

CRITERIA QUESTIONNAIRE FOR INCORPORATION

1968 PA 191

(The term "unit" is used throughout this questionnaire and is intended to mean either your township, city or village)

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OFFICE OF LAND SURVEY &
REMONUMENTATION

I. POPULATION

A. Total population of your unit for each of the following dates:

1990 _____ 2000 1495 2010 1510

II. POPULATION DENSITY AND LAND AREA

A. Give the total number of acres or square miles and density for your entire unit.

(1) Total number of acres _____ or square miles 24 sq. mi

(2) Density for 2010 _____ popu/acre or 63 popu/sq.mile.

III. LAND USE

A. Enclose a copy of the long range plan for your unit or larger area (e.g. comprehensive Master Plan, Land Use Plan, Growth Management Plan). If there is not one for your unit of government, include county plan or other. Please list enclosures:

master plan from 2001

B. Development

1. Does your unit provide special incentives (tax-abatement, low interest rates) to homeowners, builders, or developers to locate in your area?

Yes _____ No

2. If yes, describe: _____

3. Give the quantity and location of any of the following types of development either planned, under construction, or completed within your unit during the last three years.

	PLANNED	UNDER CONSTRUCTION	DATE COMPLETED	SECTION OR EXACT LOCATION	# DWELLING UNITS AT BUILD OUT
Apartment Bldgs.	_____	_____	_____	_____	_____
Standard Housing Subdivisions	_____	_____	_____	_____	_____
Condominium Subdivisions	_____	_____	_____	_____	_____
Mobile Home Parks	_____	_____	_____	_____	_____
Commercial Centers	1/2013	8/2013	_____	_____	_____
Medical Center →	_____	_____	_____	_____	_____
Industrial Parks	_____	_____	_____	_____	_____
Other: _____	_____	_____	_____	_____	_____

C. Zoning - Zoning is done with the county

1. Does your unit have a zoning board or commission? Yes ___ No .

If yes, under what public act? _____.

If yes, enclose a copy of the zoning ordinance and map.

If yes, describe the stage to which it this progressed?

If no, enclose the governing county zoning map and ordinance.

Is your unit in the process of initiating a zoning ordinance? Yes ___ No ___.

2. Is any portion of the area proposed for incorporation being considered for rezoning?

Yes ___ No .

If yes, describe the proposed change.

3. List below the acreage of the land zoned in your unit:

<u>USE</u>	<u>NUMBER OF ACRES ZONED</u>	<u>NUMBER OF ACRES USED AS ZONED</u>
RESIDENTIAL	_____	_____
COMMERCIAL	_____	_____
INDUSTRIAL	_____	_____
AGRICULTURAL	_____	_____
OTHER	_____	_____

IV. STATE EQUALIZED VALUATION

Give the S.E.V. of your unit for the last three years. Start with present year:

<u>A. REAL PROPERTY</u>	<u>20 13</u>	<u>20 12</u>	<u>20 11</u>
Residential	\$ <u>26,074,700</u>	\$ <u>28,706,000</u>	\$ <u>29,271,200</u>
Commercial	\$ <u>1,703,400</u>	\$ <u>1,725,200</u>	\$ <u>1,724,700</u>
Industrial	\$ <u>149,500</u>	\$ <u>148,600</u>	\$ <u>149,306</u>
Agricultural	\$ <u>17,792,000</u>	\$ <u>16,747,600</u>	\$ <u>16,427,900</u>
Developmental	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
Timber Cutover	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
Utilities	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
TOTAL	\$ <u>45,719,600</u>	\$ <u>47,326,900</u>	\$ <u>47,573,606</u>

<u>B. PERSONAL PROPERTY</u>	<u>20 13</u>	<u>20 12</u>	<u>20 11</u>
Residential	\$ <u>0</u>	\$ _____	\$ _____
Commercial	\$ <u>841,500</u>	\$ <u>605,221</u>	\$ <u>550,800</u>
Industrial	\$ <u>483,200</u>	\$ <u>315,900</u>	\$ <u>230,600</u>
Agricultural	\$ <u>0</u>	\$ _____	\$ _____
Developmental	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
Timber Cutover	\$ <u>0</u>	\$ <u>0</u>	\$ <u>0</u>
Utilities	\$ <u>2,940,500</u>	\$ <u>2,424,621</u>	\$ <u>2,264,400</u>

TOTAL \$ 48,660,100 \$ 49,751,521 \$ 49,838,000

C. Give the current equalization factor for your unit: 1.00.

D. Give the most recent year's state equalized value for the area proposed for Incorporation. \$ 56,300.

V. ALLOCATED AND VOTED MILLAGE RATES FOR THE LAST 3 YEARS

Example:	General Fund	1.00 Mills
	Debt Retirement	2.00 Mills
	Pension Fund	<u>.50 Mills</u>
	TOTAL	3.50 Mills

Start with the present or previous year

20 12

<u>Unit Millage</u>		<u>County Millage</u>		<u>School Millage</u>	
Purpose	Amount	Purpose	Amount	Purpose	Amount
<u>Oper.</u>	<u>.9291</u>	<u>Med. Care</u>	<u>2.00</u>	<u>SET</u>	<u>6.00</u>
<u>Fire/Amb</u>	<u>2.25</u>	<u>Senior Ser</u>	<u>.25</u>	<u>Oper</u>	<u>17.4694</u>
<u>Roads</u>	<u>2.0</u>	<u>Vet. Ret.</u>	<u>.05</u>	<u>Debt</u>	<u>7.80</u>
<u>Library</u>	<u>.78</u>	<u>County</u>	<u>5.1146</u>		
TOTAL	<u>5.98</u>	TOTAL	<u>7.41</u>	TOTAL	<u>31.27</u>

20 11

<u>Unit Millage</u>		<u>County Millage</u>		<u>School Millage</u>	
Purpose	Amount	Purpose	Amount	Purpose	Amount
<u>Oper</u>	<u>.9291</u>	<u>Med. Care</u>	<u>2.00</u>	<u>SET</u>	<u>6.00</u>
<u>Fire/Amb</u>	<u>2.25</u>	<u>Senior Ser</u>	<u>.25</u>	<u>Oper</u>	<u>17.4694</u>
<u>Roads</u>	<u>2.0</u>	<u>Vet. Retire</u>	<u>.05</u>	<u>Debt</u>	<u>7.8</u>
<u>Library</u>	<u>.78</u>	<u>County</u>	<u>5.1146</u>		
TOTAL	<u>5.98</u>	TOTAL	<u>7.41</u>	TOTAL	<u>31.27</u>

<u>Unit Millage</u>		20 <u>10</u> <u>County Millage</u>		<u>School Millage</u>	
Purpose	Amount	Purpose	Amount	Purpose	Amount
<u>Oper</u>	<u>.929</u>	<u>Med. Care</u>	<u>2.00</u>	<u>SET</u>	<u>6.0</u>
<u>Fire/Amb</u>	<u>2.25</u>	<u>Senior Ser.</u>	<u>.25</u>	<u>Oper.</u>	<u>17.4694</u>
<u>Roads</u>	<u>2.00</u>	<u>Vet Ret.</u>	<u>.05</u>	<u>Debt</u>	<u>7.8</u>
<u>Library</u>	<u>.75</u>	<u>County</u>	<u>5.1146</u>		
TOTAL	<u>5.93</u>	TOTAL	<u>7.41</u>	TOTAL	<u>31.27</u>

VI. TOPOGRAPHY / NATURAL BOUNDARIES / DRAINAGE BASINS

A. Check any unusual or restrictive topographic features which could inhibit the use or development of the area proposed to be incorporated. *None to knowledge*

- | | |
|---|---|
| <input type="checkbox"/> Extreme changes in elevation | <input type="checkbox"/> Wetlands |
| <input type="checkbox"/> Perk test failure | <input type="checkbox"/> Bedrock near the surface |
| <input type="checkbox"/> Flood plain | <input type="checkbox"/> Prime agricultural land |
| <input type="checkbox"/> Drainage basin | <input type="checkbox"/> Other _____ |

B. How does this proposed incorporation relate to natural boundaries and drainage basins? (Include aerial map if available)

VII. BOUNDARY HISTORY

A. 1. During the past 10 years, has your unit been involved in any proposed detachments, annexations, incorporations, consolidations or conditional transfers?

Yes _____ No _____

2. If yes, list the following for each case (attach extra sheets if necessary):

TYPE OF ADJUSTMENT PROPOSED: _____
 (detachment, annexation, incorporation, consolidation or conditional transfers)

REQUEST INITIATED BY: _____
(registered electors, property owners, city council, township board)

DATE REQUEST FILED: _____
DATE OF DECISION: _____

DECIDED BY: _____
(referendum, County Commission resolution, City Council resolution,
City/Township mutual resolutions, State Boundary Commission action, Circuit
Court, other court)

FINAL DECISION: _____

B. Of those annexations accomplished, are these areas receiving all the village's
services? Yes ___ No ___
No annexations in past 10 years _____

If no, list the areas not receiving services and the services they lack:

C. Does your unit have any joint policies or agreements with adjacent units of
government? Yes ___ No ___

If yes, explain: _____

VIII. PAST AND PROBABLE FUTURE GROWTH & DEVELOPMENT *All done at*

A. How many building permits for the following categories have been issued by your
unit of government within the last 3 years? *County*

_____ Industrial _____ Single Residential Units
_____ Commercial _____ Multiple Housing Structures

B. Business development

1. How many new businesses opened in the last 5 years? 0

How many new jobs were created? 0

2. How many businesses expanded their operations in the last 5 years? 0

How many new jobs were added? 0

3. How many businesses reduced their operations in the last 5 years? 1 ~~unknown~~ *Race track*

How many jobs were lost? unknown

4. How many businesses moved or closed their operations in the last 5 years? 0

How many jobs were lost? 0

C. Have any special studies been conducted in your area regarding the general economic situation? Yes No In Process
If yes, enclose copy.

D. Which of the following development tools serve your unit?

- Economic Development Corporation (PA 338, 1974)
- Local Development Finance Authority (PA 218, 1986)
- Tax Increment Finance Authority (PA 450, 1980)
- Downtown Development Authority (PA 197, 1975)
- Shopping Center Redevelopment Area (PA 120, 1961)
- Empowerment Zone/Enterprise Community/Enterprise Zone
- Local Revolving Loan Fund
- Other _____

Shiawassee Economic Partnership Development.

IX. NEED FOR ADDITIONAL PUBLIC SERVICES

A. What additional services not presently available does your unit, residents and/or property owners feel are necessary in the area proposed for incorporation?

NONE

	SERVICE	DATE IT CAN BE AVAILABLE
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

- B. Of the services listed above, which ones will be difficult to provide?

Why? _____

X. PROBABLE EFFECTS OF PROPOSED INCORPORATION ON THE COST AND ADEQUACY OF SERVICES

- A. If incorporation takes place, how will the change of boundaries affect the receiving unit of government?
- B. If incorporation takes place, and public services are improved, what additional costs will the affected area incur and how adequate will those services be?
- C. If incorporation takes place, what will be the financial effect on the remaining area from which the incorporation area is removed?
- D. If incorporation takes place, what will be the financial effect on the incorporation area?

XI. PUBLIC SERVICES

A. Public Water

1. Does your unit provide public water service? Yes ___ No
2. If yes, who owns the water treatment plant(s)? _____
3. If the water treatment plant does not belong to your unit, has your unit purchased a utility equity in the water system? Yes ___ No ___
4. How many public water customers does your unit have? _____
5. Give the number of homes and also the section numbers in which public water is not available: No. of homes _____ Section No. _____
6. Maximum capacity of your public water system is _____ gallons per day.
Average present usage is _____ gallons per day;
_____ % of capacity.
7. Is your unit under orders or has it been cited by the Michigan Department of Community Health, the Michigan Department of Environmental Quality, the Michigan Water Resources Commission, or any other state or federal agency?
Yes ___ No ___
8. If yes, give the nature of the orders or citations and what actions have been taken

9. Have the issues been addressed or resolved satisfactorily?
Yes ___ No ___
10. Does your unit serve public water to the entire area proposed for incorporation?
Yes ___ No ___
11. If not, how near are water mains of a size adequate to serve the entire area?

12. How is your public water system financed?
____ General obligation bonds ____ Tap-in fees (amount:\$____)
____ Special assessments ____ Other _____

____ Revenue Bonds

13. What is the cost per linear foot to install water lines in the street?
\$ _____
What is the cost per linear foot to extend lines on site? \$ _____
14. If public water service is not available, what other types of water services are available to residents?

15. Have any governmental agencies placed any restrictions on adding new customers to your public water system?
Yes ____ No ____
If yes, describe these restrictions: _____

16. Are there any plans to expand your water system? Yes ____ No ____
17. If yes, what sections or areas will receive services? _____

18. How many new customers are expected to be served? _____
19. What is the estimated total number of customers who will ultimately be served following this expansion? _____
20. This expansion is:
____ under study ____ under contract ____ under construction
21. Estimated date service will be available: _____
22. What charges do customers within your unit pay to receive public water?
\$ _____ connection fee \$ _____ per 1000 gals
23. If water is purchased under contract, do customers outside the unit pay the same rate as those within the unit providing the service? Yes ____ No ____
If no, what charges do customers outside the unit pay to receive public water?
\$ _____
24. Are special charges made in lieu of an assessment? Yes ____ No ____
If yes, what is the amount? \$ _____

25. What must customers outside the providing unit do to receive this public water?

26. If incorporation does not occur, how soon would the area proposed for incorporation receive public water services? _____

B. Sanitary Sewer

1. Does your unit provide sanitary sewer service? Yes ___ No

If yes, who services the treatment plant? _____

2. If the sewage treatment plant does not belong to your unit, has your unit purchased a utility equity in the sewer system? Yes ___ No ___

3. How many sewer customers does your unit serve now? _____

4. How many homes in your unit do not have sewer hookups available: _____; in what sections or areas: _____

5. What is the highest level of wastewater treatment being provided:

Primary ___ Secondary ___ Tertiary ___

6. What methods of waste water treatment are being used?
(Check all that apply.)

<input type="checkbox"/> Activated Sludge	<input type="checkbox"/> Rotating Biological Contactors or Disks
<input type="checkbox"/> Lagoons	<input type="checkbox"/> Groundwater Discharge Mound
<input type="checkbox"/> Sand Filter	<input type="checkbox"/> Sequencing Batch Reactors
<input type="checkbox"/> Trickling Filter	<input type="checkbox"/> Other _____

7. Where does the wastewater treatment plant discharge its effluent?

Surface water (Name/Location) _____

Ground infiltration (Name/Location) _____

8. Maximum capacity of the sewer system is _____ gal/day.

9. The average usage is _____ gal/day; _____ % capacity.

10. Does your sewer ordinance require residents to hook up? Yes ___ No ___

If yes, how near does the sewer line have to be? _____ feet.

11. Does your unit provide sanitary sewer service to the area proposed for incorporation? Yes ___ No ___
12. If not, how near to the area proposed to be incorporated are sewer lines of a size adequate to serve the area? _____
13. How is your sewer system financed?
___ General obligation bonds ___ Tap-in fees (amount \$ _____)
___ Special assessments ___ Other: _____
___ Revenue bonds
14. What is the cost per foot for installation of sewer lines in the street?
\$ _____
What is the cost per foot for extension on site? \$ _____
15. Are you under orders to improve your wastewater treatment?
Yes ___ No ___

If yes, describe: _____
16. Are there plans to expand the sewer system? Yes ___ No ___
17. If yes, what sections or areas will receive services? _____

18. Have you received approval from the involved state agencies for expansion of the sewer system? Yes ___ No ___
19. What is the estimated total number of customers who will ultimately be served by this expansion? _____
20. This expansion is ___ under study ___ under contract ___ under construction
21. Estimated date service will be available: _____
22. What do customers within your unit pay to receive sewer service?
\$ _____ connection fee \$ _____ per 1000 gal.
23. If sewer service is purchased under contract, do customers outside the unit pay the same rate as those within the unit providing the services?
Yes ___ No ___

If no, what charges do customers outside the unit pay to receive sewer service?
\$ _____

24. Are special charges made in lieu of an assessment? Yes ___ No ___

If yes, what is the amount? \$ _____

25. What must customers outside the providing unit do to receive this sewer service? _____

26. If incorporation does not occur, how soon would the area proposed for incorporation receive sewer service? _____

C. Fire Protection

1. Fire protection for your unit is provided:

by your own department - Ovid - Middlebury Emergency Service Authority
 under contract from another unit: (OMESA)
by the Ovid Middlebury Emergency Service Fire District which serves the following units:
Village of Ovid, Ovid Township, Middlebury

2. Underwriters rating: _____

3. What is the composition of the fire department that provides fire protection to your unit?

Number of fire fighters on force: Full-time _____ Volunteer 20 approximately

4. How is the fire department financed?

Special Assessment
 General obligation bonds
 Other _____
 Charge for each fire run
 General operating funds
 Millage ↗

5. Who provides fire protection to the area proposed for incorporation?

OMESA Underwriters rating: _____

6. If the incorporation is approved, who would provide fire protection?

OMESA

7. How near is the fire station now providing fire protection to the area proposed for incorporation? 3 blocks (approx.)

8. If the incorporation is approved, how near would the fire station providing fire protection be? 3 blocks - same fire service

no change with incorporation.

D. Police Protection

1. Police protection for your unit of government is provided:

by your own department

by the county sheriff

under contract from another unit: _____

from the _____ Joint Service District which serves the following units: _____

2. What is the composition of the police department? County Sheriff

_____ Full-time officers

_____ Part-time officers

3. How is the police department financed?

Special Assessment

Charge for each police run

General obligation bonds

General operating funds

Other _____

4. Who provides police protection to the area proposed for incorporation?

Clinton Co. Sheriff, Village Police
of Ovid

5. If the incorporation is approved, who would provide police protection?

Clinton Co. Sheriff, Village Police
of Ovid

6. How near is the police station which now provides police protection to the area proposed for incorporation? 3 blocks

7. If the incorporation is approved, how near would be the police station which provides police protection? 3 blocks

Police service wouldn't change

E. Garbage Collection

1. Does your unit provide garbage collection service? YES NO

This service is provided by:

your unit via contract with private firm.

your unit via an intergovernmental or regional contract.

If No: this service is provided by private arrangements between residents and property owners with individual haulers.

If No: this service is not available.

If the answer to 1 was "Yes" respond to the following (2 - 5):

2. How many homes are served? _____
3. Does this service include the area proposed to be incorporated?
Yes ___ No ___
4. How often is the pickup made? _____
5. How is the service financed?
___ Special Assessment
___ Each homeowner billed for service by governmental unit
___ General operating funds
___ Paid by resident to individual hauler

F. Street Lights

1. Does your unit have a street light program? Yes No ___
If yes, how is the program financed? General Fund
2. Approximately what percentage of the area is served? _____

G. Library Service

1. Does your unit provide library service? Yes No ___
2. If yes, it is: ___ unit operated ___ county wide area wide.

H. Name of School District(s): Ovid-Elsie Area Schools

I. Other services available to your unit's residents:

TYPE OF SERVICE	FURNISHED BY UNIT OR ON CONTRACT?	METHOD OF FINANCING
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

XII. FINANCIAL ABILITY TO PROVIDE AND MAINTAIN SERVICES TO YOUR UNIT

A. What major capital improvements have taken place in your unit in the last five years, and how were they financed? NONE

IMPROVEMENT	FINANCED
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

B. Does your unit of government have application for bonds before the Michigan Municipal Finance Commission? Yes ___ No

If yes, state the kind of bond, purpose, total amount of bonded indebtedness and the maturity date:

KIND	PURPOSE	AMOUNT	MATURITY DATE
_____	_____	\$ _____	_____
_____	_____	\$ _____	_____

C. Indebtedness related to the area proposed for incorporation.

1. Does your unit of government have any bonded indebtedness in place or in process that affects the area proposed for incorporation?

Yes ___ No

a. If yes, state the following about the debt:

TYPE	PURPOSE	AMOUNT	MATURITY DATE
_____	_____	\$ _____	_____
_____	_____	_____	_____

b. If yes, attach copies of any "Order of Approval" issued to your unit by the Municipal Finance Commission that relate to bonds for sewer or water facilities

_____ serving the incorporation area and include copies of maps describing the physical location of the sewer and water lines.

2. Has your unit incurred any other liabilities relating to the area proposed for incorporation? Yes ___ No

If yes, describe the liabilities and their value (\$).

