

THE CITY OF WATERLOO

COMPREHENSIVE PLAN

Prepared by

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CITY OF WATERLOO
31140 First Street - Waterloo
Lebanon, Oregon 97355

WATERLOO CITY GOVERNMENT

Mayor - Dorothy Wood

Council - Dennis Scott, Martha Clark, Dennis Stanley, John Wilmot,
Mike Utley, Tom Rhoades

Recorder - Sandra Elliott

The City wishes to thank the following individuals for their
involvement in the development of the Plan:

Stan Rous - former councilmember

Vern Hubbard - former councilmember

George Hanson - former mayor

ORDINANCE NO. 219

WHEREAS, the City of Waterloo is required by state law to prepare and adopt a Comprehensive Plan addressing all appropriate Statewide Planning Goals; and,

WHEREAS, public input through the three year planning process has been obtained and is reflected in the content of the Waterloo Comprehensive Plan; and,

WHEREAS, this version of the Waterloo Comprehensive Plan has been duly presented at public hearing.

NOW THEREFORE, the people of the City of Waterloo ordain as follows:

That the document entitled the "Waterloo Comprehensive Plan" shall serve in a legal capacity in meeting the requirements of state law with regard to the Statewide Planning Goals.

Sandra Elliott

Recorder

Barth M. Wood

Mayor

1-17-80

Date

11-7-79

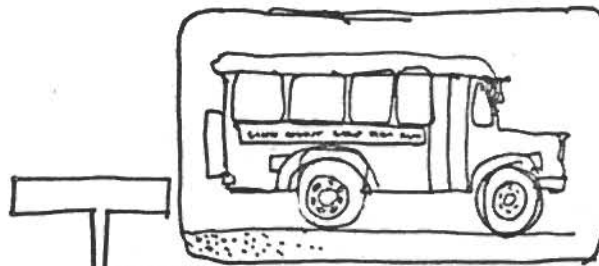
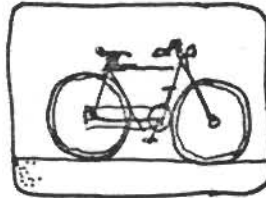
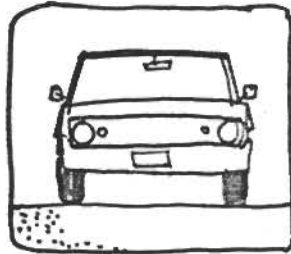
Date

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Transportation

TRANSPORTATION ELEMENT

General Development Goals:

- * Provide for safe travel both through and within the City of Waterloo
- * Alleviate traffic hazards on a priority basis and as funds permit.

FUNCTIONAL CLASSIFICATIONS

Within the City of Waterloo two classifications of street types exist. The Major Collector type is generally a through traffic mover that should adhere to the following guidelines:

- 1.) Traffic control (stop signs) at all intersecting streets
- 2.) Two moving traffic lanes
- 3.) Minimize on-street parking
- 4.) Discourage individual accesses (driveways) from fronting on collectors.

Local Streets are those utilized for providing access to individual properties. The following standards should apply:

- 1.) Two traffic lanes
- 2.) Sidewalks where necessary for safety
- 3.) Traffic control (stop signs) where necessary for safety

A third type, that does not exist in Waterloo but is considered a viable access solution, is the cul-de-sac. Cul-de-sac standards appear below.

1. Two traffic lanes
2. Adequate maneuvering area and parking space on turnaround.

STREET PLAN

Within the City of Waterloo, the circulation network is relatively simple. The small number of streets and street types in the City allow an easy flow of traffic and a minimum of hazards. The following recommendations apply to streets in Waterloo:

1. Gross street should be considered a major collector as indicated on the transportation plan map on plate _____. It's function should continue to be to provide access to local streets in the City and to provide for traffic movement *through* the City.
2. River Drive should be considered a minor collector as indicated on the transportation plan map on plate _____. It's function should continue to be to provide an alternative route to and from Lebanon.
3. All other streets within the City should be considered local roads. These, and all other local roads not yet built, should function as providers of access to properties and as a means for short, local trips.

HAZARDS

A traffic hazards study was prepared in Waterloo in August 1978. Such considerations as substandard road surface or width and dangerous intersections were identified by the study. The following priority for addressing these needed improvements are as follows:

Within City Jurisdiction

Improve Kay Street to Local Road standards

Implement a parking solution and congestion relief plan for 7th and Gross Streets

Work to relieve visibility obstruction at 6th and Star

Work to relieve visibility obstruction at 5th and Gross

Work to relieve visibility obstruction at 2nd and Card

Work to relieve visibility obstruction at 2nd and Kay

Outside City Jurisdiction

Suggest road reflectors at dangerous corners on Waterloo Drive between Highway 20 and City.

