THE GENERATIVE MASTER PLAN FOR HARBOR HILLS

NEAR BROOKINGS OREGON

A MODEL

CREATION PROCESS FOR

2 1 ST - CENTURY CITIES

THE BROOKINGS PLAN



View of the Pacific ocean, from Harbor Peak, looking south

THE GENERATIVE MASTER PLAN

FOR THE NEW TOWN OF HARBOR HILLS, BROOKINGS, OREGON

Submitted jointly to
The Commissioners of Curry County
And to
The City Council of Brookings, Oregon

Christopher Alexander Randall Schmidt

with thanks to our client and contributor Bill Buchanan for help, discussion, encouragment, and many, much-needed insights and corrections

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NOTE ON THE STATUS OF THIS PLAN

This master plan has been prepared to provide needed information about philosophy, method and intent, in sufficient depth to satisfy the City and County and State officials regarding the entitlement of the land in Harbor Peak, and to provide a basis for that entitlement to be given. There are numerous technical details, regarding the day-to-day workings of the master plan, which have not yet been provided. These details will be provided later, as the actual development of Harbor Peak begins and makes it necessary.

This plan must, therefore be regarded as illustrative, not definitive. The very new character of many of the techniques and concepts will involve considerable cost over coming years, as these concepts are elaborated. Such elaboration would not be appropriate at the time of an Entitlement Plan, which is formulated to provide officials and members of the public with a clear picture of what—in principle—is to be done in the new town. It does not yet include the technical details in every particular, that will ultimately be created to implement this picture.



We express our gratitude to a number of colleagues and fellow workers who have helped, commented, and given advice

at many stages along the way.

They include colleagues of ours from the Center for Environmental Structure

Ingrid King, Dave Mlodzik, Michael Mehaffy, and Howard Davis

together with colleagues of Bill Buchanan's

Douglas Duany, Bill Marquand, Lucien Steil,

and further support from Bill's consultants in ecology, sewage, transportation, forestry, and planning.

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PREFACE THE CORE OF OUR VISION

INTRODUCTION BY CHRISTOPHER ALEXANDER

Bill Buchanan bought his land on Harbor Peak 14 years ago. Ten years ago he began living on the land, and has lived there ever since. With his wife, Candace, he lives sparsely, in a workshop, with computers around him, tools, and equipment. Every day he walks the land, and has been walking it for all of these ten years.

He knows every path and every watercourse, the slopes, the rocks, the naturally occurring pools, the wild azaleas. He knows every view of the Kalmiopsis, and of the snow covered Preston Peak in the distance. He knows the views up and down the coast, where the sun shines and where it does not, the places where the bears live, the places from which to see the river. He knows where the sun rises, and where it sets at every season of the year.

His hope is to create a town which, in every detail of its construction, preserves and sanctifies the land he loves, while also bowing to the necessities and realities of a modern urban settlement, a place where people can live and work in comfort, in well-built houses, offices, studios, and workshops.

The Oregon land use law is aimed at preserving the beauty of the State of Oregon, by concentrating urban development within tightly drawn boundaries so that whatever lies outside the boundaries is protected and preserved, and the concentration of new urban development harms as little of the beautiful wild and rural land of Oregon as possible.

Our vision, in this plan, goes a step further. We see a future in which the town itself, also does homage to the land: in which the naturally occurring beauties of the land are kept, for ever, as the foundation stones of the town, and in which even while walking about the streets of the town, nature,

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and the beauties of the land, are ever present, in every path, and every terrace, every garden, every house.

This vision is also in the tradition of the visions of John Muir and based in the respect for land which Bernard Maybeck, designer and planner of Brookings a hundred years ago, also kept alive for the people who live here today.

Why are Bill Buchanan's aspirations, his sympathy for the land, his knowledge of the land, so important? Most of the ravages of modern development, arise when developments are controlled by long range, distant, interests - by people and monetary considerations which are too distant to be fine-tuned to the land. To have a new community created by a man who has lived here and who intends to go on living here, and who loves the land and cares about it, and has demonstrated his commitment by years of preparation, thought, even by his willingness to accept relative poverty so long as he was not ready to act, is truly a great rarity. Curry County is more than fortunate to have this commitment as a guarantee that human caring for the land will govern what happens in Harbor Peak, and it will provide benefits to the people of Curry County that are very rare today. Such a positive relation between an individual and land, similar in character to that which used to exist generations ago, is a path to something far better for people and their lives than what is usually achieved by conventional contemporary methods.

Christopher Alexander



A NEW MODEL FOR CITY CREATION

THE GROWTH AND GENERATION OF AN ORGANIC WHOLE

During the last half century critical analysis of master plans has focused repeatedly on the mechanical nature of these plans, and on the devastation they can wreak, in the wrong hands, because they often encourage rigid and sterile construction of developments. That has on occasion in the past devastated land, and, in effect, "killed the goose that laid the golden eggs."

It has come about, often, because city planners and administrators, troubled by the devastation that can so easily be wreaked, have tried to formulate controls to prevent the trouble. But in so doing they have occasionally - and of course unintentionally - helped contribute to the problem they are trying to solve, because rules of considerable rigidity (but the wrong ones) are then introduced under the aegis of planning law which too quickly becomes draconian. The position of planning officials and local communities in the modern age is not enviable, and the problem is difficult to solve.

It is our hope that the fresh approach presented in this plan, may point the way to a new way of dealing with this old problem.

In this master plan, the evolving structure of Harbor Peak is guided, at every step, by the whole - the whole of the landscape, which will embrace a community that grows within it. It aims to allow a coherent and organic whole to evolve, in small steps, every time construction or development occurs. And the fundamental idea

is that every step of construction and development, is guided in such a way that it contributes to the whole, and helps to embellish the whole.

In this way, thousands of actions, one after the other, gradually creates a living whole in which the streets, paths, houses, hedges. Fences, gardens. Walls, public open space, trees, parking lots, public buildings, all work together to embellish the whole.

The guidance which the development process receives, helps each step to adapt to the larger whole, and to help the larger whole. After application of these processes, thousands of times over, the community, or township, will—we hope—have the attributes of a living thing, a living place, where people, plants, animals, houses, flowers, birds, children, and old people, craftsmen and those who have retired, can all live together in a way which continues to embellish the living whole.

In order to encourage this continuous, step-by-step adaptation to occur, the plan must be process-based. Like organic evolution, or like the development and growth of a forest, thousands of adaptive processes are set in motion by the plan. Each one causes adaptation, a gradual fitting together of the parts, while also protecting and encouraging the integrity and privacy of each individual place.

None of these qualities can be achieved within the framework of a conventional master plan. They cannot be achieved within the framework of developers blueprints and mechanical planning law. The reason is simple. Conventional law sets many conditions, which must be met—but these conditions are all applied at the same time, to one huge plan, which is then implemented. That cannot achieve adaptation, and harmony among the parts because there is no opportunity for each place, to be fitted, harmoniously, to the places, land and buildings that lie next to it. That subtlety, that harmony, CAN only be achieved by a multitude of processes, acting individually, yet geared towards the evolution of a coherent whole.

For this reason, the plan presented in the following pages, is a process-based plan. Very specific processes provide adequate controls to protect land and community, and do so in a fashion which is inspiring to builders and developers. The processes allow people who are building, spending their money, and planning, and free people up to do the best that lies in them, in the process of reaffirming the life of a given piece of land, or creating the social life and thrust of a given township or community. It also does a better job of making a community more truly "organic."

Since the processes described are innovative, it way well be that occasional aspects of this plan will need careful scrutiny, and revision on occasion, as all the players — town, county, developer, sub-developers, architects, builders, small businesses, and families and individuals — do their best to make a new life for the Harbor Peak Community. They will focus on the positive aspects of daily life under conditions of sustainable thinking, with regard and respect for the never-ceasing importance of the land itself, its beauties and its potentials, as the ultimate source of our inspiration.

To protect the land, one method must take precedence above all others. As one walks about the land, you encounter different spots, each with its natural beauties. One is a view of the snow-covered peak to the south. One is a breathtaking view of the cost south of Harbor, and the surf. One is a flat place on a ridge, narrow but commanding, with steep slopes dropping off on either side. Another is an open meadow; another a small patch of flowers; another a naturally occurring waterfall.

It is not enough to identify these beautiful spots. What happens in typical development, is that the developers and builders see these beautiful places, then rush to make use of them, ... and before you know it, the beauty is gone - often destroyed for ever...

In order to keep each of these places alive, in its essence, as part of the new town, each place is identified, then marked, cordoned off, and it is given - in the town plan - a designation which not only protects it from future interference or destruction - -but also provides active steps that enshrine each spot, make it part of the living fabric of the town that is to come.

The following plan lays the foundation for the method by which this is to be done.

In particular, the following special issues are to play a major role in the formation of this new community. The focus on the whole, makes it possible to incorporate each one of them.

- 1. Integration of work and family life
- 2. Particular care for the young and for the elderly

- 3. Careful placing of the right emphasis on cars, which allows the emergence of pedestrian life and community.
- 4. Sustainable treatment of fire control and natural fires ecologically inseparable from the forest areas of Oregon and California.
- 5. Care for the uniqueness of every place.
- 6. Care for the uniqueness and genuine suitability of every house, dwelling, office, street, and garden.
- 7. Allowing the development of a new kind of spiritual life, not necessarily based in religion as we have understood it in the past, but rather on a common sense admiration of the nature which surrounds us, and a recognition of each person, and each action, in the works of nature and of God.
- 8. Allowing joy to govern daily life, and the construction of the habitat which is to support our daily life.
- 9. Very careful attention to those elements of our environment which support and sustain joy, and an appreciation of the calm of this joy in the daily continuous creation of such a community.
- 10. Tolerance for the realities of every day life, and for the possibilities of economic hardship and misfortune; and the necessity that these unfortunate realities also have their place, and people must be nurtured when they occur, without detriment to the whole.

FUNCTIONAL TARGETS

- 1. Derive or determine outline features, and major public spaces, from the topography of the natural land.
- 2. Derive individual local subdivisions using a process that draws local public spaces from the land and in the interest of the land.
- 3. Derive specifications of building volumes and positions using inspiration from and adaptation to the land form.
- 4. Protect natural features as a precious commodity.
- 5. Place more accent on pedestrians, and the pedestrian experience.
- 6. Establish roads and parking as subsidiary to the beauty of the land and subsidiary to suitable, vibrant pedestrian areas.
- 7. Calculate density and best use, that are appropriate to the natural land forms.
- 8. Focus on process, and careful attention to timing of actions, as the primary way that the community plan moves forward: thus placing less emphasis on static drawings, and more emphasis on processes

which are respectful of the past, and helpful to the future, each organic step following from what was there before, and protecting nature.

9. Protect property rights and land value.

Protect property rights and land value that is inherent in the beauty of public land, and shared private land.

- 10. Derive individual roads and sewer lines, from the evolution of the whole.
- 11. Regulate parking to a non-intrusive position.
- 12. Redefine and rescale vehicular roads to a limit governed by humane pedestrian necessity.

The processes provided in this plan are designed to achieve these targets, and thus to achieve the development of a living community that can adapt to serve the needs of its people, in harmony with the needs of the land. We hope they may provide a new model for city planning in living communities.

NOTE ON THE HARBOR PEAK ADMINISTRATION

In the following descriptions of the fourteen processes, the acronym HPA appears repeatedly. The Harbor Peak Administration, or HPA for short, is the administrative focus of the planning process. This organization will administer and carry out this planning process based on this master plan, oversee its application, and guide and help owners and developers in the use of the master plan processes. HPA will also take responsibility for compliance with the provisions of this master plan, take responsibility for recording parcels, subdivision of lots, surveying and recording all ongoing construction.

Details of the recording process are contained under Section 1.

PART ONE

Large-Scale Structure

KEY

In the following pages, which constitute the legal core of this master plan, three type-faces are used:

*Statements of Intent and Definitions are shown in 12.5 pt italic.

*Required Step-by-step Operations are shown in 13 pt bold.

*[Note: Comments, references, and examples are shown in 10 pt italic.]



SECTION 1 THE STATE MAP

RECORD KEEPING AND SURVEYING
FOR PUBLIC RIGHTS OF WAY,
PROPERTY LINES, AND BUILDINGS,
AND THEIR EVOLUTION OVER TIME

1.1 The Step-by-step Emergence of Community in Harbor Peak

It is expected that the new community of Harbor Peak will grow continuously, perhaps for twenty or thirty years before it is initially filled out, possibly for longer. It will then continue to gain complexity and richness, for many years.

In order to bring this dynamic nature of the process into focus, the way in which growth and development of all physical improvements are recorded dynamically, in time, becomes a major element of the plan.

It is a fundamental article of this master plan, that the detailed configuration of public space, roads and paths shall not all be determined in advance, by a fixed physical plan, but shall rather be specified by this ongoing process plan, which defines the opportunities for emergence of the community as it grows from and is adapted to new opportunities for construction and development which present themselves.

1.2 Concept of the Current State Map

To keep track of the growth, evolution, and development of Harbor Peak, at any given moment in its future history the community will maintain a state-map which records all extant configurations, to describe what has been decided, built, and subdivided, up to that moment. The state map is fundamental to the execution of this plan and its processes, and the precise definition of the state-map, and the annual process of updating and maintaining an up-to-the-minute state-map, is a critical process of the master plan.

The state map shall be a multi-layer G.I.S. (geographical information system) map, like those created by ESRI's ArcGIS, Autodesk's GIS Design Server, or similar software, although in early stages the state map may be a paper map system.

The state map shall contain separate layers, designating all those configurations of roads, paths, public space, neighborhoods, common land, lots, and buildings, that have been tentatively decided, finally decided, or built, up to that moment in time. See subsection 1.3.

1.3 The Layers of the State Map

The state map shall contain the following layers or drawings:

- 1. Boundary of the project
- 2. Density zones
- 3. Public rights of way, preliminary and final
- 4. Pedestrian paths and spaces, preliminary and final
- 5. Vehicular roadways, preliminary and final
- 6. Neighborhood rights of way, preliminary and final
- 7. Neighborhood boundaries, preliminary and final
- 8. Natural land protected from development, preliminary and final
- 9. Individual parcels and lot lines, preliminary and final
- 10. Positive space
- 11. Volume restrictions on the individual lots, including prescribed main garden locations and main building volumes.
- 12. Built footprints of completed buildings, and built garden locations (it shall be the responsibility of the homeowner to supply this information to HPA prior to receiving occupancy permit.)
- 13. Parking spaces, preliminary and final

and may contain the following:

- 14. Sewer lines and water lines, preliminary and final
- 15. Electrical lines and transformers
- 16. Cables and telephone lines.

1.4 Boundaries of the State Map

All land included in Harbor Peak shall be shown on the state map. If land belonging to the Harbor Peak jurisdiction is sold, or new land is acquired, then the boundaries shall be altered accordingly.

Any land within the Master Plan area that is sold, shall continue to be in the Harbor Peak master plan, and shall continue to be subject to the provisions of this plan.

1.5 Relation of Harbor Peak to Curry County and to The City of Brookings

The Harbor Peak community shall be subject to the laws of Curry County, with the following exception: In the event of conflict between provisions of this Master Plan and Curry County ordinances, the provisions of this Master Plan shall govern.

It is also possible that at some time in the future, The Harbor Peak community may be annexed to the City of Brookings, Oregon, and as such included within the boundary of Brookings. In this event the Harbor Peak community shall be subject to the laws of the City of Brookings with the following exception: In the event of conflict between provisions of this Master Plan and City of Brookings ordinances, the provisions of this Master Plan shall govern.

1.6 Preliminary Plan for Any Proposed New Development

Whenever new development of more than one house is proposed, the HPA and Master Plan consultant (see 1.11) shall together generate all relevant information as required by this master plan, including new diagnoses, definition of a new neighborhood, rough initial placements of pedestrian rights of way, lot boundaries, boundaries where buildings may, or must, or may not occur. HPA shall then submit this preliminary plan for entry into the state map.

Once HPA has made a preliminary plan for a proposed neighborhood, it shall submit a Detailed Development Plan to the County. The DDP shall be required to meet the requirements set forth in Section 8. The professional services performed by HPA and the Master Plan consultant shall be pid by the owner or developer of the proposed project, at prevailing professional rates.

After completion of the construction of infrastructure within substantial conformance with the Detailed Development Plan, the developer shall submit a final plat of the neighborhood to the County, for legal recording.

1.7 Establishing and Planning Positions and Configurations of All New Elements of Development, by Direct Staking on the Land

It is fundamental to the aims of this master plan, that the configurations of all public rights of way, paths, roads, lots, public buildings, private buildings, and public works—thus, ALL new development, large or small—shall grow directly from the context of previously existing buildings and from the context of naturally occurring features of the land such as slopes, trees, watercourses, rocks, logging trails, and so forth: and that these configurations have a natural and harmonious relation to the land.

In order to make this feasible, it is necessary that new elements of development, shall always be designed and located, first, by stakes directly placed in the ground itself by feeling and intuition, and that these stakes shall then at once be recorded by surveying techniques which give the exact position of the stakes on the Harbor Peak state map.

The intuitively placed stakes shall thus, themselves, provide the defining positions for all new elements. This will reverse the current practice of first deciding positions on a plan, and only then later transferring the planned positions to the land.

1.8 Required Surveying Techniques: Total-Station Surveying as Fundamental to the Process of Establishing Planned Locations of Field-defined Configurations

To be practical, especially in complex terrain, this new procedure requires introduction of a surveying technique which will allow preliminary positions of stakes in the field, to be accurately placed on a map, with a relatively small margin of error, and in such a way that this process is inexpensive, and can be done by members of HPA themselves, or by other trained paraprofessionals. Standard surveying techniques are slow and expensive, and not warranted for these preliminary positions. Accuracy of within 1 to 5 feet is all that is necessary for preliminary positions, and speed and economy of the method are paramount.

Expressed in layman's language, this means that one must be able to locate buildings or elements of public works, by walking about on the land,

making careful, intuitive judgments, placing stakes to memorialize these judgments, and then make use of a semi-automated procedure which conveys the exact position of the stakes to a conventional scale map or computer record.

To this end, HPA shall record its work in all preliminary positioning (as required, for instance, by Sections 2 through 7) directly from on-site stakes, using the total-station method.

[Note: As a matter of information, it is useful to note that police officers with only two days training can be trained to use the total-station method for laying out, and recording, exact positions of items in a crime scene, even to within an accuracy of one inch.]

Owners, architects, builders and developers can all be trained to use this method, and such training shall be made available to them on request so that they can enter their own sakes positions, directly into the state-map.

However, the final positions of all lot boundaries, located and drawn for submission as a subdivision (as required by Section 8), shall be surveyed by professional surveyors, also using the total-station method, for the purpose of official recording.

1.9 Preliminary Positions and Tolerances

Preliminary positions and configurations are those first worked out for any element, in the field, during the process of staking and site design.

Contrary to common practice, initially one can make only general assertions about where buildings and roads and gardens ought to go. Fixing overly specific positions early on is prone to be wrong, and gives rise to the lifeless quality found in most recent American construction. As design and construction of a neighborhood go forward, and one gathers information about the evolving reality, one can finetune; one can make more accurate statements about locations. The process reflects this basic but profound fact.

Also, it is important to capitalize on the expertise of HPA and the Master Plan consultant, to provide general positioning judgements, while allowing the individual architects and builders freedom of judgement and the freedom to respond to the evolving reality of the site and of the neighborhood.

