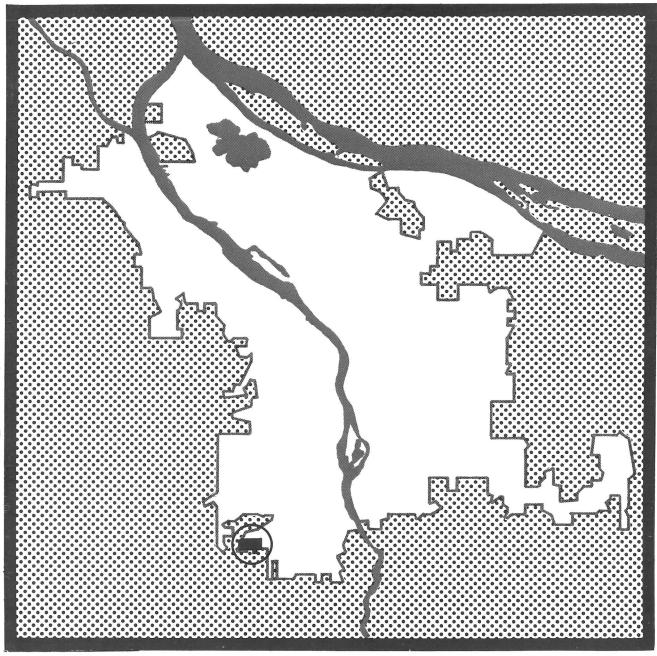
WEST PORTLAND PARK







CITY OF PORTLAND WEST PORTLAND PARK STUDY

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I. INTRODUCTION

West Portland Park is a subdivision in the southwest corner of Multnomah County within the Portland city limits. It is bounded by SW Dickinson on the north, SW Stephenson on the south, SW 35th on the east and SW 55th on the west. The area covers approximately 315 acres of which approximately 75 acres are public right-of-way. The subdivision was platted in 1889. The plat used a conventional grid pattern and created 100 blocks containing 25' x 100' lots, 36 lots to the block. The plat did not take into account the steep terrain in the area. Multnomah County zoned the area R7, single family residential, in 1955. The City has not established city zoning in the area.

Little development has occurred in the area between SW 35th and SW 45th because urban services (street, storm and sanitary sewers) are not available, most of the land is not suitable for septic tanks, and the terrain is difficult. Development in the area between SW 45th and SW 55th has been patchy. Sanitary sewer service, limited storm water facilities, and partially improved streets are available in this part of West Portland Park. Increasing pressure to develop is countered by the topography, limited urban services and the question of appropriate density.

Problems inherent in the platting and zoning and in the provision of urban services became topics of concern during the annexation process. In response, the Portland City Council directed the Bureau of Planning to study the area and make recommendations which would allow West Portland Park to develop into a high quality residential neighborhood.

When this project began, the study area included only that portion of West Portland Park within the city limits - approximately the section between SW 35th and SW 43rd with a spur extending east along the south end to SW 49th. Annexations have continued and it is now appropriate to have all of West Portland Park included in the study.

West Portland Park presents a complex planning problem and opportunity with characteristics similar in nature to other recently studied areas within Portland, in that:

- The area was platted without respect to topography, making full development of the plat difficult since many dedicated streets are too steep to build and some lots make precarious building sites;
- Vacant residential land is a much valued resource, but the urban services necessary for development (streets, storm and sanitary sewers) are not readily available and topography and geology are present problems;

- 3. The obligations of both property owners and the city upon annexation are concerns of both parties; and
- 4. The residents understandably want to ensure their quality of life and are resistant to increased density and improvements for which they must pay.

Many issues need to be addressed before recommendations for appropriate density, the provision of urban services, capital improvements, and safety can be made, among them:

- 1. What do the different zones (R5, R7, R10) translate into in terms of numbers of households, people and trips?
- 2. Can the proposed and existing sewage collection and treatment works handle these densities?
- 3. Can the proposed and existing street systems handle these densities?
- 4. How do these different densities affect storm water runoff and erosion and landslide potential?
- 5. What do these densities mean in terms of capital improvements and public spending?

The goal of this planning effort is to describe and resolve, as best possible, these issues and recommend the actions necessary to enable West Portland Park to develop into a high quality community.

Process:

The recommendations included in this study are the result of a full planning and citizen participation process.

Two public meetings were held in the neighborhood on July 2 and July 16, 1979. The first was for information gathering, the second for discussion of preliminary recommendations. Notice of these meetings was sent to all residents and property owners in West Portland Park and printed in the Southwest Neighborhood Information Inc. (SNII) newsletter prior to the first meeting.

Copies of the first draft of the study were sent to interested persons and city and county bureaus/agencies. Their response and comments were incorporated into the final draft.

Two Planning Commission Hearings were held on September 18 and October 2, 1979. Notice of the Planning Commission hearings was announced at both public meetings, printed in the SNII newsletter, $\underline{\text{The Oregonian}}$ and $\underline{\text{The Journal}}$, and sent to all those who expressed interest in the study. Public testimony was heard at both meetings. The West Portland Park Study was adopted by the Planning Commission on October 2, 1979 with modifications. These changes have been incorporated into this document.

Notice of the City Council hearings was sent to all West Portland Park property owners, adjacent neighborhood associations, posted in the area and announced in the $\underline{\text{Daily Journal}}$ of Commerce.

II. WEST PORTLAND PARK TODAY

A. Vicinity

Map #1 Vicinity

West Portland Park is 6 miles from downtown Portland. It is adjacent to the Mountain Park development of Lake Oswego on the south, Arnold Creek neighborhood on the east, and Portland Community College at its southwest corner. Many of the surrounding residential communities have all been subject to recent rapid growth. The I-5 freeway and Barbur Boulevard are approximately 1/4 to 1 mile to the north of West Portland Park.

B. Land Use and Zoning

Map #2 Current Zoning Map #3 Land Use

Much of the land in West Portland Park is undeveloped. The predominant land use on developed property is single family residential. Some newer multi-family developments occur along SW Capitol Highway north of SW Pomona and along Barbur Blvd. At the intersection of SW Capitol Highway and SW Pomona are a few commercial uses including a small grocery and drive-in restaurant. Also near this intersection is a small manufacturer of refrigeration units.

The land uses in West Portland Park, in general, reflect their underlying zones. Almost all of the area has county zoning. The exceptions are parcels along SW 35th and along SW Dickinson where the city R7, single family residential zone has been established. The county A2, apartment zone occurs along SW Capitol Highway north of SW Pasadena and along Barbur Blvd. and the Baldock (I-5) Freeway. An area of R4, residential zone occurs along part of SW Pasadena as a transition between A2 and R7 zones. The county C3, commercial zone occurs along Barbur Blvd. and around the intersection of SW Capitol Highway and SW Pomona. The county C4, commercial zone occurs at SW Capitol Highway and SW Arnold. There is one spot of county M3, light industrial zone in the northwest corner of the study area. The remainder of West Portland Park is zoned county R7, single family residential requiring a minimum lot size of 7,000 sq. ft.

The surrounding residential areas are mainly low density: R10 (10,000 sq. ft. minimum lot) on the north and west, R7 also on the north, R20 (20,000 sq. ft. minimum lot) on the east, and D4 (7500-9975 sq. ft. lot) on the south in Mountain Park in Lake Oswego.

C. Urban Services

1. Transportation

Map #4 Circulation

Map #5 Street Conditions

Map #6 Street Vacations

Map #7 Traffic Volumes and Street Classifications

Approximately 75 acres of the area are dedicated streets. Almost half of these are completely unimproved and exist only on paper. The majority of the remaining streets are minimally improved - graded and graveled only. Some of these dedicated streets are too steep to build. Others include substantial lengths of drainage courses which would be costly and undesirable to sewer.

In general, right-of-way widths are 60 feet. Rights-of-way in SW Capitol Highway, SW 49th (south of SW Arnold), and SW 45th are wider. SW Stephenson has only a 30 foot right-of-way. Capitol Highway and SW 49th (south of SW Arnold) are major city traffic streets. SW 35th is a neighborhood collector street. SW 45th, which is being improved this summer by Multnomah County, will act as a local collector street. All of the other streets will function as minor city traffic streets.

The area is served by four bus lines: #41 going to Portland Community College, #40 to Jackson, #78 to Mountain Park, and #42 Southwood. The Barbur Blvd. Transit Station is convenient to West Portland Park. Due to the lack of street improvements, bicycle and pedestrian travel is difficult.

2. Sanitary Sewers

Septic tank systems accommodate most of the sewerage generated east of SW 45th. An extra-territorial extension for sewer service has been granted to a few blocks in this area. The proposed Arnold Creek trunk line will eventually serve this part of West Portland Park. The completion of this trunk is at least 2 years away. The County's West Hills Service District has sewers west of SW 45th where gravity flow is to the west.

