

The new district of Freiburg-Rieselfeld: a case study of successful, sustainable urban development

Two new residential areas are currently coming into being in Freiburg: Rieselfeld and Quartier Vauban. They respond to an enormous demand for housing in the late 1980s and early 1990s.

The new district of Rieselfeld, situated in the West of Freiburg and providing 4200 residential units for about 10,000 to 12,000 inhabitants, is one of the largest new development projects in the state of Baden-Württemberg. The urban planning concept underlying it evolved on the basis of the first-prize winning contribution to an ideas competition in urban development and landscape planning.

It is being constructed on an area of 70 hectares, situated in the Eastern part of a former 320 hectare sewage farm which served the southwestern part of Freiburg for more than 100 years.* After extensive ground surveys were done and necessary steps such as soil removal were taken, the area fulfilled the conditions for residential construction.

Project organization

The project is not being carried out by external developers, but by a project group which is part of the city administration, but operates outside of the regular administrative hierarchy. They collaborate with Kommunalentwicklung LEG (KE LEG), a municipal service-providing company from Stuttgart. The City of Freiburg and KE LEG have appointed a joint project management team which leads the Rieselfeld Project Group. At the head of project development and implementation, the project group functions as the central control unit for the project. The core team is supported by specialists from the city departments for planning and for real estate and housing.

The Projekt Financing

The new area of the city finances itself completely through the sales of the city's own plots. Finances are handled by a trust outside of the city budget and –on a small scale- by subsidies as for the building of the schools and the fire-stations as well as from the Building-Priority-Program of the federal state of Baden-Württemberg. That means also, that the project is especially dependent on marketing success. budget. Varied works in the area of ground management, joint-financing, planning, project management, as far as marketing and public relations, must all be earned by the capital of the trust. This includes also the personal costs of the core team as well as the entire planning costs; costs which otherwise in the daily working spectrum of an administration cannot be described transparently. In the area of public infrastructure the investment Costs for the public infrastructure were financed over trust, the follow-up costs have to be financed on the budget. The handling of the trust is settled through KE LEG GmbH.

* In fact, the very word 'Rieselfeld' means 'sewage farm' in English, but it sounds much more elegant in German than the translation would suggest.

Town planning guidelines

The **political guidelines** for the town planning **concept** have been in effect since 1994.

- Constructing an urban district of high population density (with a floor-space-index greater than 1) with the majority of buildings made up of multistory apartment houses, and multiple dwelling units of up to five storeys.
- A flexible urban design principle which allows for current developments and provides the possibility to adapt planning. The development scheme was drawn up in four installments, with intervals of two years between them – this is the principle of “adaptive planning”.
- Specifically incorporating the concerns of women, families, as well as handicapped and elderly people.
- Overcoming the separation of living and working space through the integration of mixed and industrial construction areas.
- Creating a balance of structures and housing forms. For example, mixing privately financed and subsidized housing construction, or mixing real estate for owner occupation and rental housing, initiating model projects.
- Diverse construction forms due to the small size of building lots and the diversity of structural building types in order to reach different target groups – the whole range from a duplex to a five-story apartment block.
- Future-oriented traffic systems that give priority to public transport and foot- and bicycle traffic.
- Well-integrated public and private infrastructures from the very beginning.
- Orientation towards ecological objectives by means such as low-energy construction, district heating networks fed by a combined heat and power plant, integration of solar energy, a concept for rain water use, and the primacy of the streetcar line. Upgrading of the surrounding area by upgrading it to nature reserve status (adjustment areas), complete with an educational hike and marked trails.
- High quality of private and public green spaces, and of leisure options.
- Shared courtyards in the blocks with multi-story apartments which enhance the quality of residence. Overcoming unnecessary physical barriers between lots in a joint design, and realization of open-air recreational areas within blocks.

The urban building concept

Certainly there are few projects which have realized the results of a town planning competition in the years 1991/1992 as consistently as was done in Rieselfeld. The main element is the streetcar axis in central Rieselfeldallee, more or less the district's backbone. In the actual center, a northern-oriented "green wedge" serves as the district park. The central infrastructural facilities include a middle and high school, sports centers, an elementary school, a district meeting center, and a church center. The green wedge's location should redirect the burden of leisure and relaxation seekers towards the northern-bordering lowlands of Käsbach and Dietenbach - and thereby relieve and protect the west-bordering nature reserve.

Dense building block structures, each between 70 and 130 meters long, are found directly on Rieselfeldallee; the density lessens towards the outer edge. A concise housing-arc marks the passage to Besançonallee. In the third and fourth parts of the construction section, larger terraced-housing areas were originally the smallest housing unit; a few duplex houses were introduced in a later step. Directly across from the Haid industrial area lies a smaller area for both industrial and mixed residential-industrial construction. Along Rieselfeldallee, considerable areas will be allotted for ground-level commerce facilities, gastronomy, etc. In today's economic situation, these represent some of the greatest challenges in developing the project further.