Each preliminary prescription of placement for a space or building shall carry with it a particular tolerance. The preliminary placement shall be given as a boundary zone with a given thickness, or tolerance, in feet. Each of the various types of entities, such as major pedestrian public spaces, local pedestrian space, building footprint, garden, and so on, shall carry a certain tolerance, and the larger the entity, the larger the tolerance. For example, for public spaces, the tolerance shall be 30 feet. For an individual house or main garden, the tolerance shall be 15 feet.

The final built position of each element is required to be within this tolerance. Exceeding the tolerance requires the written approval of HPA.

In general, preliminary positions shall be set under the provisions of Sections 2, 3, 4, 5, 6, 7, 8. The detailed definitions of the tolerances for each entity are found in these sections as well.

Preliminary locations and positions will be changed when they are transformed to final recorded positions. Final positions shall be set at the time of legal recording, according to the provisions of Section 9.

The final built position of each element is required to be within the tolerance set forth in the subdivision map when it is recorded. If an owner wishes to exceed the tolerance, at the time of construction, exceeding the tolerance requires the written approval of HPA.

1.10 Definition, Role, and Obligations of the Harbor Peak Administration

Decision-making on behalf of the community shall be administered by the Harbor Peak Administration, which is a residents' association composed of all land owners who own land in Harbor Peak, together with the master plan consultant. Decision making will be based on voting, with each land-owner holding a number of votes according to the percentage of land owned.

The primary functions of HPA shall be three:

- 1. To initiate and lay out new neighborhoods in accordance with the plan.
- 2. To approve new applications for planning or building permission, after ensuring that they conform to the regulations and intent of this master plan.
- 3. To submit approved plans to Curry County for formal planning and building permits.

Initially, Mr Buchanan will hold most decision-making authority in HPA, since at the outset he holds a majority of the acres within Harbor Peak. As the community grows, new owners will hold more and more control over the actions of HPA. (Bill, I am not sure if this voting arrangement as described is roughly in accord with your wishes. If it is, it seems to me that the precise voting rules must be very carefully thought through, so that effective control remains largely in your hands, while also bringing real democracy into the picture – a very delicate and difficult subject).

I.II HPA Master Plan Consultant

The issues and approaches defined in this master plan are so fundamental, so important, and so relatively unfamiliar, that professional help will certainly be needed.

In view of the complex nature of the master plan, the need for its continuous maintenance, and for interpretation of its sections, and the ground-breaking nature of the processes specified in this plan, there shall be a master plan consultant helping HPA in the performance of its function as a keeper of the whole.

Initially, this position will be held by PatternLanguage.com/ Center for Environmental Structure, Berkeley, California, under the direction of Christopher Alexander. The Master Plan consultant shall serve at the pleasure of the director of the Harbor Peak Administration. If at any time, Mr. Buchanan, the present director of HPA, or any future director of HPA, wishes to make a change in the master plan consultant, he may do so at his sole discretion.

1.12 Ownership, Control, and Maintenance of Public Land in Harbor Peak

The beauty, amenity, and livability of public land play an enormous role in the plans and life of Harbor Peak, and the extent of public land is greater than in many typical communities. Both the area of public land, and its complexity, will therefore require careful maintenance, and to build and maintain the land, considerable funds will be required.

HPA shall have the right to levy substantial taxes from land sales, and substantial annual taxes from land owners, to pay for

the maintenance. All land owners of Harbor Peak shall have access to the HPA accounts and books, so that they may inform themselves about the items of expenditure incurred annually.

(Note to Bill - do you want the public land to be owned by HPA, or by Curry county; and do you want construction of public works in the public land to be undertaken by HPA or by Curry County. Ditto for routine maintenance and repair. Very important to get the structure clear.)

1.13 General Role and Obligations of Developers

Any developer may buy land and undertake construction consistent with this master plan. The developer shall be bound as follows.

If the developer proposes to develop more than a single lot, the preliminary plan for the neighborhood which contains these lots, or DDP, shall be prepared by the HPA and Master Plan consultant according to the provisions of subsections 1.6 and 1.10, and according to the general provisions of Sections 1-7. In this procedure the developer may play the role of client, or participant in discussions with HPA and the master plan consultant, and may provide rough sketches, ideas, or discussion about his proposed project. The developer shall not have direct personal control over the construction or details of the plan until submission and approval of a subdivision plat have been completed in accordance with the terms of Section 8.

1.14 Participation and Involvement of Users and Owners in Forming Neighborhood Plans

It may be said that in general, places which are shaped and controlled by the people that actually live and work there have more life that when they do not have this direct involvement.

It is therefore highly desirable that insofar as possible, there is be user participation in design of the built environment in Harbor Peak. This means that the people who live and work in the community, shall actually have a hand in the shaping of the place, its outdoor spaces, its houses, its roads and paths. The success of such a process will depend on the extent to

which the Developer knows how to involve people, and on his willingness to do so.

And so: in creating the preliminary plan of a proposed new neighborhood, HPA and the Master Plan consultant shall seek out the involvement and input from the neighborhood's future residents (if they are known) regarding the layout of the neighborhood, including but not limited to the shape and position of public spaces, paths, roads, lots, and house positions.

Residents of adjoining existing neighborhoods shall also be solicited by HPA and the Master Plan consultant for input and involvement in the preliminary plan of the new neighborhood. Such input shall of course be weighed somewhat less than that of the residents of the new neighborhood itself.

In addition, later in the process, as the neighborhood is being designed in detail and built, the developer and builders shall do their utmost to involve the future residents of the neighborhood (if they are known) in the detailed design and construction of the houses, gardens, public spaces, paths, and roads.

1.15 Detailed Obligations of a Developer when Working with HPA

As described in Subsection 1.10, HPA together with the Master Plan consultant, shall determine the preliminary layout of any and every new neighborhood by following Sections 2, 3, 4, 5, 6, and 7.

HPA shall then submit a DDP, in accordance with the terms of Section 8.

The county will then approve the DDP, or request modifications, or refuse the application.

The developer who is developing the neighborhood or a part thereof, is bound in his/her development to follow the DDP, and the prescriptions of Part II of this Master Plan. In particular, he must do the following:

1. Before any construction of building or infrastructure is undertaken, the secondary developer shall submit to HPA a detailed plan showing the developer's proposed development, including locations of public spaces, local public spaces, buildings, gar-

dens, paths and roads, showing that the locations of all these items conform to the preliminary plan within specified tolerances. HPA will review and must approve this detailed plan, and if any items are outside specified tolerances, HPA must review and approve any such proposed changes.

- 2. After receiving HPA approval, the developer shall record the final plat.
- 3. All building construction and public space improvements shall conform to the construction specifications found in Part II, Sections 13 and 14 of this master plan. Prior to applying for building permit, the developer shall submit construction drawings to HPA for review and approval. Upon review, HPA shall issue a letter of approval, after which the County may accept an application for building permit.
- 4. All pedestrian path and road construction and surfaces undertaken by the developer shall conform to the requirements of Section 7.
- 5. During construction further modifications may be proposed by the developer. This master plan recognizes the dynamic nature of design and construction, and recognizes that changes may well be warranted, in order to protect the land and the evolving well-being of the neighborhood. Such proposed modifications may be submitted by the developer for review by HPA. Upon approval by HPA the proposed modification may then be submitted to the county, if the nature of the proposed modification warrants government review.

1.16 Ultimate Responsibility for Maintaining the State Map

The state map, together with the linked total-station system of surveying, shall be created and maintained by the Harbor Peak Administration.

The cost of creating and maintaining the state map and surveying system shall be paid by the Harbor Peak Administration, and possibly by other parties who wish to make use of the maps. The costs may also be passed on, in part, to participant landowners in Harbor Peak.

The layers which comprise the state map shall be maintained, and updated by HPA. The frequency of updates, the submissions

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in all particulars required of developers and property owners (such as as-built drawings and drawings of proposed building envelopes) shall be determined by HPA. HPA shall charge a fee to the owners for the resulting updates to the state map, commensurate with the cost.



SECTION 2 DIAGNOSIS OF THE LAND

GRADUALLY IDENTIFYING THE NATURALLY OCCURRING CENTERS IN THE LAND

2.1 Protecting the Land Forever

As one walks about the land of Harbor Peak, one encounters different spots, each with its natural beauties. One is a view of the snow-covered peak to the south. One is a breathtaking view of the coast south of Harbor, and the surf. One is a flat place on a ridge, narrow but commanding, with steep slopes dropping off on either side. Another is an open meadow; another a small patch of flowers; another a naturally occurring waterfall.

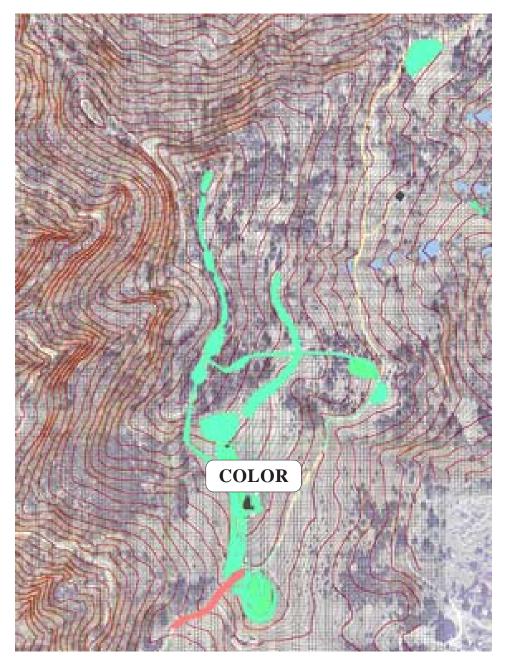
It is not enough merely to identify these beautiful spots. What happens in typical development, is that people see these beautiful places, then rush to exploit them, or worse simply bulldoze them—or even when trying to do their best often fail to enhance the natural beauty because it takes unusual skill to do it, within today's commercial climate—and before you know it, the beauty is gone, often destroyed for ever.

In order to keep each of these places alive, as a matter of priority for the new town of Harbor Peak, we begin by identifying each place, marking it, cordoning it off, and then giving it—in the emerging town plan—a designation which not only protects it from future interference or destruction, but provides active steps that will enshrine each of these lovely, precious spots, and make it part of the living fabric of the town that is to come.

The following diagnostic map shows the results of such a diagnosis in one small area of Harbor Peak, and lays the foundation for the method by which this is to be done.

To protect the land, one method shall take precedence above all others.

In order to protect the natural land, which is the source of the land's beauty, and the reason why Harbor Peak has been created in this place, a continual effort shall be made, to identify those naturally occurring "centers" (defined below, 2.2) in the land which most inspire love and attachment, and to keep them, strengthen them, so that as the town is urbanized by construction, still the centers which were inherent in the land, will inspire and dominate the structure of the newly built place, too.



Diagnostic map: An early and fragmentary diagnosis of a few central areas of the Harbor Peak site. This map shows places that strongly suggest themselves as vital, to-be-protected parts of the land, shown here in green. Under the procedures of sections 4–7, these protected places will later become either pedestrian rights of way and plazas (later to be shown as yellow) or open meadows and parks for the use of the community (still to be shown as green).

2.2 What is a Center, and How Shall Centers be Protected and Enhanced

A center is a spot of living beauty in the land. The places marked in green on the diagnostic map above, provide examples. When you walk around the

land, as it is today (2004), they are places which strike you with their life, the life radiates out beyond them, and they beg to be preserved. Centers can be any size: very small, middle sized, or very large. A trickling stream under a piece of stone may be a center. A large basin in the landscape may be a living center.

The intent of this master plan, is not only to encourage the preservation of living centers in the land, but then to enhance them and strengthen them: that means, to build buildings and other built structures which preserve and draw their inspiration from the naturally occurring centers, so that their beauty and intensity is kept alive. This can be done by building, in stone, and wood, and concrete and tile and steel and glass, constructed enhancements which support the naturally occurring centers (in the land) with building volumes, and in the gardens and pavements between buildings, in the rooms and roofs and windows, and (sometimes) in the smallest details of the buildings.

The new town, as it evolves, shall always be made so that, as far as possible, these existing centers, visible in the land, shall be maintained, and sustained, and improved, by the actions taken in development. This means specifically that:

- a. The public pedestrian paths and roads and public open spaces—in short, the rights of way which form the life of the community—shall be chosen to preserve and strengthen, as far as possible, the centers that inhere in the land itself.
- b. The buildings and enclosures created by construction adjacent to these public rights of way, shall be placed and shaped to enhance, and enliven, the deep feeling which lies in the centers as they exist in the community and land before construction.

This is intended to preserve a continuity from the land as it was, to the town and buildings as they will be, and through its unfolding, to maintain the deep feeling of the place at all times.

2.3 Diagnosis on a Green-Field Site

Diagnosis is the process through which the land is observed, and scrutinized, at regular intervals, to identify the living centers, as a guide and source of future construction, and as precious places of value to be kept and hallowed by the construction of the town.

An initial diagnosis has been made for a small portion of the site, which indicates certain natural centers. These are places of natural beauty, which have specific form or potential., This initial diagnosis has been created to make the most of the land, as it exists, and will lead to development that preserves and extends the natural beauties of the site. A few of our initial assessments are recorded in the site map on page 23 of this section. Further standards for diagnosis, and the practical nature of the process of diagnosis are given, by example, in two sections of this plan. One is given in section 3.8(?check). The other is given in section 10.3.(?check)

In an area being subjected to diagnosis, the living centers shall be identified by the following empirical test: a place within the area is identified as "living" when two or three people agree that to them it seems a spot with exceptional life.

Places meeting this test shall be recorded on a diagnostic map, by the HPA and master plan consultant.

[Note: Validity of this empirical test, and correlations and statistical methods demonstrating degree of objectivity and range of reliability are given in Yodan Rofe, xxx.]

2.4 Diagnosis in the Presence of Buildings or a Town

In an area where buildings, roads, public works, or exterior structures have been built, the process of diagnosis is more complex, and requires a somewhat more complex procedure.

As in the case of nature, the process starts by looking for valuable and precious places which have life, as they are, using the same empirical procedure defined in 2.3.

These places shall be recorded on the diagnosis maps, and protected in any subsequent construction that takes place.

The second way the diagnostic process works, in cases where there is existing built structure (buildings, roads, paths, retaining walls, and so on), looks for "latent" centers. A latent center is a center which has the promise of life, even though it may not be very strongly living as matters now stand. The criterion for a latent center, is that two or three people can see, and agree, not only that it has potential as a living center, but that structure-preserving actions can be imagined (definition in 2.5), which will bring that place to life.

These places, too, shall be recorded on the diagnostic maps, and protected in any subsequent construction that takes place, and some version of the imagined improvement shall be carried out.

2.5 Performance of Diagnoses

Diagnoses shall be made by the Harbor Peak Administration together with the current Master Plan Consultant.

Rough ideas about possible, or best, structure-preserving transformations for a given place, shall be recorded at the time of the initial diagnosis.

Members of the community shall be encouraged to think about diagnosis as a routine matter of daily life, and to communicate their feelings about possible diagnoses to the HPA.

2.6 STRUCTURE-PRESERVING TRANSFORMATIONS ON A GREEN-FIELD SITE

It is, in our era, not widely recognized that each act of construction can either help, or harm, the natural wholeness which exists in a piece of land. The definition of this concept is probably the most profound and most subtle matter dealt with in The Nature of Order (see 2.16) - yet it is essential. Most people in traditional times had a natural understanding of this issue, were able to deal with it, and dealt with it.

In a nutshell, a structure-preserving transformation is: an act which first recognizes the existing beauty and order and structure existing in the current situation, and where the act (design, construction, painting, planting a garden, anything) then preserves and enhances that existing beauty and order, rather than harming it.

This Master Plan is formulated to encourage every act of design and construction to be a structure-preserving transformation. In order to be able to do this, people must learn to perceive the wholeness of a given place – not merely some pleasant or spiritual sensation – but an actual ability to grasp the essential structure of that wholeness, and then respect it and respond to it. This is not typically done in contemporary planning practice, and requires newly defined skills and awareness of issues that were not previously part of conventional practice.

One vital issue involved includes knowing which features of a given landscape or of a given natural center, give it its centeredness, give it its essential feeling. Making this observation correctly is a matter of intuition coupled with analytical ability, and a matter of being able (accurately) to seize those features of the place which must be enhanced or preserved, because they are the ones most important to its life.

A second vital issue, even more important, requires knowing what features of building—building volume, and hard construction in the land-scape—will sustain the wholeness that exists. This can involve very subtle issues. The scale of a thing, its placement on a slope, placement with respect to the natural direction of a slope, orientation to views, decision as to which trees to preserve and which to open up, extent of a hard surface, balance of hard and soft in the treatment of the walking surfaces, use of walls to create enclosure, but just the right amount of enclosure, not too much and not too little, the creation of positive space in the land between buildings, walls, and trees—(one of the most subtle issues of all); and the support given by a hierarchy of volumes to natural hierarchies of volumes inherent in the land.

All acts of development, and particularly those defined in Sections 4, 5, 6, and 7, including placement and construction of buildings, hard surfaces, paths, roads, retaining walls, choice of trees, planting of trees, shall be undertaken in such a way as to optimize to the extent reasonably feasible, the enhancement of the structure already present in the land

2.7 Structure-Preserving Transformations in the Emerging Fabric of the Town

Initially, diagnoses will be based mainly on nature, and on the natural state of the land. However, as buildings, pedestrian space, and roads and other public works are built and established, then the fabric of the town, is per-

ceived and felt structure, will depend on these human-made features together with the nature and the land. Thus gradually the diagnosis will describe centers, emerging latent centers, and living centers, that arise in the newly created urban structure.

These living centers, too, shall be cherished, enhanced and preserved, by structure-preserving transformations that come afterwards.

Thus, the future actions of development, once the town has begun to take shape, will treat the town itself, its built space, its buildings, and its connective tissue, as a precious substance, which as much as nature, shall be protected, preserved, and enhanced by further actions.

As the town grows, extensions of major public space, public buildings, parks, and open areas—all of these—shall be made in accordance with the same principles and defined procedures of diagnosis and structure-preserving transformations. These principles and procedures are attached as part of the covenant governing the growth of the town under the headings of public spaces, major centers and major connections. See Section 4.

2.8 Diagnoses Shall be Made Slowly, Step-by-step, Over a Period of Many, Many Years

It must be emphasized that a successful diagnosis of the land must be done carefully and over time, and can only be done carefully, over time. There are two reasons.

- (1) Time. It takes an enormous amount of time, simply to walk the land, even a few acres of land, examine each place carefully enough, decide, through experience, which places have the most value, which places are the most beautiful and have the most potential to remain beautiful, if handled correctly.
- (2) Evolutionary change. In addition, the structure of Harbor Peak as it unfolds in time, has, at each moment in its life, a different overall character. This means, in practical terms, that the assessment of which centers are most important and most lovely, will change, as Harbor Peak evolves. Thus, even if it were possible to make a complete diagnosis at the start, on the virgin site, much of it would later be wrong, because it would lack relationship to the emergent structure.

For this reason, the process of diagnosis shall be done incrementally, each year adding diagnoses of new areas, roughly in the order in which HPA de-

cides to develop the land. A land diagnosis shall always precede construction of new neighborhoods (see Section 5), and a new neighborhood shall not be created until a diagnosis is in place, and is recorded for that place.

