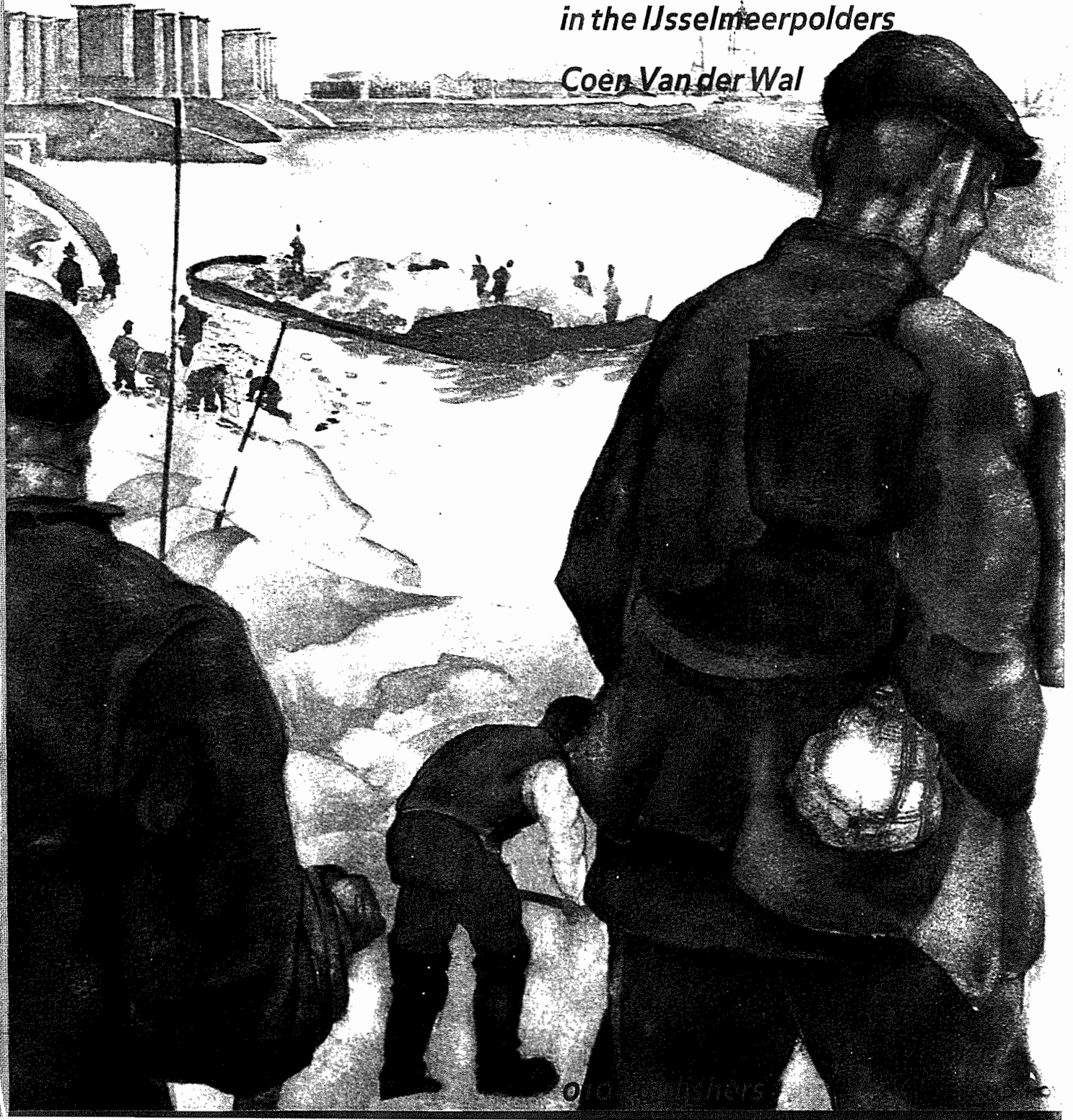
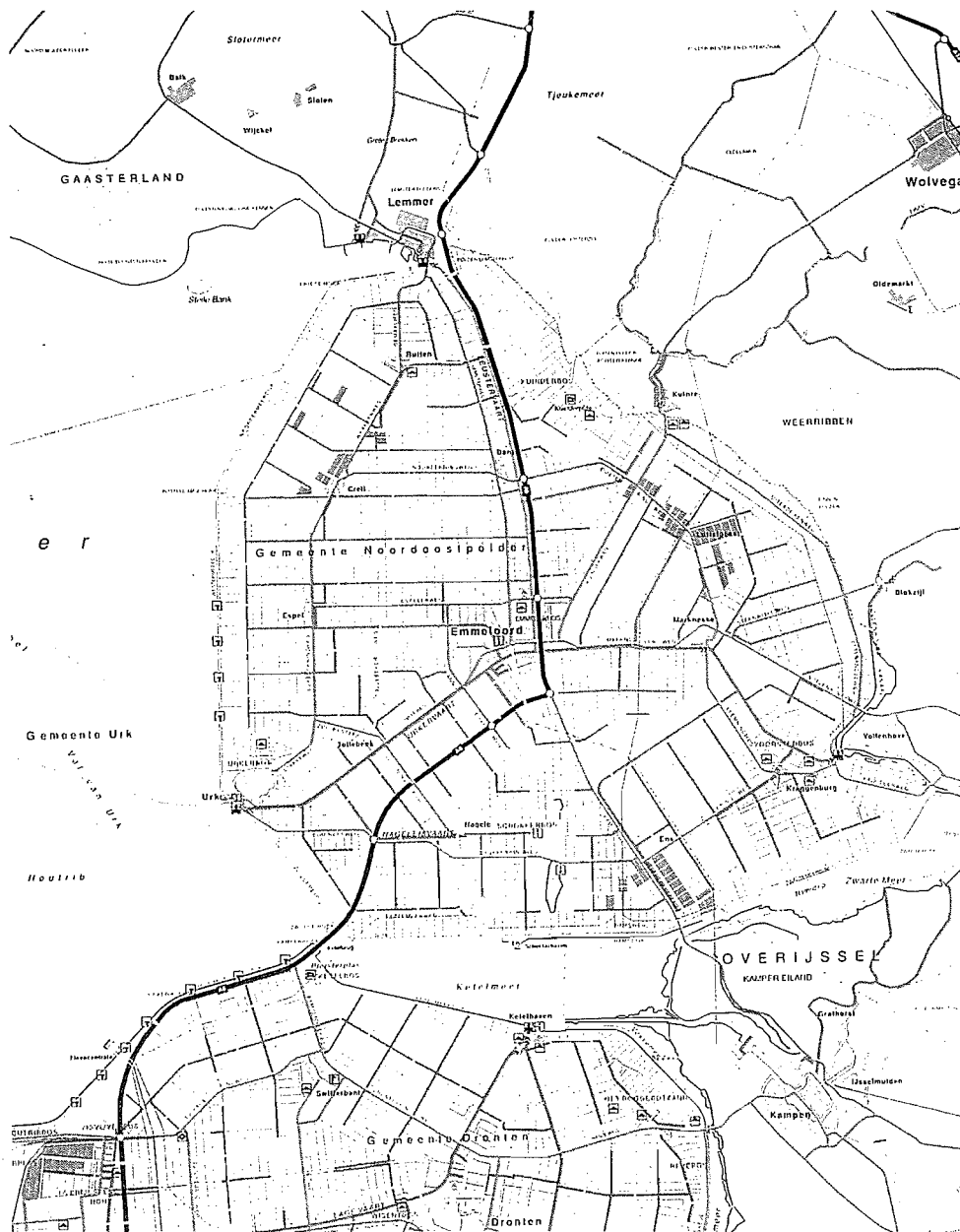


IN PRAISE OF COMMON SENSE

*Planning the ordinary. A physical
planning history of the new towns
in the IJsselmeerpolders*

Coen Van der Wal

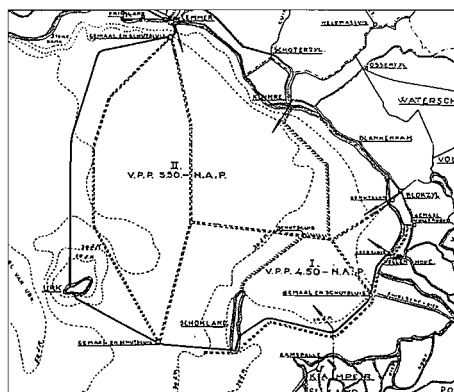




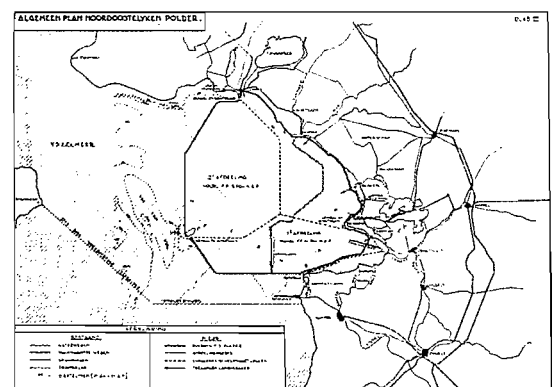
119

Noordoostpolder

- 119 Plan Noordoostpolder, 1996.
- 120 Proposed dikes and main canals, 1932.
- 121 Revised, near final, plan, 1936.



120



121

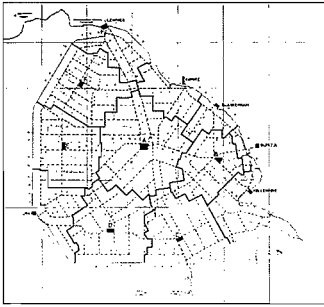
The Noordoostpolder

When on May 28, 1932, the last gap in the Afsluitdijk (Barrier Dam) was closed, the Zuiderzee had become a lake. It was named: IJsselmeer, after the IJssel, the northernmost branch of the Rhine river delta system. For the continuance of the Zuiderzee project, the ZPD and the Directorate were expecting to start on the *Zuidwestpolder*, the Markerwaard.¹ However, the depression continued to affect the economy and, in the annual discussion on the national budget, the question of financing the IJsselmeerpolders remained a precarious item. In September 1930, the minister had already indicated that, given the relationship between the southern polders, it would be necessary to finish them once a beginning was made. The much smaller, independent, Noordoostpolder might be a more prudent choice as the next polder. In 1932, a definite choice was made, but it was not until 1936 that parliament approved the reclamation plan, after having again been assured that the project was financially feasible. The promise of ample job opportunity had turned the scale in an era of high unemployment.²

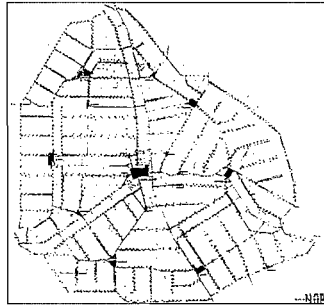
The polder plan

In 1932, the ZPD had already made a report, *Nota nr. 703*, in which the general form and the main canal system had been proposed. In February 1935, the Minister of Water Management instructed De Blocq van Kuffeler and Smeding to prepare a general plan for the Noordoostpolder.⁴ In May, one of the engineers of the ZPD, whose offices were in The Hague, J.G. Schilthuis, was stationed at the Directorate in Alkmaar. The resulting report, *Nota nr. 955*, however, must be seen as predominantly the ZPD's, although it was published under joint responsibility. Both Van Dissel and Andela / Bosma have taken note of the professional cooperation between the Directorate and the ZPD regarding the parcellation plan.⁶ In December 1937, the Directorate received the assignment to study the question of agriculture in the Noordoostpolder. The last gap in the dike was plugged in December 1940, and on September 9, 1942, the polder was dry.

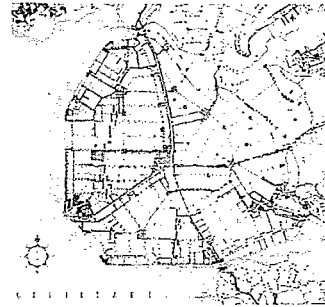
The Zuiderzee Project Department went about planning the Noordoostpolder in much the same way it had done with regard to the Wieringermeer. This time the ZPD's civil technicians were assisted by the agricultural engineers from the Directorate. The 'Lovink' farm plots had been very successful in the hydraulic, civil, and agricultural technical sense. Nonetheless, some adjustments in parcel sizes and in the system of roads and canals were deemed necessary. The standard parcels increased in size from twenty to twenty-four hectares, some were larger. Transport by road had proved to be far more popular than



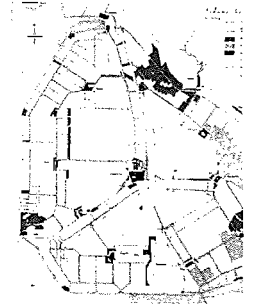
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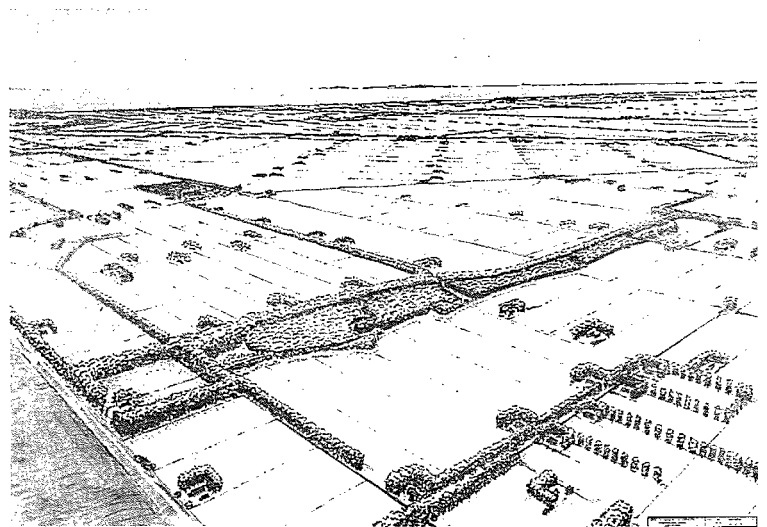


125



126

- Town/village sites already present on 1937 plan.
- Village site added in 1942.
- * Site moved, and enlarged from hamlet to village, 1945.
- ★ Hamlet not build, 1945.
- △ Village added or moved to new site, 1948.
- ▨ Vegetable and fruit farming area.



127



128

Noordoostpolder, siting of the towns

122 Siting of one central town and five peripheral towns. The service regions are indicated, based on the assumption that existing towns would serve as local business centers for part of the polder. From ZPD Nota nr.123, 1937.

123 Groenman's proposal of one central town, six villages and fourteen hamlets. 1945.

124 The Building Bureau of the Directorate also busied itself with drawing plans. This is one of them showing one central town, eight villages, and a large number of hamlets. 1945.

125 Plan with one central town and ten villages. 1947.

126 How the number and location of the villages evolved from 1937-1948.

128 Perspective of the area around the isle of Schokland, by Pouderoyen. 1943.

127 Aerial photograph. 1996.

1 Van Dissel, *Eigengereide doeners*, 105.

2 *The Driemaandelijke Berichten* always paid much attention to the annual discussions on the national budget, as the project's continuance depended on it.

3 *Dienst der Zuiderzeewerken*, *Nota betreffende het algemeen plan voor de droogmaking van den Noordoostelijken polder*, *Nota nr. 70*, June 1932.

4 Van Dissel, *Eigengereide doeners*, 105.

5 *Dienst der Zuiderzeewerken*, *De algemeene beginselen der verkaveling*, *Nota nr. 95*, October, 1935.

6 Van Dissel, *Eigengereide doeners*, note 2, 105; Andela/Bosma, *Inrichting*, 123.

7 Andela/Bosma, *Inrichting*, 124.

8 *Dienst der Zuiderzeewerken*, *Het Verkavelingsplan*, September 1937.

9 *Dienst der Zuiderzeewerken*, *Nota betreffende de bewoning van den Noordoostelijken polder*, *Nota nr. 130*. See also Andela/Bosma, *Inrichting*, 131.

10 Bosma, *Ruimte*, 303–315.

11 Van Dissel, *Eigengereide doeners*, 117.

12 For events in the polder between 1942 and 1945, see C. C. Van Baalen's *Paradijs in Oorlogstijd?*, Zwolle, 1986. Pages 161–174 describe the razzias.

13 Bosma and Wagenaar have indicated that the relevant Department of Reconstruction and Building Construction, under the energetic direction of J. A. Ringers, was able to steer a fairly independent course until Ringers' incarceration in 1943. Bosma, *Doorbraak*, 91–95.

14 Andela/Bosma, *Inrichting*, 135.

15 Andela/Bosma, *Inrichting*, 137.

16 resp. P. Verhagen and J. T. P.

Bijhouwer.

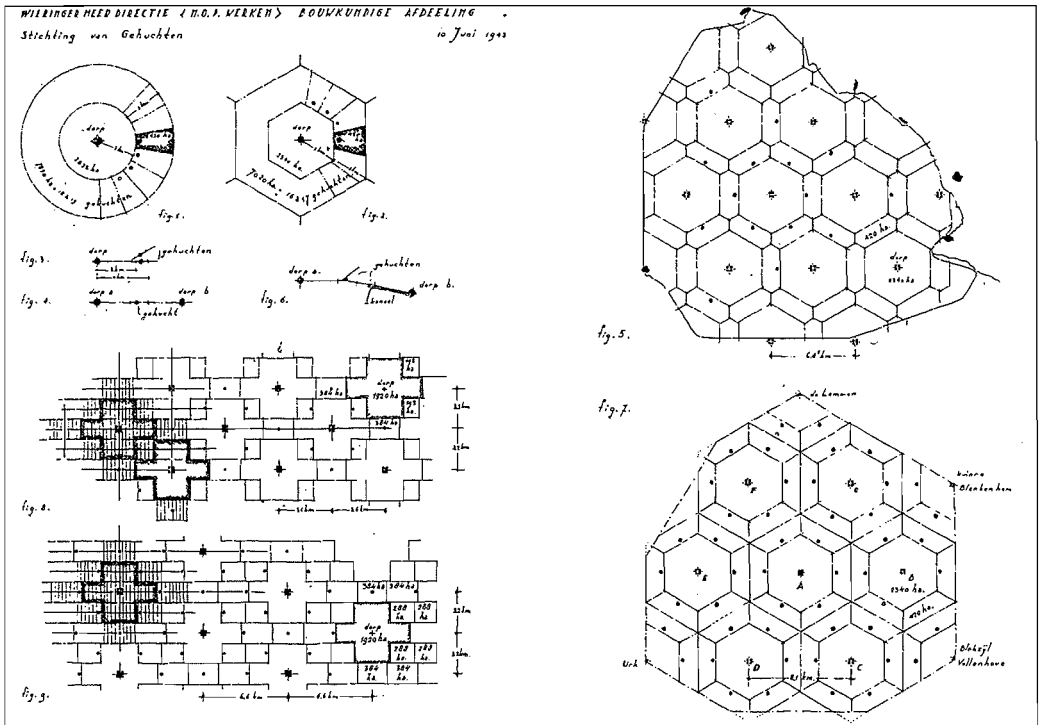
water transport in the Wieringermeer. Since this tendency was expected to continue, the number of canals in the Noordoostpolder was reduced.⁷ The resulting plan gained the approval of the Zuiderzee Advisory Board in February 1937.

