



SUGGESTIONS FOR MIGRANT HOUSING IN MICHIGAN

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COMPETITION FOR LABOR is great in Michigan. Since pay tends to be uniform, housing is a primary means of attracting migrant farm workers. Not only does each grower have to keep up with his neighbors' housing, but regular improvements help workers decide to return for the next season.

When deciding on a change in migrant housing facilities or management practices, consideration should be given to the alternatives. The first idea is not always the best. Items to be considered are: (1) whether to build, (2) where to build, (3) what type of housing to build, and (4) what functional features must be built into the facility.

The purpose of this bulletin is to present and analyze ideas that growers have generally found to be good.

Housing Needs

Growers should first consider using labor more efficiently and hiring only the number of people necessary to do the work in a reasonable period of time. Mechanization could cut labor needs drastically within a few years. It might be well to plan new housing to fit the needs of machine operators. The production of several crops might be changed to make for steadier use of labor throughout the season.

The number of people that should be housed adequately and safely in one camp is an important consideration. A service building size which has worked out well will accommodate 55 to 75 people. Small camps are easier to manage than large ones. Crews larger than 60 people are rare. Workers prefer small camps with work crews kept intact.

Desirable Site Requirements

Additions to an existing camp may make the camp too large, and may emphasize any contrast between old and new housing. More than one camp may be desirable to help give more privacy. Locate the camp so that it can be checked frequently. Make sure the site is large enough and located so as to provide privacy. Zoning regulations may influence distance from the road, and size of buildings. Electricity and water should be available.

Some of the hazards to avoid are traffic, machinery, spray materials, ponds, swamps, junk, and gasoline storage. Provide good drainage so that the well is not contaminated, so that privies and sewage disposal fields will be on dry ground, and so water will not stand on the surface. If possible, choose a site that is sunny in the morning and shady in the afternoon.

Camp Layout

Provide a well-defined parking area at least 20 feet from the housing. This makes clean-up and mowing easier. Litter may accumulate around buildings where cars are parked close by. Auto driveways should be located away from housing and play areas. Barriers of some kind are useful to confine automobiles to parking area and driveways.

A lawn close to the housing for the little children is very desirable. Some play equipment should be

The duplex unit (top of page) has a bathroom for each family. Plan No. 719-C2-11 (see page 4).

provided. A ball field or similar playground could be located a little distance from the housing.

Community toilets and showers should not be closer than 25 feet or further than 150 feet from any living unit. The middle of a lawn is a good place for this facility. This makes a good place to locate a yard light.

Types of Housing

Converted

Just any available unused building should not be used for housing. The determining criterion should be desirable housing at reasonable cost. Conversions of large farmhouses are usually unsatisfactory because they do not permit the occupant density customary in cabins and motels. Deterioration is usually rapid in a crowded old house. Similarly, barns make poor housing, especially the basement and loft.

Light, ventilation, and privacy are required for every family and can be achieved in houses and barns by limiting the number of living units.

Old schools usually make good housing because of sound construction, adequate windows, and a good site.

Dual Purpose

Primary consideration should be given the human usage. Partitions of lightweight material and rooms without ceilings do not give adequate privacy. Partitions do not have to be moved to provide good wintertime storage space. For storage access, each room can have an overhead door, as shown in Figure 3. This

plan can have concrete block partitions and still provide good storage.

Wide buildings split into two rows of living units give only one outside wall per living unit, so lighting and ventilation may be difficult and there is only one exit in case of a fire.

