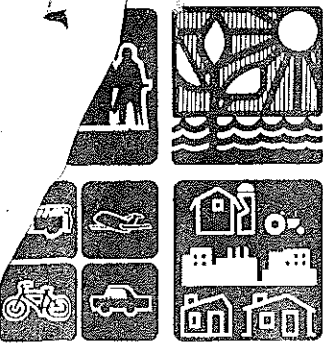


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# Dane County Regional Planning Commission

217 S. Hamilton St., Suite 403, Madison, Wisconsin 53703-3238 Tel. 608/266-4137



July 2, 1996

Mr. Roger Shores  
Bureau of Water Resources Management  
Wisconsin Dept. of Natural Resources  
101 S. Webster, WR/2  
Madison, WI 53707

RE: Amendment to the Dane County Water Quality Plan, Revising the Central Urban Service Area Boundary and Environmental Corridors

Dear Mr. Shores:

We are submitting an amendment to the *Dane County Water Quality Plan*, revising the Central Urban Service Area boundary and environmental corridors in McFarland for Department review and approval.

This amendment was requested by the Village of McFarland and is based on the 1994 Village of McFarland Master Plan. The amendment adjusts the Central Urban Service Area boundary and environmental corridors in McFarland to reflect some of the changes adopted in the 1994 Master Plan. The amendment adds 124 acres to the CUSA, including 6 acres of existing development and the designation of 14 acres of environmental corridors, resulting in a net increase of 104 developable acres.

Enclosed are two copies of the following supporting materials: (1) request from the Village of McFarland; (2) public hearing notice; (3) Staff Analysis of the proposed amendment (dated April 29, 1996); (4) minutes of the May 9, 1996 public hearing; (5) Addendum to the Staff Analysis (dated June 4, 1996) of the proposed amendment addressing additional concerns noted at the public hearing; (6) minutes of the June 13, 1996 meeting of the RPC; and (7) Resolution RPC No. 771, adopting the amendment. Note that the resolution includes a condition designed to protect water quality.

We would appreciate your prompt review and approval of this amendment to the *Dane County Water Quality Plan*. If you have any question or need additional information or assistance in reviewing this amendment, please do not hesitate to contact me.

Sincerely,

*William N. Lane*

William N. Lane, Director  
Environmental Resources Planning

WNL:KM:lel

cc: Keith Weiss, President, Village of McFarland  
Donald Peterson, Administrator, Village of McFarland  
cc w/enc: Steve Fix, DNR Southern District



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**Staff Analysis of Proposed Amendment to the Dane County  
Regional Development Guide, Water Quality and  
Farmland Preservation Plans Revising the McFarland Portion of the  
Central Urban Service Area Boundary and Environmental Corridors**

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**1. Applicant:** Village of McFarland

**2. Description of Proposal**

In February 1994 the Village of McFarland adopted a Master Plan to guide village development for the next 20 years. The Village proposes to adjust the adopted Central Urban Service Area (USA) boundary and environmental corridors to reflect some of the proposed changes in the Master Plan.