Request speed limit signs on Waterloo Drive between Highway 20 and City

Request design solutions, including but not limited to night lighting, be studied and implemented for intersections of Highway 20 / Waterloo Drive and Highway 20 / Sodaville-Waterloo Drive to alleviate dangerous turns

Suggest immediate improvement (safety features) to railroad crossing at Waterloo Drive

To insure adequate, safe circulation of traffic within Waterloo the following policies are adopted:

- * *Encourage all future street dedications align logically with existing streets*
- * *As economics permit, pursue improvement of hazards on the priority list previously indicated.*
- * *Consider all newly created roads serving residential needs as "local streets."*

OTHER MODES

Bicycle, pedestrian and bus travel are modes of traffic that

address the conservation of energy. Potentials for providing this-conservation stem directly from Waterloo's size: it is a small community with a park and general store conveniently located and within biking or walking distance. The creation of a biking/walking path network in the City will create an opportunity not only for energy conservation but for more community interaction.

To this end, the City adopts the following policies:

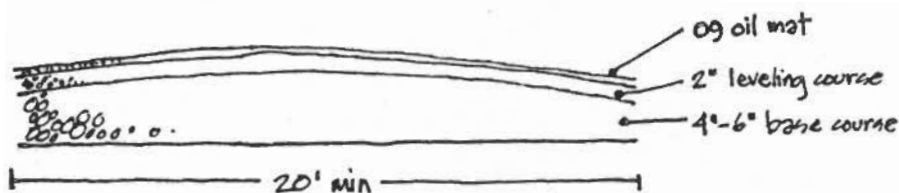
- * *Explore and pursue bikeway/walkway project funding*
- * *Install safety devices (such as crosswalk markings or flashing lights) where necessary for bicycle or pedestrian safety.*

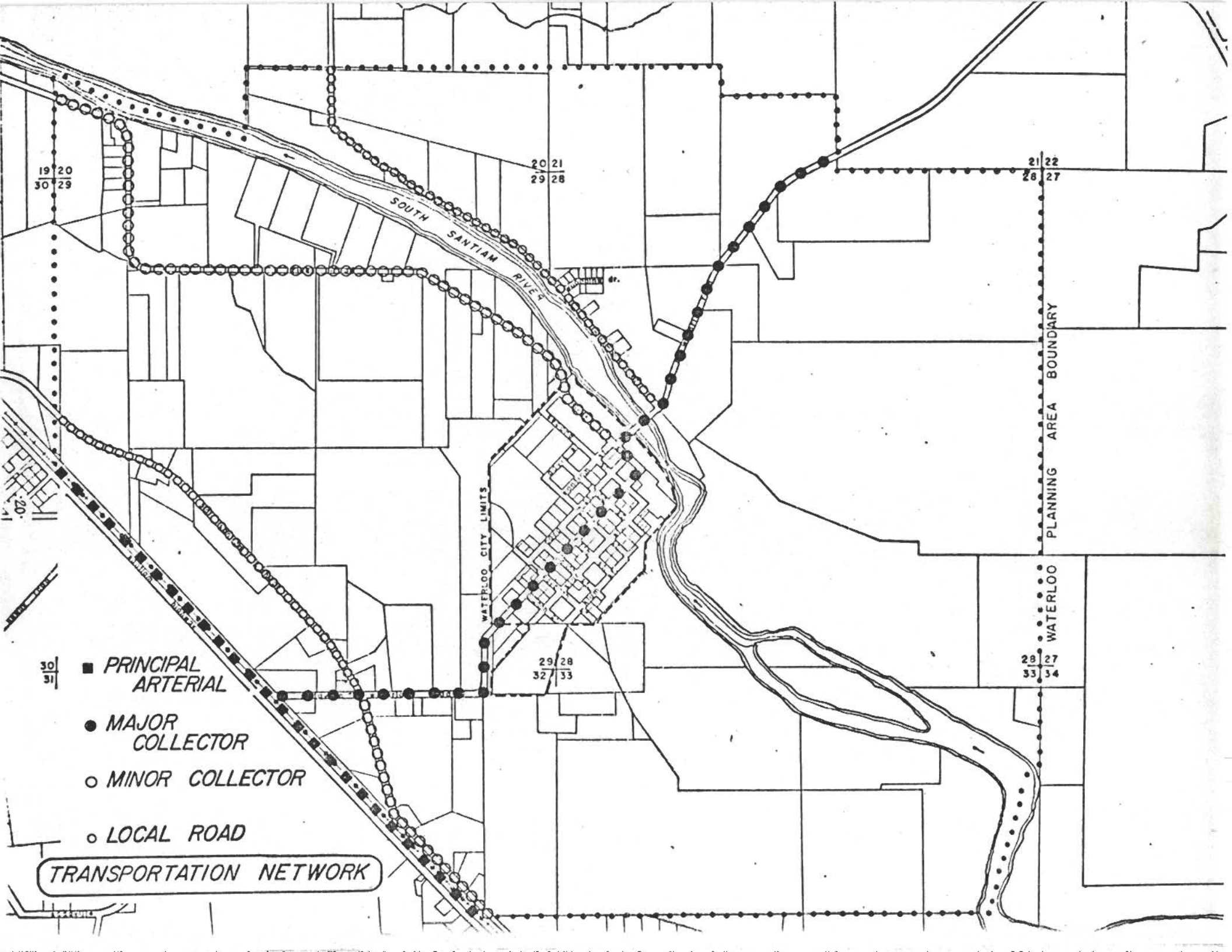
Bus service, while not serving Waterloo regularly, is available on call from the Linn County Senior Bus Service. There appears to be no need, currently, for this Bus Service to travel through Waterloo. Conditions in the City may, in the future, warrant being placed permanently on the bus route.