3. Storm Drainage

Map #8 Drainage Basins

No storm drainage improvements exist in the area east of SW 49th except where new development has been required to install storm sewers. The area east of SW 45th drains into Tryon Creek to the east. Much of the land, particularly east of SW 47th, is undeveloped and covered with trees and other vegetation. This type of

ground cover naturally reduces the amount and speed of runoff from rain. As the area develops, land will be cleared and the amount of impervious surfaces (roofs, streets, driveways) will increase resulting in more and faster runoff. The area east of SW 45th is presently drained by a system of natural swales, channels and roadside ditches. Without adequate attention to storm drainage, flooding and erosion problems will occur.

A limited number of storm sewers are available west of SW 49th. Capitol Highway and SW 49th have storm sewers. The area west of SW 45th drains west to Fanno Creek.

4. Fire Protection

Station 18, at 8720 SW 30th (a few blocks north of Barbur Blvd.), serves all of West Portland Park. Multnomah County contracts with the City of Portland for the City to provide fire protection in the areas which are currently outside the city limits. When annexation takes place, the contract will not be necessary. Response times to calls in parts of West Portland Park are at the limit of acceptability. Future development in the south end of West Portland Park and surrounding annexed areas may well be outside the 6 minute standard. Improved fire protection will be necessary.

5. Police Protection

The City provides police protection to all areas within the city limits. The Multnomah County Sheriff's office provides this service to the surrounding county area. Upon annexation, the City assumes all responsibility for police protection.

6. Parks

There are no park facilities within West Portland Park, though Block 49 was dedicated as a park. There are no plans to develop it as its terrain precludes its use for standard play equipment and it is small - 2.07 acres. The closest recreational facilities are play fields at Markham ($\frac{1}{4}$ -1 mile), Stephenson ($\frac{1}{2}$ -1 $\frac{1}{2}$ miles), and Jackson Schools (0-1 mile). An undeveloped, combined school and county park site, Maricara, is located $\frac{1}{2}$ -1 $\frac{1}{2}$ miles from West Portland Park at SW 30th and Maricara. School District #1 owns a 10 acre site on the south side of SW Stephenson between SW 37th and SW 39th.

7. Schools

Children and young adults living in West Portland Park attend Stephenson Elementary, Markham Middle and Jackson High Schools. Stephenson School is about at its capacity of 340 students. Its enrollment as of October 1978 was 321. However, it faces a declining enrollment. Markham will have capacity for 650 students in September when an addition is completed. It had an enrollment of 528 in October 1978. Jackson's capacity is about 1200 students and it had an October 1978 enrollment of 858. Another nearby elementary school, Capitol Hill, has space for an additional 50-70 students. Portland Community College, Mt. Sylvania Campus is adjacent to the southwest corner of West Portland Park at SW 49th and SW Stephenson.

8. Commercial Services

West Portland Park residents shop at a number of commercial centers, including Washington Square, City of Tigard, Multnomah business district, downtown Portland, and the Barbur Boulevard strip. Very limited services, a small grocery and drive-in restaurant, are now available within walking distance from West Portland Park. A new structure in Mountain Park at SW 49th across from Portland Community College is under construction. It is zoned for neighborhood commercial use and can house offices, small retail and service establishments.

D. Natural Features

1. Topography

Map #8 Drainage Basins Map #9 Land Hazards

West Portland Park is just north of Mt. Sylvania, an inactive volcano in the Tualatin Mountain Range. Two general types of land make up the area: 1) flat to moderately sloping ridge crests, ridge spurs and swales which contain existing development; and 2) moderately steep to very steep stream valleys and flanks of Mt. Sylvania. The largest of these valleys runs approximately from SW 45th to SW 35th between SW Buddington and SW Arnold Streets (Arnold Creek). The majority of undeveloped areas are in second growth timber. Permanent and intermittent streams run through the area.

2. Geology

Columbia River basalt, Troutdale formation and Boring lava, presumably from Mt. Sylvania, underlie the area and are overlaid with upland silt. Cascade silt loam, Cornelius silt loam and Delena silt loam are found on the surface. Each of these geological units has potential for landslide and erosion hazards. Shallow ground water (within 6 feet of the surface) is often found in the area.

III. ISSUES

A. Platting; Zoning; Density

Map #10 Ownership Map #2 Current Zoning Tables 1 and 2

The plat of West Portland Park created 3720 lots, the vast majority of which are 25 x 100 (the lots along SW Stephenson and SW 55th are slightly deeper). The county R7 zone allows construction of single family residences on lots of at least 7000 sq. ft. The county "grandfather clause" allows single family dwellings on lots as small as 3000 sq. ft. provided the lots were created before 1957 and no lot lines have been changed since then. Under the county zone, this means that in West Portland Park a building site is at least 5000 sq. ft. (two 25 x 100 lots). However, many lots along SW Stephenson qualify as building sites under the 3000 sq. ft. minimum rule.

Upon annexation, the City is obligated to establish city zoning. In the majority of annexation cases the equivalent zone is applied to the annexed areas. The city R7 zone also requires a minimum of 7000 sq. ft. The City's "grandfather clause," however, requires a minimum 5000 sq. ft. and is only applicable to a lot held in separate ownership since 1959. A variance would be required under other circumstances to develop on lots less than 7000 sq. ft. The City defines a lot as any contiguous ownership. This means that if someone owns any number of parcels, even if they have individual lot numbers, which touch each other, they are considered one lot.

Sizes of ownership vary from 1 or 2 lots to full blocks. The more developed area west of SW 45th has smaller lots, mostly 5000 sq. ft. This area has more new housing, since it is served by the West Hills Service District. The balance of the area for the most part is held in larger ownerships of at least 10,000 sq. ft. Parkwest, a land development firm, owns about 5 blocks (including the steepest slopes in West Portland Park).

There is some confusion regarding commitments to property owners from various agencies (city, county and sewer) for R5 density in West Portland Park east of SW 45th. To date, though requested, no evidence of any commitment has been supplied. Understandably, there will be objections raised about the recommendation for R7 density from property owners who are losing the right to develop on 5000 sq. ft. lots that the county "grandfather clause" affords them. However, at R7 density

there is still much development to be realized.

An ownership survey of West Portland Park showed this pattern of parcel size: west of SW 47th, the majority of parcels are less than 7000 sq. ft.; east of SW 43rd, parcels are greater than 7000 sq. ft.; between SW 43rd and SW 47th the pattern is not as evident.

In the area between SW 43rd and SW 47th, the block by block ownership pattern varies. There is new development on 5000 sq. ft. or smaller lots towards SW Stephenson as well as large vacant and occupied parcels. The ridge which separates the Fanno and Tryon Creek drainage basins runs close to SW 45th. The land hazard potential changes from generally mild to moderate west of SW 45th to moderate and severe east of SW 45th. Service capacities are different on each side of SW 45th. For the purpose of appropriate density, the discussion and recommendations are divided into 2 sub-areas: West of SW 45th and East of SW 45th.

West of SW 45th

At present the area west of SW 45th contains 352 lots (under the City's definition as contiguous owhership). If the City zoned the area R7, 439 building lots could be created. However, because of the existing pattern of developed 5000 sq. ft. lots, it is felt that variances would be allowed for at least 45 additional lots, bringing the total number of building lots to 484. If the city zoned the area R5, which is equivalent to the allowable density under the county's "grandfather clause," 572 building lots could be created. This is only an 18% increase over the probable density if the area was zoned R7.

This area has adequate urban services available to it. Many storm and sanitary sewers are in place. The topography is such that the full grid street pattern can be built. The area has gentle slopes and less landslide hazard. The area easily feeds into a major city traffic street, Capitol Highway and its extension SW 49th.

East of SW 45th

In the area east of SW 45th, the average parcel size is over 10,000 sq. ft. Again under the county "grandfather clause," the area could develop at R5 density. However, without the precedent of a substantial number of developed 5000 sq. ft. lots, few lots could be granted variances. In effect, there would be a 46% increase in density if this area was zoned R5 over what would be allowed under R7. There would also be a 46% increase over the amount of impervious surfaces associated with R7 if the area was rezoned R5. Downzoning to R10 would result in a decrease in households, population, trips and impervious surfaces of 18% under that expected with R7 density. (See Tables 1, 2 and 3.)

The four blocks between SW 45th and SW 41st, SW Vacuna and SW Ste-

phenson have been the scene of much recent development under the county "grandfather clause" on lots less than 7000 sq. ft. The neighbors of this area have voiced many complaints about water and erosion problems stemming from this recent construction. The slopes and hazards in this area are moderate to severe. By establishing the city R7 zone on these blocks, property owners wishing to continue building on substandard lots will be required to request a variance.

This area is in the Tryon Creek drainage basin and can be served by the proposed Arnold Creek Trunk sewer. The sewer interceptor through Tryon Creek State Park is the limiting link in this system. This is also the area of steepest slopes and greatest environmental hazards: landslide, flooding, and erosion. A number of the platted "paper" streets are considered too steep to build and it is recommended that they be vacated. It is felt that a substantial increase in density here will have adverse impacts on both the man-made and natural systems in and surrounding this area.