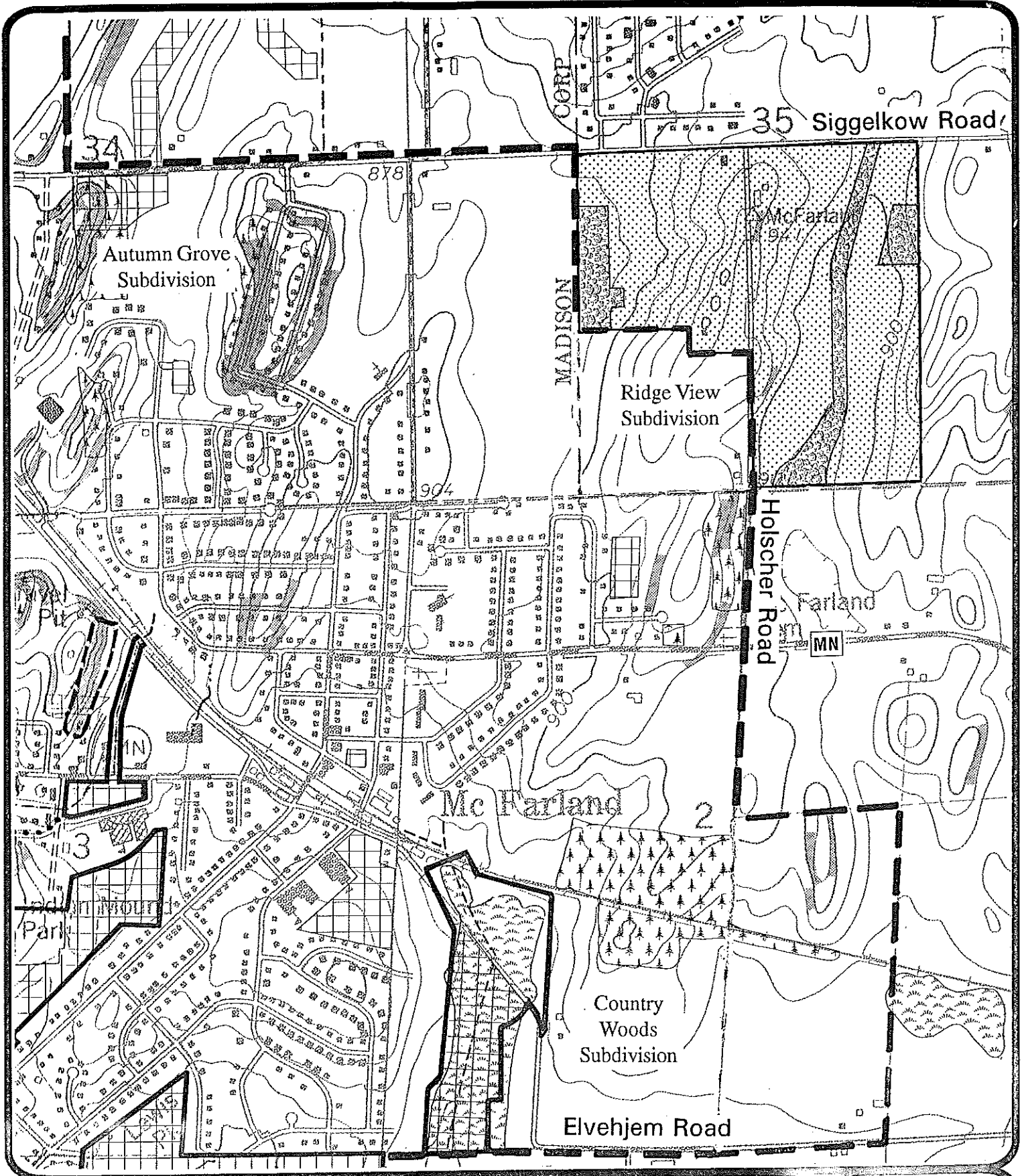
The proposed changes (see map) would add 124 acres of land to the Central Urban Service Area (CUSA), including 6 acres of existing development and 14 acres of environmental corridors. **The result is a net increase of 104 developable acres.** About two-thirds or 81 acres of the amendment is in the Village of McFarland. The remaining 43 acres include three parcels in the Town of Blooming Grove.

The proposed land uses for the McFarland Master Plan are shown in the northeast portion of the McFarland Master Plan Map, and the USA addition land uses are summarized in Table 1 (attached). All of the land in the proposed addition is planned for residential development at an average net density of 4.3 housing units per acre. The net result is an increase of 104 acres of residential development (excluding street right-of-way), which will ultimately accommodate 348 additional housing units and a potential population of 934. The plan also includes 14 acres of land for park and stormwater management purposes, designated as environmental corridors. The average net residential density in the amended area is 4.3 housing units per residential acre; the average net density for the entire McFarland Master Plan is 4.2 housing units.



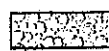
Existing land uses in the added area are primarily agricultural and open space. Surrounding land uses include: north—residential development and agricultural, Town of Blooming Grove; east—agricultural, Town of Blooming Grove; south—agricultural, Town of Dunn; and west—agricultural, City of Madison, and residential development, Village of McFarland.

**3. Existing Environment**

**Area to Be Added.** McFarland (with an estimated 1995 population of 5,736) is situated in the Yahara River basin east of Lake Waubesa. There are no lakes, streams, wetlands or floodplains within the proposed amendment. Groundwater is generally at a depth greater than 25 feet below the land surface. Surface water runoff is toward Lake Waubesa and Lower Mud Lake. The area west of Holscher Road drains in a northwesterly direction to an open channel drainageway, which leads to an intermittent stream discharging to Lake Waubesa near McDaniel Park. The area east of Holscher Road drains southeast to an off-site wetland area and eventually discharges to Lower Mud Lake. Lake Waubesa and Lower Mud Lake support warm water sport fisheries. The primary resource management concern is nutrient and sediment accumulation in the lakes from nonpoint source pollution.