To this end, the City adopts the following policy:

- * *When population and development conditions warrant, request being placed permanently on the Linn County Senior Bus Service route*

• local road construction standards •





19 20
30 29

20 21
29 28

21 22
28 27

SOUTH
SANTIAM
RIVER

PLANNING AREA BOUNDARY

WATERLOO CITY LIMITS

29 28
32 33

28 27
33 34

WATERLOO

- PRINCIPAL ARTERIAL
- MAJOR COLLECTOR
- MINOR COLLECTOR
- LOCAL ROAD

TRANSPORTATION NETWORK

ACKNOWLEDGED PLAN MATERIAL

WATERLOO BACKGROUND REPORT

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BACKGROUND REPORT - TRANSPORTATION

Transportation systems provide the framework for social, recreational and development activity in an area, whether the method is walking, biking or automobile travel. Movement - safe, efficient and wherever possible visually pleasing - is the objective.

In Waterloo and the area there are several levels of movement that occur: transportation through the area, transportation to and from the area, and transportation within the area.

"THROUGH" TRAFFIC

State Highway 20 is the major traffic mover in the area. It is considered a primary arterial and provides the only high volume transportation link between Lebanon and Sweet Home, as well as tying Waterloo and Sodaville to these two cities. Recognized guidelines that should be observed for primary arterials include the following:

- a) Regulated access.
- b) Traffic control at all intersecting streets.
- c) Minimum right of way 100'.
- d) Width of travel lanes 12'.
- e) No parking lanes on principle arterials.
- f) Width of shoulders without sidewalks 4-8 feet.
- g) Left hand turn lanes at intersecting major collectors or where hazardous conditions warrant a turn lane.

The major hazards that occur in this area are from right hand turns by Lebanon-bound traffic. The turn required from Highway 20 to Waterloo Drive (Lebanon-bound) is particularly hazardous because of the angle of the intersection as well as the abrupt railroad crossing. The possibility of improving this intersection should be addressed. Design solutions might include those in diagram 1.

Another through traffic mover in the area is the railroad, a freight transporter. The Oregon Electric Railroad traverses the area parallel to Highway 20. There are no sidings in the area as there are no existing industries or, within the scope of the plan,

any potential industrial sites. Daily traffic on the line averages between 2-4 trains.

The major concern relating to the railroad is from the dangerous situation of the crossing of Waterloo Drive. The crossing is presently very poorly marked; there was an accident there in 1976. With traffic volumes on Highway 20 increasing and volumes on Waterloo Drive expected to increase, the need to improve this crossing is evident. The Public Utilities Commissioner indicates this particular crossing, in terms of priority for improvement, as being eligible for signal installation "within 5 years". The City of Waterloo should encourage this action as soon as possible.

"TO AND FROM" TRAFFIC

Currently Waterloo Drive and Berlin Road are in the major collector category, carrying traffic generally to and from the area. General guidelines for this category include:

- a) Traffic control at all intersecting streets.
- b) Two moving traffic lanes.
- c) Minimum right of way 60'.
- d) Width of travel lanes 12'.
- e) Width of shoulders 10'.

The major hazards associated with Waterloo Drive are the numerous sharp turns that occur in and out of the City. The possibility of straightening or relocating might be considered as a means of solving the problem.

There is a definite possibility of Waterloo Drive serving as a "through traffic" mover in the near future. With the proposed strengthening of the North Santiam link (utilizing Bellinger Scale Drive) traffic from Sweet Home and Sodaville may be routed through Waterloo. The impact of this may provide justification for considering road straightening as well as passing safety measures in the City. Increased traffic may produce serious pedestrian and bicycle safety hazards resulting in perhaps the need for a sidewalk or crosswalk markings. The proposed North Santiam link is shown on page 57.

Another collector road (though a minor one) is River Drive. River Drive connects Waterloo to South Lebanon.

"LOCAL" TRAFFIC

Local roads in Waterloo are those that serve it's residents and are not meant for any through traffic movement. In addition, the Old Santiam Highway (between Waterloo Drive and Highway 20) can be considered a local road, as Highway 20 has long since precluded it's use as an actual highway. Plagman Drive also is basically a local road as it serves mainly just as a connector between Berlin Drive and Waterloo Drive.

