produce a permanent supply of fuelwood for users of Forest Park. Each year mature trees are cut, and each year young trees are planted. This is Forestry on a small scale.

This small stand should be kept in good shape; hawthorn and sumac should be cut out, and where heavy reproduction comes in, as in the case of Elm in the east end, it should be thinned. In other words, it should be a model forest.

Bridges.

Two bridges will be put across Fleming Creek. Bridge No. 1, the downstream bridge, will cross at a place 245 feet from the point formed by Fleming Creek and the Huron River in the western section of the park. This location was selected because of the good views both up- and down-stream from this place, and because it is far enough removed from the point to make the latter more desirable for picnic purposes, and yet it affords easy access to the paths in the eastern section across the creek.

Bridge No. 2 will be farther upstream, being located 110 feet from bridge No. 1, or 48 feet upstream from the overhanging Maple. In addition to serving as a means of crossing the creek at this point, it will also act as a lower boundary for the wading pool which will be located on the upstream side of the bridge. This will be a distinct advantage, since the water is much deeper and rockier downstream from this point. Children will thus be protected from the danger of getting into the water which is too deep for wading. Both parents and children will have free access to both sides of the wading pool.

The length of bridge No. 1 will be approximately 58 feet, and bridge No. 2, 45 feet. The framework and supports will be of rustic material, preferably oak. The planking will be 2 x 6 boards, preferably yellow pine reject stock. The supporting timbers will be 6 x 8 Douglas Fir in 12 and 20 foot lengths, six

of the 20-foot timbers being required for bridge No. 1, and two of the 20's and four of the 12's for bridge No. 2.

Diagrams for these bridges are shown on Plate 6.

Paths.

While there will be no restrictions as to where people may walk, a few paths will be located in the eastern section of the park for their convenience. It is believed that people will avail themselves of the use of these paths because of the rather dense underbrush. In the picnic section, however, no paths will be laid out.

The paths will be constructed by clearing away the underbrush, dead trees and other obstructions, leveling bumps in the ground, *loosening the sod with a mattock,* and walking back and forth over them by the crew at work.

All along the paths, and within seeing distance from them, tree and shrub species will be conveniently labeled.

The following paths will be laid out in the eastern section:

I. From bridge No. 1 south along the bank of Fleming Creek and along the Huron River to the point. This path should follow the streams quite closely, but should curve frequently, going around and between trees to make an interesting and attractive walk. Low hanging branches should be cut and soft ground avoided.

II. Across the corner formed by the junction of Fleming Creek and the Huron River, beginning at bridge No. 1 and running into the shore path. This path is designed to go by as many different tree species as possible. These trees, of course, will be labeled.

Since this path does not follow any topographic features, the following compass and pace notes will serve to locate it:

Start 10 feet from shore, or at east end of bridge No. 1.

N 50 E	14 paces	(42 feet)	
S 30 E	10 paces	(30 feet)	by a White Ash
N 55 E	28 paces	(84 feet)	by a Hackberry
S 75 E	40 paces	(120 feet)	
S 35 E	20 paces	(60 feet)	
S 70 E	20 paces	(60 feet)	by a Slippery Elm
S 20 E	20 paces	(60 feet)	to Hackberry, Hickory, and Bur
S 70 E	40 paces	(120 feet)	to two White Oaks (Oak
S 20 E	17 paces	(51 feet)	to shore trail.

III. A path connecting the two bridges, turning away from Fleming Creek to avoid the soft, wet ground surrounding the peculiar elevated spring.

IV. A path running from bridge No. 2 along the edge of the Fuelwood Forest for approximately 140 paces (420 feet), then turning south-east and forking, one branch connecting with Trail II, the other continuing south-east and joining the shore trail. This latter part cannot be completed until the muddy depression has been filled in to allow crossing.

Benches.

Rustic benches, of the design shown on Plate 7, will be placed at intervals along the paths in the eastern section of the park. They will be set off the paths a convenient distance, and will face the water wherever possible. There will be 12 benches in all, the majority of which will be placed along the river path between the bridge and the point. They will be staked to the ground in the same manner as the picnic tables.

The framework of the benches should be of peeled oak, with seats and back of pine or cedar. All parts of the framework should be put together with bolts, and the backs and seats with screws. The whole bench should be finished with clear varnish.

Parking Space.

The parking area will be directly in back of the Park House, and will be reached by a driveway coming off the south-east bend of the road circling the disposal plant. The drive will run through the center of the parking area and out the other side, looping back to the road. The parking area will be 60 feet wide and 200 feet long, and will accommodate a maximum of 40 cars. This spacing is figured on a 10 x 18 foot space per car, with a 24 foot driveway between the two rows. The area will be surrounded by a rock guard-rail. This lot is shown on the map.

Signs.

The signs used in the park will be of two types: namely, the informational type, marking trees and shrubs, and the directional type, indicating what should or should not be done.

The signs marking the trees and shrubs will contain the common name, the scientific name, and, in the space below, illustrations or mention of one or two distinguishing characteristics. The leaf outline or fruit outline will serve in most cases; or it may be necessary to say, for instance, "Note rough bark". ^{At least} Two examples of each species of tree and shrub will be marked. These labels will be close to the paths, and will be in the eastern section only.

The labels will measure 8 x 15 inches, and will be made of 1-inch cypress. The lettering will be done in dark green paint, and the signs clear-varnished. They will be screwed to 2 x 4 inch creosoted stakes, three feet long, and placed in the ground.

The signs identifying the various tree species are to be illustrated in the following manner:

Maples--outline of leaves and fruits, and "Note opposite branching".

Elms--outline of leaves.

Cork Elm--"Note corky ridges on twigs."

Slippery Elm--"Note loose bark."

Oaks--outline of leaves and acorns.

Ash--outline of leaf and fruit, and "Note opposite branching".

Willow--outline of leaf.

Basswood--outline of leaf and fruit, also "Note basal sprouts".

Hickories--outline of leaves and notes on bark.

Hackberry--outline of leaf, also "Note rough bark".

Sycamore--outline of leaf, fruit, and "Note light bark".

Black Walnut--outline of leaf and fruit.

Ironwood--outline of leaf, fruit, and "Note fine bark texture".

Black Cherry--outline of leaf, fruit, and "Note curly bark".

Box Elder--outline of leaf and fruit, and "Note opposite branching".

Kentucky Coffee--outline of leaf and fruit, and "Note scaley bark".

The tone of the directional signs should be generally positive rather than negative. The following suggestions are made: "Keep the River Clean", "Please Wrap All Refuse and Deposit Here", "Leave the Flowers for Everybody to Enjoy".

Certain negative signs are necessary, however. A small "Please Do Not Waste" sign should be placed by the fuelwood of each fireplace; and two or three "No Fishing" signs will be necessary along the shore.

These directional signs should be used sparingly. A few, well placed, will be much more effective than dotting the park with them.

A diagram of the tree-labeling type of sign will be found on Plate 8.

Wading Pool.