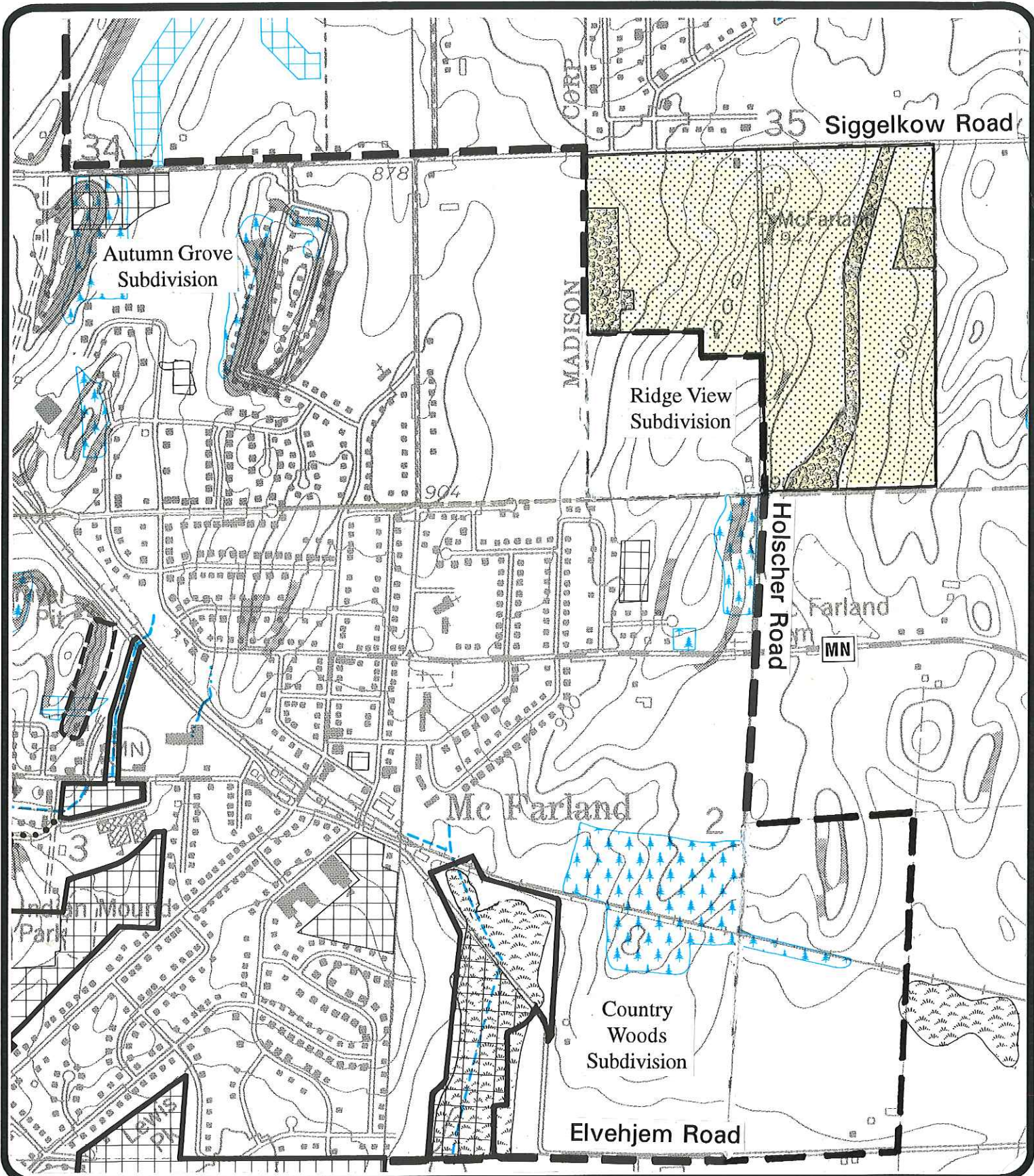
**McFARLAND PORTION  
OF THE CENTRAL  
URBAN SERVICE AREA**