Other Zones

There are a few small areas of other county zones (C3, C4, M3, A2, and R4) in the West Portland Park addition. These areas are for the most part developed and exist along the major traffic streets: Capitol Highway, the I-5 freeway and Barbur Blvd. Wherever possible, the nearest equivalent city zone should be applied. The City has no C3 zone. The general commercial, C2, zone exists all along Barbur Blvd. The upzoning of the C3 areas along Barbur to City C2 would be a logical extension of an existing zone. The C3 zone at SW Pomona and Capitol Highway is abutting C4 (neighborhood commercial), A2 (low density apartments), and single family residential property. SW Pomona is a residential street though it carries through traffic. The three services at this location are a small grocery, a drive-in restaurant and a manufacturer of refrigeration units. The latter is a non-conforming use which existed prior to the original zoning. It would remain non-conforming under both the City's C4 and C2 zones. A drive-in restaurant is allowed in a C2 but not a C4 zone.

Land uses along SW Capitol Highway in West Portland Park are mainly residential: single family dwellings and apartment complexes. Just north of the study area on SW Capitol Highway are Markham Middle School and the Capitol Hill Branch Library. It is feared that the establishment of a C2 zone at this location would set a precedent for other zone change requests along Capitol Highway.

There is one area of light industrial, M3, zone north of the freeway in the northwest corner of West Portland Park. The zone was changed to M3 from C3 and A2 in 1957 because the use on the site was a builder of swimming pools. This use is gone, though a swimming pool remains. It is presently a scuba diving school. This use is allowed in the City C2, general commercial zone.

B. Transportation

1. Street Vacations

Map #6 Street Vacations

The improved streets in West Portland Park are under Multnomah County jurisdiction. Unless otherwise designated, when an area is annexed into the City of Portland, all public rights-of-way that are not maintained by the former jurisdiction come under the City's jurisdiction. Multnomah County maintains only those streets that are fully improved to County standards. Several of the dedicated streets are considered too steep to build. Very few streets are fully improved; most are only graded and graveled. SW Pomona is the only through street between SW 35th and SW 49th. SW 45th between SW Pomona and SW Vesta is being improved by Multnomah County this summer. It will act as a neighborhood collector street feeding into SW Pomona, an existing collector street which connects with SW Capitol Highway, a major city traffic street. There is a 4-way traffic signal at that intersection.

Additional street improvements will be necessary as the area develops. The need for additional streets between SW 35th and SW 49th already exists. Area residents originally indicated a desire to have SW Stephenson put through. Initially this seemed like a good idea. The south side of SW Stephenson abuts a vacant (open space) area of Mountain Park so that through traffic would affect fewer residents than any interior street. Recent construction along Stephenson has coincided with street improvements, so that much of it is already built. If completed, it could serve as a southern collector street to balance the traffic carried by SW Pomona. However, a 500-600 foot stretch of SW Stephenson between SW 39th and SW 41st has a grade over 20% and could not be constructed without extensive filling or cutting to reduce the grade - an expensive task. Also, SW Stephenson, has only a 30 foot right-of-way, half that of all of the other neighborhood streets. The standard pavement width for a collector street with parking on both sides is 36 feet. Thirty feet is too narrow a right-of-way for such a street; even with parking on only one side, no room would be left for sidewalks. Previous attempts to acquire additional right-of-way from Mountain Park were unsuccessful.

However, there is a possibility of acquiring additional right-of-way along SW Stephenson between SW 35th and SW 39th. Block 91 in the southeast corner of West Portland Park is owned by one family. SW Vesta, on the north of this block, if improved could create a dangerous intersection at SW 35th because it is too close to the busier intersection at SW Stephenson. Additional right-of-way along SW Stephenson could be dedicated in exchange for vacating SW Vesta between SW 35th and SW 37th. This would have to be negotiated with the owners. The property on both sides of SW Stephenson between SW 37th and SW 39th is in the City of Portland. Additional right-

of-way on the south side of SW Stephenson could be dedicated from the Kerr school site.

An improved street going straight from SW 35th to SW 49th would also encourage through traffic from outside the area and create an undesirable situation for the neighborhood. Three streets have the potential for providing these direct routes: SW Vacuna, SW Coronado and SW Buddington. In order to avoid this situation, vacating sections of these streets is recommended. The approval of these street vacations will still allow access to all properties and access through the neighborhood. The idea is that through traffic will be discouraged, and those remaining trips through the neighborhood will be slowed down by having to turn corners.

One development firm, Parkwest, owns much of the blocks generally between SW 43rd and SW 39th, SW Coronado and SW Arnold. This area contains the steepest slopes and greatest landslide potential in West Portland Park. The replatting or clustered development in this area is most desirable. The vacations of streets running through this property would encourage more appropriate development.

As noted above, there are streets in West Portland Park east of SW 45th which have been determined by the City Engineer's office to be too steep to build and maintain. These streets should not be public right-of-way. Construction of these streets by extensive cutting and filling would disrupt the landscape and natural drainageways.

Where the removal of these streets from public right-of-way does not preclude anyone's sole access to their property, street vacations are recommended. It may be necessary to locate storm and sanitary sewers in some of the streets proposed for vacation to provide service to adjacent properties. In this event, easements for sewer purposes would need to be reserved.

Expedient handling of the recommended street vacations is appropriate and would best be accomplished by city initiation and action as one unit.

2. Street Improvements

Map #5 Street Conditions

The City can require street improvements as a condition for new construction permits. Often all that has been required is the signing of a waiver giving up the right to remonstrate against future street improvements. This delays the actual street improvements and can contribute to the disorderly provision of urban services to an area. East of SW 45th, West Portland Park is without storm and sanitary sewers. It is assumed that without sanitary sewers, few new building permits will be issued. When the sewer is available to this area, no development should occur without the

commitment for full street improvements including storm sewers, curbs, paving and sidewalks. In the area west of SW 45th, urban services are generally available. However, even with recent construction, the majority of streets are unpaved.

Once annexed, the city normally takes responsibility for only unpaved or fully improved streets. This causes confusion over jurisdiction for both the agencies and the neighbors. As streets become fully improved, the city takes more and more responsibility alleviating this confusion.

Two means of financing street and other public improvements are available:

- (1) the cost being borne completely by the developer, and
- (2) through a local improvement district (LID) which assesses all benefiting properties.

The City presently has no reimbursement policy for developers who often bear the full cost of improvements required outside their developments. This makes developing property in the city more expensive than in areas that have such policies and discourages smaller developments which cannot afford these front end costs.

An equitable system of reimbursement is not simple. It can be said that the homebuyers absorb the cost of improvements. If the neighboring land owners, upon development of their property, were required to pay back the original developer for improvements already in, these developers would be paid back twice. This does not have to be the case. To date there has not been much encouragement for the future of reimbursement policies in Portland. An equitable reimbursement policy could encourage a more timely provision of services and more reasonably priced developments within the city limits.

The design of new streets in West Portland Park can have an impact on the area. New construction which precedes street improvements must be on-grade with the future street so that the slopes for driveways, sewers and drainage are acceptable. It is not anticipated that all 60 feet of right-of-way will be necessary to fully improve local service streets. Many trees are growing in public rights-of-way. Tree roots and ground cover help stabilize the soil on slopes. The amount of impervious surface (in this case pavement) affects the amount and speed of runoff.

3. Bicycle/Pedestrian Improvements

Map #4 Circulation

Virtually no bicycle or pedestrian facilities are available in West Portland Park. SW 45th, with a sidewalk on one side, will be completed this summer. This will direct motorized and non-motorized

traffic to and from SW Pomona from and to SW 45th. There are no sidewalks or bike lane striping on SW Pomona, though it is often the route to Markham and Jackson Schools. With increased traffic from new and denser development, these routes will become unsafe. Multnomah County has jurisdiction over SW Pomona.

Portland Community College is located between SW 49th and SW 55th south of SW Stephenson. A new neighborhood commercial development is being built across from Portland Community College on SW 49th. West Portland Park residents would like access to these services without having to make automobile trips. SW Stephenson is open (though not all paved) from SW 41st west to SW 49th except for the east corner and intersection at SW 47th. The corner property is owned by Capitol Highway Water District. SW Stephenson at this point runs between two water tanks. It is unlikely that SW Stephenson will be improved for cars at this corner because of its narrow width; however, the 30 foot right-of-way is adequate for a bicycle and pedestrian path. If the Kerr school site becomes a neighborhood park, bicycle and pedestrian access the length of SW Stephenson will be desirable.

4. Safety

Until additional streets are improved, SW Vesta, SW Pomona and soon SW 45th will carry the traffic in West Portland Park. When the county decision to improve SW 45th was approved, a request was made to the county to install 4-way stop signs at SW 45th and SW Vesta. Upon annexation the city becomes responsible for all signing of streets. The intersection of SW 45th and SW Pomona will also be a problem because of increased traffic. Present traffic volumes may not warrant signing at these intersections, but as part of a neighborhood plan, they can be justified.