All commentary having been acted upon, and after due deliberation between the Directorate and the ZPD, the parcellation plan was presented as *Nota nr. 123*.⁸ Since Molière was still an advisor to the ZPD, the office of Granpré Molière, Verhagen and Kok was involved in the planning to the extent that Verhagen assisted in the siting of the settlements. He made plan sketches of one central and six peripheral towns, which were meant to convey ideas as no research had been done regarding their form, size, or content. This office's involvement resulted in an adjustment to the plan, which was added to *Nota nr. 123* as *Nota nr. 130*.⁹

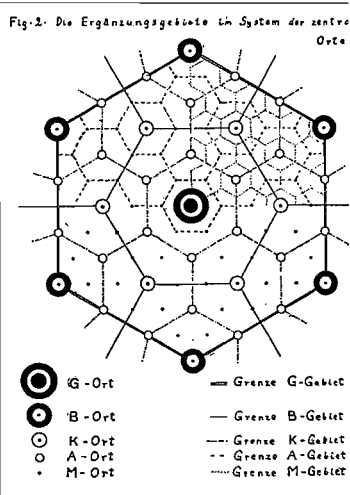
In 1942, the Noordoostpolder was drained, but reclamation was retarded by World War II; materials, machinery and fuel were scarce. Still, the German occupation authorities wished to continue the project as a showpiece of Arian accomplishment. Bosma has pointed out that the reclamation of the polder fitted well in German plans for recolonization – particularly regarding the eastern border of the German Reich: Poland, the Baltic States and parts of the USSR – and the development of land for the resettlement of west-European farmers.¹⁰ Also, the Noordoostpolder would be a welcome addition to agrarian land to help alleviate the faltering food production. Since building materials could not be obtained, the IJsselmeer authorities decided to concentrate on the development of the polder for agriculture.¹¹ Due to the lack of machinery, most of the work would have to be done by manual labor. Many young men chose to come to the polder as an alternative to being sent to Germany, or to hide from the authorities. For young farmers there was the extra incentive of a promise of land once the polder had been developed. Toward the end of 1943, it had become common knowledge that the polder was a haven for men fleeing the occupation forces' scrutiny. When, toward the end of 1944, Germany was confronted with the idea that defeat might be an imminent possibility, interest in the Noordoostpolder waned. In August 1944, 220 men were arrested and in November a large razzia took place. About a thousand men were sent to Germany, and work on the polder ground to a halt.¹²

During the war, the Directorate continued its efforts to attain a permanent status as a separate authority. It was to no avail; however, on August 15, 1942, a separate Public Authority, *De Noordoostelijke Polder*, was installed to handle that polder's municipal tasks. Smeding, Directorate director, became bailiff.

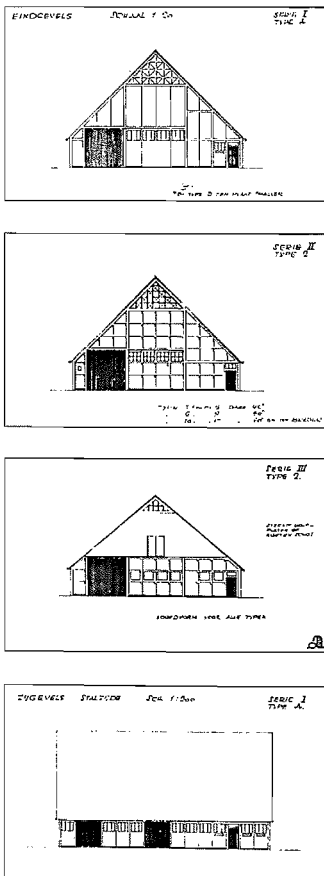
Research and planning of the towns did not really get underway until the early nineteen-forties, during World War II, when the Directorate's Building Bureau took planners into its employ to make the physical plans. They were assisted by also newly-employed social geographers. The addition of these new disciplines to the Directorate stems from the changes that had taken place at the national level that had been placed under German supervision. The State Authority for the National Plan, formed in 1941 under the new system, had instructed the polder authorities to start planning in a more comprehensive way and avail themselves of experts in the planning discipline. It could do so under the authority provided by the German-dominated government.¹³ The goals of the State Authority for the National Plan were '...the spatial ordering of the national interests, supervision of the spatial ordering of regional and municipal interests, and research as a required base for physical planning.'¹⁴ The experience of the Wieringermeer had shown that, particularly in the field of spatial planning and on the social-economic level, scientific expertise had been sorely lacking. Highly recommended by Granpré Molière, C. Pouderoyen, one of Molière's former students, was employed part-time as a physical planner for the Directorate, starting in August 1942.¹⁵ Pouderoyen thought along the same lines as Molière, both philosophically and in terms of design. He was a typical physical planner, and one of the Delft School. He was no planologist, which was contrary to what the State Authority for the National Plan had wished. Nonetheless, having the approval of both polder authorities and physical planning and landscape planning advisors¹⁶, he was appointed. Two social geographers, S. Groenman and C.A.P. Takes, were hired by the Directorate, J.E. Van Dierendonck by the ZPD, and E.W. Hofstee was the consultant for both authorities. They were former students of H.N. Ter Veen, professor at the University of Amsterdam, whose dissertation on the 'pioneers' in the Haarlemmermeerpolder had had an impact on the sociological aspects of the Wieringermeer planning. These men, assisted technically by the Building Bureau, busied themselves with studying the problem of the villages, such as number, distribution, size, physical and social content, size and composition of the population. At the basis of it all was the social position of the farm laborer and his family, or the relationship farmer – farm hand. The Directorate, Granpré Molière, and Pouderoyen evidently took the conservative position by insisting the old relationship should be maintained. The social geographers, on the contrary, acknowledged the changing times by stating that the farmer's old patriarchal position regarding farm labor had already ceased to exist. This meant that one side propagated placing farm laborers' housing close to the farm, the other side chose to settle farm laborers in towns for a greater independence and proximity to shops, schools and social facilities. A serious



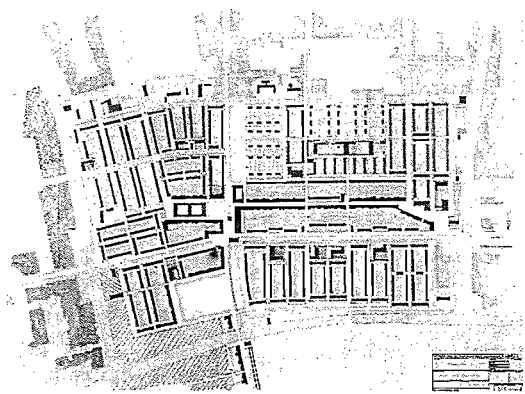
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133

129 It seems reasonable that L. Brandts Buys, a Building Bureau architect, had studied the Christaller theory when he drew his system of towns and hamlets for the Noordoostpolder in June 1942.

130 Diagram of the theoretical order of towns in Christaller's central places theory. The figure was copied from the UDA's copy, probably purchased in or after 1941.

131 Van Eck encouraged the use of prefabricated concrete elements for barn buildings.

132 Two Mastenbroek plans for Emmeloord were found in the archives. This plan was more or less a 'straightened-up' version of the Pouderoeyen plans. June, 1944.

133 It is likely this is the Mastenbroek plan, scoffed at by Pouderoeyen and the planning advisors. Probably 1944.

17 *Zuiderzeewerken, Notas nrs. 123 and 130.*
 18 Described in detail by *Andela/Bosma, Inrichting, 144.* Constandse is more concise in *Directie, Wording Noordoostpolder, 11, 12.*
 19 *Directie, Wording Noordoostpolder, 12;* or *Nota nr. 123.*
 20 *Distances from the farm to the villages (not the hamlets) varied from 4 to 8 kilometers.* Constandse, *Wording Noordoostpolder, 12; Andela/Bosma, Inrichting, 145–148.*
 21 Constandse, *Wording Noordoostpolder, 13.*
 22 Van Dissel notes that this was a step backwards in comparison to the *Wieringermeer*. As farm laborers' homes they were no success. Eventually all were sold, very few to farm laborers. Van Dissel, *Eigen-gereide doeners, 162.*
 23 *Andela/Bosma, Inrichting, 144.*
 24 *Bosma, Ruimte, 323.* See also *Bosma, Doorbraak, 165–166.* Faludi also states that in the *IJsselmeerpolders* '... the settlement was based on the explicit adoption of Christaller's idea of a settlement hierarchy.' Faludi, *Rule and Order, 19.* In public planning in the Netherlands, chapter 13 (co-authored by Dutt, Costa, Van der Wal and Lutz) an illustration asserts that the village pattern was based on Christaller's theory. Dutt, *Public Planning, 221.*
 25 Constandse, in *Stichting, Vijftig jaaractief, 72.*
 26 *Ibid.*
 27 W.F. Heinemeyer, 'Kunnen we Christaller met zijn centrale plaatsen theorie wel vergeten?' *Tijdschrift voor Sociale en Economische Geografie, Jan./Febr. 1970, 5.*
 28 *Bosma, Ruimte, 323.*
 29 *Bosma, Ruimte, 324; Heinemeyer, Christaller vergeten, 5.*
 30 *Takes, Bevolkingscentra, 13, 14, 157.*
 31 About the 'quantitative revolution' in American geography, and its spread in Europe, see R.J. Johnston, *Geography and Geographers: Anglo-American Human Geography since 1945, New York, 1992, 63, 68, 85–87;* and P. Hall, 'Geography. Descriptive, Scientific, Subjective, and Radical Images of the City', in L. Rodwin, R.M. Hollister (eds.) *Cities of the Mind. Images and Themes of the City in the Social Sciences, New York/London, 1984, 25–29.*

argument in the debate was the consideration that large towns might have an alienating effect on the rurally-oriented lives of the farm laboring class.

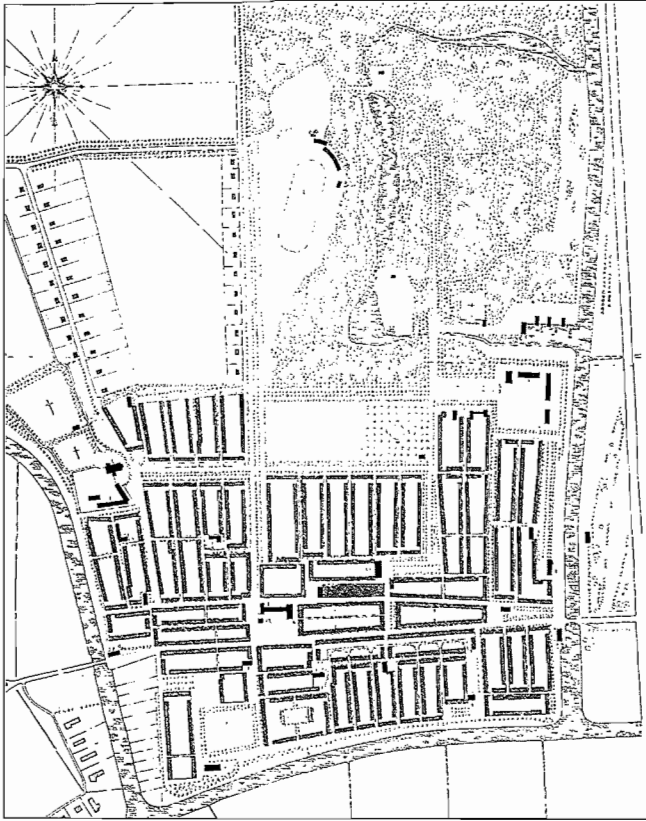
The 1937 parcellation plan¹⁷ shows one central town and a ring of five villages.¹⁸ It is based on calculations by the ZPD. This Department had studied similar areas on the 'old land' and, allowing for a more efficient farm management and greatly increased mobility, the total number of inhabitants could be placed at around 50,000. The average distance between towns could be seven to eight kilometers. 'Using these criteria, the following polder division was made: an area of 12,500 hectares would be apportioned to (existing) towns along the edge: Lemmer, Kuinre, Blankenham, Blokzijl, Vollenhove and Urk; 8,300 hectares would belong to the polder central town; leaving 27,000 ha. for the (other) villages. Herein, five villages were planned, each with an average support area of 5,400 hectares and 4,000 inhabitants.'¹⁹ Constandse recognizes this as the first stage in a four-stage process. In the second stage, in 1942, a village was added in the northeastern part. This change was caused by doubts about the usefulness of Kuinre, an existing village on the edge of 'the old land', the idea of better control over a new village than an existing one, and a better coverage of the serviceable area. The third stage can be characterized as the period of the farm labor discussion. The spatial translation of the argument regarding the place of the farm laborer was naturally a compromise: if laborers were to be close to the farm and still live in a village²⁰, the number of villages would have to be increased. Several plans were presented in which, besides the ring of six villages, a number of hamlets were added to the plan. The final stage was entered in 1946 when it became clear that, in the eastern part, a number of small farms for horticulture would be added and that in other areas farm sizes would be smaller than at first anticipated.²¹

When, after World War II, the fresh wind of social change also started to blow through the Noordoostpolder, the plan attained its final form with one central town (meant for 10,000 inhabitants) and a ring of ten villages (each of 2,000 inhabitants). Restricting the distance to a village to a maximum of five to six kilometers had proved a stronger argument than the village's size. For those who wished to or had to live on the land, the polder was strewn with two-, three-, and four-unit row-houses, that had yards large enough for a vegetable garden.²² The plan was approved and signed by the Minister of Transport and Water Management in March 1948.

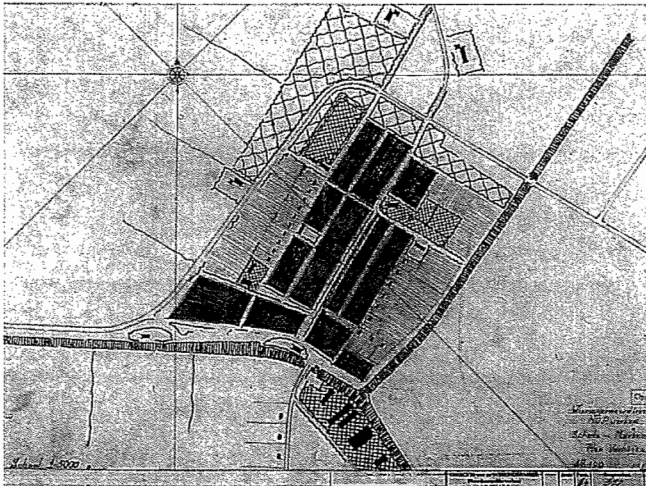
In *De Inrichting van de IJsselmeerpolders 1920–1960*, a detailed account of research done in the archives of the several polder authorities, it is stated that no evidence was found that Christaller's central-places theory regard-

ing distribution and hierarchy of towns was used in the Noordoostpolder.²³ Bosma alludes to a 1942 letter from the State Authority for the National Plan in which Christaller is 'referred to emphatically'²⁴ for the future planning of the other IJsselmeerpolders. Of course, these statements are not mutually exclusive, it is entirely possible that, although the theory was known, it was not applied in the Noordoostpolder as other considerations took priority. Constandse has argued that '...there is probably no direct relation...'²⁵ between the Christaller hexagonal configuration and an early plan with six villages around a 'central place'. 'The planners of those days had enough knowledge of nuclear hierarchy in agrarian regions to arrive at the thought of a central town, Emmeloord, without this source. Even if Christaller had been the source of information, his model was quite freely varied. In the nineteen-forties, widely varying proposals had been made, such as a plan with 45 to 55 hamlets, each with a minimum of seven and a maximum of twenty-six dwelling units.'²⁶ However, it is likely that L. Brandts Buys had read Christaller's work when he drew a hexagonal village pattern on the Noordoostpolder plan in 1942. W.F. Heinemeyer has noted that in the nineteen-forties and fifties Christaller hardly got any attention. He does not remember Ter Veen ever mentioning his name in his lectures.²⁷ Christaller himself had indicated that his lecture at the 1938 international geographers' conference in Amsterdam, also mentioned by Bosma²⁸, had met with more rejection than approval. Bosma and Heinemeyer have also mentioned that Takes referred to Christaller in his 1948 dissertation on population centers in the IJsselmeerpolders.²⁹ It cannot be said, however, that Christaller's central places theory was at the base of Takes' dissertation. On page 13 is written: 'To a certain degree, in the distribution of the service centers in both places [Takes referring to areas in the provinces of Friesland and Noord-Holland], one can find an affirmation of the basic idea in the Christaller theory.'³⁰ On the next page, however, he asserts that it would require extensive research to explain all the deviations from the Christaller scheme when compared with the existing town locations in Friesland. He also surmises that the scheme might be of some interest to the 'relative homogeneous structure' of the new land. He does not mention Christaller again until the final page, and then only as a comparison with other authors.

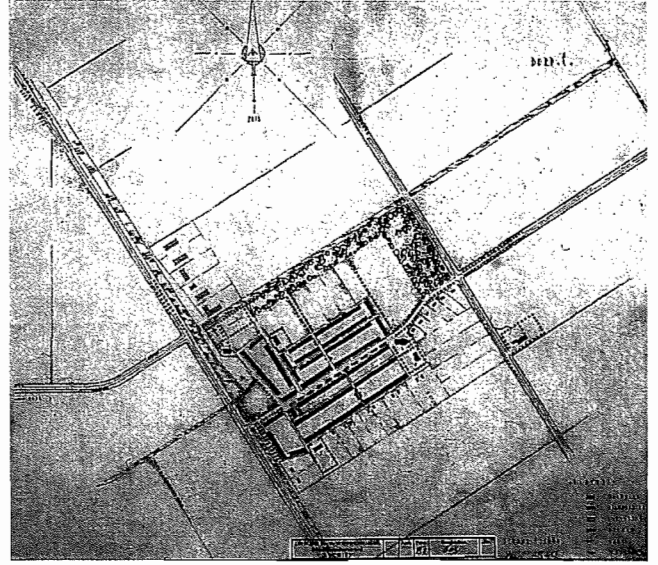
B. De Pater has shown that in the Netherlands, Christaller's views did not gain popularity until the late nineteen-sixties, as the result of the study of a new approach to geography in the United States of America.³¹ There, the Christaller theory had arrived with German geographers who had fled Nazi Germany. In the nineteen-fifties, it was embraced by young geographers as an expression of a new quantifiable scientific systematic geography. Via Canada, Great Britain, and Sweden, the