Standards for local streets are as follows: *Polig?*

- a) Two traffic lanes.
- b) Minimum right of way 60', 20' minimum oiled roadway, two 10' shoulders.
- c) Sidewalks recommended where necessary for safety.
- d) 5' wide sidewalk with 8' setback from roadway.

Actual construction standards should also be adopted by the City, before such time as new roads in Waterloo are begun. The possibility for the use of cul-de-sacs (with appropriate standards) in Waterloo should also be considered a viable local access solution. Local Road and Cul-de-Sac standards appear on pages 59-60.

Hazards on local roads are minimal, however, in some areas, intersection visability is limited. This can be avoided in the future by requiring adequate building and planting setbacks.

BICYCLE AND PEDESTRIAN TRAVEL

Another type of local travel is accomplished by biking or walking, which in Waterloo is relatively easy. Waterloo's small size makes it a short drive or walk to the store, the school, or the park and the City's flat topography makes the trip easy.

A class III bike and pedestrian path currently exists on Gross Street from Waterloo Park to the Waterloo Store. It is the only path in the City. Bike and Pedestrian traffic volumes

in Waterloo currently are small due to it's size. The impact, however, of increased auto traffic on even the small amount of bicyclers and pedestrians could be hazardous to the point of installing sidewalks or other safety devices (flashing lights, crosswalks) on Cross Street.

A bike path also reaches as far as Pineway Golf Course on Highway 20. Should this path ever be extended closer to Waterloo, the possibility for tying in to this system will be greatly enhanced.

The Department of Transportation provides financial assistance to local governments for footpaths and bikeways. Possible projects in Waterloo after their submission will be considered by the State Advisory Committee on Bicycles and placed on a priority list for funding. Funding criteria involve the following points:

1. Cost per mile of the project.
2. Service area population.
3. Previous expenditure of State bikeway funds in the service area.
4. Local financial participation in the project.
5. System linkage.
6. Whether the project is part of a locally adopted plan.
7. Whether the project will increase ridership.
8. Whether the project will alleviate any hazards.

Point 6 illustrates the importance of including a bicycle and pedestrian path plan in the Waterloo Comprehensive Plan.