There shall be an elapsed time of at least two months, between the time of the diagnosis for an area, and the laying out of a new neighborhood in that area. This will allow sufficient time for due consideration of the diagnosis, and its consequences, and allow the meaning of the diagnosis and its accuracy, to settle before taking action on the basis of it.

HPA shall undertake ongoing diagnosis, at regular intervals, at a minimum at least once every six months. The diagnoses shall not attempt to make an overall diagnosis of the whole township, but shall address areas of land piecemeal - those which HPA deems most useful, or most likely to be needed next for growth and development.

The ongoing diagnoses shall also be applied to areas previously diagnosed, where construction has taken place, so that mistakes, or raw spots needing to be healed, or places that have potential for improvement, can be realized.

Rough ideas about possible, or best, structure-preserving transformations for a given place, shall be recorded at the time of the initial diagnosis.

Diagnoses shall be made by the Harbor Peak Administration together with the current Master Plan Consultant.

2.9 Model-Making as a Necessary Tool for Diagnosis

Diagnosis comes not only from walking the land, and from using one's eyes and feelings to assess the important centers there. It also comes from a grasp of the global three-dimensional layout of the land, and from a perception of unique spots and important places, as they present themselves in the configuration of land, slope, views, trees and buildings.

For this purpose, models are indispensable. Years of experience have shown that the best scale for such models is 1:200, or 1/16th inch to one foot. The models do not need to be fancy presentation models, and they do not need to be expensive. They need to be constructed so that they help a person grasp the land and buildings.

The essential purpose of the model is to allow a person to see the overall configuration of the land, and to judge the spaces that are actually felt by a person walking on the corresponding land.

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The Harbor Peak master plan requires that every diagnosis which approaches a definitive state, and every process of discovering, defining and laying out a new neighborhood, shall be accompanied by the construction of a 1:200 cardboard model, with the following physical attributes.

- * Cardboard contours to be made from corrugated cardboard, each layer representing a 2 foot vertical contour interval.
- * The ground to be represented by gray-green modeling clay (plasticine), laid over the corrugated cardboard.
- * Buildings to be made to scale, with walls and roofs made of manila folder material a cardboard stock which is which is II pt.
- * Trees and vegetation masses to be made of wire or small dowels or dry twigs with model-maker's lichen (flock) and paper representing foliage.

These models, shall, of necessity, be built piecemeal, as new neighborhoods are considered and formed. Individual models shall be built by the developer, or land owners, under the supervision of HPA. It is recommended that, unless the necessary skills exist, they be built for the owners, by HPA master plan consultants. They will be presented to the HPA when first made, and will form an indispensable tool in discussions and decisions about diagnosis.

2.10 The Overall Aggregated Model of Harbor Peak

A given neighborhood must respond not only to the land upon which it is proposed, but must also respond to the context beyond its borders. In order to be well adapted, it should respond to the nature beyond the neighborhood boundary, and to the surrounding existing built context—the neighborhoods and public places and paths and roads which have been built before. For this purpose, it is invaluable to see the models made previously, of these adjacent contexts, placed together into a continuous large model.

This model will show prospective buyers and citizens, what progress has taken place, what is contemplated, and help them make decisions about their own role in the future of the community.

The various neighborhood models shall remain the property of HPA, and shall be kept, permanently, in the Harbor Peak planning office. Each piecemeal model shall be made so that it fits together with previously made models, so that gradually a complete model of the Harbor Peak topography will be built up. The composite model, at the scale stated, will be about 25 feet by 25 feet in size. It will contain movable portions, so that one can reach any portion of the model to make adjustments, or experiments.

The composite of models shall be available for public inspection.

Prospective owners, architects, and developers, will have the opportunity to examine the model and, under supervision to prevent damage, to place test models in position, so that the adequacy of newly contemplated actions may be judged, and fine tuned.

2.11 Model Making as a Necessary Tool for Structure-Preserving Transformations in the Creation of Building Volumes

The creation of building volumes which support and sustain the structure of the land, requires continuous attention to structure-preserving transformations. See references in 2.16.

Here again, the operational procedure which will help applicants and officials to understand best what buildings volumes are genuinely structure-preserving, lies in the use of models.

At the time of submitting a neighborhood patterns of lots and buildings, and once again at the time of submitting a building design for approval, the owner shall prepare a cardboard model of the proposed building, which shall be placed on the extant model of the neighborhood, and judged in place, then modified and improved, until it is not possible to see an improvement in its structure-preserving character.

Once again, it is emphasized that the model made by an applicant shall not be judged by its degree of finish, or its elegance as a model, but shall be judged only by the extent to which the proposed building volume is seen to support the land, the character of the land, and the morphology of the neighborhood as a whole.

2.12 Full Size Mockups as a Necessary Final Tool for Structure-Preserving Transformations

Many issues are best evaluated in full scale mockup. In many situations, drawings cannot accurately and fully reflect the reality of what is being proposed, and full scale mockups are a quick effective and cheap way to actually gauge the impact of a possible action which is under consideration.

As a building project moves towards planning permission, the owner shall be required to make simple full size mockups, of its volume, and exterior spaces.

Building volume mockups shall be made by a combination of stakes, set in the ground, with tall 2 x 4s or other braced posts with strings indicating the outlines of the proposed volume, including the roof lines. A member of HPA shall examine these mockups and after discussion and adjustment, may give a goahead on key volumetric aspects of the building design.

Progress to design drawings shall not proceed until this mockup has been approved.

2.13 Professional Help

The issues and approaches defined in this master plan are so fundamental, so important, and so relatively unfamiliar, that professional help will most likely be needed.

Therefore, the master planning consultant, who drafted this plan, or others chosen by HPA, shall maintain an ongoing relationship with each project, and be on retainer that is paid by each landowner directly, as a tithed fee on each property. This fee shall be paid as part of the responsibility of ownership, when diagnoses are being made, when neighborhood planning is being done, and when building placement and creation of coherent exterior open space is undertaken.

Administration of this professional service shall be governed by HPA.

DIAGNOSIS OF THE LAND

[Note: The amount of this tithe will be limited, in a fashion consistent with practice in Oregon and California counties. We do not believe it needs to be too expensive. Maintaining this service on a regular basis will be the life support of the whole project.].

2.14 References and Incorporation by Reference

The judgments involved in deciding questions of diagnosis and structure-preserving transformations are highly complex. In cases of doubt, or in cases where disputes might arise in the application of these principles, we refer the county officials, and landowners and the Harbor Peak Association to the technical textbooks in which these concepts have been set forth. The primary sources of information lie in the indicated chapters of The Nature of Order, Books 1 through 4, published by Center for Environmental Structure Publishing, Berkeley, California.

The chapters from *The Nature of Order* referenced below, are hereby incorporated by reference, as a legal portion of this master plan.

[References: Centers and Wholeness Book 1, chapters 1-5

DiagnosisBook 1, chapters 7-9

Structure-Preserving TransformationsBook 2, chapter 2, and chapters 3-18].

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SECTION 3 INITIATING GROWTH OF LARGER WHOLES

MORPHOGENESIS & ELABORATION
OF BILATERALLY SYMMETRIC
STRUCTURES IN RELATION
TO THE LAND

3.I Introduction

In any piecemeal process, whether in biology or town planning, a vital question always arises: how do the larger wholes, the largest centers of all, form themselves, what stimulates their occurrence, what stimulates their movement towards completion and wholeness.

Traditionally, in 20th-century planning, the larger wholes were provided by maps — drawn plans — which show the configuration of the whole, and force future construction into the straightjacket of these lines.

However, for reasons stated in the Introduction to the plan, this method of achieving coherence, has an enormous cost. The resulting towns are dry, often lifeless, and have the quality of mechanical, and starkly antiseptic order. This plan has been deliberately created to permit a more organic form of development that arises from the land, from adaptation to the land, and from the sequence of adaptations, each one of which creates a different context, and hence a more living result, from the adaptation to the constantly evolving whole.

But since the Harbor Peak plan is committed to a more organic way of doing things, and contains the machinery for implementing these more organic things, it must also contain an organic, not preplanned, method for the growth and development of coherence in larger wholes—especially in the very largest wholes.

In this section, we present the solution to this problem. It is a fundamental and essential part of the plan.

3.2 Progressive Differentiation through Center Formation

The larger centers which give a town its distinctive flavour, and character, and life. They have come into being, almost always, as a result of some deliberate understanding, and some deliberate intention. There are these issues to consider.

1. A major center, which ultimately comes to shape and play a defining role in a community, is often defined, long before, by a simple and highly generative act. The Chichester Cross is an example — which started life, perhaps 2500 years ago, as a sacred tree or small cross, merely playing a modest, symbolic role at the time of the founding of the place. A thousand years later, it had grown in importance and emotional spirit, all of which was then consecrated by the building of the Chichester Cross, a beautiful late gothic

structure that stands to this day, near the cathedral. So, in some form, marks made in modest form, are chosen, as a go-player plays his first, all-important stones, in such a way as to set a field in motion that guides the growth of the future by providing an important center, to cling to, adhere to, and enhance.

- 2. As the major centers develop, they will be enhanced, further, by minor centers and connections, still quite large, and vivid in their own right as centers.
- 3. Locally, too, centers will be created from other formations of centers, largely by strengthening positive space.

[Note: A profound example of this type of process — illustrating the growth and evolution of St. Mark's Square, Venice, as it extended steadily over a thousand years or more — is given in The Nature of Order, Book 2, pages xxx–xx.].

3.3 THE GENERAL CHARACTER OF THIS CENTER-FORMING PROCESS

In view of a pressure towards simplicity, as the complex configuration arises out of diagnosis, it is imperative that the potential disorder being created by the random-like character of the land and its configurations, there is a countervailing force which creates or generates highly simple structures, to bring simplicity and order to the configuration.

Alternatively, we may equally well see this process in reverse: that morphogenesis naturally and spontaneously creates locally symmetric structures, and that their simple order then comes in conflict, or enters necessarily into adaptive interaction with its surroundings, modifying the simplest symmetries, and forcing generation of limb-buds, which begin new centers of local symmetry, when the old one is exhausted or is too restrictive to be any longer useful or possible.

3.4 Templates for Possible Urban Limb Buds

There are a variety of simple, archetypal configurations which allow, or encourage formation of a coherent, bilaterally symmetrical limb bud. Here are examples of some different basic types:

- * Symmetrical space, with a well marked axis.
- * Space surrounded by roughly symmetric buildings forming a wall or enclosure on two sides
- * A space with a symmetrical building at one end.

These symmetry principle shall be brought into play, to generate the morphogenetic fields, in the manner specified in subsection 3.13.

3.5 THE OVERALL SPATIAL PATTERN OF THE URBAN CORES (THE PALE-BLUE FIELD)

In response to the diagnoses which have been performed in the past, and to the overall current state of the diagnostic map for Harbor Peak, it is possible to draw a field which represents an approximation of an appropriate overall gestalt for the future distribution of urban cores in the Harbor Peak community. On the opposite page, we see a representation of such a field. The pale blue areas, and above all the overall configuration or gestalt of these pale blue areas, represent a hint of the emerging town which can arise and which, in relation to the present diagnoses, would most beneficially arise.

Of course, the places referred to as urban cores are not truly urban, in the sense of cores in Chicago or San Francisco. They can in many cases be extremely modest. For example, the small community of Nicasio in California, has less than 200 households spread over a wide area, but it has a beautiful small square, with a baseball field forming the town green, with four roads on the four sides, with three small stores, a restaurant, and a rarely used church. There is green grass and fields visible in all directions; it is extremely rural. Yet it forms a strong and beautiful center, which charm and magnetism.

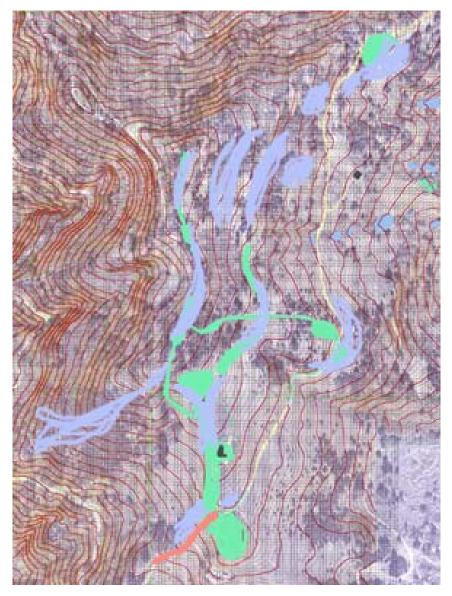
The pale blue field indicates the main lines and areas which might, possibly begin to form a connective net and distributed small urban centers in Harbor Peak. The positions are not required, nor are they coercive: they are suggestive only. Nevertheless they are to be taken very seriously, as a stimulus toward a coherent and valuable community.

The land in the areas that are blue, shall be intended for people who wish to contribute toward the social life of the town, the small scale shops and cafes, workshops or businesses, and to any other socially useful activities which may naturally draw people to them.

In general, the houses built on these lots shall have, along the frontage, at ground floor, either workshops, or shops, or other

^{*}A smaller center hanging off a large one, and giving it additional strength.

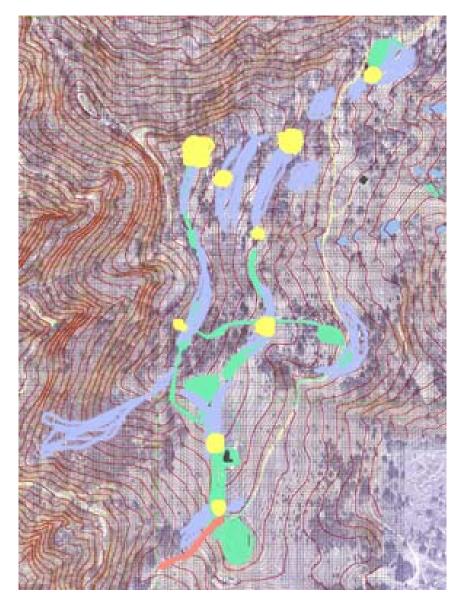
^{*} Intensifying the shape of a larger center.



Step 3.5. The pale blue growth field, indicating a tentative layout of urban centers, and their possible relation to one another. This global configuration will guide detailed development to create the broad pattern of urban centers.

activity more interesting than the house itself. The dwelling itself shall be located above, or behind this street frontage.

The community, guided by HPA, shall make every effort to discuss and modify and improve the pale blue field, as time goes by, thus making a succession of steps towards social value in the future.



Step 3.6. The field of golden dots, seen in the context of the pale blue growth field, indicates a tentative layout of main urban buildings, and their possible relation to one another. This global configuration will guide detailed positioning and development of the main public buildings, one by one, to as to create approximately this spatial pattern.

3.6 The Point-Field of the Most Important Buildings in the Town (the golden field)

In order to create a natural and felt order in the town, one that is deeply felt and experienced every day, there must be buildings that form focal centers—special, differentiated, buildings—which both stand out, and also provide the points of anchorage for the most important public spaces in the town's urban core.

Here the field identifies the natural positions for important buildings, or large masses that have some height. These spots are determined by an extension of the diagnosis process, and without regard, at first, for what these buildings might be, in function. All that this field says, is that important public buildings, placed as markers in the land, will be the guiding lights of the community, and ultimately of its space and social life.

The land marked in these ways shall not be sold, nor building permits given, until some building, earmarked as special, and with special height, or shape, or material, or color, shall be identified, its function and source of funding provided for.

3.7 Forming Coherent Space to Make Public Squares in Each of the Individual Urban Cores (the dark blue field)

In each space, dominated by one or more special buildings, the space itself needs to be shaped to bring out the uniqueness of the interaction of the buildings and the land. Above all, around that space, the buildings which grow must help form the space: and the space-and-buildings together form a unique configuration.

However, like everything else, this space-and-building configuration cannot be forced. It needs to grow discretely, slowly, from the interaction of individual shopkeepers and householders and their workshops, paying homage to the building which dominates the square.

The town shall exercise the necessary rigor in the placing of buildings surrounding these squares, so that the space comes to life, and the public buildings identified take on special weight, by virtue of the way the smaller buildings help to point towards them.

The dark blue field indicates encouraged building positions within an individual urban center.

* Owners shall be given incentives to build to the envelope.



Step 3.7. The dark blue growth field indicates a tentative layout of urban spaces, formed by buildings to be centers, and their possible relation to one another. This global configuration of building masses and contained urban space, guides detailed development to create the foundation of Harbor Peak's pattern of urban centers.

3.8 How the Three Growth Fields will Stimulate Formation of the Three Necessary Types of Larger Pattern

All three of the scales described in subsections 3.5, 3.6 and 3.7 require help beyond mere diagnosis of latent centers plus responses from acts of development. The Master Plan provides for this system of guidance fields, which themselves emerge from the ongoing diagnosis and development, but also

guides the creation of a more coherent urban pattern that will help to develop spatial urban cores that are geometrically and functionally coherent.

The essence of the situation is twofold.

First, each of these three fields shall carry specific incentives that strongly encourage prospective landowners who buy land in these areas, to undertake useful development for the public good, to live and work there, to provide services, and to help make the public spaces pleasant, useful, and attractive for community and casual associations on a daily basis.

Second, in order to maintain a dynamic relation with the (now unpredictable) directions the town growth takes in future, it shall be borne in mind that these three fields, unless zoning maps, are changing and fluctuating annually, in a way guided by the HPA, keeping pace with changes and developments in the community, and adapting new versions or modified versions of these fields to make the most of opportunities as they arise.

3.9 Incentives Coupled with the Pale Blue Field

Requirements for the pale blue field:

- * Is required to place buildings to form useful connective public space.
- * Density is required to be greater than 50% lot coverage
- * The lots built in the plae blue field areas shall uniquely be given an advance ability to split lots at some future date. Thus as density grows, the landowner will be enabled to make money on his investment in the community.

Incentives

- * Property is sold by HPA to the developer at 50% discount. (?This takes the form of a rebate: the developer shall make pay full payment to HPA; upon completion of the construction in accordance with requirements, HPA will refund half of the money paid for the land, with interest.)
- * A land owner in this area can buy small lots, cheaply.
- * Each landowner shall place his buildings to form useful connective public space.

3.10 Incentives Coupled with the Golden Field

The absence of genuine public buildings is one of the most serious problems in modern day urbanism. In traditional towns there was always a system of main recognizsable public structures: a church, a pub, a bridge, a fountain, a tower, a mansion with a public presence, a library, a cafe, a park, a beautiful seat, a lovely tree. In modern development construction, a pale shadow of some of these items is occasionally present, but most often, there is no heart and soul in them, they are not inspiring to be around, not inspiring to visit, or to live with every day.

This is essentially because the aspect of these buildings that existed in traditional towns was something glowing, something one might consider as a spiritual or religious in its deeper aspects. Yet, in fact, it had little to do with organized religion. It was more a question of the pride that people had, a belief in themselves, an expression of soul that was publicly motivated. And this quality was reflected in a certain majesty in the architecture: not necessarily expensive, but grand nevertheless. Even a modest public bench was shaped to be a thing of beauty, which reminded people who they were.

This quality, we may call spirit, depends on the careful choice of such buildings, and then on the provision of these buildings with a majestic and authentic face which brings the human heart face to face with people going about their daily lives and reminding them of their own value. Modern construction has as a rule done none of this.