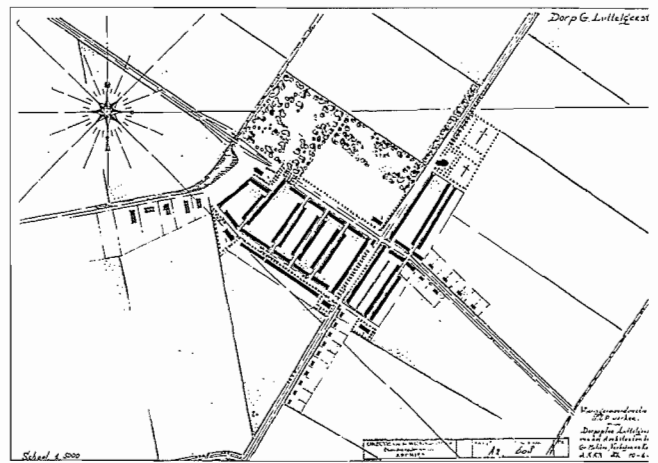
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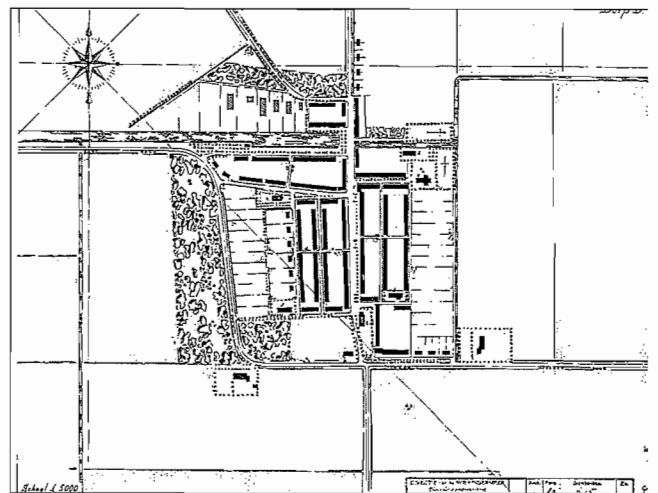
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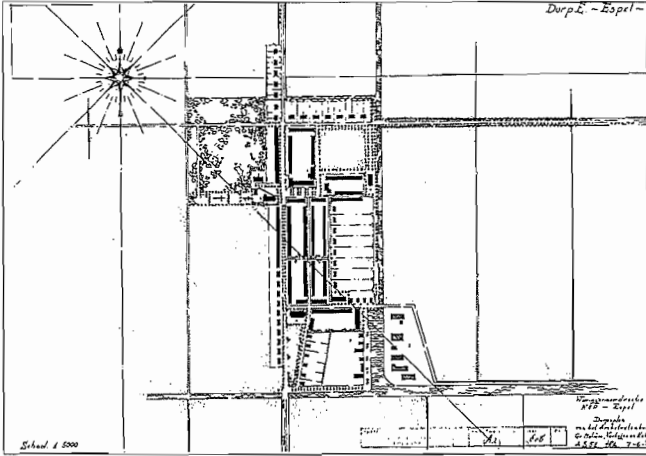
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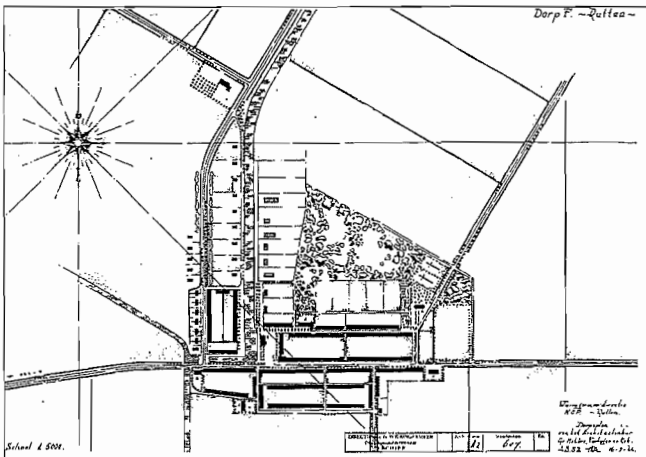
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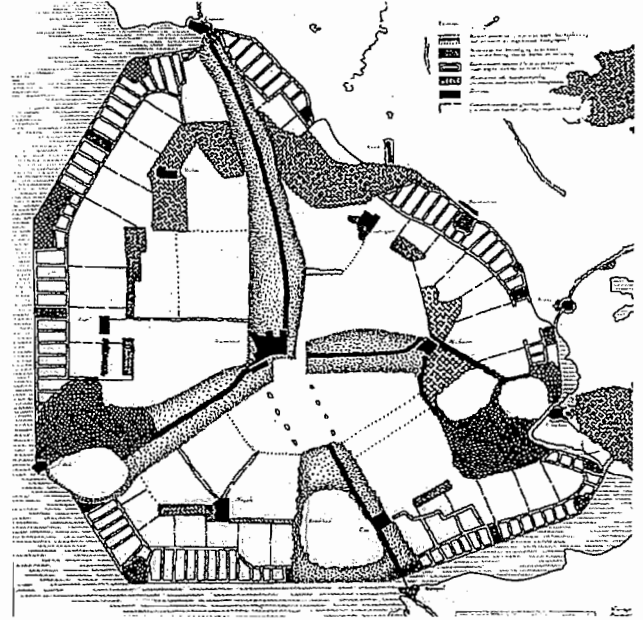
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141

Town plans by Verhagen

Verhagen, who took over from Granpré Molière in the Noord-oostpolder, drew plans of the then planned 7 towns, probably before 1940. The originals were destroyed in the Rotterdam bombardment, but later redrawn by Directorate draftsmen.

134 Emmeloord.

135 Marknesse.

136 Ens.

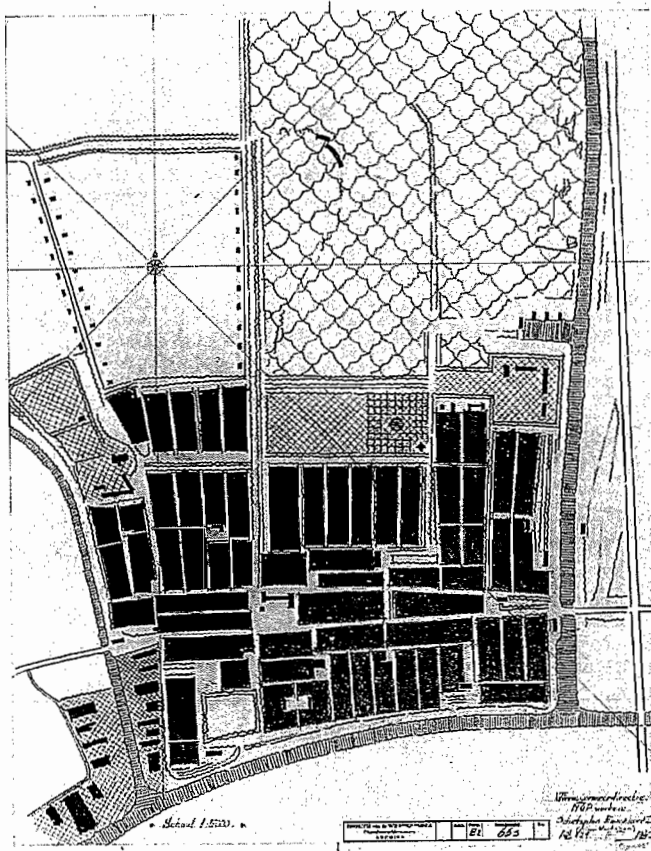
137 Luttelgeest.

138 Nagele.

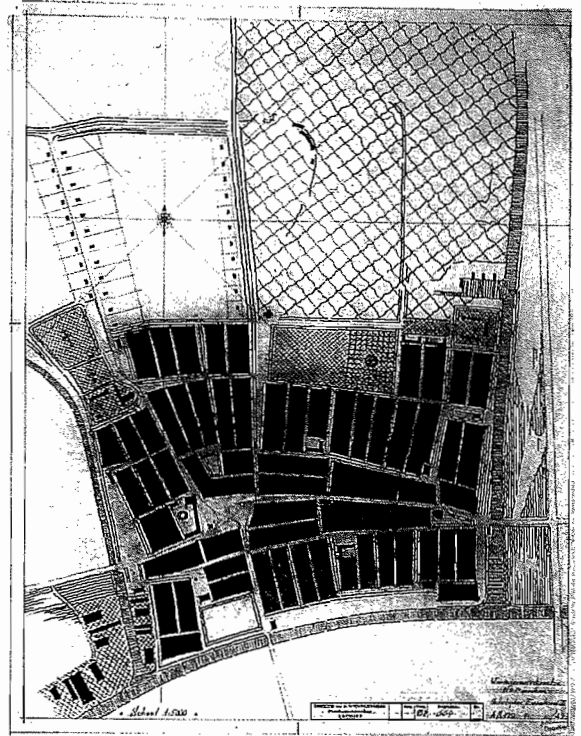
139 Espel

140 Rutten

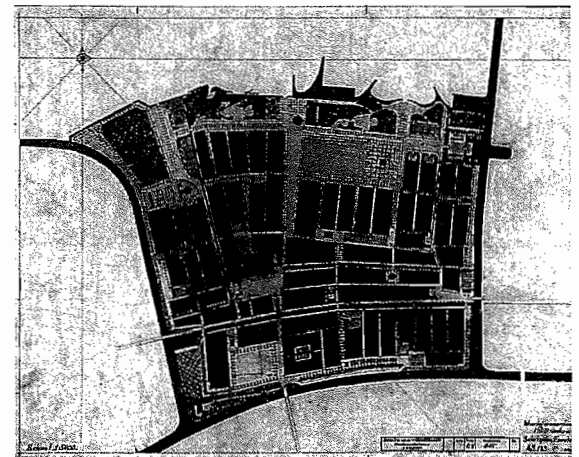
141 Polderoyen made several polder plans, among which this landscape plan (1943), with a cruciform partition cutting through an open central region. The edges were divided into small compartments.



142



143



145

Sequence of Noordoostpolder new town review

Planner	Town	(First) Intended size (dwelling units)	Starting date	
			Planning	Construction
<i>Wieringermeer directorate employees</i>				
Pouderoyen	Emmeloord	2500	1942	(1943)1946
Verlaan	Marknesse	475	1946	1948
	Ens	440	1946	1948
	Luttelgeest	290	1947	1950
	Bant	240	1949	1951
	Creil	275	1950	1952
<i>External consultants</i>				
Dingemans	Kraggenburg	450	1947	1948
W. Bruin	Rutten	240	1949	1952
Duintjer	Espel	225	1952	1956
Nix	Tollebeek	175	1952	1956
De 8 en opbouw	Nagele	300	1947	1954

144

142 In 1942, Pouderoyen started by redrawing Verhagen's plan.
 143 A few months later, he began to mold the plan according to his own views. 1942.
 144 Scheme of the new towns in the Noordoostpolder.
 145 In this sketch the secondary canal is introduced. 1942.

32 B. De Pater, H. Van der Wusten, *Het geografische huis, Muiderberg, 1991, 138–143*. Also: in a typically Dutch complicated phrase, Chr. Van Paassen states: 'The New World was necessary again to give European innovation a chance; and – irreverently expressed – in a far corner of the United States (Seattle), [Edward] Willman, as inspired a non-conformist as Robert Gradmann, Christaller's pro-nator, with the help of [William] Garrison and the newly graduated English geographer [Brian] Berry, was the horse pulling the triumphal chariot of the new geography, of which the original author lived in the deepest poverty outside the closed portals of German academic geography.' C. Van Paassen, *Het begin van 75 jaars sociale geografie in Nederland, Amsterdam, 1982, 33*.

33 A. D. Van Eck, 'De Bebouwing in den Wieringermeerpolder, Tijdschrift voor Volkshuisvesting en Stedebouw 11.5, May 1933, 141.

34 Interview G. Nijhof, May 28, 1993.

35 The question was asked to T. Verlaan, G. Nijhof, F. Tellegen, S.J. Van Embden, W.J.G. Van Mourik, and others.

36 Private notes by Van Eck, as quoted in Andela/Bosma, *Inrichting, 126*.

37 Mastenbroek was a member of the functionalist De 8.

38 Pouderooyen, *Over de stedebouw, 20*.

39 See also Bosma/Andela 'Het Landschap van de IJsselmeerpolders', in Kras (ed.), *Het Nieuwe Bouwen, 142–158*.

40 Andela/Bosma, *Inrichting, 250–260*; and J. T. P. Bijhouwer, 'Het landschapsbeeld van de nieuwe polders', *Forum 1–2, 1955, 9–17*.

41 Bruggenkamp made use of his own research, that of Andela and Bosma in *De Inrichting van de IJsselmeerpolders 1920–1960 and Wonen TABK 14/85*, and Pouderooyen's 1987 letter to the IJDA. This letter was a reaction to *The Villages in the IJsselmeerpolders*, an IJDA publication in 1986. In his letter, Pouderooyen corrected some inaccuracies and expanded on the necessarily short text of the Village book. Emmeloord received his special attention, since he took over the town's design and carried it to its approved edition.

42 '...the relevant [Verhagen] designs were given to me at the start of my work for the Directorate in August-September 1942, with the comment that I could put them aside and start anew, if I wanted to. [It was] Characteristic of Van Eck's attitude regarding the Delft School, and also a sign of rivalry between the ZPD and the Directorate [Molière and Verhagen originally were ZPD advisors]. Also, Prof. Ir. G.M. told me I did not need to feel bound to these plans, on the one hand because he obviously knew they were meant as illustrations, on the other to give me the necessary freedom for my own creation.' Pouderooyen, *Over de stedebouw, 19–20*.

43 At the beginning of World War II, Molière felt he could no longer com-

geography of spatial analysis came to European (and Dutch) universities.³² In this light, the justifiable conclusion must be that Christaller's central-places theory has not played a role of any importance in the planning of the IJsselmeerpolder towns.

The ideological discussion about architectural and urban design had continued, reduced and subdued, during World War II. It had come out in the open again in 1945, but it seemed to pass by the Noordoostpolder. It is true that Van Eck in the Wieringermeer had already uttered his objections about the total exclusion of modern architectural design ideas.³³ G. Nijhof, an architect employed by the Directorate at the time, recalls how a group of Directorate designers would gather regularly at night in the home of B. Odink, one of the Building Bureau's architects, to discuss the modern movement in architecture.³⁴ Odink was an admirer of Rietveld's, a member of Het Nieuwe Bouwen, whose architecture had a direct relationship with the De Stijl movement. However, modern influences in the polder buildings remained limited to details, and conventional materials and forms were still used. In any case, the architects and planners in the Building Bureau were not preoccupied with the notion of a particular style or school of thought. The fact that Van Eck had made a critical remark about the traditionalistic architecture of the Wieringermeer does not mean that he was a heart-and-soul modernist, although he disliked the alleged romanticism and conservatism of the Delft School. None of the people who worked with Van Eck at the Building Bureau remember him as a modernist.³⁵ He was a very practical and pragmatic man who looked for efficient solutions and who had a firm grip on the Building Bureau. His opinion of architects, at least those with a membership of the *Bond van Nederlandse Architecten* (Dutch League of Architects), was not very high. He accused them of paying attention only to the aesthetics of the exterior.³⁶ Had he wanted to do so, he could have steered toward a more 'modern' form in the towns' layout and buildings, as is shown by the completely new methods in concrete barn construction that he encouraged and that now to a large degree give the Noordoostpolder landscape its characteristic dotted unity. Admittedly, it was very difficult to stand up against the solid front of the Directorate and its planning advisors. Pouderooyen relates an occasion in the period 1942–1946 when Van Eck supported a 'counter plan' for Emmeloord, in the Het Nieuwe Bouwen style, by one of the Building Bureau's architects, H. Mastenbroek³⁷, who had worked for Le Corbusier. 'He was unsuccessful because the two advisors, Prof. Ir. G.M. [Molière] and Ir. P.V. [Verhagen] thought it too dilettantish and not worth a critical review'³⁸, adds Pouderooyen with some complacency. It must also be said: Van Eck is generally credited with being the man who persevered against many odds to put Nagele on the map.

The towns

Before the start of the Second World War, Verhagen, of the firm of Granpré Molière, Verhagen and Kok, had made sketches of the central town and some villages. When Pouderooyen started to work for the polder authorities, he drew up plans for the towns and for the whole polder. Leaving aside a 1929 publication by the Planning Advisory Board, called *Het toekomstig Landschap der Zuiderzeepolders* (Future landscape of the Zuiderzeepolders), and efforts by the polder authorities' landscape consultant J.T.P. Bijhouwer, landscape planning in the Wieringermeer had been treated as an afterthought. Having learned from that, in the Noordoostpolder the scale and the physical environment were studied both by Pouderooyen and Bijhouwer.³⁹ The functional cross of the north-south line Lemmer-Kampereiland and the west-east line Urk – Vollenhove served as basis for a spatial division. In several plans, this cross is accentuated by wide or narrow green belts. The polder layout was designed with a small-scale planting grid along the polder's borders, leaving an open polder center only bisected by the green belts. Eventually, the south leg of the cross was omitted to create an open area in which the former isle of Schokland could manifest itself in the landscape. Woods were planned in infertile areas near Urk, Kuinre and Vollenhove. Pouderooyen's characteristic delineation is noticeable on many of these plans.⁴⁰ They illustrate the craftsmanship and spatial approach of the traditionalist that he was.

On the adjacent page, a schedule of the towns constructed in the Noordoostpolder is listed in the same order of sequence as they are discussed on the following pages.

Emmeloord by Pouderooyen

Pouderooyen also made plans for the towns in the eastern part of the polder that was being developed at the time. His main effort, however, was the plan for the central town, Emmeloord. The development of this plan has been described by Bruggenkamp in *De Ruimtelijke Opbouw van de Noordoostpolder*.⁴¹

The starting point was Verhagen's original plan that Pouderooyen found to have too much regularity, and he proceeded to reform the plan by bending the east-west roads, thereby fanning the north-south ones.⁴² He tried to promote a 'more confined spatial image'. He also introduced the south access road suggested by the consulting firm of Verhagen, Kuiper en Gouwetor.⁴³ In 1943, a canal system was introduced but, for functional and economic

reasons, it was reduced to one east-west canal along the central square. A major change/addition occurred at the end of 1943 when the industrial area was moved south of the main canal (Urkervaart) and connected to a railway line coming from the south (Kampen and Zwolle). From then on, only small-scale changes were made, especially around the main square, until the plan was approved in the spring of 1947. By that time, construction had already started in the western part of Emmeloord.

New in this procedure was the presence of social geographers, who did the planological work. They were not only consulted in sociological questions, they also did the calculations on the number of inhabitants and the required housing, and municipal and commercial services. These conditions were noted in 'programs' or 'surveys'. Starting in Emmeloord, a program has been at the base of every IJsselmeerpolder new town. Where in Emmeloord program and plan developed simultaneously, in all following nuclei the program preceded the plan.⁴⁴

The Emmeloord plan is as much a product of the Delft School as was the planner himself.⁴⁵ In fact, the plan is in some ways more abundant and, in the sketches, more Sittesque, than Granpré Molière's own sober approach to town planning. The State Authority for the National Plan probably tried to express something similar in its commentary on a 1943 plan when it stated: 'One of the differences between a romantic and a classical work of art lies in the fact that, in the first, the elements from the past and those of the present when juxtaposed, remain strangers to each other, while, in the last, integration has taken place, so that the work of art testifies to one indivisible quickening power [*krachtig leven*], presenting itself in a perfect form. In the above sense, we consider the received sketch plan as romantic in character, but striving for the classical. In our estimation, this last quality has not yet been reached.'⁴⁶ With all due respect for Pouderoyen's work, with regard to the balance between form and content so striven for by Granpré Molière, a slide toward the 'form' can be noticed in Emmeloord. This tendency would continue in the Building Bureau's village plans.

A number of design elements of the Wieringermeerpolder towns can be found in Emmeloord and, as will be shown, also in the villages designed in the Building Bureau by Verlaan. The concept of the confined central open space, the spatial definition of long spaces (streets) with a beginning, a middle and an end, the converging lines of facades, and the subtle modulation of spaces toward focal points can be found in all town plans. The decision to promote a religiously diverse population in each town meant that the position of the church buildings had to be such that no church could dominate another. In the Wieringermeer this had been considered as unfortunate, i.e., the town could

not have a traditional silhouette. It was an issue even in Emmeloord, where it was solved by making a water tower the dominant building on the Emmeloord skyline (which it is to this day). The approved plan shows the cross form also favored by Molière; east-west is the added canal alongside the main road, the north-south axis is accented by widened green areas both at the south and north entrance. At the intersection is the main square. The seven neighborhoods are separated by green spaces reminiscent of the central green areas of the Wieringermeer villages, and the important churches are found at the end of these long greens. Characteristic of this school of planning is the careful consideration given to changing viewpoints. A good example is the main north-south axis: approaching the center from the south, the first focal point is the Dutch Reformed church, south of the canal. Moving on, one encounters the facade of the theater / restaurant and then, after a subtle turn and before moving into the wide Boslaan, the post office. On a smaller scale, in the first neighborhood, the original plan was adjusted so that upon entering the Duizendknoopstraat from either side the view at the end is blocked by a public building, a school.

The construction of Emmeloord began in 1943 with a row of brick houses in the Rietstraat preceded by some temporary buildings along the Harmen Visser square, but lack of material and labor soon put a halt to that. The restart was after World War II, and by the time the Noordoostpolder became an independent municipality in 1962, all seven neighborhoods on the 1948 urban plan, and an additional one to the west of the Espeler canal, were fully occupied. On December 31, 1962, there were 7,892 residents.

The main square, De Deel, has been the subject of continual design efforts. Pouderoyen made numerous schemes, from an east-west orientation in the first phases to a north-south scheme in 1944, and back to east-west in the later stages. On the south side the square was bordered by the main road and the canal. The east and west sides were designed as closed building fronts; and along the north side the square was to be lined by a park-like area in which the large public buildings would be located. The location of the town hall was planned on the west half of the square. Doubts remained about the spatial impact, about the relationship of the large square size to the height of the buildings and to the openness of the north edge.⁴⁷ After a design competition, the winning design for the water tower was worked out and the tower was placed in the southwest corner, next to a quadruple row of linden trees that closed off the square from the south road, the Korte Dreef.⁴⁸ On the drawing Verlaan made for the benefit of the competition participants, the site of the town hall moved to the east. Later, in private practice again, Verlaan was the architect for the town hall⁴⁹, but in 1966,

bine his teaching job with his pract. The office name changed from Granpré Molière, Verhagen en Kok Verhagen, Kuiper en Gouwetor.