Appropriate width of streets, various town squares and generous communal courtyards make up for the high density of the building blocks.

One essential condition for the successful marketing of the project is met by the division of blocks into small lots, i.e. one block is normally not sold to one investor, but parceled out between five to ten investors. A great variety of different building types is particularly important here, these include densely built blocks right on Rieselfeldallee, ribbon development, town houses, duplex houses, terraced houses and the housing arc. An effort was made to offer different building types in each of the different blocks. The four-story town houses each include two maisonette apartments as a way of offering housing forms for private ownership already in the first two stages of development. They are vastly popular.

This urban building structure demands an orthogonal street grid and forms the basis of the traffic concept, which comprises as its main elements:

- Priority for the streetcar, pedestrians, and cyclists.
- Easy access to the public transport for all residents through three streetcar stops.
- A general speed limit of 30 km per hour.
- Several "play streets" in which playing kids have priority and
- Three main traffic inlets to the general area.
- A right-before-left rule of priority for driving in all places.

The ecological concept

Ecological guidelines have played a big part from the beginning. The **energy scheme** is marked by the geographical orientation of, and distance between, the structures, the obligation to use low-energy building with a maximum level of energy consumption of 65 kWh per square meter a year. In the learning process of the past several years, the administration, architects, engineers and builders learned to appreciate the principle of "communication, not penalization", which is now spreading far beyond Rieselfeld -, the binding obligation to connect all structures to the district heating network fed by a combined heat and power plant in Weingarten, and the use of renewable types of energy such as solar energy, wood pellet heating, and heat pumps.

The water scheme provides for separate collection of surface water, and complete recirculation into the western part of the Rieselfeld area (which has been upgraded to nature reserve status) after a biological purification process. Thus the typical local vegetation - marshes and swamps - is to be preserved. In the developed area, some damping-off fields add to these efforts.

The **ground scheme** comprises as its main characteristics the minimization of ground sealing, both in the private and public sector, and the areal removal of polluted soils. Spatially inclusive and comprehensive ground samples were taken before and after removal to ensure pollution-free subsoil. The nature reserve in western Rieselfeld, at 250 hectares, is one of the largest in the state. The majority of the adjustment measures that were prescribed by law have already been implemented there. This unique free space will be secured in the future through systematic fostering and maintenance. There will be a signposted nature trail to help visitors explore "their" nature reserve area. To round off the ecological concept, a **combined planting scheme**, adaptable to each individual green area, will connect the block courtyards and a number of high-quality green spaces segmenting the district.

Bordering on the north of the new district Rieselfeld, the new Sport and leisure areas "Untere Hirschmatten" is being planned. This will be an extensively used public area with ground for two sports clubs which should function as an extension to the "recreational task" of the district's parks. Through the construction of this area, the free-time activities should be steered to Rieselfeld's northern half in order to take some of the pressure off the nature reserve in the west of Rieselfeld.

Social and cultural life in the district

From the earliest stages of planning, equal attention has been paid to the district's social and cultural life as well as to technical aspects, marketing, and urban building. The Rieselfeld project group was determined to work very hard on making Rieselfeld a prime address. This was necessary to make the newly available residential estate competitive on the Freiburg market - even though more than 90% of the newly built real estate is in multi-story apartment buildings and multiple dwelling units. Thus it was possible to minimize financial risk for the City of Freiburg, which had set up public infrastructural facilities very early on. The development of the building process is, to this day, being accompanied by an unprecedented amount of public interest and involvement.

The social infrastructure in Rieselfeld today includes Kepler comprehensive secondary school and its Sepp-Glaser-gymnasium ; the Clara Grunwald Primary School, the "Freie Waldorf Schule Freiburg-Rieselfeld e.V.", a Kindergarten called Taka-Tuka-Land, the children's day care centers "Rieselfeld" and "Wilde 13", another, "Arche Noah", that is run by Caritas charity; a sports-kindergarten operated by Freiburger Turnerschaft 1844 e.V., two outdoor-kindergarten, a private sports club; and a district meeting center for youth projects that includes a "Mediothek", a media center for children and teenagers. As well there is now also a fire station and the Mara-Magdalena ecumenical church center. At the beginning of May 2006, construction has begun on a new two-part gymnasium next to the Clara-Grunwald Primary School. It also will be lent to clubs and the township of Rieselfeld.

