Planning Theory of Housing Development by the Non-Profit Organization in the United States

A Case Study on Habitat for Humanity's Twin Oaks Project at Madison, Wisconsin

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Habitat for Humanity of Dane County (HFHDC), which is the non-profit organization in the United States, has been developing new Twin Oaks subdivision in Madison, Wisconsin. HFHDC has provided a mix of housing types, densities, and costs. The plans for Twin Oaks mirror the Madison city's long-term use envisioned for this property. By the case study about this project, a kind of potentiality of the non-profit organization's initiative in the big project was found out. The non-profit organization can only diversify economical risks and manage to plan the mixed-income subdivision practically. Thus, Twin Oaks could have been realized as the housing environment for ordinary people only by the non-profit organization, which doesn't pursue it's own large profits.

1. Introduction

This study aimed to consider possibilities of new theory and methodology for the housing environment design by the non-profit organization through theoretical analysis and the case study about concrete ideas and systems of a pioneer project, Twin Oaks at Madison in the United States.
Many researchers and practitioners have been studying for planning theory of housing development toward the creation of more supportive environments. The "Garden City" by E. Howard showed us the new vision of community life assimilated a city with a village at the end of the 19th century. Letchworth Garden City is famous for the realization of Howard's concept in the world. Radburn planned by Clarence Stein and Henry Wright was known as a town for the motor age with a pedestrian path system and cul-de-sacs. This town became a model of property management by a private association.
In recent years, New Urbanism has penetrated practice of urban planning and neighborhood development as the basic concept in the United States. Some design methods, such as Transit-Oriented Development or Traditional Neighborhood Development, are already in the spotlight today. However, most of the towns that realize the concept of New Urbanism faithfully are basically made up of investment and return on it. Thus, these projects depend on the resources of wealthy people.
On the other hand, housing development by the non-profit organization primarily aims to supply affordable housing for low-income people and therefore the idea is totally different from them. Housing development by the non-profit organization with the public private partnership is significant and potential when we consider the quality of life for our diversity in the community.

2. Outline of Twin Oaks

Habitat for Humanity of Dane County (HFHDC) has been traditionally operated to locate individual parcels, recruit and screen potential residents/buyers for their houses, train and supervise volunteers and residents to help build the houses, and hire subcontractors for the more technical or licensed construction components. HFHDC provides some low-cost mortgage financing and some continued post-sale counseling to the homebuyers. More recently, HFHDC has purchased and renovated several units on one site within the Town of Madison.

HFHDC decided to seek and itself develop a larger parcel with a five-year inventory of lots for their own development. Their traditional practice of a search for individual sites has been consumed a great deal of time, and many of the available potential individual lots on the Madison market included a number of covenant restrictions that added unnecessary costs to a house. Hence HFHDC decided to get a larger parcel that it could develop itself. HFHDC has become to be able to focus its own energy on the construction of housing rather than seeking for individual location of available lots.

The HFHDC land use proposal includes space for 142 dwelling units on Madison's southeast side near McFarland village. (See Figure 1 & 2) All is home-ownership and no rental. 71 market units would be sold to private/individual developers and builders (49 condominiums between two parcels to be developed by another private developer, 22 single-family detached lots sold and built at market rate). 71 affordable houses would be built by three non-profit organizations and sold to eligible homeowners (21 sold to homeowners having income cap of $59,000 for family of 4, 50 sold to homeowners having income cap of $44,500 for family of 4). Both the single-family and the multi-family would be deed restricted for sale to owner-occupants. (See Figure 3)

The basic acquisition and land development budget was approximately $3 million. HFHDC bought the property with $700,000 of the Department of Housing and Urban Development's Economic Development Initiative/Neighborhood Initiative grant. The revenue proposed to cover these costs includes sales of the lots to other builders, federal EDI/NI funds, and some utility rebates on installed meters. (See Figure 4)

This development is compatible for the adopted neighborhood plan for the Marsh Road area. The Madison city's approved long-term plan has stipulated a mix of single-family with some multi-family owner-occupied for this area. This site is also adjacent to McFarland village. Madison has an intergovernmental agreement with the village that calls for the sharing of information about these kinds of projects. It is important that the houses are comparable to neighborhoods on both sides of the development. The adjacent land is for the other housing development, Liberty Place.

And, wetlands in the site and must be declared as undevelopable place by the Department of Natural Resources and the Army Corps of Engineers. Consequently, the development would end up preserving a significant amount of open space.