The following incentives shall be implemented to encourage the creation of the golden field:

- * Public buildings occupying the positions indicated by the golden field, shall receive a cash grant of 50% of construction, from HPA.
- * Buildings built in this category will be sought and encouraged by the HPA.

3.11 Incentives Coupled with the Dark Blue Field

Dark blue field:

* Developer is required to build to the envelope indicated on the dark blue field map, within a tolerance of i'.

- * Is required to build at least x% of the buildings structured so as to accommodate both residential and business use.
- * If a developer buys a lot or piece of land that sits in the pale blue field, and wishes to take advantage of the blue field incentives, he must fulfill both the more general requirements of the pale blue field, but also the detailed requirements of the dark blue field.

3.12 Annual Adjustment of the Location and Incentives of the Fields

This approach is fundamentally different from zoning. It allows the subtle development of the whole over time, in part because these fields will be adjusted over time, in response to the evolving reality of Harbor Peak. The exact location and configuration of the fields will be adjusted to respond to the buildings already built. Thus the rigidity of zoning is avoided. In addition, the fields do not force a particular pattern of growth or segregation, they merely encourage a certain structure of wholes to develop.

The configurations of these fields shall be reviewed and adjusted from time to time by HPA as it sees fit, but at least once a year. The incentive structure shall likewise be reviewed and adjusted, but in no case if a developer has undertaken a project under a particular incentive shall the incentive for that particular project be adjusted after the fact.

3.13 Criteria for Defining and Upgrading the Fields: The Role of Local Symmetries

Where do these fields comes from, and how are they defined?

Genesis of the pale blue field. What are the site specific components that allow us to generate the pale blue field?

- * We choose areas that are marked highly valuable in the diagnosis
- * Most of these sites are on slopes, thus creating a natural vector along the contour, and create areas which are long and narrow with an axis of symmetry along the contour.

- * Along the edge of the slope there are identifiable views. These are highly site specific and can change within a few feet. The axes that are most prominent, and most beautiful, form natural lines going outward from the slop. * The overall array of blue patches has a sweep and connectivity. The swarm is located at what appears most likely to become the natural center of gravity of the community.
- * The blue patches are also distributed to be a connected array or centers, thus potentially forming a true heart of the town.

Genesis of the golden field. What are the site specific components that allow us to generate the golden field?

- * Each of the buildings or gold spots in the field is placed in a commanding position, with respect to the areas defined by the pale blue field.
- * This commending position may typically be in the middle of a long curve, looking outward, or
- * It may be on the axis of the long pale blue area, thus positionally forming the "head" of the center and space that will occur there.
- * These rules are very approximate. In other instances important accidents of placement, watercourses, views of distant mountains, may dictate a unique position which uniquely gives the blue area its character and its main subcenter.
- * The placement of the golden spots form a coherent field which should, as far as possible, delicately indicate the overall form and thrust of the township.
- * Within this array of golden spots, the size of the gold spots indicates importance or sense of priority.
- * There is also an implication that the gold spots will generate buildings that stand out. They may stand out by height, by symmetry, by ornament, by color or material. They may in one or two instances be large. However, others may be extremely small. It is their imposing uniqueness and beauty that matters more than the physical size or height.

Genesis of the dark blue field. What are the site specific components that allow us to generate the dark blue field? Here the issue concerns space, and the beauty and coherence of space.

- * The beauty of space, especially urban space, depends on its positiveness.
- * Roughly the positiveness of the space depends on the extent to which it is shaped and surrounded, for at least part of its perimeter, by buildings.

- * It is also valuable that the building masses are punctuated, sufficiently, so that view out to larger wholes and spaces are possible.
- * On a sloping site, as most of these sites will be, the downhill (open) side of the space will more often need to be open, while the uphill side will most often need to be fully enclosed or very nearly so.
- * The shape of the space, oriented to the view and long along the axis of the contours, is the vital issue, and the beauty of this shape will come almost entirely from the way in which the buildings form an envelope.
- * If one of the major buildings (from the gold field) is part of the envelope of the space, then it is extremely important that the other buildings forming the envelope somehow enhance and "point towards" this important building.
- * The buildings that surround the space may in many instances need to touch. This virtually requires a masonry wall, at least at ground level.
- *Further, as specified in the description of the blue field, many of these buildings will contain workspace or commercial space, or workshops, at ground level, thus forming a friendly and public front to the space.

The above criteria shall be applied to all lot subdivision and to all building permits for construction in the pale blue areas.

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SECTION 4 DENSITY DISTRIBUTION LOT SIZE AND LAND USE

4.1 The Fundamental Role of Lots and Dwellings

There are to be 1300 lots in Harbor Peak. Each lot shall be allowed to have one dwelling built on it.

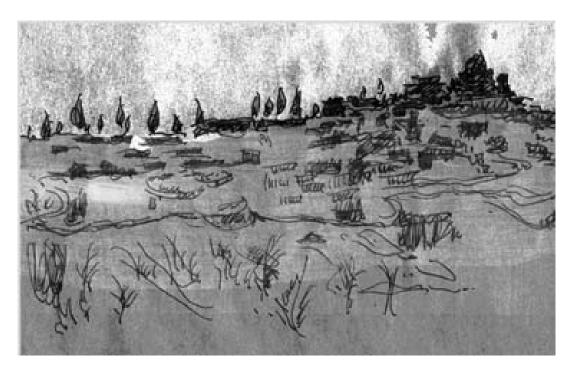
In addition to the house, each lot may also have up to 1000 square feet of workshop, workspace, or commercial space built next to the house or under it or over it. In addition each lot may have an in-law apartment or cottage on the same lot.

There shall be no zoning by use types. Instead so long as each lot has one dwelling on it, the lot may support some mixture of these functions. The lot is always understood on the basis of the fact that it contains, or may one day contain, a dwelling.

4.2 The Density Gradient

The site of Harbor Peak has a natural focus on the ridge which is, topographically, the highest part of the land. There is a natural sense that high density should accumulate around that area, and fall off towards the periphery of the town. This observation was made by Bill Buchanan and other colleagues. They based it on analysis of the density patterns in European hill towns—which have had centuries to evolve and which add to the beauty and drama of the landscape, rather than blight it; on analysis of how to strengthen and clarify, rather than muddle, the natural forms of the hills as seen from a distance. The same pattern is indicated when we analyse the terrain most naturally suited for building, and that most naturally suited for growing things. The resulting vision of the town is illustrated in the sketch on the opposite page.

In Harbor Peak lot size and construction density shall not be uniform across the land, but shall instead be modulated in response to the natural order of the land, according to the prescriptions given in this Section.



Impression of the ridge top of Harbor Peak, seen from the East.

4.3 Built Land Alternating with Natural Land

It is our intention to provide mechanisms which will encourage both untouched natural land and natural terrain embellished by human hands to be part of the life of the people in the town. These enhanced natural areas will, in effect, form pockets of zero density. The un-built land will offer gradations along the range of public to private, offering a full range of choices from the lively park to the quiet garden.

The overall pattern of built and natural terrain, is to be made in conformity with the understanding that the terrain can, naturally, form breaks, fire breaks, a natural counterpoint, to what is built. In broad outline, 25% of developable land will be protected and enhanced in its natural state, and then carefully interwoven with developed areas so as to prevent the uniformity and destructive sprawl that has too easily arisen in developed townships controlled by 20th-century techniques of zoning.

4.4 Summary of Acreage

The township of Harbor Peak, includes 695 acres in total, of which 560 acres lie within the urban growth boundary (UGB), and the remaining 135 acres lie outside the UGB and are protected from development. Of these 560 acres, 123 are too steep for construction, leaving 437 which have less than 35% slope and are suitable for building. One quarter of these 437 acres are to be preserved for fingers of natural vegetation, and three quarters, or 328 acres, are to be dedicated to construction of neighborhoods including roads, homes, and workplaces. On these 328 acres a maximum of 1300 single lots are to be built, and these lots may contain one dwelling per lot, together with ancillary workplaces and in-law cottages.

The 695 acres altogether of the Harbor Peak community altogether may have upon the 327 acres of land to be developed a maximum of 1300 households, together with all other necessary related built space, for community buildings, business, public facilities and workplace-related structures, as set forth below. The 695 acres shall also include natural topography, existing vegetation, natural views, a few scattered buildings currently occupied, logging roads, and initial access roads from the community of Harbor and from the South Bank River Road.

4.5 THE DENSITY DISTRIBUTION

In Harbor Peak, density shall be defined as the number of lots permitted per acre. The arithmetical view of the density distribution is shown numerically in this section 4.5. The same information is presented graphically in the diagram in section 4.6, and topographically (that is, as distributed across the land) in section 4.7.

The mean overall density on the 328 developable acres of Harbor Peak designated as suitable for development is approximately 4 lots per acre. The most common density types are in the range of 4-6 lots per acre. The highest density allowed anywhere in Harbor Peak, is 30 lots per acre. In the present distribution there are only 4 acres of this density within the entire township. The two lowest density-types of 1 lot per acre and 1 lot per two acres together cover nearly one half of all the land to be developed in Harbor Peak, a total of 127 acres.

The numbers from which the density map and diagram and their statistics are derived, are presented in the following table.

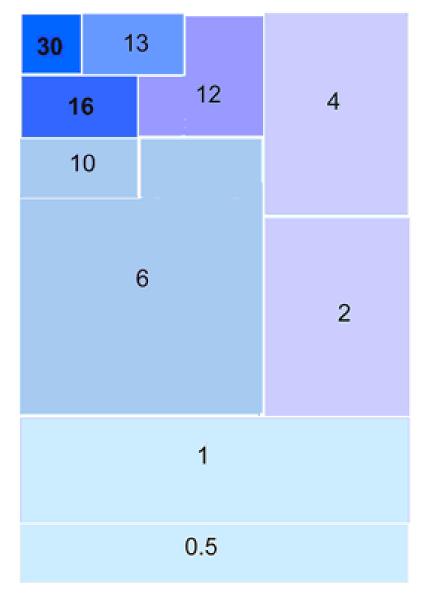
DISTRIBUTION OF DENSITY BY AREAS AND TYPE

TARGET DENSITI	ES LISTED IN ORDER OF I	NCREASING DENSIT	Y
HOUSE TYPE	DENSITY	ACREAGE	HOUSES
Very Large Lots, Gentle Slope	o.5 per acre	49 acres	25 houses
Large Lots, Gentle Slope	ı per acre	78 acres	78 houses
Single Family Houses	2 per acre	58 acres	116 houses
Loose House Group	4 per acre	48 acres	192 houses
Tight House Group	6 per acre	26 acres	156 houses
Urban Center	6 per acre	31 acres	186 houses
Stepped Terrace Houses	10 per acre	8 acres	80 houses
Spanish Steps houses	13 per acre	13 acres	156 houses
Row Cottages	13 per acre	6 acres	78 houses
Ridge Top Houses	16 per acre	7 acres	112 houses
Live-in Workshops	30 per acre	4 acres	120 houses
TOTALS		328 acres	 1299 houses

4.6 Graphical Representation of Areas of Different Density

The graphic distribution on the next page does not show topographic locations of areas of different density, but merely shows, graphically, the relative quantities of different density types. Each density has an area, in the diagram, that is proportional to the total area of that density type on the ground.

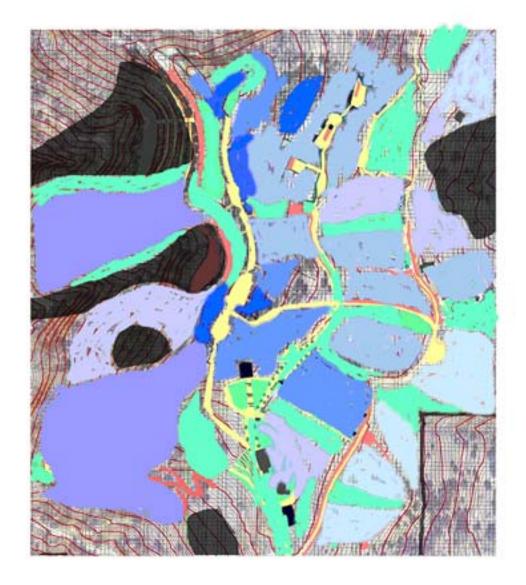
Diagrammatic distribution of quantities of different densities in the 328 acres of land to be developed in Harbor Peak. Each density is expressed in dwelling units per acre.



Step 4.6. Graphical Chart. The numbers in each area show the density in lots per acre. Dark blue is the most dense, lightest blue the least dense. The area of each color shows the relative number of acres of that color, at the same scale as the areas on the map opposite.

4.7 Topographic Density Map (Illustrative simulation only)

Illustrative plan showing density distribution for approximately 1/3 of Harbor Peak. Numbers show lots per acre in each zone: the darkest blue represents 30 per acre; the lightest represents 1 lot per acre. Green represents the required 25% of protected natural land. Dark gray represents land that is technically unbuildable.



Step 4.7. The central area, with a density map showing positions and relative areas of of different densities.

4.8 PROTECTED NATURAL LAND

As stated in subsection 4.3, twenty five percent of the developable land in Harbor Peak shall be designated as protected land, to be preserved in perpetuity in a natural, or managed natural state or park land. This land shall be shown on the density map, as green.

The practical assignment of the protected green land, shall be made each time that a new neighborhood is staked out and planned (see Section 6). Thus, if a neighborhood of x acres is planned, at the same time an irrevocable assignment of x/3 acres

shall be made to the stock of protected land. The protected land shall be adjacent to the neighborhood (part of its boundary, for instance).

4.9 Commercial Space, Professional Workspace, Workshops, and Employment

With the exception of public buildings, all non-residential construction shall be regulated and established in relation to dwelling lots, so that by referring density calculations to dwelling lots alone, the overall density of all construction including non residential construction, is fully taken into account.

Every legal lot in Harbor Peak shall allow construction of one dwelling, (plus an in-law cottage, see section 4.10), together with up to 1000 square feet of commercial workspace. Thus Harbor Peak shall permit a freely mixed use environment, according to people's needs and inclinations, and will contain both residences, and shops and small businesses associated with the residences, if the resident so desires. Limitation of commercial use is achieved by area (see subsection 4.13 below).

As stated above, the baseline amount of shop or commercial space allowed per lot in addition to the residence, is 1000 square feet over and above the residence. If a resident wishes to build more than 1000 square feet of commercial space, approval must be given by HPA. In return for this permission for extra space the resident shall build a positive contribution to the public space in the immediate neighborhood or its environs. For every 100 square feet of commercial space allowed to be built above 1000 square feet, the resident shall contribute at least \$2000 to the development of public space in Harbor Peak, and shall undertake this improvement, in coordination with HPA. Such improvements would include building benches, gardens, trellises, fountains, gates, and so on.

4.10 In-Law Cottages

On each lot in addition to a dwelling and workspace, an in-law cottage, for rental or for the use of family members, may be built. The in-law cottage may have a built area no greater than 700 square feet, and shall not encroach

into the designated garden area associated with the lot (see Section 11, in Part Two of this plan).

4.11 Multifamily Residential Buildings

Since density is expressed in number of lots per acre, the underlying assumption is that all dwellings have their own land. As described above, the dwelling shall also be permitted a certain amount of ancillary business or work-related construction, within the lot assigned to the dwelling. In the case of a single family house, this is easy to understand.

Even in cases where high-density construction of dwellings is to take place, the individual dwellings shall be built in such a way that each one is assigned a certain lot. Thus each dwelling, even in a multifamily building, shall stand on its own land, have access to its own outdoors, and shall have direct access from the dwelling to the public commons and public right of way.

This means that apartment buildings, in the sense of buildings with interior corridors, or galleries for access to individual dwellings, are not permitted in Harbor Peak. Multifamily construction must take the form of row housing, or connected buildings, subdivided according to condominium law, in which each dwelling retains direct access to the ground, and direct access to public pedestrian ways. This rule shall apply even in the case of dwellings which are built for rental. Even in multifamily construction, each dwelling owner retains the right to build some square footage, for business or for work on that lot, up to a built area of 1000 sf, as described in section 4.9.

There are two exceptions: Hotels and old-age homes. A hotel or old age home which provide care and supervision, shall be considered as a single building. The density of rooms per acre allowed for such a project, is given in the following table. Such projects shall require special permission from the HPA, and shall also require 80% of the landowners within a 300 foot radius to support them.

4.12 Limitations on Lot Coverage and Built Space

Oregon's strong libertarian ethos indicates that residents want to have the freedom to add rooms, to shape and add to their houses over time to suit themselves, and this Plan explicitly permits and encourages that activity.

The plan intentionally provides no absolute limits on square footage of dwellings, since it is the intention of this plan to support organic evolution. The belief that someone should be able to add a bedroom when a child is born or a giant shop when one gets a notion to build a boat is strongly held and worthy of respect. We also believe that too many limitations would unhelpfully interfere with unexpected future creativity & organic development (where there is suddenly a new demand for space that may not be where at first anticipated).

It is hereby stated that there shall be no explicit limitation on residential square footage for any given residence.

The initial layout of a neighborhood shall indicate a rough footprint size for each residence, and a tolerance for adjustment during design and construction, which together indicate a maximum size to which the house can be initially built. After initial construction the house can be further added to, without explicit limitation as to square footage of residential space, so long as the main garden space as initially staked out is not built upon.

If, in the future, Harbor Peak requires such limits, the modifiable (and variable) neighborhood-by-neighborhood private covenants shall provide the opportunity to permit them. (what are these covenants, and where are they defined and what is the procedure for creating them???)

4.13 Estimated Overall Amount of Construction at Build-Out

A distillation and summary of points delineated in later sections of the plan suggest that the estimated most likely amount of construction at build-out (including both residential and non-residential) is approximately 1.6 million square feet of built space, and the estimated maximum at build-out is 2.25 million square feet of built space.

4.14 Periodic Revision of the Density Map

- * The density distribution shall, if necessary, be revised each time a new neighborhood is defined.
- * The density distribution may also be examined and revised more frequently, at the discretion of HPA.
- * Whatever revisions are proposed, density will be adjusted in such a way that the total number of houses remains at, or below, 1300. This maximum shall remain fixed, unless modified by Curry County, as an amendment to this plan and a Comprehensive Plan Amendment and also approved by the HPA.
- * For land already sold by HPA, once sold the density allowed on that land may no longer be adjusted up or down by HPA, unless the owner of the land approves this adjustment in writing.

4.15 Illustrative Example (Narrative)

We illustrate the process of modifying the density map, by referring to the new neighborhood, given as an example in sections 6, 7 and 8. At the time of drafting this master plan for submission, we chose an area to begin building, in the area just south and south-east of the Harbor Peak: an area of 4.3 acres, all told, shown in the following drawing.

In the state of the density map prior to laying out this neighborhood, the area in which the neighborhood is proposed was categorized at 13 lots/acre, thus allowing a total of 56 lots.