In the upper part of Fleming Creek, where it makes a distinct bend, the wading pool will be located. The eastern bank of the stream is low and sandy here. This is the side into which the pool will be cut. Some of the dirt taken from the spot can be leveled out into the stream, and some can be hauled to fill a deep, wet, water-retaining depression in the ground nearby. The wading pool will be increased considerably from the present size of the pool, and will extend upstream from the bridge a distance of approximately 40 feet. A row of large stones will be placed under the bridge to slow the water up in the pool. Some fine gravel will be brought in and spread in the pool to help hold the sand which will be stirred up by the waders.

Baseball Diamonds.

Two regulation sized soft-ball diamonds will be laid out in the open area south of the disposal plant. They will be located with home-plate toward the river. Some distance behind the plate a 16-foot wire guard screen will be placed.

The regulation size for soft-ball diamonds is as follows:

Distance between bases - - - - - 60'

Distance between 2nd base and home plate - - - - - 84'9"

Distance between pitcher's box and home plate - - - 40'

The diamonds should be far enough apart to allow ample fielding space for each one. Grass should be grubbed out of the base lines, a board inserted in the ground at the pitcher's box, and one at home plate.

Horseshoe Courts.

Three horseshoe courts will be laid out next to the ball diamonds; i.e., between the diamonds and the picnic grounds. These should run north and south and be of regulation size, which is 40 feet between the stakes. The stakes will be set in cement blocks which will be inserted in the ground about 18 inches. A space 6 feet square will surround the stakes, and will have boards on ^{all} ~~each~~ sides. The sod in this square will be removed and the dirt loosened.

It may be possible to arrange with the watchman at the disposal plant to check horseshoes out to those who want them. Otherwise they will not be furnished.

OPERATION OF THE PARK

After the park is established and improvements are made, it must of course be kept up, improved here and there, repaired, and kept clean. These activities are included in the operation of the park.

Authority and Personnel.

The authority for the operation of the park is, of

course, the city park department. All improvements or changes must come from either the city forester or the park board, depending upon how important the change is. Frequent inspections and recommendations should be made.

Work on the park property will be done by the custodian under the direction of the park board or city forester. He should be a dependable man, young enough to be ambitious. If possible, he should be a resident of the village of Geddes, or of that vicinity, who could live at home and get back and forth to work conveniently.

Maintenance.

Certain duties will be outlined for the custodian to carry out. Among them will be the following:

1. Collect and burn the refuse every day after the park has been in use.
2. Clean out the fireplaces.
3. Keep the grounds clean.
4. Keep a small supply of wood at each picnic unit for the free use of the picnickers.
5. Keep the rest rooms cleaned and stocked.
6. Do general repair work on tables, bridges, etc.
7. In the winter, cut and buck trees marked for fuelwood.
8. In the spring, place oil on low wet places not yet filled to kill mosquito larvae.
9. Keep poison ivy out of picnic area and away from trails.
10. Plant in the spring under forester's direction.

It will not be necessary for the custodian to be on duty unless there is work to be done, nor will it be necessary for him to be there because the park is in use. It is believed

that no great amount of damage can be done, so policing the grounds will not be needed. If, however, the opposite should be the case, then he may be required to be on hand when the park is being used.

As is the policy in the Ann Arbor Parks, the custodian will be paid an hourly wage of \$.50 while on duty, and must be depended upon to account for and turn in his time accurately.

COSTS

Improvements.

The following estimated cost of approximately \$6400 for the improvements necessary in the development of Forest Park is based, for the most part, on actual figures obtained from local merchants and contractors and various price catalogues. In these calculations the cost of labor was figured on a \$.50 per hour basis, and the labor figures are only estimates at best. While labor will be furnished largely by PWA or ECW men, much of it, however, will have to be skilled, higher-priced work. The figure of \$.50 per hour, it is therefore believed, represents a fair average.

With the exception of rustic material for the tables, benches and bridges, and stone for the Park House and fireplaces, all material will have to be purchased. Rustic material is available near the area, particularly north of the park, across the railroad tracks, where large amounts of scrubby oak growth are present. Stones taken from the area have been piled, and are thus available.

Each of the main items of expense is listed, and a total given for each type of improvement. This figure is then increased somewhat, so that the total should represent the outside figure.

Picnic Facilities

20 tables @ \$6 - - - - -	\$120.00	
Labor @ \$8 per table - - - - -	160.00	
120' of 3/4" iron for stakes @ 7¢ per ft. - - - - -	16.80	
13 fireplaces @ \$6 - - - - -	78.00	
13 garbage receptacles @ \$2.50 - - - - -	32.50	
	<u>\$407.30</u>	\$ 430.00

Park House

Stone walls, material and labor- - -	\$4,000.00	
18 squares of shingles @ \$5.50 - - -	99.00	
Concrete floor @ 15¢ per sq. ft. - -	108.00	
Labor on roof and floor- - - - -	100.00	
	<u>\$4,307.00</u>	4,300.00

Water Supply

500' of 3/4" pipe @ 10 1/2¢ - - - - -	\$52.50	
350' of 1/2" pipe @ 8¢ - - - - -	28.00	
Fittings - - - - -	10.00	
	<u>\$90.50</u>	100.00

Sanitary Facilities

6 toilets @ \$20- - - - -	\$120.00	
2 lavatories @ \$20 - - - - -	40.00	
1 5' urinal @ \$30- - - - -	30.00	
2 septic tanks @ \$35 - - - - -	70.00	
1 incinerator @ \$70- - - - -	70.00	
Plumbing fixtures, including pipe, fittings, closet bends, soil pipe, drain tile, etc.- - - - -	300.00	
Labor- - - - -	200.00	
	<u>\$830.00</u>	850.00

Benches

12 benches @ \$3- - - - -	\$36.00	
Labor @ \$4 - - - - -	48.00	
144' of 3/4" iron for stakes @ 7¢ per ft. - - - - -	10.00	
	<u>\$94.00</u>	100.00

Bridges

8 20' timbers @ \$5.60	- - - - -	\$ 44.80	
4 12' timbers @ \$3.30	- - - - -	13.20	
1260 bd. ft. planking @ \$35 per M	-	44.00	
Bolts, nails, etc.	- - - - -	15.00	
Labor	- - - - -	200.00	
		<u>\$317.00</u>	\$ 350.00

Signs

100' 1 x 8 cypress @ \$115 per M	- -	\$ 7.70	
173 bd. ft. 2 x 4 stakes @ \$60 per M		10.40	
Labor on signs, including lettering, etc.	- - - - -	100.00	
		<u>\$118.10</u>	120.00

Baseball Diamonds and Horseshoe Courts

180 ft. of screen @ 10¢ per running ft.	- - - - -	\$18.00	
Labor	- - - - -	30.00	
		<u>\$48.00</u>	50.00

Other Items

Path construction, pipe laying, general clean-up, etc.	- - - - -	\$100.00	<u>100.00</u>
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Total Estimated Cost	- - - - -	\$6,400.00	
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Maintenance.

At an hourly wage of \$.50 for the custodian, the cost of maintenance should not run more than \$150 for the summer for labor, and possibly fifty dollars for material. During the winter and spring the work on the fuelwood supply and planting, including labor and equipment, should not exceed \$50. Annual maintenance cost might then be placed at \$250.

WORK PROGRESS AND PLANS

During the past winter some work was done on the area by both PWA and CCC crews. This work consisted of picking up and digging up of rocks and boulders and piling them. Many that could not be dug up were buried, and dirt was hauled in and leveled over the pits. Work was confined to the western section of the park. The large piles of stone are available for use in the construction of the Park House and the fireplaces.