3 Analysis of Developing the Subdivision Design

3.1 Pre-application Process (See Figure 5)

3.1.1 Stage A and B (February 25th, 2002)

The street plan followed the principle of New Urbanism on both Stage A and Stage B, and was intended to take "local trips are not forced onto arterial streets" and "the local street system should be recognizable, formalized, and inter-connected". The cul-de-sacs were applied to connect local trips with natural resources. Streets are arranged to walk along rather than "segregated pathways which isolate the pedestrian and result in an expensive, duplicative system". All lots were for single-family houses and were laid out along the straight. However, because this site is adjacent to another subdivision, the street for the west side lots became a dead end way in case of Stage A. To solve this point, the plan on Stage B was changed symmetrically by the north-south axis from Stage A, and the street for the east side could be connected the park.

3.1.2 Stage C (March 11th, 2002)

It was aimed to increase the dwelling units. There was a strategic reason in that background by selling the lots to other non-profit organizations and private developers as to the management to raise the amount of collection of the development expense. The cul-de-sacs were increased very much on Stage B. From the viewpoint of New Urbanism, it was obviously retreated from Stage B because all cul-de-sacs were closed inside the residential cluster. And, it was characteristic that extra lots were proposed in the northeastern land of the site for the future development. Developing 11 lots on the west side of Hey Jude Lane would be maintained by Madison, the total number became 131 units for single-family. By way of parenthesis, Stage A was 124 units and Stage B was 126 units.

3.1.3 Stage D (May 8th, 2002)

Though Madison City applied the subsidy of $950,000 to the Department pf Housing and Urban Development, it resulted in $700,000 that was smaller than the expected. The strategy had changed to sell the lots for multi-family to private developers and raise the amount of collection of the development expense. It goes without saying that there is a limit to increase the dwelling units with the plan only for single-family houses under the restriction of gas pipelines and sanitary sewer interceptors in the site. As for making this change possible, the grant by the Department pf Housing and Urban Development will be applied to the costs of particular affordable single-family houses within the project. It isn't concerned whether a project has other multi-family houses or not. The plan of Stage D had gained 154 dwelling units (83 units for single-family and 71 units for multi-family) with 3 lots for multi-family.

3.1.4 Stage E (June 24th, 2002)

Reviews before the formal application by the Plan Commission began, and modifications were done to return to the principle of New Urbanism. Though greenways are a king of idea to take advantage of the place where gas pipelines and sanitary sewer interceptors are underground, the plan for it on Stage D was the form that comes out from the southeastern wetland to the north wetland. As for New Urbanism, it is pointed out that separating the pedestrian onto greenways from the Radburn wasn't good today in attempting to control the traffics. Therefore, on Stage E, the local streets were designed to connect to open spaces with neighborhood activity. Besides, the cul-de-sac on the center of the site was removed. The pedestrian spaces were created as friendly street networks and secured with the lot arrangements faced to the street. Recently, the permeability of the street is specially taken seriously in the United States to prevent crimes and keep residential areas secure. Though lots for multi-family were changed from 3 to 2, the number of the dwelling units on Stage E had increased to 162 (90 units for single-family and 72 units for multi-family) in comparison with Stage D.

3.2 Formal Application Process

3.2.1 Preliminary Plat (October 16th, 2002) (See Figure 6)

Preliminary Plat was submitted as Formal Application to Madison, and some reviews and questions were returned from the various departments, divisions and agencies. The curving street on the corner of the southeast of the site examined on Stage E was returned to the plan that it was based on the permission of the Wisconsin Department of Natural Resources. The dwelling units were made to decrease from 72 to 49. The reason to take a change was that the construction of condominiums on the land with gas pipelines and sanitary sewer interceptors was very difficult and more open spaces were needed to dedicate to Madison according to the ordinance. However, the densities were kept in the same range. In case of Stage E, 40 dwelling units were in 124,482 sq. ft. (3112 sq. ft./DU) and 32 dwelling units were in 109,881 sq. ft. (3434 sq. ft./DU). In case of Preliminary Plat, 24 dwelling units were in 88,024 sq. ft. (3668 sq. ft./DU) and 25 dwelling units were in 92,483 sq. ft. (3699 sq. ft./DU).

3.2.2 Revised Preliminary Plat (January 21st, 2003) (See Figure 7)

Lot 55 of Preliminary Plat was provided as a park, and also Lot 77 was finally decided to change to a park. Out Lot 5 for a future development wasn't approved officially in Final Plat. And, the contents of the deed restriction and the restrictive covenant began to be examined concretely at this stage. The final adjustment, who prepares which lot, was proceeded. HFHDC would only be building 50 of the 142 dwelling units. The homes Habitat builds would be 3-5 bedroom homes. In addition, a homeowners association would be created, with fees due annually that would provide funds to accomplish the shared maintenance of common areas.