⁴⁴ Groenman wrote the program f Emmeloord. It is dated January 26, 1944. INVNR. DWM 1545, RAL.

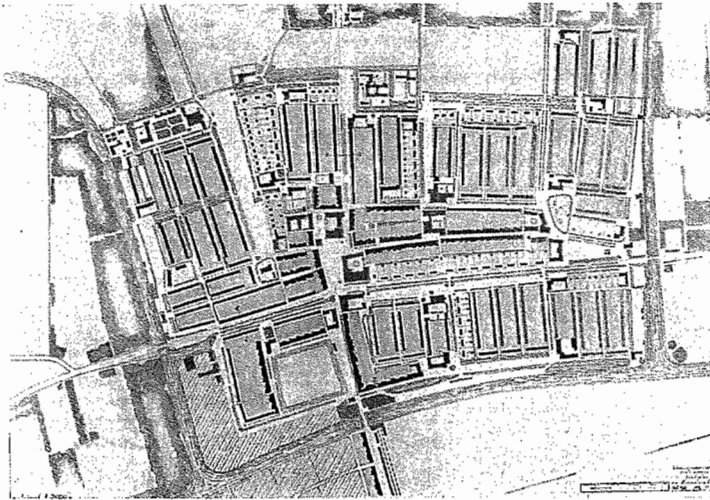
⁴⁵ Unlike other former students o; Granpré Molière, Pouderoyen evidently had no basic objection to the term 'Delft School' as he used it several times in the above mentioned ter.

⁴⁶ Stadsplan Emmeloord, INVNR. DWM 1545, RAL.

⁴⁷ Andela/Bosma, Inrichting, 211. Smeding particularly was not at all sure the town center would become attractive. In a letter to the Minister Transport and Water Management dated November 15, 1948, he proposed a design competition for the center, but the minister turned him down. A little later approval was obtained for the competition for the water tower. INVNR. DWM 1545, RAL.

⁴⁸ In December 1950, a design competition for a water tower was issued to be submitted before July 1, 1951. The jury comprised of: G. Friedhof, Rijksbouwmeester (official state architect), J. C. Keller, director of the water company, A. D. Van Eck, head of the Building Bureau, A. Komter, architect advisor to Directorate, S. J. Embden, architect/planner, and S. Bakker, adj. head of the Building Bureau, secretary. One hundred and seventy designs were submitted. The winning design, by H. Van Gent, was executed in 1957 and 1958. The official opening of the tower was on June 20, 1959.

⁴⁹ Verlaan also made a town hall plan in 1958-1959, while still employed at the Directorate.



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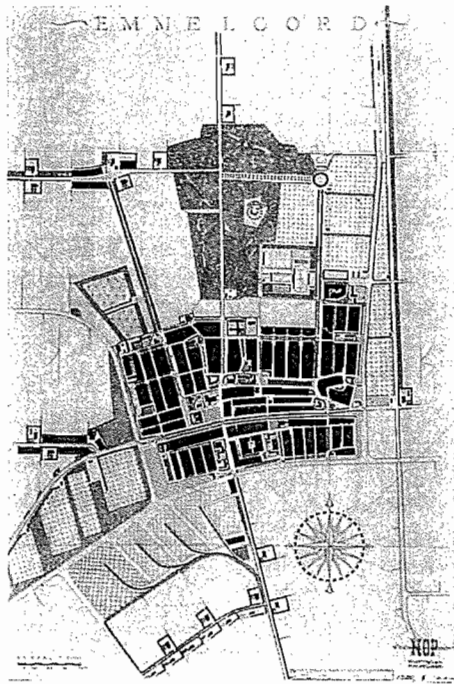
Pouderoyen's Emmeloord

146 Introduction of the widened Espelerlaan, in the northwest, and industrial estates to the south of the main canal. May, 1944.

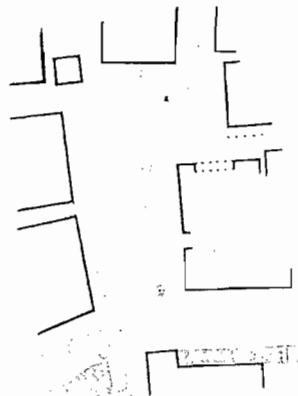
147 Pouderoyen's 'classical' views of Emmeloord's urban spaces. View of the square from the canal. March, 1943.

148 Emmeloord, the penultimate plan. May, 1946.

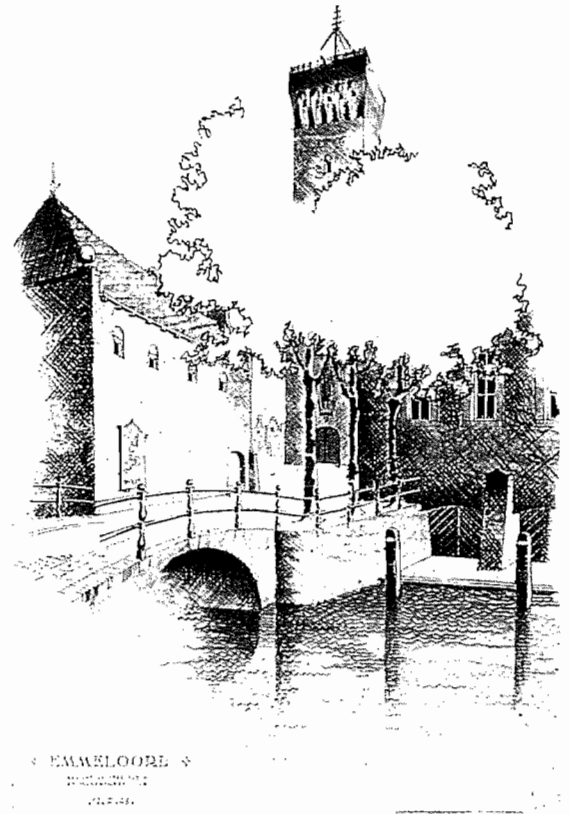
149, 150 Plan and perspective of the town square as envisioned in August, 1944. (All drawings by Pouderoyen.)



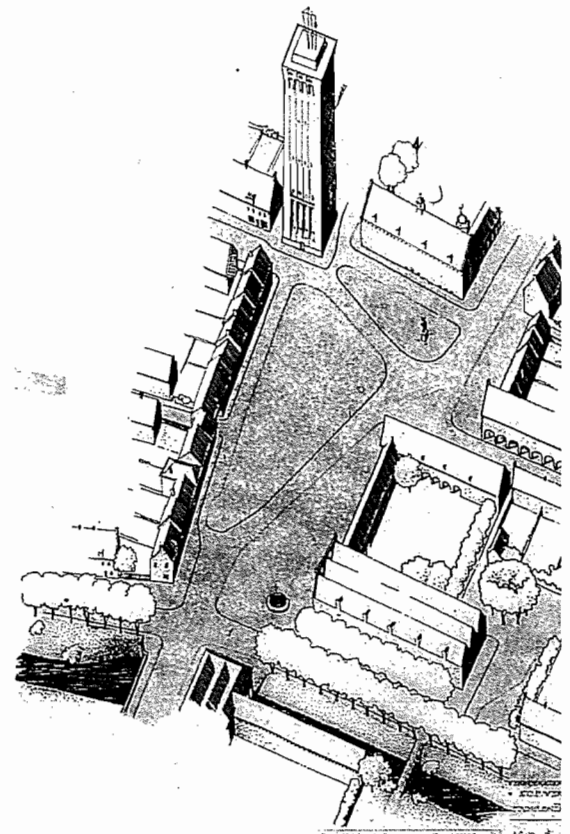
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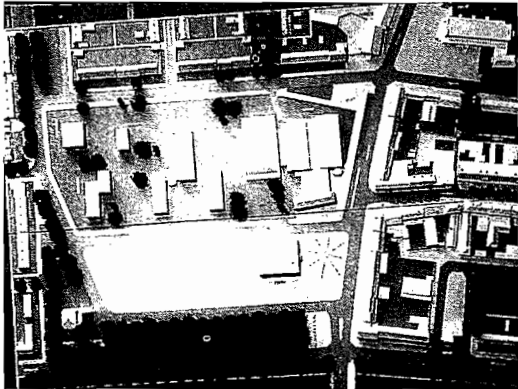
158

Welwyn and Emmeloord compared

Emmeloord and Welwyn City have (some) similar elements. Did Pouderec's Welwyn, or are these coincidences? Photographs: 151 Emmeloord, Boslaan; 152 Welwyn, Parkway; 153 Emmeloord, corner along the Julianastraat; 154 Welwyn, corner along the Parkway; 155 Emmeloord, villas along the Julianastraat; 156 Welwyn, villas along Parkway; 157 Emmeloord, row-I along the Distelstraat; 158 Welwyn, cottages Parkway.

Emmeloord

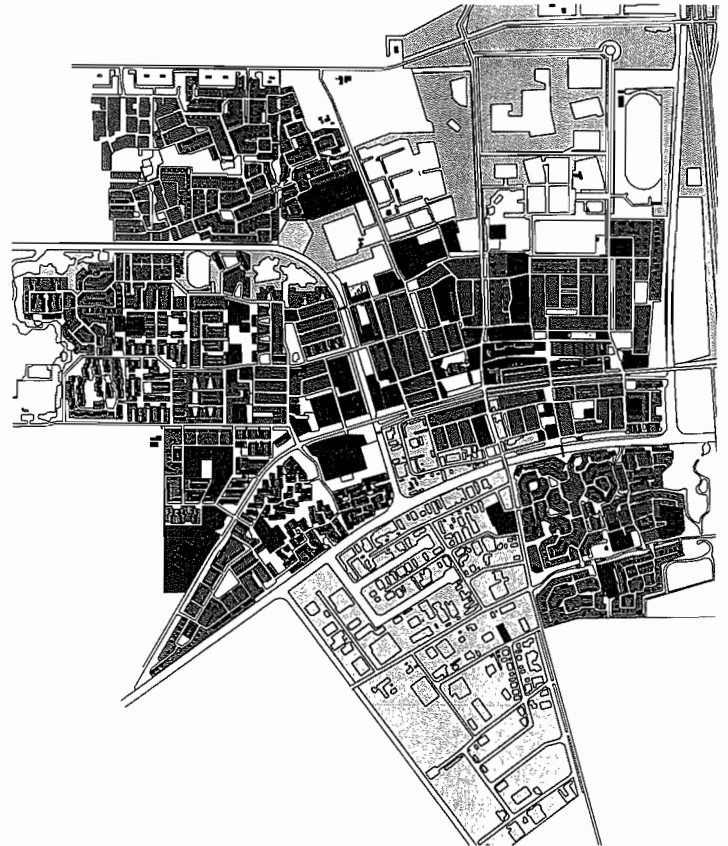
159 A 1955 model of the space, De Deel. To the quadruple row of lindes creates the square from To the north, the small public buildings. The tower was never built on the 160 Aerial view of 1999; 161 The winning design central water tower in Emmeloord, by H. Van tower was completed 162 Plan, 1995. 163 Aerial view of the from the south. In the canal and the tower. B tower and to the right, Parkway-like avenues, Espeleraan and the B



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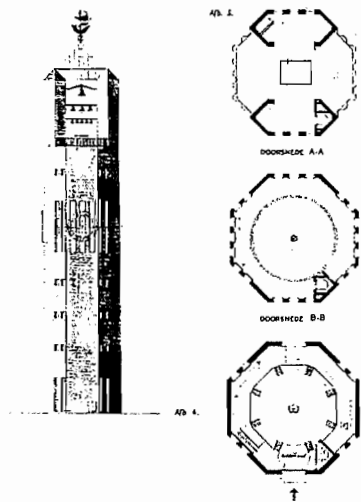


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with the contract drawings already completed, the city council decided (with one dissenting vote) not to place the building on the square. Fifteen years later, a town hall by another architect was built four hundred meters to the west, along the Harmen Visser square, the location of the first wooden town hall. Despite feeble efforts to come to grips with the space, De Deel has remained the uninteresting area many had feared it would become.⁵⁰

Towns designed by Verlaan

In 1946, Th.G. Verlaan joined the Wieringermeer Directorate. He was an architect, but was hired to do urban planning work. In August 1947, he took over from Pouderoyen who returned to private practice. Verlaan had been educated in architecture at a technical college in the north of the country, far from Delft. J. Bakema and he had been classmates. Bakema, of course, went on to become a fervent advocate of *Het Nieuwe Bouwen*, Verlaan was non-aligned and was more prone to follow prevalent trends. In the Building Bureau he followed the pattern set by Granpré Molière. Thanks to the Marshall Aid program, the reclamation of the polder had come into full swing again. During the war, town construction had halted, while land development had continued. The bureau had to concentrate on making plans for the villages and, as the polder developed from east to west, the eastern villages were first. On August 13, 1947, the *Planologische Commissie* (Planological Commission) was formed.⁵¹ This commission was evidently preceded by the *Stedebouwkundige Commissie*⁵². In 1948, A. Komter replaced Molière in the commission, and as advisor, S.J. Van Embden replaced Verhagen in 1951.

Marknesse

Pouderoyen had made sketches for Marknesse and some other Noordoostpolder towns. In the Marknesse plan, he marked a dominant spot for the (Roman Catholic) church and adjoining churchyard.⁵³ For that reason it was not approved. Also, the *Stedebouwkundige Commissie*, according to the minutes of the relevant meeting, deemed it 'too urban', meaning: too much closed building frontage at the edge of town rather than a transparent transition from town to open land. Verlaan's first plan was based on 475 dwelling units as calculated by S. Groenman, the Directorate's social geographer. It was a design '...that started with (the idea of) a circular, albeit it imaginary, fortification placed in the midst of the low land.'⁵⁴ It found no mercy, but the layout of the next, and approved, plan has a marked resemblance to it. When executed, the northern entrance to the ring road was omitted. This was caused by the early placement of 'temporary' wooden

homes along a road in the northeast plan corner.⁵⁵ Having sufficient capacity, another north exit was not necessary. The initial cruciform scheme disappeared altogether. Verlaan, less concerned about such mystic significance, had no qualms. During the first Planological Commission meeting, the question of housing density was discussed.⁵⁶ The discussion centered on the proposed duplex dwellings for farm laborers, requiring more property for growing vegetables, keeping chickens, and perhaps a pig. Van Eck and Blaauboer deemed the large plots too expensive, while Hofstee opposed the housing of farm laborers in row-housing. A calculation to that effect showed that, disregarding the price of the land itself, the large plots (700 m²) would only require one hundred and twenty guilders more per plot. This would amount to a price increase of no more than 1¹/₂ to 5% per dwelling in relation to the row-house plot.⁵⁷ This clever handling of figures did not eventually convince the Treasury. The approved plans for Marknesse and Ens still had the free-standing or duplex dwellings for farm laboring families along the edge of town. However, because of economizing measures announced in 1948, this type of housing was never built. It was replaced by row-housing.

Ens

In contrast to Marknesse, Verlaan's first sketch for Ens does bear a resemblance to Pouderoyen's design. Both plans show a simple rectangular layout on two regular 300x800 m. parcels. Pouderoyen had placed the town beside the main road, a bridge and a narrowed portal giving access to the central portion. Verlaan added a wooded area to the west to make the Kampen-Emmeloord road and the canal visually part of the built-up area. Since the land had already been parceled out for agricultural purposes, even the greatly reduced wooded strip, shown on the approved plan, was never planted. In Ens, for the first time in the IJsselmeerpolders, a housing pattern can be seen, which was popular with the modernists, in which the rows are all oriented in the same way toward the sun. This means that the local access road is bordered on one side by back yards and on the other by front yards. In the Netherlands this plan pattern is called *strokenbouw*. Since this author has not found a reasonable translation, the Dutch term will be used in this text.⁵⁸ In Ens, the rows have been placed north-west south-east, giving an optimal exposure to the sun. In Nagele, the plan of *Het Nieuwe Bouwen*, this pattern is, of course, very much in evidence. There, however, the rows have been placed north-south and east-west, to fit the orthogonal pattern.

⁵⁰ For a commentary on the current and present state of Emmeloord, see J.W.C. Bruggenkamp, 'Emmeloord: traditie en vernieuwing', in *Rijksdienst voor de Monumentenzorg. Monumenten van een nieuw Nederland*, Zwolle, 1994, 74–91.

⁵¹ At the first meeting it consisted of: P. Boodt, F.W. Malsch, Overdijkink of the State Forestry Service, J.T.P. Bijhouwer, adj. director, A. Blaauboer, adj. director, A.P. Minderhoud, he Social-Economic Department Van Steen, Agricultural Department and O.S. Ebbens, secretary of the Directorate. At the October 1, 1947 meeting, the commission was expanded with: P. Boodt, F.W. Malsch, Overdijkink of the State Forestry Service, J.T.P. Bijhouwer, adj. director, A.P. Minderhoud, he Social-Economic Department Van Steen, Agricultural Department and O.S. Ebbens, secretary of the Directorate, J.J.M. Aengener, Ministry of Transport and Water Management, and E.G. Boiss D. Burger, J. Winsemius of the Authority for the National Planning, RAL.

⁵² Consisting of Blaauboer, Pouderoyen, Hofstee, Groenman, Smeding, and Brandts Buys, the Directorate architect. *Andela Inrichting*, note 181, p. 270.

⁵³ These sketches were based on a survey made by S. Groenman in December 1943. *INVNR. DWM 1531, RAL.*

⁵⁴ Verlaan, 'De afzonderlijke plannen', in *Wording Noordoostpolder*, 22.

⁵⁵ Smeding remarked: '...The city to remove the wooden houses that have been admitted for a time, will not occur soon. [This is contrary to the original intention.] Minutes of the Planological Commission meeting August 1947. *INVNR. DWM 1531, RAL.* In 1999, the houses are still there and are visible.

⁵⁶ The discussion was continued on the October 24, 1947 meeting; the question was raised: whether pig sties could be all the villages.

⁵⁷ Calculation with map and plan was presented in the October 1947 meeting. *INVNR. DWM 1531, RAL.*

⁵⁸ In *Kras* (ed.), *Het Nieuwe Bouwen*, Amsterdam, 1920–1960 the term also been left untranslated.

⁵⁹ *Architects in Amsterdam 1547–1947*.

⁶⁰ Meetings of November 19 January 28, 1949, March 18, 19 June 3, 1949, with even two meetings. *INVNR. DWM 1531, RAL.*

⁶¹ On March 5, 1947, they go assignment. On March 18, 1947, they were asked to submit their firm. *Dorpsplan Luttelgeest*, *INVNR. DWM 1531, RAL.*

⁶² Minutes of the Planological Commission meeting of November 1948. *INVNR. DWM 1531, RAL.*

⁶³ Verlaan, *Wording Noordoostpolder*, 24.

⁶⁴ Verlaan, *Wording Noordoostpolder*, 24.

⁶⁵ The program was made by

Venstra, Directorate social geographer. In September 1950, surveys were presented on Creil, Espel and Tollebeek. INVNR. DWM 1531, RAL.

66 The question of one or more municipalities in the Noordoostpolder had not yet been solved at that time.

67 Verlaan (interview June 9, 1993) has pointed to the form similarity between Creil and Swifterbant. However, when asked, Van Mourik said not to have known of the early Creil plan when he designed Swifterbant. And it is hard to imagine how he could have.

68 Komter wanted to make an exception to the rule by having the ring road in the village.

69 'The village which merely borders a straight road so that, approaching the village, one can see through it and out beyond it before one gets actually into it, starts with a handicap which not even the most beautiful buildings can overcome.' Thomas Sharp, *The Anatomy of the Village*, Harmondsworth, 1946, 9.

70 Komter may have read the book also. In any case he had already suggested a bend in the main road in Luttelgeest at the Planological Commission meeting of September 10, 1948. INVNR. DWM 1531, RAL.