A great deal of work has already been done in landscaping the sewage disposal plant grounds, which will be very attractive when completed.

Work on the park will continue in the summer under the direction of the Ann Arbor City Park Department, in co-operation with the National Park Service Branch of Recreational Planning and State Co-operation. Officials hope within the next year to have a branch CCC camp established within the park to complete the work.

FURTHER DEVELOPMENT

A large area known as the Shanghai Pit, which lies on the north side of the Michigan Central Railroad tracks and across the river to the east, can be acquired in the future, should the demand be great enough. This area of 75 acres belongs to the Michigan Central Railroad, and the officials would be glad to have it made into a park and thus beautified. It now contains a young oak stand, some of which could be used in the construction of rustic tables and benches.

There are no ways of driving into the area at present. Two routes, however, are possible, but both require road and bridge construction. In one case a drive would come in from Geddes Road beyond Parker's Mill, starting east of Fleming Creek, going parallel to the creek to the Railroad, then turning directly east parallel to the tracks and across the Huron River into the area. It would be necessary to acquire a right-of-way from the Railroad Company in order to use the strip next to the tracks for road purposes. By the other route, a road would run across Fleming Creek in Forest Park, through the eastern section of the park, under the railroad bridge, and thus into the new area. This latter means is not so desirable because of the necessity of cutting through the woods in Forest Park. On the other hand, by this route the two parks would be directly connected.

This expansion program, however, is somewhat in the future, and not in the scope of this report.

CONCLUSION

It is not very often nowadays that city people have a bit of wild land so easily accessible and so attractive as the Forest Park Area. This plan for the development of the area calls for as little disturbance of this wild beauty as possible, and yet provides modern comforts, and educational and recreational opportunities of many kinds. Even though close by are typical city structures and developments, they are sufficiently hidden from within the park to be easily forgotten.

As time goes on, and places of this type become fewer and fewer, more attention will be given to keeping them in a wild, natural state than to imposing upon them elaborate developments which require the elimination of much of their charm. It is therefore believed that the adoption of this plan will provide a park which will retain its natural beauty and yet be of service to everyone.

(Dummy folder)

PICNIC
AT

ANN ARBOR'S
FOREST PARK
ON THE HURON RIVER
4 MILES EAST OF
ANN ARBOR AT GEDDES

PHOTOGRAPH
OF
PICNIC
SECTION

PHOTO OF
CHILDREN
IN WADING

Paragraph 1.

Paragraph 2.

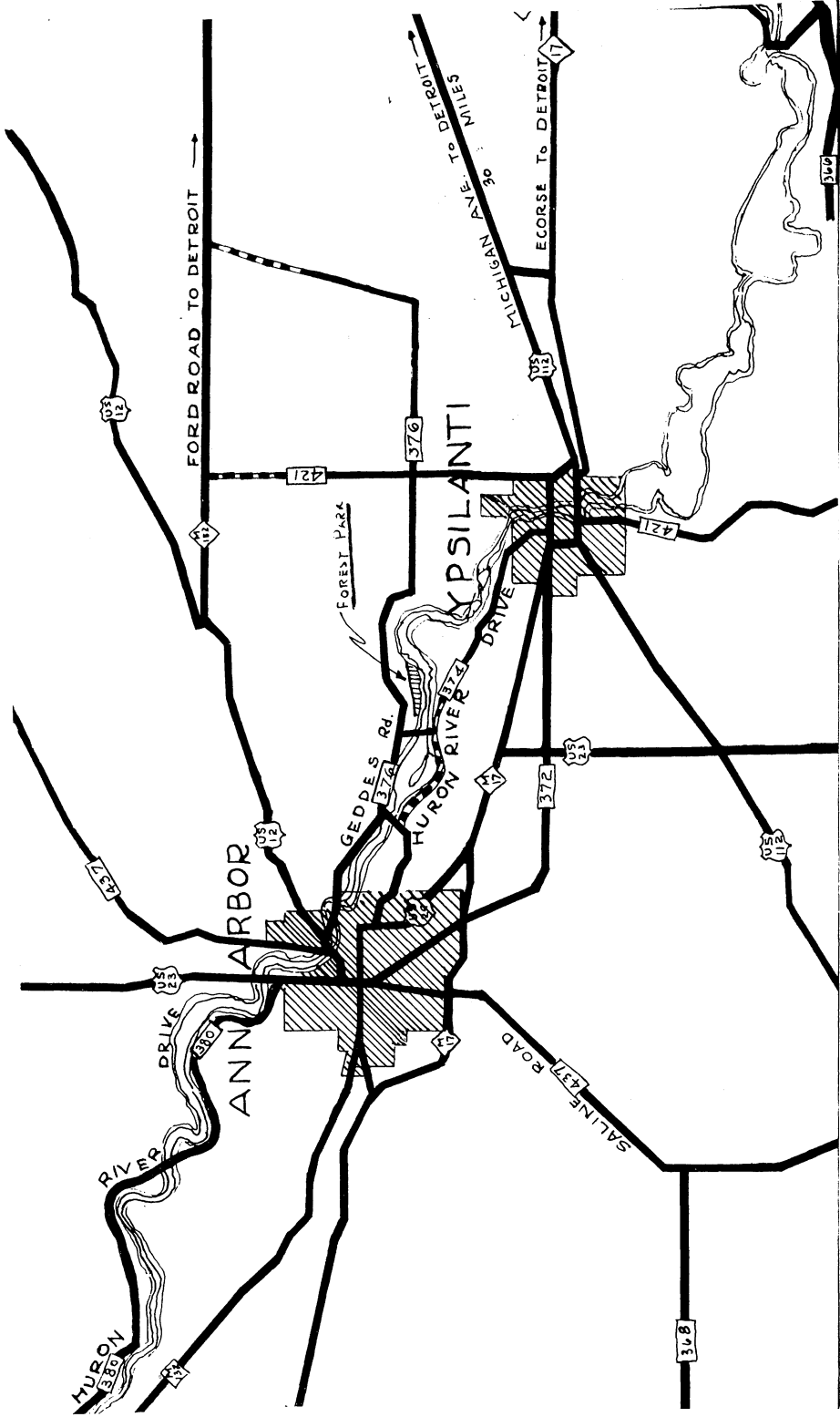
Paragraph 3.

PHOTO OF
SIGN
BESIDE
TREE

PHOTOGRAPH OF
PICNIC UNIT
including
TABLES
FIREPLACE
FUELWOOD
REFUSE RECEPTACLE

Paragraph 4

PHOTO TAKEN
IN FUELWOOD
FOREST
SHOWING
STUMPS
and
REPRODUCTION



HURON RIVER
BRIDGE

ANN ARBOR

XPSILANTI

FOREST PARK

GEDDES RD.
374 & 373

HURON RIVER DRIVE
374

FORD ROAD TO DETROIT

SALINE ROAD
437

MICHIGAN AVE. T. O. DETROIT
30

ECORSE TO DETROIT

US 71

US 24

421

376

US 12

US 37

421

437

372

US 31

34

437

376

4

4

373

4

4

4

4

4

4

376

94

COPY FOR PROMOTION

PAMPHLET

PICNIC AT ANN ARBOR'S FOREST PARK. ON THE HURON RIVER, 4 MILES EAST OF ANN ARBOR AT GEDDES.