Currently the construction of the second extension of the Clara-Grunwald primary-school is in progress. This building will be dispositional for another utilization as school enrollment will decrease. The extension of the Kepler secondary school has begun in summer 2006, it will be extended towards an all-day-school with four lines.

The facilities that are now available in the new district are tailored to residents' needs, and are supplemented by further offerings for children and teenagers. The City and the public have important partners in matters of the social and cultural life: two church parishes, the Rieselfeld residents' association and its committees, the club "Sport vor Ort" (SVO) and

also the exemplary district work of K.I.O.S.K. After just a few years, Rieselfeld now has an amazing social and cultural diversity. The residents produce a district newspaper which recently published its 40th issue on the occasion of tenth anniversary of K.I.O.S.K. e.V.

Aside from the coherent overall development concept, this successful and enjoyable development is based largely on the residents' strong identification with their district, and on the resulting positive public image of Rieselfeld. In late 2003 the district association K.I.O.S.K. e.V., which grew out of residents' social activity, assumed sponsorship of the district meeting center "Glashaus"-in which also the child and youth media resource center is accommodated as branch-office of the city library. This is an outstanding example of residents taking charge of their district. The Rieselfeld project group has encouraged public engagement since the earliest stages of planning. All this points to a heightened sensitivity of residents to their environment.

The marketing strategy

Marketing of real estate started in 1993 and has been both vigorous and successful.

Initially, planning and marketing were aimed at subsidized low-cost housing, privately financed rental housing investment projects, and apartments and family houses for private ownership. At the end of the nineties, however, state support for residential construction was discontinued and tax advantages for investors were cut, bringing about substantial changes in the business environment of real estate, particularly for multistory apartment house construction.

The project group's reaction, particularly in the third and fourth planning phases, was a modification of the development strategy in favor of single and multiple dwelling units. Also, investor acquisition for the construction of real estate for private ownership was intensified, and an anymore flexible marketing strategy was developed which includes services for industrial building. As a result, till today demand is excellent in the areas of both smaller investors' projects and of private and industrial purchasing groups. Besides numerous small and larger investors' projects, more than 100 purchasing groups have formed (also in the construction of multiple dwelling units and multistory apartment buildings), and there are more in the works. Marketing continues to be successful, despite more than 90% of all construction being in the area of multiple dwelling units and multistory apartment houses. Very flexible

investment handling by cost-free option financing with generous duration has been an important factor contributing to this positive trend. This enables a better structural steering of demands in order to bring the right project to the right place.

Other favorable factors include the fact that Rieselfeld is a convenient location through its proximity to the Haid industrial area. Also, a large number of jobs will soon be created in the service sector in Rieselfeld itself.

The current state of development and perspectives

Beginning 2007 there were over 7.650 inhabitants living in about 2.830 apartments. The big demand has been for units of multi-story dwellings. This means that all available building plots, as well as multi-purpose plots (i.e. shops and housing) are being sold in options, in the planning stage, or already under construction. The situation at the begin of 2007 is that there is a demand for homes contrary to the fact that, at present, there are no concrete building plots available. The decision on the construction of the eight-story building inside the urban railways turning loop in Rieselfeld has yet been made.

The construction of the “Wohn- und Geschäftshaus” situated at “Geschwister-Scholl-Platz”, which is both a residential house and a business premises was finished in september 2006. The idea of integrating a retail bookseller into Rieselfeld is being pondered. All along the central avenue of Rieselfeld, more and more home/business premises are coming into being .and with it more possibilities of trading and offering services. Consequently the urbane character of the center line will be rounded off.

In Januray 2007 about 370 units are under construction. About 270 units in different projects are in planning and should enter the building phase in the next 12-15 months. All real estate for family housing has either been sold in options, is under construction, or has already been built. The development of Rieselfeld should be completed in 2010.

A positive image, comprehensive and demand-oriented enhanced infrastructure, and an active public life in the district are important reasons for young families as well as senior citizens to choose Rieselfeld as their home, whether as tenants or as home-owners - even though construction sites will be part of the townscape for a few years to come.

Moreover, the Rieselfeld project group is strongly drawing on suggestions from the public for future development stages, and encourages residents' social engagement. A strong partnership between residents and the City has evolved, which has stood the test of conflict very well. Conflicts of interests and goals are unavoidable in a new district; in such cases the welfare of all needs to be put before that of individuals. The basic principle that has emerged is: "more activity, less administration".

The Rieselfeld project manages to keep families within the city, and attract families from the surrounding rural areas back to the city. Rieselfeld has asserted itself on the real estate- and housing market of Freiburg. Important goals of the City of Freiburg in the areas of urban development, residential building, and environmental policy are being realized in the spirit of sustainability.

Rieselfeld has indeed become a prime address, and one can reasonably call it a successful example of sustainable district development.

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