5. Planning

The impacts of West Portland Park's ultimate development on connecting streets and transit routes have not been determined. West Portland Park is just part of the far southwest area. Substantial increases in density from West Portland Park and Mountain Park, as well as increases from Arnold Creek and Woods Memorial (these latter are possibilities), could change traffic conditions over a broad area.

The Multnomah shopping district and areas north and south along Barbur Blvd. have a pull from the areas surrounding West Portland Park. The Jackson Neighborhood Association has requested a freeway overpass at SW 35th which would have access to Barbur Blvd. At present SW 35th turns into Taylors Ferry Road which winds around and finally crosses the freeway at SW 26th. Taylors Ferry Road is

narrow, curvy, residential and at its capacity. Any additional development in West Portland Park will increase traffic on Taylors Ferry Road.

C. Sanitary Sewers

The area east of SW 45th presently is unsewered except where extraterritorial extensions have been granted for new development. These extensions were given with the condition that when city sewer is available, these properties will hook up. The City has designed the segment of the proposed Arnold Creek trunk line which will serve the area east of SW 35th, the eastern boundary of West Portland Park, for present densities. This density is expected to increase. The trunk line will eventually serve that part of West Portland Park east of SW 45th, carrying waste into the interceptor which runs through Tryon Creek State Park and on to the recently upgraded City-owned treatment plant located in Lake Oswego. Interceptors and plants are actually designed many years before they are built. To determine size, one must anticipate the future demand on the system. Current zones and densities are used in the formula, and a multiplier - hardly an exact science. The Tryon Creek interceptor is the limiting link in this system since the addition of an alternate interceptor or expansion of the existing one would disrupt the state park and would be very difficult to accomplish. The R2O area east of West Portland Park is designated as R1O in the draft Portland Comprehensive Plan. This increase in density can be accommodated in the sewer system by switching sewer service in an area that is presently pumped into the Tryon system to another system. The Bureau of Sanitary Engineering supports the continuance of R7 density in West Portland Park east of SW 45th, so that alterations to the Tryon Creek interceptor will not be needed.

There is a possibility that some property owners in this area may wish to develop before sanitary sewer service is available. The suitability of land for septic tanks is determined on a case by case basis. It is important that all new development be designed so that hooking up to future sewers is easily done. New development should also be required to hook up when service is available.

Properties west of SW 45th are served by the West Hills Service District. This area drains to the west. The county sanitary engineer has stated that sewer capacity is adequate for any residential density.

D. Fire and Police Protection

The City, either under contract with Multnomah County or on its own, presently provides West Portland Park with fire protection. Station 18, on SW 30th near SW Dolph, is the first station to respond to calls from this area. The Fire Bureau recognizes existing deficiencies in this service particularly with respect to Portland Community College.

Increased development without service improvement may jeopardize safety in West Portland Park. The Fire Bureau has recommended that Station 18 be moved to near SW 40th and SW Huber. This would reduce response times and afford better service to Portland Community College and newly annexed city areas.

This recommendation was not a high priority a year or so ago. The project was not funded or put into the CIP (estimated cost of \$551,000). With annexation complete and the prospect of hundreds of new homes in this area as other services become available, the need for the station relocation becomes more important.

The Bureau of Police has indicated that increased development in the far southwest area including West Portland Park will place an additional demand for patrol coverage on the district currently serving this area. The demand will be felt under any of the density considerations.

E. Parks

Block 49 was dedicated for public use, in perpetuity, to Multnomah County in the original subdivision plat. The block is just over 2 acres. The terrain is very steep, which precludes its development with standard play equipment. Neither the City nor County has any plans for its development as a park. The present low density in West Portland Park and the amount of open space do not justify public expense for park improvement. However, as the area develops, the open space will vanish, population will increase and the need for recreational facilities will be justified. The neighborhood has voiced a need for a park with play equipment. They would like to see more families in their neighborhood. A well-equipped park often provides this attraction. However, it does not appear that Block 49 can be this park.

There has been discussion within the City about a trade of the park property for public improvements. It is important that the City or County not relinquish this park site without ensuring that other property will be available when the need is justified and that public access to this natural site is ensured.

Another undeveloped public site exists in West Portland Park. School District #1 owns a 10 acre parcel, the Kerr school site, on the south side of SW Stephenson between SW 37th and SW 39th. It has no plans to develop this site in the immediate future and foresees no need for an additional school. While not as centrally located as Block 49, its

potential for park development is greater. It is the south end of West Portland Park which is farthest from public open space since Jackson High School is just north of SW Dickinson. A combined school and county owned park site is located at SW 30th and SW Maricara.

A feasibility study of Southwest park sites done by the Parks Bureau rated both school sites highly. Mountain Park residents have indicated a need for a public park. The location of the Kerr school site makes its joint development with Lake Oswego attractive.

F. Storm Drainage

Map #8 Drainage Basins

The problem of storm drainage provided the initial impetus to study West Portland Park. The fear is that without adequate facilities, increased development will aggravate existing problems and create new ones. The majority of the area is without storm water facilities. A number of flooding problems have been identified by residents, including: 1) at SW 35th and SW Stephenson, which collects runoff from the northeast flank of Mt. Sylvania; 2) at SW Stephenson and SW 47th, also getting water down from the mountain; and 3) at the north end of West Portland Park, the east end of the Trio Addition at SW 43rd near SW Pasadena which starts a flow of water northeast through the high school property.

All of these problem areas are in the eastern section of West Portland Park. The area west of SW 45th has less steep slopes, some storm sewers in place, and basically less cause for concern. It is in the Fanno Creek drainage basin which flows west.

In general, the area's slopes and valleys along with a high water table make up a landscape inherent with water problems. The Department of Sanitary Engineering has indicated that traditional means of storm water disposal should alleviate the present problems and prevent new ones. This includes improved streets with storm sewers, culverts where streams cross streets, and occasional piping or trenching to direct water to the natural drainageways where these do not follow the streets. This department should outline the necessary systems for proposed densities and street network.

A drainage study in southwest Portland is underway. The study is concerned with large area facilities as opposed to individual streets. It may recommend the acquisition of property or easements on Block 50 and the north half of 51 (SW 35th to SW 37th, SW Arnold to SW Palatine) for runoff retention. This is a natural basin which sends water into Arnold Creek to the east. However, the timing of its realization may be at least 5 to 10 years away.

The means for assuring a property drained area involve: 1) requiring storm sewers in new streets, 2) providing culverts where streams cross streets, 3) directing runoff to natural drainageways, 4) maintaining and increasing the vegetaion on slopes and along creeks prone to erosion, 5) minimizing the amount of impervious surfaces, 6) requiring erosion control measures on construction sites, and 7) the acquisition of the basin noted above if determined necessary.

G. Design Standards for Crime Prevention

Standards which can be applied to new developments were prepared by the Crime Prevention Division of the Police Bureau. They are included in the recommendation section of this study to provide criteria for the evaluation of new development.

IV. SUMMARY OF FINDINGS

A. Appropriate Density

West of SW 45th

- 1. A substantial number of lots in the area of West Portland Park between SW 45th and SW 55th, developed and undeveloped, are less than 7000 sq. ft. even though the area presently is zoned for a 7000 sq. ft. minimum lot size.
- New single family development in this area presently is on 5000 sq. ft. lots.
- 3. The realistic increase in density which would occur by rezoning the area R5 is at most 18%.
- 4. The area has mainly mild (0-8%) slopes and slight potential for landslide, flooding and erosion hazards.
- 5. All of the streets are buildable (less than an 18% slope).
- 6. The existing sewer works can absorb the increase in density resulting from a zone change from R7 to R5.
- 7. The existing schools can absorb the increase in school age population resulting from a zone change from R7 to R5.
- 8. The area has good bus service (3 lines within 3 blocks) and access to major city traffic streets.
- Fire and police protection will need improvement with any new development.

East of SW 45th

- Most of the area is undeveloped and covered with trees and other vegetation.
- 2. Lot sizes average over 10,000 sq. ft.
- The area is presently zoned county R7.
- 4. The potential for landslide, flooding and erosion hazards is moderate to severe.
- 5. A number of dedicated unimproved streets have slopes exceeding 18%.
- 6. The area does not have direct access to major city traffic streets.
- 7. No sewer service is available.

- 8. The sanitary sewer system which will eventually serve this area was designed for present densities.
- 9. An upzoning of this area from R7 to R5 will increase the numbers of households, people, trips, and amount of impervious surfaces by 46% over that expected with R7.
- 10. A downzoning of this area from R7 to R10 will decrease the numbers of households, people, trips, and amount of impervious surfaces by 18% under that expected with R7.
- 11. The existing schools can absorb the increase in school age population resulting from a zone change from R7 to R5.
- 12. Fire and police protection will need improvement with any new development.
- 13. The area has adequate bus service: one line within 3 blocks, 3 other lines within 7 blocks.