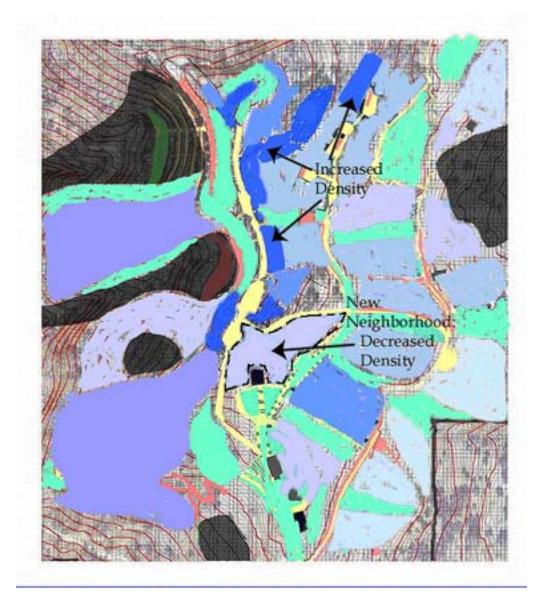
In the approach that we now wish to take, the density in this area is roughly uniform, and includes only 17 lots, thus a density of 4 lots/acre. This is a reduction of 39 lots.

To compensate for the loss of 39 lots, an area at the north of the central ridge composed of three pieces of land is increased in density, with a total gain of 39 lots. This is shown in this revised map (overleaf) which may be composed with the initial condition shown in subsection 4.7, and is calculated in detail in subsection 4.16.

All adjustments to the density map by HPA shall follow this general procedure, allowing a reasonable re-distribution of density which responds to unfolding conditions over time, while ensuring that the overall number of lots in Harbor Peak is preserved.

The modified density distribution, shows lower density in the area of the proposed new neighborhood, and a compensatory increased density in an

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Step 4.16. The central area, with a modified density map after adjustments have been made, while keeping the overall total dwellings constant.

(as yet unplanned) area toward the north end of the ridge. This is now adopted as the current density map.

4.16 Example of Calculating Allowable Number of Houses for a new Neighborhood, and then Adjusting the Overall Density Map

In this example, the area of the proposed new neighborhood is 4.3 acres. Based upon the original density map, the proposed neighborhood sits in the 13 lots/acre density zone; for the proposed neighborhood as a whole this zone gives an allowed total number of lots of 56. See calculations below:

In considering creating this neighborhood, HPA has deemed it more appropriate to have only about 17 houses on this piece of land. The density in this area will be therefore be adjusted downward, so that the entirety of the 4.3 acres is placed in the category of 4 lots/acre. (see map)

New neighborhood, before and after adjustment

	DENSITY	ACREAGE	HOUSES
BEFORE	13	4-3	56
AFTER		4.2	
AFIEK	4	4.3	17

This nbd. area has 39 (56 minus 17) fewer lots than the density surface previously allowed, and thus requires HPA to adjust the density surface elsewhere, to allow the placement of 39 more lots elsewhere in the Harbor Peak. In this example, HPA will do so by converting some land near the northern end of the ridge from 6 lots/acre to a higher density category of 30 lots/acre. See map showing the three pieces of land which together total 1.6 acres, and the calculation below.

North ridge area, before and after adjustment

	DENSITY	ACREAGE	HOUSES
BEFORE	6	1.6	9
AFTER	30	1.6	48

Thus the number of dwellings allowed for this north ridge area has increased by 39, and the total number of dwellings allowed in Harbor Peak remains unchanged.

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SECTION 5 PUBLIC RIGHTS OF WAY

THE PRIORITY OF PEDESTRIAN SPACE

5.I Introduction

The Harbor Peak Master Plan has one particularly fundamental and innovative aspect: The plan is consciously, and explicitly, based on the proposal that human beings, adults and children and animals walking, are the essence of which community is made, and that the land given to the community for movement is configured in such a way that the priority of pedestrian space over all forms of vehicular traffic is to be established, without in any way causing a deterioration of needed daily access by car and truck, and while maintaining the highest level of access for fire-safety vehicles, ambulances, construction vehicles and other necessary road-based transportation.

In this section we set out the core of the new approach which will allow the community to generate a road and path structure that will enjoy the benefit of these apparently contradictory aims without impediment.

In reading this section, the reader should bear the following in mind: Whenever a right of way is defined, it shall always be done with the understanding that necessary additional vehicular elements—roads, emergency vehicle access, and parking rights—will be assigned to some portions of the right of way and certain surfaces within that right of way, and will be assigned areas, widths, specifications, and surface-materials consistent with the vehicular needs and conditions defined in Section 8.

However, it shall also be understood that every right of way is to be regarded as primarily PEDESTRIAN, in conception and use, and that the vehicular portions, that are for the use of cars, trucks, and emergency vehicles, are to be regarded as SECOND-ARY, and subsidiary to the core of each right of way which is to be pedestrian.

5.2 The "Pedestrian" Nomenclature for Rights of Way

In present day parlance, the term "public right of way" has been gradually taking on a diminished meaning, and has devolved in people's minds to more or less mean "roads". Pedestrian sidewalks, or paths may be grafted on to the road, within the right of way. The idea of using the term right of way to refer specifically, and all-embracingly, to a PEDESTRIAN right of way, may seem unusual, and inconsistent with current practice. It is however, intentional.

The ultimate purpose of public rights of way is to provide access and convenience and pleasure to people, and to create a world where people may freely and comfortably walk about. That aspect of rights of way has almost disappeared, during the late 20th century, when, especially in new tracts and subdivisions, the vehicular roadway became the dominant entity, while pedestrian ways, if they appeared at all, were grafted on, in a fashion which was inadequate, and rarely created pleasure for pedestrians. There is no more logic in the idea of thinking of rights of way as only vehicular, than there is in the idea of thinking of rights of way as only pedestrian. Both pedestrian movement, and vehicular movement deserve careful attention. Indeed, pedestrian pleasure, and pedestrian use, for young and old, and families, is more primary in society and in people's well-being, than the purely mechanical use of access for vehicles.

In order to restore the balance in the emotional meaning of community, all rights of way shall be considered FIRST primarily pedestrian, and SECONDLY vehicular so that vehicular uses, and functional needs specific to vehicles, shall be placed within the pedestrian rights of way, in a reasonable manner consistent with the needs and requirements of vehicular travel and access, while occupying a mentally secondary position.

5.3 Extending the Pedestrian System

The primary rule of growth for the town is the rule that the pedestrian space shall grow from the features of the natural land, shall be carefully shaped to be beautiful and useful, so that it becomes an extension and embellishment of the beauties visible and inherent in the natural land, and is placed and built in such a way as to memorialize the beauty of the natural land.

The town shall grow and be improved, first and foremost, by adding, and embellishing, new pedestrian space, prior to the creation of any new neighborhood.

This means that pedestrian space shall have both conceptual and procedural priority over vehicular roads. Roads will be designed, in due course, to meet all transportation needs. But the layout and conception of all rights of way will be conceived, first, and before any other consideration, in those places which are most beautiful and valuable, and in a way that supports and maintains their beauty, so that these emotionally sustaining places are kept alive to become the heart and soul of the community.

5.4 Adherence to the Most Beautiful Natural Centers Identified by Diagnosis

Within the framework of contemporary planning practice, it is not yet widely understood that beautiful places need to be protected: and that this can only happen if the planning and construction of public space, and of buildings, is always thought of as a process which is to extend, enhance and make jewel-like whatever beauties presently exist in the land.

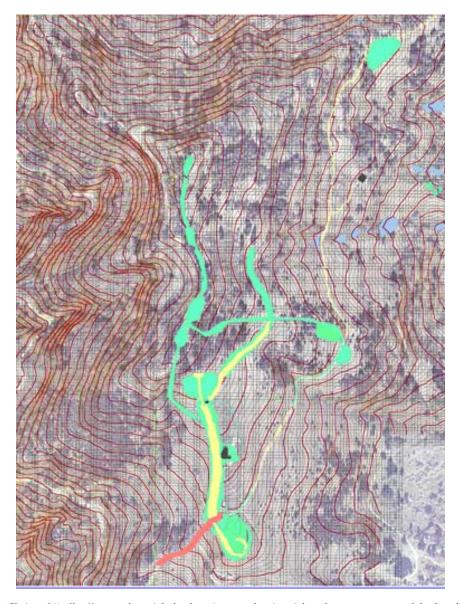
In the Harbor Peak planning process, especially in the early years, and thereafter on an annual basis, the HPA has the responsibility for walking the land, and recording the most beautiful centers that exist in the land itself. To do this, one needs to examine every spot, every special rock, every view, every natural platform in the land, any naturally beautiful small open meadow, every natural watercourse, every magnificent tree, and every flowering bush... and of course the larger living centers which must be enhanced and protected.

The core string of these beautiful places, the natural centers in the land, will be kept as the public spines of the neighborhoods, a series of most precious places, most of them pedestrian, which belong to everyone. They are—and shall become—the living rooms, the common land of the neighborhood and town: and they shall be freely accessible to everyone.

In this process all acts of planning and construction shall be defined and conceived as acts of healing whose primary obligation is to the beauty of the land.

A group laying out a new neighborhood, shall first repeat the diagnostic procedure defined in Section 2 to double-check its reliability and validity, and as a way of seeing and defining the major centers and places most suitable as main pedestrian paths and spaces in the neighborhood.

The HPA shall then designate pedestrian rights of way, in such a fashion that the physical form and construction of the right of way protect and enhance, and strengthen the naturally occurring beauty.



Step 5.4. Choice of "yellow" areas that might be the primary pedestrian rights of way to grow out of the first diagnosis, changing some areas from green to yellow, and leaving other green for the time being.

The design of street furniture, grounds surfaces, edges, walls, benches, and building positions shall be conceived, designed, and built to enhance the naturally ocurring beauty.

The drawing on this page shows some of the first pedestrian rights of way identified and selected from the green areas in the first diagnosis (see Section 2).

5.5 Piecemeal Definition of New Rights of Way

Each year, certain actions shall be taken to increase the extent and area of defined pedestrian space.

This plan strongly discourages too-hasty decision making for new rights of way, since this, when done too rapidly, almost inevitably leads to conceptual or mechanical alignments, typical of drawing board planning.

New pedestrian rights of way shall be defined step by step, piecemeal, year by year, in accord with the interest of developers or new land owners in new areas of the community, and in accordance with the natural growth of experience and judgment on the land itself.

In Harbor Peak the way forward will depend on two kinds of actions, (1) initiated by HPA, making choices about the next areas which are good to develop or extend as a new neighborhood, and (2) initiated through negotiation by a sub-developer who approaches HPA and after negotiation chooses a particular area, containing a definite number of potential lots, and buys it to develop.

5.6 Strategy and Dynamics of the Extension Process: Obtaining the Alignment, Dimension and Position of New Pedestrian Rights of Way from Previous Piecemeal Diagnosis of the Land

In each of these cases, as new areas are chosen for development, the process of establishing pedestrian kernels, made of coherent centers, will begin.

Once a decision has been made to create and record a new neighborhood in the community (Section 6), the major pedestrian rights of way which serve that neighborhood, and lead to it from contiguous neighborhoods, shall first be identified and recorded in accordance with the provisions of Section 2. That gathers the information already recorded in previous diagnoses of the community, as it pertains to the general area of the new neighborhood.

As this process moves forward, typically the extant (previously done) diagnosis will need to be modified, slightly, since

the process of focusing on the new area, together with new insights received from the greater knowledge of adjacent areas, will allow a reinterpretation of the previously existing global structure, in the vicinity of the new neighborhood.

5.7 Annual Protocol for Pedestrian Area Creation

- * At irregular intervals, but at least once a year, HPA shall update the existing diagnoses for the Harbor Peak community by looking at the following two points of focus: looking at least one new area not yet developed, and also recording (if they exist) any adjustments or refinements to the existing diagnoses HPA may have become aware of, since the previous diagnosis.
- * HPA will identify areas in land which have not yet been sold where a new pedestrian center(s) will be necessary to the growing life of Harbor Peak.
- * HPA will stake out the rough outline of the new pedestrian centers.
- *HPA will stake out at least one pedestrian path connecting each new pedestrian center to another pedestrian center, and to nearby neighborhoods if they exist.
- * Then and only then, only after doing the above, the HPA shall stake out road extensions which it deems necessary for the life of the pedestrian centers according to the provisions of Section 8. At the point where the road reaches the pedestrian center, it may go thru the pedestrian center, it may skirt the edge of the center, it may go behind building sites which front onto the pedestrian center.

5.8 Subroutine of Steps for Layout of an Individual Pedestrian Right of Way

The growth of new pedestrian space moves forward one center at a time, in relation to and respecting the existing topography and natural features by paying attention to the context in the following order:

- a. Creation of major centers.
- b. Creation of link paths.
- c. Identification of horizontal areas.
- d. Identification of sloped areas.
- e. Identification of stepped areas.
- f. Relation to natural landscape.
- g. Relation to gardens and horticultural terraces and planting.

- h. Use of stone retaining walls
- i. Relation to water courses, streams and bridges.

5.9 Evolution Towards a Coherent Whole for the Pedestrian Network

Though growth of the pedestrian network will occur in a piecemeal manner over time, an overall coherence is important as well.

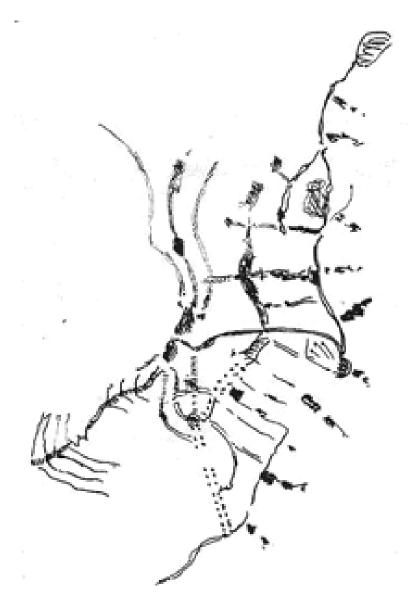
An illustrative example of a possible kind of network possessing such holistic properties in some degree is shown below. It must be emphasized that this example is for illustrative purposes.

Inevitably, the understanding of each pathway, and each proposed right of way will first be governed by the perception and observation of beautiful places in the land – and then modified, gently, to approach a coherence of the type visible in this diagram – but entirely without harmful control ahead of the fact. It will happen, inevitably, that the alignments of well chosen paths will sometimes be orderly, and at other places, seem rambling, or even accidental — and the whole will thus approach a truly organic landform in which paths and land together form a seamless, living entity. See opposite page for an illustrative example of an early possible global pattern for the Harbor Peak Pedestrian Network

The extension of the pedestrian centers and the network they form, shall be guided by considerations that create a system that is coherent, well connected, and also provides a natural intensity of pedestrian movement towards certain natural centers, originally inherent in the land forms, and now, gradually becoming visible in the emerging built community.

This means that as people move from place to place within Harbor Peak, certain lines will develop: in joining the most living places in the land, HPA will endeavor to record the lines of movement which connect them naturally, which then become a tracing of people moving in the terrain. (needs work)

PUBLIC RIGHTS OF WAY



Step 5.9. Sketch of an early conception of the pedestrian system as it may develop, showing a global configuration that may guide the details. It cannot be emphasized strongly enough, that even if this sketch or another like it seems beautiful and orderly, when it is realized on the land, it will ALWAYS, and MUST always come out different because it will be guided, every few yards, by real rocks, trees, declivities and so on—things that could never be represented in such a drawing.

5.10 The Priority of Pedestrian Space: A Further Advance Comment on Creation of Vehicular Roads

The essential point is that the environment of Harbor Peak is ultimately to be dominated by its pedestrian structure, not by its vehicular structure. Referring once again to subsection 5.1, it shall be understood as a fundamental principle (and is the essence of this Harbor Peak master plan) that layout and creation of pedestrian paths and spaces will always precede the creation of vehicular roads. As expressed in Section 8, all vehicular roads and travel ways shall be introduced into an area only after that area has first received a coherent pedestrian structure, and where pedestrian spaces and paths have first been located, planned, shaped, and staked out.

Vehicular alignments and travel paths shall always be located within the previously established pedestrian rights of way.

This requires that pedestrian structure shall be defined, conceived, and marked on the ground, before the mental structures caused in people's minds by engineering decisions about vehicular roads are taken.

5.11 Exceptions for Vehicle-only Roadways

There will be instances where a pedestrian center, or path, is so precious (from the point of view of natural beauty), or so steep and complex, that vehicles cannot negotiate the same alignment, or should not follow the same alignment.

In these instances, an entirely separate driveway or roadway shall be provided, which is primarily for vehicle access, and will provide no pedestrian sidewalks or pathways. Further discussion of this issue is present in subsection 8.5.

5.12 Physical Staking and Recording of Newly Defined Pedestrian Centers

As new pedestrian rights of way are established in the preliminary planning process for a new neighborhood, or even before, the possible new rights of way, if marked with stakes and flags, they will be capable of building a picture, in peoples minds, of the space which will be experienced.

The flags should be six foot steel or wooden stakes, with a white cloth flag on the order of 8 by 16 inches, flying from the top. These stakes shall be placed at about 100 foot intervals along the boundary of the proposed right of way.

The positions of these stakes shall be discussed, with relevant persons, and recorded as a preliminary configuration on the pedestrian layer, by the total station method defined in subsection 1.8.

Tolerance Recording

5.13 Physical Construction Sufficient to Allow Prospective Buyers and Owners to Experience the New Pedestrian Centers of the Neighborhood

If some portion of the pedestrian spaces are then built, first, before house construction and infrastructure in the neighborhood, this will be of major significance in the later design and detailed layout of houses, since it will inspire the owners and builders of houses, to conceive, and see, and build the houses as extensions of the public domain, and as structures which enhance the public community of the neighborhood.

It is strongly recommended, but not mandated, that as each new system of pedestrian centers is established for a new neighborhood, and that after the preliminary alignments of vehicular surfaces have been established according to Section 8, some significant physical traces of the soon to-be-built pedestrian ways are then built in the land, so that the neighborhood and its public rights of way, can be experienced by people walking about in them.

We suggest the following:

* After approval of the detailed development plan, the first step of construction shall be: Stone posts will be built all along the edge of a newly contemplated pedestrian center, perhaps 18" square or larger by 30" tall, at a spacing of between 15 to 35 feet. As buildings are built later over the course of time, the front wall of the building can engage the posts, or step back and let the stone posts define the edge of a path between building and post,

or perhaps low walls may be built to connect free-standing posts, and perhaps some buildings will jump forward of the posts where it seems appropriate to do so. But the posts define and create the pedestrian center from the early days, so that subsequent development is respectful of the center.

[Note: As an economy measure the stone posts might be replaced by big stones set by excavator especially in the areas of gentle grade. And in steeper areas where considerable excavation may be needed after the boundaries are roughly determined, and this excavation is likely to destroy the posts, wood or steel stakes as a temporary alternative might be used. However, the permanence, solidity, and beautiful character of stone posts is fundamental for the ultimate success of the planning measure. These economy measures should be used only in extremity].

- * The pedestrian paths will be created at this point, graded, and possibly graveled. And the path may also have stone posts along one or both sides. The paths and surfaces will be upgraded as appropriate, in the course of future development.
- * Then and only then may building of permanent roads take place, or the construction of excavation, grading, and so forth which is likely to lay a permanent position for a vehicular rightof-way.

[Note: Temporary dirt roads must be made. Without temporary roads vegetation can't be thinned enough to see, and to lay out pedestrian areas (currently you must crawl on your belly through many areas & become disoriented quickly). There may be areas we want to thin early, both for reasons of fire protection and so that healing can get started. However, even temporary dirt roads cannot be graded in without a clear picture, first, of the pedestrian areas that are developing, or likely to form, so that in the grading of temporary roads, too, it is done with cognizance of the priority that the pedestrian right of ways must have over the construction of vehicular roads].