3. Has your unit signed any other contractual agreements affecting the area proposed for incorporation? Yes ___ No

If yes, list the agreements and include copies.

4. Has your unit accumulated any assets attributable to the area proposed for incorporation? Yes ___ No

If yes, describe the assets and their values(\$).

5. What percent of your total sanitary sewer, public water, storm drainage and other utility(ies) exist in the area proposed for incorporation?

0 % sewer

0 % public water

0 % storm drainage

___ % other _____

XIII. GENERAL EFFECT UPON COMMUNITY OF PROPOSED ACTION

- A. What is the position of your government officials on this proposed incorporation?

We are presently taking no position on this proposed incorporation.

- B. What is the position of the affected residents in the proposed area for incorporation towards this petition?

- C. What is the position of your constituents towards this petition?

**XIV. WHAT IS THE RELATIONSHIP OF THE PROPOSED
INCORPORATION TO ANY ESTABLISHED TOWNSHIP, VILLAGE,
CITY, COUNTY OR REGIONAL LAND USE PLAN?**

**PLEASE PROVIDE THE FOLLOWING INFORMATION FOR THE INDIVIDUAL PARCELS
WITHIN THE AREAS HIGHLIGHTED ON THE ENCLOSED MAPS:**

- 1. Current Tax Rate**
- 2. Tax Rate if included in the Incorporation**
- 3. Current Zoning**
- 4. Current Usage of the Land.**
- 5. State Equalized Value (SEV)**

List the people who completed this questionnaire:

Name	Title	Telephone (include area code)
<u>Susan Tomasek-Swan</u>	<u>Clerk</u>	<u>989-834-5842</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Date Completed 9/20/13

Middlebury Township Land Use Plan

February 2001

Shiawassee County, Michigan

Planning Task Force members:

Kim Case

Mark Cooley

Paul Dutton

Jo Easlick

Janet McCreery

Nancy Watkins

Laxy Richards

Richard Semans

Steve Semans

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OFFICE OF LAND SURVEY &
REMONUMENTATION

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Table of Contents

Preface.....	1
I. Introduction.....	2
II. Regional Setting.....	5
III. Population Profile.....	8
IV. Township Setting.....	19
V. Issues.....	45
VI. Goals and Objectives.....	52
VII. Strategies.....	58

Figures

Figure 2-1	Regional Setting	6
Figure 2-2	Township Roads	8
Figure 3-1	Sprawl Process.....	11
Figure 3-2	School Districts	16
Figure 4-1	Drainage Map.....	24
Figure 4-2	Erosion Areas.....	25
Figure 4-3	Soils Prime for Agricultural Production.....	29
Figure 4-4	1930 Plat Map.....	33
Figure 4-5	1961 Plat Map.....	34
Figure 4-6	1974 Plat Map.....	35
Figure 4-7	1982 Plat Map.....	36

Figure 4-8	Consumptive Splits Vs. Good Design.....	37
Figure 4-9	Consumptive Splits Vs. Good Design.....	38
Figure 4-10	Large Lots, a Waste of Land.....	39
Figure 4-11	Strip Residential and Bowling Alley Lots.....	40
Figure 4-12	Getting Around Regulations.....	41
Figure 5-1	Suburban vs. Rural Character	49
Figure 6-1	Rural Clustering.....	54
Figure 6-2	Rural Clustering.....	55
Figure 6-3	Rural Clustering.....	56

Tables

Table 3-1	Area Historic Population	10
Table 3-2	Household Composition.....	12
Table 3-3	Age Groups.....	14
Table 3-4	School Enrollment	17
Table 3-5	Income Levels	18
Table 3-6	Poverty Levels	19
Table 3-7	Population Projections	20
Table 4-1	Prime Soils in Shiawassee County.....	27
Table 4-2	Property Values.....	31

Appendix

- A Materials Reviewed
- B Glossary of General Terms and Zoning Terms
- C Community Survey Results
- D Relevant State Laws Relating to Planning and Zoning
- E Planning Commission Bylaws
- F County Soils Key
- G Current Zoning Map
- H Planning Resource Contacts
- I Zoning Reminders
- J Plat Map, Soils Map and Topographic Map

Preface (Editorial)

For the most part, this plan is structured like many “traditional” land use plans found in Michigan communities. There are, however, some “untraditional” elements to the plan in that it calls out some unpleasant realities of land use issues we face in Michigan. Specifically, it points out the practices that promote the vicious cycle of urban sprawl; and consumptive trends that threaten countrysides, open space, and agriculture.

It is my opinion that planners and the communities they work for generally do a poor job of identifying the real land use issues present in society because it causes too much personal and political discomfort. While objectivity is supposed to be part of the planning process, we should not be so objective that we don't say anything of substance in our plans. Keeping peace to keep comfortable is no way to plan for our future. The truth is, consulting planners who make clients uncomfortable may have a difficult time getting future clients. Staff planners who cause controversy become political liabilities and may have their livelihood threatened. The result? Watered down, superficial plans that don't really arm a community to take charge of its future.

As the author of Middlebury Township's plan, I'm in a unique position of being a consulting planner, yet not having to rely on consulting for my livelihood. I've worked both in consulting and at township and county levels of local government—some of that time with Shiawassee County. I've seen the same land use trends facing Middlebury Township unfold in hundreds of Michigan communities. I've read dozens of studies at state and national levels warning about the ills of growth pressures, growing service demands and sprawling development. With all the discussion and literally decades of “planning” I can honestly say I've seen very few communities really get a grip on good planning and well designed development.

The other side of the equation is the stance many local officials take on development. The perspectives that “development is good, it means tax dollars” and “landowners should be able to do what they want with their land” are terribly short-sighted. All development is not good, in fact, dispersed rural development rarely pays its own way. It takes more tax money to service this type of development than is brought in. Unchecked, large-lot, development in rural areas actually yields very few winners. These are the few land owners who truly “cash-in” on a development and the few real estate agents who manipulate the system for personal windfalls—often, profiting much more than the original large land owner they purchased the land from.

Collectively, the liability we leave behind may go unnoticed for years. Incrementally, the landscape changes, service demands increase, and the social costs stack up. By the time someone notices the negative impacts of past practice, the floodgates of market pressure and land sales are open and it's difficult to turn back.

I worked with several townships in Shiawassee County to update their Land Use Plans because I believe that a handful of thoughtful, well-informed people *can* make a difference. If ever I found determination to take a stand I found it in some of the township officials in Shiawassee County.

If I get no other message through—**be informed about what your land use policies will really bring your community; and have the strength to work together and consistently and competently stick with your policies.**

Brenda M. Moore, AICP, PCP

I. INTRODUCTION; PURPOSE OF THE PLAN*

Overview

The purpose of the Middlebury Township Land Use Plan is to guide policy and decision making for all future land and infrastructure development decisions within the Township. ~~The Plan both describes current conditions and outlines future goals and objectives. Within the Plan are several key components including:~~

- ~~An inventory of current conditions in the Township;~~
- ~~Identification of key development trends of the region and the Township;~~
- ~~Acknowledgment of critical planning issues facing the Township;~~
- ~~An outline of goals, objectives and strategies;~~
- ~~A description of future land uses and public facility standards.~~

This Plan is adopted pursuant to the authority of the Township Rural Planning Act, PA 168 of 1959. This Act provides for the preparation of a "basic plan" to promote community health, safety, and welfare through provisions for the use of land and resources and the assurance of adequate public facilities and services. The County Planning Commission further reinforces this plan by adopting it with their authority under Public Act 183 of 1943.

The Middlebury Township Land Use Plan is a "basic plan". It is prepared as a foundation for, and depends primarily upon, the zoning ordinance and subdivision regulations for its implementation. Although this Plan includes specific land use development policy and proposes specific land use arrangements, it has no regulatory power. It provides the foundation and impetus, however, for land use regulations and the decisions associated with them.

All proposed future land uses and policies presented in this Plan were developed based on a combination of the natural capability of the land to sustain certain types of development; the important natural functions played by unique land and water resources in the area; the relative future need for residential and commercial land uses; the existing land use pattern; the relationship of undeveloped lands to existing community character; and the desires of local residents and public officials as expressed through interviews, the community survey and public meetings.

This Plan is intended as support for the achievement of the following public objectives, among others:

- to protect public health, safety and general welfare;

- to conserve and protect property values by preventing incompatible uses from locating adjacent to each other;
- to protect and preserve the natural resources, unique character, and environmental quality of the area;
- to maintain and the enhance agricultural economy of the area;
- to maintain a healthy, self-sustaining tax base in the area;
- to promote an orderly development process which is paced in coordination with the Township's ability to provide services and which permits public officials and citizens an opportunity to monitor change and review proposed development in a reasonable manner;
- to provide information from which to gain a better understanding of the area and its interdependencies and interrelationships, and upon which future land use and public investment decisions may be based; and
- to provide efficiency and economy in governmental administration.

Planning should exert a positive influence rather than just promulgating regulations and restrictions. The Plan is an instrument for converting citizen's goals and aspirations into reality. This plan should be reviewed with regularity and amended as needed.

Structure of the Plan

The Plan has five interrelated components:

1. Inventory - a brief background assessment of the current conditions within the Township including physical, environmental and social characteristics.
2. Analysis - identification of trends and important characteristics which have the potential to affect or predict future growth patterns.
3. Goals and objectives - stating the desires of the Township residents relative to future growth and plans to fulfill these desires.
4. Implementation strategies - the tasks or actions to be taken by the Township to help achieve goals and objectives and adhere to stated policies.
5. Future Land Use Map - graphic representation of the physical and spatial arrangement of various land uses thought to be most in conformance with identified objectives and best suited for a particular use as defined by the Township planning process.

Application of the Plan

This Plan is presented to assist all elected and appointed officials when making difficult choices between competing interests by serving as a guide for decision making. It is anticipated that this plan will be consulted in the following situations:

Review of rezonings, variances, site plan review and special use permits: Applications for rezonings, variances, site plan approval or special use permits should be evaluated not only in terms of specific regulatory standards (e.g., the Zoning Ordinance), but also in terms of how well the proposed action would help attain the goals and objectives of this Plan and fulfill its policies.

Public improvement projects: All future public improvement projects, including the construction of new facilities, utilities or buildings, should first be reviewed by the township and county for consistency with this plan. Such projects should be reviewed to determine consistency with the goals, objectives and policies in the Plan, and whether they conform to the planned future land use patterns contained herein.

Review of land subdivision and lot splits: The subdivision of land and associated lot split activities has a profound impact upon the character of a community, future public service needs, and tax burdens. This plan provides policies to assist the Township Planning Commission, Township Board of Trustees, County Planning Commission and County Board of Commissioners when making decisions regarding the appropriateness of proposed subdivisions and lot splits, and the adequacy of public services to serve them.

Township stability: This plan is a strong and visible statement by the Township and its residents regarding the intended future character of the community and strategies to assure that character. As a formal and tangible document, this plan instills a sense of stability and direction for Township officials, Township activities, and Township residents.

The Planning Process

The planning process used in developing the Middlebury Township Land Use Plan included a combination of local interviews, public meetings, map interpretations, data analysis, and a community survey.

Draft goals and objectives were developed from the community survey executed by the Township. Goal and objective statements were presented formally at a public hearing for discussion. Input lead to a refinement of the goals and objectives and the development of alternative future land use development patterns. This plan is clearly a statement of the desires of the Middlebury community.

*Adapted from the Michigan Society of Planning Officials

To be added after public hearing

II. REGIONAL SETTING

It is important to understand how a community's geographic position influences its development. Proximity to major roads, other developing areas, or just paved roads will influence migration and market demand for land, which in turn, influences development patterns and land use.

Middlebury is on the edge of Shiawassee County near the fringe of an expanding Greater Lansing metro area (see Figure 2-1). Sciota Township lies to the south; Owosso Township to the east; Fairfield Township to the north and Clinton County to the west. Owosso Township is the most suburbanized of these townships; being closest to the City of Owosso and bisected by M-21. In 1990, Owosso Township was approximately three times the size of Middlebury in terms of population. Middlebury's population was closest to Sciota's in 1990.

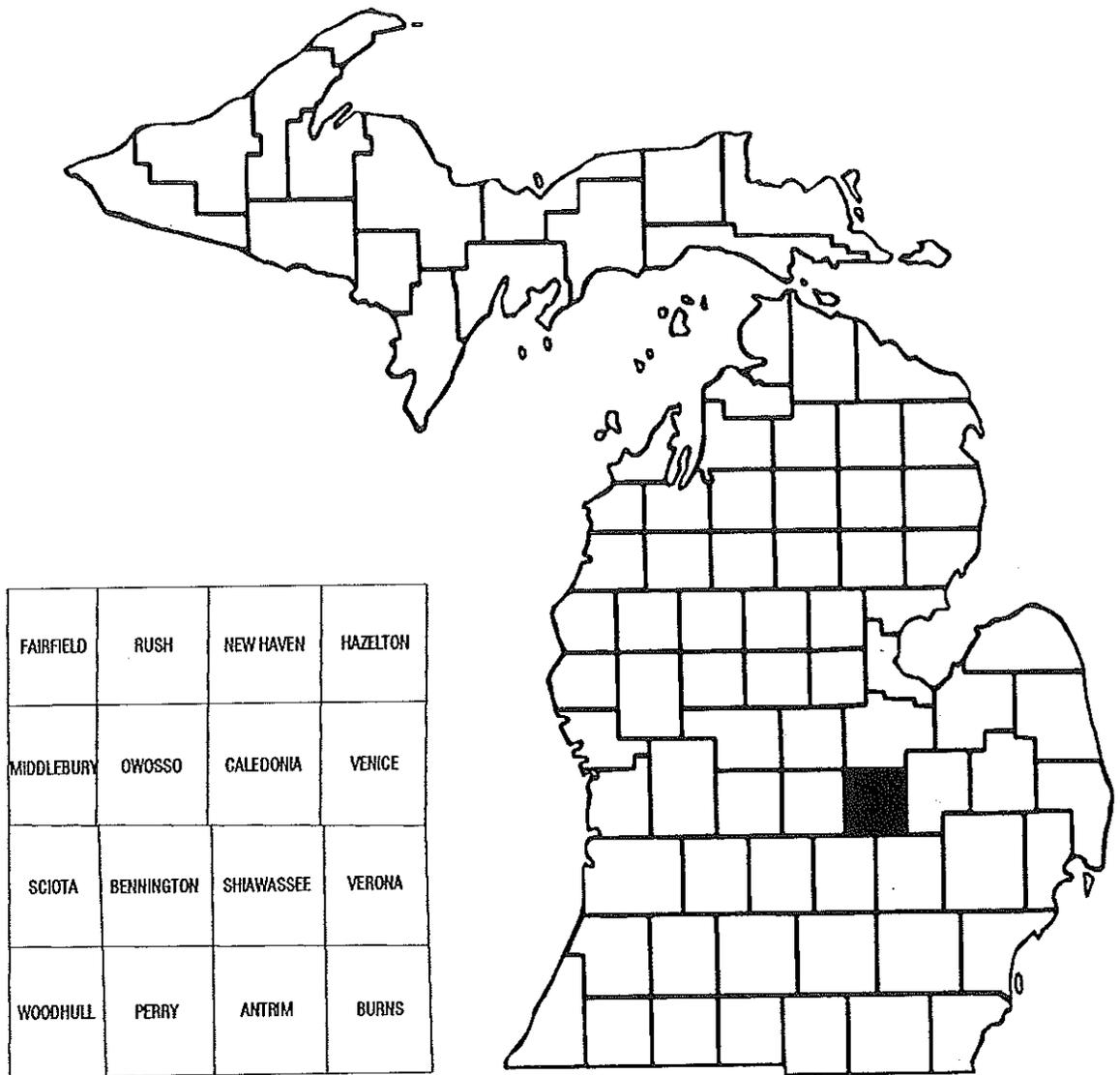
The sister cities of Owosso and Corunna represent the most concentrated development in Shiawassee County. The City of Corunna is the county seat and the City of Owosso is the county's largest city. This area is about 6 miles from the eastern edge of Middlebury Township. Many of Middlebury's residents have ties to Lansing, St. Johns, Ovid and Owosso in terms of employment and shopping. Since the completion of U.S. 27, Middlebury can expect increased development pressure from the west.

Interstate 69 cuts across Shiawassee County and connects to Lansing, Flint and Detroit metro-areas. M-21 is another major east/west route through the county. Large portions of Shiawassee County are bedroom communities to people working in Flint, Detroit, Saginaw and Lansing. A bedroom community is one that is primarily residential, with limited commercial and industrial development. Residents work, shop and recreate in other areas. The downside of this form of development is that the tax burden for all community services lies with homeowners and farmers and it is not shared with businesses (who typically demand less service than residential development).

The following township roads are classified as primary hard surface: Carland, Hibbard and Baldwin (up to M-21). Parts of Baldwin, Simpson, Krouse, Mason and Meridian Roads are classified as local hard surface roads. The remainder of the township road system is gravel roads in various states of repair (see the "Township Road System" Map).

Middlebury is not a full-size township in that it is missing a western tier of sections found in a standard township (sections 6, 7, 18, 19, 30 and 31 are missing). Sections 5, 8, 17, 20, 29, and 32 are only partial sections. This is due to the fact that Meridian Road was a correction line for state surveying that started in the easternmost part of Michigan and ran west. The settlement of Ovid encroaches on a portion of section 16 of the township (Mabbit's Addition). Middlebury is only about three-quarters of the size of a traditional township. Having a smaller township means there is less area to plan for and service; and less land for development. Regardless, land is a limited resource and once converted from agriculture and open space, it rarely goes back. Development becomes more intense, dense and often more difficult to manage as it evolves.

Figure 2-1



LOCATION MAP

MIDDLEBURY TOWNSHIP
SHIAWASSEE COUNTY, MICHIGAN

III. POPULATION PROFILE

Introduction

Characteristics of the population tell a story about a community. Variables like income levels, types of households, and age break-downs are indicators of life stages and lifestyles. People make decisions about where to live, work and play based on their life stage. They have certain needs and demands based on their lifestyle. As examples: A single-person, senior household has different needs than a married-couple household with several small children. A population with high household income levels is much more mobile, and typically demands higher levels of public service, than a population of households with low income levels.

This chapter highlights population trends in Middlebury Township. With a basic understanding of its population, a community can begin to predict future needs of its residents in terms of service demand and land consumption. The data following are presented to identify trends, which are indicators of potential land use and service demand. Although most of the data is derived from the 1990 Census, it still presents a good relative picture of population trends affecting Middlebury's evolution. When the 2000 Census information is finalized, trend analysis can be updated and modified as needed.

Population

In 1960 Middlebury's population was ^{1,043} people. By 1990 the total population was 1,536; a sizable population increase of about 88% in three decades (see Table 3-1). In that same 30 years, the county population went up about 23%. Like its neighboring townships of Sciota and Owosso, Middlebury's population has grown primarily due to people relocating from urban and suburban areas into rural areas. For perspective's sake, Middlebury Township's 1990 population was about the same size as Owosso Township's was in 1950.