Results and Conclusion

This subdivision now called "Twin Oaks" is the first large-scale new development for the affordable housing provider in Madison. The plan is to build up to 93 single-family homes and up to 49 owner-occupied condominiums on the site. Half to three-quarters of the homes would be constructed by HFHDC or the other non-profit organization and sold to families whose income is 60% or lower than the Dane County median. The rest would be constructed by private builders and sold at market rate. Twin Oaks is as one of the pilot projects in the United States because this method for the affordable housing isn't major way at present.

HFHDC is an independently incorporated organization. It is responsible for the development of the parcel. It is planning to sell almost 65% of the dwelling units spaces to other builders. Sale of lots to other builders will help broaden the rage of housing product offered, and the income range of the buyers of the housing. The scale of those lots will also reduce some of the costs and risk to HFHDC, and enable them to focus on their own housing units. HFHDC is affiliated with a larger national and international organization, and can draw on their experience and occasional resources to help the local Habitat with this development.

With the non-profit organization's act, the main concept of New Urbanism could be a general theory from ideas such as "scaled to the human body, timed to a stride, patterned to ceremony, and bounded to nature". Some methods or systems of Twin Oaks; Habitat for Humanity organizes the homeowners' association, makes guidelines for the subdivision including the deed restriction and the restrictive covenant, and reviews and permits the architectural design and construction, contribute to reduce important risks not only in economical meaning but in a broad sense, especially in the quality of life. Twin Oaks is one of suggestive projects to discuss the vision of housing environment design by the public private partnership in our society.

References

1）The City of Madison Department of Planning and Development, Planning Unit, Participating in the Development Process: A Best Practices Guide for Developers, Neighborhoods & Policymakers, 2005.6

2）The City of Madison Department of Planning and Development, Development Guide: Land Use and Construction Approval Processes, 2005.3

3）The City of Madison Department of Planning and Development, Marsh Road Neighborhood Development Plan, 1999.8

4）Intermunicipal Cooperation Agreement between the City of Madison and the Village of McFarland relating to Lands Easterly of Marsh Road, Northerly of Eighmy Road and Southerly of Siggelkow Road, 1997.11

5）Peter Calthorpe, The Next American Metropolis: Ecology, Community, and the American Dream, Princeton Architectural Press, 1993

6）Diane R. Suchman with D. Scott Middleton, Susan L. Giles, Public/private housing partnerships, Urban Land Institute, 1990

7）Sherry B. Ahrentzen, Choice in Housing, Promoting Diversity, Harvard Design Magazine, No.8, pp.62-67, 1999