Paragraph 1. Ann Arbor's new park offers Picnicking, Walking, Wading, Baseball, Horseshoes, Nature Study, or just Loafing. Enjoy these recreational opportunities in the delightful surroundings of water, trees, wild-flowers, and birds.

Paragraph 2. Picnic facilities for 120 people are provided. Rustic tables, single and in groups of two and three, with a fireplace for each single table or group, afford ideal accommodations for all sizes of parties up to 20 people. Wood for the fireplaces is furnished at the park. Drinking water and modern sanitary facilities are also provided.

Paragraph 3. Over twenty-five species of native Southern Michigan trees, and many species of native shrubs and wild-flowers are found on this small area. The different tree and shrub species are conspicuously labeled for your information. Besides the more familiar trees, are found Bur and Pin Oaks, Cork and Slippery Elms, Black Maple, Hackberry, Kentucky Coffee, Black Cherry, and other less common species. Thus the park offers an ideal place to become familiar with our native trees.

Paragraph 4. A small three-acre section has been set aside for the continuous production of fuelwood for the users of Forest Park. Each year approximately five cords of fuelwood are taken from the area, and each year young trees are planted in the openings. This is definitely a foreward step in park planning, and a feature which must be accepted sooner or later in a great many parks of this size and larger where fireplaces are provided and cooking permitted.

PHOTOGRAPHS TAKEN IN FOREST PARK



— Photograph taken just inside the wooded area in the Picnic Section of the park , showing how completely the Sewage Disposal Plant is screened out of view. The dark windows can barely be seen in the right-center of the picture.



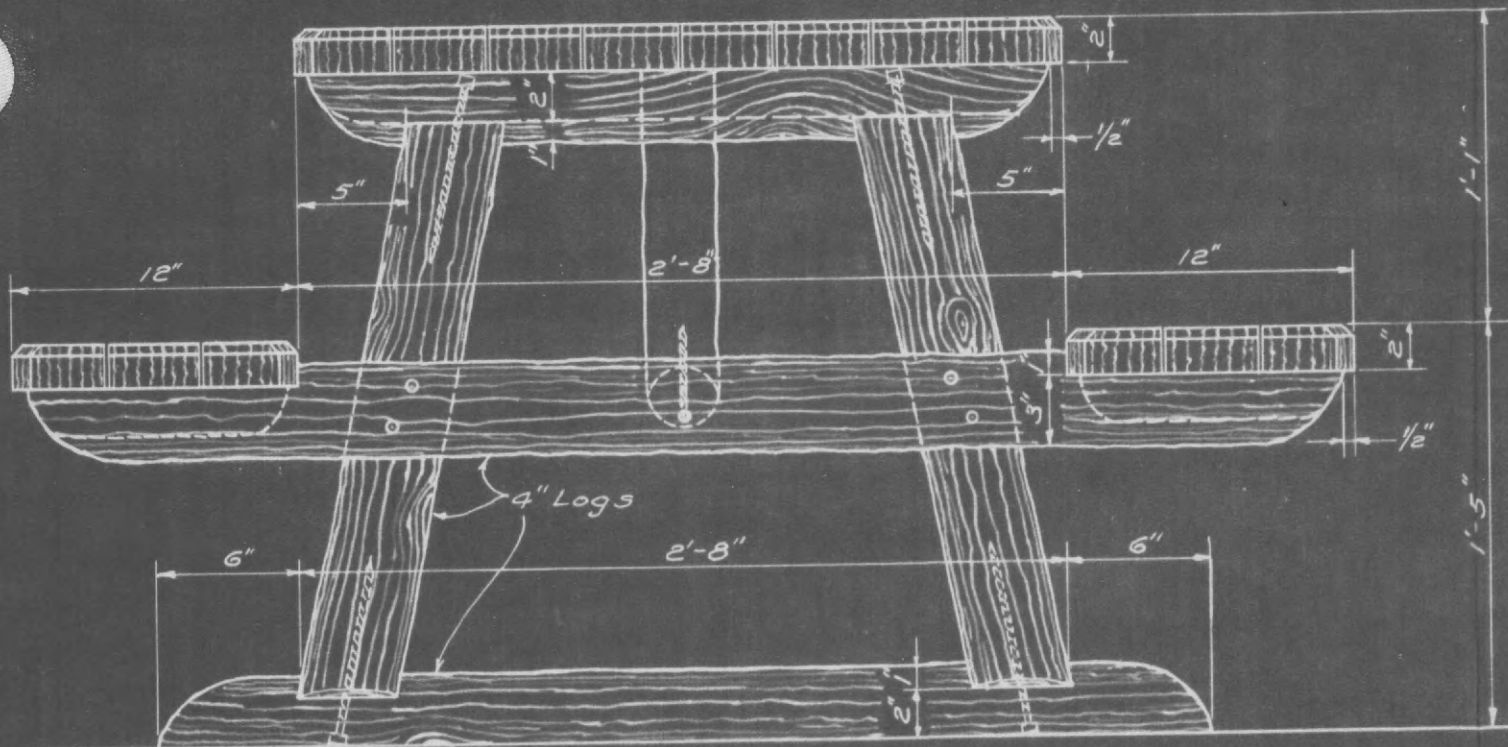
Photograph taken at the junction of Fleming Creek and the Huron River, looking across the Creek to the Picnic Section of the park. Its heavily wooded nature is clearly shown.



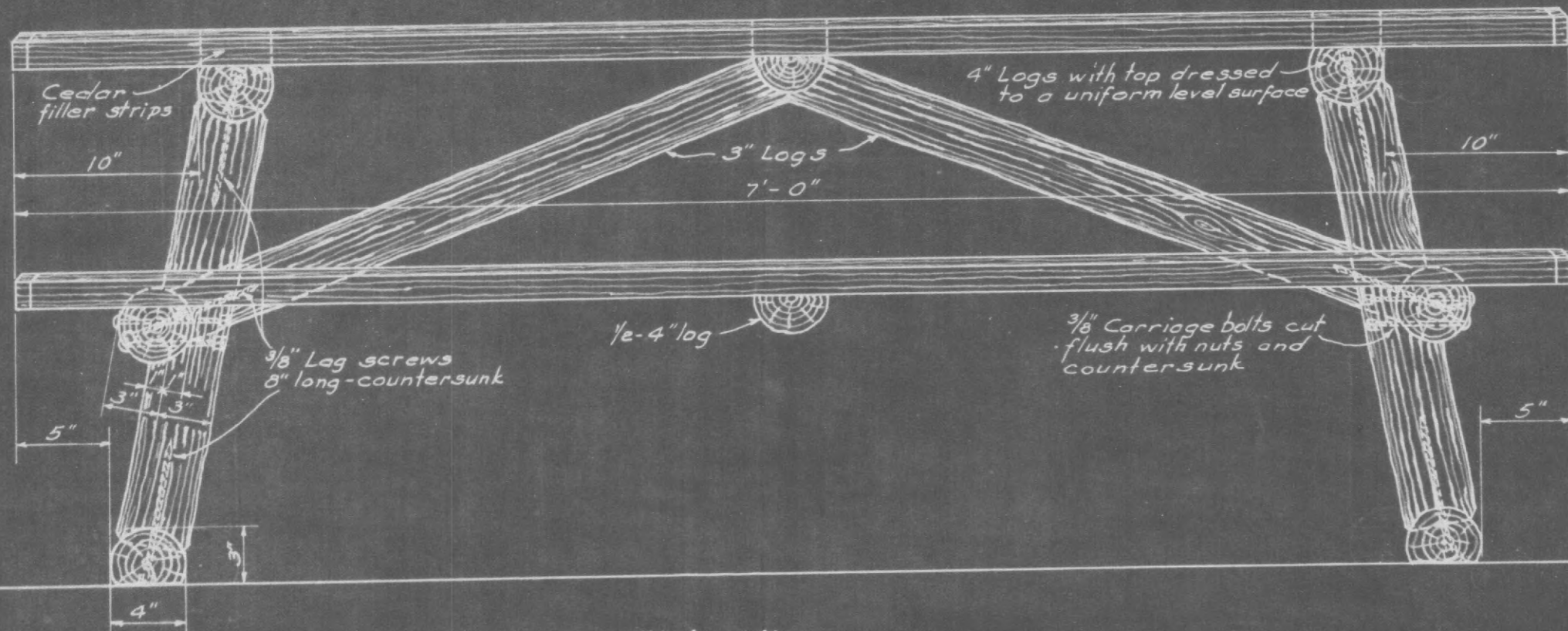
Photograph taken on Fleming Creek at the location of the Wading Pool. The pool will be cut into the sand seen in the upper left quarter of the picture.