Table 3-1
Historic Population

	1960	1970	1980	1990	2000 (est.)
Middlebury Twp.	1,043	1,362	1,574	1,536	1,683
Sciota Twp.	855	1,054	1,527	1,578	1,729
Owosso Twp.	2,989	4,002	4,530	4,121	4,384
Fairfield Twp.	837	964	904	790	866

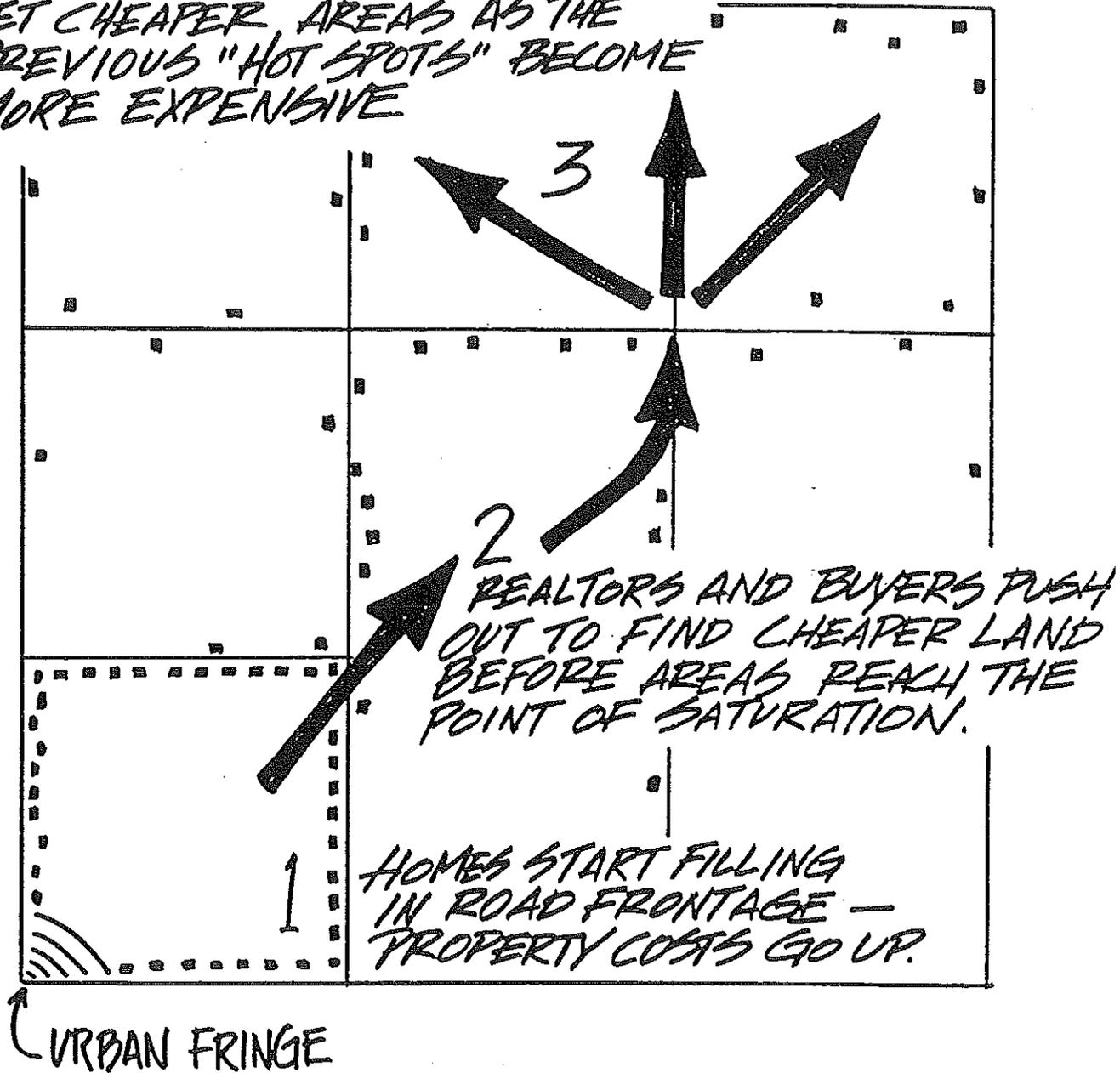
Population increases in Middlebury Township can be attributed primarily to in-migration from the greater Lansing area and Owosso urban area. This migration is often due to people leaving congested and poorly designed communities to seek a quieter lifestyle in the country. Ironically, the same land use and design mistakes are made in these rural areas and the suburbs are created all over again. Property costs get high, taxes increase significantly, and quality of life is perceived to decline. A few decades later, people are moving out again to find greener, cheaper pastures. This phenomenon has been coined "urban sprawl", see

Figure 3-1. Migration primarily originated from urban centers and moved to adjacent undeveloped areas creating the suburbs. When those areas are deemed undesirable or too expensive a portion of the population will move on to the rural/suburban fringe driving market demand for new rural sites. Urban sprawl has been debated since the 1950's and we are still facing its growing impact some 50 years later.

An indicator of in-migration for Middlebury is found in the 1990 Census. As of 1990, one-third of the households in the township had lived in a different home five years before that. Some of these individuals may have moved within the Township, but the majority of them relocated in the Township from elsewhere.

Figure 3-1

DEVELOPMENT SPRAWLS ACROSS THE LANDSCAPE AND LEAP-FROGS OUT TO YET CHEAPER AREAS AS THE PREVIOUS "HOT SPOTS" BECOME MORE EXPENSIVE



SPRAWL and LEAP-FROGGING

Race and Households

In terms of race the 1990 Census showed that Middlebury is relatively homogenous, being 98% white in 1990. Comparatively, 88.5% of the County's population and 76.8% of the State's population is white.

Many communities in Michigan lost population between 1980 and 1990 or had small increases in population. Decision-makers in these communities may have been lulled into complacency, believing that there would be less public service demand because of a reduction in population. This is far from the truth. A loss of population does not correlate to a loss of households. Many communities who lost population in the 1980s actually experienced a gain in number of households. Trends toward smaller families, more one-person households, and single-parent households reduce the number of persons per household but reflect an increase in the total number of households across the state and nation. While Middlebury experienced a 3% population **loss** between 1980 and 1990, it experienced a **gain** in the number of households by about 6.5%. There were 509 households in the Township in 1990, and 478 households in 1980. This is a significant trend. In terms of land use planning, it is a better practice to monitor changes in the number of households rather than changes in the population because it is the household unit, that is the consumer of land and public services.

In 1990, about 71% of all households in Middlebury were married-couple families; about 20% were non-family households and about 9% were single-parent households. Non-family households include single-person households and households with unrelated or unmarried individuals.

The incidence of married-couple families in the Township is considerably higher than the state's level of only 55.1%. Middlebury is becoming a "bedroom community" which means that families live there but commute elsewhere for work and shopping. When considering planning issues in the township it is important to understand that married couples and married couples with children are the largest sector of Middlebury households. These households generally have more service demand for better roads, schools, and public safety.

Although the percentage of married-couple households in the Township is high, it has experienced an increase in "non-traditional" households. Between 1980 and 1990, household composition shifted as follows:

Table 3-2
Household Composition; Middlebury Township
(rounded)

	<u>1980</u>	<u>1990</u>	<u>2000</u>
Non-family households	12%	18%	
Married-couple families-total	81%	72%	
Single-parent households	6%	10%	

Middlebury has a strong "married-couple family" component to its households, but the needs, desires, and perhaps the limited financial means, of nontraditional households need to be considered in planning efforts. Issues like affordable housing, rising taxes, community services, and low cost recreational opportunities can be critical to households with fixed, poverty level, or moderate incomes.

Another indicator of the family orientation of the Township is the average number of persons per household. In 1990 average household size in the Township was 3.02 persons per household. This is higher than the county average of 2.78 persons per household. The state average was lower still at 2.66 persons per household.

Households have been getting smaller in the last several decades. Fewer people per household means that less people (on a per-household basis) are using more land and demanding more services. For example, a few decades ago, a "typical" family may have had three children, one car, and both parents in the home. The family's one vehicle served five individuals. The public school bus made one stop to serve three children. Today, an average family in the county has 2-3 cars, 0-2 children and demands more public services on a household unit basis. School buses make more stops to pick up students and cars travel county roads more. Conversely, the tax burden on individual households will become higher as municipalities struggle to keep an acceptable level of service for a dispersed population.

Households locating from suburban areas often demand a higher standard of governance and service for their community. There are many rural townships in Michigan who experience a rift between what is coined as the "old guard" (generally landed farmers) and the "new guard" (suburban professionals). Long-term residents are used to minimal rural services while the new residents have higher expectations for service because they came from suburban or urban areas that provided more services. Ironically, the new residents also often want to "close the door behind them" limiting future development to keep the rural lifestyle they moved out to enjoy. To further compound matters, large landowners (usually farmers) feel increased market pressure to sell their land. It's difficult to ignore the fact that an acre of farmland in the township sells for an average of about \$2,500 per acre while that same acre of land for a building site could bring \$15,000-\$25,000 (estimates based on late 1999 figures).

Housing

In 1990, there were 528 housing units in the Township, the majority of which were single-family in nature (87%). About 12.5% of the housing units were mobile homes. Most of the housing units were classified as owner-occupied (85%). The county's home ownership rate is lower than Middlebury's at 78%. Comparatively, the state average is at 71% owner occupancy.

In terms of land use issues, single-family housing is the largest consumer of land in Michigan communities. This is even truer in Middlebury, because most of the single

Last entered

family-development is on large lots (e.g., 1, 3, 5, 10 or more acres). Not only does large-lot development consume more land quicker, it threatens rural character and the viability of the state's agricultural industry. Further, large-lot single-family development rarely pays its way in terms of taxes collected vs. services demanded.

The Township's housing stock is relatively new in that 48% of it was built in two decades; 1960-1979. Between 1970 and 1979 alone, 136 units were built. Between 1984 and 1994 an average of 6 new homes were built per year in the township.

In 1990, median value of owner-occupied housing in the Township was \$51,300; higher than the county average of \$47,200. State median housing value in 1990 was \$60,600.

Age Composition

Middlebury's family orientation is reflected in its higher percentage of school-aged children and its lower percentage of senior citizens (see Table 3-3). The median age of the township is also lower than county and state averages.

Table 3-3
Age Groups; Percent of the Total Population (1990)

	<u>Township</u>	<u>County</u>	<u>State</u>
School-aged (under 18)	31%	28.6%	26.5%
Seniors (over 65)	10.4%	11.1%	11.9%
Median Age	31yrs.	32.5 yrs.	32.6 yrs.

Education

Overall, Middlebury Township residents have a lower percentage of high school graduates than the county and the state. As of 1990, about 76.1% of the Township's population were high school graduates or higher; the state's figure was 76.8%. The Township also has a lower rate of persons with a bachelor's degree or higher with about 6.4% of the population 25 years and over holding a college degree. The County had 78.7% of its population as high school graduates or higher and about 10% holding a bachelor's degree or higher.

School Enrollment

Two public school districts serve Middlebury students; Ovid-Elsie and Owosso (see Figure 3-2). Note how enrollments have decreased over time in both districts.

Table 3-4 School Enrollment

<u>Year</u>	<u>Ovid-Elsie K-12 enrollment</u>	<u>Owosso K-12 enrollment</u>
1982	2,074	4,750
1986	1,980	4,603
1990	1,845	4,496
1994	1,800	4,482
1998	1,810	4,450
2000	1,750	4,189

Source: Michigan Education Directory 1982, 1986, 1990, 1994, 1998 and 2000 school years.

Figure 3-2



Middlebury Township

Shiawassee County Intermediate School District

Labor Force and Employment

Of the 1,127 persons 16 years and over in the Township at the time of the 1990 Census, about 67% were in the labor force. About 60% of females and about 75% of all males were employed. Middlebury has a high incidence of two-income households. The top four occupations among Middlebury Township workers were:

- * Precision production, craft and repair--17% of all Township workers;
- * Administrative support, including clerical--14.7% of all Township workers;
- * Machine operators, assemblers and inspectors - 12% of all Township workers.
- * Service occupations—11% of all Township workers.

The top four occupations represented about 55% of the labor force.

While occupation refers to the type of work a person does, industry refers to that sector of the economy that employs them. In 1990, the top three industries that provided jobs to Township workers included:

- * Manufacturing – 32% of all Township employment;
- * Retail trade - 16% of all Township employment;
- * Health Services – 9% of all Township employment.

The top three industries employed about 57% of the work force.

Not surprisingly, the majority of Middlebury workers commute to work. The average commute to work was about 27 minutes, which may indicate a strong tie to employment centers in the Lansing and Owosso areas.

Income

Income is analogous to mobility, both physically and socially. There are four common measures of income in the Census; median household income, median family income, median income of non-family households, and per capita income. Household income figures include all households in a community, no matter what their composition. Family income is a subset of all households and only looks at family households. Non-family household income is the other subset of all households and includes single-person households, and households with unrelated individuals living together. Per capita income distributes all income among each individual in a community (non-workers, such as children, are included).

In all cases, Middlebury Township's income figures are lower than both state and county averages (see Table 3-5).

Table 3-5
Median Income Levels – 1990

	<u>State</u>	<u>Township</u>	<u>County</u>
All households	\$31,020	\$30,179	\$30,283
Family households	\$36,652	\$32,083	\$34,557
Nonfamily households	\$16,690	\$12,054	\$14,042
Per capita	\$14,154	\$11,155	\$12,244

Poverty levels in the Township are close to county averages. In 1990, 11.7% of the entire population of Middlebury Township was below poverty level; about 11% of the county's population and 13.1% of the state's population were below poverty level. Poverty levels for subsectors of the population are much higher than in the overall population (see Table 3- 6).

Table 3-6
Poverty Levels; Subsectors of the Population
Percent in Poverty - 1990

	<u>State</u>	<u>Township</u>	<u>County</u>
Persons 65+	10.8%	15%	9.9%
Unrelated persons	25.9%	22.2%	26.1%
Children 5-17 yrs.	16.7%	16.2%	11.8%
Children < 5	22.1%	19%	20.7%

In 1990, about 10% of all township households were on public assistance. About 26% were on social security. Note that the number of the township's senior citizens in poverty was higher than the county and state averages. Some of these individuals may be large land-owners whose assets are in their land. With increasing cost of living and market demand for rural homesites, these individuals often succumb to market forces and sell their land off. Even though a profit is made by the landowner, the largest profit is realized by the agents who further divide and sell the land. Unfortunately, the land divisions are often made by land owners or realtors with little or no thought put into the future impact on the community overall.

Demographic Projections

Population projections are sometimes little more than educated guesses about what may happen in the community, but there needs to be some basis for discussing future land use demand scenarios. Averaging population estimates based on several projection techniques

is an accepted method of predicting future population. Because the 1990's were much more prosperous than the 1980s, the township will see a larger population increase between 1990 and the year 2000. Following are four projections of future population for the township; average rate of growth, straight-line projections, population estimates based on new housing builds, and "stepping down" county projections. See also Table 3-7.

If the average rate of growth over the last three decades (16% per decade) keeps up for the next three decades, by the year 2020, Middlebury's population would be around 2,400 people.

Straight-line projections predict that the Township's 2020 population will be approximately 2,750.

Using the current rate of new home builds, about 6 new homes annually with 3 persons per household, suggests a year 2020 total population of 2,076.

Population projections from the state predict the county will have a year 2020 population of 80,910. Population projections at the state level are fairly elaborate. Several variables of the population are assessed that are difficult to consider at a township level (e.g., birth and death rates, migration patterns) but these figures can be "stepped down" to the township level. In 1990, Middlebury Township represented about 2.2% of the total county population. If this ratio holds true, by the year 2020 the population will be about 1,780.

Table 3-7
Population Projections; Summary

<u>Method</u>	<u>2020</u>
Average rate (based on last 30 years):	2,400
Straight line (continued increase):	2,750
New builds (using current household size):	2,076
<u>Portion of county population:</u>	<u>1,780</u>
Average:	2,251

Averaging these methods (which generally yields the best results) indicates a 2020 population for the township of about 2,324 individuals.

Many variables can affect the township's future population growth, however, including a change in densities permitted by zoning, a large development that concentrates population, or another economic fluxes.

IV. TOWNSHIP SETTING

Start
where 11/1/07

Community Facilities

Government is a service provider. Depending on the size and nature of the community, the services provided vary. Typically urban or suburban communities have full-time staff which include police and fire departments. Public water and sewer systems must be provided when population density reaches a certain point. Other services generally include trash, recycling, and yard waste pick-up, public transportation and public works like sidewalks, storm water systems, road maintenance, and park systems. This level of service means higher taxes and/or user fees, which can make cheaper taxes in the country more appealing. After suburban transplants come to the country, however, they often begin demanding the public services they were used to in the city.

Townships are generally rural, have part-time elected officials (who wear many hats) and provide minimal services because of their large area, relatively small population—and small tax base. Such is the case with Middlebury. Part time elected officials are the staff. The county provides the remainder of public services (e.g., zoning enforcement and building inspections). Township residents have individual wells and septic fields. At some point, small tracts like Synder Manor and Mabbit's addition may need alternative sewage disposal like group systems or sewer service. Special assessment districts will likely have to be used to finance such improvements.

The largest expenditure from the township budget is roads. The County Road Commission takes care of the road system. The township pays for a portion of County Road Commission services. Grading and brining, paving and repaving are under cost-share arrangements. While service to roads and spending on roads has increased, so too have complaints about the roads. This is because a gravel road cannot handle much more than the traffic of 10 households on a one-mile stretch without breaking down. No matter how much the stretch is graded and brined, the washboard, dusty road will return. The condition and upkeep of roads was an issue in the township survey. Dust drifting into homes from the roads is also of concern.

Other than M-21, Carland Road, Baldwin Road (North of Hibbard) and Warren Road (South of M-21) are the most heavily traveled in the township. In general, they all average over 1,000 vehicle trips per day.

The County Sheriff and State Police provide police protection to the Township. The Shiawassee County Sheriff's department provides primary police service. There are generally three cars patrolling the *entire* county during the day and two cars at night. The state police can provide some back up to the County but they cover several counties and their primary charge is to patrol state highways. Fire and ambulance service is provided by Ovid area fire and ambulance.

In terms of recreational or cultural services, the Village of Ovid has a library and parks. The school system also has sport fields. The closest county parks for Middlebury residents are

several miles away. Henderson County Park is in Rush Township and Geeck Park and Shia-town Parks are in Shiawassee Township. Hundreds of acres of public land are also available in Rose Lake State Game Area and Sleepy Hollow State Park, located in Clinton County to the west.

As development and density increases so will the demand for public services. Citizens will want better roads, more public safety and expanded services like garbage pick-up. Increased development density requires a higher level of fire and police protection. Public water and sewer often follow. The population also places additional transportation burdens and cost on the school system. Dispersed rural development costs the **most** to service on all counts. A common yet flawed assumption about additional growth is that as development increases, tax revenues increase thus covering the cost for additional services. Research has revealed, however, that dispersed rural development does not fully pay for itself. This fact is a major reason to keep rural development consolidated or clustered.

Many Michigan communities continue to compete with each other in the name of tax base only to find that new development brings a variety of administrative and financial obligations that outpace the community's ability to meet the need for service. Without appropriate planning and implementation strategies, the community can get caught in a vicious cycle of trying to catch up to the needs of new development. This places a growing community in a reactionary position rather than a management position. The reactionary position is not a vantage point from which to manage growth and preserve rural character.

Natural Character

Much of the Township is still undeveloped, open, rolling agricultural land with intermittent woodlots and wetlands. This combination of natural features makes the area desirable for rural homesites. The lay and look of the natural landscape is what many residents called "rural character" in the community survey. People know it when they see it and as a society we relish it. We don't always see, however, that rural character is undermined with happenstance development. Well-designed development *can* fit into rural settings rather than obliterate them.

The U.S. Geologic Survey map housed in Appendix J clearly shows the quilt-like pattern of wetlands, wood lots and rolling terrain in the township. The majority of Middlebury's land area is open land, whether it be fallow field or active agricultural area.

Surface water in the township includes the Maple River and Bear Creek, which are tied to the County drain system (see Figure 4-1). There are also man-made ponds associated with gravel mining operations. Most of these are located along Simpson Road and M-21 just outside of Ovid. Reclamation and reuse of these areas will be critical in the township's future development.

According to the U.S. Department of Agriculture, flooding can be a problem in areas adjacent to the Maple River and Bear Creek (see Figure 4-2). Some wetlands speckle the township's landscape. The largest wetland system in the township is near Bear Creek and

the Maple River (see again topographic map in appendix "J"). Not only are wetlands productive wildlife habitat, they also provide a buffer to store stormwater and floodwater. Wood lots are also dispersed throughout the township. These natural areas are important components of rural character and can be designed around to enhance development amenities. These areas can also serve as excellent buffers between residential development and agricultural uses.

