

# City of Rockaway Beach Planning Commission Meeting Agenda



**Date:** September 8<sup>th</sup>, 2022  
**Time:** 4:30 P.M.  
**Location:** Rockaway Beach City Hall, 276 HWY 101 - Civic Facility

JOIN ZOOM MEETING

[HTTPS://US06WEB.ZOOM.US/J/84103077658?pwd=MjBBLTRmWFB2VU9yRHVOWHZBZkZKQT09](https://us06web.zoom.us/j/84103077658?pwd=MjBBLTRmWFB2VU9yRHVOWHZBZkZKQT09)

MEETING ID: 513 717 9369

PASSCODE: 013664

+12532158782 US (TACOMA)

**CALL TO ORDER** – Bill Hassell, Chair

## **ROLL CALL**

[Position #3 - Pat Olson: Present](#)

[Position #7 - Georgeanne Zedrick: Present](#)

[Position #5 - Bill Hassell: Present](#)

[Position #1 - Zandra Umholtz: Present](#)

[Position #6 - Kristina Woida: Present](#)

[Position #2 - Stephanie Winchester: Present](#)

[Position #4 - Sandra Johnson: Present](#)

## **APPROVAL OF MINUTES**

1. July 21<sup>st</sup>, 2022 – Olson made a motion to approve minutes as is, seconded by Umholtz;  
Motioned Carried.

[Position #3 - Pat Olson: Motion](#)

[Position #1 - Zandra Umholtz: 2nd](#)

[Position #3 - Pat Olson: Approve](#)

[Position #7 - Georgeanne Zedrick: Approve](#)

[Position #5 - Bill Hassell: Approve](#)

[Position #1 - Zandra Umholtz: Approve](#)

[Position #6 - Kristina Woida: Approve](#)

[Position #2 - Stephanie Winchester: Approve](#)

[Position #4 - Sandra Johnson: Approve](#)

## **CITIZEN CONCERNS, COORESPONDENCE AND COMMENTS**

Charles McNeilly 123 S. Dolphin St. spoke about Short Term Rental concerns and the need for more regulations.

## **PUBLIC HEARINGS**

1. Falcon Subdivision continuation from July Meeting (SD 22-01)

Scott presented an updated Staff report including the City Engineer's requirements. Commissioners asked questions to staff about the list of conditions, fire turn around, wetlands, off and on street parking.

Applicant George Day presented 346 N Falcon St. – Spoke on behalf and has already been working on lot size adjustments, tree coverage, paving conditions, and other things as per the City Engineer’s requirements. Eileen George spoke about they have hired an arborist to look at the trees to ensure to keep as many trees as possible.

Public comments in support – none  
Public comments in opposition - none

Public hearing closed at 5:33 PM. Umholtz made a motion to close the hearing, seconded by Zedrick, Winchester abstained; Motion carried.

[Position #1 - Zandra Umholtz: Motion](#)  
[Position #7 - Georgeanne Zedrick: 2nd](#)  
[Position #3 - Pat Olson: Approve](#)  
[Position #7 - Georgeanne Zedrick: Approve](#)  
[Position #5 - Bill Hassell: Approve](#)  
[Position #1 - Zandra Umholtz: Approve](#)  
[Position #6 - Kristina Woida: Approve](#)  
[Position #2 - Stephanie Winchester: Abstain](#)  
[Position #4 - Sandra Johnson: Approve](#)

Commissioners held discussion regarding parking on and off street. Hassell opened for a motion, Woida moved that Falcon Subdivision Preliminary Plat (SD 22-01) be approved with the conditions listed in the staff report and City Engineer’s memo, and direct staff to write a final order containing those conditions, Olson 2<sup>nd</sup>, Winchester abstained; Motioned Carried.

[Position #6 - Kristina Woida: Motion](#)  
[Position #3 - Pat Olson: 2nd](#)  
[Position #3 - Pat Olson: Approve](#)  
[Position #7 - Georgeanne Zedrick: Approve](#)  
[Position #5 - Bill Hassell: Approve](#)  
[Position #1 - Zandra Umholtz: Approve](#)  
[Position #6 - Kristina Woida: Approve](#)  
[Position #2 - Stephanie Winchester: Abstain](#)  
[Position #4 - Sandra Johnson: Approve](#)

## **OLD BUSINESS**

1. Appointment of Planning Commission Secretary – Olson made a motion to appoint Jenny Kettner, Ummoltz seconded; Motioned Carried.

[Position #3 - Pat Olson: Motion](#)  
[Position #1 - Zandra Umholtz: 2nd](#)  
[Position #3 - Pat Olson: Approve](#)  
[Position #7 - Georgeanne Zedrick: Approve](#)  
[Position #5 - Bill Hassell: Approve](#)  
[Position #1 - Zandra Umholtz: Approve](#)  
[Position #6 - Kristina Woida: Approve](#)  
[Position #2 - Stephanie Winchester: Approve](#)  
[Position #4 - Sandra Johnson: Approve](#)

## **NEW BUSINESS - None**

## **PLANNING COMMISSION COMMENTS & CONCERNS**

Johnson – Rules and Procedures for PC Commission, update on NW 22<sup>nd</sup> street, tree ordinance. thanked for Luke to attend the PC meeting. Short-Term rental, parking and committee for cedar preserve, and dumpsters comment for commercial properties.