Photograph taken at the west edge of the Fuelwood Forest at the Township line. This end is quite open due to the cutting which has been done here. A few stumps can be seen in the foreground. The other end of the 3-acre plot is much more heavily stocked.



End View



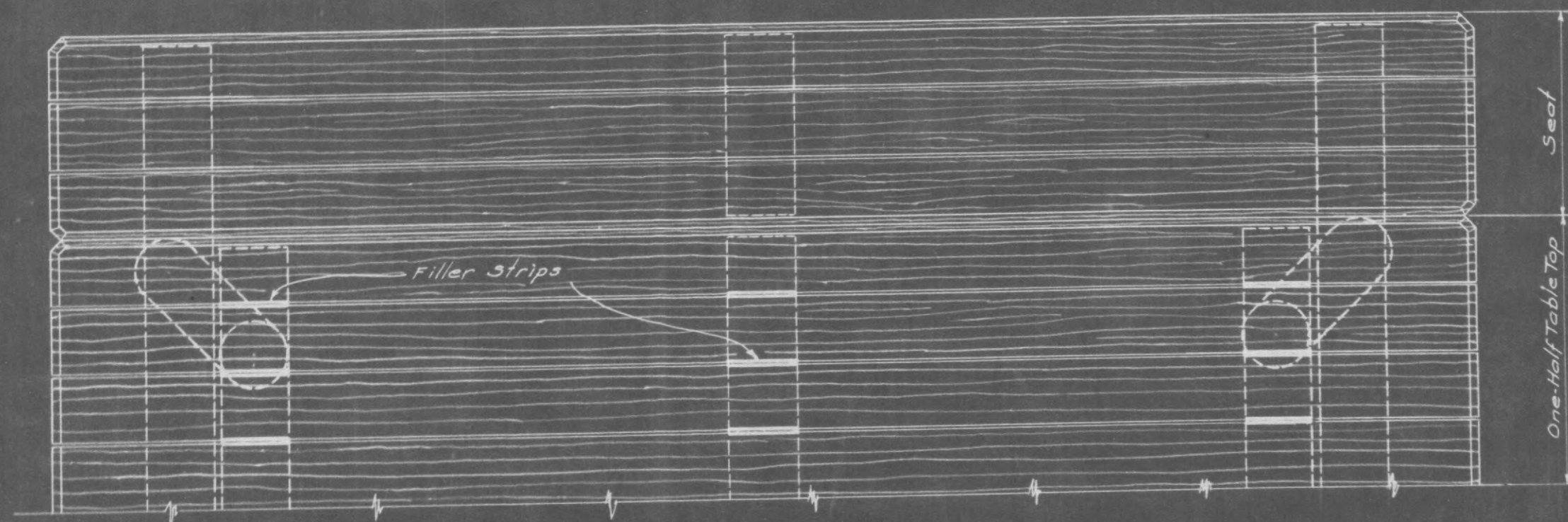
Side View

Material shall be oak logs with all bark removed. The table top and seats shall be of 4"x2" finished cedar planks spaced 1/4" apart. 1/2" bevel all around table and seats, and corners cut off 1" at 45° angle. Notch and fit all parts together as shown and spike securely where necessary. All wood shall be given a brush treatment of light creosote oil, grade 1, according to specifications 8.13 or Clear Varnish finish

DETAIL OF RUSTIC TABLE

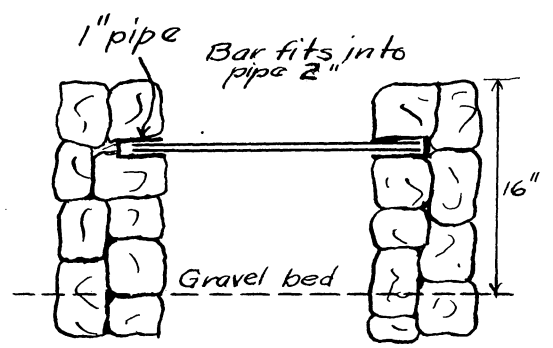
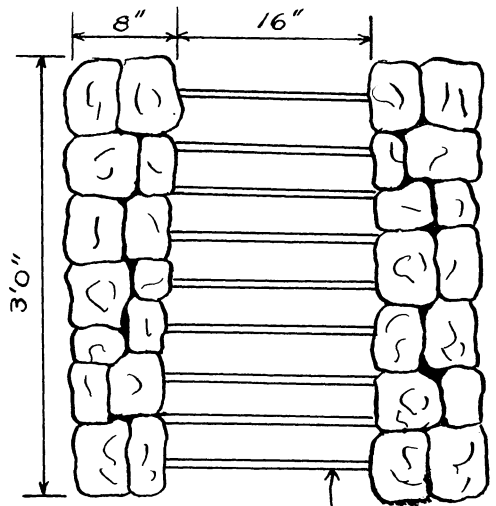
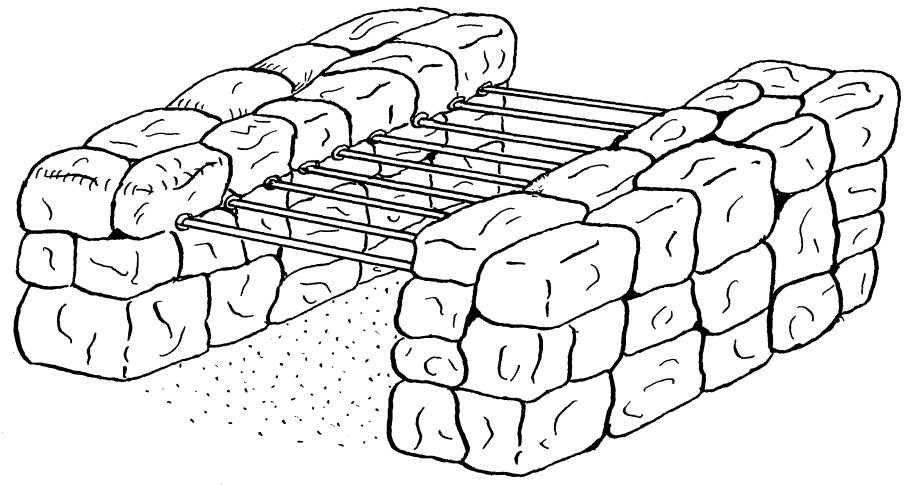
Scale: 1/8" = 1'-0"