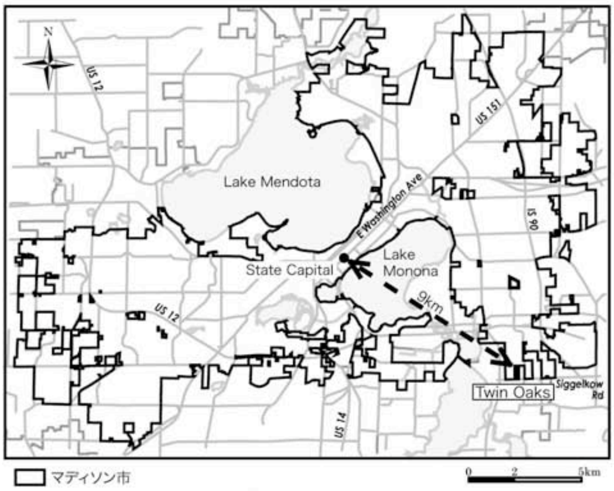


Figure 1. Twin Oaks Site

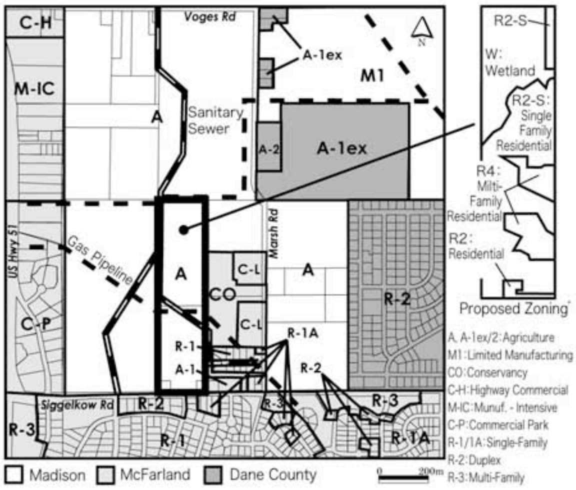


Figure 2. Zoning

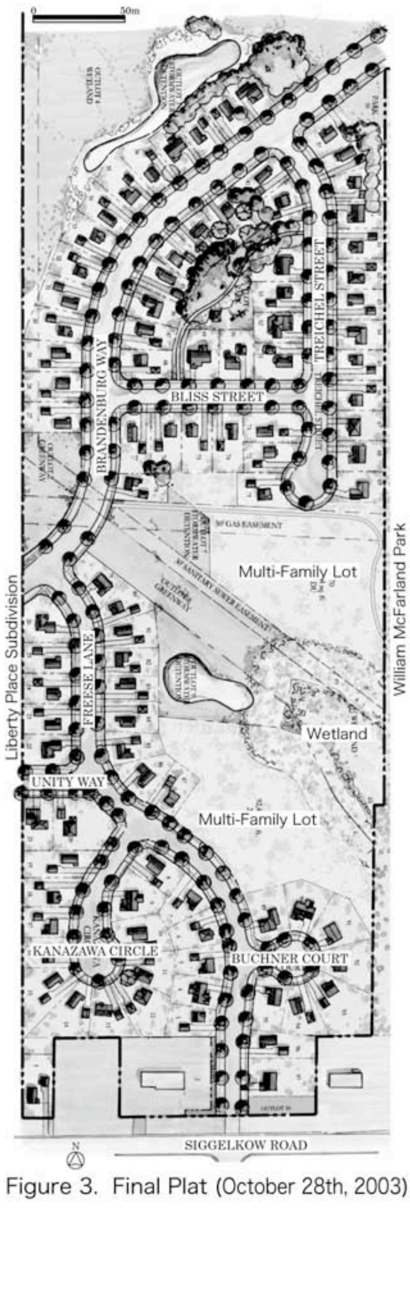


Figure 3. Final Plat (October 28th, 2003)

			Jan 04 Projection:	Actual thru 11/30/04
Cost to Develop				
1	Land Costs		$1,231,400	$ 1,222,700
2	Less Proceeds from sale of home at 5210 Siggelkow Rd.		$ (120,000)	$ (120,000)
3	Net Land Cost		$1,111,400	$1,102,700
	Infrastructure Construction and Soft Costs			
4	Engineering, Environmental, Planning		$170,000	$ 153,360
5	Site work and grading		$245,000	$ 556,173
6	Streets and sidewalks		$424,000	$ 609,591
7	Sanitary sewer and water		$500,000	$ 139,419
8	Storm sewer		$246,000	$ 19,800
	Net of City's portion fronting parks		$ (27,000)	
9	Sigglekow frontage water main and sidewalk		$40,000	$ 63,479
10	Construction Contingency		$150,000	$ 90,866
11	City of Madison Design: Engineering, Traffic & Water		$79,000	$ 64,520
12	Utilities - Electric Service MG & E		$69,000	$ 72,882
13	Madison Met. Sewer District		$55,000	$ 50,470
14	Permits and Review Fees		$13,500	$ 30,991
15	Park Development and Dedication Fees:		$160,000	$ 79,792
16	Holding Period Interest		$45,000	$ 42,779
17	Construction Period and Sell-out Interest		$70,000	$ 60,037
18	Legal, Bonding, Marketing		$30,000	$ 53,893
19	HFHDC Project Oversight		$50,000	$ 30,872
20	**TOTAL DEVELOPMENT COSTS**		**$3,430,900**	**$ 3,221,624**
	Est Allocated Cost / Single Family Lot	93	$2,976,000	
	Est Allocated Cost / Multi-family Condominium	49	$441,000	
Sale Proceeds				
29	24 Multi-family Condo Units to WPHD (11 afford./13 market)		$255,000	
30	25 Multi-family Condo Units - No Restrictions		$300,000	
31	34 Single Family Lots - No Restrictions		$1,645,700	$ 460,000
32	9 Single Family Lots sold to non-profits at cost		$288,000	$ 288,000
33	MG & E Meter Rebate		$60,000	
34	**Total Proceeds**		**$2,548,700**	**$ 748,000**
35	**Development Proceeds**		**$ (882,200)**	**$ (2,473,624)**
Long-term Affordability Financing:				
36	**HUD EDI/NI Loans via City of Madison (25 Habitat lots)**		**$700,000**	**$600,289**
37	Future HOME/CDBG for 60% CMI homes built by HFHDC			
			$ (182,200)	**$ (1,873,335)**