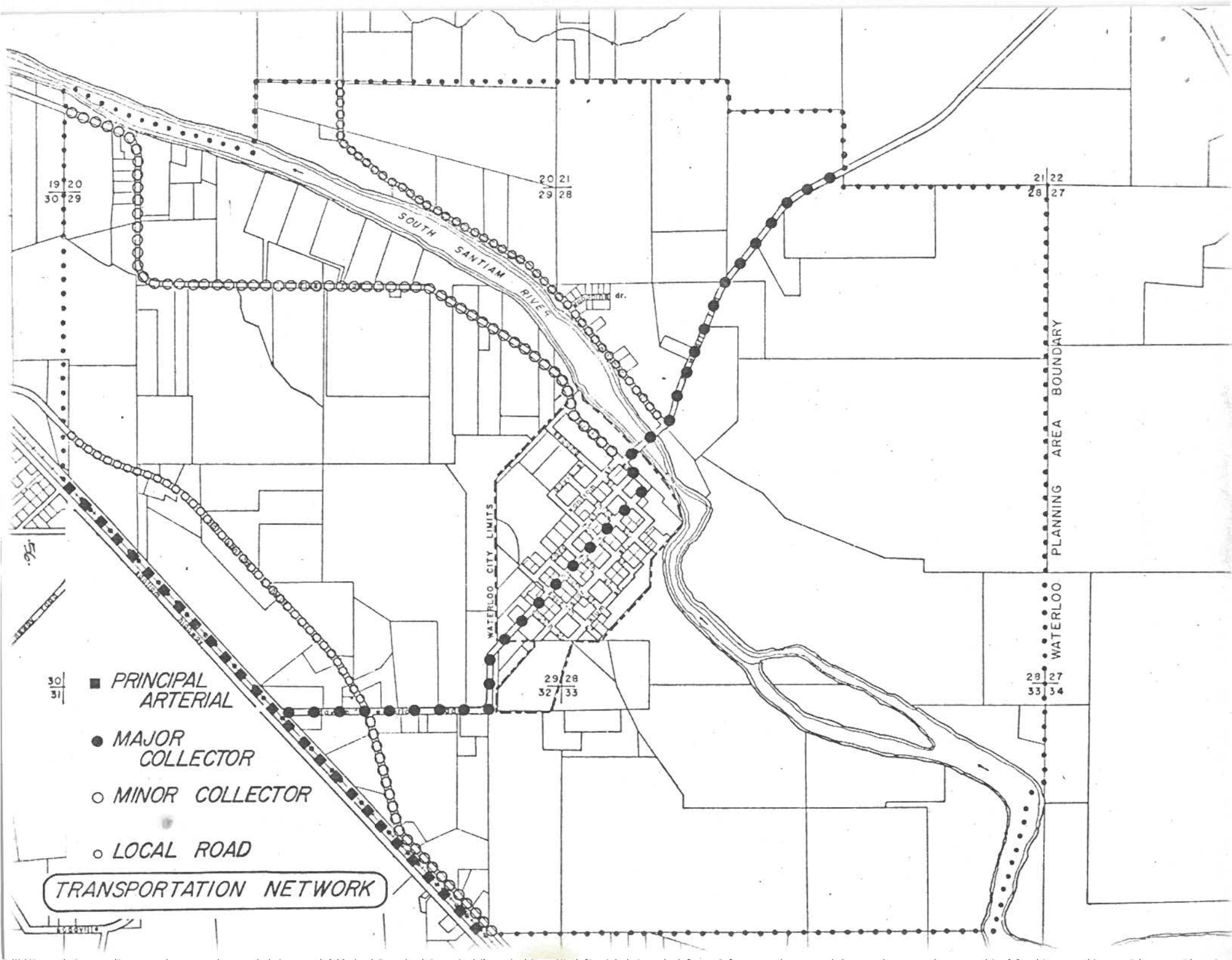
MASS TRANSIT

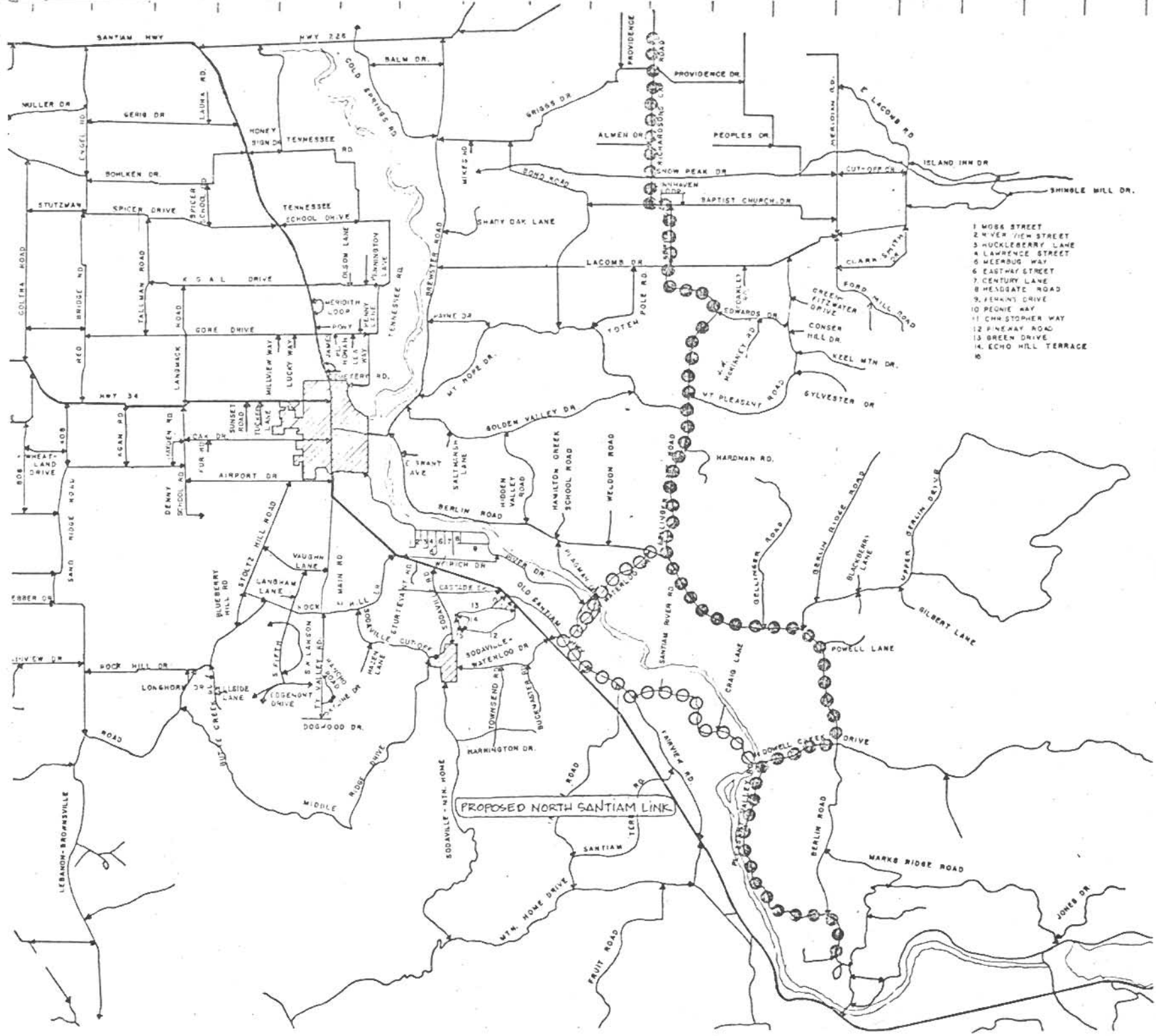
Mass transit does not exist in Waterloo, as the need for it is very low. The closest transit run utilizes Highway 20, the Linn County Senior Bus Service. This bus service gives priority to Senior Citizens, but is available to anyone. With the high percentage of retired persons living in Waterloo, it's potential for being placed on the bus route should be realized perhaps even on an experimental basis. The bus currently makes roundtrips between Sweet Home and Lebanon (bypassing Waterloo) two days per week.