-  Service Area Boundary
-  Proposed Amendment
-  Environmental Corridor






North  
1"=1000'  
4/96

Prepared by the Dane  
County Regional  
Planning Commission



**McFARLAND PORTION  
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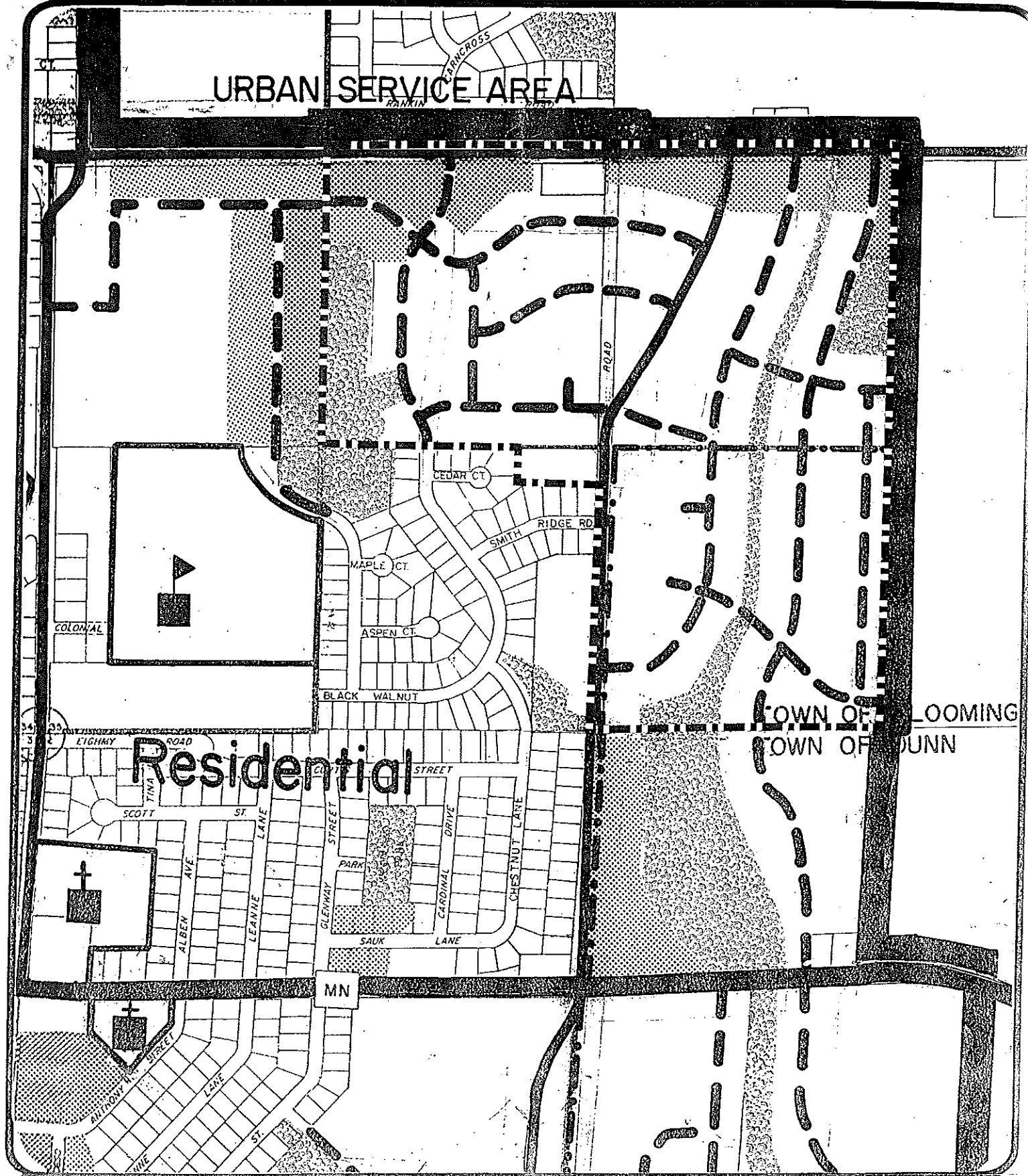


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Prepared by the Dane  
County Regional  
Planning Commission



URBAN SERVICE AREA



Village of  
McFarland  
Master Plan (Pt.)