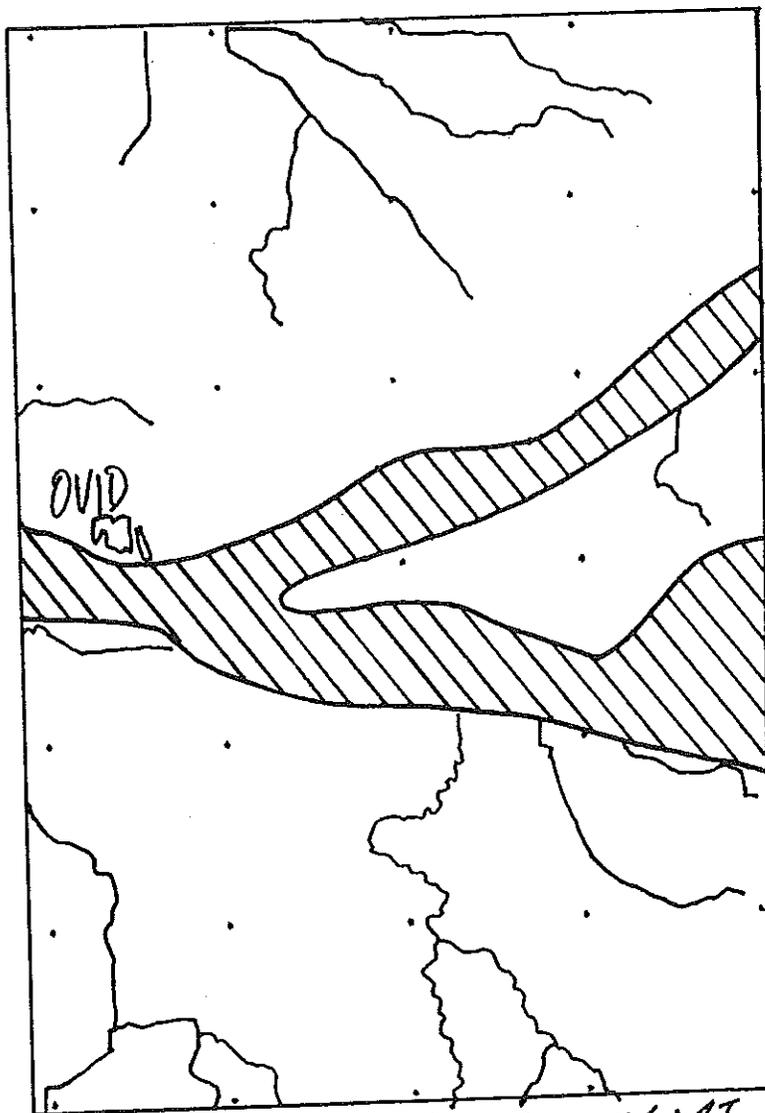
In general, topography in the Township can be classified as level to gently rolling with slopes of less than 10%. Some areas of steep slopes (over 12%) do exist in the Township. Not only do slope characteristics of an area influence drainage, erosion and construction limitations, they also influence community character by providing scenic relief and local landmarks. Slope development should be approached carefully. Well placed development can enjoy vistas yet not deter from them.

Various areas in the township have been identified as having water or wind erosion problems, see Figure 4-3. In these zones it is particularly important to keep wind breaks (fence rows), vegetative buffer strips and other soil management practices in place to prevent erosion. The importance of fence rows as buffers, windbreaks and wildlife habitat should not be underestimated. They serve an important function and add significantly to rural character.

Sediment from erosion is a primary source of water pollution so soil resources need to be managed well. Sediment chokes drainage ditches and surface water, smothering aquatic habitat and killing various forms of wildlife. Sediment is also very expensive to remove from drainage areas.

Figure 4-2

MIDDLEBURY TOWNSHIP

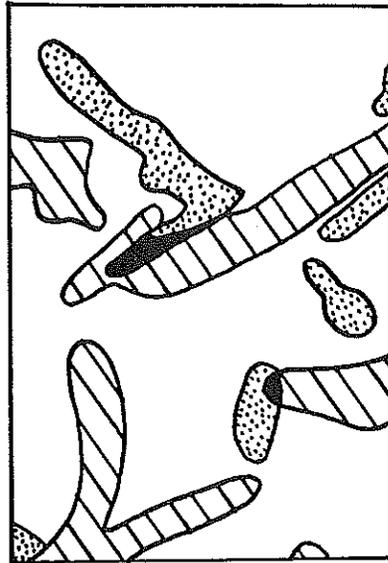


SHIAWASSEE COUNTY, MI

FLOOD PRONE AREAS

Figure 4-3

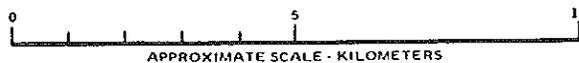
EROSION PROBLEM AREAS SHIAWASSEE COUNTY MICHIGAN



Middlebury Township
Shiawassee County, Michigan

- \\ WIND EROSION PROBLEM AREAS
- WATER EROSION PROBLEM AREAS
- WIND AND WATER EROSION

SAGINAW BAY AREA RIVER BASIN



BASE COMPILED FROM USGS 1:100,000 BASE
MAP UNIVERSAL TRANSVERSE
MERCATOR PROJECTION

10,000 METER UNIVERSAL TRANSVERSE
MERCATOR GRID ZONE 16 AND ZONE 17

Soils are an essential part of the area's natural resource inventory and are important in determining building foundation strength, effectiveness of septic tank sewage disposal, plant fertility, erosion hazards, and drainage conditions. All of these factors are crucial in determining the nature and extent of development that should occur within the Township.

For site development, soils should be tested on a case-by-case basis. But for general land use planning the County Soil Survey is an excellent source of information. A composite soil survey map can be found in Appendix J. The majority of township soils are loamy soils prime for agricultural production. Prime and unique soil designations come from U.S. Department of Agriculture definitions that focus on the soil's suitability for agricultural production:

Prime Farmland

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land or other land, but not urban built-up land or water). It has the soil quality, growing season and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no stones. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding. Examples of soils that qualify as prime farmland are Miami loam, 0 to 6 percent slopes; Brookston silty clay loam, drained; and Emmet sandy loam, 0 to 6 percent slopes.

Unique Farmland

Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are tree nuts, cranberries, fruits and vegetables.

Figure 4-3 presents a generic soil map that outlines areas designated as prime and unique in the township. It should be noted that while prime soils cover a large portion of the township not every square foot of land in these areas have soils that are prime. These non-prime areas may be excellent places to cluster homesites on. The area of land designated as unique in the township is orchard. Table 4-1 is a listing of soil types in Shiawassee County that are considered prime (see also Appendix J).

Table 4-1 Prime Soils of Shiawassee County

SYMBOL	NAME
Ah	Alganssee sandy loam (unique - 1)
Ba	Barry loam (prime - 1)
Bb	Barry sandy loam, bedrock variant (prime - 1)
BeA	Belding sandy loam, 0 to 2 % slopes (prime - 1)
Bh	Berville loam (prime - 1)
BmA	Boyer loamy sand, 0 to 2 % slopes (unique-1)
BmB	Boyer loamy sand, 2 to 6 % slopes (unique)
BmC	Boyer loamy sand, 6 to 12 % slopes (unique)
BrA	Boyer sandy loam, 0 to 2 % slopes (prime)
BrB	Boyer sandy loam 2 to 6 % slopes (prime)
BrC	Boyer sandy loam, 6 to 12 % slopes (unique)
Bt	Breckenridge sandy loam (prime - 1)
Bv	Brevort loamy sand (unique - 2)
Bw	Brookston loam (prime - 1)
Cg	Calisle muck (unique - 2)
ChB	Celina loam, 2 to 6 % slopes (prime)
ChB2	Celina loam, 2 to 6 % slopes, mod. Eroded (prime)
Cm	Ceresco loam (prime - 1,2)
Cn	Cohoctah loam (prime - 2)
Cs	Colwood loam (prime - 1)
CtA	Conover loam, 0 to 2 % slopes (prime - 1)
CtB	Conover loam, 2 to 6 % slopes (prime - 1)
Ek	Edwards muck (unique - 2)
En	Eel, landes and Abscota soils (prime - 2)
FoB	Fox sandy loam, 2 to 6 % slopes (prime)
FoC	Fox sandy loam, 6 to 12 % slopes (unique)
FoD	Fox sandy loam, 12 to 18 % slopes (unique)
Gg	Gilford sandy loam (prime - 1)
GmA	Gladwin loamy sand, 0 to 2 % slopes (unique - 2)
Gn	Glendora sandy loam (unique - 1,2)
Go	Granby loamy sand (unique - 2)
IsA	Iosco loamy sand, 0 to 2 % slopes (prime - 1)
Iv	Iosco loamy sand, deep variant (prime - 1)
KhB	Kendallville sandy loam, 2 to 6 % slopes (prime)
KhB2	Kendallville sandy loam, 2 to 6 % slopes, moderately eroded (prime)
KhC	Kendallville sandy loam, 6 to 12 % slopes (unique)
KhC2	Kendallville sandy loam, 6 to 12 % slopes, moderately eroded (unique)

SYMBOL	NAME
KnA	Kibbie loam, 0 to 2 % slopes (prime - 1)
KnB	Kibbie loam, 2 to 6 % slopes (prime - 1)
LmB	Lapeer sandy loam, 2 to 6 % slopes (prime -1)
LmC2	Lapeer sandy loam, 6 - 12 % slopes, moderately eroded (unique)
Ln	Lenawee silt loam (prime - 1)
Lo	Linwood muck (unique - 2)
LsA	Locke sandy loam, 0 to 2 % slopes (prime - 1)
LsB	Locke sandy loam, 2 to 6 % slopes (prime - 1)
MaA	Macomb loam, 0 to 2 % slopes (prime - 1)
MoB	Macomb sandy loam, 2 to 6 % slopes (prime - 1)
MeA	Mancelona loamy sand, 0 to 2 % slopes (unique)
MeB	Mancelona loamy sand, 2 to 6 % slopes (unique)
MmA	Matherton sandy loam, 0 to 2 % slopes (prime - 1)
MmB	Matherton sandy loam, 2 to 6 % slopes (prime - 1)
MnA	Matherton sandy loam, loamy substratum, 0-2 % slope (prime-1)
MnB	Matherton sandy loam, loamy substratum, 2 to 6 % slopes (prime - 1)
MoB	Menominee loamy sand, 2 to 6 % slopes (unique)
MoC	Menominee loamy sand, 6 to 12 % slopes (unique)
MrA	Metamora loamy sand, 0 to 2 % slopes (prime - 1)
MsA	Metamora sandy loam, 0 to 2 % slopes (prime - 1)
MsB	Metamora sandy loam, 2 to 6 % slopes (prime - 1)
MuB	Miami loam, 2 to 6 % slopes (prime)
MuB2	Miami loam, 2 to 6 % slope, moderately eroded (prime)
MuC	Miami loam, 6 to 12 % slopes (unique)
MuC2	Miami loam, 6 to 12 % slopes, moderately eroded (unique)
MvD3	Miami clay loam, 12-18 % slopes severely eroded (unique)
NyB	Newaygo sandy loam, 2 to 6 % slopes (prime)
OkA	Ottokee loamy sand, 0 to 2 % slopes (unique)
OmB	Owosso-Miami sandy loam, 2 to 6 % slopes (prime)
OmC	Owosso-Miami sandy loam, 6 to 12 % slopes (unique)
OmD2	Owosso-Miami sandy loam, 12 to 18 % slopes (unique)
RhA	Richter loamy fine sand, 0 to 2 % slopes (prime - 1)
Sd	Sebewa loam (prime - 1)
Sh	Shoals loam (prime - 1,2)
Sn	Sloan loam (prime - 2)
SpA	Spinks loamy sand, 0 to 2 % slopes (unique)
SpB	Spinks loamy sand, 2 to 6 % slopes (unique)
SpC	Spinks loamy sand, 6 to 12 % slopes (unique)
TsB	Tuscola loam, 2 to 6 % slopes (prime)
WeA	Wasepi sandy loam, 0 to 2 % slopes (prime)
WeB	Wasepi sandy loam, 2 to 6 % slopes (prime)

Source: U.S. Department of Agriculture Natural Resources Conservation, Technical Guide.
*Prime, 1 = Prime if adequately drained 2 = not prime if flooded more often than occasionally.
*Unique, 1 = Not considered if flooded more often than occasionally 2 = if drained

Environmental Quality Issues

Water quality problems are an issue throughout the county, for both surface water and groundwater. High fecal coliform counts, which can be an indicator of harmful pathogens, are found in high concentrations in several areas of the county. Pathogens (disease-causing bacteria, viruses or parasites) generally originate from human or animal waste, which enter surface or groundwater through leaching and/or runoff. The primary source for pathogen contamination in the Township would likely be faulty septic systems and manure runoff from pastures and cropland. The life expectancy of the average septic field is 10-20 years *if* the system is well maintained (e.g., the tank pumped regularly every 3-5 years). If the system is not functioning well, contaminants can leach to surface water and well supplies. Unfortunately, many homeowners septic systems are "out of sight, out of mind."

Plant nutrients, primarily nitrogen and phosphorus, that enter surface waters in concentrated levels can drastically alter natural ecological processes by stimulating blooms in aquatic plant growth. Such blooms choke surface waters with weeds and algae, deplete oxygen levels, making it difficult for aquatic organisms to survive. The majority of nonpoint nutrient loads to Township wetlands or surface water are likely to come from agricultural applications, overuse of commercial fertilizers on residential developments, and from faulty septic systems.

Sediment is also of concern. Eroded soil particles that enter surface water can carry nutrients and pathogens. Sediments cloud the water and cover plant leaves reducing sunlight penetration and inhibiting desirable plant populations. When suspended sediment settles out of the water aquatic spawning habitat becomes buried, streams become shallower, and water temperature rises causing further degradation to aquatic life.

Nitrates and arsenic in private drinking wells are a concern in the County. Arsenic is a naturally occurring poisonous element occasionally found in bedrock that leaches into groundwater. Arsenic can build up to toxic levels in the human body. Nitrates in groundwater generally come from agricultural fertilizers and animal waste or septic tank effluent that makes its way through the soil into private wells. Nitrates affect oxygen exchange in the body, which can have serious impacts on young children. Nitrates can also affect heart patients. The potential presence of Arsenic and/or Nitrates in township wells should be monitored. Nitrates and pathogens could become problems in the future if residents are not mindful about septic system maintenance and chemical use.

There is an old landfill on McBride Road (Section 13). This is a 4 acre site that is that could have any variety of household and farm waste and refuse in it. Building structures or placing water wells in that area is of particular concern. There are no known sites of environmental contamination in the township.

Land Base

Middlebury still has large tracts of vacant and agricultural land. Residential development is now generally scattered among agricultural uses and open space. Continued demand for

large-lot residential sites among agricultural land, however, will increase pressure on farmers to sell out. Planning for and regulating land use helps prevent the untimely conversion of agricultural land and open space; makes public service provision more efficient and economical; and helps protect natural resources.

The landscape of Shiawassee county has undergone profound change in the last several decades. People are leaving the urban and suburban areas of Greater Lansing, Flint, and Saginaw to get a piece of the country. There is also an influx from Livingston County, which is experiencing overflow from the Detroit-metro area. The irony of this phenomena is that the suburban areas people are "escaping" once looked very much like the rural countryside of Middlebury Township. Likewise, unchecked development patterns and land division will have Middlebury eventually looking like the suburban areas of Genesee, Saginaw, and Ingham counties. If development is left unchecked, children in elementary school today could see this happen by the time they have school-aged children.

It is an unfortunate truth that our society tends to create urban and suburban environments that it wants to flee. Rather than redeveloping existing areas to be more attractive, or engaging in land use practices that **meaningfully** protect open spaces and rural character, its easier to move on to "greenfield" sites. Thus, the perpetuation of suburban sprawl and "leapfrogging."

Tax Base

Escalating property values often prompt conversion of land from agriculture and open space to higher intensity development. Agricultural down-sizing, land speculation, parcel splits and requests for rezoning are activities that suggest shifts in land use and, ultimately, changes to the landscape.

Data on property values over time is an indicator of shifts in land use. When there is a change in use of a parcel, there is also a change in its tax classification. The tax classification of a parcel is assigned by an assessor and is tied to its use. Tax classification differs from zoning classification in that a piece of land may be in an agricultural zoning district but it may actually be used as a single-family residence.

Shifts in the value of residential, agricultural, industrial, and commercial tax assessment classifications are found in state equalized value (SEV) figures. The most significant shifts for Middlebury are found in agricultural and residential classes (see Table 4-2). Between 1982 and 1999, residential values nearly tripled while agricultural values were essentially flat.

Table 4-2 Middlebury Township State Equalized Value

<u>Year</u>	<u>Residential</u>	<u>Agricultural</u>	<u>Commercial</u>	<u>Industrial</u>
1982	\$6,342,750	\$7,130,600	\$328,800	not classified
1986	\$6,764,650	\$6,892,400	\$458,000	\$253,400
1992	\$9,669,100	\$5,685,600	\$1,349,045	\$328,050
1996	\$14,663,950	\$6,446,900	\$1,401,250	\$408,350
1999	\$18,421,800	\$7,813,500	\$1,522,000	\$348,250

Fragmentation

An indicator of changes in the land base is the amount of land division that occurs in an area. Figures 4-4 through 4-6 are historic plat maps of the township. Note how in many areas, the size of parcels get smaller and smaller. This trend is referred to as land fragmentation. It's a serious problem all over the state. The smaller the parcels get, the less likely they are to be used for agriculture. To be viable, large parcels of agricultural land need to be contiguous with one another. In order for a parcel to be economically viable for agricultural use, it generally has to be at least 40 acres in size. Higher value crops like fruits and vegetables may be economically viable on 10-20 acre parcels.

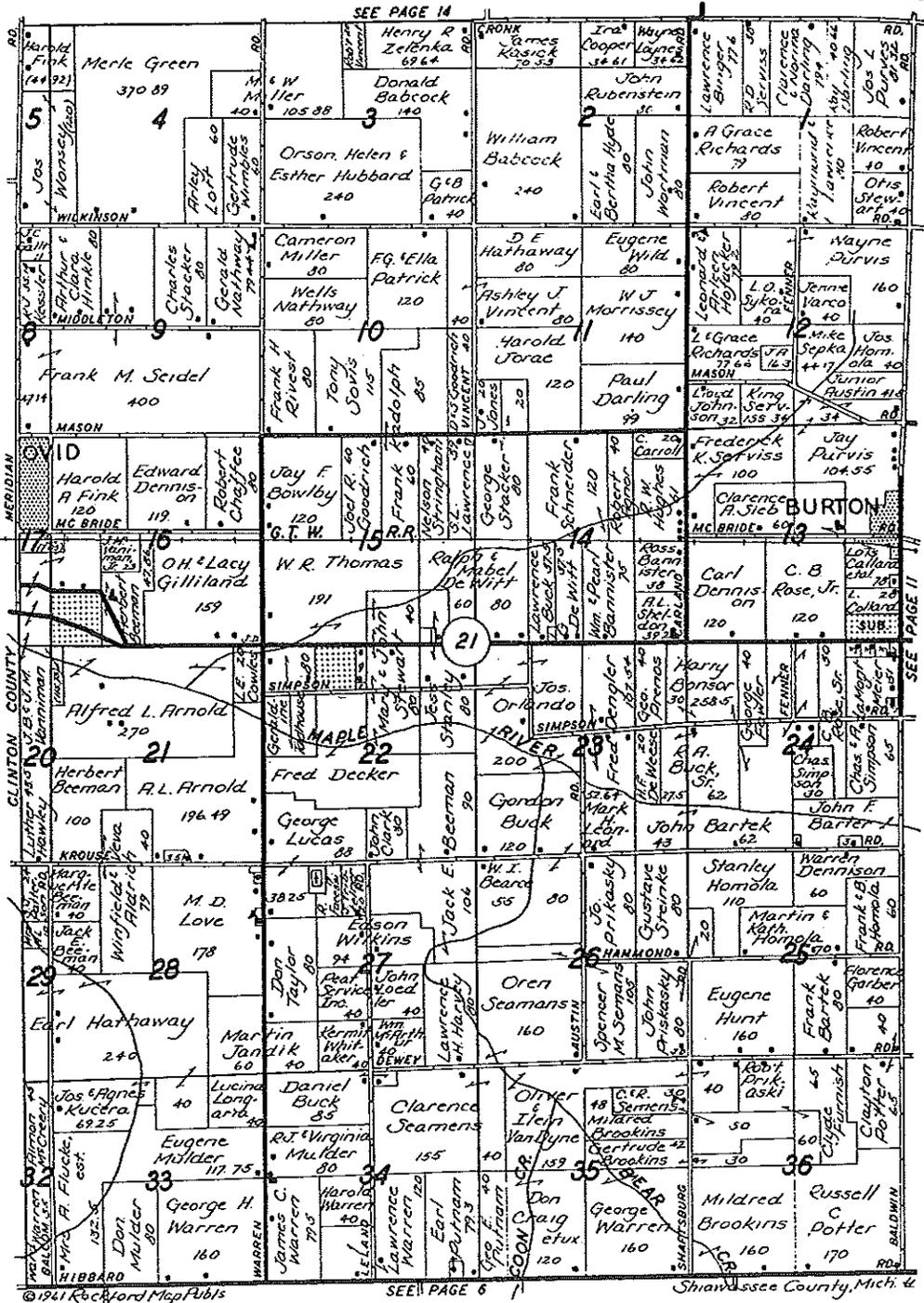
If a 40 acre parcel of land is divided into smaller pieces it will probably be sold to separate owners who are likely to use them for residential development. Once this occurs, the land is not likely to be managed for resource-based commodities (i.e., agriculture, gravel extraction, forestry, wildlife). The loss is usually permanent. Large lot residential development is the biggest culprit in land fragmentation--and a great waste of land. See Figures 4-8 through 4-10 which illustrate examples of wasteful land splits in contrast with well-designed splits. Prior to amending the state Subdivision Control Act, ten acre splits were perpetuated to avoid requirements of the law. Four houses on forty acres is nothing less than squanderous. Selling large lots also short-changes the farmer. For example, in a 10 acre parcel the buyer pays the largest amount of the land price in the building site (maybe 1-2 acres of that area). The remaining acreage is relatively cheap to buy and does not yield as much of a profit to the farmer. Some of this land can be rented out for agricultural production, but this rarely works long term. Homes are difficult to work around and residents do not like the dust, chemicals and noise associated with farming.