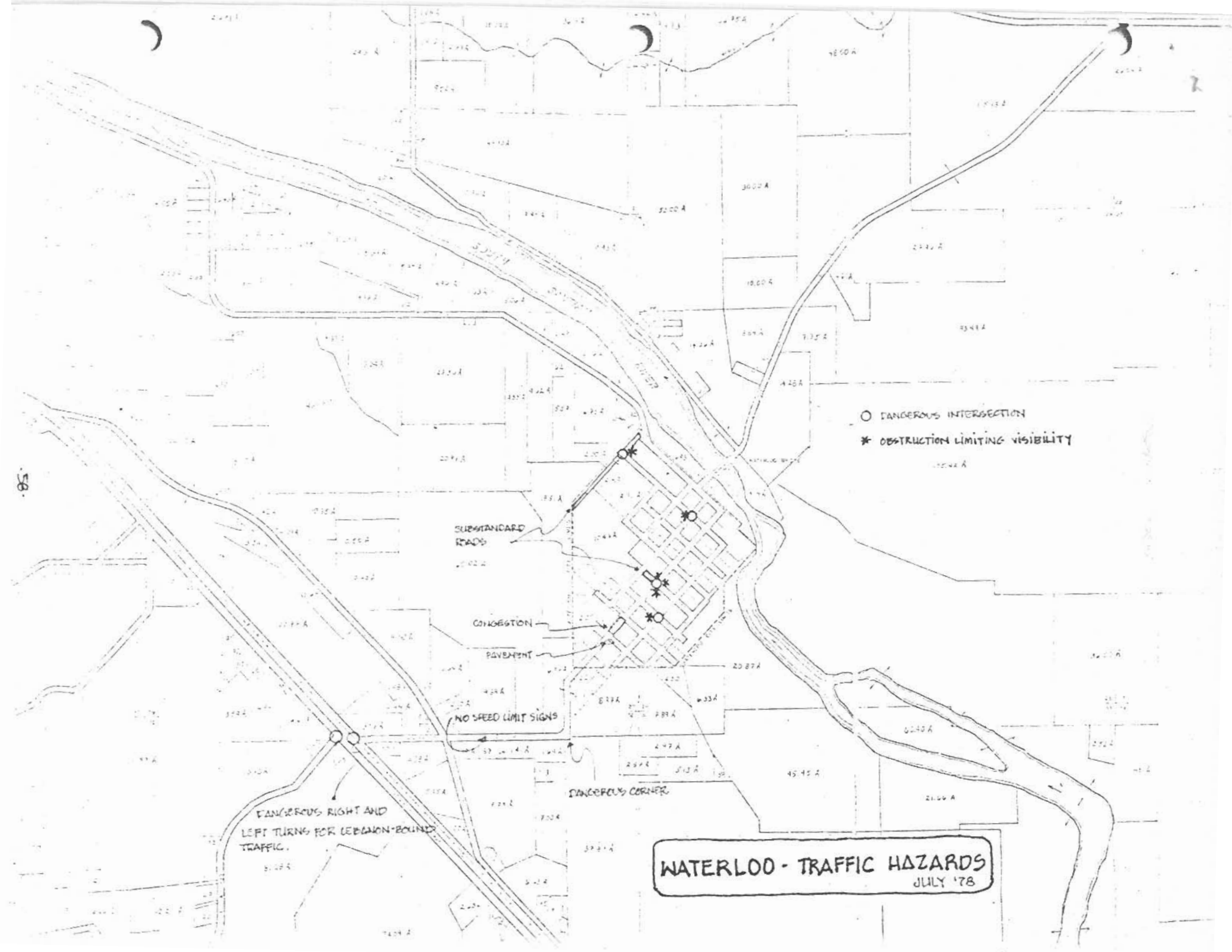
IMPACTS OF PROPOSED LAND USES

Rural residential land uses in the Planning Area would create the need for increased property access via Waterloo Drive (Major Collector) River Drive (Minor Collector) and the Old Santiam Highway (Local Road/Minor Collector). The reduced speeds in effect on each of these roads in addition to their good condition minimizes the impact of a small residential traffic increase. Proposed accesses would be reviewed for safety considerations and possible traffic volume increase.

Residential land uses in the City would also create an increase in traffic volumes on the collectors and arterials in the area. The high construction standards of these roads, however, are more than adequate to absorb any increase generated within the Planning Area.