Luttelgeest

The next town planned by Verlaan was Luttelgeest, although an earlier plan by De Rijk and De Vries⁵⁹ existed, which had been discussed in the Planological Commission's meeting of August 13, 1947. In the earlier plan, the town was situated on both sides of the Marknesse-Bant road, the polder's main ring road, that was to function as the village main street. The plan was received sympathetically, but at the next meeting (October 14, 1947) doubts were raised about the desirability of the main road having a through-traffic function. The question of traffic safety was brought up again in the meeting of September 10, 1948 in Amsterdam at which De Rijk and De Vries were not present. Van Eck explained he was unhappy with the plan, the center was not right, neither was the main road, nor the location of the two churches. The traffic discussion flared up again. Granpré Molière was willing to defend the De Rijk plan; to him it appeared to be a natural solution. However, the decision was made that the Building Bureau, i.e., Verlaan, would draw up an alternative plan for comparison. The village would be placed entirely within the triangular space between the ring road and the canal. At the following Commission meetings⁶⁰, Verlaan presented several schemes. In the Commission meeting of October 21, 1949, the plan was finally approved. De Rijk and De Vries had long since departed via the side door.⁶¹ Reading the minutes of the meetings, the impression emerges that the planning and planologically-oriented Commission members would have preferred a scheme in which the polder's ring road had remained as the main village street. The Directorate, in the person of Van Eck, however, preferred to locate the village beside the ring road. The approved plan ended up looking like the villages that had already been constructed. True inspiration had been lacking. Newly-installed commission member and Directorate architectural design advisor A. Komter commented that the village looked as if it would vegetate quietly by the side of the road.⁶² And so it came to be.

Bant

The development of the towns was counterclockwise around the ring road. Bant was Verlaan's next endeavor to be placed on a rectangular parcel paralleling the radial Lemmer-Emmeloord road. The shift in parcellation direction on the west side of that road gave him the opportunity to draw the intersection of the radial and the ring road into the village's spatial context. In that way the roads would become part of the village, without hampering the town's internal circulation.⁶³ It is reminiscent of his idea to close off Ens' western side from the openness of the polder. Verlaan envisioned the area as an open pasture full of wildflowers. Wistfully he added: '...but, alas, on fertile

soil, flowers do not thrive...'.⁶⁴ The Directorate deemed that aspect of the plan too frivolous, but approved the plan as a whole. Of the obligatory long central open space of the other towns only a rudiment is present here in the middle of the town. The Planological Commission had very little comment and approved the plan at the first meeting on October 21, 1949.

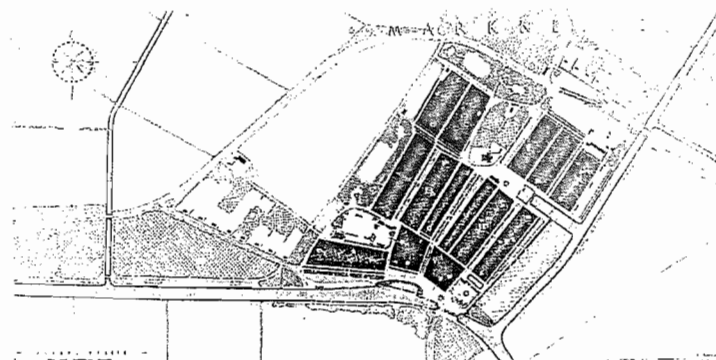
Creil

Creil was the last village Verlaan designed in the Noordoostpolder. The site and other parameters were similar to Luttelgeest's. In 1950, it was calculated that the plan should be designed for about 1,100 inhabitants or 275 dwelling units.⁶⁵ In the first plan, the village is placed north of the canal and east of the main (ring)road. The basic layout consisted of a large central green space, closed off on the west side by a paved area around which there were to be the town hall⁶⁶, a café and shops, and on the east side by the Roman Catholic church and school. The central part contained two schools and a gymnasium. To the north and south of the green were residential areas. The three churches were placed at sites of about equal importance, two of them bordering on the central green. To the west of the main road, Verlaan placed a strip of woods in the same way and for the same reason as he had proposed for Ens. Using the central green for schools and/or churches was not new, since that concept had been used by Dingemans in Kraggenburg and by De 8 in Nagele (both to be discussed later in this chapter).⁶⁷ The plan was presented in the Planological Commission's meeting of May 2, 1952, somewhat prematurely, because it had not been thoroughly discussed within the Building Bureau. Lacking the Building Bureau's united front, the commission members started criticizing the plan, and it was proposed⁶⁸ to try to situate the village on both sides of the main Espel-Bant road to create more liveliness within the village. The plan was revised accordingly in a move that was almost a mirror image of what had happened in the planning of Luttelgeest. (It is true that the principle of keeping through-traffic out of town had already been abandoned in the design of Rutten. There, Wieger Bruin had blatantly arranged a village around the intersection of two through roads.) A parcel of land to the west of the ring road was added to the town area and the village plan was moved to straddle the main road. Verlaan, having studied the then-popular book *The Anatomy of the Village*⁶⁹, put a bend in the road⁷⁰ where it intersected with the small village green. Without much comment, this plan was approved at the Commission meeting of October 24, 1952.

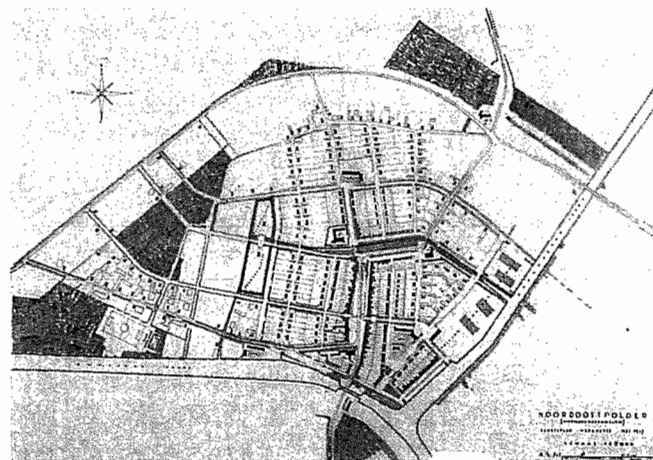
All villages designed by Verlaan contain the same basic design ingredients; they are the same elements that Granpré Molière used in the Wieringermeer towns.



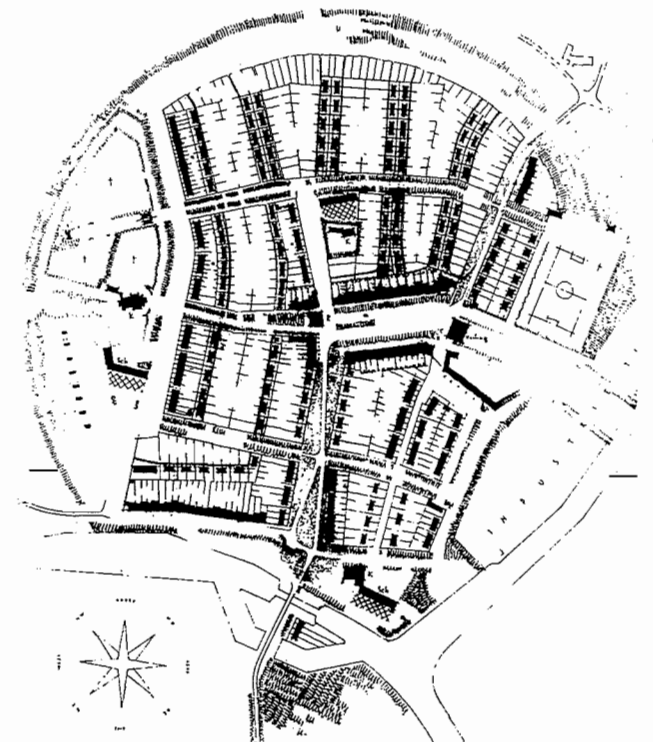
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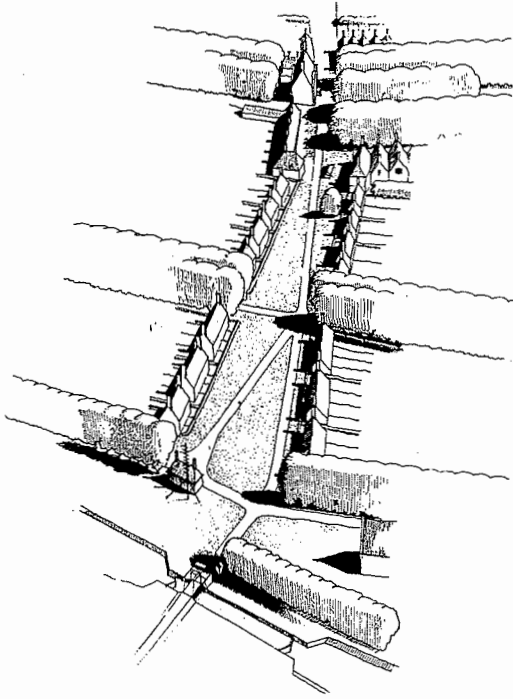
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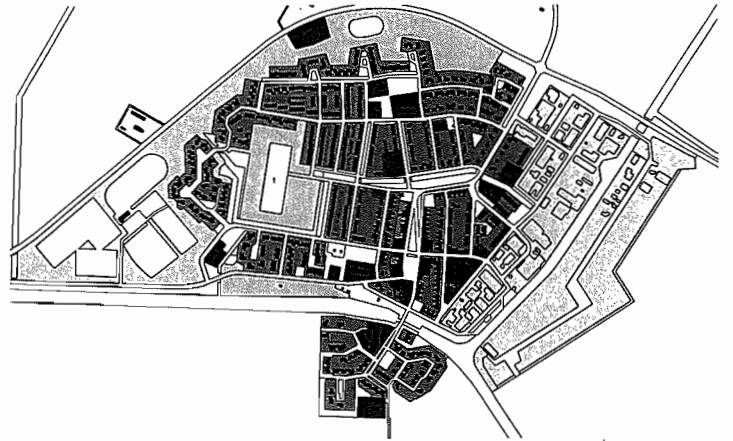
167

Marknesse

- 164 A Pouderoeyen plan of September 1943.
- 165 A Pouderoeyen plan of August 1943.
- 166 Final plan. May, 1947.
- 167 One of Verlaan's first plans in fortification form. 1947.
- 168 Perspective of the north-south central area by Verlaan. May, 1947.
- 169 Plan. 1995.
- 170 Aerial view from the south. 1996.



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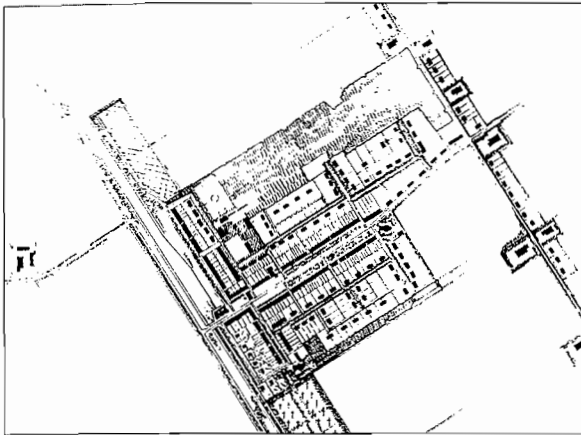


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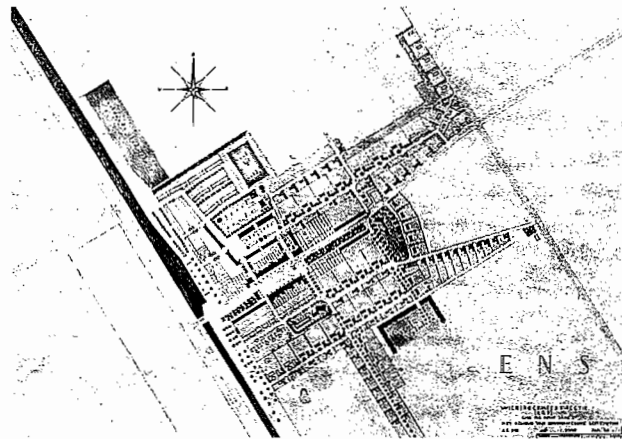
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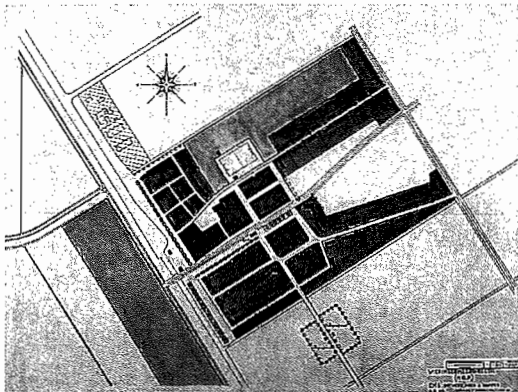
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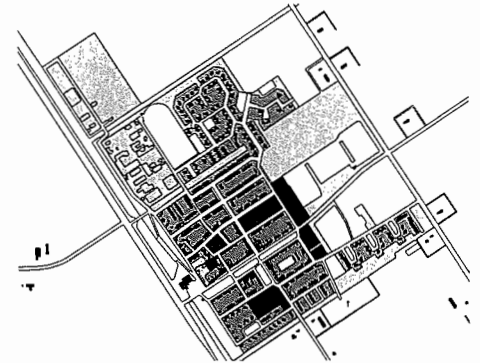
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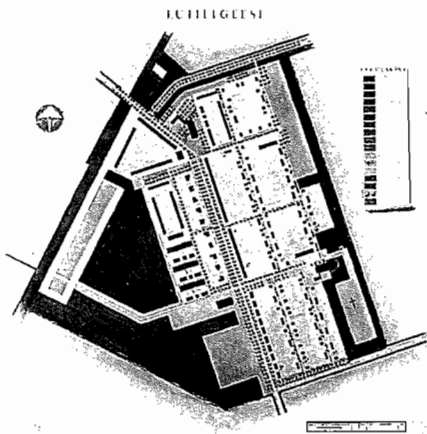
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175

Ens

- 171 Pouderoyen plan. 1943.
- 172 Verlaan plan in which he more or less followed Pouderoyen. January, 1948.
- 173 Plan drawn by Komter, aesthetic advisor to the Directorate. Here he introduced the focus on the spaces around the three churches. It was a little unusual, but not exceptional, for design advisors to make their own plans. Van Embden did it in the 1954 controversy over Eastern Flevoland.
- 174 Plan. 1995.
- 175 Aerial view from the southwest. 1996.



Luttelgeest

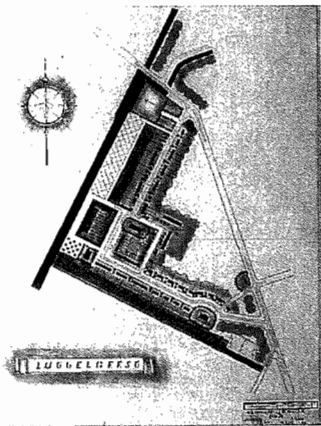
176 Original plan, by De Rijk and De Vries, straddling the main polder road, 1947.

177-180 At short notice Verlaan made a number of plans.

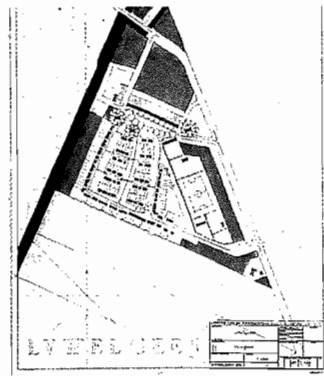
181 Plan, 1995.

182 Aerial view from the south, 1996.

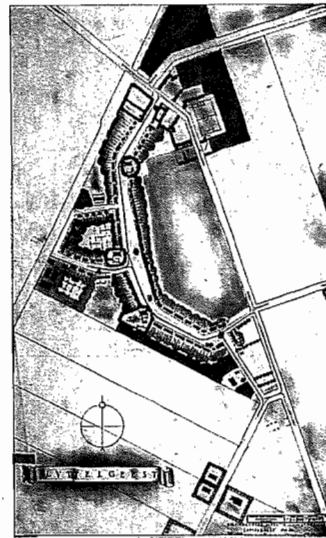
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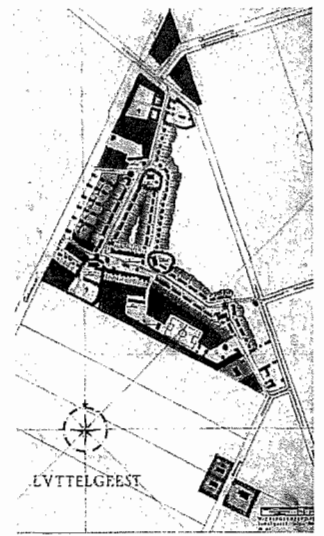
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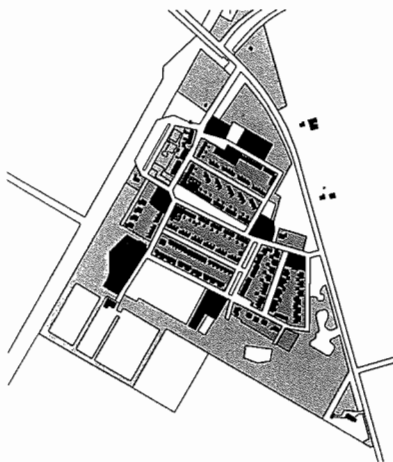
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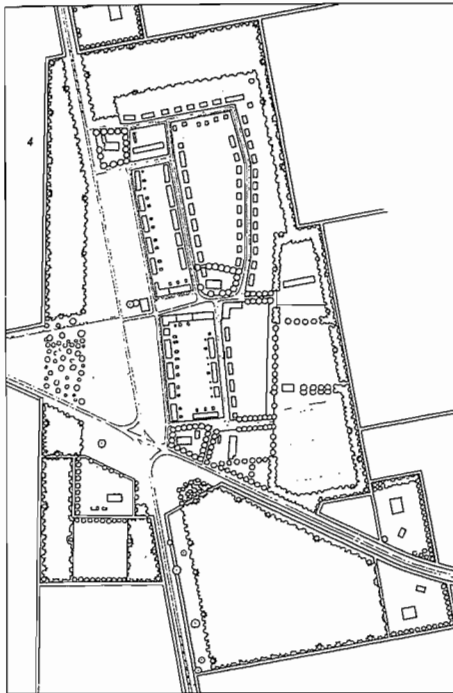


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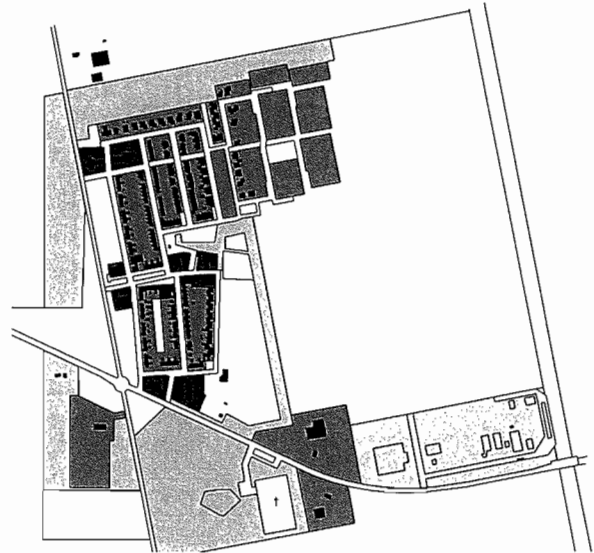
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Bant

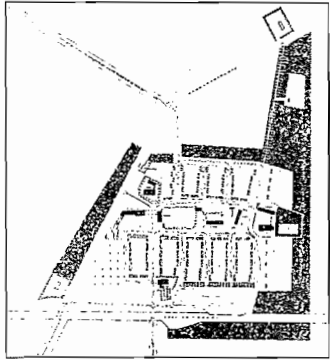
183 Verlaan plan of 1949.