Maximum lot sizes for home sites (e.g., 2.5 acres) coupled with rural clustering criteria and open space requirements can help reduce land consumption. Non-agricultural homes on 20 or 40 acre parcels is another challenge. While such estates appear less imposing on the landscape, they can still take large tracts of land out of agricultural production. Further, what happens when the property owner has trouble with rising taxes or wants to further subdivide the land? The original home should be placed on that acreage so it does

not preempt the thoughtful placement of additional homesites. In fact, future splits should be laid out up front to ensure a logical design that can accommodate future access, homes and septic fields (or sewer lines).

Figure 4-5
1961 Plat Map

T. 7 N.-R. 1 E.



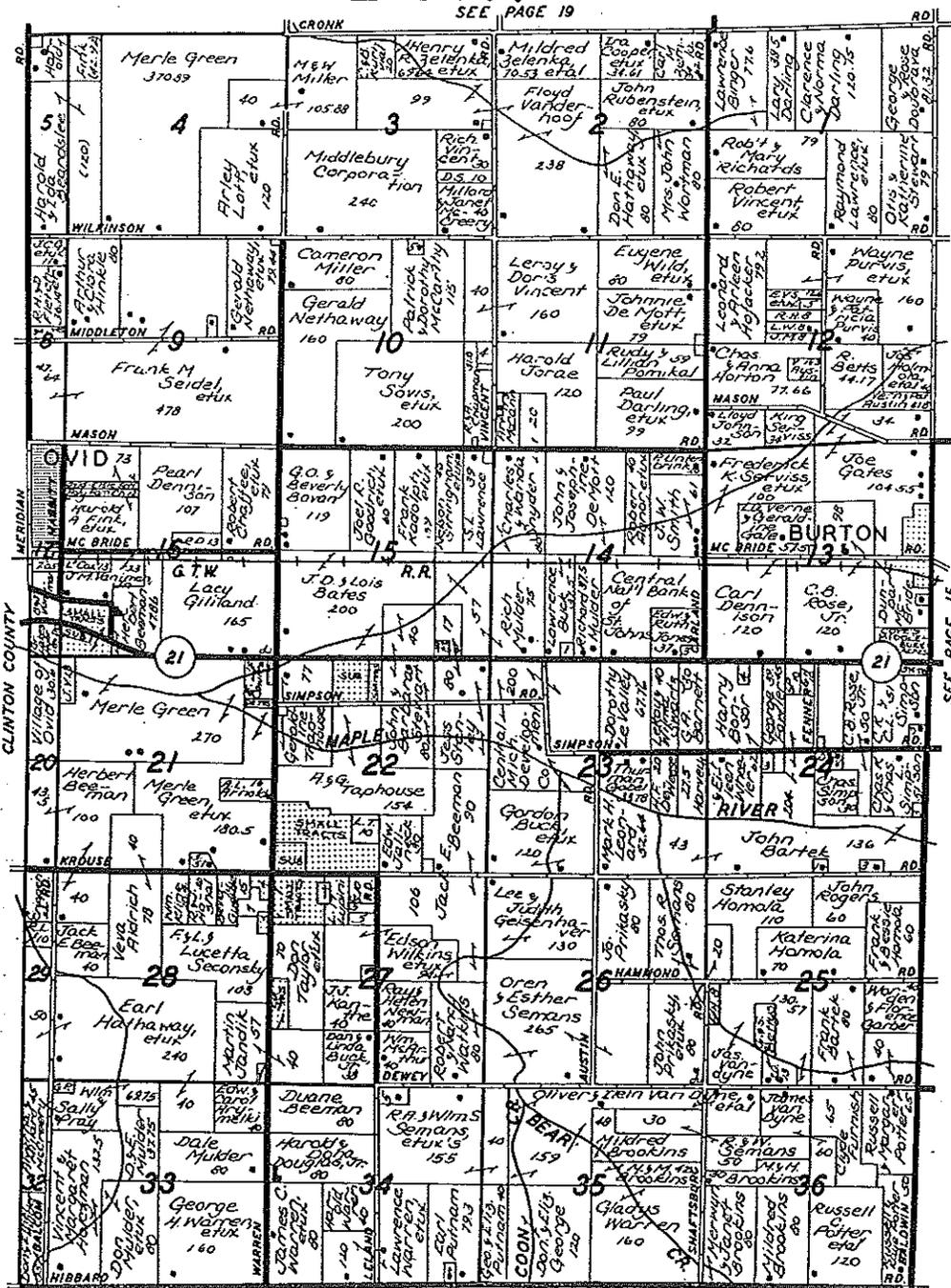
© 1961 Rockford Map Pubs

SEE PAGE 6

Shandssee County, Mich. 4

Figure 4-6
1974 Plat Map

MIDDLEBURY



©1974 Rickford Map Pubs., Inc. Rev. 1974

SEE PAGE 9

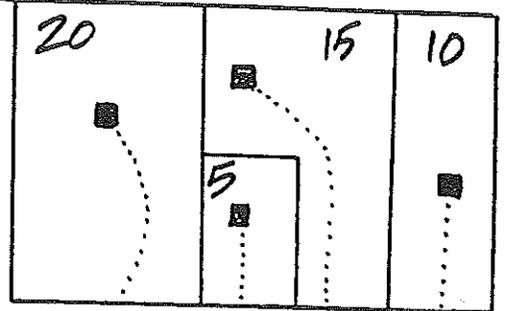
Shiawassee County, Mich.

Figure 4-8

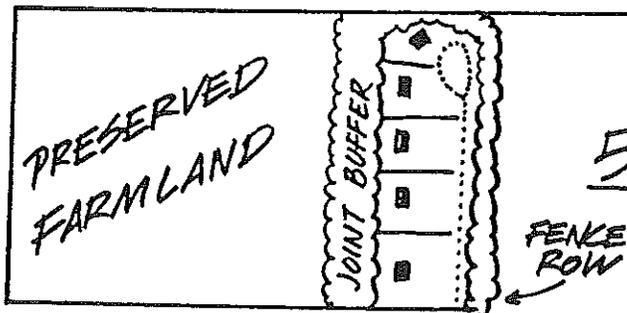
BAD DIVISIONS

50 ACRES = 4 HOMES

A TREMENDOUS WASTE OF LAND. THIS PARCEL IS DEVELOPED IN SUCH A WAY AS TO PREVENT LOGICAL REDEVELOPMENT OR INFILL. ALSO, FALLOW AREAS SURROUNDING HOMESITES CAN'T BE UTILIZED FOR FARMING.



GOOD DESIGN

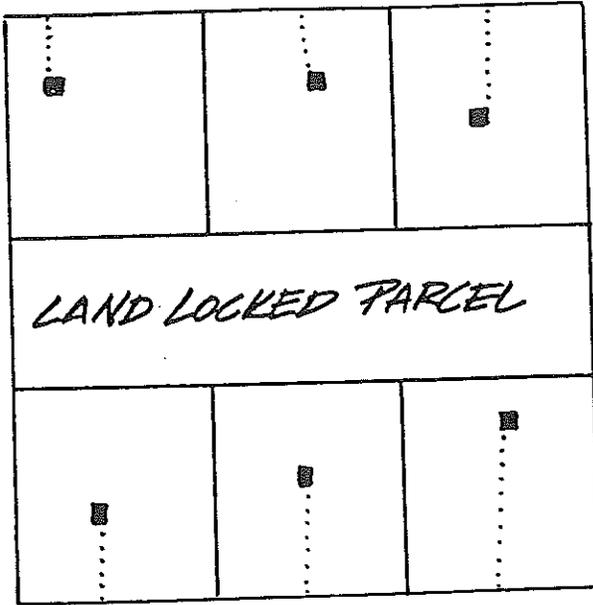


50 ACRES = 5 HOMES

cul-de-sac

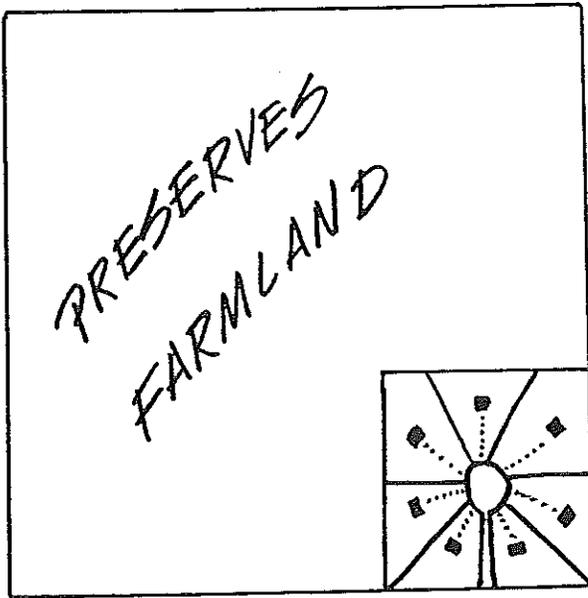
50 ACRE PARCEL DEVELOPMENT

Figure 4-9



BAD DESIGN
6 SITES

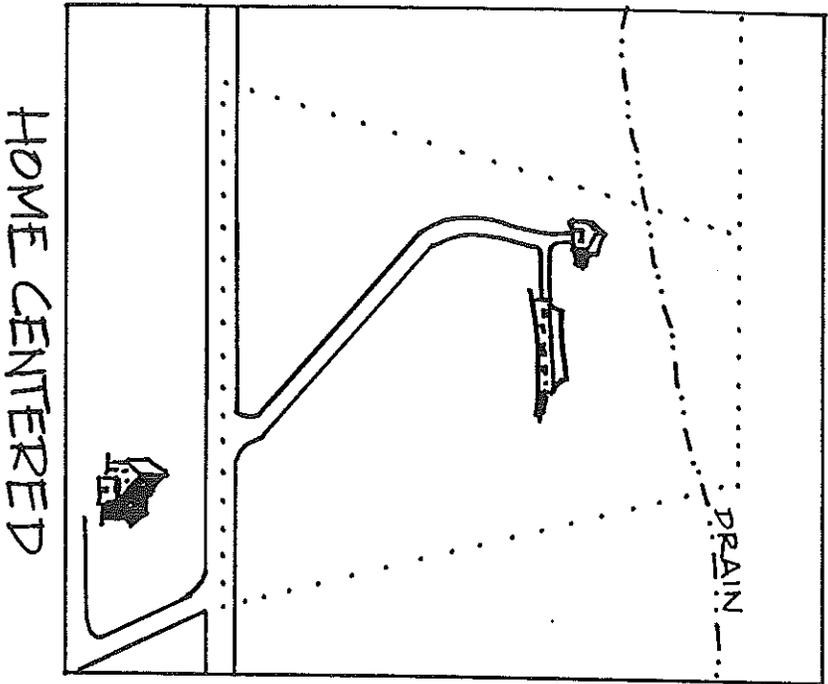
LARGE LOTS WITH
POORLY CONCEIVED
FRONTAGE SPLITS



IMPROVED DESIGN
7 SITES

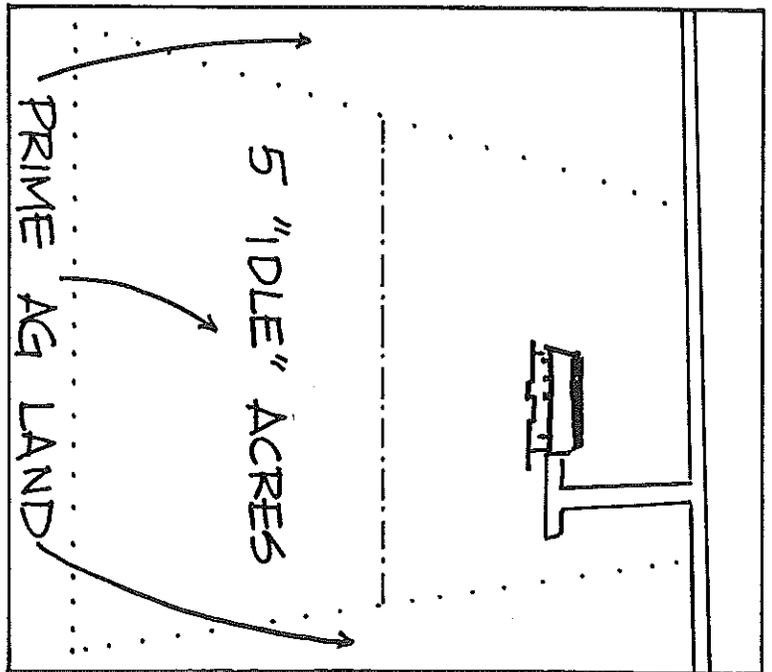
cul-de-sac

Figure 4-10



HOME CENTERED

10 ACRE PARCELS



5 "IDLE" ACRES

PRIME AG LAND

HOME ON 5 ACRES

LARGE LOT RESIDENTIAL LAND FRAGMENTATION

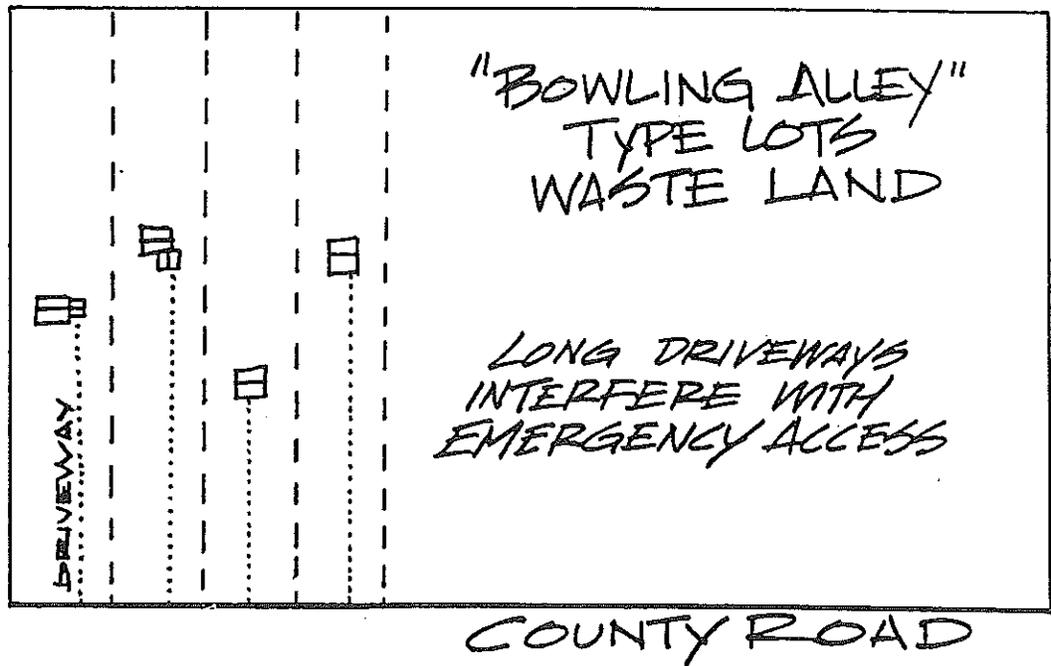
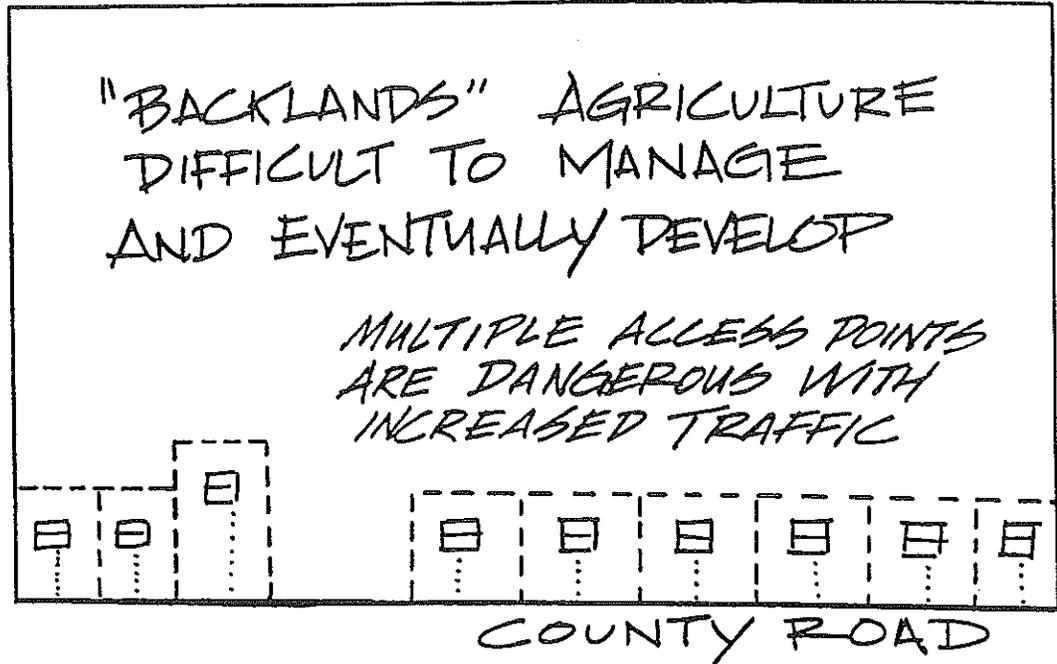
Strip Development

The layout of land splits are of great concern too. Divisions are often made along road frontage because they are expeditious and cheaper to develop (see Figures 4-11 & 4-12). Strip residential development starts lining country roads. Not only does this quickly affect the look of the country, divisions of road frontage parcels is an inherently inefficient use of land. They can also:

- Create undesirable living situations. As the road get busier traffic, dust and noise intrude on the residential use;
- Create public service problems. It costs more to provide school bus service, road improvements and other services to residential lots strung along a corridor.
- Create public safety problems. Multiple driveways along a road corridor (many of them with "blind spots") pose traffic threats. A once country road becomes a busy corridor that was not designed for such traffic.
- Make getting mail at the roadside mailbox a death-defying experience.
- Reduce resale opportunities. As an area suburbanizes homes on major roads are less desirable than those in planned developments.
- Create greater tax burden in the future. Poor development patterns limit future options and end up costing more in the long run to service and work around.
- Promote premature conversion of agricultural lands. Development pressure and conflicts with residential neighbors push farmers out of business. Land gets divided and disposed of more quickly when strip residential takes over an area.

This development pattern leaves an unfortunate legacy for future generations. Haphazard land splits that avoid local and state approvals may at first be expeditious and economical, but over time, they actually become more costly, both socially and economically. Consideration of issues like; safe access to property and road systems; efficient public service delivery; preservation of open space and rural character; and consideration of future generations may be more costly up-front, but the future benefits are enormous.