- DANGEROUS INTERSECTION
- * OBSTRUCTION LIMITING VISIBILITY

SUBSTANDARD
ROADS

CONGESTION

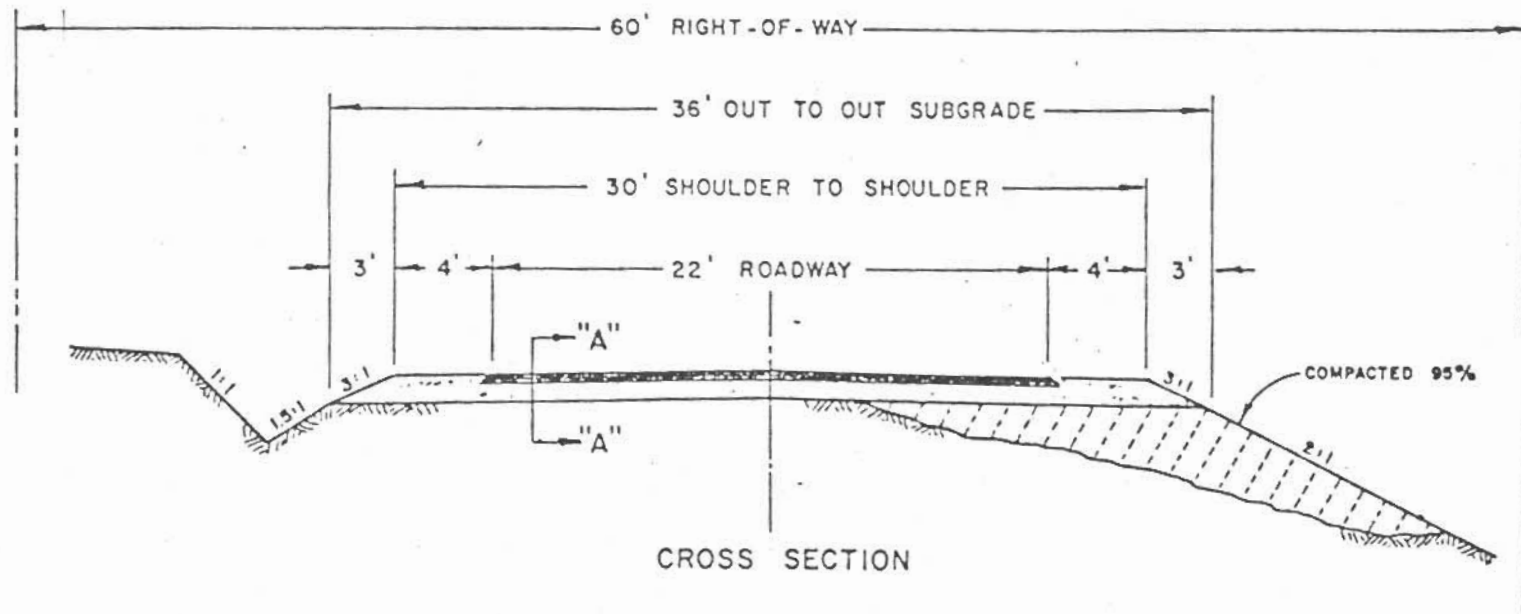
POVERTMENT

NO SPEED LIMIT SIGNS

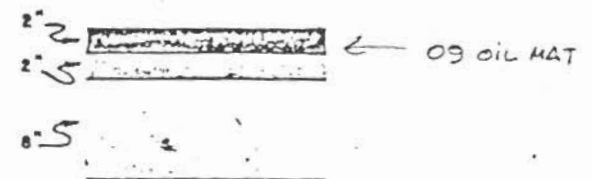
DANGEROUS CORNER

DANGEROUS RIGHT AND
LEFT TURNS FOR LEBANON-BOUND
TRAFFIC.

WATERLOO - TRAFFIC HAZARDS
JULY '78



SECTION "A"- "A"



ASPHALTIC CONCRETE
2" compacted class "B" or "C"

LEVELING COURSE and SHOULDERS (3/4"-0)
2" min. deep rock compacted
to 95% relative density

BASE COURSE (1-1/2"-0)
8" min. base C.R. rock compacted
to 95% relative density.