B. Transportation

- 1. Very few streets in West Portland Park are improved.
- 2. Many of the dedicated, unimproved streets in West Portland Park east of SW 45th have slopes exceeding 18%.
- 3. The improvement of these steep streets is undesirable because of the cost and disruption of the landscape associated with extensive cutting and filling.
- 4. Three streets have the potential for being improved all the way from SW 35th to SW 49th.
- 5. A through street will encourage through traffic from outside the neighborhood.
- 6. Right-of-way widths throughout West Portland Park are at least 60 feet with the exception of SW Stephenson which has a right-of-way of 30 feet.
- 7. 60 feet is ample right-of-way for a minor city traffic street. 30 feet is adequate only for a street with no parking or parking on one side only.
- 8. There is one ownership, containing the steepest slopes, that consists of about 5 adjacent blocks in the center of West Portland Park.
- 9. This consolidation of property presents an opportunity for replatting and cluster development.

- 10. There are means available to require street improvements as the area develops.
- 11. Street grades and building grades should be coordinated.
- 12. More than the abutting property owners will benefit from the vacation of streets that would disrupt the landscape.
- 13. Sidewalks are scarce in West Portland Park.
- 14. There are no improvements for bicyclists in West Portland Park.
- 15. SW Stephenson could provide bicycle and pedestrian access to the Kerr school site, PCC and commercial services.
- 16. SW Pomona will get increased use by bicyclists and pedestrians en route to Markham Middle and Jackson High Schools when the improvement of SW 45th is completed.
- 17. SW Vesta, SW Pomona and SW 45th (upon its improvement) will carry much of the traffic in West Portland Park.
- 18. The impacts on the street system in the far southwest area of Portland resulting from future development and increased density in West Portland Park, the Arnold Creek neighborhood, and Mountain Park have not been determined.
- 19. The city has no reimbursement policy for "first in" developments in areas which have unimproved streets.

C. Sanitary Sewers

- 1. The sewer system in the area of West Portland Park west of SW 45th, in the West Hills Service District, can accommodate an increase in density from R7 to R5 in this area.
- 2. The Tryon Creek interceptor is the limiting link in the provision of sanitary sewer service in that part of West Portland Park east of SW 45th.
- 3. Any alteration to the Tryon Creek interceptor will be costly and environmentally unwise since it runs through a state park.
- 4. The ability of the Tryon Creek interceptor to handle an increase in density in that part of West Portland Park east of SW 45th from R7 to R5 has not been proved.
- 5. The Tryon Creek interceptor was designed for existing density (R7) in West Portland Park.

- 6. It is possible that some property in West Portland Park, east of SW 45th, is suitable for septic tanks and could be developed before sanitary sewer service is available.
- 7. The City has no reimbursement policy for "first in" developments in areas without sewer service.

D. Fire and Police Protection

- The City has a responsibility to provide adequate fire and police protection to areas within the city limits.
- 2. Response times to fire calls in parts of West Portland Park and to Portland Community College, Sylvania Campus are longer than optimum times.
- 3. The Fire Bureau has recognized the need to relocate Station 18 to better serve recently annexed areas in the far southwest.
- 4. The relocation of Station 18 from SW 30th near SW Dolph to the vicinity of SW 40th and SW Humber was not included in the latest CIP.
- 5. The cost for this relocation was estimated at \$551,000.
- 6. There will be increased development in West Portland Park when sewer service is available.
- 7. The Bureau of Police recognizes the need for additional patrol coverage in West Portland Park with increased development.

E. Parks

- 1. There are no developed parks within West Portland Park.
- 2. Block 49 of West Portland Park was dedicated for public use, in perpetuity, to Multnomah County in 1889.
- The topography of Block 49 precludes its use for playground facilities.
- 4. The West Portland Park residents have expressed a need for park facilities.
- 5. Mountain Park residents have expressed a need for park facilities.
- 6. Both the Maricara site, at SW 30th and SW Maricara, and the Kerr school site, at SW Stephenson and SW 39th, scored high in the Southwest Portland Neighborhood Park Site Evaluation prepared by the Bureau of Parks.

- 7. The location of the Kerr site presents the opportunity for joint park development with Mountain Park.
- 8. School District #1, which owns the school site, does not foresee the need for an additional school in this area.
- 9. Neither the city nor county wants to develop Block 49 into a park.
- 10. West Portland Park residents would like to have more families in their neighborhood.

F. Storm Drainage

- Storm water facilities are generally available west of SW 45th in West Portland Park.
- 2. No storm water facilities are available east of SW 45th in West Portland Park except where there is new development.
- 3. There are means available to ensure that storm water runoff is taken care of pursuant to development.
- 4. A natural basin is found in the area of SW Palatine between SW 35th and SW 37th.
- 5. The use of natural drainageways for storm water runoff is desirable.
- 6. Flooding and problems associated with erosion are real in that part of West Portland Park east of SW 45th.
- Removal of trees and ground cover increases the chances of flooding and erosion problems.
- 8. The amount of impervious surfaces is directly related to the amount and speed of storm water runoff.
- 9. The City has no reimbursement policy for "first in" developments in areas where storm water facilities are not available.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Zoning

Map #11 Recommended Zoning

Area West of SW 45th

The area west of SW 45th should be rezoned from R7 to R5. Urban services are available and can accommodate the increase in density. The topography is such that the full grid platting can be realized, a substantial number of houses are already developed on 5000 sq. ft. lots, there is good bus service and access to major streets, and problems from landslide, flooding and erosion are not great.

Area East of SW 45th

The area of West Portland Park east of SW 45th would suffer from a density higher than R7. The land in this area is prone to landslide, flooding and erosion hazards; the trees and vegetation which are an important factor in the stability of the landscape and the character of the area would all but disappear with full development on 5000 sq. ft. lots; the additional 46% of impervious surfaces possible at R5 density is a substantial increase; the increase in number of trips generated would be felt more heavily on residential streets; and the ultimate street network is limited because of the terrain.

This area is destined to change with the advent of the Arnold Creek Sewer Trunk. This change should be sensitive to the landscape: slopes, valleys, creeks and vegetation. This is more easily done on larger lots. A number of the properties in this area are between 7500 and 10,000 sq. ft. A downzoning of the area from R7 to R10 would leave these property owners with substandard lots and would result in only an 18% decrease in trips and impervious surfaces.

Other Zones

The nearest equivalent city zone should be applied to all other county zoned areas in West Portland Park except in the case of the M3 zone on Barbur Blvd. There is no precedent or need for the light industrial zone in this area, and the present use on the property is allowed in the city C2 zone. An unfortunate situation exists at SW Capitol Highway and SW Pomona: a county zone C3, with no city equivalent and a non-conforming use occupying part of the site. Since there is no precedent for establishing a general commercial zone along this stretch of SW Capitol Highway, and the C3 zone abuts a C4 zone, the expansion of the C4, local commercial zone is recommended.

It is recommended that the City Council adopt the following zone changes:

- A1. The area west of SW 45th and east of SW 55th between SW Stephenson and SW Dickinson that is presently zoned County R7 and R10 be rezoned City R5;
- A2. The area west of SW 35th and east of SW 45th between SW Stephenson and SW Dickinson that is presently zoned County R7 be rezoned City R7;
- A3. All of the property within the West Portland Park study area which carries the County A2 zone be rezoned City A2.5;
- A4. The property along SW Barbur Blvd. between SW 55th and SW Dickinson that is within the West Portland Park study area and carries the County C3, retail design review zone be rezoned City C2, general commercial;
- A5. The property along SW Capitol Highway between SW Pasadena and SW Arnold that carries the County C3 zone be rezoned City C4, neighborhood commercial; and
- A6. The one parcel of land within the study area (tax lot 2 of Block 2, West Portland Park) which carries the County M3 zone be rezoned City C2.
- A7. All of the property within the West Portland Park study area that is presently zoned County C4 be rezoned City C4.

B. Street Vacations, Street Improvements, Street Design

Map #12 Transportation Recommendations

Streets that are above an 18% slope require extensive filling or cutting and are expensive to build. Where they do not provide the only access to property, they should be vacated.

It is undesirable to have outside traffic encouraged to cut through a residential neighborhood. Stop signs, indirect routes and dead ends discourage through traffic. Where the vacation of a section of a potential through street does not take away the sole access to a property, the section should be vacated.

It would be desirable to replat all of West Portland Park east of SW 45th; however, the diverse ownerships make this unreasonable. This can, however, be accomplished on large holdings. The Planning Commission will favorably review additional street vacations in West Portland Park on an individual basis.

All of these street vacations will benefit more than the adjoining property owners. The handling of the proposed street vacations would be most easily and quickly done if the City would initiate them, do them all at once, and absorb the processing charges.

Street improvements should be coupled with new development. This is not always possible since development is often piecemeal and it is not

economical or reasonable to build streets in this fashion. The coordinating of waivers of remonstrance and the initiation and implementation of local improvement districts to finance street improvement would help get streets built in an orderly way.

The trees in West Portland Park are important environmentally and esthetically. Many of them grow in the public right-of-way. They should be saved wherever it is feasible to do so. The 60 foot rights-of-way in West Portland Park allow some flexibility in the placement of pavement.

The following recommendations are made with respect to street vacations, street improvements and street design.