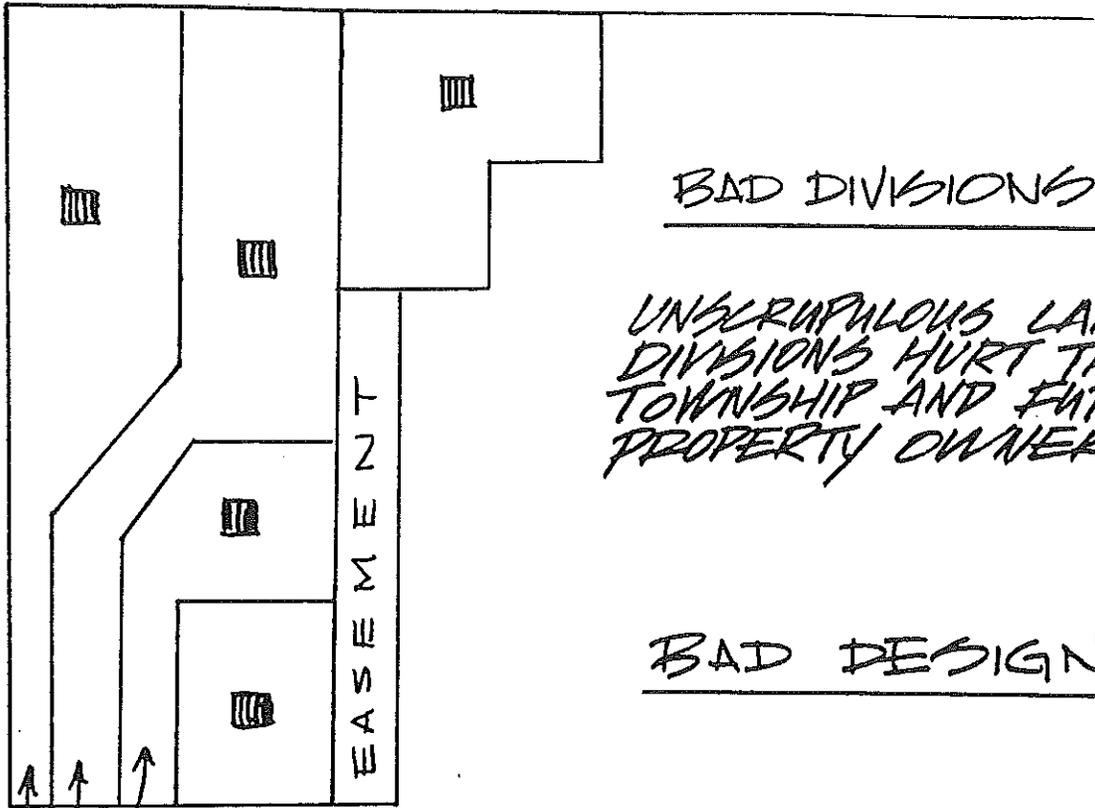
Figure 4-11



HAPPENSTANCE SPLITS

POOR DESIGN THAT SQUANDERS LAND RESOURCES

Figure 4-12

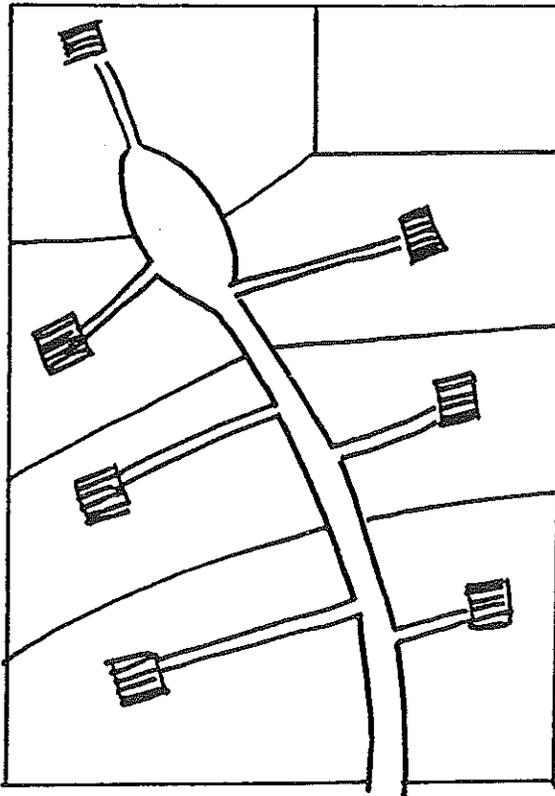


BAD DIVISIONS

UNSCRUPULOUS LAND
DIVISIONS HURT THE
TOWNSHIP AND FUTURE
PROPERTY OWNERS

BAD DESIGN

BACK TO BACK EASEMENTS CREATED
TO AVOID PRIVATE ROAD REGULATIONS



IMPROVED DESIGN

BETTER LAND USE,
SAFER ACCESS
AND HIGHER
RESALE VALUE

Suburbanization

The scattered development pattern, commonly identified as sprawl, costs very little in terms of public resources in the beginning. However, once demand for public services increases beyond low, rural levels for roads, police service, fire safety, schools and emergency services, it becomes the most expensive development pattern. The expense is in terms of both service provision and degradation to natural resources, rural amenities and lost opportunities for more efficient development.

The sequence of events often proceeds like this:

- A land owner with a large holding (usually a farmer) wishes to generate some extra income. Market demand is present to sell large-lot residential parcels. The divisions are usually configured in a strip immediately adjacent to a public road --which is often gravel.
- Residences are developed, each with an individual driveway, increasing both turning movements in and out of properties and road use. Access to the new driveways can interfere with through-traffic and obstruct the passage of large, heavy equipment used in farming.
- When several homes have located along the road, the gravel base begins to break down since it is designed for minimal, rural traffic.
- Residents petition to have the road paved because of its condition.
- Once the road is paved, it becomes more desirable for additional residential development. Some of the larger residential parcels may be further subdivided by new owners when taxes increase and the owners learn they can sell a parcel at a handsome profit. Additional land divisions take place around the original, haphazard splits which are inherently inefficient.
- Newly divided parcels fill in with residential development and residential uses become more prominent than farming and other natural resource based uses.
- Use of pesticides, herbicides, and heavy machinery in agricultural production can be disruptive to residential living. Conflicts between residents and natural resource based users increase as homeowners attempt to protect their interests.
- Agriculture is squeezed out by increasing density, rising land values and other associated pressure from surrounding residential development. Owners of remaining vacant land accelerate land division and sale of their property.
- Demand for services rises as residential density increases. Residents begin to desire higher levels of service (e.g., better roads, more police and fire service). Public

sewer and water systems may become necessary in areas where density has surpassed on-site septic and private well capacity.

- The character of the community has been altered to the point where the countryside resembles unplanned converging subdivisions rather than wooded and pastoral countryside. Open space, fence rows, and naturally occurring vegetation are replaced with well-groomed, mown yards. Fisheries and wildlife diminish as do farms and other remnants of rural life. The once strong resource based economy is replaced with commuter housing which only provide initial construction jobs and later service jobs.
- There is no safe pedestrian or bicycle access to recreation or business areas so the dependency on automobile traffic increases.
- Local units of government scramble to cope with mounting problems of unplanned suburbanization after the fact.

Summary: What Could the Trends Mean?

If existing development patterns continue in the Township, most of the new housing units built in the next 20-30 years will be scattered across the countryside. The Township will experience additional "in" migration from urban and suburban areas, which continue to be abandoned. Agricultural land and open space areas will be divided haphazardly to expeditiously accommodate new development. The agricultural base will be undermined.

Market demand for rural residential land will continue to place the highest development pressure on agriculture lands and open space throughout the township. Scattered residential development will in turn increase surrounding property values and tax burdens on remaining raw land, perpetuating land consumption and conversion.

As density increases in the township the pattern of suburbanization will become more noticeable. Areas with a predominance of open space and agricultural land will be replaced with scattered residential uses which will begin to look more like converging subdivisions rather than a rural landscape.

As newly developing areas suburbanize and begin to develop urban ills (congestion, loss of open space, increased crime, etc.) people migrate farther out in search of the space and peace we all want. In time, these newly developed areas become much like what people were trying to "escape." Ironically, in our haste to be in the "country" we often destroy the very things that attracted us there in the first place.

The problem of an aging population will be aggravated with new development. Less mobility, fixed incomes, and health needs make it more difficult for senior citizens to maintain a household in a developing township where property values and taxes increase at a much faster rate than cost-of-living adjustments for fixed incomes. This

phenomenon can force elderly--many of them large property holders--from their homes and land prematurely. It also promotes speculation on their land. Unfortunately, some of this speculation is unscrupulous; and rarely does the individual land use decision get considered in the context of its long-term impact on the community.

Suburbanizing areas have higher proportions of school-aged children, this places increased demand on school systems, which bus large numbers of their students. Parents will place a higher burden on county roads as they transport their children to school functions and youth activities most often centered at cities and villages. Commuting families with multiple cars will impact the road system to the point where gravel roads will need improvement. Complaints about the condition of the road system will increase. A relatively small population will shoulder the high cost of road improvements. When the roads are improved, more families will want to locate in the area (i.e., if you build it, they will come).

Escalating property values, taxes and reduced levels of public services will hit households of limited means particularly hard. To further aggravate the situation, relocating households with higher incomes are generally used to a higher level of service than what is typically provided in a rural setting. Although individuals relocating from urban and suburban communities are attracted to the country, they eventually demand suburban or urban levels of service (e.g., paved roads and more police protection). This increases costs for low and moderate-income people at a level that can seriously impact their quality of life.

This five-decade cycle experienced literally throughout the country does not have to become Middlebury Township's reality. The trend of unchecked sprawl can be controlled if communities are educated and willing to engage in logical and consistent land use controls. The challenge is finding the balance where market demand can be accommodated without obliterating farmland and open space. The community's stance does not have to be anti-growth. Well-designed enclaves of residential housing can accommodate the demand for rural home sites *and* permit farmers to continue. **The placement and design of development makes the absolute difference.**

Land fragmentation and suburbanization is occurring in Middlebury Township but there are still active farms and large blocks of land that can be preserved and/or developed efficiently. Land use and development regulations can be crafted in such a way as to provide for open space, rural preservation and the provision of efficient public services. Rural communities faced with losing rural amenities, including degraded natural resources, must rethink their approach to land use regulation. The land base needs to be recognized as a collage of resources if it is going to be successfully managed for future generations.

V. ISSUES

Previous sections of this plan provided a background analysis of the township in addition to identifying significant trends affecting the township. The next task of the planning process is to identify challenges that influence the township's ability to attain its goals.

This section of the plan summarizes key issues identified in the course of research, personal interviews, and the citizen survey (see also Appendix C). Following is a recap of issues brought up directly or indirectly in this plan. They are titled to assign clearer meaning to them.

1. Land Use Mix. Not every community is well suited to provide land for high-density residential, commercial and industrial uses. Proper sewer, water, class A roads and proximity to the highway must be available for such development to be viable. Middlebury has had no real high-density residential, commercial or industrial development because it lacks the basic services these types of developments need. Making an area for a mobile home park was also a consideration of the planning process. The township should not feel obligated to establish areas for such development if it is not appropriate. For example, as of 1990, the township already had nearly 13% of its housing stock in mobile homes. They are primarily located in a subdivision along M-21. The small lots are already of concern in that they have individual septic systems.

Any future consideration for commercial, industrial or high density residential development should be in proximity to the Village of Ovid where higher density development would be close to community facilities like stores and parks near higher volume roads and city services (e.g., the fastest fire and ambulance response). Such high intensity development should only occur where public water and sewer are available.

Market demand for land from development pushing out is not coming from "full" urban areas. There is vacant land, abandoned commercial and other holes in development that could, and should, be looked at prior to pushing into rural areas. Existing population centers with vacant land and empty structures should be focused on before green field development is permitted. The Lansing metro area and Owosso/Corunna area are appropriately suited for industrial development.

2. Level of Development. Respondents to the township survey clearly indicated they wanted Middlebury to remain "country". They enjoyed the open space, natural areas and quiet nature of the community. On the other side of the coin, several respondents wanted farmers or large landowners to be able to develop some of their land. The question is, can the township strive for two seemingly conflicting goals? The short answer is yes, but it will take effort on the part of the community and landowners to find that balance. Well conceived clustered development is much better for the township and future owners, it does, however, cost more to develop initially—but residential lots in rural clusters have higher sale and resale values. Clustered home sites satisfies the demand for open space by offering shared open space as opposed to the present pattern of each non-farm single-family home buying its own open space.

3. Public Services. When survey respondents were asked if they wanted suburban services like sidewalks or public water or sewer, the answer was a resounding *no*. In rapidly growing areas development threatens to overtake the capacity of township services. Unchecked, it antagonizes new groups of citizens, causes irreversible damage to the social and natural environment and unnecessarily consumes land. In addition to being a critical part of the state's economy, agricultural land uses do not require many of the expensive public services that accompany suburban development. Keeping large blocks of agricultural lands isolated from residential development actually keeps public service costs down.

4. Land Division. Fragmentation of the land base undermines agriculture because large tracts of land are necessary to support viable farms. Even if developed smaller tracts are adjacent to one another and a farmer rents the extra acreage, tilling and chemical use become a problem. The way homes are situated often makes negotiating large farm equipment nearly impossible. When residents have soil dust and chemical drift, they often change their minds about renting out their extra land to a farmer. Land division also affects rural character. It is not so much the fact that land is divided for homesites, its how its divided. The quickest and cheapest way to sell off lots occurs in strips along roads. It's this kind of fragmentation that does the most damage to farm viability and rural character. If these same divisions are clustered around woodlots, wetlands or areas not prime for agriculture, residential development can coexist with farming. See again Figures 4-8 through 4-12.

5. Rural Character. Township residents treasure living in a rural area. Not only is farming a strong part of the economy, it is a big part of rural character. Pastoral scenes are a part of rural ambiance; so are fallow fields, woodlots, fence rows, wetlands and tangled brush areas. New residents tend to clear out brushy areas and fence rows and establish groomed lawns (see Figure 5-1). When a string of residents clear the land and establish lawn, the roadside looks more suburban than rural.

6. Community Design. Those who live in the country are attracted to a rural setting, but very seldom are the elements of rural living outlined or openly recognized so they can be protected. Simple visual features like uninterrupted rolling terrain, fence rows and woodlots are all elements of rural character. They can be identified and required to be protected. Not only does the type of development affect rural character, it influences environmental quality, service provision, transportation demands, and general quality of life. Poor land use decisions not only become a liability for the general citizenry, it limits the choices of future generations.

7. Illegal or Problematic Splits. Realtors and property owners have created splits in the township that do not comply with zoning regulations. It is thought they do this to create momentum for a rezoning or variance argument. There are also many parcels that fall between the maximum lot size of 2.5 acres and "farm" acreage of 20 acres. How should these splits be dealt with? Further, people get around the maximum lot size by buying three

2.5-acre splits, building on one and leaving the others vacant--or worse yet--they buy 20-40 acres and use it for one home site.

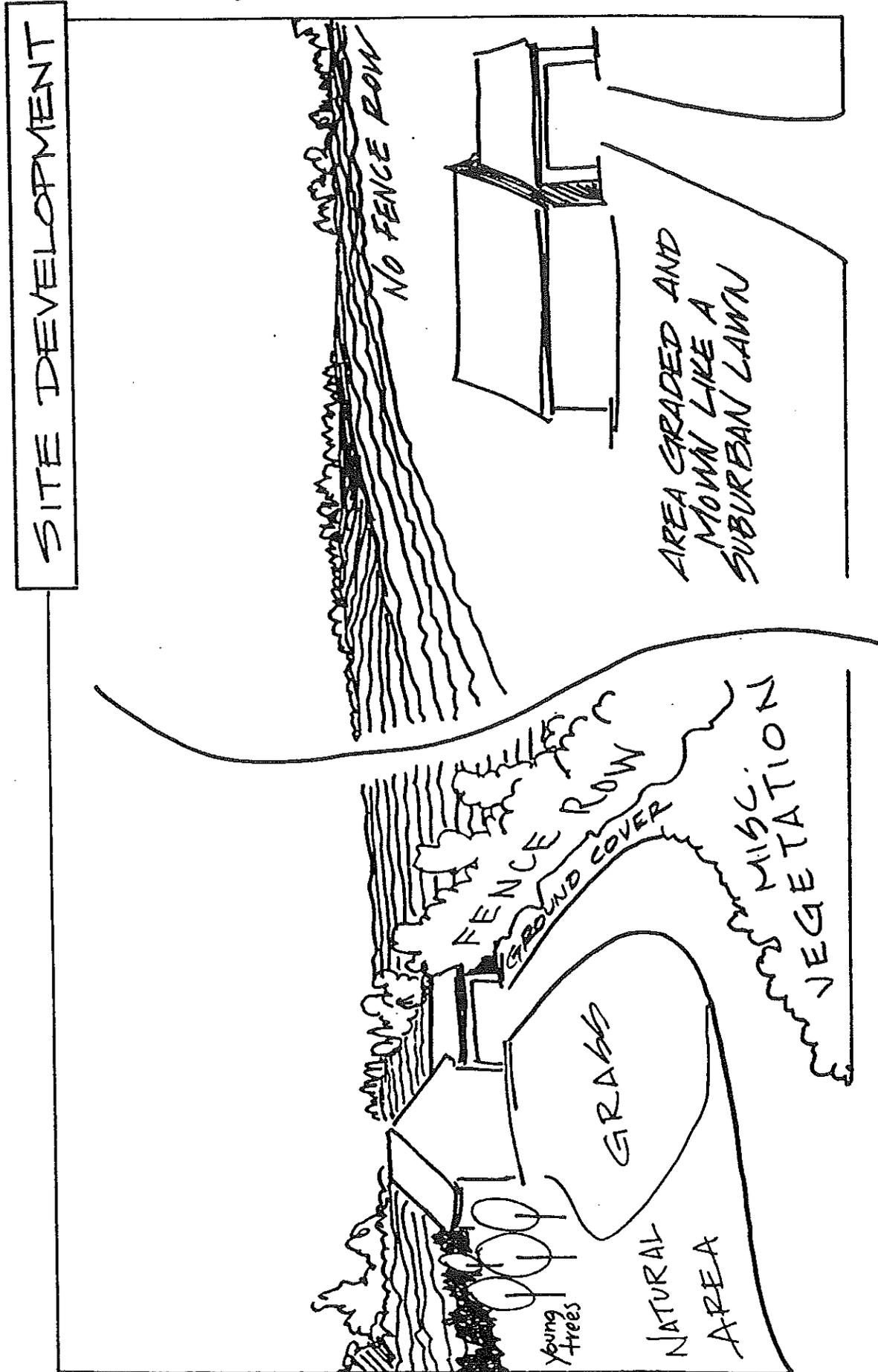
There have been splits created and recorded in the township that violate zoning regulations or the Land Division Act of the state. Legal opinion has stated that the actual division of land can't be prevented, but the issuance of a building permit can be prohibited. Unwitting buyers may be purchasing such splits in hopes of building a home or buying the land over time via unrecorded land contracts.

8. Predatory Development It's no accident that rural areas have a great deal of land division activity and questionable land conversions. Rural areas are easy targets for developers in search of land to sell. The land is relatively cheap, taxes are still low, and there are plenty of large landowners to approach. Unfortunately, in the author's experience in Shiawassee County, in general, more realtors spent time figuring out ways to get around regulatory requirements than they spent planning well-designed developments that could benefit the landowner and the community. The community response can be to tighten the loopholes and manage growth more deliberately.

Since townships are generally of modest means, a mere threat of a lawsuit, contrived or not, will often get governmental officials to back down. Rural communities often lack direct technical and legal support so they are more vulnerable to predatory activity. It only takes a few inappropriate land use decisions to send a message that your township is "easy". Fortunately, when enforcement and implementation are strong and consistent, that message gets out quickly too.

9. Intergovernmental relationships: During interviews with county and township officials it became apparent that there is some tension between the townships and county level boards, commissions and staff that deal with planning and zoning. Lack of an understanding of respective roles, where legal authority lies, and general responsiveness among the parties seems to be the root of this friction. When unscrupulous developers/landowners see a lack of coordination and direction in an area this kind of dissention makes the county and its township an easier target for predatory activity.

Figure 5-1



How Do You Want To Look... RURAL OR SUBURBAN?