- ▣ Proposed Amendment
- ▨ Medium Density Residential
- ▩ High Density Residential
- ▧ Parks & Conservancy
- ▤ Future Street
- ▬ Arterial
- ▬ Collector Street
- Ten Year Staging Boundary



North  
1"=600'  
4/96

Prepared by the Dane  
County Regional  
Planning Commission

**TABLE 1: MCFARLAND—CENTRAL URBAN SERVICE AREA AMENDMENT LAND USES**

Area or Category	Planning Districts										Total	Env. Cor.	Ext. Dev.
	RL	RM	RH	CM	IND	ROW	TCU	GOV	OS				
Midland Builders	19.7	1.2	4.3	0.0	0.0	8.9	0.0	0.0	4.9		39.0	4.9	1.2
Ed Kamm	48.0	3.5	1.6	0.0	0.0	19.2	0.0	0.0	9.3		81.6	9.3	1.2
C.S.M. 1021	0.9	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0		1.4	0.0	1.4
Old Schoolhouse	1.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.6		2.0	0.0	2.0
	0	0	0	0	0	0	0	0	0		0	0	0
	0	0	0	0	0	0	0	0	0		0	0	0
	0	0	0	0	0	0	0	0	0		0	0	0
<b>Total Areas Added</b>	<b>69.7</b>	<b>4.7</b>	<b>5.9</b>	<b>0</b>	<b>0</b>	<b>28.9</b>	<b>0</b>	<b>0</b>	<b>14.8</b>		<b>124</b>	<b>14.2</b>	<b>5.8</b>
Housing Units	227	33	89	0	0	348 Total	Total Area Added (in acres)					124	
Density (HU/ac)	3.25	8.85	13.64	0	0	4.3 HU/ac	Environmental Corridor					14	
Population	702	72	159	0	0	934 Total	Existing Development					6	
K--12 Students	159	16	35	0	0	210 Total	Total Area Deleted					0	
Ave. Daily Trips	2,265	263	531	0	0	3,059 Total	Net Developable Area					104	
Planning Districts:													
	HU	Housing Units				ROW	Right--Of--Way						
	RL	Residential--Low density				TCU	Transportation, Communication & Utilities						
	RM	Residential--Medium density				GOV	Government & Institutional						
	RH	Residential--High density				OS	Open Space						
	CM	Commercial				Ext Dev	Existing Development						
	IND	Industrial/Business Park				Env Cor	Environmental Corridor						



The surficial geology of the area consists of ground moraine and drumlins underlain by sandstone bedrock at a depth of 10 to 50 feet. Surface deposits are generally fine- to medium-grained.

Principal soil series in the amendment area consist of Batavia, Dodge and McHenry silt loams. These soils pose slight limitations for development. About half are considered prime agricultural soils. (Note: Predicted average corn yields for Batavia, Dodge and McHenry soils are 130, 100 and 105 bushels per acre, respectively.)

Archeological information on file at the RPC and the State Historical Society does not indicate the presence of any prehistoric cultural sites in the proposed addition. Available information on endangered resources does not indicate the discovery of threatened or endangered species in the proposed addition.

#### 4. Consistency or Conflict With Plans

The Central Urban Service Area was established in 1977. The Village of McFarland adopted environmental corridors in 1983. The McFarland portion of the CUSA was last amended in October 1991.

In February 1994, the Village of McFarland adopted a revised Master Plan and made minor land use changes in the amended area in 1996. The McFarland 2020 population forecast is 9,285. The Urban Service Area Land Area Analysis for the McFarland portion of the CUSA provides for a maximum urban service area of 2,448 acres to be consistent with the 2020 population forecast and existing densities. The McFarland portion of the Central Urban Service Area is 1,841 acres. Based on this information, the urban service area has a potential addition of 607 acres.

Recent residential development has occurred on all sides of the Village, especially the northeast and southeast sides, with commercial and industrial growth occurring along USH 51. The lands to be added to the urban service area are adjacent to Village utilities and are a logical extension of development. The reconfiguration proposal in this request will add developable land in the Village's residential areas, consistent with the adopted Master Plan. The proposed amendment is generally consistent with the *Regional Development Guide*, especially related to a mix of type and density of housing, transportation modes and function, environmental corridor additions and the provision of urban services. Exceptions or inconsistencies are noted in the following discussion and conclusions.

The Town of Blooming Grove Land Use Plan shows the area as a farmland preservation area.