*1 HUD: Department pf Housing and Urban Development
*2 EDI: Economic Development Initiative Grant *3 NI: Neighborhood Initiative Grant

Figure 4. Twin Oaks Budget

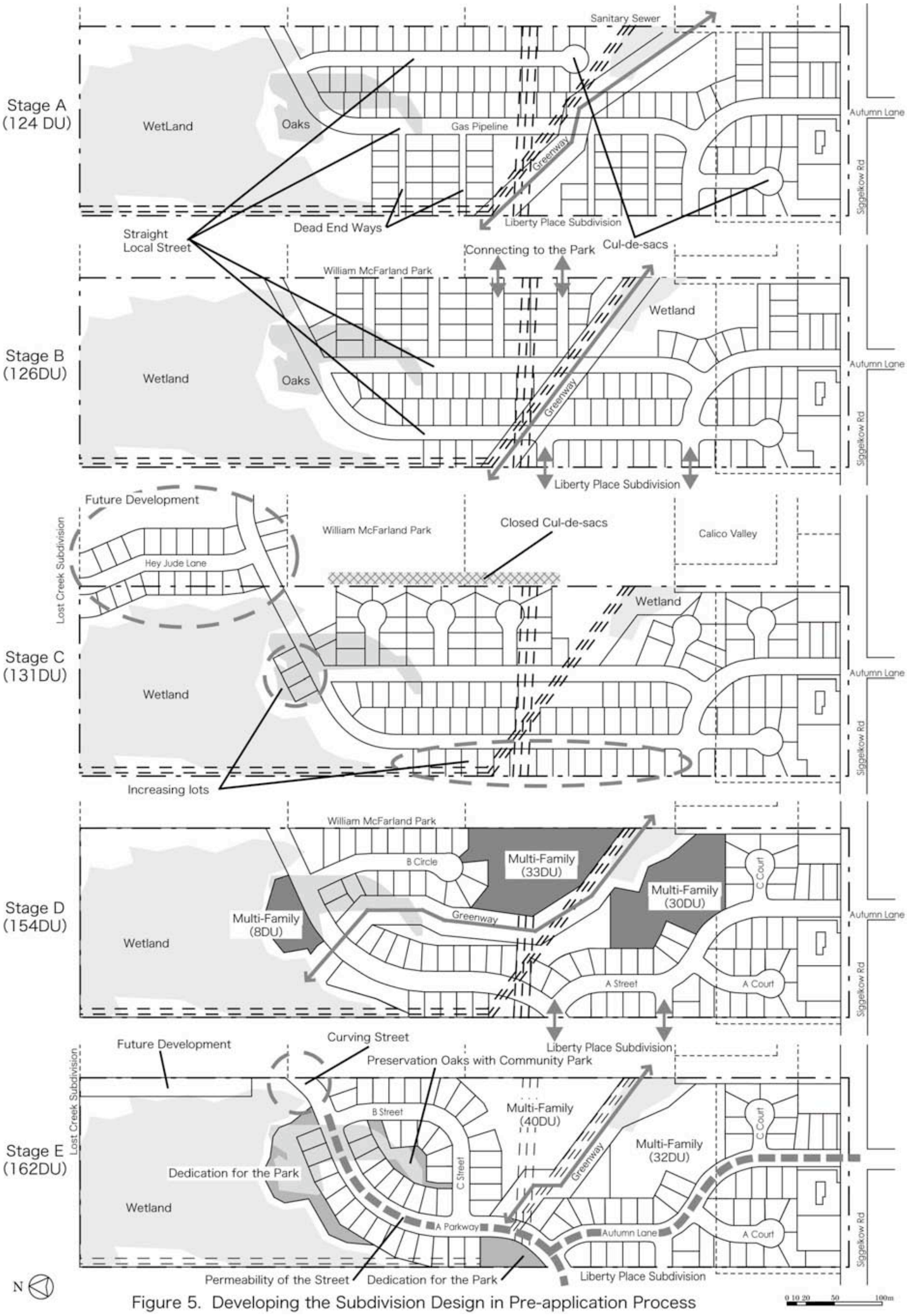
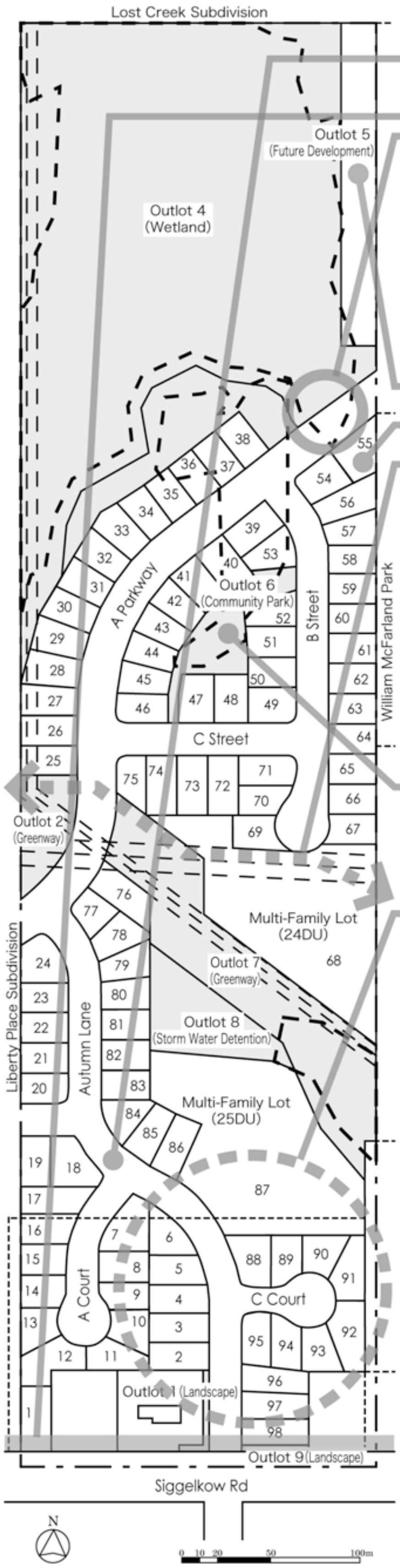