184 Plan. 1995.

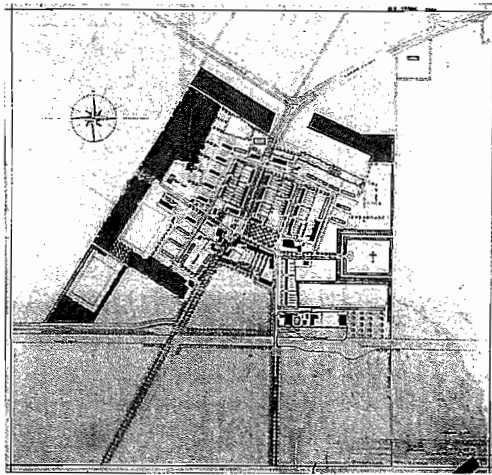
185 Aerial view from the south-west. 1996.



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100 m. N ↑

Creil

- 186 Verlaan plan of 1952.
- 187 Revised and approved plan. 1953.
- 188 Plan. 1995.
- 189 Aerial view from the east. 1996.



189

All plans have the elongated central green with the non-parallel (or diverging) street walls. Notice, however, the increasing rudimentariness of the greens in successive town plans. In Marknesse and Ens they also contain the through road, in the other towns they simply denote the center along which the few shops and businesses are located. All plans have the churches situated at places where they form a natural focal point, but nowhere do they dominate the townscape. Next to the functional aspects, the visual impact a person might experience when moving through the town has been at the base of the carefully laid out plans.

Towns designed by consultants

Only five of the ten villages were designed by the Building Bureau; for the other five, private consultants were invited to make the plans. The influence of the advising commissions was limited to the overall plan; working drawings and detailing were all executed within and under the responsibility of the Building Bureau. The design consultants relinquished all rights to their design and they had no influence on changes made by the Directorate. It is hard to assess whether the consultants had any qualms about this procedure. In the minutes of the Planological Commission meetings, there is only one allusion to this subject. In the June 3, 1949 meeting, Wieger Bruin asked to what extent the designer could exercise control over the realization of the plan. Smeding promised to bring that question before the Directorate's board.

Presumably, Bruin never got an answer. In the subsequent polder, it is known that R. Hajema, the planner for Biddinghuizen, protested against this lack of influence. It was to no avail, although this subject had been discussed at length by the Planological Commission, on June 22, 1959. At this meeting E. Van den Ban, ZPD planner, C. Van Eesteren, planning advisor, and J. Van Tol, Dronten's designer/planner, held the view that the plan's designer should be consulted on the form and function of buildings.⁷¹ Van Eck claimed that, if this procedure were to be followed, too much time would be lost, which he claimed would also be partly due to lack of interest on the planner's part. Besides, it was his, Van Eck's, function '...to ingest the planner's thoughts and meaning, and to act accordingly...', while working out detailed town plans. Nonetheless, chairman Minderhoud, IJDA's director, promised to maintain regular contact with (in this case) Van Tol in the detailed planning of Dronten.

It was not until Lelystad and Almere that the planners had great influence both over the form of public spaces, and over the placement, form, color and function of the architectural components. Then, however, they were part of the IJDA.

Kraggenburg

The earliest project in the Noordoostpolder not designed by the Building Bureau was Kraggenburg. The planner was P.H. Dingemans, an architect who had graduated from the Technical University in Delft just before the start of World War II. Granpré Molière must have been his teacher, but in his work there is little evidence of Delft School influence. He was a man who went his own way, like so many others after the war, not aligned with a particular current. Dingemans' preoccupation was with social relations rather than the aesthetic aspects of planning or architecture. Being a systematic man, he tried to translate his views on human interactions into simple diagrams. His was a rational approach to a design problem in which the relationship of people with their environment, according to Dingemans, was enacted in three areas: material, social and creative. The greater the balance among the three, the more harmonic a person's life would be. He applied the above diagram not only to the position of persons in society, but also to the function of a house or a town. Be that as it may, it does tell something of the way he thought and worked.⁷²

The Directorate had invited Dingemans to design the plan as a result of winning, or at least participating in, a design competition for a village in that location toward the end of World War II.⁷³ The minutes of the Planological Commission's meeting contain a description of Dingemans' 'philosophy'.⁷⁴ He was concerned about making a plan that would reflect society's status of that era, and that would be conducive to the creation of a true community. In his tendency towards a systematic approach, he presented the village scheme, again, as a triad of conditions: 1. living, 2. production and trade, and 3. science and culture. These three areas formed their own circles around a central symbol of community, in this case the town hall. When pressed together they would coagulate as a plastic substance into a functioning whole, in which some areas would have a greater attraction for some groups than for others. It is odd that, with all the scheme's social relevance, Dingemans made such a case for establishing a hierarchy among the working classes (see illustration). The remarkable feature of this approach is the departure from the traditional attitudes demonstrated in the other polder villages. It is based on the same premise which, in Nagele, got the attention it deserved, namely that the basic needs of a rural population are in essence no different from those of an urban one. Just the scale is different. Unfortunately, Kraggenburg would be very small, and a number of the scheme's elements simply could not be present in the town plan.

Dingemans placed the schools and churches together in a central green (before Nagele had been conceived) as a

⁷¹ '...most architects do not think in terms of planning relationships...'. Van Tol, in the Minutes of the Planological Commission meeting June 22, 1959. INVNR. DWM 1542, R. ⁷² The plan has also been described extensively in Andela/Bosma, 'De maakbaarheid van de Noordoostpolder', Wonen/TABK 14/1985, 9-35. ⁷³ Thanks to a list by J. Van der We in Bosma, Doorbraak, 191, the design competition can almost certainly be traced to a study competition for 'a plan design of a village in one of the IJsselmeerpolders', issued on June 1944 by the small Amsterdam architectural society: Groep 32 (informatic found in P. Zanstra archives, NAI.) I Zanstra archives also contain a sketch of a village plan dated 'summer, 19'. Dingemans mentions that he worked on the competition during the cold days of the end of the war (letter Dingemans to Van Eck, dated February 4, 1947). This is corroborated by Pouderoyen's letter (Pouderoyen, Over de stedebebouw, 12) in which he mentioned having worked a program for a design competition a village. M. Duintjer, designer of Espel, also participated. It is on his of accomplishments in 1945 (P.K.A Pennink, Marius Duintjer Architect Rotterdam, 1986, 136). However, efforts to establish the exact due date or the winner have been unsuccessful. It is possible that A. Komter put the Directorate on Dingemans' trail, since Komter was a member of the Groep 32. Dingemans received the commission for Kraggenburg in a letter dated February 24, 1947. INVNR. DWM 15, RAL.

⁷⁴ Kraggenburg was discussed at meetings of August 13, October 24 1947, September 10, November 19 1948, and October 21, 1949. INVNR DWM 1531, RAL.

⁷⁵ Molière had an interesting, if not curious, comment: 'The dividedness expressed by the three churches, is essence a sign of impoverishment. Instead of a totality, a three-headedness [driekoppigheid] is proposed. Planological Commission meeting October 24, 1947. INVNR. DWM 153, RAL.

⁷⁶ Again, note the similarity with the free-standing row of shops in Nagele plan.

⁷⁷ Hofstee had already gone on record against the plan in the March 18, 1949 commission meeting. INV. DWM 1531, RAL.

⁷⁸ In 1955 Verlaan noted the similarity with Nagele also. Verlaan, Wonen Noordoostpolder, 24.

⁷⁹ Information gathered in an interview with H. T. Vink on April 22, 19 in Amsterdam. Vink was Bruin's partner for many years.

⁸⁰ Verlaan, Wording Noordoostpolder, 26.

⁸¹ Letters of January 16 and April 1 1951. Bruin, Brux0089, 187, NAI.

⁸² Marius Duintjer, architect in Amsterdam, 1908-1983.

⁸³ Duintjer participated in the 'village' competition (mentioned about the Kraggenburg part) in 1944-45 but no physical evidence remains.

84 *The architectural society 'Architectura et Amicitia'.* Both had been members of De 8, Komter from 1934 to 1938, Duintjer from 1936 to 1946.

symbol of a new tolerance in a new society, the ecumenical movement. He also insisted on a green buffer all around the village, not only for protection against the wind, but also to set it apart in the openness of the polder and to define it in its own scale. In the later schemes, he cleverly left some space between the planned built-up area and the (narrow) buffer.

Molière objected, of course, to the central placement of the churches. He would have preferred a more peripheral siting, where each church could have its own ambiance.⁷⁵ Verhagen, Van Eck, and Smeding, on the contrary, wanted to maintain the idea of the communal central green. Just as in the cases of Ens and Marknesse, comments were made about the duplex dwellings. At the next meeting (September 10, 1948) it was Groenman, the social geographer, who objected to the central location of the churches. In November, the plan had virtually acquired its present shape. Komter noted at the November 19 meeting that he could not appreciate the 'transparent shopping street'.⁷⁶ In the meeting of March 18, 1949, the commission indicated it could agree with the plan. For final approval, the plan was again submitted in the meeting of January 13, 1950. Chairman Smeding remarked that it was pleasant that criticism of the plan was absent, since construction had already started. The plan was hereby approved.⁷⁷

Construction of the town started in 1948. The town hall never came, nor did the vegetable auction hall, and even in 1995 it had fewer than 700 inhabitants. But it stands with its principles in place, marked by the strip of trees and bushes along its periphery, just like Nagele.⁷⁸

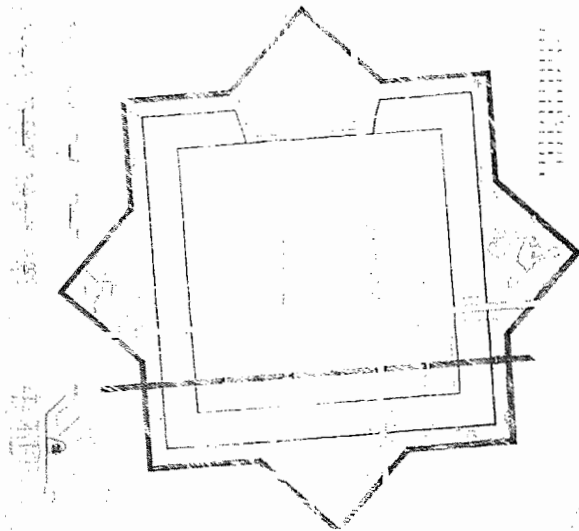
Rutten

Rutten was designed by Wieger Bruin. Schooled as a painter, he switched to architecture at an early age. While working for J. Gratama, an architect of the Amsterdam School of some renown, he furthered his architectural education at the Academy of Architecture in Amsterdam in the evenings. In 1923, he established his own firm. Being a gregarious man, he had many connections both in art and architectural circles, where he was active in the professional society of *Architectura et Amicitia* (A&A). He was one of the initiators of the *Doornse Leergangen*. Gradually the firm's activities shifted to urban planning. After World War II, in which he distinguished himself in the artists' underground movement, he became a professor in urban/regional planning at the Agricultural University of Wageningen.⁷⁹ He was an architect of the traditionalist school. In the Wieringermeer, he had been selected by Granpré Molière to design a number of buildings in the unobtrusive red-brick, indigenous architecture of the

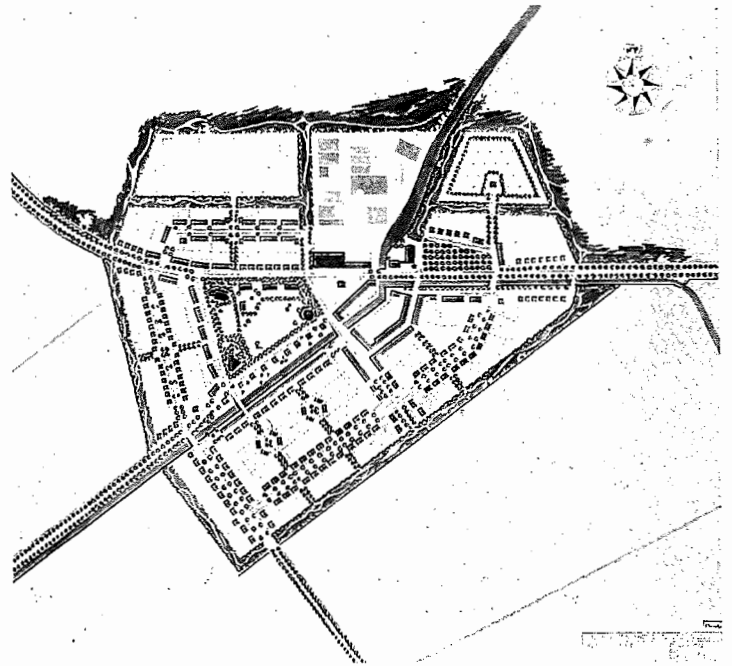
nineteen-twenties and thirties. Having an attitude similar to Molière's toward experiencing urban space, he deemed it natural that motorized traffic be led through the town. So he designed the village for 950 inhabitants around a central square bisected by the two main roads. The triangle between the roads and the canal was destined for the village woods. No advantage was taken of the location at the bend of the canal. This phenomenon can be observed in many towns in the Noordoostpolder. Except for the canals through the centers of Emmeloord and Marknesse, the small canal through Nagele's green, and (finally) the orientation of Tollebeek toward the water, no attempts have been made to incorporate this element in the plans. Part of the reason must be ascribed to the often eccentric location of the canal in relation to the town site; economic considerations were important: bridges and quay walls are expensive; and part of the reason must be sought in the utilitarian image of the canal, which in the Noordoostpolder had no great importance as a traffic route anymore. Bruin presented the plan at the Planological Commission meeting of June 3, 1949, where it met with a minimum of criticism. The plan returned to the commission only one more time, on January 13, 1950, when Verlaan presented it in a review of approved plans. Building construction started in 1952. Verlaan suggests that the restraint shown in the Planological Commission is in part due to the time pressure, as the rapid development of the polder made construction of the villages necessary.⁸⁰ Bruin's authority in the architectural and planning world must have had something to do with it. Having done much planning in the province of Noord-Holland, he had many contacts with the Ministry of Water Management and its regional office. In that way he was able to avert a veto on the plan from the *Rijkswaterstaat* in 1951.⁸¹ It stands to reason that, had a younger, less known, planner handled the job, the chances are that Rutten would not have been situated with its central square astride the road intersection.

Espel

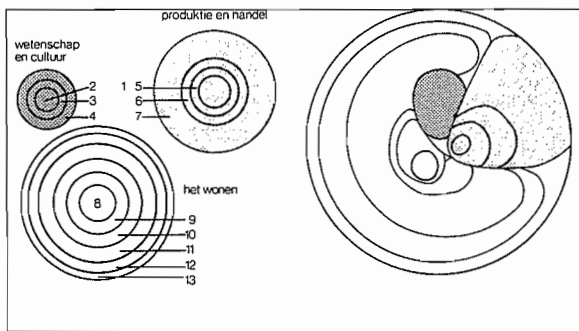
For Espel, the architect M. Duintjer⁸² was selected. Although no record exists, there can be little doubt that his name was suggested by A. Komter, the Planological Commission member, and aesthetics advisor to the Directorate.⁸³ Komter and Duintjer knew each other well. They had done several projects together, among which the (in)famous competitions of 1937–1941 for the Amsterdam city hall. Both were members of the same professional societies.⁸⁴ Neither Komter nor Duintjer were outspoken adherents of either the functionalist principles of Het Nieuwe Bouwen or the traditionalist attitudes of the Delft School. Komter, who had friends on both sides, constantly tried to keep the discussion going between the two factions. Komter had worked for Le Corbusier for a



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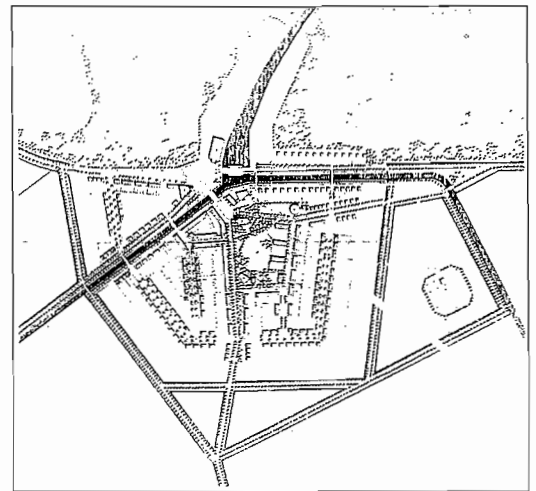


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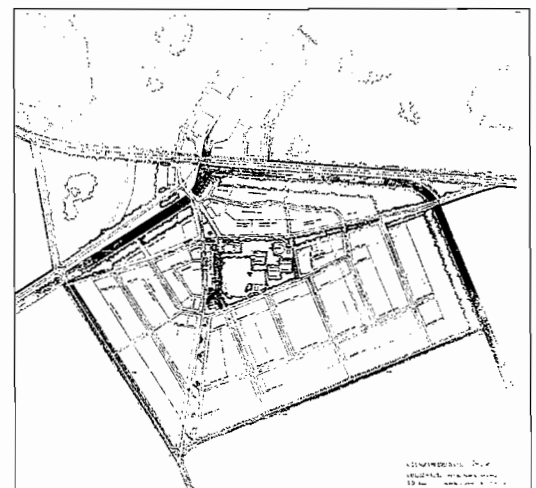
Stage 1
The three circular areas are brought together around the coördinating town hall.

1. town hall
2. theater
3. dancing
4. cinema etc.
5. shops
6. industry
8. center
9. upper middle class
10. lower middle class
11. working class
12. working class (horticultural)
13. working class (agricultural)

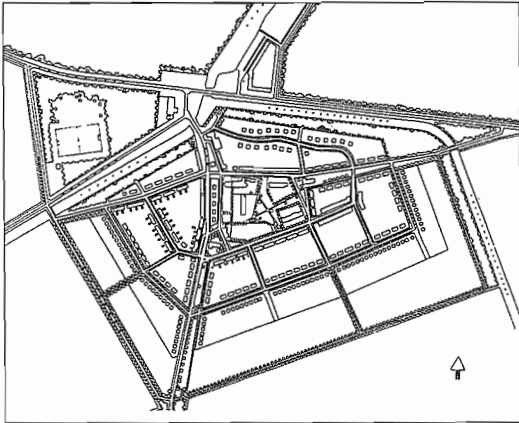
Stage 4
By the law of attracting and opposing forces, all elements, as if in a plastic substance, will find their place, to be determined by the attraction of their own center and the adjacent ones. In this way the upper middle class will seek contact with the area of science and culture. The lower middle class will have an affinity with trade and industry. The labouring class will orient itself mostly on work in the factories, a few seeking the cinemas and dances (sic).