The proposed amendment impacts the *Farmland Preservation Plan* because some prime ag land would be lost to development. About half of the soils in the added areas are prime agricultural (57 acres).

#### 5. Description of Urban Services

*Urban Transportation System.* The existing major roadways serving the McFarland area include: USH 51, a north-south principal arterial, and CTH MN, an east-west minor arterial.

Siggelkow Road (1,310 vehicles/day) and Marsh Road (810 vehicles/day) are collectors located in the northern half of the Village.

The Master Plan calls for the official mapping of existing and future collectors and arterials. The Master Plan provides for bicycle routes along selected local and collector streets, and off-street bike and hike paths are proposed. Currently, Siggelkow and Marsh Roads have bike paths. The Dutch Mill Park & Ride lot at the interchange of USH 51 and the South Beltline serves McFarland-area commuters with Madison Metro's Glendale route.

**Public Water System.** The proposal does not provide specific water use projections for the service area addition. Based upon population and land use forecasts, the RPC estimates 0.056 million gallons per day (MGD) of water will be consumed by the proposed additions, when fully developed. A detailed water system layout has not been provided for the added area. The existing distribution system is in good condition and includes 950,000 gallons of storage and three municipal wells with a total pump capacity of 3.99 MGD (the McFarland water system includes a fourth well which is no longer being used).

Fire hydrants will be provided in the amendment area, and the water system is expected to provide adequate fire fighting flows and storage for the residential and commercial parts of the Village. McFarland has a community fire insurance rating of 5, an acceptable rating for a community of its size.

**Wastewater.** A detailed wastewater system layout has not been provided for the area. The area west of Holscher Road would be served via a gravity sewer from Siggelkow Road. The area east of Holscher Road would be served by a lift station located on the south side of the proposed amendment area, near Holscher Road. The proposed lift station would pump wastewater generated in the area to the sewer main on Siggelkow Road. The proposed amendment is estimated to generate 0.071 MGD of wastewater at full development.

McFarland is served by the Madison Metropolitan Sewerage District (MMSD). MMSD's Nine Springs wastewater treatment plant is projected to receive a flow of 48 MGD by the year 2020. The treatment plant has adequate capacity to treat the wastewater generated in its service area, including the proposed amendment.

**Stormwater Management System.** A stormwater management plan for the proposed service area additions has not been submitted. Stormwater management practices will need to be installed to comply with the Village's erosion and runoff control ordinance.

**Environmental Corridors.** Environmental corridors are proposed to address recreation and stormwater management concerns.

Additional environmental corridor acreage may be needed in the future to incorporate stormwater management plans and drainageways or stormwater facilities that have yet to be specified.

**Public Areas and Facilities.** The Master Plan has identified an increase of nine acres of open space areas to meet the needs of the projected population. The area ¼ mile southwest of the proposed amendment has been identified for future expansion of school facilities.

**Fire Protection.** The proposed addition is within about three miles of the McFarland Fire Station. McFarland has a fire insurance rating of 5, and the water distribution system has sufficient storage and flow to provide fire fighting flows for the amendment area.

**Emergency and Other Village Services.** Other urban services, including police and solid waste collection, will be provided through the existing delivery systems of the Village.

## 6. Impacts or Effects of Proposal

**Surface and Ground Water Impacts.** The potential impacts of urban development in the proposed service area amendment would be to increase stormwater runoff rates and volumes, reduce groundwater recharge, and introduce additional contaminants into Lake Waubesa and Lower Mud Lake. This would occur from roadway and building construction. Development can also cause substantial soil erosion and off-site siltation from construction activities.

The Village of McFarland has adopted an erosion and stormwater runoff control ordinance that provides a means for mitigating the adverse impacts of erosion and increased runoff resulting from development. However, the ordinance does not specify practices that will provide water *pollution* control benefits, such as retention ponds, grass swales and infiltration practices. These practices are recommended, where feasible, to maintain groundwater recharge and protect water quality from urban runoff.

Because of population growth and development that is occurring throughout the Village of McFarland, an overall stormwater management plan, incorporating water quality protection measures, should be prepared for the Village.

**Transportation System Impacts.** The proposed McFarland amendment to the Urban Service Area will add 81 acres of residential land use to the current USA. At full development, this will generate an additional 3,059 vehicle trips. In 1993 that portion of Siggelkow Road carried about 1,310 vehicles a day. The area's functional classified roadways serving the proposed USA additions have adequate capacity available to accommodate the increased trips produced at full development without need for expansion.