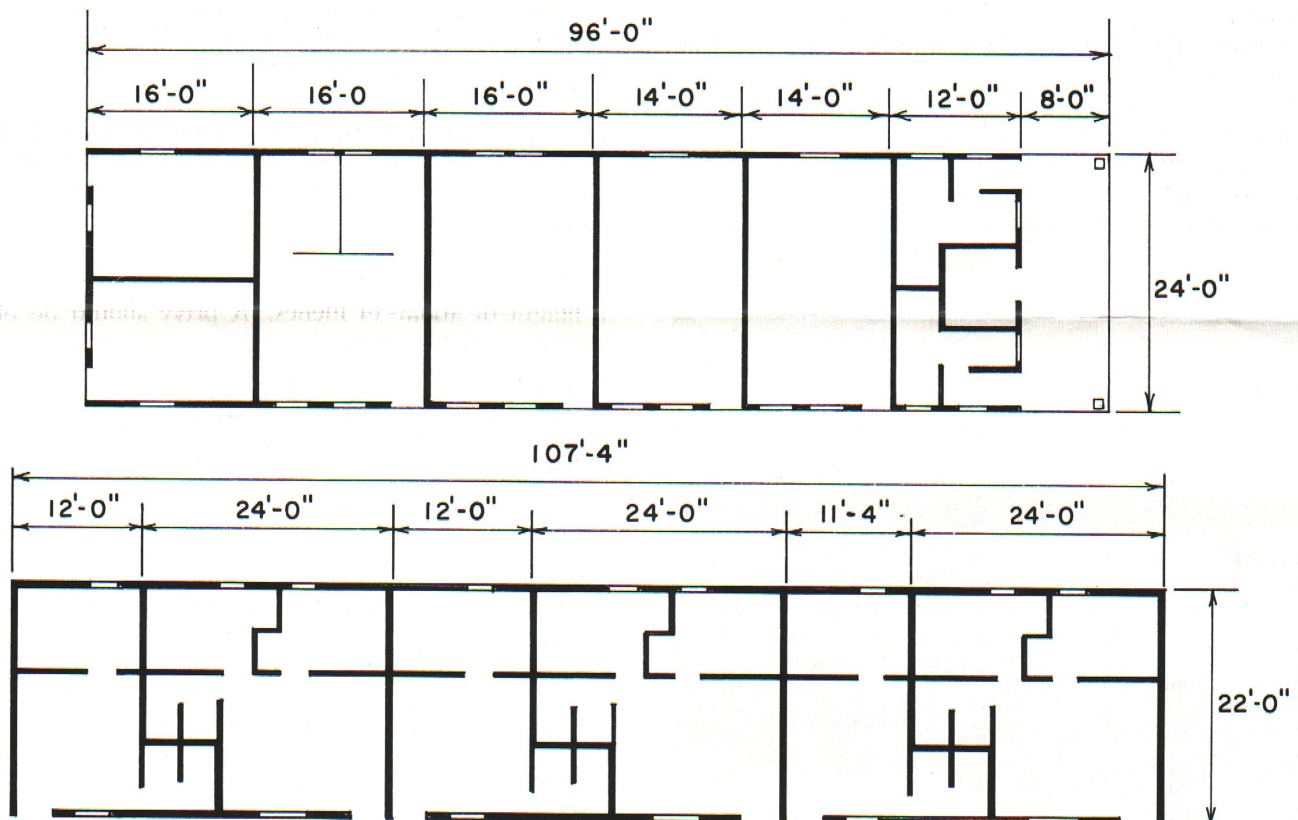
Garages make good dual-purpose buildings.

Motels

Motels have the advantage of compactness. Less land is required. Utility lines (heat, electric, gas, water, and sewer) are easier to install. It makes sense to install sinks at the time the building is built, even if water has to be carried. This avoids the unsightly and unsanitary practice of throwing dishwater out the door.

Concrete block partition, due to their weight, stop sound transmission better than a double-lined stud wall, which should be considered minimum construction between families. Walls should be at least 8 feet high to allow for bunk beds. Living units should extend across the building (except possibly at the corners) to allow for cross-ventilation and good lighting.

On a living unit basis, motels cost about the same as cabins. Materials and labor for a concrete block motel unit and an unlined wood cabin with a concrete floor cost about \$250 plus \$2 per square foot. Example: 14' x 20' motel unit or cabin approximately $\$250 + (\$2 \times 280) = \$250 + \$560 = \$810$. Utilities, furnishings, and painting are not included in this cost. Growers have paid somewhat less as well as considerably more than this.