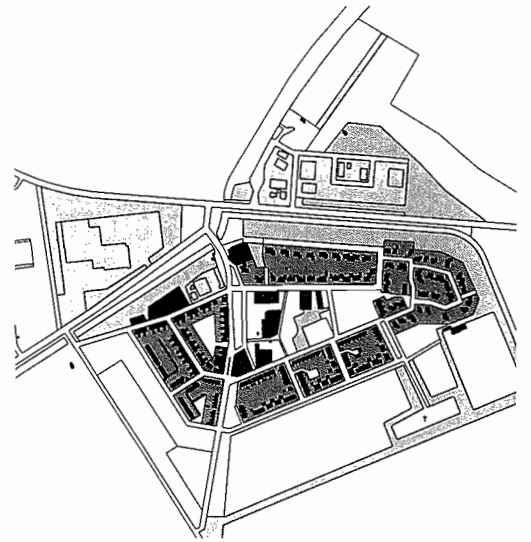
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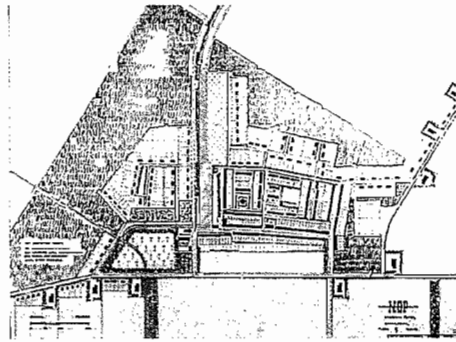
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Kraggenburg

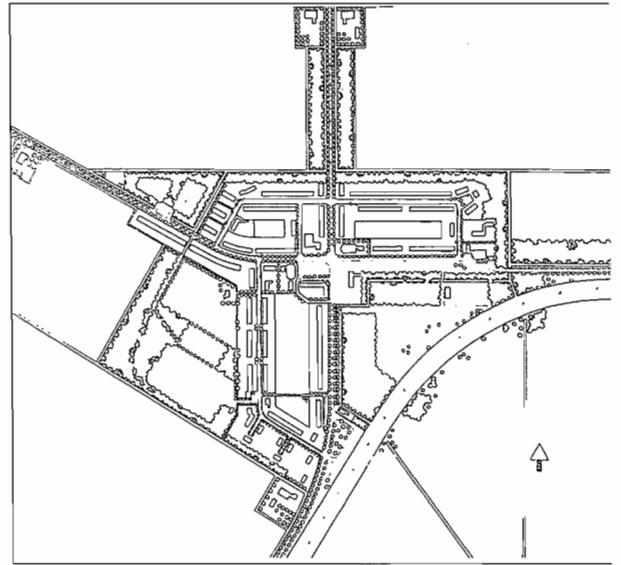
- 190 A site-independent plan in fortification form by Dingemans. 1945. It could well be the plan submitted for the competition.
- 191 According to Dingemans, a town would develop in four stages. The first and fourth stages are shown here.
- 192 This plan is probably the first design for the site. 1947.
- 193 In the next design phase, all of the town had been moved south of the main east-west road. 1947.
- 194 In 1948, the plan was adjusted again, and housing moved out of the western triangle formed by the northwesterly road to Marknesse and the southwesterly road to Ens. Herewith it attained almost its final form.
- 195 Approved plan. 1949.
- 196 Plan. 1995.
- 197 Aerial view from the south. 1996.



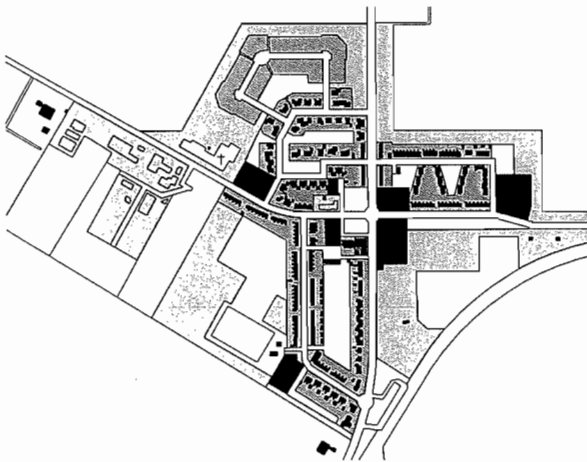
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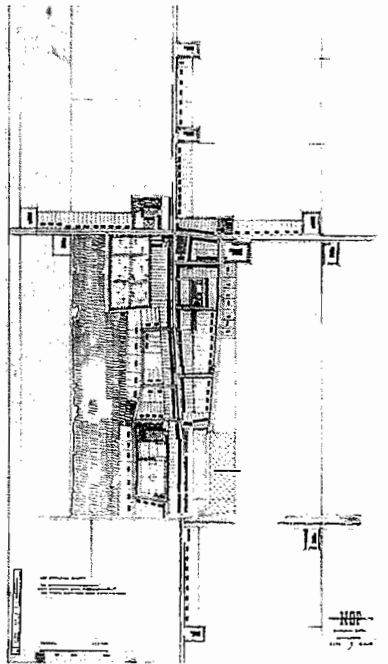
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Rutten

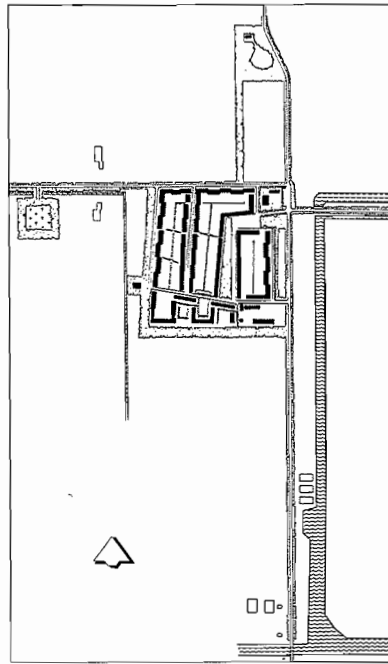
- 198 Polderoyen plan. December, 1945.
- 199 Approved plan. 1950.
- 200 Plan. 1995.
- 201 Aerial view from the south. 1996.



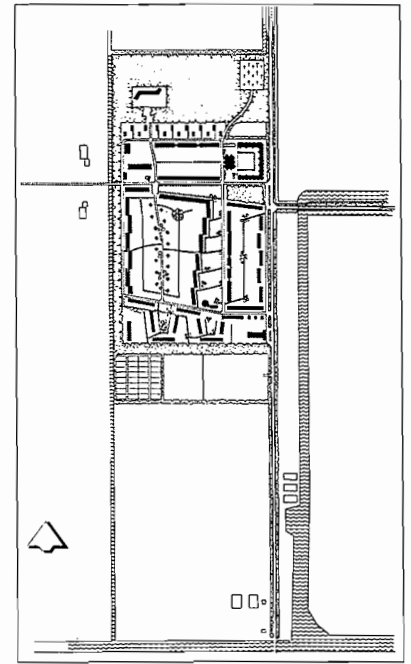
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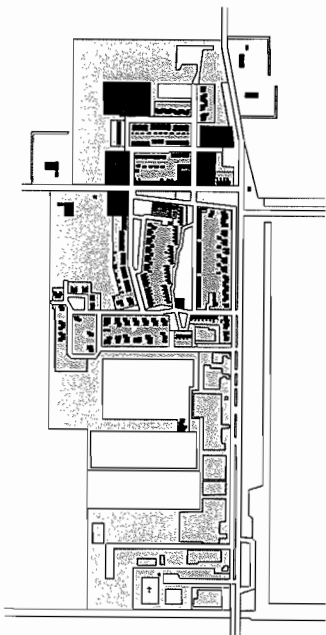
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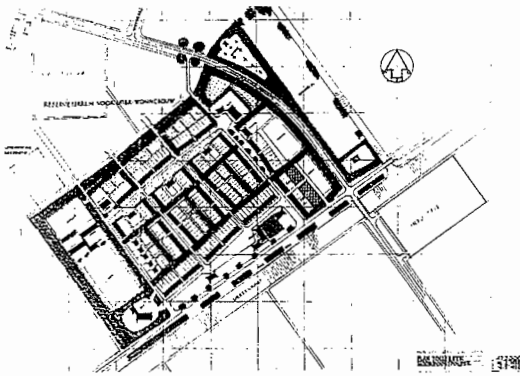
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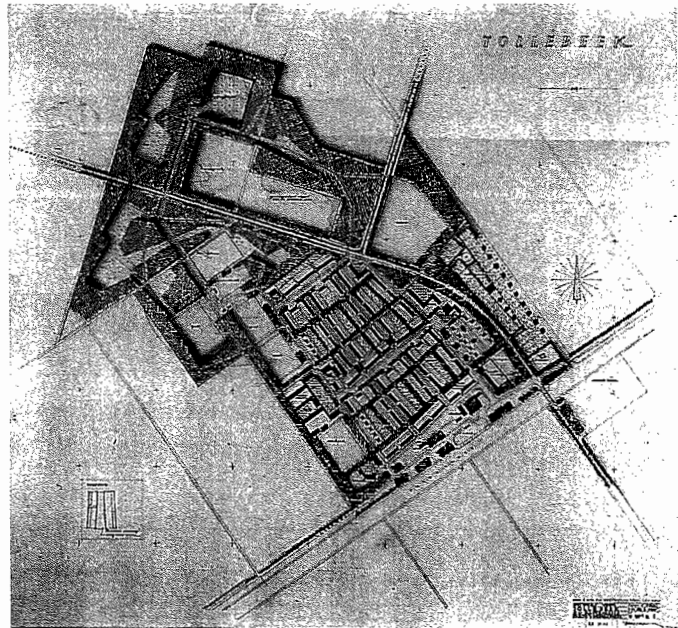
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Espel

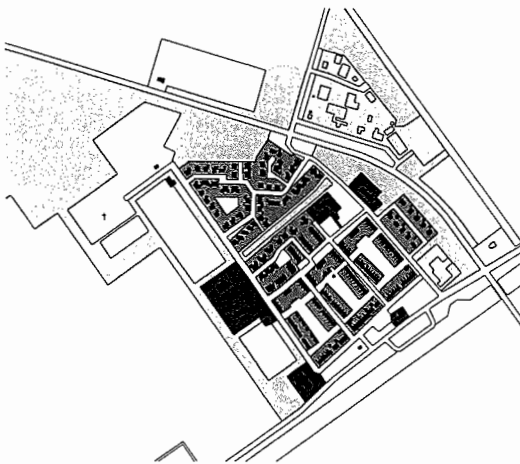
- 202 Pouderoyen plan. December, 1945.
- 203 Duintjer's first plan. 1952 (redrawn in 1989).
- 204 Duintjer's revised plan. 1952 (redrawn in 1989).
- 205 1995 plan, executed according to revisions by Verlaan, as approved in 1956.
- 206 Aerial view from the south. 1996.



207



208



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100 m. N ↑

Tollebeek

- 207 Nix's original plan for 175 dwellings. 1952.
- 208 The revised plan for 350 dwellings. 1956.
- 209 Plan. 1995. Only the southern part was built according to the original plans.
- 210 Aerial view from the south. 1996



210

85 See *W. De Wit, Auke Komter/architect, Amsterdam, 1978*.
 86 Penning, Duintjer, 43.
 87 In 1951, S.J. Van Embden was asked to replace Verhagen, who had died that year, in the Planological Commission.
 88 Minutes May 2, 1952 Planological Commission meeting. INVNR. DWM 1531, RAL.
 89 Planological Commission meeting of January 20, 1956. INVNR. DWM 1554, RAL.
 90 'our professor' he wrote in a letter to author, dated May 10, 1993.
 91 Minutes of the Planological Commission meeting of January 21, 1956, 3. INVNR. DWM 1553, RAL.
 92 Hemel and Van Rossem: *Nagele een collectief ontwerp*; G. Andela: 'Nagele, lusthof voor het nieuwe bouwen', *Futura*, June 1982, 2-23. Even Pouderoeyen called Nagele: 'an ideal-project for a village in the Noordoostpolder' (with strong reservations), in *Tijdschrift Wederopbouw Hengelo* 7, 1952, 38-42.
 93 The group working on Nagele were: physical planner C. Van Eesteren, architects W. Van Bodegraven, A. Bodon, P. Elling, A. Van Eyck, W. Van Gelderen, M. Kamerling, J.P. Kloos, B. Merkelbach, J. Niege-man, G. Rietveld, H. Salomonson, and landscape planners J.T.P. Bijhouwer and M. Ruys. *Forum* 6/7 1952. The architects M. Stam and C. De Vries are mentioned as participants in a letter by Merkelbach dated February 3, 1948, but later both names disappeared from the list. Stam did some design work in the beginning, but moved to Dresden in 1948, to become director of the Akademie für Bildende und Angewandte Künste.

short time and his first works show this influence. Later he demonstrated an independent, if vacillating, course, sometimes more traditional, sometimes more International Style.⁸⁵ Duintjer also had worked at the office of Le Corbusier, of whom his first works give some evidence but, after World War II, he became an architect with his own style. This was eloquently shown by two churches, the *Kruiskerk* in Amstelveen and the *Opstandingskerk* in Amsterdam⁸⁶, which won him both international professional acclaim and the general appreciation of the local lay population. Later, his style evolved toward a functional column-and-slab architecture with strong horizontal lines. But that was after he designed Espel. Espel's plan, for a village of 225 dwelling units, was first presented to the Planological Commission on May 2, 1952. Almost everyone agreed that it was an architect's plan. It lacked the flexibility of a plan that could be executed piecemeal over a longer period of time. Van Eck thought it best if it were not built. Van Embden⁸⁷ found it a plan with character and invited the Directorate to accept it.⁸⁸ Nevertheless, Duintjer was asked to revise the plan. He presented his revision on October 24 of the same year. The plan had become much more spacious, but the architectural rigidity remained and the members were not altogether enthusiastic. To add insult to injury, at the end of the meeting, chairman Smeding declared that the plan had been discussed sufficiently and advised that parts of the plan be examined again by the Building Bureau. Verlaan revised the plan on seemingly minor points, but upon comparing the two plans it can be observed that the spirit had changed into that of a Verlaan plan.⁸⁹ Building construction started in 1956.

Tollebeek

Tollebeek was to be the smallest of the western villages with 700 inhabitants. It was designed by Th. Nix, who had been a student of Granpré Molière.⁹⁰ He went to the Dutch East Indies in 1930 and he returned to Europe in 1938 to live as a painter in Paris. He went back to the Dutch East Indies in 1941, repatriated after World War II, and started his own architectural and planning firm. In 1949, he received his PhD in architecture, for which Granpré Molière was his promotor. For the Directorate he designed a number of dwelling units and in 1952 he was asked to do the last village in the Noordoostpolder. The first plan was presented at the Planological Commission meeting of May 2, 1952. The plan did have some elements that had not been used previously in other villages. Nix using the farm and barnyard as his inspiration, set the village in a green buffer and divided the interior into 'rooms' by means of green swaths. The 'green room' concept would give the village its own identity. He also placed the village square along the canal; the first time the canal had

been incorporated in this way in a village structure. The commission's criticism centered around the green swaths and their shadow which had an effect on adjacent back yards. However, there was enough sympathy for the plan on the part of the (urban) planners that it was approved at the commission meeting of October 24, 1952. In 1956, due to the fact that farm-laborer homes, initially planned on the land, now had to be located in the village, the number of dwelling units had to be doubled, from 175 to 350. Nix extended the plan toward the northwest, leaving a green space between the extension and the original plan. In that way, the shops and other businesses could be moved to the new center of town if and when the extension were necessary. That must not have had Nix's preference, as is indicated by the somewhat offhand way in which the plan addition was handled. Nix being absent, Verlaan presented the new plan at the January 20, 1956 commission meeting. Again the shadow issue was raised, but both Bijhouwer and Verlaan defended the plan: '...the village's structure must be sought in the trees not in the buildings...'.⁹¹ The village was built according to the initial plan. Although the plan misses the central green element of most other villages, the slight curve in the building line at the north of the square, the converging property lines in the streets, and the nonparallel street pattern are indicative for Nix's Delft School education.

Nagele's design by De 8 en Opbouw

The planning of Nagele began in 1947. Put in chronological order, the planning story should have been placed somewhere near the start of the Noordoostpolder village plan descriptions. However, due to its unique place in polder planning history it has been placed at the end of the list to facilitate the jump to the next polder, Eastern Flevoland. It has been described by Hemel and several others as the purest form of community planning Het Nieuwe Bouwen could produce.⁹² Others have questioned the form and the underlying ideas. Some participating architects, during the planning process and afterwards, have expressed disappointment at the physical form it has attained. Still, it remains a village of such quiet difference that it strikes the eye and the emotion of every planner who comes upon it with an unbiased mind. It has not become a national monument and rightly so, although it needs to be preserved. It must maintain that semi-unknown aura, remain one of those places that one reserves for the truly appreciative foreign visitor on a hazy summer morning. The flaws can be discussed afterwards.

The village was conceived as an exercise for De 8, one of two groups that formed the Dutch contingent of the CIAM.⁹³ The plan was to be presented at its 1949 Bergamo congress, where neighborhood planning as part of the

human settlement would be one of the themes. In the book *Nagele een collectief ontwerp* (Nagele a collective design), Van Eesteren's role has been emphasized. In *Aldo van Eyck, relativiteit en verbeelding* (Aldo Van Eyck, relativity and imagination [or imagery]), and to some extent in Andela's article *Nagele, Iusthof van het Nieuwe Bouwen*, Van Eyck's contributions have been highlighted. Much information about the course of events in this publication comes from Mart Kamerling, who was one of the leading participants in the first years of the design period.⁹⁴ He was the one to present the plan at the Bergamo meeting. Kamerling had had his education at the *Middelbare Technische School* (later known as the *Hogere Technische School*), a technical college in Amsterdam and, to avoid being sent to Germany during World War II, at the *Kunstnijverheidsschool*, the institute for fine and applied arts, also in Amsterdam. Here he studied under J. Niegeman, M. Stam and J. P. Kloos, all members of De 8. After the war, he studied philosophy and sociology while working as an architect. He was invited to join De 8 (from Amsterdam, which was associated with de Opbouw from Rotterdam, often called 'De 8 en Opbouw') of which G. Rietveld, C. Van Eesteren and B. Merkelbach were probably the most prominent members.

In thinking about a presentation for the next conference, the group came upon the idea to ask the Directorate for a site to design a modern village. Van Eck consented, gave them a site of village 'D' in the southern part of the polder, and promised to do his best to build the town if an acceptable design were delivered. Verhagen (in 1938 or 1939) and Pouderooyen (in 1945) had already made sketches for the originally-planned seven towns, but the Directorate considered these as illustrations. The Nagele sketches had no influence on the De 8 plans.

The program, provided by the Directorate, dated December 29, 1947, called for three hundred dwelling units of which one hundred and thirty for farm laborers, sixty for other laborers and the rest for homes at shops, businesses and for private parties.⁹⁵ Three churches, three schools (for the different denominations), one café and several other buildings, a cemetery and an industrial estate were part of the program. Farm laborers were to be housed in duplex dwellings, each dwelling with a 400 m² garden. A map was included, showing the limits of the sand layer already deposited to stabilize the soil for future village construction.

The first meeting took place on January 14, 1948. B. Merkelbach proposed that all members prepare a plan to be examined at the next meeting. The intention was to discuss the plans, and to continue with those deemed to have sufficient merit. It was a planning method primarily aimed at the form. An introductory period of reflection on the

content of such an undertaking was not considered. While 'striving for urban perfection'⁹⁶, they skipped that part of the procedure which Van Eesteren had claimed essential in the General Extension Plan. In the second phase of the planning period (1952), H. J. A. Hovens Greve, a social geographer, as yet inserted such an exercise.⁹⁷ The term 'urban perfection' was not used in De 8's first publication on Nagele. De 8 stated that: '...the village is (...) chiefly a farm laborers' settlement. The opinion has been expressed (...) that a farm laborers' village must be simple, i.e., without typical urban comfort. We are of the opinion that the facilities/amenities [uitrusting] of the farm laborers' village must be as rich and varied as possible, as a compensation for its isolated location in relation to important cultural centers.'⁹⁸ However, the group readily accepted the half-page program which was similar for all Noord-oostpolder villages (except Emmeloord). Nagele, of course, suffered from the same deficiency already experienced in Kraggenburg, namely its size. Lofty principles conceived for large urban areas, such as the separation of functions and the use of 'core', could not have much of an impact when applied to a village of three hundred dwellings.

At the meeting of February 3, several architects made a presentation. Rietveld was one of them. Van Eyck showed some diagrams, regarding the relationship of a village with its open polder surroundings. Kamerling also presented a plan. It was not based on a street plan, on the contrary, he wanted 'to expose the mechanics of the village, put the collective items (shops, businesses, schools, churches)⁹⁹ in the center and the houses around the periphery. The schematic non-directional quality of the plan and the large open central green, in which the public buildings are located, are striking features of the plan. The central green is a recurring theme in the first village schemes. The source of this theme is not exactly traceable, although openness was a feature inherent in *Het Nieuwe Bouwen*. Strauven makes a case for the idea that the theme of the central open green was introduced by Van Eyck at the first meeting. There, the village was schematically presented as a circle with a central communal green. The village would be closed off from the polder with a green buffer: 'a space within a space'.¹⁰⁰ Also, the group was familiar with a Swiss publication on modern American architecture, in which several new villages with an open structure had been shown.¹⁰¹ Kamerling's plan met with enthusiasm and several architects volunteered to work on a collective plan taking Kamerling's plan as starting point.¹⁰²

In early 1948, the sand depot marking the town site was removed. It gave the designers the opportunity to shift the town location to their own liking. The result of the architects' collaborative effort was presented in April

94 Kamerling's sketches for Nagele fill many portfolios in the NAI, an overabundance in comparison to Nagele plans by the other participants. (Van Eyck's drawings are not [yet] in the NAI).