Street Vacations

- B1. The following sections of streets are considered too steep to build. It is recommended that the City Council initiate street vacations for the following street sections, waiving the application fees:
 - SW Arnold between SW 35th and SW 37th
 - SW 37th between SW Arnold and SW Palatine
 - SW 39th between SW Arnold and SW Palatine
 - SW Palatine from 250 feet west of SW 43rd to SW 41st
 - SW 41st between SW Palatine and SW Coronado
 - SW 43rd from SW Palatine to 100 feet south of SW Buddington
 - SW Stephenson between SW 39th and SW 41st
 - SW Vesta between SW 39th and SW 41st
 - SW Palatine between SW 37th and SW 39th
- B2. The following sections of streets should be vacated so that through traffic is discouraged from using neighborhood streets. It is recommended that the City Council initiate street vacations for the following street sections, waiving application fees:
 - SW Vacuna between SW 37th and SW 39th
 - SW Coronado between SW 39th and SW 41st
 - SW Buddington between SW 41st and SW 43rd

B3. In order to acquire adequate right-of-way along SW Stephenson between SW 39th and SW 35th and avoid a potentially dangerous intersection at SW Vesta and SW 35th, it is recommended that the City Council direct the Planning Bureau and the Public Works Department to negotiate for the vacation of SW Vesta between SW 35th and SW 37th in exchange for 20-30 feet of property for right-of-way from the south side of Block 91 along SW Stephenson, and the dedication of 20-30 feet of property along SW Stephenson for right-of-way from the north side of the Kerr School site.

Street Improvements

B4. In order to ensure the timely improvement of streets, it is recommended that the City Council direct the Public Works Department to:

require waivers of remonstrance for future street improvements from all developers/owners of less than 4 units,

require full street improvements as a condition for building permits for developments of 4 or more units, and

agree to implement a local improvement district for street improvement when at least 51% of the district is developed or has signed waivers of remonstrance.

Street Design

B5. In order to maintain the character of West Portland Park and avoid erosion, landslide and flooding hazards, it is recommended that the City Council direct the Public Works Department to use the following policies when designing and approving new streets in West Portland Park:

make every reasonable effort to minimize the removal of trees and other deep-rooted vegetation from the public right-of-way;

strive to keep pavement widths at minimum acceptable standards;

require that the relocation of existing streets and dedication of new streets in replatted areas be designed with the contour of the land; and

require that the access street be designed prior to the issuance of building permits, so that all new construction is on grade.

It is understood, however, that engineering considerations of the motoring public will govern in the design of streets.

C. Bicycle/Pedestrian Improvements and Safety

The lack of improved streets and sidewalks makes bicýcle and pedestrian travel difficult and hazardous. The routes to schools, parks, and nearby commercial services should be improved to encourage more non-automobile trips and promote safety.

The following recommendations are made with respect to bicycle and pedestrian improvements.

Bicycle and Pedestrian Facilities

C1. It is recommended that funding be requested for the following projects:

sidewalk construction along SW Pomona from SW Capitol Highway to SW 35th, from Multnomah County's sidewalk for schools fund;

improvement of the right-of-way along SW Stephenson between SW 35th and SW 39th, SW 41st and SW 49th for bicycles and pedestrians, with available city funds; and

provision of a section of bicycle/pedestrian path south of SW Stephenson between SW 39th and SW 41st, from available City of Lake Oswego funds.

It is understood that the Bureau of Planning is responsible for the follow through of the above projects.

- C2. It is recommended that the City continue to require sidewalk construction on at least one side of all street improvements.
- C3. It is recommended that the City require the maintenance of a pedestrian path as part of any development proposal which includes **Block** 49, the dedicated park.

Safety

C4. SW Vesta, SW 45th and SW Pomona are busy streets used by motorists, bicyclists and pedestrians. Neighborhood residents have requested additional traffic controls to promote safety. It is recommended that the City Council authorize the installation of the following stop signs:

4-way stop signs at the intersection of SW 45th and SW Vesta,

a stop sign on SW 45th at SW Pomona.

D. Sanitary Sewers

Little development will occur in the area of West Portland Park east of SW 45th prior to the availability of sewer service. However, if properties are considered suitable for septic tanks and the owner chooses to develop, development could occur. In this event, the owner should be required to waive the right to remonstrate and hook up to the sewer when it is available.

D1. It is recommended that the Public Works Department require developers/owners of any new construction in the area within West Portland Park east of SW 45th (preceding sanitary sewer service) to sign sewer waivers and agree to connect to the sewer when service is available.

E. Storm Drainage

Proper disposal of storm water is an imperative in West Portland Park, particularly in the area east of SW 45th where flooding and erosion hazards are great. The obvious means of avoiding problems from water and earth movement are through the maintenance and increase of vegetation, the reduction of impervious surfaces, the use of natural drainageways, the careful use of trenches, pipes and storm sewers, and the minimizing of landscape disruption. All building permit applications, subdivisions, and P.U.D. proposals in West Portland Park will be carefully evaluated for adequate storm water disposal and erosion control under the provisions of the new Floodplain ordinance.

The slopes, soils and drainage information compiled for the West Portland Park study by Roger Redfern, consulting geologist, should be useful to the Public Works Department and Bureau of Buildings. The information can be used in the Westside Drainage Study being prepared by Public Works and can be used to update or replace the land hazard maps in the Bureau of Buildings.

- E1. It is recommended that before approving any major development between SW 45th and SW 35th, SW Dickinson and SW Stephenson, public acquisition of property or easements on Block 50 shall be required, if, through the Bureau of Sanitary Engineering's Westside Drainage Study, it is determined that a retention facility is needed.
- E2. It is recommended that the Bureau of Buildings shall:

require erosion control methods to be used during construction in West Portland Park;

require tree surveys showing species and location of all trees at least $3\frac{1}{2}$ inches in diameter at breast height (dbh), and justification for any to be removed on all sites over 28,000 sq. ft. east of SW 45th in West Portland Park.

E3. In order to ensure the timely development of the storm water disposal system in West Portland Park, it is recommended that the City Council direct the Public Works Department to:

require waivers of remonstrance against future storm water disposal improvements from developers and owners of new construction, and

initiate the local improvement district for necessary storm water disposal improvements when 51% of the district has waived the right to remonstrate.

F. Planning

The full impact of new development in the far southwest on the existing streets cannot be determined without further study. Increased development is anticipated in West Portland Park and Arnold Creek with the completion of the sewer trunk, and also in Mountain Park with the completion of the project area southeast of the intersection of SW 35th and SW Stephenson. Full development in these areas is years away. Often street improvements take years to realize. If a transportation planning study preceded development, there would be a greater probability of getting necessary improvements funded and constructed before problems occur.

F1. It is recommended that the Planning Bureau complete a circulation study of the Far Southwest prior to the construction of the Arnold Creek sewer trunk, addressing projected traffic volumes along SW Stephenson, SW 35th, SW Pomona and SW Taylors Ferry Road and investigating access to Barbur Blvd. from SW 35th.

The City of Portland has no reimbursement policy for "first in" developments, which must absorb the full cost of off-site improvements in areas that have no sanitary and storm sewers or have unimproved streets. The improvements required for these developments benefit abutting properties. Small developments are discouraged because of the cost of completing these improvements. Improvements are delayed until an L.I.D. can be implemented or a development large enough to absorb the huge front-end costs comes along. The buyers ultimately absorb these costs in the price of their unit. It would be advantageous for the City to offer such a policy, as it would promote a more timely provision of urban services and attract more reasonably priced development.

F2. It is recommended that the Planning Bureau and the Public Works Department be directed to investigate and recommend an equitable reimbursement or cost-sharing proposal for the timely completion of street, sanitary and storm water improvements in undeveloped areas.

G. Fire and Police Protection

There is a documented need for improved fire protection in West Portland Park and the surrounding areas. As the area develops, the need for better protection will be increased. Police protection appears to be adequate at present but with increased development, additional protection should be provided. It is recommended that the City Council authorize:

- G1. The relocation of Fire Station 18 to better serve West Portland Park and surrounding areas, and
- G2. Additional patrol coverage in West Portland Park when development in the area warrants increased protection.

H. Parks

The best available site for West Portland Park is the 10 acre Kerr School site. This site is owned by School District #1, but district staff has been receptive to the idea of park development on this site. The Kerr site also provides an opportunity for joint development with Lake Oswego. It is recommended that the Parks Bureau, with the assistance of the Planning Bureau shall:

- H1. Secure the deed or a long term lease for the Kerr school site from School District #1;
- H2. Pursue the possibility of joint park development of the Kerr school site with Lake Oswego and the Mountain Park Corporation;
- H3. Ensure that Block 49 remain as a natural, open area; and
- H4. Ensure public access to Block 49.

I. Crime Prevention

The Crime Prevention Bureau has been involved throughout the West Portland Park study. These guidelines, prepared by them, offer the opportunity for the city to evaluate new development in light of crime prevention considerations. West Portland Park, as an area of new development, provides a first step in city efforts to encourage safety through site design.