- * No extension or development of permanent or semi-permanent roads or permanent or semi-permanent right-of-way into an undeveloped area shall take place until the above steps have been taken.
- * Any building development that takes place must respect the boundaries and paths of pedestrian rights of way.

5.14 Default Definitions of Surface Material for a New Pedestrian Right of Way

When a new right of way is first defined, the default surface of the new right of way will be one of the following:

- a. unfinished earth or grass
- b. crushed rock with fine gravel top surface
- c. partial paving mixed with (a) or (b).
- d. in cases where the slope is greater than 1 in 6, the surface for the area or a path within it will be stepped with risers retaining the surface material.
- e. In cases where the slope is greater than 1 in 3, the surface for the area or a path within it, will be provided by built steps and stairs.

5.15 First Round of Expansion of the Pedestrian Network

Neighborhood pedestrian streets running uphill from the southern portion of the road will be laid out initially, and sketched in with build-out provided as buildings take shape in local neighborhoods.

It is anticipated that the first round of pedestrian paths, which will connect to the main road, will be running uphill (west) from the southern portion of the main road. These pedestrian paths may occur upon alignments which will eventual have roads next to them, and so should be considered a way of getting a sense of the roads that might exist in this area.

THE BROOKINGS PLAN



SECTION 6

NEIGHBORHOODS

ALL DEVELOPMENT GOES FORWARD INCREMENTALLY, THROUGH CREATION, PLANNING AND CONSTRUCTION OF SMALL NEIGHBORHOODS

6.1 Creation of New Neighborhoods

The development of Harbor Peak shall go forward neighborhood by neighborhood.

Construction of houses, pedestrian paths, roads, or other improvements, can take place only after the neighborhood has been designated, and its boundary and plan recorded on the state map, the tentative plan approved as a DDP, and the final plat recorded (see Section 9 for requirements).

It shall be the exclusive prerogative of the HPA to establish new neighborhoods. When chosen, the plat of a new neighborhood shall always adhere to the provisions and procedures of this master plan.

6.2 Definition of a Neighborhood

A neighborhood is defined as a contiguous area of land which meets the following arithmetic restrictions, and has been selected by the HPA and designated by HPA as a neighborhood.

A neighborhood may contain as few as two houses, and as many as 20 houses, but not more.

In physical size a neighborhood may be as small as 1/4 an acre, or as large as 6 acres.

A neighborhood shall not be larger than 6 acres.

[Note: A given neighborhood may be made up of a mixture of lots of widely different sizes, for example a mix of a few large lots and many small lots; so long as the above parameters and the density specification for the land upon which the neighborhood is located are not exceeded. For more detail see Section 4 and Section 7.]

6.3 Permissible Development

New development may only happen in one of two ways:

- (a) It may occur within an existing, previously defined neighborhood, in which case the possible construction of houses, lots, paths shall follow the platted neighborhood plan, together with the processes for modifying such plan, provided in Sections 1-8.
- (b) If it is desired to build in an area that is not part of an established neighborhood, the area of intended new construc-

tion, or a larger area containing it, must first be established as a new neighborhood, by the process of this Section 6 and Sections 7-9.

The following exceptions to this constraint on development outside neighborhoods are permitted:

- (c) Under the supervision of HPA, the possible activity of landscape work such as thinning trees, and planting new trees, are permitted in areas where a neighborhood has not yet been established.
- (d) Under the supervision of HPA, and with careful advance warning and discussion, a temporary construction road may be built to reach a new neighborhood, if the plat for this neighborhood does not include full access as it stands.?? (needs discussion with Bill)

The initiation of development of a new neighborhood must be authorized by HPA. This may be done at the initiative of HPA itself, or of a prospective developer, or as a result of interest expressed by prospective lot owners who have shown a wish to purchase a certain area of land as the focus of their interest.

6.4 Neighborhood Interior, Neighborhood Boundary, and Interstitial Land Between the Neighborhoods

Not all land in Harbor Peak will ultimately belong to a neighborhood. Some land will be interstitial land, lying between neighborhoods. Such land may be permanently protected natural land, and may also include areas of steep topography, and areas of geology unsuitable for construction (see Section 4). It may also include green areas given protection in the diagnosis, and dedicated as pedestrian rights of way. (And areas outside neighborhoods will of course include unmarked land which is to be built on in the future, but which has not yet been given approved subdivision plans for its neighborhoods.)

- * Each neighborhood shall have two components, an interior area and a boundary area.
- * The interior area shall be a piece of contiguous land which shall be part of no other neighborhood.

* The boundary area shall consist of one or more areas contiguous with the perimeter of the neighborhood interior. These areas typically contain public land and public rights of way, and protected green land, and may lie contiguous with boundary areas of other neighborhoods or may lie directly contiguous with other neighborhoods. This will occur if, for example, two neighborhoods near each other, are both connected to, and make use of, the rights of way in their boundary areas. It will most typically occur when important pedestrian rights of way or roads serve more than one neighborhood, and are thus included in adjacentlying boundary areas of two or more neighborhoods which abut them.

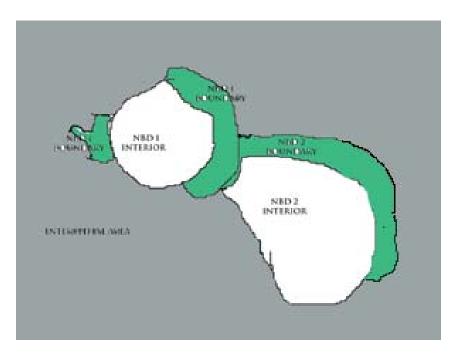
*The total boundary area of a neighborhood shall be at least one third of the area of the neighborhood interior. This land shall be protected by deed convenant, and may not be built upon by private buildings. It may, with approval of HPA, be used for construction of public buildings. (Public buildings may be placed in several types of locations: within a neighborhood, within the boundary area of a neighborhood, or within the green setaside land that is not yet dedicated to any particular neighborhood). *All other land that is not the interior of a defined neighborhood, and is not the boundary area of some neighborhood, shall be called "interstitial" land.

The diagram on the page opposite summarizes the relationships:

6.5 Calculation of Green Belt Areas and Dedication as Neighborhood Boundaries

As stated in Section 4.8, when a new neighborhood of x acres is defined, the HPA has an obligation to create an additional area of x/3 acres, adjacent to the neighborhood, which is irrevocably dedicated to protection and conservation as natural land. The calculation which has to be made is complex, and must be done carefully.

- * The total area of developable land in Harbor Peak, that is to be built upon is 328 acres, at maximum.
- * The area of protected "green" belt land protected from development or construction, shall be, in total, a minimum of 109 acres.



Step 6.5. Neighborhood interiors, neighborhood boundaries, and interstitial spaces between neighborhoods.

- * All land marked as green and protected, under the diagnostic procedures of Section 2, shall be considered as a part of these 109 acres of green belt land.
- * All areas which are marked as green, under the procedures of Section 2, less the area of any vehicular roadways which may be placed in those areas, shall be considered part of the protected land.
- * Each time a new neighborhood is established, whose interior area is x acres, then adjacent to the neighborhood, and contigous with it, a boundary area of x/3 acres shall be assigned to that neighborhood. This x/3 acres may include previously diagnosed "green" land, or otherwise unassigned green and natural land.
- * Green belt areas which contain local roadways for vehicles, may not be included in the calculation of protected x/3 acres that must be assigned to the neighborhood.

6.6 Public Land Within a Neighborhood

Paths and public outdoor spaces within the neighborhood shall be accessible by all, for everyone's enjoyment, except as specifically set forth in the particular preliminary neighborhood plan. The public land within the neighborhood shall be owned by an association made up of the residents of that neighborhood, or alternatively by the HPA. The lot owners shall be jointly responsible for maintaining and enhancing this public neighborhood space. Public land shall not be split up for anyone's exclusive use.

6.7 Illustrative Example

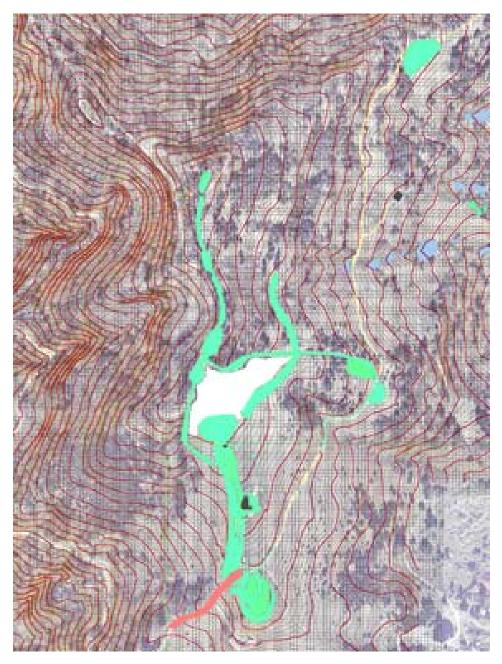
At the time of drafting this master plan for submission, we decided that the first place to begin building, would be in the area just south and south-east of the Harbor Peak: an area of 4.3 acres, all told, shown in the following drawing.

We decided that in this first neighborhood, we would build lots approximately 1/4 to 1/2 acre in size, or slightly larger. Removing internal paths and public land, and some small areas for conservation of woodland, we reckoned that this land would yield about 3.5 acres of net land, and so work out supporting some 14–15 possible quarter-acre lots in the new neighborhood, including a handful of small lots intended for cottages.

Definition of a new neighborhood. The white area is the interior of the neighborhood. The green areas are part of the neighborhood boundary.

6.8 Legal Process of Establishing a New Neighborhood by Submission of a Detailed Development Plan for that Neighborhood

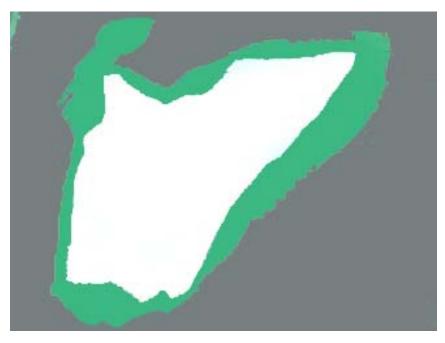
- * A new neighborhood shall be formally established when a detailed development plan or DDP for the neighborhood is submitted and finally approved by Curry County.
- * Land may not be sold until a DDP including that land and expressing its provisions, has been submitted and approved by Curry County planning department.
- * The information required in a DDP for acceptance by the county, shall be the following
- * Neighborhood boundary.
- * Tentative positions of houses.
- * Tentative position of lots and lot boundaries.
- * Position of public pedestrian rights of way giving access to the neighborhood.
- * Position of internal pedestrian rights of way within the neighborhood.



Choice of a new neighborhood. The area shown in white (4.3 acres) is the area selected for the first neighborhood, superimposed on the then current diagnostic map showing early and partial diagnosis of a few central areas of the Harbor Peak site.

- * Position of vehicular roadways within the public rights of way.
- * Location of parking spaces.

These features are further defined in Sections 7 and 8, where the processes to be used for determining them are set forth. De-



Neighborhood interior and neighborhood boundary. The interior (white) is building land which may be used for public space, house lots and houses, gardens, paths, parking. The boundary (green) is land which may not be used for house lots or house construction. It may contain protected wild land to be left natural, parks, pedestrian rights of way, and roads. It may, on occasion, also contain public buildings. The gray area is interstitial land.

tailed requirements for the DDP submission itself are then specified in Section 9.

6.9 Construction Sequence in a New Neighborhood

Often in residential developments, the infrastructure is built first before houses are built, often before the houses are really even conceived or designed. Roads, sewers, light poles, power lines, are all in place, before the actual houses are begun. This is a huge mistake; by locking in all the geometry of the neighborhood as the very first act, this effectively prevents the houses from being fine-tuned in any meaningful way to the land and surrounding buildings. This master plan specifically eschews this approach, for one which is more reasonable, and allows for subtle adjustment of the geometry of the houses and the details of the neighborhood exterior works during construction, by not building the infrastructure too early.

No construction of buildings or infrastructure for a given neighborhood may begin until a final plat has been recorded.

In general, construction of the houses must begin first, before any infrastructure construction (sewer, water lines/wells, roads and so on) can begin. Once house locations have been fine-tuned prior to pouring footings, and then the footings have been poured, and framing is underway, then infrastructure construction for the neighborhood may begin. The house construction and infrastructure construction will then be happening roughly simultaneously.

The exception to this rule: in a very small neighborhood of three houses or less, it is permissible to undertake infrastructure construction before the house construction begins.

For details see the provisions of Section 8.

6.10 Note: Financing of Large Parcels

At any time after approval of the Master Plan, portions of the land, likely near the perimeter of the master plan area, may be divided into parcels of 10 acres or larger, primarily for financing purposes. These parcels may be held for financing purposes, but they shall not thereby constitute legal neighborhoods. For any of these parcels, or any part of these parcels, to be considered as a neighborhood or developed as a neighborhood, the development process must follow the provisions of Section 6, 7, 8, and 9 in their entirety, and all other applicable sections.

THE BROOKINGS PLAN



SECTION 7

HOUSE LOTS AND HOUSE VOLUMES

PRELIMINARY SUBDIVISION

7.I Introduction

Houses and other buildings—their volumes—together with the shaped space they generate between them—are the raw material from which the life of the neighborhood, its public space, are made. They are active elements, whose volume, position and shape, play the largest role in generating the life of the neighborhood.

The placing of houses, and the choice of lots to support their positions, is therefore the most important task in laying the groundwork, and provides the skeleton, for the communal life of a neighborhood.

Bearing in mind this vital principle, the preliminary subdivision procedure for the neighborhood shall have the following steps.

7.2 Discovering the Natural Center of the Neighborhood

Given the boundary of the neighborhood, it is necessary to discover the natural center of this neighborhood. That process should follow a process similar to the diagnostic process described in Section 2.



The natural center of the neighborhood. This spot of land is felt, and easily agreed, as the most natural place, the natural focus, as people feel it and agree.

Walking about the full extent of the proposed neighborhood area, the decision makers from HPA shall identify that place which — by account of its beauty, by account of its natural pull, and by the natural focus that it can provide to the houses within

the whole area of the neighborhood — has the greatest claim to be identified as the natural neighborhood center.

This decision resides in the land, and is almost independent of the number or density of houses which surround it, and lead to it.

7.3 Deciding on the Number of Houses/Lots which are to be in the Neighborhood

The next task, after the center is settled, is to reach a decision about the number of houses which are to be built in this neighborhood. The first input to this decision about number is likely to come from the density map. According to the current density map and the acreage of the neighborhood, the number of houses may be determined arithmetically.

However, an intuitive judgment about the desirability of land in this location, its value and suitability for sale, may now suggest an increase or decrease in the total number of houses for the neighborhood. In accordance with Section 4, and subsection 4.14, local increases must be compensated elsewhere, so that the total number of legal house lots inside the Harbor Peak boundary, remains below 1300 after the change is made (see wording of subsection 4.14).

The density map is then adjusted to keep the total allowed in Harbor Peak, the same as it was before.

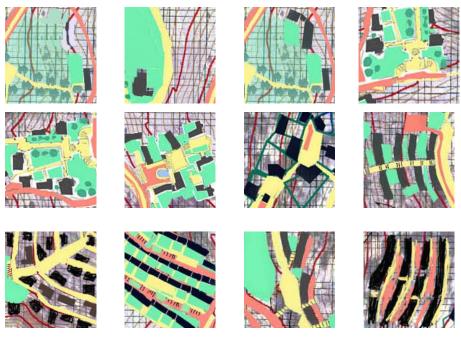
7.4 Considering Various Possible House–Group Types for the Neighborhood, according to their Density

As a rough guide, it may be useful to examine the suggested house group types, that are presented and discussed in Section 10. These types do not cover all possible kinds of arrangement, but they will help in the formulation of a suitable density pattern and an overall building footprint for the neighborhood.

HOUSE-GROUP TYPES

HOUSE TYPE	DENSITY	AVERAGE SF of LAND PER HOUSE
Very Large Lots, Gentle Slope	0.5 per acre	80,000 sf of land per house
Large Lots, Gentle Slope	1 per acre	40,000 sf of land per house
Single Family Houses	2 per acre	20,000 sf of land per house
Loose House Group	4 per acre	10,000 sf of land per house
Tight House Group	6 per acre	7,000 sf of land per house
Urban Center	6 per acre	7,000 sf of land per house
Stepped Terrace Houses	10 per acre	4,000 sf of land per house
Spanish Steps Ridge Terraces	12 per acre	3,500 sf of land per house
Row Cottages	13 per acre	3,000 sf of land per house
Ridge Top Houses	16 per acre	2,500 sf of land per house
Live-in Workshops	30 per acre	1,200 sf of land per house

7.5 Icons of the Different Density Types

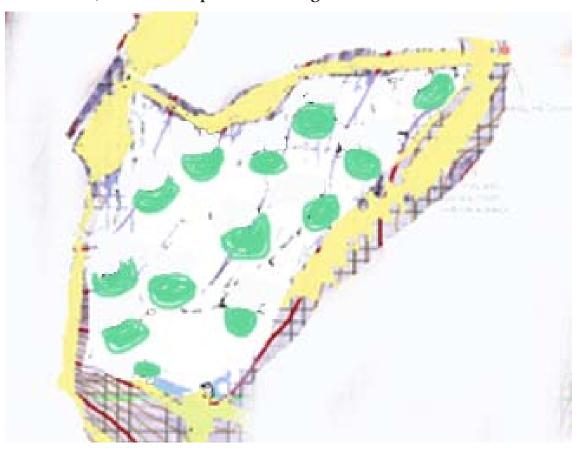


These icons describe different possible densities. Each represents a two acre area, 300 feet by 300 feet, and shows a possible configuration at a different density. Letters refer to the preceding table.

The twelve icons on this page may serve as a reminder of these different types. Please check Section 10 (in Part 2 of this Master-plan) for details. Once this information has been taken in, it will then be possible to formulate house positions, with a realistic sense of spacing between houses, and forms of aggregation for the higher density types. At higher densities, the possible forms of aggregation are more limited, and must be more carefully considered in advance. At lower densities, there is more freedom in the overall arrangement.

7.6 Choosing Gardens First

Before placing house volumes, the first thing to be located, for each house, shall be the position of its garden.



Garden positions. The gardens are placed by instinct, in those places where they contribute most to the well-being of the land, and are most beautiful and plesant to be in. This is done while walking the land, not on the basis of a drawing or a map.

This seems to reverse common wisdom, which would normally believe in locating the house first, and then the garden. However, once the garden is chosen, for its aspects, orientation, view, sunshine, and trees, it is then possible to make this garden a positive and beautiful place, and a source of value to the house. The house volume may THEN be placed in such a way that it cradles and enhances the garden. The sequence of this procedure will make the house more valuable, and more livable. Although the house seems to be viewed as subsidiary in this sequence, in fact the house and its interior become more valuable because of it.

Note again: The house shall be placed after a decision has been made for a best position of the garden.

7.7 Then Look for the Specific Positions of the Individual Houses with Relation to the Chosen Gardens and the Land



House positions. The houses are placed by instinct, in those places where they contribute most to the well-being of the land. This is done while walking the land, not on the basis of a drawing or a map.

Approximate choices of positions for the houses (conceived as volumes) shall now be made by inspection of the land in the neighborhood. On a first rough map of the neighborhood, and without reference (at this stage) to any supposed street layout, possible and desirable houses are now placed on sites, and in positions, which have desirable sunshine, view, access, potential for a garden and so forth.