Figure 5. Developing the Subdivision Design in Pre-application Process



●Comments from City Engineering Division (November 21, 2002)
・The applicant shall dedicate a 60-foot wide strip of right-of-way along Siggelkow Road.
・Autumn Lane shall have 100-foot tangents between curves.
・The developer shall dedicate right-of-way for the extension of Jude Lane.
・The developer shall construct Madison Standard street improvements for all streets
・The developer shall show a 40-foot building setback line on the plat adjacent to Siggelkow Road.
・A Parkway shall require a permit to fill wetlands from the USACE and the WDNR.

●Comments from City Traffic Engineering Division (November 23, 2002)
・The plat shall be recvised to provide a 15 ft wide public pedestrian-bicycle easement through Court C.
・The plat shall be revised to provide a 15 ft wide public pedestrian-bicycle easement through B Street and Lot 68 to the park to the east.
・The internal streets may include special design or traffic calming treatments, at key locations.

●Comments from Park Planning Supervisor (November 25, 2002)
・Under an agreement with McFarland, park and recreation needs for this plat will be partially met by the McFarland City Park adjacent to the plat on the east. McFarland residents will also be able to use natural area and trail systems developed on Madison public.lands.
・Outlot 5 contains wetland and required wetland buffer. It should be dedicated to the public to allow for extention of Hey Jude Lane and for open space.
・Lot 55 and a small portion of Lot 56 shall be dedicated as parkland, to provide an open space connection between the McFarland Park and the wetland open space.
・A bike path route is also required from the McFarland Park, through Lot 68 with an access from B cul-de-sac, through Outlot 7 and through Outlot 2 to the adjacent plat.
・Park dedication required for 96 single family and 49 multifamily is 138,800 square feet. Dedication of Lot 55 and credit for part of Outlot 5 is 17,000 square feet. The remaining 121,800 square feet of required dedication shall be paid as a fee in lieu od dedication.
・The developer shall provide documents establishing how perpetual private maintenance will be provided to the private open sapce and the private improvements proposed for Outlot 6.

Answers to Planning Unit
Integration into Planning Unit Report ⇩ ⇧ Requests from the Planning Unit

●Comments from Planning Unit (December 20, 2002)
・An amendment to Chapter 28, the Zoning Ordinance, shall be provided to establish a minimum 80-foot lot depth requirement within the R2S and R2T zoning district.
・There shall be no development on proposed Outlot 5 until Chapter 30 permit has been granted by the Wisconsin Department of Natural Resources.
・Draft restrictive covenants shall be provided for review and approval with the future final plat to ensure common maintenance and ownership of the private community park and landscape in areas on proposed Outlot 1, 6, and 9.