(Michigan State Highway Department)

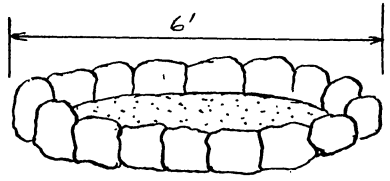


Half Plan

STONE FIREPLACE

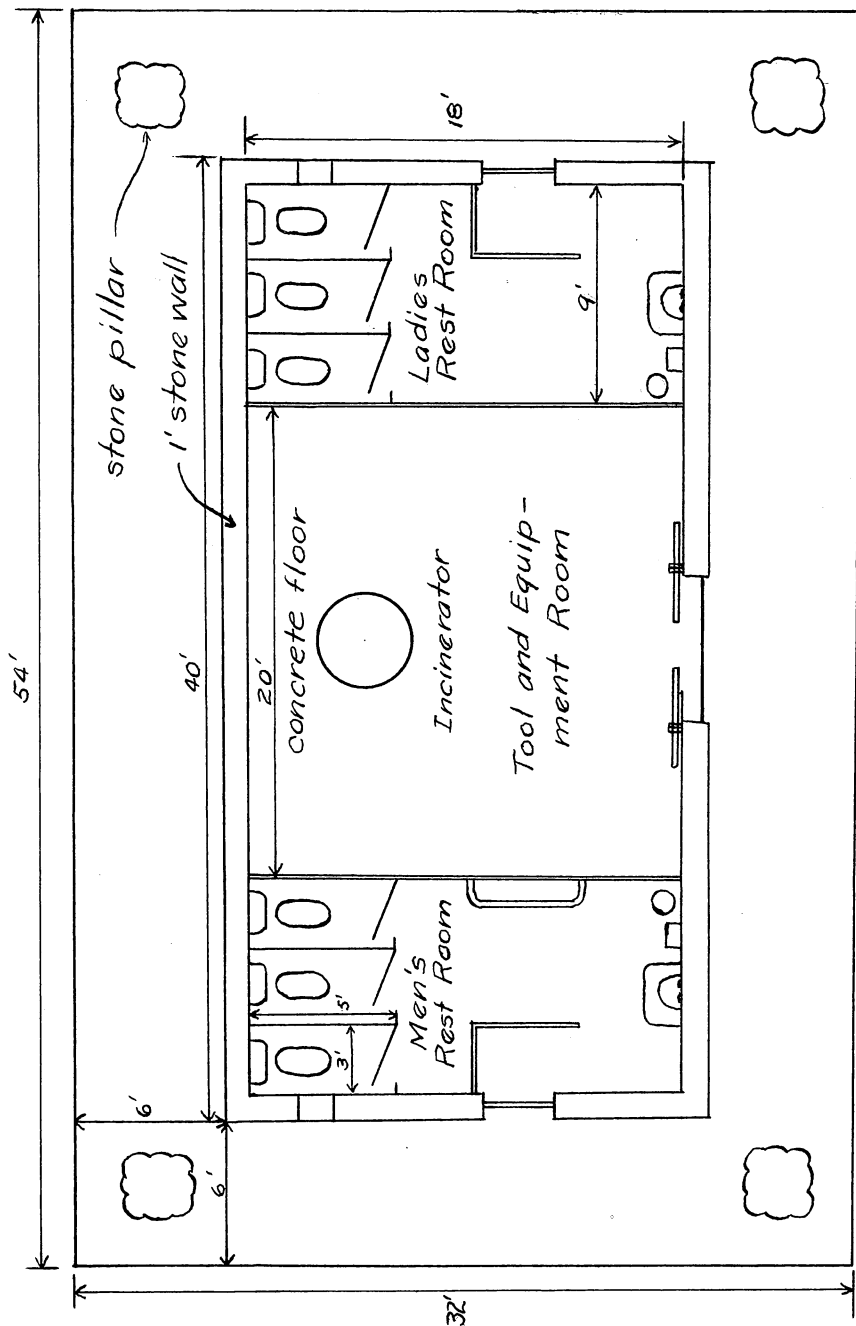
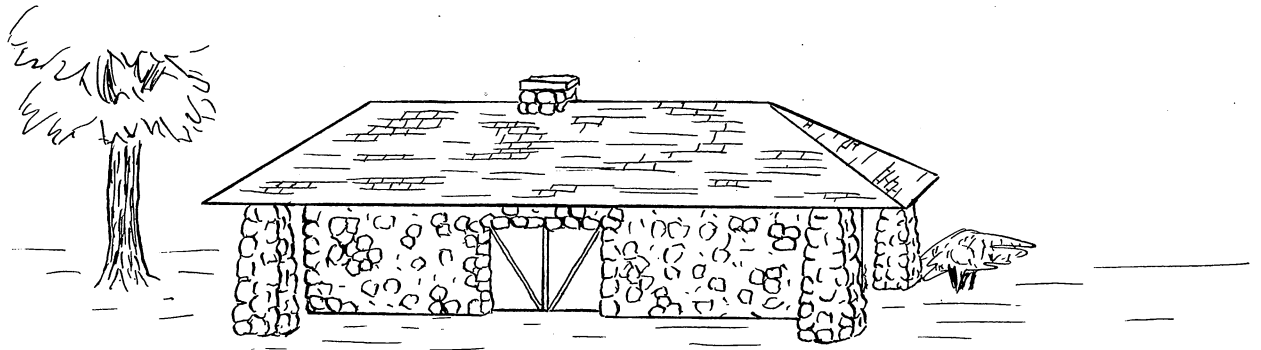