The resulting map will initially look something like the one shown on this page. Such a map shall then be fine-tuned under the provisions of Section 8, by later processes having to do with placement of roads and utilities.

7.8 First Approximate Lot-Lines and Subdivision of the Neighborhood into Lots

At the same time that houses are being located, each house is now assigned a very rough parcel of the approximate size indicated by the total number (Average lot size is Neighborhood-area/N, where there are N houses).



Lot lines. Next, each house is given a lot boundary that suits the house, the garden, and its position, and that gives the house at least one well formed and pleasant garden. This, too, is done while walking the land, not solely on the basis of a drawing or a map.

Certainly, the resulting lots need not be exactly equal in size, or similar in shape. Nor need they have any minimum or maximum dimension or proportion. The lots should merely form a continuous packing of space, so that the lots, paths, and houses, fill the space gently, and well.

7.9 TREE CLEARANCE: THE DELICATE PROCESS OF CHOOSING HOUSE POSITIONS, FELLING TREES, LOCATING HOUSE FOOTPRINT, AND REFINING LOT LAYOUT

In the presence of trees, the process of arriving at a preliminary layout for the neighborhood is of necessity an iterative process. The layout will be rough at first, and then fine-tuned, in several passes. A major reason for this necessarily iterative process: the difficulty of making successful judgments in a dense growth of trees.

Trees are one of the main sources of beauty in Oregon; within reason, many should be left standing. Yet, of course, in heavily wooded terrain many trees will typically need to be removed in order to place houses. Here we face a "chicken and egg" problem. The trees themselves make it difficult to see where one ought to place the house; and until one begins to clear the trees, it is hard to see the land well enough to make good decisions about where to place the house. On the other hand, if one begins to cut trees down, in order to see better, it may turn out that the trees cut down are (it later turns out after the house location has been judged and understood) the very ones which should have been left standing. Avoiding this catch-22, therefore requires an operation of great delicacy. Trees must be taken down one at a time, using the judgement and weighing the likelihood that a given tree is not likely to be worth keeping, and yet one which will make a useful contribution to clearing and opening the site so as to allow good judgments.

Successive iteration shall be used as the method best suited to home in on appropriate and sensitively placed house locations while removing as few trees as reasonably possible. Over-clearing must be avoided, and in the built neighborhood the most beautiful and healthy trees must certainly be left standing (see discussion of structure-preserving transformations, in Section 2).

[Note: First round of layout. The first round of layout for house volumes shall be done without removing any trees, and will therefore be rough, and will require further adjustment. Use short stakes for the garden position, and tall stakes for house footprints. Stake these out, at first, trying to be sensitive to the protection of major trees, and, in this first round, without actually felling any trees.

The fundamental thing to keep in mind is that the building footprints should shape and support the outdoor garden space for each house, and the spaces between houses in general. The garden is the most important thing, the house is secondary.

The next day. Come back the next day, with fresh eyes, to see if this layout still seems roughly valid. First, if you immediately see adjustments you want to make at this point, do so, by adjusting the stakes and ribbons. Now, cautiously begin to fell trees carefully, one by one, from within the proposed garden, and within the proposed building footprint. After each tree is cut, you will be able to see more clearly what it the reality of what the stakes are proposing, and you may see some shortcoming in what you've done, some adjustment in position which may improve the house, the garden space, the neighborhood.

After EACH tree is cut, re-examine the staked positions, and adjust as necessary. This is delicate iterative work, and should be done carefully. It is as delicate as brain surgery; the mistakes are irreversible. One can always cut a tree later, but one can never put back a tree once cut; prudence and caution must be the rule.

Construction. Clear only enough trees to verify the stakeout you have done; you needn't clear all of the footprint, or all of the main garden. The preliminary subdivision plan for the neighborhood shall be based on these stakes.

Once the projects are under construction, final tree clearing may be done, and the layout may be further adjusted within the tolerances given in sub-section??.]

7.10 Small Pedestrian Paths Piercing the Fabric, and some Double Fences between Adjacent Lots

Some of the boundaries between adjacent lots shall now be configured as pedestrian paths, with the implication that each path lies between two fences (or walls or hedges).

These paths may vary considerably in width and uniformity, according to context and suitability. The narrowest paths would be (say) 5 feet wide. The widest might be as much as 15 or 20 feet wide or more along limited stretches.

It should be born in mind that these paths may, in certain instances, be used for parking, or for private vehicle access along their wider stretches.

The primary purpose of these paths, is to provide access to the lots, both for pedestrians and vehicles, where this is not already provided by access from large rights of way established previously. At this stage, this matter of access is being established as a matter of general feasibility. Detailed treatment of legal requirements for vehicles, is taken up in sub-section 8.x.



Here we see the rich composite configuration which arises from the mutual interaction of gardens, house-volumes, small paths, larger pedestrian rights of way at the periphery, parks and public land. Each neighborhood will become unique, in its own terms.

The paths of all the neighborhoods in Harbor Peak are for the access and mutual enjoyment of all. Residents of a given neighborhood may travel on and enjoy the paths of other neighborhoods.

Exceptions to the required paths will be granted where:

- * Slope along the property line makes even a stair unfeasible, i.e. slopes along the property line in excess of 30,
- * attached building pattern where buildings are contiguous along the property line. (in this case a lot line path must occur every xoo feet.)
- * Very small lots (in this case a lot line path must occur every xoo feet.)

Paths on every lot line would be monotonous, never different or surprising. In our example, we have a reasonable number, but we don't have yellow paths on every lot line.

Also, in steep neighborhoods, placing stairs at every lot line would be expensive at the startup, and also perhaps strange. Expense might be dealt with in the following way, that stairs for essential paths are built at the time of constructing neighborhood, other non essential stairs are to be built later, to be paid by HPA from home-owner fees.

7.11 Fine Tuning the Configuration of the Neighborhood as a Whole

The configuration of the neighborhood as a whole must now be considered carefully. It is certainly not necessary that houses, or lots, or buildings, or paths, or path width should be uniform. The intention is that a viable and successful neighborhood can be built from this configuration. Where some feature is inappropriate or superfluous, it may be omitted.

The resulting neighborhood map, after fine tuning to take this large aspect into consideration, will look something like the drawing on the left.



SECTION 8

ROADS, PATHS, & PARKING

THE VEHICULAR AND PEDESTRIAN SYSTEM IN THE NEIGHBORHOOD

8.1 Introduction

Once the definition of a new neighborhood has been achieved, a pattern of buildings and lots has been defined, and major pedestrian rights of way have been identified, (approximately), and marked on the land, and a tentative map has been made showing positions of buildings and rough designation of lots, the process of defining vehicular roads and parking begins.

This is a departure from current conventional practice, which usually places roads and sewers first. The Harbor Peak plan is based on the conviction that it is precisely the practice of starting with roads and sewers which has devastated the naturalness and human qualities of land and community.

Instead, in this plan the roads, ranging from large to small, and including all emergency routes for fire and other emergency vehicles, and including all necessary provisions for parking, are generated in relation to the preliminary pedestrian plan and the preliminary major pedestrian rights of way, so as to serve the community structure, which is in essence pedestrian.

Here is how it works.

8.2 Context of Previous Actions for this Neighborhood

- * Global diagnosis done, major centers mapped (Section 2)
- * More detailed diagnosis for this neighborhood done, major centers mapped (Section 2)
- * Major pedestrian network staked out, entered in state map (Section 5)
- * Major pedestrian spaces and paths have stone pillars built, demarcating their rough edges (Section 5)
- * Neighborhood boundary staked out, entered in state map (Section 6)
- * Rough house and garden locations set within neighborhood (Section 7)
- * Local pedestrian ROW's set: small pedestrian spaces and paths within the neighborhood are staked out and entered in the state map (Section 7).

8.3 Color and Texture Codes to be Used in Drawings

See chart on the opposite page.

SYMBOL TABLE

SYMBOL	CAPACITY	SURFACE
	All vehicles	Asphalt over 4 inches crushed rock
	Pedestrians and emergency vehicles	Pedestrian paving which is load bearing for heavy vehicles
	Pedestrians and emergency vehicles only	Grass over grass block on eight-foot shoulder of a local road
	Parking spots	Permeable load-bearing surface including crushed rock, gravel, compacted earth
	Low-volume pedestrian lanes	Narrow asphalt strip between earth, grass, or planted edges
	Mixed pedestrian allowing 5mph slow-moving cars and deliveries	Rolled gravel and clay over crushed rock
	Pedestrian paving, not capable of carrying heavy vehicles	Stone slabs, bricks, or pavers, laid over a light mortar base or sand, and compacted rolled clay and gravel.
	Pedestrians and animals only, alongside pedestrian paths; No vehicles at all	Grass and freely planted vegetation, for children, play, and enjoyment

8.4 Road Link to the Neighborhood

When making a new neighborhood, the first thing to decide is the primary road link providing vehicle access to this neighborhood.

The process for laying the neighborhood's local roadway(s) shall have the following steps:

First: HPA shall identify the neighborhood's principal point of access. This is the point on the existing road network outside the new neighborhood, which passes most closely to the new neighborhood, and which provides easy, and efficient access to the neighborhood while preserving the beauty of the land.

The highest priority criterion for locating this point of access and the new link, is that the location, among possible ones, shall be that one which is least disturbing to the landscape, and which does the least damage to diagnosed precious places on the current master plan diagnosis (Section 2). Occasionally, there may be more than one point of access. Mark the point(s) of access on the map (See illustration on opposite page).

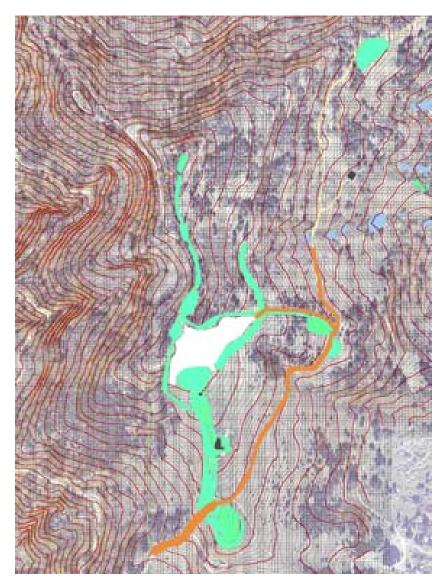
8.5 Placing the Local Roadway into the Neighborhood



Each neighborhood shall have at least one local roadway. The local roadway shall be a 12 foot wide asphalt road, lying within the pedestrian right of way, and providing the main vehicular access to the houses in the neighborhood. It shall also be the primary path for emergency access to houses in the neighborhood. The local roadway shall follow these specifications:

The local roadway must reach to within 200' of at least 85% of the houses in the neighborhood.

15% of the houses in the neighborhood may be further than 200 feet from the local roadway.



Step 8.4. The principle point of access for the new neighborhood, shown in red. The upper right hand road comes in to the neighborhood from the major North-South collector, and requires the least new road construction, while preserving existing structure by using the alignment of a logging trail.

The design speed shall be 15 mph.

The gradient limitation shall be 15%, (and may be steeper, up to x% for y feet of length).

The minimum inner turning radius shall be 33 feet, with exceptions permitted on steep terrain.

The minimum width of the roadway shall be 12'.

The roadway may pinch down to 10' at certain points along its length, for lengths up to 50', especially at steep areas where greater width would cause prohibitively ugly cuts.



Step 8.5. Point of Access, showing the process of introducing local roads, shown in red, as they fan out from the point of access. The black bar shows the dimension of 200 feet, and allows one to see that in this neighborhood, only two houses (as permitted) are more than 200 feet from the local roadway.

The road surface shall be asphalt or concrete, or other surface such as pavers, cobbles, when if approved by HPA. The local roadway in its entirety shall be placed within the footprint of the already staked and built pedestrian right-of-way network.

Materials of asphalt and concrete shall be in accordance with material specifications of City of Brookings.

The process for choosing the alignments for the neighborhood's local roadway(s) shall have the following steps:

* Starting from the principal access link, lay out a local roadway, lying within the neighborhood boundary areas identified as the pedestrian ROW network designated for the neighborhood, and chosen so that some part of the local roadway reaches to within 200 feet of 85% of the houses in the neighborhood. The local roadway may branch in order to achieve this aim. In addition:

- * The local roadway shall not be extended any further than is needed to meet the 200 foot specification for 85% of the houses. The roadway alignments in the neighborhood shall thus be chosen in such a way as to keep total area of asphalt surfaces to a reasonable minimum, while staying within designated pedestrian ROWs.
- * It is permissible to create additional short dead end "spurs" of the 12 foot local roadway, to achieve this objective, provided that any such spur is not more than 200 feet long.
- * Except for spurs, all other parts of the length of the local roadway in the neighborhood shall have a passing shoulder at least 8 foot wide. This passing shoulder shall be of a surface which is green and planted but suitable for heavy vehicle passing (See subsection 8.7).
- * Once the alignment of the main local roadway has been determined, the edges shall be staked, and recorded on the state map (shown in red, see example). Tolerance for later adjustment of position shall be 10'

Note: While grading the road, may need this degree of flexibility if for example a slide occurs, or bad soil is encountered.

Additional Note: The above gradient requirements and turning radii limitations for emergency vehicles may in certain instances force this road to step a bit outside the limits of the pedestrian ROW network, in order to not be too steep, or turn too sharply. This is acceptable, but keep this to the minimum possible: the maximum running length of a hairpin allowed outside the pedestrian network is 150 feet. (On occasion, with HPA approval, the hairpin may be longer, if needed) (Question: And does this then extend the ped ROW to include this area.?) Some re-grading may be done, but to the greatest extent possible, the existing contours shall be respected and protected.

It may be helpful, on wide pedestrian areas, to keep the local access road to one side of the pedestrian space, thus leaving the main width of the pedestrian right of way intact for pedestrians (see map).

[Note: Permissible examples of variations of the Local Roadway type prepared by Bill Buchanan can be found in the Road Type appendix to Section 8. The types found there which are examples of Local Roadways are: F. Community Center Secondary, G. Community Center Tertiary, I. Neighborhood Street, and J. Secondary Neighborhood Street.]

8.6 Providing a Second Access Route for Emergency Vehicles



Road layout in the neighborhood shall follow a principle of secure redundancy. This shall provide for emergency access to every house by emergency vehicles, even when a portion of the local road is blocked by a stalled vehicle or other obstruction, while an emergency vehicle needs to enter the neighborhood. To achieve this result, there shall be a redundant secondary access from the existing road network, into the neighborhood, which connects with the local roadway, in such a way as to create a loop, whereby all houses can still be reached. The alignment and surface of the secondary access paths shall conform to the following specifications:

The gradient limitation is 15%. (May be steeper, up to x% for y' length. Bill will provide this)

The minimum inner turning radius is 33 feet.

The minimum width is 12'.

The road surface may be a combination of any of the following: Heavy duty pedestrian paving, Grasscrete and others.

This secondary access, like the main access, shall be placed within the pedestrian right of way for the neighborhood.

The process to set the slignment of the Secondary Access Loop is as follows.

- * First: Identify a secondary point of access from the existing road network, to the neighborhood. This shall be a point where the existing road network is near to the neighborhood, but a point different from the main Point of Access.
- * Second: From this secondary point of access, extend a Secondary access to neighborhood, from the existing road network, to connect with all branches of the Main Access. This secondary access shall be used only by vehicles only in case of emergency access, it shall be primarily part of pedestrian space at all other times.



Step 8.6. The process of introducing a secondary loop of pedestrian hard paved surface capable of taking fire trucks and other emergency vehicles.

* Stake edges. Record on state map as green herringbone. Tolerance for later adjustment is 10 feet.

The secondary access route shall be used by vehicles only for emergency access, thus allowing emergency use to flow through spaces not normally accessed by vehicles. It can flow through a pedestrian space without really being a commonly used road, it can even flow through a section of small local pedestrian path. For instance this can occur through a large pedestrian plaza, no part of which need be demarcated as a roadway, yet providing

sufficient hard surfaces to be secure for the use of emergency vehicles.

- * Fine-tune and adjust these elements as needed, to give emergency vehicles redundant access to within 200 feet of all points of all structures. Record in the state map.
- * Locate fire hydrants as needed to serve fire vehicles coming on on these access paths.

8.7 Providing an 8-Foot Passing Shoulder Alongside the 12-Foot Roadway



Except where roadway is 20 feet wide or more, and except for spurs less than 200 feet long, all parts of the length of the local roadway in the neighborhood, shall have a passing shoulder at least 8 foot wide.

This passing shoulder, for emergency use only, does not need a fully drivable roadway. It needs a structural surface capable of taking the weight of a fire truck or large construction vehicle. (Bill would like to include cobble, pavers, grasspave, perhaps others approved for firetruck load. Would like to do mockups to see what combinations feel ok and which do not. Perhaps its phrased as the aggregate 20' can be any combination of a list of approved materials. Also, he's concerned that the grasspave2 -the plastic ring one -won't wear well, cautious about using).

In order to avoid unnecessary use of non-permeable surfaces, it is recommended that a punctured structure, capable of supporting growing grass, but also capable of receiving a heavy vehicle load, be used. This may be on either side of the roadway, and immediately adjacent to it.

At pinch points in the local roadway, the passing shoulder is discontinued.

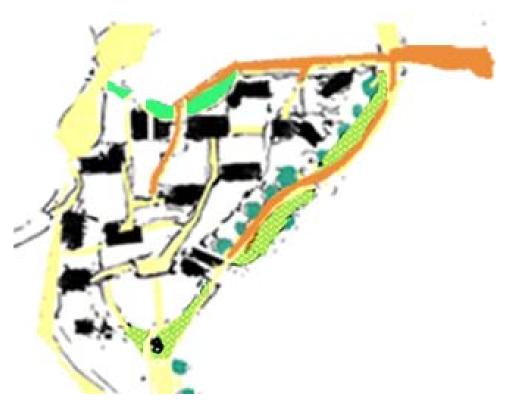
If the local roadway is 20 feet wide, the passing shoulder is not needed. In any case, the local road surface plus shoulder must be a minimum of 20 feet wide, all along the local roadway.

ROADS, PATHS, AND PARKING



Step 8.7. The process of introducing grass block and reinforced turf along the shoulders of local roads as a breakdown lane, pleasant to look at and to walk on, but capable of taking the weight of firetrucks and other heavy vehicles in all weather conditions.

8.8 NARROW LOW-VOLUME PEDESTRIAN PATHS



Step 8.8. Recap of the pedestrian lanes and paths which form the neighborhood.



In Section 7, we have already identified a network of local narrow paths between lots, serving pedestrian movement inside the neighborhood (See subprocess 7.x). Before placing parking spots, we now restablish, and check, and confirm, the positions of these narrow local paths.

Set grass in main pedestrian spaces: All large pedestrian spaces in the network shall have the default surface of grass, with small paths within it. Mark this on the state map, with a single hatched pattern. (see map.)

Locate low stone walls around major pedestrian spaces.

[Note: Permissible examples of variations of the Local Roadway type prepared by Bill Buchanan can be found in the Road Type appendix to Section 8. The

types found there which are examples of Narrow Low Volume Pedestrian Paths are types: Q. Pedestrian Street, U. Close, W. Walk, X. Trail, and Y. Stair.]