Motel floor plans: 719-C2-12 (top): 719-C2-13, (bottom).



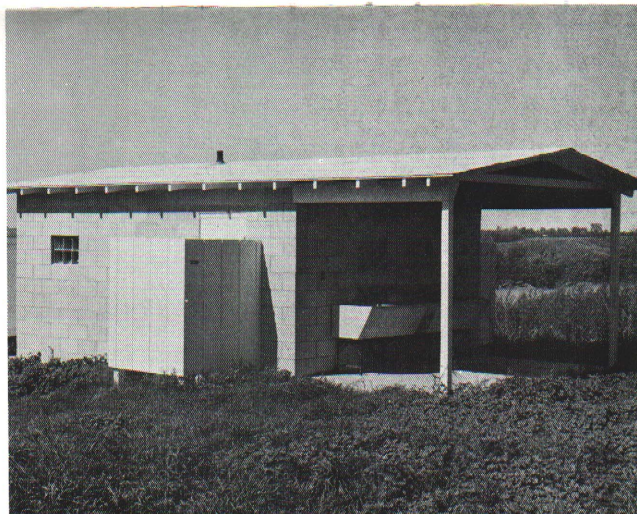
Good housing and good storage are provided in this dual purpose structure. Plan No. 719-C2-7.

If living units average six persons or more, a bathroom for each living unit in a motel costs no more than a central shower and toilet building. The central building requires cleaning labor, is at a disadvantage in cold weather, and can cause management problems. Individual bathrooms certainly help attract good workers and improve worker morale.

Short-time use favors construction of a central bath and toilet facility. A long season, large families, and adequate maintenance favor private bathrooms.

Cabins

With adequate separation (at least 30 feet), cabins provide privacy and are generally best liked by the workers. Wood construction is pleasant and comfortable; light and ventilation are simple, the units can be moved and can be widely dispersed if desired. Providing light and ventilation along the eaves is advantageous where cabins are lined up in a row. Translucent plastic panels give good light, and a screened eave can be opened for ventilation without loss of privacy. Standard windows are likely to interfere with placement of bunk beds.



A good central toilet, shower, and laundry building: Plan No's 719-C2-2, Septic Toilets; 719-C2-3, Flush Toilets.

Having several cabin sizes is desirable. A 14-foot width will accommodate beds placed end to end and can use 8 feet long material for the roof.

Design Essentials

Toilets—Privy

To minimize odor, the pit should be as dry as possible. The site should be well drained and surface water should be diverted from the pit by grading and banking. Ventilation of the pit helps drying, but the pit should be dark to discourage entrance of flies.

Another problem, caving-in, can be eliminated by cribbing and can be reduced by making the area of the pit small compared to the base of the privy.

Privies often are not moved as often as they should be, perhaps because they are not easy to move or because they are not strong enough to be moved. A "one-holer" with a preservative-treated lumber base adapted to fork lift or having skids would solve this problem. To reduce abuse the size should be limited to one hole. A standard toilet seat should be set at a height of about 14 inches. A privy should be provided for each family.

Toilets—Central Toilet and Shower

This type of building needs daily cleaning, so it should be designed to clean easily and to dry out quickly. The proper slope for floors is about 3/8 inch per foot. A common mistake is to make most of the floor quite flat and slope it too steeply next to the drain. Outside laundry area floors should be sloped to a drain also. If not, there will be an adjacent muddy area. Laundry areas for summer use are best left with at least one side open. Likewise, ventilation for the shower room is critical. Screening all around the perimeter of the roof is minimum.

The septic toilet is designed for rough use. None of the drains are trapped. It is important to set the septic tank outlet so that the liquid level is slightly above the bottom of the drop tube. Otherwise the whole surface of the liquid in the tank contributes to

odor in the building. Septic toilets are actually less desirable than privies and cost more than providing one privy per family.