$\frac{3}{4}$ " iron Bars 3" apart



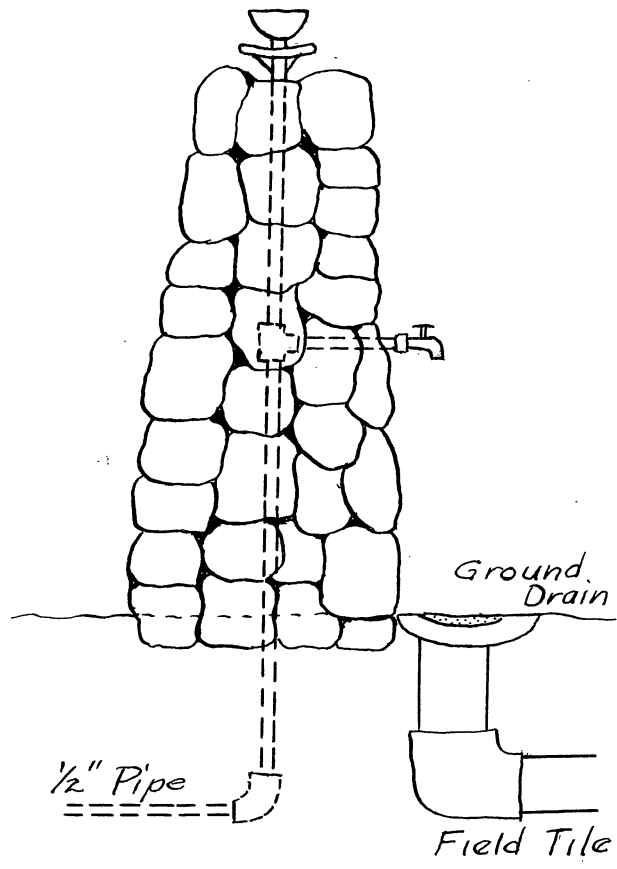
Circular Fireplace

SKETCH AND PLAN FOR PARK HOUSE

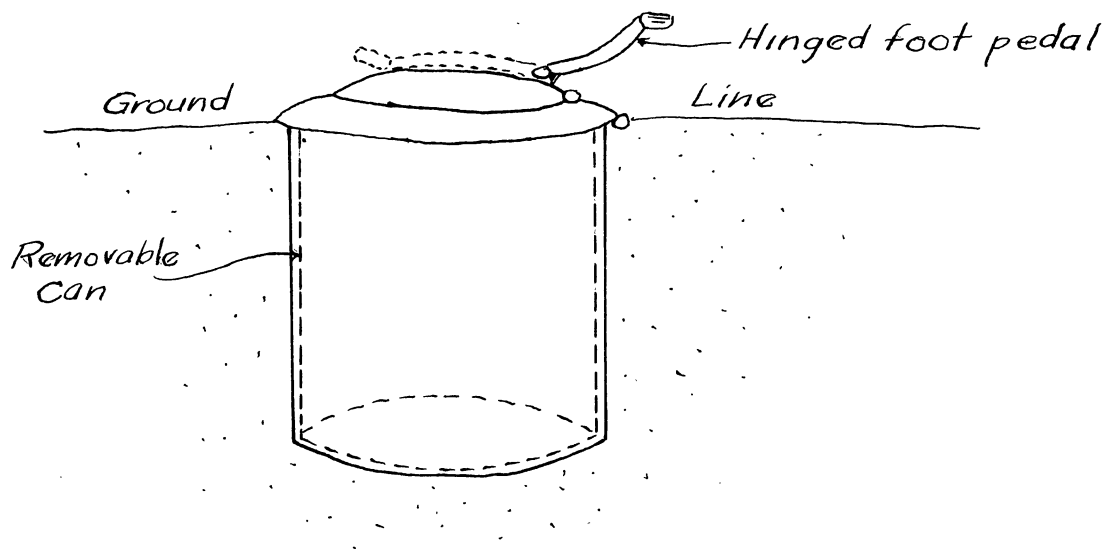


Ground Plan

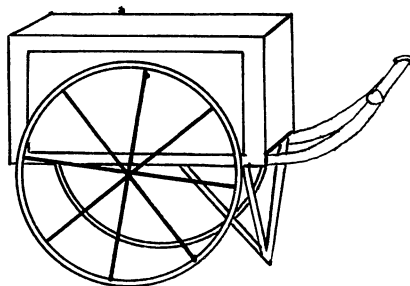
DRINKING FOUNTAIN



GARBAGE CANS

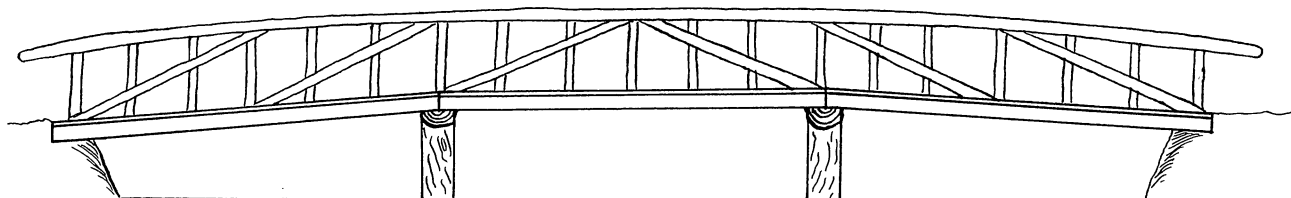


HAND CART



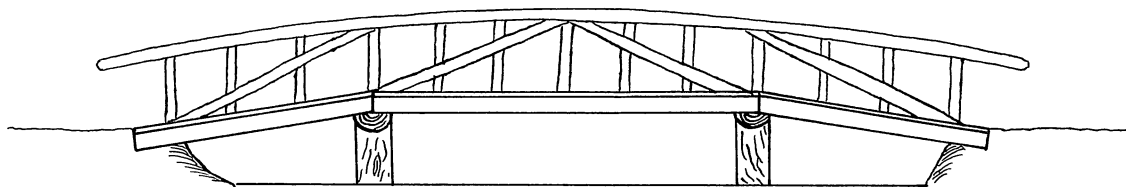
BRIDGES

Framework of peeled rustic material.
Supporting timbers of 6"x8" Douglas Fir.
Bridges to be 6' wide with a 5' tread.



BRIDGE NO. 1

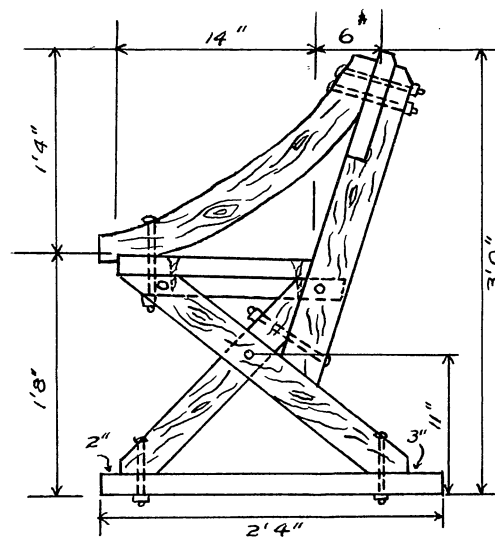
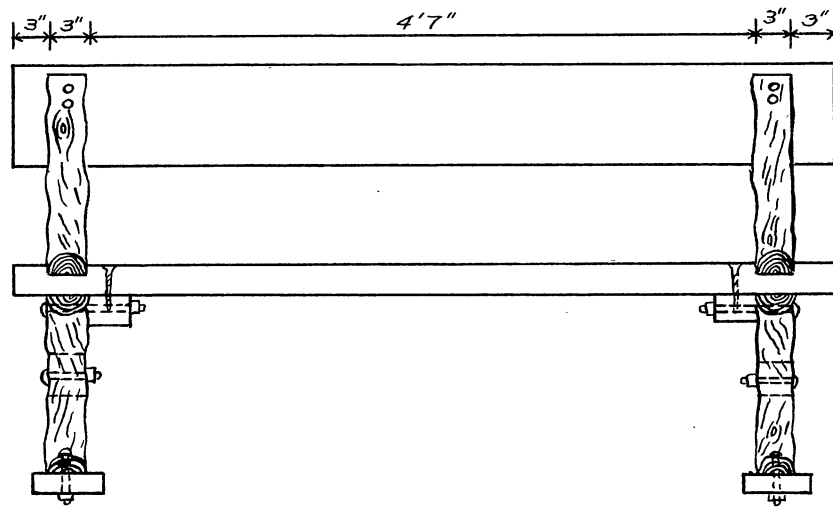
Length 58' Three 20' Sections



BRIDGE NO. 2

Length 44' One 20' section
and two 12' sections.