95 INVNR. DWM 1550, RA.L.

96 As claimed by Hemel/Van Rossem, *Nagele collectief*, 60; and Andela *Nagele Iusthof*, 2. These authors were quoted again by Saal, in *Stichting*, 50 jaar actief, 92.

97 On May 14-16, 1953 an excursion was organized to learn about the specific problems and wishes of IJssel-meerpolder living. Merkelbach, 155, NAI.

98 *Workgroup De 8*, 'Een plan voor het dorp Nagele', *Forum* July 6, 1952, 172-178.

99 Interview M. Kamerling, February 18, 1994.

100 F. Strauven, Aldo Van Eyck, *relativiteit en verbeelding*, Amsterdam, 1994, 171-182. Independently, Kamerling's plan was based on this same premise.

101 'USA baut', catalog of an exhibition held in Switzerland and other European countries. Of particular interest to the group was a 1937 aerial photograph of Yuba City, California, designed by B. D. Cairns and V. De Mars. Kamerling thinks Van Eyck may have introduced the magazine in the group. 'Everybody had seen it.' (Kamerling interview) See also Hemel, *Nagele collectief*, 23.

102 In the group participated: Niegeman, Van Eyck, Van Bodegraven, Van Gelderen, Bijhouwer, and Kamerling. Two other groups were also working on ideas: Ruys and Kloos, and Bodon and Salomonson (after a Stam idea). Letter dated March 10, 1948, Merkelbach 152, NAI.

103 Strauven, Aldo Van Eyck, 180-181.

104 See *Ens and Marknesse*.

105 He consulted Van Lohuizen on this. Interview Kamerling, February 18, 1994.

106 Hemel, *Nagele collectief*, 27. This is corroborated by Kamerling in the 1994 interview.

107 He may have acquired the idea from another plan presented in USA baut: Channel Heights, California, designed by Richard Neutra.

108 Letter to the group dated June 15, 1948, signed by Van Gelderen. Merkelbach 152, NAI.

109 See letter dated July 30, 1948 signed by Van Gelderen. Merkelbach 152, NAI.

110 Both Van Eck and De 8 were interested in prefabricated components. The Building Bureau and concrete component manufacturer the N.V. Schokbeton worked together on the development of prefabricated farm barns.

111 Those present were J. J. M. Aengenent (Ministry of Transport and Water Management), E. G. Boissevain and D. Burger (State Authority for the National Plan), F. L. Van der Bom (ZPD), A. Blaauboer (Public Authority), S. Bakker, O. S. Ebbens, A. D. Van Eck, S. Groenman, P. De Groot, A. P. Minderhoud, S. Smeding, Th. Verlaan (Directorate), E. W. Hofstee, A. Kom-

ter, M. J. Granpré Molière, P. Verhagen (advisors), and B. Merkelbach, H. Van Gelderen, and M. Kamerling (De 8). *INVNR. DWM 1550, RA1.*

112 Rowe, *Collage City*, 56.

113 'And then let us qualify what became a widespread tendency to space worship with yet another prevalent supposition: that, if space is sublime, then limitless naturalistic space must be far more so than any abstracted and structured space;' Rowe then adds: 'and finally, let us upstage this whole implicit argument by introducing the notion that, in any case, space is far less important than time and that too much insistence – particularly upon delimited space – is likely to inhibit the unrolling of the future and the natural becoming of the 'universal society.' Rowe, *Collage City*, 58–59.

114 Recently H. Ibelings has mentioned this phenomenon in *De moderne jaren vijftig en zestig*, Rotterdam, 1996, 10–26.

115 The element of the endlessness of space has also been demonstrated by Rosalind Krauss' essay on grids, a favorite expedient for *Het Nieuwe Bouwen*. 'The grid, she argues, makes the work of art by virtue of its extensions in all directions to infinity, from the work of art out; the art work thus becomes 'a tiny piece arbitrarily cropped from an infinitely larger fabric' [...] for example, in the case of a composition by Theo Van Doesburg, the conceptual grid is infinite and the realized grid is both centripetal and centrifugal, the one pointing to the potential of the other.' Vidler, *The architectural uncanny*, Cambridge, 1992, 142. In this light, it could be argued that the wooded belt around Nagele was a necessity to demarcate the considered space in the infinity of the polder.

1948. The site had been moved to the north of the canal and the dwellings were systematically scattered along the town's green buffered border. The center was fairly open; the roads went through the town. The model resembled the layout of Yuba City, California (1937), which had been featured in 'USA baut'. The plan contains elements of sketch plans made by Kamerling and Van Eyck. The road pattern is copied from a Niegeman sketch.

The meeting received the plan coolly and it was described as a parking lot for single family residences. The decision was made not to continue on that path, and the ad hoc group disbanded. Kamerling and Van Eyck had felt unhappy about collaborating in that manner. Van Eyck '...faded into the background, and [from then on] particularly Rietveld, Kamerling, Bodon, Salomonson, and Van Eesteren played important roles. Kamerling drew the initiative toward himself, and developed a tenacious design activity in competition with Bodon and Salomonson...'103 Kamerling would not quite have put it that way, but a fact is that he went back to his first plan to try to advance from there. With the decision not to build single family or duplex residences for the farm laborers, row-housing was introduced into the plans.¹⁰⁴ In his further studies, Kamerling used row-housing of five units, arriving at a plan with a central space around the widened end of the canal and the rows of houses placed around the green. It was an attempt, as can be seen in a number of other plans, to make the water part of the spatial design. The housing rows were placed in a northwest-southeast position for orientation toward the sun.¹⁰⁵ Bodon and Salomonson worked on a plan that placed the village to the east of the north-south road. It had a rectangular organization, in which some of the later-realized elements can be recognized: the ring road and the central green. It was at this time that Van Eesteren, the only real urban planner, became involved in the planning. Rather than contributing his own plan, he commented on plans by others.¹⁰⁶ In his opinion both the Kamerling and Bodon/Salomonson plans had merit.

Other architects of the group also made plans. Particularly Rietveld, almost sixty years old, went his own way, interpreting the discussions of the previous meeting, composing them into a new plan and presenting it at the next. His first experiment was a nondescript plan, but in April he presented a systematic plan in which a rectangular central green was sited at the end of a rectangular body of water. The homes, all single-family, were situated on triangular lots of 400 m² each.¹⁰⁷ In May, he came with a square urban scheme, where the houses were placed in long blocks at the four sides of the central green. Centrally placed in the green was the community building, also containing the cooperative store. It received admiring comments from the group.

The intention was to present the schemes selected by Van Eesteren at the July 5 meeting, come to a conclusion, and then go on to the next phase, namely, the design of a definite plan.¹⁰⁸ However, at that meeting, other architects, among whom Rietveld (with the above-mentioned plan), chose to present their plans. This flurry of activity may have been caused by Van Gelderen's letter, intimating this would be a last chance. What transpired at the meeting is not exactly clear, but a consensus on a common plan was not reached. The decision was made to consult the Directorate on this question. It would also be a good opportunity to bring the principal up to date, since that had not happened before. The meeting took place on July 12, 1948, in Merkelbach's office in Amsterdam. Van Eck, Verhagen, Van Eesteren, Merkelbach, Van Gelderen, and Kamerling were present.¹⁰⁹ Four plans were presented, those of Kamerling, Bodon/Salomonson, Rietveld, and (probably) Elling. Van Eck deemed Kamerling's plan the most realistic, and it was decided to continue with that plan.

From then on, Kamerling worked out the plan, and made further refinements. In the center, he placed squares of (he recalls) about 400 m² as shops and businesses. These modules could be used in a number of ways, possibly as prefabricated units and built as needed.¹¹⁰ Around the whole village was a dense green buffer, while the central green was to be an open grassy area with trees.

The first opportunity for the Planological Commission to see what progress had been made was at the special meeting at the pavilion in the Amsterdamse Bos (a wooded area southwest of Amsterdam) on September 10, 1948.¹¹¹ The commission reacted favorably. Particularly Verhagen admired the concept, although he commented on the indeterminate space between the determinate belt of housing and the shopping area. Schools and churches seemed to float, whereas they should be the anchors of society. Some members commented on the large area for such a small village. The minutes of the meeting do not report on Molière's reaction, although he was present.

Modern architecture and planning's pre-occupation with the notion of space has been generally recognized. Colin Rowe stated that 'the matrix of the city has become transformed from continuous solid to continuous void.'¹¹² He observed 'a widespread tendency to worship space'.¹¹³ Unlimited space (or indeterminate space as Verhagen stated), i.e., experiencing space because of its unlimitedness, were part of the *Het Nieuwe Bouwen* vocabulary.¹¹⁴ However, the polder was too big, even for De 8. Their village had to be limited by a green buffer.¹¹⁵ The limitlessness, metaphorically speaking, had to be found inwardly. Molière had designed his villages exactly the other way round: definitively dimensioned in its central areas, and

flowing outward into the open country. Ibelings also noted that, by the mid nineteen-sixties, the appreciation of expanding space had appreciably diminished¹¹⁶, to be replaced by the significance of space in terms of scale and usefulness for human activities.

The weekend of October 9 and 10, S. Giedion, CIAM's executive secretary, and avid advocate of modern architecture, visited Amsterdam, and he came by to check on De 8's contribution. When he saw the plan, he commented on the north-south road going through the middle of town. According to the CIAM doctrine of the separation of functions, this was unacceptable.¹¹⁷ The plan had to be altered for the Bergamo meeting. It was the first time in the design process that Van Eesteren really intervened, when he ordained that the plan be moved to the east. Since Bodon (and Salomonson) had already made a plan that placed the village entirely to the east of the north-south road, Van Eesteren asked Bodon to redesign the village based on the new location. Bodon would have to incorporate the open central area of the Kamerling plan. However, since the conference would be held the last week of July 1949, and time was pressing, it was decided that Kamerling would draw up the final plan. In December 1948, Kamerling had made a layout with the same orientation as the Bodon plan, but his plan was clearer and more tightly organized. The central green was a large rectangle, containing the schools, churches and public buildings. Between the end of the canal and the green there was a row of shops and businesses paralleling the north-south road. The dwellings were situated in a belt around three sides of the green. The cemetery, sports fields, and industry were located to the west of the north-south road. Most of the periphery was surrounded by a wooded buffer. The ring road, giving access to the homes, was located just inside the buffer. Pedestrians could move freely through the green between their home and the shops, without having to cross the access road. This plan was discussed with the Directorate on December 17, and was received favorably.¹¹⁸ However, the Directorate deemed it better to trace the ring road between the dwelling belt and the green, thereby delineating the central area. The drawings were adjusted accordingly, and presented to the Planological Commission on June 3, 1949. They encountered no essential criticism. Kamerling was to have presented the plan at the CIAM Bergamo meeting, but Niegeman's jeep, with which they were making the journey, broke down, and they arrived two days late. By that time the plan had already been shown. It had been received sympathetically.¹¹⁹ It was shown again at the 1951 meeting in Hoddesdon, England.

After the Bergamo meeting, Kamerling worked on the plan in cooperation with Van Eesteren, whom he went to see every few weeks.¹²⁰ On September 27, 1950, the plan

was considered ready.¹²¹ In the following period, De 8's activity around Nagele came to a virtual standstill. The Building Bureau was examining the plan. The basic dimensions had been laid down and the Directorate had started to plant the green buffer. Contact between De 8 and the Directorate was scant at that time. From October 21, 1949, when the (Bergamo) plan was approved, Nagele was not discussed in the Planological Commission in the presence of De 8 representatives until a completely revised plan was presented at the meeting of January 8, 1954. Communication between De 8 and the Directorate was maintained by Van Eck and Merkelbach, as parts of the village were slowly developed.

The inactivity of De 8 ended in 1952.¹²² The restart can be set at the day when, at Van Eck's invitation, Merkelbach and Kamerling went to Zwolle to meet S.J. Van Embden, who had become the new commission member and planning advisor on Verhagen's death. Van Embden showed great interest in the plan. One of his questions pertained to the possibility for expansion of the village. It was a question for which Merkelbach and Kamerling were not prepared; in fact the programmed three hundred dwelling units had always been thought of as an absolute maximum.¹²³ The problem up until then had been how to make the village work on eighty to one hundred dwelling units; growth was very much in doubt. In the early nineteen-fifties, serious doubts had already been raised by the social geographers about the feasibility of the ten planned villages. Van Embden's question proved that something was afoot. Not very much later, Van Eck informed Merkelbach that, taking into account the nation's tight financial situation, Nagele's density was too low and that he was under ministerial pressure to increase the density. Under the circumstances, this could best be accomplished by adding one hundred and fifty to two hundred dwelling sites. Van Eck suggested this could be done in the existing plan.

That woke up the group again. At first, Kamerling tried to find a solution without compromising the plan¹²⁴, but he had lost his enthusiasm, in part because of the growing dissension among the group on the appropriateness of his plan.¹²⁵ It was Merkelbach's and Van Eyck's suggestion that they call in de Opbouw for assistance.¹²⁶ J.B. Bakema, architect and Van Eyck's architectural ally, W. Boer, landscape architect, H.J.A. Hovens Greve, social geographer, and R. De Vries, architect, joined the team. Life was restored, new discussions were heard, new plans were made. Hovens Greve headed up a small task force to come up with a new program regarding the needs of Nagele's future population. He particularly stimulated the group to (re)think the programmatic aspects, whereas up to that time Nagele had been mostly regarded as a design problem. Fundamental issues such as: the village as 'labor

¹¹⁶ 'In the mid-sixties, open space without a program was no longer viewed as positive, but experienced as emptiness.' Ibelings, *Moderne jaren*, 22.

¹¹⁷ This information comes from Kamerling (interview February 18, 1994). Giedion's visit is recorded in Van Eesteren's agenda. The De 8 meeting was on Monday, October 11, but Giedion probably had already left for Zürich on Sunday. Kamerling may well have presented the plan to Giedion in that weekend. On March 2, 1949, Giedion returned to Amsterdam. It is likely that they conferred again on Nagele, since Van Eesteren's agenda states both Giedion's and Kamerling's name on that date. Van Eesteren X-1073, 1074, NAI.

¹¹⁸ The meeting was held in Zwolle. Those present were Bakker, Van Eck, Verlaan (Directorate), Komter, Verhagen (advisors), and Elling, Merkelbach and Kamerling (De 8). Merkelbach 152, NAI.

¹¹⁹ Interviews Kamerling, February 18, 1994, and July 10, 1996.

¹²⁰ From November 1947 till February 1950, Kamerling worked part-time in the Amsterdam city planning department. (Not on the Nagele plan, which he did in his own time.)

¹²¹ Letter to author dated August 22, 1996.

¹²² Based on Kamerling interview, and on Van Embden, *Stedebouw in Nederland*, 57. Van Embden sets the date in 1953. This is unlikely, however, considering the plan changes that occurred in 1952.

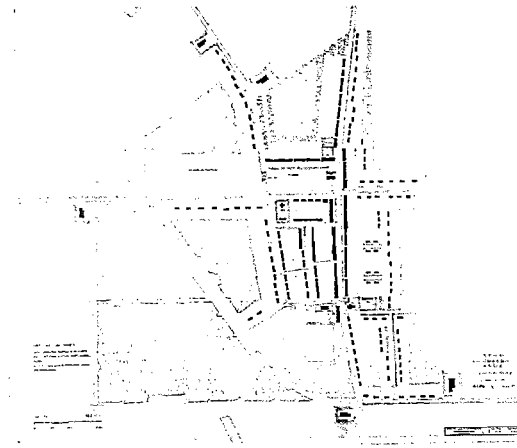
¹²³ Van Embden, in deference to Verhagen's sympathetic attitude toward the plan, wrote: '[Van Embden] naturally considers himself hardly justified to intervene in a matter that had been already settled by his predecessor. He confines himself to warning against the plan's insusceptibility to eventual future growth, which he personally finds disquieting.' Van Embden, *Stedebouw in Nederland*, 57. It is a fine example of Van Embden wallop-packing modesty. Considering his Delft School upbringing, combined with his post-war Rotterdam urban planning experience, he had to be against the static planning approach in Nagele.

¹²⁴ Interview Kamerling, February 18, 1994.

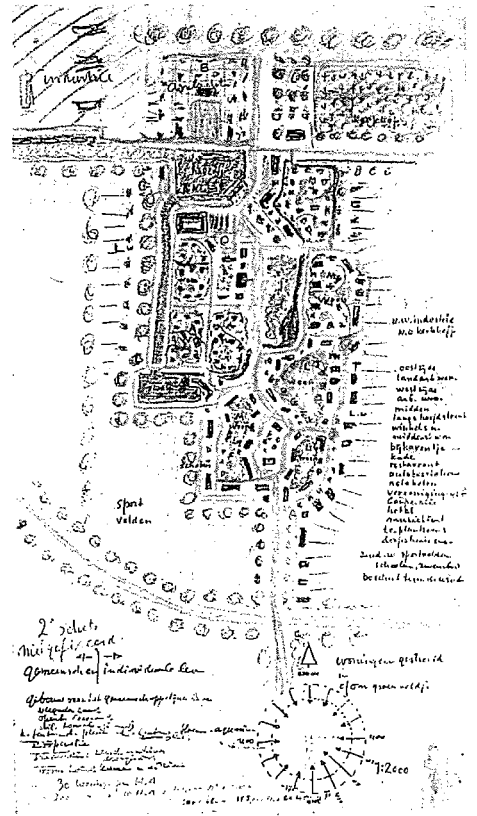
¹²⁵ Rietveld had, on several occasions, expressed disagreement with the plan. On an October 1949 plan he wrote: 'I would strongly discourage continuing with this plan. This plan, as it is now, is very dependent on straight modern housing types and fences, and all the trees drawn on this plan.

Without these conditions this village will be, on the drawing [perhaps], but in reality not better, in fact, more pathetic to look at than the other polder villages...' In October 1952, he criticized the plan again. Rietveld archives nrs. 188 and 189, NAI.

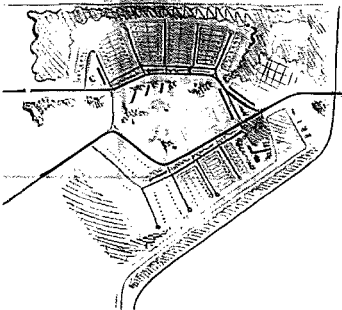
¹²⁶ Interview Kamerling, February 18, 1994; and Strauven, Aldo Van Eyck, 232, 233.



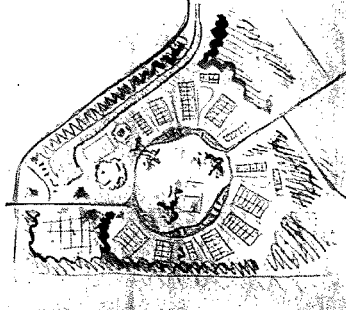
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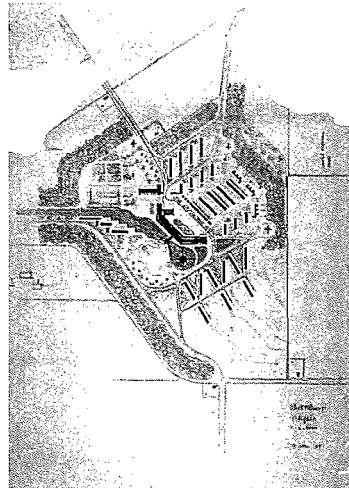
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Nagele

211 Pouderoyen plan. December 1945.

212 One of the first sketches by Rietveld. February, 1948.

213, 214 Two sketches by Van Eyck. March and April, 1948.

215 First Kamerling plan. February, 1948.

216 Niegeman also presented a plan in February, 1948.