It is recommended that the Planning Bureau and Hearings Officer use the following guidelines in reviewing subdivision and P.U.D. applications.

- II. New development in West Portland Park is encouraged to:
 - a) Provide adequate street, pathways, bikeways, park, and parking lot lighting wherever new development occurs.
 - b) Enhance visibility on pathways and bikeways and in parks through the use of direct routes and planned landscaping where the developments occur.
 - c) Avoid cul-de-sac and dead-end street development when possible to discourage creation of overly secluded areas which could become vulnerable to crime.
 - d) Require posting of street numbers on residential dwellings in a prominent place, and require that numbering of multi-family dwelling units be accomplished in a logical, systematic and easily understood manner.
 - e) As new street development occurs (both surface and interior P.U.D. access streets), provide naming, layout and design in a manner which will permit easy patrol access by local law enforcement officers.

For planned unit developments:

- f) Encourage cluster construction for multi-family dwellings to enhance resident visibility and monitoring capability whenever possible.
- g) Locate resident and visitor parking lots in view of units to provide surveillance capability.
- h) Locate laundry facilities in easily accessible, well-lit and protected areas.
- i) Locate playgrounds so that they are visible to units, to provide monitoring of children's activities.
- j) Provide adequate lighting in parking lots, walkways, corridors

and other public areas to enhance visibility and provide safe access.

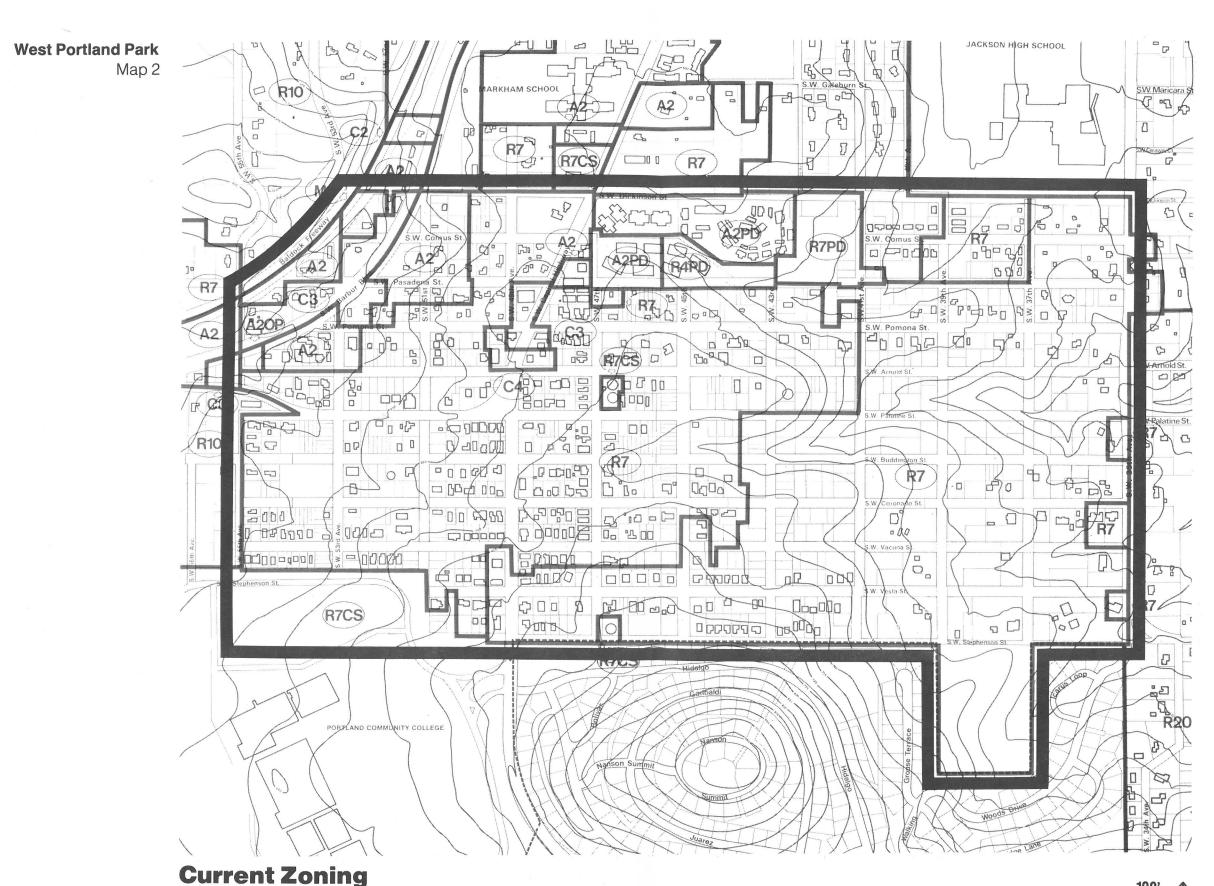
- k) Encourage installation of security hardware, doors, door viewers and other access control devices whenever possible.
- Encourage the utilization of planned landscaping to provide adequate visibility when possible.

VicinityMap 1

West Portland Park Map 1 Barbur Transit Station Jackson High School Markham School * Maricara Park Site Capitol Hill Branch Library *Park Block 49 0 0 000000 0 0 0 0 0 0 00 5: 00 \$0000 Q coccoo Q 0000 6 200 Stephenson Elementary TO BOTTON EXP Capa 21100 | DDDD C 3000d 00 1 2000 0 0 00 00 0 0 00 0000 School Mountain Park Site Portland Community College

Vicinity

Current Zoning



ZONE CODES

APARTMENT ZONES
A2.5 5000 sq ft min lot size
A2* 7000 sq ft min lot size

COMMERCIAL ZONES

C2 general commerce
C3* retail-design review
C4 focal commerce

M3 light industrial

RESIDENTIAL ZONES
R4* 7000 sq ft min lot size
R7 7000 sq ft min lot size
R10 10000 sq ft min lot size

R20 20000 sq ft min lot size

OVERLAY ZONES

CS* community service
OP* off-street parking
PD* planned development

S signboard control
B buffer zone

ZONE ASSIGNED BY MULTNOMAH COUN

* used by county only

 PORTLAND ZONING CODE revised 1-78

 MULTNOMAH COUNTY ZONING CODE

Land Use

Мар 3

West Portland Park JACKSON HIGH SCHOOL Мар 3 S.W. Maricara S MARKHAM SCHOOL *S 6 Dº o ± **≠**2000b en o gje D O 8 - (2000) G.O 8 8 - O ≠0a00 900*00*00 12/12 ⊃ **90¢** 10₀ =00 GU88 period is the contract of the 11 QQ EXCOUNG Eumap '' ದ್ಹಿ É œ 00000 p1_f11 euch 80 60 nson SI DEPOTE CHENTED **2** POBELAND COMMUNITY COLLEGE · 6 0> Δ

Land Use

Single Family Multi Family Commercial/Retail Vacant Public

100'

Circulation

West Portland Park Map 4 0 0 0 0 0 0 0 0 12 10 20 00 00 0 BB Q00000 0,000000 00,00000 0 82 10 Bus Routes Bike Paths Pedestrian Ways **Circulation**

Street Conditions

JACKSON HIGH SCHOOL **West Portland Park** Map 5 MARKHAM SCHOOL SW Maricara S 空雪台 00 000 다. 冶二号 Palatine - / 2000/ Buddington (y) 20 a (t) 000000 | Coronado | 3 BOA 000 마이 마리 **V**acuna -WO Vesta اعدال ا DDD 00 1 0 66060 0 00000

Street Conditions

Paved
Graded/Gravelled
Unimproved

00,

Street Vacations

West Portland Park JACKSON HIGH SCHOOL Map 6 MARKHAM SCHOOL S.W. Maricara \$ 占日品后 00000 Cy and Cold - 0 D & D C QQOa 20 D 0 0 D 0 D D 62000 9 5000 0 C 000000 ~~~~ 6000 0 000 a D G Nao っ口 9000 OCOOPA COOPA 石砂