Answers to Planning Unit ⇧ ⇩ Requests from the Planning Unit

●Comments from Zoning Administrator (December 30, 2002)
・The required lot depth of 100' has become an issue that we think it's a good idea to look at reducing this requirement.

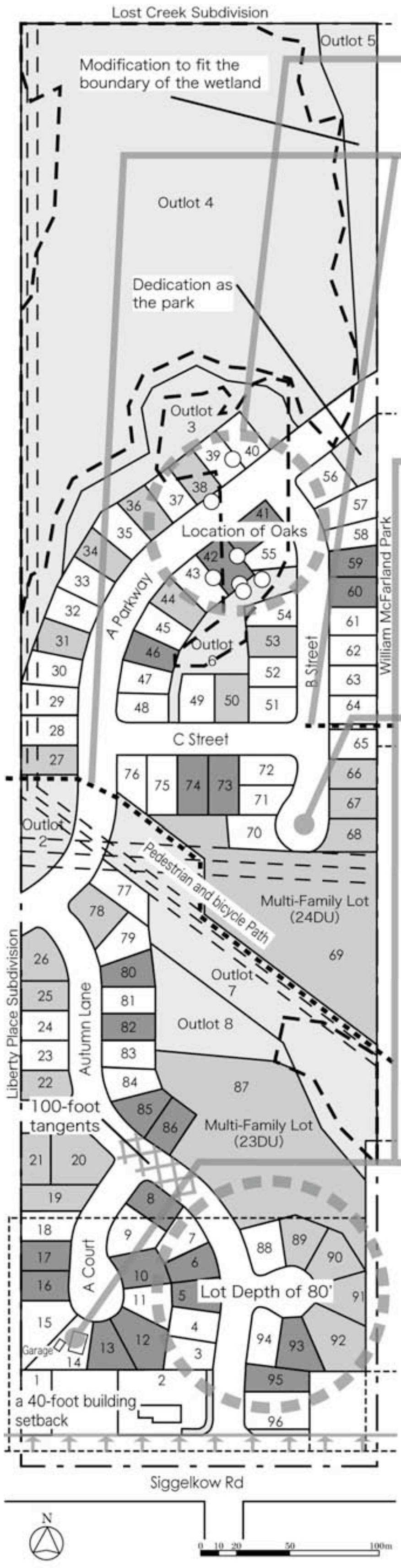
●Comments from Comunity Development Block Grant (January 3, 2003)
・The current plan for the use of Federal funds does conform to the stated objectives for the assisted units outlined in the initial proposal.

Quetions at the Plan Commission's Discussion (January 8, 2003)

●Quetions from Planning Unit
Q1) Provide a clear indication of the location of the trees to be preserved.
Q2) Provide a cost estimate for addition of two-car garages to the guildings.
Q3) Locate on the preliminary plat the proposed pedestrian and bicycle paths connecting Twin Oaks to the William McFarland Park.
Q4) Provide the three of eight prototype house designs completed to us for review.

●Quetions from Alders
Q5) As for the CDBG application, this project was going to have 120-150 "single family homes". There was no mention of "multi-family". It also indicated that the split of single-family homes will be 50% Habitat and 2 other affordable builders. I don't consider multifamily dwellings part of a single-family development.
Q6) The original sketches that were presentedto me , would not make these homes blend in.
Q7) I want to see at least a preliminary copy of your deed restrictions and covenants.
Q8) Since Liberty Place will have community areas, have you made an agreement with Midland to allow access from your neighborhood to these areas?
Q9) What is your proposed sell out time, and build out time?
Q10) As you are developing with cru-de-sacs, and the city has a hard time with the snow plow on those, causing curbs to break down, and salt deposits to destroy laws, how do you plan to eliminate the cost to the homeowner for these repairs?
Q11) What is Habitat for Humanity's view for ensuring that the low-income families attracted to Twin Oaks have acces to necessary services?
Q12) I would like information on how expandable these homes will be. For example, lack of a garage is not nearly so great a liability if there's room to add such an amenity. Similarly, I would like to know that the houses are also expandable so that families can thrive in that neighborhood over time, not just cycle through.

Figure 6. Developing the Subdivision Design in Formal Application Process (Preliminary Plat)



□HFHDC ■ Other NPOs ▨ Private Developers □ Open Space

Answers to Q1～12 (January 20, 2003))

●Answers to Planning Unit

A1) Trees identified on revised preliminary plat

A2) We estimate a cost increase of $8,000 for the addition of a 2-car garage. But the issue is not just the cost of physically building the garage, it is also the increased assessed value of possibly thousands of dollars above its actual cost and corresponding tax increase that could jeopardize the owner's ability to make payments.