10. Zoning Enforcement: In personal interviews among 5 townships there was frustration expressed about the consistency and timeliness of enforcement. It was felt that too many variances were given and too many illegal things were allowed without appropriate enforcement action. Many officials were concerned about county planning staff's technical ability, communication with townships, and a record keeping system. County representatives expressed concern over the townships not understanding their role or not being well-trained enough to execute it. In many ways, after talking to both township and county people, it became clear that "*the right hand did not know what the left hand was doing*" It was also felt that, in general, the Prosecuting Attorney's office does not perceive zoning issues as critical, which undermines enforcement-- again, those willing to take advantage of the land use and regulatory system know that.

While the county planning and zoning departments appear to be continuing to work on enforcement issues, the fact remains that the county enforces land use plans, and zoning and has one zoning administrator and one enforcement officer monitoring 14 townships—that's over 500 square miles of area to monitor. Anyone would have trouble keeping up with zoning enforcement, lot splits and other land use issues, no matter how technically able.

Continuity of staff is also an issue in the County. Landowners or developers with their own self interests in mind, heavily lobby politicians who can make staff duties very difficult. In some cases, political posturing has threatened staff or driven them away altogether. Inconsistent enforcement driven by political cronyism is also very damaging. Staff needs the support of the system to be effective. They also need continuing training to keep up with changing issues.

Another reality of adequate enforcement is legal assistance. The attorneys that help with zoning enforcement are in the County Prosecutor's office. The attorney's are usually generalists and may not be well equipped for complicated land use cases and the legal challenges they bring. Further, zoning cases and enforcement are usually not high priority when compared to family and criminal cases. If the county and its townships are not legally well equipped they will be taken advantage of.

11. Market realities. Market pressure on farmers is a reality that must be dealt with. With a glut in the market for corn, soy and wheat it is difficult to make enough profit to cover the cost of production, let alone to make a living. For example, in 1999 the price given for soybeans was the same as it was in 1974, yet the cost to produce that same product increased. There used to be many dairy farms in the township, but several operators have gotten out of the business because it is so tough. Corporate farms are taking over large herds.

Many farmers retirement assets are in their land. In 1999, on average, an acre of farmland sold for approximately \$2,500. That same acre for a home site went for ten times that. Farmers often see land splits as a way to get through lean times. Even if the children want the farm, they need to pay for it. Its difficult to tell a farmer they can't sell

their land for a higher return—especially in the face of such volatile times for agriculture. Many farmers have full-time jobs off the farm to make ends meet. These issues are why Middlebury Township officials wanted a mechanism to allow lot sales by landowners. Land control tools like rural clustering, conservation easements, purchase of development rights, and transfer of development rights provide some choices to landowners without severely undermining agricultural operations or rural character.

12. User conflicts. The family farm is somewhat romanticized in American society, but agricultural operations can have several impacts on residential neighbors. Farming entails blowing soil, drifting chemicals, wafting animal odors, equipment noise, and slow moving vehicles on public roads. These activities cause conflicts between farmers and non-farm residents. At some level, agriculture should be recognized as an industry. Farm operations use heavy equipment, chemicals and diesel fuel. They produce noise, odors and dust. The factory just happens to be open land.

Other potential user conflicts of concern in the township include:

- Hunting on farms close to residential neighbors
- ATV's and other users trespassing on large landowner's holdings
- Increasing intolerance for junk cars and junky lots by newcomers who are not accustomed to such rural settings
- Land application of sewage sludge and milk residual.

13. Political Fortitude and Technical Ability. Well before the drafting of this plan, township leaders expressed a seemingly contradictory desire to protect farmland and rural character but still allow land owners to divide and sell their land. Middlebury does not have to look far to see the results of such "hands-off" land use policy. Strip residential development, wasteful land splits, illegal or unscrupulous land divisions and inconsistent zoning decisions can be found in any township experiencing growth pressure. In some cases, the landscape of an area under a land use plan may not look very differently from an area with no plan at all. Why is that?

It could be argued that many local officials do not have a clear understanding of the issues that surround land development. If the community and its leadership do not clearly understand the ramifications of poor land use decisions then they inherently lack the conviction to prevent them.

Even if community leaders understand land use issues, they are often ill-equipped to deal with them because there is usually a weak tie between the community's goals and its implementation measures. *So what* if nearly every rural land use plan in Michigan has a goal related to protecting rural character? Just what *is* rural character? What are the elements of it we want to keep? What are the realities of society that may fly into the face of that goal? What can we do specifically to protect rural character beyond *wishing* for it? Strong implementation efforts require some technical ability, consistency in application, and conviction to see them through. When political pressure becomes part of the equation good planning and design can fall by the wayside. Engaging in good design

costs more time and money than traditional development. Sometimes politicians have difficulty telling landowners (their friends and neighbors) they have to spend more time and money up front even if the economic returns are better.

None of the issues or challenges outlined in this plan are insurmountable. Armed with a clear vision of community desires, and a clutch of viable strategies, a determined, consistent leadership *can* get control of the community's future and create "win-win" situations.

14. Demand for land. The year 2020 population projection for the township is 2,224 people. If the household size stays close to the 1990 figure of three persons per household, this means there will be about 775 new households in the township between 1990 and 2020. If each new household consumes an average of 3.5 acres of land for a homesite, that means over 2,600 acres of land in the township will be consumed for "country" homes in the next 20 years. **Imagine the impact of that demand on the landscape, especially if it occurs haphazardly.** This consumption figure could easily be higher--or perhaps lower, depending on zoning policy, market demand and the economy.

VI. GOALS, OBJECTIVES AND STRATEGIES

Goals are general statements of what is desired in a community. They are policy beacons to provide a frame of reference for public decisions. Objectives are more specific statements designed to provide more focus on a stated goal. Strategies are specific actions set forth to strive for the stated goals and objectives.

Middlebury township sets forth the following goals, objectives and strategies to guide planning and land use decisions:

1. Goal: Protect public health, safety and general welfare by promoting safe, efficient and consolidated development that maintains the rural character of the township.

Objectives:

- a. Prohibit strip development that creates multiple drives along public roads.
- b. Review land splits to ensure an efficient use of land that does not unnecessarily consume agricultural land or open space.
- c. Provide design criteria that requires efficient layout and planning of clustered development.
- d. Promote regular septic field maintenance.

2. Goal: Conserve and protect property values by preventing incompatible uses from locating adjacent to each other.

Objectives:

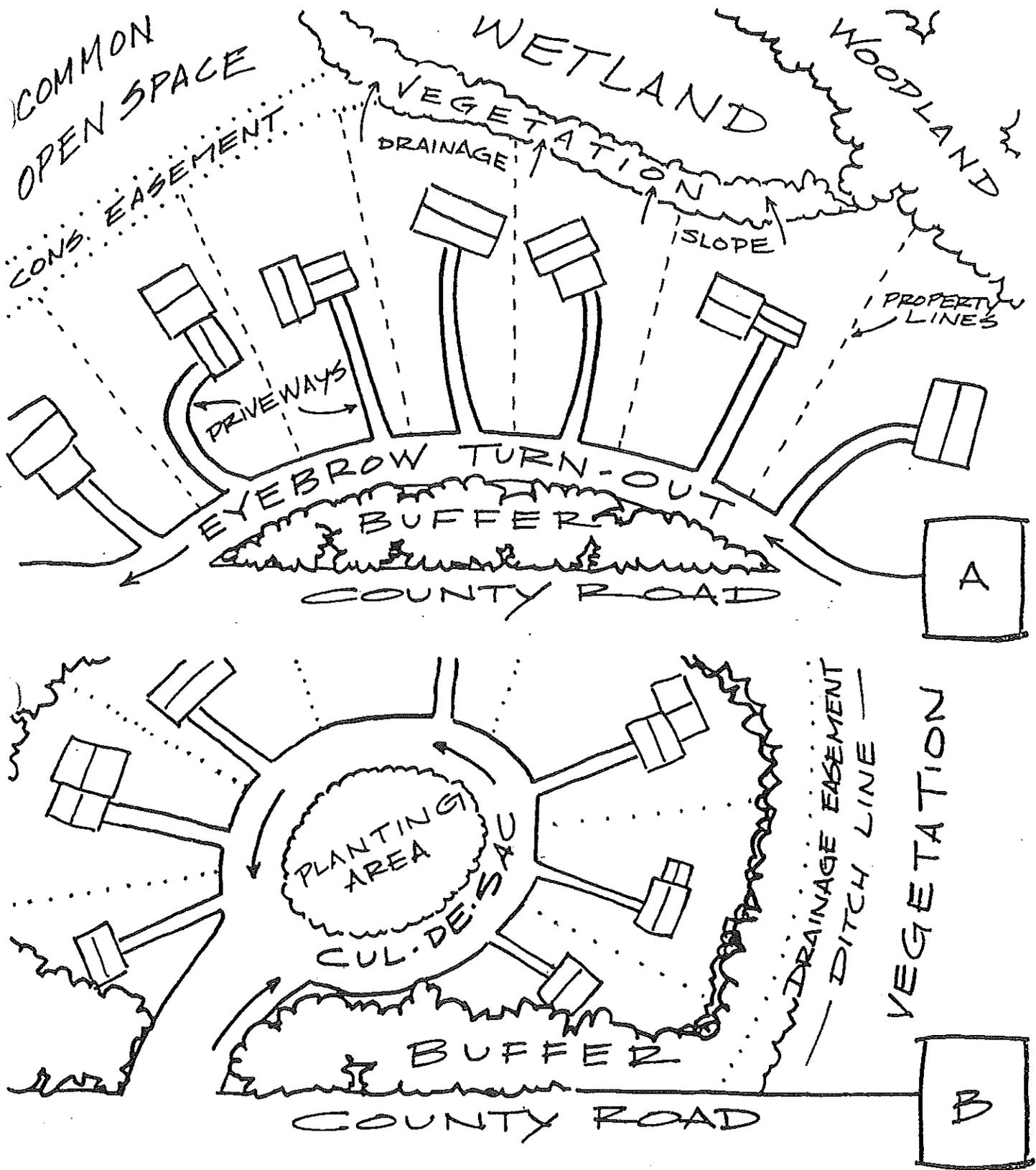
- a. Prohibit strip development along public roads, especially M-21.
- b. Designate pockets or clusters of residential development that are buffered from agricultural activity (see Figure 6-1 and 6-2).
- c. Prohibit commercial, industrial and high density residential development that is not immediately adjacent to the Village of Ovid.

3. Goal: Protect and preserve the natural resources, unique character, and environmental quality of the area.

Objectives:

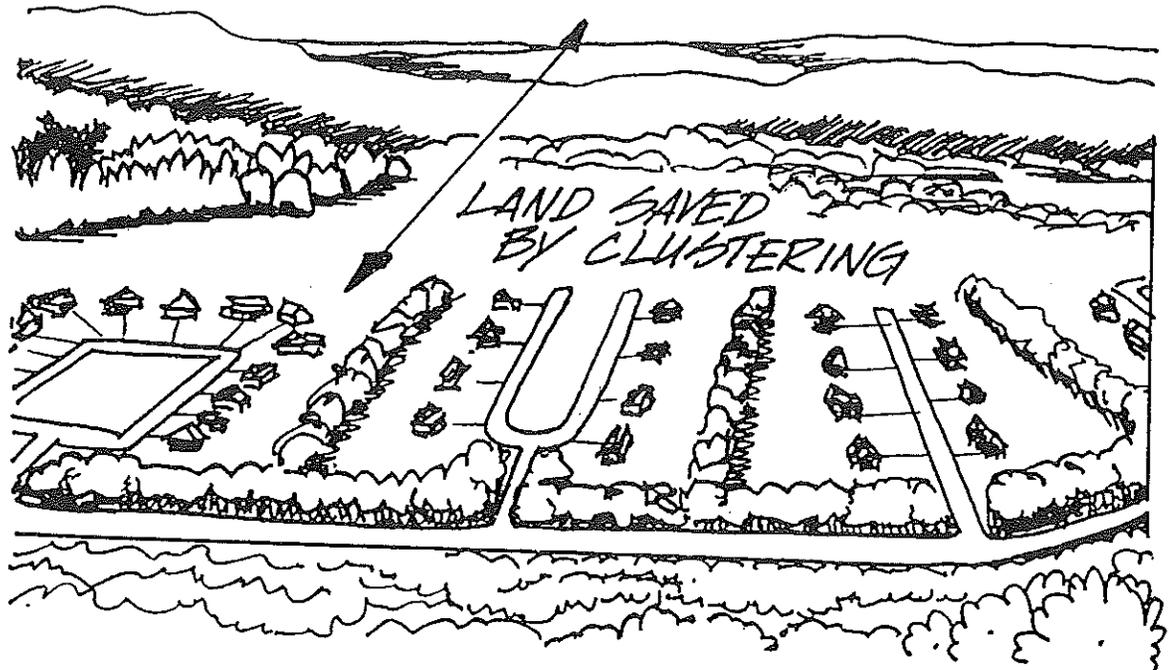
- a. Enact regulations that specifically protect natural and rural amenities like hills (see Figure 6-3), fence rows, wetlands and woodlots.
- b. Minimize disruption of natural site topography and drainage.
- c. Educate landowners about the benefits of protecting wetlands, fences rows, woodlots and native prairie vegetation.
- d. Use non-regulatory tools like conservation easements and purchase of development rights to promote the protection of natural amenities.

Figure 6-1



SAMPLE CLUSTER LAYOUTS
WORKING AROUND NATURAL AMENITIES

Figure 6-2



TYPES OF CLUSTERING

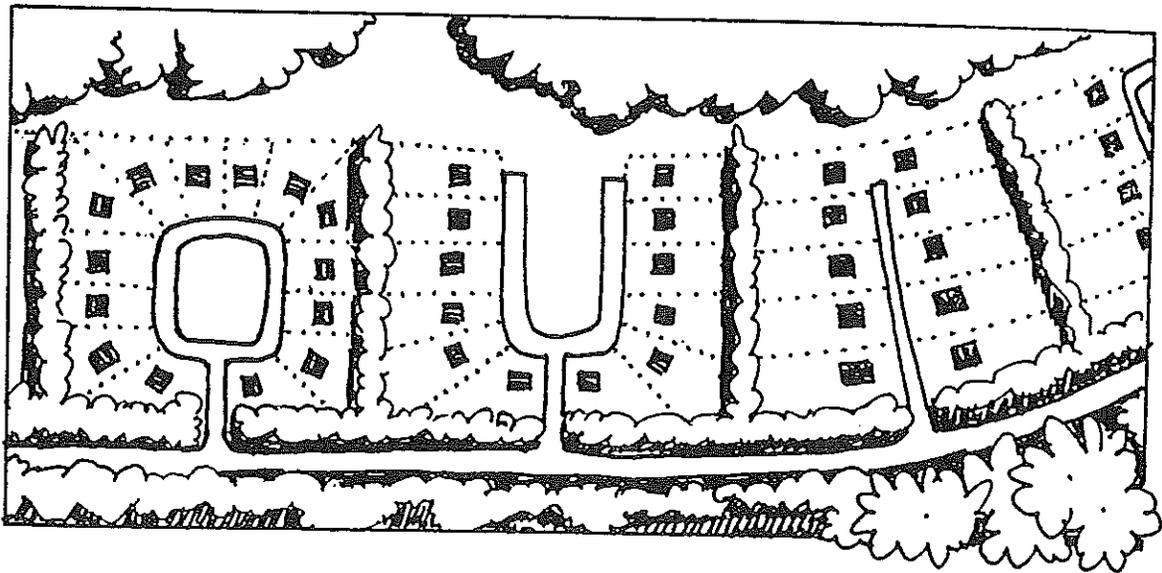
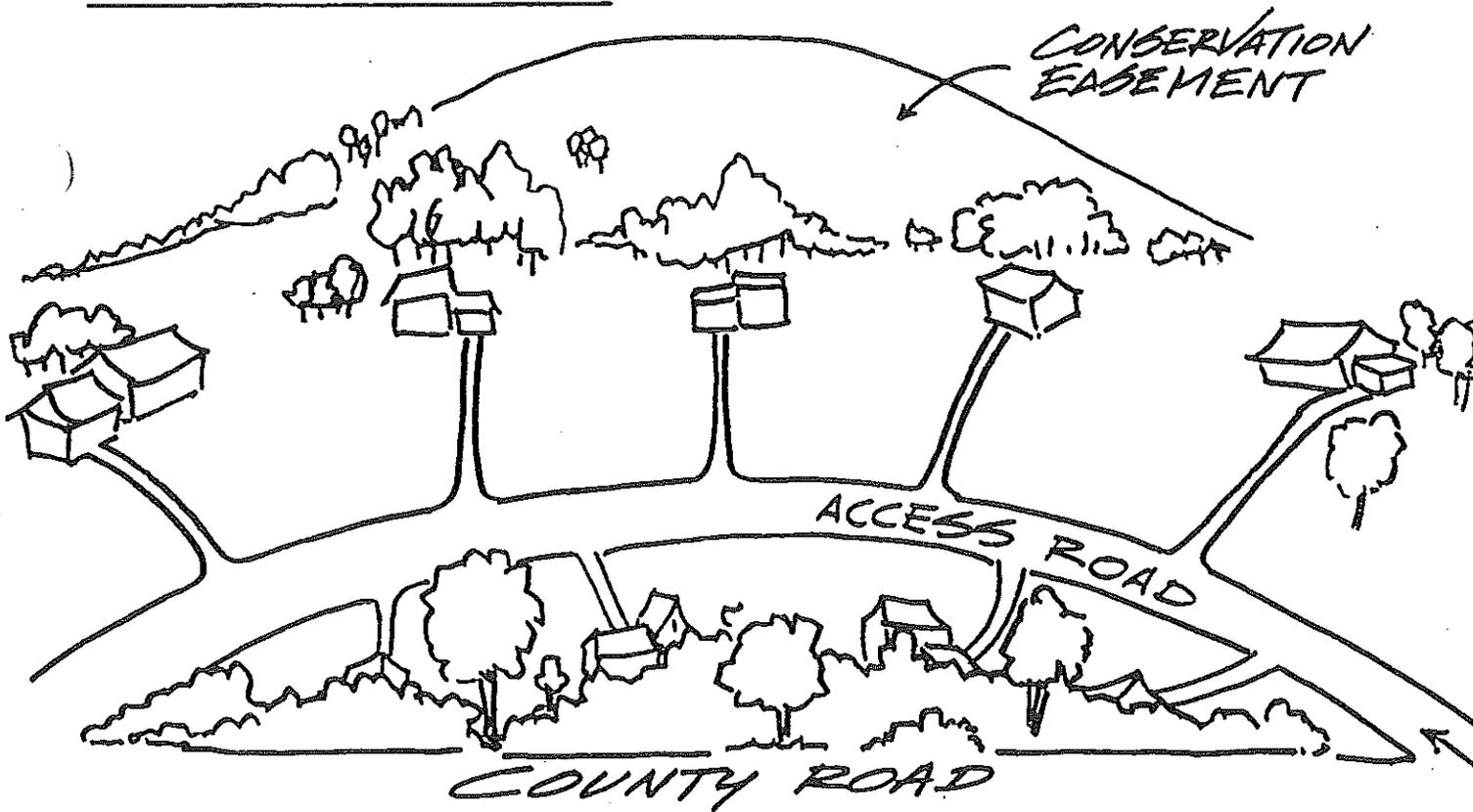


Figure 6-3



IMPROVED DESIGN



WORKING WITH TOPOGRAPHY

4. Goal: Maintain and enhance the agricultural economy of the area.

Objectives:

- a. Prevent premature and inefficient land splits.
- b. Prevent premature conversion of productive agricultural land for housing and suburban uses.
- c. Keep residential development isolated from active, viable farms.
- d. Enact regulations that recognize the importance of agriculture as an industry.
- e. Situate residential development near woodlots and wetlands and use their natural buffering capabilities to prevent conflicts between farmers and residents.

5. Goal: Maintain a healthy, self-sustaining tax base that can support township services without an inordinate burden on farmers or residents.

Objectives:

- a. Keep development low density so current police and fire capabilities are not burdened.
- b. Limit road paving to prevent development pressure on the lands adjacent to them.
- c. Prevent sprawl and leapfrogging by deciding where development will be placed.

6. Goal: Promote an orderly development process which is paced in coordination with the Township's ability to provide services by placing growth so that services demanded by the population do not outstrip the tax base ability to support it.