Street Vacations

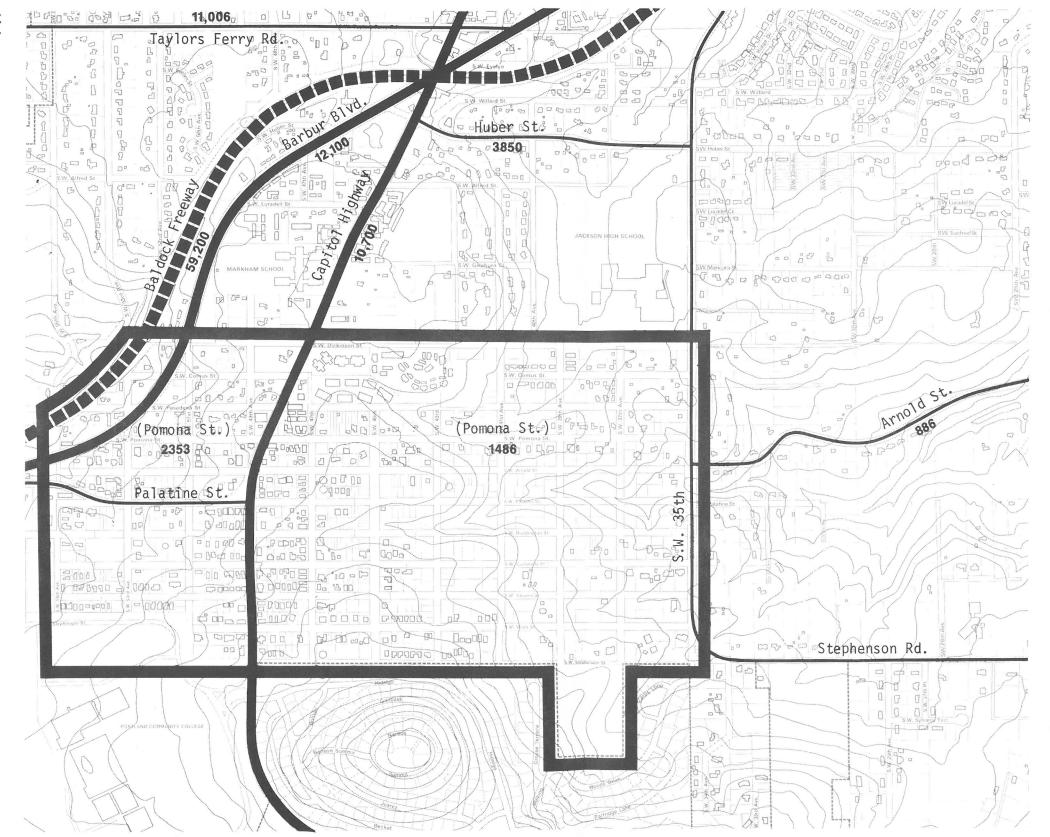
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Conditional Vacation
Vacation for Non-Through
Streets

Vacation for Too Steep Streets

Traffic Volumes and Street ClassificationMap 7

West Portland Park
Map 7



Traffic Volumes and Street Classification

Regional Trafficway
Major City Traffic Street
Neighborhood Collectors
Note: Street Volumes Indicated
in Numerical Values Represent Total Number of
Automobiles Travelling
in Both Directions
During 24 Hours

100' N

We

Drainage BasinsMap 8

JACKSON HIGH SCHOOL **West Portland Park** Map 8 MARKHAM SCHOOL D OP a Q, Fanno Greek Tryon Creek

Drainage Basins

Slight Stream Erosion Moderate Stream Erosion Severe Stream Erosion Slight Observed Stream Erosion Moderate Observed Stream Erosion Severe Observed Stream Erosion Apparent Floodplains Stream Valley Slopes (Highest Overland Erosior Potential in Zoning Study Area) Drainage District Boundary Drainage Problem Areas

100' N

Land Hazards

West Portland Park Map 9 a ≠=000b ≓0uoo6 9 D

Mild (0-8%)
Moderate (9-15%)
Severe (16-30%)

Land Hazards

Ownership Map 10

West Portland Park JACKSON HIGH SCHOOL Map 10 S.W. Maricara S MARKHAM SCHOOL 5 內口 υD +50

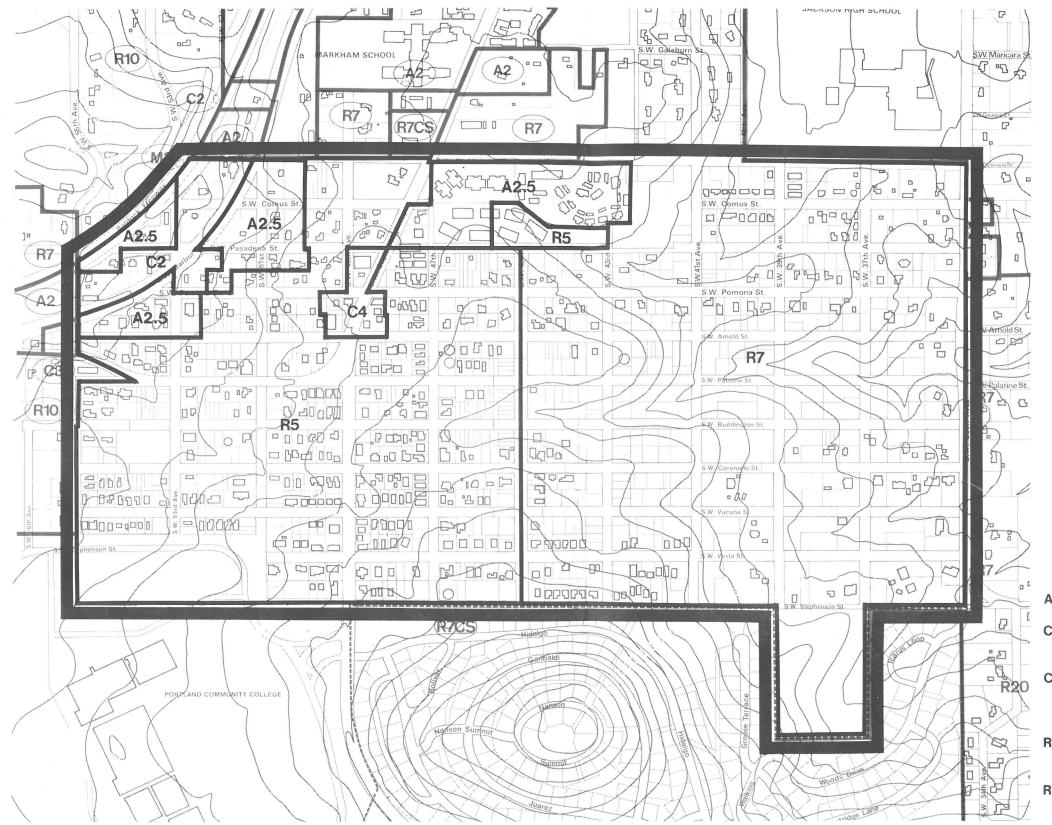
Ownership

Less Than 5,000 Sq. Ft. Greater Than or Equal To 5000 Sq. Ft., But Less Than 7000 Sq. Ft. Greater Than or Equal to 7,000 Sq. Ft. Apartment Condominiums

00' N

Recommended Zoning
Map 11

West Portland Park Map 11



Recommended Zoning

Area Limit
Light Industrial Zone
Single Family Residential
Zone. 5,000 Sq. Ft. Min.
Lot Size.
Single Family Residential
Zone. 7,000 Sq. Ft. Min.
Lot Size.

Apartment Zone

General Commercial Zone; Retail Service Establishments.

5,000 Sq. Ft. Min. Lot;

Local Commercial Zone 4,000 Sq. Ft. Floor

100'

Transp	ortation	Recommen	dations
Man 40			

West Portland Park Map 12

Recommended Stop Signs Major Through Streets Residential Service Street Recommended Bike / Pedestrian Route Attractor Hubs

Transportation Recommendations



Estimated change in housholds, population and trips based on alternative land use densities in West Portland Park Study Area. TABLE 1 -

Maintain/Downzone	R7/R10		954 (1)	2834	7632	-10%
1	R7					
Mix: Upzone, Dovnzone	R5/R10(2)		1942	3095	8336	-1%
Mix: Upzone/ Mix: Upzone/ Maintain Downzone	R5/R7(2)		1145	3401	9160	%8+
Upzone	R5		1411	4191	11,288	+33%
Maintain Existing Density	R7		1057(1)	3140	8456	1 1 1
Present			209 (1788	4816	
		Households	(single family) 602	Population(3)	Trips/Day(4)	%Change over R7

Assumes 45 variances for building on 5000 lots. West of SW 45th/East of SW 45th. Based on Household size of 2.97. Based on 8 Trips/Household/Day.

Estimated change in households, population and trips based on alternative land use densities in the areas east and west of SW 45th Avenue. TABLE 2

	Downzone R10	470	1396	3760	-18%	
of 45th	Upzone R5	839	2492	6712	%97	merendikan dan andara pinanyungan angadan
Area East of 45th	Maintain Upzone R7 R5	573	1702	4584	1 1 1	
	Present	250	743	2000	1	
						0000 lots
	Upzone R5	572	1699	4576	.16%	ilding or
- 45th	Maintain R7	484*	1438	3872	1	variances for building on 5000 lots
Area West of 45th	Present	352	1046	2816		1
Are						5 45
		Households	Population	Trips/Day	%Change	Assumes 45
		우	Ро	۲	S%	*

Estimated amount of impervious surfaces added by houses and driveways* in the area east of SW 45th Avenue. ı TABLE

% Change Over R7	+46.5%		-17.9%
Blocks	11.2	7.6	6.3
Acres	23.1	15.8	12.9
Sq. Ft.	1,006,800	687,000	564,000
	R5	R7	R10

Assumes roof coverage (house and gargage) of 1000 sq. ft. and driveway coverage of 200 sq. ft. (20'x10')