A3) Pedestrian and bicycle paths identified on revised preliminary plat

A4) At the Plan Commision meeting, we will have floor plans and updated renderings.

●Answers to Alders

A5) Our change has been to have Twin Oaks be a neighborhood of home ownership. While the mix may have changed from 100% detached homes to 2/3 detached and 1/3 condominium ownership, we still propose 100% home ownership.

A6It has certainly been our intent to be as diverse as possible. Operation Fresh Start has committed to the 9 remaining non-profit lots. Wisconsin Housing Partnership has executed an Option for the other 12 non-profit lots.

A7) We realize the importance of deed restrictions and fully plan to have them created for Twin Oaks. We understand that homes previously built by HFHDC may not appeal architecturally to everyone. However, we also realize Twin Oaks demands more sttention to the exterior of our homes and our mission continues to be to provide well constructed housing and in this case, add more architecturally pleasing features. These are general conditions that will be included in the deed restrictions, consider the follows:

- ·Front porches required on Habitat homes and encouraged on others;
- ·All homes to have basements, unless unforeseen water table problems dictate differently, or another non-profit entity decides against having basements;
- ·Minimum 6/12 pitch on all homes;
- ·Aluminum or vinyl siding allowed and no plywood material siding;
- ·Drain tile and sump pumps on all Habitat homes;
- ·HFHDC will create an Architectural Control Committee to approve all plans;

A8) active park to the east, passive open space to the north and additional public park grounds in Liberty Place. We look forward to families from all neighborhoods interactiong with each other in all of these park families.

A9) We expect a 5-7 year build-out. There will not be a time limit from acquisition, but homes will need to be completed within one year after construction commences.

A10) Cul-de-sacs are a part of neighboring subdivisions and part of the neighborhood plab. We anticipate that repairs to curb, gutter and sidewalk will be mede by teh city. Lawns in need of repair will be the responsibility of the homeowner.

A11) I am a Habitat Board member working on the project and because I am the recently retired director of Economic Support and Work Services for Dane County.

·Habitat for Humanity has a very careful selection process. Each family must have the income, stability, work and rental history needed to succeed in meeting addordable mortgage payments regularly.

·Eligibility is based on the family having an income somewhere between 30 and 60% of sounty median. Incomes in this range are lower than the average, but they are consistently higher than the poverty line. For example, under 2002 guidelines, a family of 4 with $18,100 exists at the poverty line. Income must be lower than that to qualify for programs such as Food Stamps and Medicaid. A family Of 4 at 60% of county median is not eligible for any of those programs. However, there is another very substantial group of people who have far more stability, who work hard every day, and who also require a hand up. These families are not eligible for publicly funded programs and rely on non-profit organizations like Habitat for Humanity.

A12) Our Habitat homes, with basements, will be expandable down, out and possibly up, depending on the home itself and subject to city approved construction plans, setbacks and deed restrictions.

Floor Plans and Facade Design of Lot 14

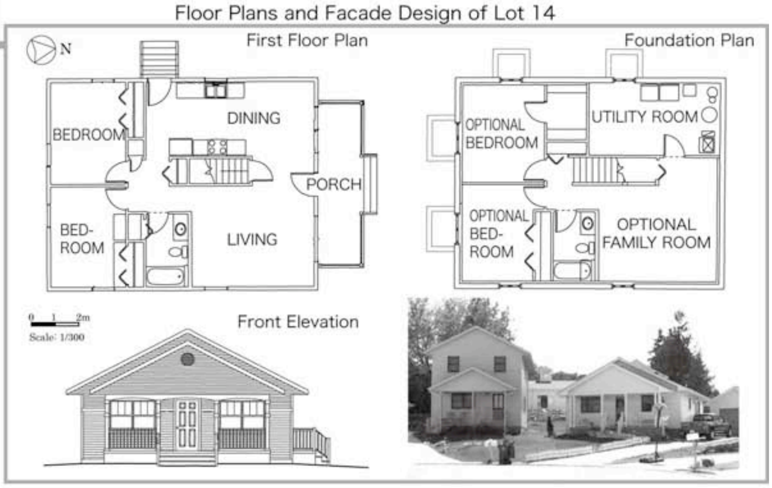


Figure 7. Revised Preliminary Plat