Objectives:

- a. Encourage industrial and commercial development to locate in areas that have public water, sewer and other infrastructure to support it (i.e., cities).
- b. Discourage sprawling and scattered development that consumes extensive land areas, creates higher community costs, generates traffic problems and increases land speculation.
- c. Place the general welfare of the township ahead of the economic interests of a few.
- d. Any high density residential development; subdivisions on less than 1 acre, multi-family development, or mobile home development shall be located on paved roads adjacent to the Village of Ovid where public services are in close proximity.
- e. Residential development shall be consolidated in rural clusters in areas not well suited for agriculture.
- f. Land shall be transferred into new zoning classifications in a controlled and orderly manner, based on realistic demand for land.

7. Goal: Strive for thoughtful, informed land use decisions that foster controlled, well designed, and coordinated growth.

Objectives:

- a. Continually reference the land use plan and follow it.
- b. Amend the land use plan as needed to keep it updated.
- c. Require local officials to get training on land use issues and zoning.
- d. Maintain dialog with neighboring townships and the county on land use matters of mutual concern.
- e. Consistently apply land use regulations and seek professional assistance when necessary.

VII. STRATEGIES

While goals and objectives are statements of desired behaviors, strategies map out specific tasks to help attain the desired targets. Following is a series of strategies designed to help move the township toward meaningful and manageable plan implementation—**the most difficult part of the entire planning process.**

The strategies are generally categorized, but there is a great deal of overlap among them.

Environmental

1. Environmentally sensitive areas like wetlands, floodplains and areas of steep slopes should not be development sites. These areas will be used as buffers, design amenities, and private common open space in rural cluster developments.
2. Design criteria in the zoning ordinance and subdivision control ordinance should require environmentally sensitive areas be designed around.
3. In areas where individual septic systems require large amounts of land, group systems should be employed. Such systems should have a regular maintenance schedule and be professionally monitored.
4. Investigate entering into a contract with a professional septage waste hauler to offer group-rates to township residents to encourage proper septic system maintenance.
5. Circulate information on the proper maintenance of septic systems. The County Health Department (743-2390) and Cooperative Extension Service (743-2251) have excellent educational materials already available.
6. Look into establishing, by ordinance, septic system maintenance districts in areas with high population concentration.
7. Work with the County Health Department to have “point of sale” septic system inspections to ensure proper operation of septic systems.
8. Amend environmental policy to have an expiration date for septic permits. Permits should only be issued in conjunction with a building permit and not for speculative purposes, unless they are part of an approved cluster development.
9. Work with the County Health Department to identify abandoned wells so they may be properly sealed to prevent contamination of the groundwater.
10. Make contact with environmental groups to see if they can offer technical support or other insight for rural and open space preservation; e.g., the Wildlife Habitat

Foundation (517)882-3110, the Mid-Michigan Environmental Action Council (517)337-2237 and the Environmental Fund (517)332-3800 (see also appendix H).

Community Character

1. Cluster single family home development to protect environmentally sensitive areas, limit sprawl, maintain rural character, and prevent unnecessary development pressure on local agriculture.
2. Recognize community elements that make an area appear rural and protect those elements in zoning and subdivision design standards. Development should occur that:
 - a. Takes into account the natural integrity of the land (e.g., wetlands, hills, views, etc.).
 - b. Prevents excessive earth moving and clearing of natural vegetation
 - c. Adheres to standards for screening, buffering, transportation access control, landscaping, and environmental protection.
 - d. Protects rural features like fence rows, drainage ways, brush areas, woodlands and natural terrain.
3. Network with communities already involved in administering clustering designs to learn how they administer the program (i.e., Livingston County, Thomas Township, Saginaw County).
4. Prohibit strip residential development.
5. Every development should include common open space, path linkages and driveway management that creates an enclave of development and not just a series of unrelated land splits lined along the roads with homes on them.

Social

1. Assist the Village of Ovid with their recreational facilities.
2. Build-in common open space and recreation areas into developments.
3. Develop an annual newsletter or some form of communication to residents to educate them about township land use policy and options available to them (like conservation easements).
4. Maintain dialog with large landowners and educate them about cluster development, conservation easements and other options available to them. Warn them about unscrupulous development activity that can limit their future options or hurt their self-interest.

Service Provision

1. Keep higher density development near the Village of Ovid where residents will be closer to community services.
2. Work with the Village of Ovid to develop a public service boundary whereby it is public policy not to extend public water and sewer services outside that area.
3. Continue to collaborate with surrounding communities for fire service. Look into joint recreation planning and collaborating for future services (like police).
4. Engage in activities that lengthen the useful life of septic systems to prevent the need for sewer system development.
5. Engage in measures to protect groundwater supplies to prevent the need for a public water system.

Economic

1. Recognize agriculture as a land-based industry that must not be encroached upon by scattered development. Long-term agricultural areas should not be encroached upon by subdivisions or other development.
2. Develop a sizable fee schedule for lot splits that discourages speculative splits. Earmark fees for computerized mapping and enforcement tracking systems.
3. Consider a cooperative among large property owners and perhaps the county surveyor to collectively survey lands for cluster development that would keep down the cost of surveying.
4. Investigate incorporating site design, survey, and private road development fees into the cost of a home site whereby the fee for such services are paid as the building sites are sold so farmers will not have to put a large amount of capital out for good design. There should be a time limit on such agreements.
5. Encourage the consolidation of parcels to reestablish large tracts of agricultural land.
6. Consider the use of "transfer of development rights" (TDR) and "purchase of development rights" (PDR) as a means to preserve farmland and open space. As examples:
 - a. Investigate enactment of a township or, better yet, a county-wide millage to publicly purchase development rights (PDR). Find a sponsoring entity like the community foundation (725-1093) or the Shiawassee Conservation Association (725-7588) to help facilitate the program.

- b. Set up an overlay district that identifies “sending” zones for the transfer of development rights (TDR) and “receiving zones” to accommodate the transferred developments. Let private sector developers use this tool to promote preservation of isolated farmlands. While this option would work within a single township, it may be better suited for a multi-township application.
 - c. Develop standards that if the purchase or transfer of development rights occurs, purchase preference is given to retiring farmers and larger farms.
 - d. Obtain technical support from groups aware of the PDR and TDR like Farm Bureau, the Michigan Departments of Natural Resources and Agriculture, and other Michigan communities already engaging in such measures (i.e., Alpine township, Kent County and Peninsula Township, Grand Traverse County).
7. Stay aware of changes in agriculture and support local operations. Encourage farmers to diversify crops and products. Consider organic farming, more cash crops (e.g., mint, alfalfa, strawberries, sod) and agricultural tourism to strengthen and diversify the agricultural economy.
 8. Work with Michigan State University Cooperative Extension Service to take advantage of niches or opportunities in agricultural development.
 9. Industrial development should be permitted only where there is public water, sewer and improved, class “A” roads. Industrial areas are best placed in existing industrial parks throughout the county that are not at full capacity (e.g., in the Cities of Owosso and Corunna). Offering up large tracts of agricultural land to industrial uses when there is sufficient improved sites in urban areas merely promotes sprawl and consumption.
 10. Consolidated commercial areas should be designed to promote a symbiotic relationship among establishments. For the next 10-15 years, commercial development should be accommodated in or in the immediate vicinity of the Village of Ovid to prevent long runs of utilities to service them. Strip development along M-21 should be strictly prohibited.

Housing

1. Work with county home rehabilitation programs and educate the owners of older homes who may be of limited means about these opportunities.
2. Become familiar with low interest loan programs for seniors and moderate income families through the Michigan State Housing Authority. Identify local participating lenders and direct residents to them.

3. Promote high quality cluster housing developments that will promote pleasant rural settings for future residents of the township.

Transportation

1. Keep moderate density development on roads that can either handle the traffic load or can most easily be upgraded to accommodate it.
2. Do not improve roads in long term agricultural areas.
3. Strip development where parcels front on county roads and have individual driveways to that county road should be strictly prohibited.
4. Control land use and driveway spacing along roadways to prevent congestion and accident problems.
5. Plan a network of roads for the township when new development occurs that can tie into the existing system of roads and not just create a series of dead-ends or cul-de-sacs.
6. Negotiate private road development that decreases the initial financial impact on the developer. Perhaps the County Road Commission could take a role in assisting with design, special assessment management, or some form of oversight at a reasonable cost to promote good design and high construction standards. Perhaps additional right-of way area along frontages could be "traded" for such assistance.
7. Consider zoning regulations in the form of Planned Unit Development criteria that would permit bonus densities or other incentives for cluster development that help cover the initial increased cost for development.

Education

1. Join and be active in the Michigan Society of Planning (MSP). This statewide organization provides training and promotes networking among professional planners, local politicians and planning commissioners.
2. Purchase economical educational materials from Michigan State University, the Michigan Society of Planning, and the Michigan Township's Association. Send Planning Commissioners and Board members to training to increase their knowledge and confidence with planning issues (see Appendix H).
3. Participate in the annual planning dinner with the county and keep in contact with the County Planning Commission on a regular basis.
4. Keep plenty of Land Use plans on hand so the policy basis for your decision-making is not lost when leadership changes. Every member of both the Planning Commission

and Township Board should have a copy of the Plan. Ample copies should also be provided to the County Planning Commission and County staff.

5. Develop a manual that includes a copy of the plan, the zoning ordinance, bylaws of the commission, subdivision ordinance and other basic educational material, for each member of the Planning Commission. This will better equip them for their very important job.
6. Have copies of the Land Use Plan in circulation so the general public can access and review township policies. Have copies of the Plan placed in the Ovid and Owosso Public libraries in addition to public school libraries. Work with ShiaNet to get the plan on the Internet.
7. Refer to the plan's goals and objectives when making land use decisions.
8. Keep in contact with groups like Farm Bureau and the American Farmland Trust and seek their advice on open space and agricultural preservation issues.

Administration

1. Do not let politics or "the good 'ole boy" system get in the middle of good planning and administering land use policy. Rise above short-sighted, political, reactionary decisions and keep the community-wide purpose of this document in the forefront of your minds.
2. Develop and consistently use checklists when processing land use cases (special use permits, a rezoning, etc.). A computerized database that gives summaries of actions taken on properties (variances, rezoning, etc.) is a good way to monitor land use activities. Tie this data to Equalization so it may be used by the township and county planning and zoning staff.
3. Consider hiring a professional person to take minutes for the Township Planning Commission when critical land use decisions are being made. Understand what needs to go into the minutes for a good public record.
4. Work with county planning and zoning staff to consistently administer the plan and zoning ordinance. Get a clear understanding of each party's role in the process and keep communications open and productive among staff. If the township feels it is not getting the attention from county staff it needs, consider jointly hiring a consulting planner who can help advise the township in difficult land use issues. While the county has oversight of local zoning, the staff there covers a great deal of territory and issues. Perhaps the consultant costs could be shared by the county. Application processing fees as a means of paying for such service.

5. Work closely with the County Prosecutor's office to emphasize that zoning enforcement is important and the townships collectively want more enforcement attention devoted to zoning administration.
6. Explore with the Prosecuting Attorney's office about contracting with a legal firm for a land use attorney who has the necessary depth and understanding of land use and land split issues.
7. Monitor local Realtor activity and work with the Shiawassee Regional Board of Realtors 217 N. Washington, Owosso (723-4672) and the State Board of Real Estate (517)241-9288) to point out unscrupulous activities. Set standards as policy makers and consumers not to tolerate such inappropriate behavior which short-changes the community. If warranted, file appropriate complaints with the state licensing board. Severe cases can result in the revocation of a Realtor's license. Avoiding the use of bad Realtors also sends them a financial message.
8. Educate large landowners and the public about land split, clustering and other land use issues to help the entire community stay involved with good design and good land use practices. Have planning commission, board members and concerned citizens be ambassadors of these messages.
9. Each year the plan's goals, objectives and strategies should be reviewed for relevance. Amendments should be made to the plan, as appropriate, to keep it a meaningful and relevant document. The plan should be entirely updated no less than every five years—even if the update merely reaffirms previous goals and objectives.
10. Stay in regular contact with the Village of Ovid officials. Be familiar with their land use, community service provisions, and annexation policies.
11. Communicate with neighboring townships about emerging land use and service issues. Be aware of how one community's policies can impact its neighbors. Keep the planning issues in mind of the larger community (county and state) when making land use policy and decisions.
12. Be aware of regional issues that impact your township.
13. Consider working with the Village of Ovid in zoning policy and enforcement.

Enforcement

1. Since there seems to be no legal way to prevent splits that do not comply with zoning regulations, file a notice with the County Register of Deeds for any land division created that does not qualify for a building permit. The zoning administrator could put it in the form of an affidavit with township signatures to demonstrate multi-jurisdictional coordination.

2. Enforce the requirement that all land contracts are supposed to be registered with County Equalization and Register of Deeds.
3. Make contact with the State Board of Realtors and report any unscrupulous activity by area Realtors. If parcels are being created and sold with problems, these facts must be disclosed by sellers. They can be held responsible for a situation where someone bought a piece of property in anticipation of building only to find they cannot get a building permit.
4. Pass an ordinance that requires disclosure at the point of sale regarding, right to farm, the township policy not to pave certain roads, septic maintenance standards, and other issues of relevance new owners should know about.
5. Identify nonconforming uses and non-conforming parcels. Map them and monitor them.
6. Many of the enforcement complaints were centered around junky properties, junk cars, etc. The township does have the ability to enact its own free-standing ordinance to deal with property maintenance and junk. The township can enforce its own regulations in this case and may get better results. The township could hire a part-time enforcement officer, or collaborate with its neighbors to employ someone to provide focus in their areas.
7. Review the zoning ordinance with regularity to ensure it still meets the needs of the township.
8. Develop a shared data-base or tracking mechanism for zoning decision and enforcement to help watchdog consistent and appropriate implementation of land use policies and regulations.
9. Review the track record of zoning administration and enforcement. Keep up dialog with the county to confirm local land use policies and enforcement expectations are being met. Additional staff may be needed at the county level to implement more complicated zoning regulations. A consultant may actually be used by the county to augment staff and keep administrative costs down. A contract could be entered into with an experienced, professional planning consulting firm with the township, neighboring townships and the county.
10. Investigate joint membership with the county and other townships in a legal risk pool so if there are legal challenges to the plan and zoning the township is equipped to defend itself.

Land Use

1. The planning process engaged in to create this plan recognizes that scattered, sprawling development is a very poor practice and creates future liability for the

community. As such, a sprawling development pattern shall not be permitted along township roads, but rather, clustered residential enclaves will be permitted in select areas where agricultural production is not well-suited for the land.

2. Adhere to the land use designations of the future land use map and evaluate rezoning requests in terms of the future land use map.
3. Amend the zoning ordinance to:
 - a. Create an overlay zone that *requires* rural clustering with appropriate design guidelines.
 - b. Use rural clustering as a means of utilizing existing non-farm parcels between 2.5 and 20 acres in size in areas not appropriate for A-2 zoning.
 - c. Provide for maximum setbacks to prevent long driveways and waste of land.
 - d. Clarify maximum lot sizes for home sites to prevent 20-40 acre home sites in all zones.
 - e. Set minimum densities to ensure efficient use of land.
 - f. Provide cottage industry standards for appropriate rural enterprises.
 - g. Clarify the definition of "farm dwelling".
 - h. Enact use variance standards to prevent abuses in granting variances to get around the rezoning process.
4. Amend the township zoning map to realize the objectives illustrated in the future land use map (see Figure 7-1).
 - a. Areas designated in *yellow* on the map will be permitted to develop for rural residential home sites at a maximum density of **one unit per acre**. Development occurring in these areas will be required to cluster the development. The design of the development must meet the criteria outlined in this plan for rural clustering to promote efficient development and maintain rural character. Bonus densities would be permitted in this area as a way to offset the design costs of the cluster. It is further the intent of this plan to have some review over the placement of single homesteads in the cluster overlay area to prevent placement of structures that prevent efficient future divisions. The current analogous zoning district in the adopted zoning ordinance is A-2, which permits one unit per acre. The use of this overlay district, however, would necessitate the creation of additional ordinance language for design and review of rural cluster subdivisions. It is the intent of the township **not** to move any additional lands to the A-2 required overlay district until the regulatory language is developed to support the required overlay district.
 - b. Areas designated *orange* on the map will also be permitted to develop for rural residential home sites at a maximum density of **one unit per acre**. Development occurring in these areas, however, will not be required to cluster, but clustering will be encouraged with design incentives. The current analogous zoning district in the adopted zoning ordinance is A-2, which permits one unit per acre.

- c. The areas designated in *green* on the map will be permitted to develop for rural residential home sites at a maximum density of **one unit per 10 acres**. Development occurring in these areas will be required to cluster the development. The design of the development must meet the criteria outlined in this plan for rural clustering to promote efficient development and maintain rural character. Bonus densities would be permitted in this area as a way to offset the design costs of the cluster. It is further the intent of this plan to have some review over the placement of single homesteads in this cluster required overlay area to prevent placement of structures that prevent efficient future divisions. The current analogous zoning district in the adopted zoning ordinance is A-1 ½ . This overlay district, however, would necessitate the creation of addition ordinance language for the design and review of rural cluster subdivisions. It is the intent of the township **not** to move any additional lands to the A-1 ½ overlay designation until that the regulatory language is developed to support the district. Once the necessary supporting regulations are developed, however, it is further the intent of the township not to move lands currently zoned A-1 (one unit per 40 acres) into the A-1 ½ classification unless a rezoning request is filed.
 - d. It is the intent of this plan to keep higher intensity residential development and commercial development in close proximity to the Village of Ovid (designated *red* on the future land use map).
5. Amend and adopt the subdivision control ordinance developed by the county for the townships in 1996 to accommodate changes in the State Land Division Act. Use this ordinance to regulate and evaluate land splits, cluster developments and subdivisions. Work with the county to coordinate the review. Investigate delegating township authority given by state law for lot splits and subdivisions to the county through a contract, resolution or other legal means, to solidify the review process and chain of authority for land splits.

6 Modify the zoning ordinance to create a cluster overlay district classification that permits only clustered development under certain conditions. The cluster development would be processed like a special use permit (SUP) with a site plan for the design submitted with the application for the SUP. The following is a framework to develop the regulatory language.

The overlay district should:

Create a cluster review committee comprised of a USDA representative, the Drain Commissioner or designee, a County Road Commission liaison, an Environmental Health inspector, the county surveyor, a land use planner, a township planning commission member, and a county planning commission member to work with the property owner to help determine the best placement and layout of a cluster development.

The cluster development shall be evaluated on the following criteria:

- a. Value of the proposed development site for agriculture. Cluster areas shall be situated on lands not well suited for agricultural production.
- b. Proximity of the site to a paved road.
- c. Use and preservation of existing woodlots, wetlands, fence rows in the cluster design and as buffers from roads and agricultural production.

The development shall:

- a. Set a density limit on the development (e.g., 2 units per acre), regardless of the number of transferred development rights or incentive splits earned.
- b. Provide a minimum of 25% common open space for the development, a portion of which must be usable to the residents of that development.
- c. Follow the design standards set forth in the township's subdivision control ordinance.
- d. Avoid tiled farm areas and prime soils for agricultural production.
- e. Provide adequate buffers between agricultural operations and the residential use.

The developer may:

- a. Have up to 10% additional building lots for design amenities (e.g., additional open space).
- b. Use a zero lot line option on one side and/or a rear property line to permit flexibility in home placement.
- c. Reduce the front yard setback to 25 feet for lots not fronting a public road.

The township/county may:

- a. Require performance guarantees to ensure the protection of natural amenities and/or the placement of site improvements (e.g., a paved private road).
- b. Require registered conservation easements or deed restrictions.

Non-regulatory tools

1. Monitor, encourage and take advantage of state legislation that reduces tax burdens on farmers and permits purchase or transfer of development rights.
2. Educate landowners about the tax benefits of conservation easements. Work with an entity like the Nature Conservancy that helps owners craft, set-up and monitor conservation easements.
3. Allow farmers in the A-1 zone to sell their development rights to other zones. Once the allotted splits are sold, a deed restriction needs to be recorded to protect the "sending zone" or conserved area from development.
4. Investigate the use of a real estate conversion fee or land consumption tax for lots converted from agricultural use to residential use. Such fees could be earmarked to purchase development rights from farmers. In this case, the purchased rights would not have to be transferred or used in a "receiving zone" or developing area.
5. Get familiar with U.S. Department of Agriculture conservation incentive programs and utilize them.
6. See whether or not the Shiawassee Community Foundation is willing to assist with the purchase of conservation easements and or transfer of development rights. (P.O. Box 743, Owosso, MI 48867. 725-1093).