**School System Impacts.** Currently the McFarland Area School District is looking at its facility needs for its moderately growing enrollment. From 1990 to 1996, McFarland experienced the fourteenth-fastest enrollment increase in Dane County (16.1%). The proposed amendment would add about 212 students (at full development). Part of the land to the southwest of the area to be added to the USA is the proposed site of a future elementary school.

## 7. Alternatives

The process of revising the Village's Master Plan examined the alternative locations for future development, taking into consideration protection of environmentally sensitive areas. The revised Master Plan provides for development of vacant lands in or near the Village which are

contiguous to existing developing areas and needed for proposed commercial, industrial or residential growth, and which represent a cost-effective extension of Village services.

#### **8. Controversies, Comments Received, Unresolved Issues**

The Village of McFarland held a public hearing (February 26, 1996) on the proposed change as part of the Master Plan process. A public hearing has been scheduled before the Dane County Regional Planning Commission on May 9, 1996. The Towns of Blooming Grove and Dunn and the City of Madison have been notified.

#### **9. Conclusions and Staff Recommendation**

The requested amendment is generally consistent with adopted plans and requirements for urban service area amendments. The main environmental concerns relate to protecting the Yahara River from the impacts of developing the added areas.

The staff recommendation is to approve the proposed amendment shown on the map, based on the land uses and density standards outlined in the Village of McFarland Master Plan (1994), and subject to the preparation of a stormwater management plan for the amendment area to control runoff and prevent off-site erosion and water quality impacts.

It is also recommended that the Village prepare a villagewide stormwater management plan.

**ADDENDUM TO  
Staff Analysis of Proposed Amendment  
to the Dane County Regional Development Guide,  
Water Quality and Farmland Preservation Plans Revising the  
McFarland Portion of the Central Urban Service Area Boundary  
and Environmental Corridors**

### **Background**

A public hearing was held on the proposed amendment at the May 9, 1996 RPC meeting. Testimony was received both in support of and in opposition to the amendment. RPC deferred action on the proposed amendment, requesting staff to provide additional information or response to three issues: (1) concern about runoff or erosion impacts on adjacent Town lands; (2) historic status of schoolhouse on Siggelkow Road; and (3) minutes of McFarland's public meetings on the proposed amendment. An addendum to the staff analysis has been prepared, responding to these concerns.

### **Runoff and Erosion Impacts on Adjacent Town Lands**

Concern was expressed that development in the amendment area could create runoff/flooding or erosion problems on adjacent lands outside the Village.

The Village has a comprehensive erosion/runoff control ordinance which, if enforced, will effectively control erosion and limit peak runoff rates to predevelopment conditions. In addition, staff is recommending as a condition of approval that a stormwater management plan be prepared for the amendment area that controls water runoff and prevents off-site erosion and water quality impacts. This condition is reflected in Resolution RPC No. 771.

### **Historic Status of Schoolhouse**

Staff contacted the State Historical Society staff regarding the historic status of the schoolhouse at the southwest corner of Siggelkow and Holscher Roads. Their files indicate that the structure is a good example of a one-room rural schoolhouse with unique brickwork. The structure is not on the National Register, but is eligible to be placed on the Register. SHS staff indicated that an inquiry had been made several years ago, but no action was initiated by the owner to document the significance of the structure or request that it be placed on the National Register. The owner could complete the necessary documentation so the structure could be nominated for inclusion in the Register, which would allow tax deductions for restoration costs to the owner.

### **Minutes of McFarland's Meetings on the Amendment**

Minutes of the McFarland Plan Commission's meetings of January 29, February 26, March 25 and April 29, outlining the public discussion and concerns with the amendment, are attached.

## **Staff Recommendation**

The requested amendment is generally consistent with adopted plans and policies, and with the requirements for urban service area amendments. The Village previously revised the proposed land uses to eliminate adjacent commercial or industrial land uses that would be seriously detrimental to the historic schoolhouse. The principal environmental concern relates to erosion and stormwater runoff impacts from development, which is addressed by the Village's erosion/runoff ordinance, and by the condition of approval in Resolution RPC No. 771 requiring a stormwater management plan for the amendment area to control runoff and prevent off-site erosion and water quality impacts.