8.9 Enumeration and Position of Parking Spots



The intention of this plan is to take the emphasis away from parking as a major visible feature of the environment. Under the provisions of the plan, parking will be practical but not lavish, and it should not disturb the environment that people see, daily, around their houses and workplaces. Each house requires parking, but the parking spaces need not necessarily be immediately adjacent to the house.

- * Each house shall be assigned two parking spaces, or one parking space if the house has less than 1000 sf of interior space.
- * In addition, the neighborhood shall provide a general pool of on-street parking, one for each house in the neighborhood.
- * The parking spots shall not necessarily be immediately adjacent to the house. For any house, the parking places shall be no less than 50 feet and no more than 250 feet from the house, positions chosen in such a way that the spots belonging to a given house are readily identifable as such. Small parking lots may be used, but no lot shall be larger than five cars, and may be no less than 100 feet from any other similar parking lot.
- * Record parking spots on the state map, as blue rectangles.
- * The parking spots for the houses in the neighborhood shall be located while walking the land, in relation to trhe house position, and in such a way as to least harm to the beauty of the local pedestrian environment of the house.
- * They shall be locted primarily on or near the local access roadway, and in addition along other small pedestrian paths in the pedestrian network, according to the foregoing criteria.



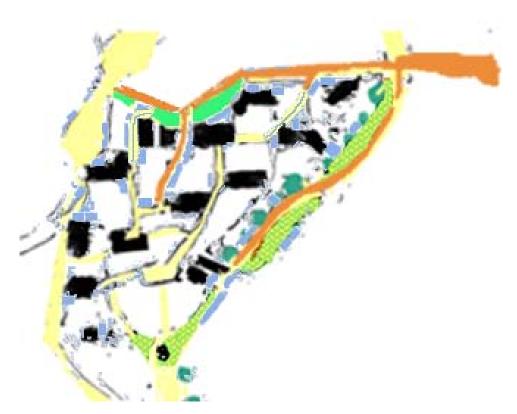
Step 8.9. Place the needed number of parking spaces, in the positions required by subsection 8.9. Some will be placed individually, some may be in small lots of no more than five cars. If any small lot is used it may not be visible from any other such lot. Location of parking spots is done while walking the land, not on the basis of a drawing or a map.

* Commercial parking: Those residents who build commercial space must provide one additional parking spot/1000sf of commercial construction, or alternatively contribute money to an HPA parking fund.

8.10 Driveway/Paths which Allow Cars to Reach Parking Spots



Local access paths or driveways shall be provided to allow cars to reach all parking spots. These car paths shall be of minimum dimensions, and provided with a modest surface of permeable materials.



Step 8.10. The drives and lanes needed to reach all those parking spaces not directly accessible from the local road, are shown as a yellow path with a thin blue line down the middle.

You may have located some parking spots not on the Local Roadway. For these spots, within the local pedestrian network, add in small local access vehicular paths, if necessary to extend from the main access to reach any parking location which can reach the parking locations determined above. These local car paths shall follow these specifications:

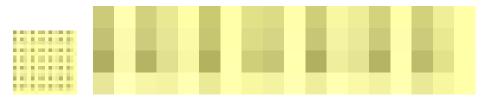
- * The design speed shall be 10 mph.
- * The surface shall be gravel (more variety: cobbles, grasscrete?)*
- * The minimum width shall be 8',
- * The gradient limitation shall be 25%
- * The minimum inner radius shall be 33'. (Note: this is the same as the AASHTO shared driveway specification.)
- * Record the location of the local access car paths on the state map, as a thin red line. Tolerance for later adjustment is 2'. You may also add a bit of purely pedestrian path to the network, to connect the parking spot to the house, if need be. Record this in yellow.
- 6. Set gravel pedestrian paths: all remaining paths in the pedestrian network shall have the default surface of gravel. Mark this on the state map, as a dotted

pattern. (see map.) An alternative you may choose is concrete pavers set in gravel (dotted pattern with diamonds.)

7. Set hydrant locations. Locate hydrants on the Main access and secondary access roads and the access spurs, such that no point of a house is more than 400 feet from a hydrant. Record on the state map as black dots.

[Note: Permissible examples of variations of the Driveway Paths type prepared by Bill Buchanan can be found in the Road Type appendix to Section 8. The types found there which are examples are the following: N. Shared Driveway, T. Minor Cul de Sac, V. Alley.]

8.11 Modest Pedestrian Paving for Important Squares and Paths



On certain special places, places where people may perhaps concregate, or go for enjoyment and company, some paving — if possible, beautiful paving, with special designs in the surface — shall be used to mark the place, and give it a permanent quality.

[Note: Permissible examples of variations of the Modest Pedestrian Paving for Squares and Important Squares and Paths prepared by Bill Buchanan can be found in the Road Type appendix to Section 8. The types found there which are examples are the following: O. Woonerf, P. Piazza, Q. Pedestrian Street, U. Close.]

8.12 Use of Thick and Natural Vegetation along Pedestrian Ways





Step 8.12. Examples of paths enhanced by vegetation along either side.

8.13 Sewer Lines and Leach Fields

It has long been common practice in development to install all sewers at the same time as roads, long before the houses themselves are built. This expensive and wasteful procedure is not recommended. Instead, sewer lines are to be dug, placed, in a more flexible manner, thus able to tie in with house construction as it occurs, and without large upfront investments which cripple the developers ability to provide more essential amenities to the startup neighborhood.

The system is to be a STEP (septic tank effluent pumping) system. This system minimizes the size and cost of the lines, and thus will allow more responsive and incremental growth of the wastewater system, so that the septic system responds over time to the detailed final location and construction of houses, not the other way around.

In summary: each house has an underground tank and pump, and a 2" pvc line from this tank, through which liquid effluents are pumped away. The houses work in clusters, with each individual tank pumping to a common line that feeds a common treatment and disposal system. As lines in the system come together and accumulate, if the number of houses served by any one line increases to 70 houses, the diameter needs to be 3", (still far smaller than the typical 8" main needed in a conventional sewer system). The effluent is pumped from each house to a local gravel or textile filter serving the cluster of houses. Then from the filter, effluent flows to a local subsurface disposal field serving the cluster. (For more detail see the Infrastructure Appendix to the Master Plan.)

This system is globally decentralized, locally centralized. The lines are very small diameter, which minimizes line cost and trenching. The installation and expenditure for the sewer system keeps pace in a sensible manner with house construction, rather than being an enormous upfront cost.

These small lines are to be run within the network of pedestrian and vehicle paths, and are to be installed after the houses are built. Since the system is dosed with small pumps, the line layout can have some uphill runs if needed, which further minimizes trenching effort and cost.

As evidenced in the table below, the per-house cost of the STEP system is about 2/3 the cost of a conventional standard system. The STEP therefore places less load on municipal system, and avoids large upfront costs, instead spending the money more linearly as houses are built. Costs of the STEP system shown are 71% of the typical tract cost of a main-line sewer system for a similar group of houses.

TABLE COMPARISON OF SEWER COSTS FOR A FIFTEEN-HOUSE NEIGHBORHOOD

CONVENTIONAL SYSTEM	PER-HOUSE FIGURES				
4-inch house laterals, 795 feet	53 feet	\$ 20	\$	 1,060	
8-inch mains, 2250 feet	150 feet	\$ 55	\$	8,250	
Manholes	0.25 ea	\$ 8,000	\$	2,000	
Two 8-inch mains to treatment plant, 2.5	1 еа	\$ 2,640	\$	2,640	
miles each, \$100/ft (cost over 1000 houses)					
	Total cost per house \$ 13,950				
STEP SYSTEM	PER-HOUSE FIGURES				
1000 gallon tank with pump	1 еа	\$ 3,000	\$	3,000	
2-inch small diam pvc lines, 3045 feet	203 feet	\$ 10	\$	2,030	
Filter (cost over 15 houses)	0.067 ea	\$ 25,000	\$	1,667	
Field (cost over 15 houses)	0.067 ea	\$ 12,000	\$	800	
Two small 6-inch mains (if STEP system is	ı ea	\$ 2,376	\$	2,376	
connected to municipal system in future), 2.5					
miles each, \$90/ft (cost over 1000 houses)					

Total cost per house \$ 9,873

Provided that sewers are placed within the system of paths defined in the neighborhood, most of them will require only trenching and fitting, thus greatly reducing the cost of cutting asphalt, replacing the surface, and so forth. This allows the sewers to be built as houses are built, changing crucial cash flow for the developer. In spite of the greater flexibility, the step system is cheaper. As the table shows, the total length of lines, many of them smaller than the typical 6 or 8-inch mains used in typical tract development, will reduce, not increase, the overall cost of sewer runs.

The procedure to be followed in laying out sewer lines and leach fields shall go like this:

1) Identify location of filter and disposal field. The area of the filter shall be about 90 square feet per house if a recirculating gravel filter, or about 9 sf per house if a textile filter is used. The subsurface field will be about 6000 sf per house (7.25 dwellings per acre of field). The filter and field may be placed slightly above the group of houses, or



Step 8.13. Sewer lines shown in red. The total cost per house of these small bore sewers is less than the cost of main sewer lines for a typical, conventional, group of houses in a tract.

preferably slightly downhill. If the filter is above some of the houses, the greatest height allowed from the lowest house up to the filter shall be about 100 feet in elevation gain but may be increased with engineered facilities to increase the lift.

- 2) Lay out a network of 2-inch lines which run in the pedestrian space, and connect to the filter location. Try to minimize length, and do not allow the line from any house to cross someone elses's lot. The 2-inch lines shall be dug and placed incrementally, as houses are completed.
- 3) If any line serves more than 70 houses, the diameter of that line shall be increased to 3 inches.

8.14 Narrative of Illustrative Example

On the basis of the procedures specified in this section, steps 8.2 to 8.12 were taken, and led to the road and path layout, including emergency vehicle access and parking lots, that is shown in the accompanying sketch. (We emphasize again, that these drawings are illustrative. They have not been given

ROADS, PATHS, AND PARKING



Step 8.14. The overall result of the steps in Section 8.

sufficient detail study, for actual correct placing of houses, roads and so on, but they show how the steps of the process are to be applied to an emerging neighborhood, to reach the result intended by this master plan.

Actual implementation shall then be done in the following sequence:

- * Place temporary construction roads, following the alignments established above for local roadways.
- * detailed design and build houses
- * Fine tuning then final building of pedestrian spaces, and the road surfaces within them.

8.15 Growth of the Road Network Over Time

- * (Bill would like somewhere to include a global statement about points of access for the project, like: Harbor Peak has one initial point of access. At least one more point of access will be added by the time that 150 lots have been recorded. Ultimately at full build-out, Harbor Peak will have 5 to 8 points of access. And show a drawing showing these places of access onto the project.)
- * Term our road types in terms of design speed, eg three categories: 25 mph, 15 mph, 10 mph.
- * "Roads shall be designed such that for emergency access vehicles to reach any house in Harbor Peak, they need not traverse more than 2000 feet in total of either the 15mph or 10mph types."
- * Further, can assert that the low speed roads can be truly mixed ped/vehicle, don't need separate sidewalks.



SECTION 9

SUBDIVISION MAPS AND THEIR SUBMISSION

REVIEW PROCESS FOR
DETAILED DEVELOPMENT PLANS
AND THE PLATTING OF NEW
NEIGHBORHOODS

9.1 Introduction

In order for a new neighborhood, or a new piece of a new neighborhood, to achieve legal status so that lots can be sold, it must be platted. Rights of way, access routes, and legal lot lines for the lots in that neighborhood or neighborhood fragment, must be approved by the County Planning Department, and then recorded and deeded in the County Records office.

According to City of Brookings law, the incremental development of neighborhoods, according to the foregoing sections 1 through 8, shall go forward in according with the rules prescribed for subdivision applications, in SECTION 118, subsection 118–150, entitled Detailed Development Plan (DDP) Review Procedures, and subsection 118–180, entitled Review Criteria for Determining Compliance with Master Plan of Development (MPoD).

9.2 Size range of Permissible Subdivisions

In size a subdivision application may be for a piece of land as small as 1/4 acre, or as large as 10 acres. A subdivision shall not be larger than 10 acres.

9.3 DDP Submission Requirements

A submission shall include information required under City of Brookings Section 118, Master Planned Development, except as those requirements are modified in this Master Plan, and in addition shall include the following.

- 1) A letter from the HPA certifying that the processes set forth in Sections 1-8 have been completed for the area under consideration, that HPA has reviewed the proposed DDP and that the DDP meets its requirements. The HPA shall have final authority as to adequacy of the completion of processes.
- 2) A copy of the Harbor Peak state map current as of the time of application. Specifically this must include the following drawings or layers:

- 3) A color drawing consistent with the graphic standards established by this master plan showing, for the area of the DDP:
 - * The materials with which all vehicle and pedestrian areas will be surfaced;
 - * The location, species and dbh of all Exceptional Trees;
 - * Species and approximate location of any street trees that are proposed to be planted;
 - * Any infiltration structures to be built at the time of road construction; (Bill, what is this?)
 - * Hydrant locations;
 - * Areas with any special requirements, such as increased fire resistance-standards.
 - * Any cultural resources within the plan area
 - * Any areas in which building is to be prohibited, or only permitted conditionally for reasons of geology.
- 4) A calculation of the area of impervious road and path surfaces that will be built, along with a narrative describing how they have been minimized to the extent practicable.
- 5) A narrative describing how the traffic impact that will result from the DDP is consistent with this master plan.
- 6) A narrative describing how the infiltration techniques described in Appendix XX have been employed and how the standards described there have been met.
- 7) A drawing of all roads which indicates the type, class, design speed and approximate average grade for each road segment consistent with the standards in Appendix XXX.
- 8) A narrative describing to what extent, on roads with a design speed of less than 25 mph, the road geometry enforces the design speed.
- 9) A drawing accompanied, if needed, with narrative that together show that the development of the DDP will not interrupt the eventual inter-connection by road of all main access points, the continuity of the water backbone line and the continuity of

the schematic sewer collection system (although it may adjust the routes.)

- 10) A report from an Engineering Geologist licensed in the State of Oregon in which the proposed DDP is found suitable for the site. (Bill what is this? seems onerous every time?)
- 11) A list of any special conditions that must be met before either a building or occupancy permit is granted, such as any related to drainage, erosion control or foundation design. (Remove following sentence, and place in a later section pertaining to building permits. OK?) (In any event any foundation plan for a habitable structure built on a slope of more than 15% must bear the stamp of an Engineering Geologist licensed in the State of Oregon.)

9.4 Guarantees of Compliance with City of Brookings Code Section 118

Many of the conditions imposed by Brookings section 118, are guaranteed to be met more stringently in a subdivision meeting the provisions of this master plan. Therefore, in order to avoid the arduous and unnecessary duplication of effort by the developer, for any DDP submitted that is in compliance with the Harbor Peak master plan, the conditions of section 118.150 and section 118.180 shall be considered in substantial compliance as follows:

9.5 Detailed Guarantees of Compliance with City of Brookings Code Section 118.180

A. Request for Approval of a DDP shall be reviewed to determine whether it is in substantial conformance with the MPoD, namely this Harbor Peak master plan. The DDP shall be deemed not to be in substantial conformance with the master plan, if it results in any of the following types of changes from the master plan.

1) Increase of density that results in a peak hour trip generation of greater than 10 percent more than the total approved in the MPoD. This

is guaranteed by master plan Section 4, and in particular by subsections 4.1 and 4.14 which maintains the maximum total density at all times, and at the time of every new neighborhood submission.

- 2) Increase in the floor area proposed for non residential use by more than 10 percent from what was previously specified. This is guaranteed by master plan Section 4, and in particular by subsections 4.9 nd 4.13, which maintain the maximum floor area of non-residential use as 1,300,000 sf.
- 3) Reduction of more than 10 percent of the area reserved for common open space and/or usable open space from what was previously specified. This is guaranteed by master plan Section 4, and in particular by subsection 4.3, which maintains a minimum of 25% of all buildable land as open space, and by Section 5, in particular subsections 5.x, which preserves the total of unadulterated open land and does not allow such land to be used for other purposes.
- 4) Increase in the total ground area proposed to be covered by structures more than 5 percent from what was previously specified. This condition is guaranteed not to occur, because as specified in Section 4.12 there is no set limit upon lot coverage. Density is instead measured and controlled by other stringent mechanisms: a strict limit upon total number of houses (Subsection 4.14), and a strict minimum of unbuilt land set aside for common use(Subsections 4.8 and 9.5.3 above.) In addition each house is required to have a significant garden space which cannot be diminished, as guaranteed in Subsection 4.12 and Section 11.
- 5) Reduction of specific setback requirements by more than 25 percent where precviously specified. This condition is guaranteed not to occur, because the location of houses is not controlled by setbacks, but by other more stringent mechanisms which must be met and approved by HPA before the DDP can be submitted. This is described in more detail in Sections 7.6, 7.7, and Sections 11 and 12. In particular, Section 12 Positive Space controls the placement of buildings such that they create positive outdoor space in every instance.
- 6) Reduction of project amenities provided such as recreational facilities, screening, and/or landscaping provisions by more than 10 percent from what was previously specified. This condition is guaranteed not to occur. The critical amenity requirement of set-aside open land is controlled and guaranteed by Subsection 4.8; there are no explicit screening or landscaping requirements contained in the master plan; and other possible recreational facilities shall be determined and added during the development of Harbor Peak.

9.6 Materials Not Required for a Harbor Peak DDP

The Brookings Master Plan Development ordinance asks for a few things that would be either irrelevant to Harbor Peak or harmful to it. These need not be provided except as otherwise required herein:

- 1) Instead of typical elevations of buildings, this requirement shall be deemed to be met by a declaration that the buildings shall conform with the controls upon the nature and character of buildings which are contained within Sections 13 and 14. This shall be further reviewed for conformance and approved by HPA upon the actual submission of detailed building designs.
- 2) Instead of a landscape drawing a narrative landscape plan setting forth the numbers of retained and restricted plants that will be required to be met on each lot, along with any required irrigation system shall be provided.

Explanation: A drawn landscape plan at this stage would conflict with the incremental basis of the Harbor Peak master plan and is especially inappropriate prior to building design.

3) The lighting plan shall be in a narrative, prescriptive form and shall emphasize the minimization of light pollution and preservation of night-time views.

9.7 Action by the Planning Commission

The Planning Commission may approve, conditionally approve, or deny the DDP. The Planning Commission's decision shall include findings that specify how the DDP is or is not in substantial conformance with the MPoD. If it is in conformance with the MPoD the commission shall approve the DDP.

9.8 SMALL SUBDIVISIONS

A small subdivision in the Harbor Peak district is defined as a subdivision which has six lots or fewer.

It is in the interest of Curry County to encourage small subdivisions, since these subdivisions will encourage more attention to detailed configuration of land, trees, lots, building volumes, roads and paths — thus creating a more finely tuned environment for livability.

The approval of the DDP for a small subdivision in Harbor Peak shall be an administrative decision, decided by the planning director.

For a small subdivision the requirements shall be modified as follows. The letter, the maps, and the reports required under section 9.3 shall be required. However the narratives (9.3–9.12) shall instead be replaced by a standard form with check boxes to indicate compliance.

The Planning Director shall issue his decision within 14 days of the day a complete application has been received by the County.

If the applicant provides a statement of non-opposition to the DDP signed by all owners of property within 300 feet, as part of the application, periods for notice and appeal shall be waived.