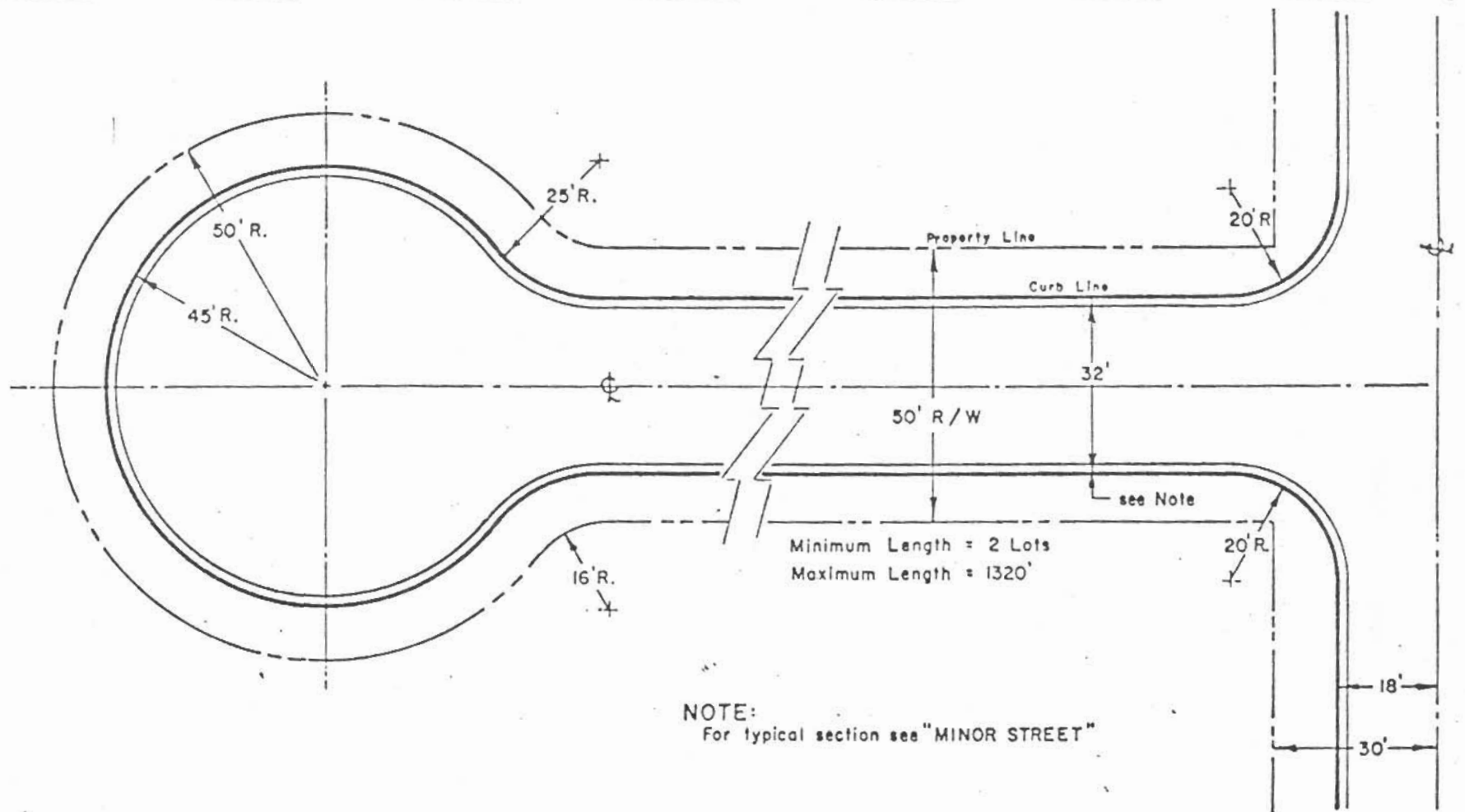
ALTERNATE DEPTH AS DETERMINED BY C.B.R. OR EQUAL TEST

1" base rock
LINN COUNTY ENGINEERS OFFICE

RURAL, COLLECTOR &
SUBURBAN ROADS

DATE: 6-1-78

ST-105



LINN COUNTY ENGINEERS OFFICE

MINOR CUL-DE-SAC

DATE: 6-1-78

ST-109

BACKGROUND REPORT - HOUSING AND ECONOMY

POPULATION CHARACTERISTICS

Figures from the Waterloo Housing Survey indicate that approximately 28% of the population is of "New Household Formation" age (18-34). This compares with a 24% figure for Linn County on the whole. Waterloo also shows a slightly higher percentage of retirement age (65+) residents than the overall County -14% versus 10%.

1970 figures from the District 4 Council of Governments show an average household size of 3.51 people per household in Waterloo. The Waterloo survey shows this figure diminishing to 3.08 by 1978, at a rate much faster than the State. (This perhaps is due to it's attraction as a retirement community.) Continuation of this trend gives the following projection of people per household in Waterloo.

<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
3.51	3.24	2.97	2.70	2.43

EMPLOYMENT

Growth, and therefore housing in Waterloo is tied closely with employment in the rest of the County, particularly Lebanon. A summary of existing and future economic conditions in the Lebanon Planning Area and Linn County follows, along with the implications for Waterloo.

Lumber and Wood Products

Timber harvest and processing accounts for 41% of the employment in the Lebanon Planning Area. With timber supply on the decline, however, employment in this sector can be expected to decrease. With approximately 23% of the responses on the Waterloo housing survey indicating timber-related employment, the consequences of this condition could be significant.