Many growers have been dubious about putting in flush toilets. However, growers who have them generally agree that they are worthwhile. Flush toilets improve the morale of the camp considerably. Drains should be properly sized, sloped, and vented. Clean-outs should be installed. Flush valves could well be used instead of flush tanks for the toilets.

Heating

Requirements vary according to season. The following table lists design temperatures for East Lansing. These temperatures could be raised several degrees for the southeast and southwest corners of the state, and lowered several degrees for the northwest part of the Lower Peninsula.

The design temperatures represent the coldest average daily temperature likely to occur in ten years. On about one summer night a year the low is likely to drop 10 degrees below the listed levels. For example, during July and August, one overnight low might be expected to fall to 46 degrees. A heater size based on the design temperature would allow the room temperature to drop to 60 degrees. This can be tolerated if people are sleeping under blankets.

For least cost, cabins should be fully insulated for use during November through February, and should have the ceiling insulated if used during March and April or September and October. Note that heater output is listed. Gas heaters are usually listed by input, which must be about 30 per cent greater than the output required.

Camp Management

Camp Preparation

Workers often arrive early, so the camp should be ready. Mowing, cleaning, and painting should be done well ahead of the time workers are needed. Everything should be in good condition; the water, drains, lights, stoves, refrigerators, and mattresses. Hazards such as poison ivy, dangerous chemicals, poor wiring, and abandoned refrigerators should be eliminated.

Rules and Procedures

Posting a long list of rules may create bad feelings. However, there should be a clear understanding of things that are important.

Things that might be considered are:

1. Assigning housing to fit workers, keeping unused housing locked.
2. Charging for rent, utilities, and damages.
3. Automobile driving and parking regulations.
4. Maintaining quiet in camp; drinking; not working, working elsewhere.
5. Use of showers, trash cans, refrigerators, telephones.

6. Clean-up of camp and common use buildings. Paying the children or one family for this works well.

7. Time and transportation for shopping, laundry, health care, and school.

8. Time and place for payment of earnings, and the rate of pay, bonus, deductions, and charges.

9. Check-out procedure.

All management should be based on concern for the individual worker. The jobs that migrants have are not particularly challenging. There is a limited amount of motivation that can be derived from the job itself. However, concern for the man and his family can be shown in the housing provided.

Plans and Information Available

County Health Departments or Michigan Department of Public Health, 3500 N. Logan Street, Lansing, Michigan 48914:

Agricultural Labor Camps, Act 269 of 1965 and Rules and Regulations

Regulations for Certain Water Supplies in Michigan
Regulations Governing Food and Drink Establishments

Carbon Monoxide Hazard

Carbon Monoxide Problem

Cooperative Extension Service, County Offices or Department of Agricultural Engineering, Michigan State University, East Lansing, Michigan 48823:

Migrant Housing Plans

719-C2-1	Portable Privy
719-C2-2	Septic Privy, Shower, Laundry
719-C2-3	Flush Toilet, Shower, Laundry
719-C2-4	12' x 16' Cabin
719-C2-5	12' x 20' Cabin
719-C2-6	16' x 24' Cabin
719-C2-7	Dual-Purpose Motel
719-C2-8	Shower and Laundry
719-C2-9	12' x 16' Movable Cabin
719-C2-10	14' x 20' Insulated Cabin
719-C2-11	22' x 36' Duplex Cabin
719-C2-12	24' x 88' Motel
719-C2-13	22' x 107' 4" 6-Unit Motel

Tenant Housing and Cabin Plans

USDA 5928	Cabin, frame, 24' x 24'
USDA 5968	Cabin, masonry, 24' x 24'
USDA 5997	Vacation House, 24' 8" x 33' 0"
USDA 7148	Farm Cottage, 18' x 26'
USDA 7178	Tenant House, 26' x 33' 4"

Michigan State University Bulletin Office,
P.O. Box 231, East Lansing, Michigan 48823

E-566	House Flies and Their Relatives
E-360	Household Storage
E-365	Kitchen Storage
E-425	Beautiful Home Grounds (25¢)