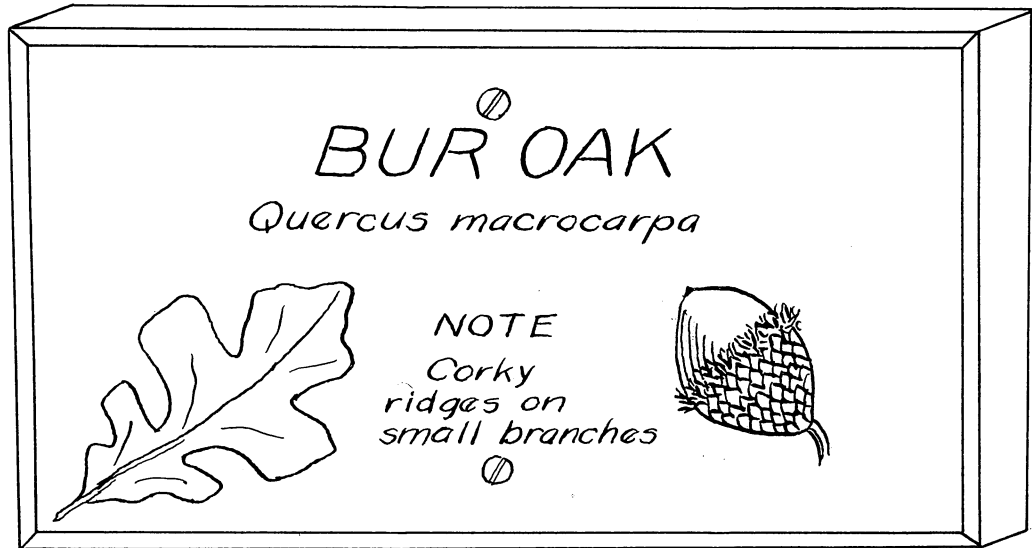
PLAN OF RUSTIC BENCH



All material except back, seat, and ground board to be of peeled rustic wood.
Clear varnish finish.

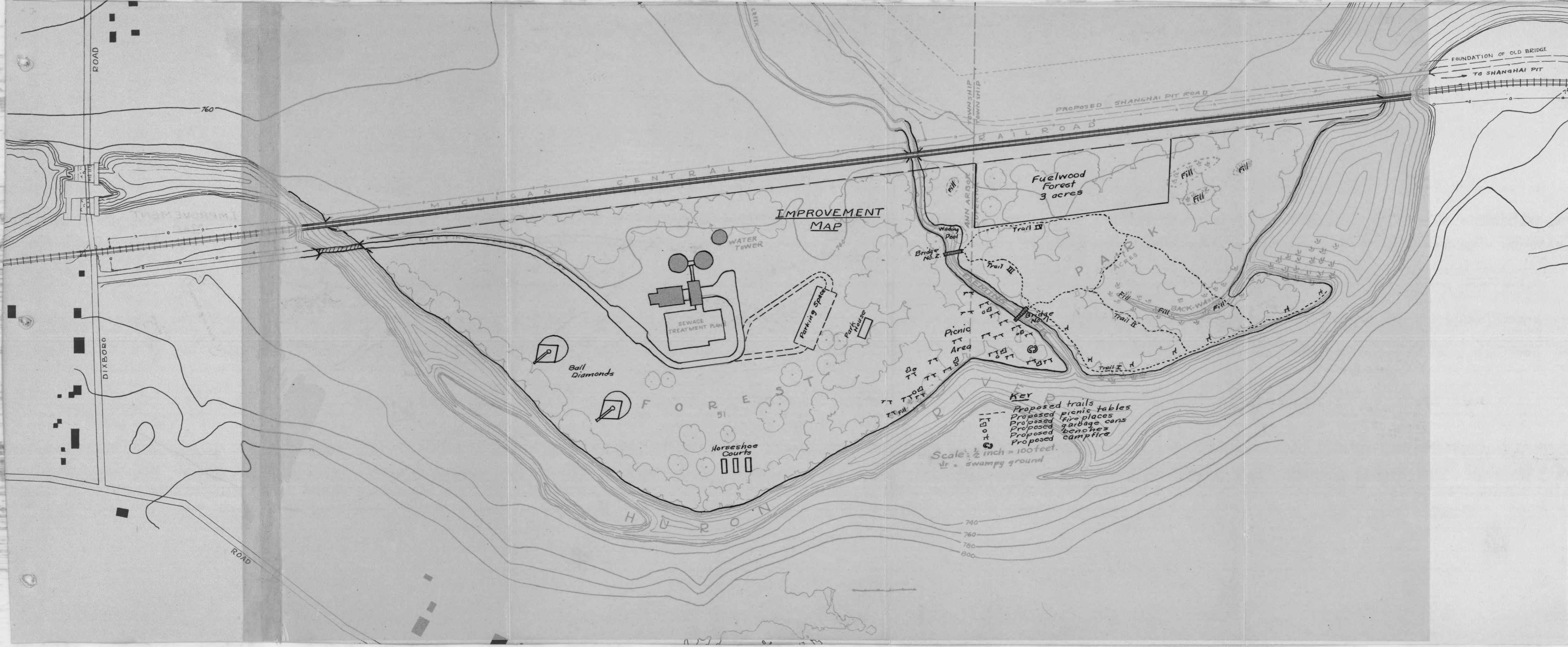
From: Michigan State Highway Department.
(changed slightly)

SIGNS



Boards
15"x8"x1"
Cypress
Lettering in
dark green paint
Clear varnish
finish

Stakes
2x3"
Creosoted



**IMPROVEMENT
MAP**

Fuelwood
Forest
3 acres

SEWAGE
TREATMENT PLANT

WATER
TOWER

Parking Space

Park House

Ball
Diamonds

Horseshoe
Courts

- KEY**
- - - Proposed trails
 - ▢ Proposed picnic tables
 - ⊙ Proposed fire places
 - ⊕ Proposed garbage cans
 - ⊘ Proposed benches
 - ⊙ Proposed campfire

Scale: 1/2 inch = 100 feet.
⊕ = swampy ground

740
760
780
800

FOUNDATION OF OLD BRIDGE
TO SHANGHAI PIT

PROPOSED SHANGHAI PIT ROAD

RAILROAD

MICHIGAN CENTRAL

TOWNSHIP ROAD

ANN ARBOR

ROAD

DIXBORO

ROAD

760

HURON RIVER

HURON FOREST

PARK

Picnic
Area

Trail IV

Trail III

Trail II

Trail I

Fill

Fill

Fill

Fill

BACK-WASH

Fill

Fill

Fill

Fill

Fill

Fill

Fill

Fill

Fill

Fill

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