Winchester – Rules and Procedures for PC Commission.

Woida – tree ordinance.

Olson – Happy about STR ordinance

Umholtz – Short term rental and code enforcement.

Zeedrick – Short term rental, tree ordinance and code enforcement.

Hassell – Island Street parking for old Cedar Preserve entrance.

## **STAFF COMMENTS AND CONCERNS**

Shepard – Spoke about parking on 23<sup>rd</sup> and future widening on 22<sup>nd</sup> waiting on utilities that need to be moved. Short Term Rental and land use.

Scott – Is presenting to City Council next week on Affordable Housing, buildable lands inventory update and future housing needs analysis.

Discussion about moving Planning Commission meeting to 4:30 going forward - all in agreement.

## **ADJOURNMENT at 6:28 p.m.**

Johnson made a motion, seconded by Woida, Motion carried.

[Position #4 - Sandra Johnson: Motion](#)

[Position #6 - Kristina Woida: 2nd](#)

[Position #3 - Pat Olson: Approve](#)

[Position #7 - Georgeanne Zedrick: Approve](#)

[Position #5 - Bill Hassell: Approve](#)

[Position #1 - Zandra Umholtz: Approve](#)

[Position #6 - Kristina Woida: Approve](#)

[Position #2 - Stephanie Winchester: no longer present](#)

[Position #4 - Sandra Johnson: Approve](#)



STAFF REPORT

CASE FILE: #VAR-22-03

DATE FILED: 9/1/22

HEARING DATE: 9/20/22

**CITY OF ROCKAWAY BEACH  
PLANNING COMMISSION ACTION**

**APPLICANT:** Kris & Randy Pierce

**REQUEST:** The applicants are requesting a variance for a reduction to the required front yard setback to construct a new home and garage located at 873 N Miller Street. The lot is located in the R-1 Zone and is approx. 4,515 sq ft. The R-1 front yard setback for lots between 3,500 and 4,999 sq. ft. is 15 feet from the property lot line and the applicant is requesting to reduce the front yard setback to 0 feet.

**A. REPORT OF FACTS**

- 1.) **PROPERTY LOCATION:** The property is located at 873 N Miller St. in Rockaway Beach and is further identified on Tillamook County Assessor's Map #02N-10W-32BB as tax lot 300. There is no active zoning permit, but the applicant has informed city staff that they intend to demolish the current single-family home and construct a new one.
- 2.) **LOT SIZE:** approximately 4,515 square feet
- 3.) **ZONING DESIGNATION:** R-1 (Residential Zone)
- 4.) **SURROUNDING LAND USE:** The subject property is adjacent to existing single-family dwellings on the north, south and west. To the east is Miller Street, the railroad tracks and HWY 101.
- 5.) **EXISTING STRUCTURES:** The building is a single-family home with no garage and two outdoor decks.
- 6.) **UTILITIES:** The following utilities serve the subject property:
  - a. Sewer: City of Rockaway Beach
  - b. Water: City of Rockaway Beach
  - c. Electricity: Tillamook County P.U.D.
- 7.) **DEVELOPMENT CONSTRAINTS:** The property is not in a flood zone and does not have wetlands. The property is over 25% sloped thus making it located in the Hazard Overlay Zone (HO). The property sloped toward Miller Street because it's located on a dune. The elevation goes from 28 feet at the street level property line up to 45 feet which is 47% sloped. A zoning permit will require a Geotechnical Report.

**B. EVALUATION OF THE REQUEST**

- 1.) **GENERAL DESCRIPTION OF THE PROPOSAL:** The applicants are requesting to build a garage up to the property line on Miller Street.
- 2.) **BACKGROUND:** There is no active zoning permit, but the applicant has informed city staff that they intend to demolish the current single-family home and construct a new one with a garage.
- 3.) **AGENCY COMMENTS:**
  - a. None received to date.
- 4.) **ORDINANCE STANDARDS:** The following ordinance standards apply to this request.



Rockaway Beach Zoning Ordinance, Article 8. Variances.

#### Section 8.010. Purpose

- 1.) The purpose of a variance is to provide relief when a strict application of the zoning requirements would impose unusual practical difficulties or unnecessary physical hardships on the applicant. Practical difficulties and unnecessary hardships may result from the size, shape, or dimensions of a site, or the location of existing structures thereon; from geographic, topographic or other physical conditions on the site or in the immediate vicinity or from population densities, street location, or traffic conditions in the immediate vicinity.

Although the purpose section of the variance provisions is not intended to be used as a criterion or standard to evaluate the request, it should be considered as a guide in the evaluation of the criteria as outlined below.

#### Section 8.020. Criteria

(1) Variances to a requirement of this chapter with respect to lot area and dimensions, setbacks, yard area, lot coverage, height of structures, vision clearance, fences and walls, and other quantitative requirements may be granted only if, on the basis of the application, investigation, and evidence submitted by the applicant, that all four expressly written findings are made:

- (a) That a strict or literal interpretation and enforcement of the specified requirement would result in practical difficulty or unnecessary hardship and would be inconsistent with the objectives of the Comprehensive Plan; and
- (b) That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties in the same zone; and
- (c) That the granting of the variance will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the near vicinity; and
- (d) That the granting of the variance would support policies contained within the Comprehensive Plan.

#### **C. STAFF SUMMARY**

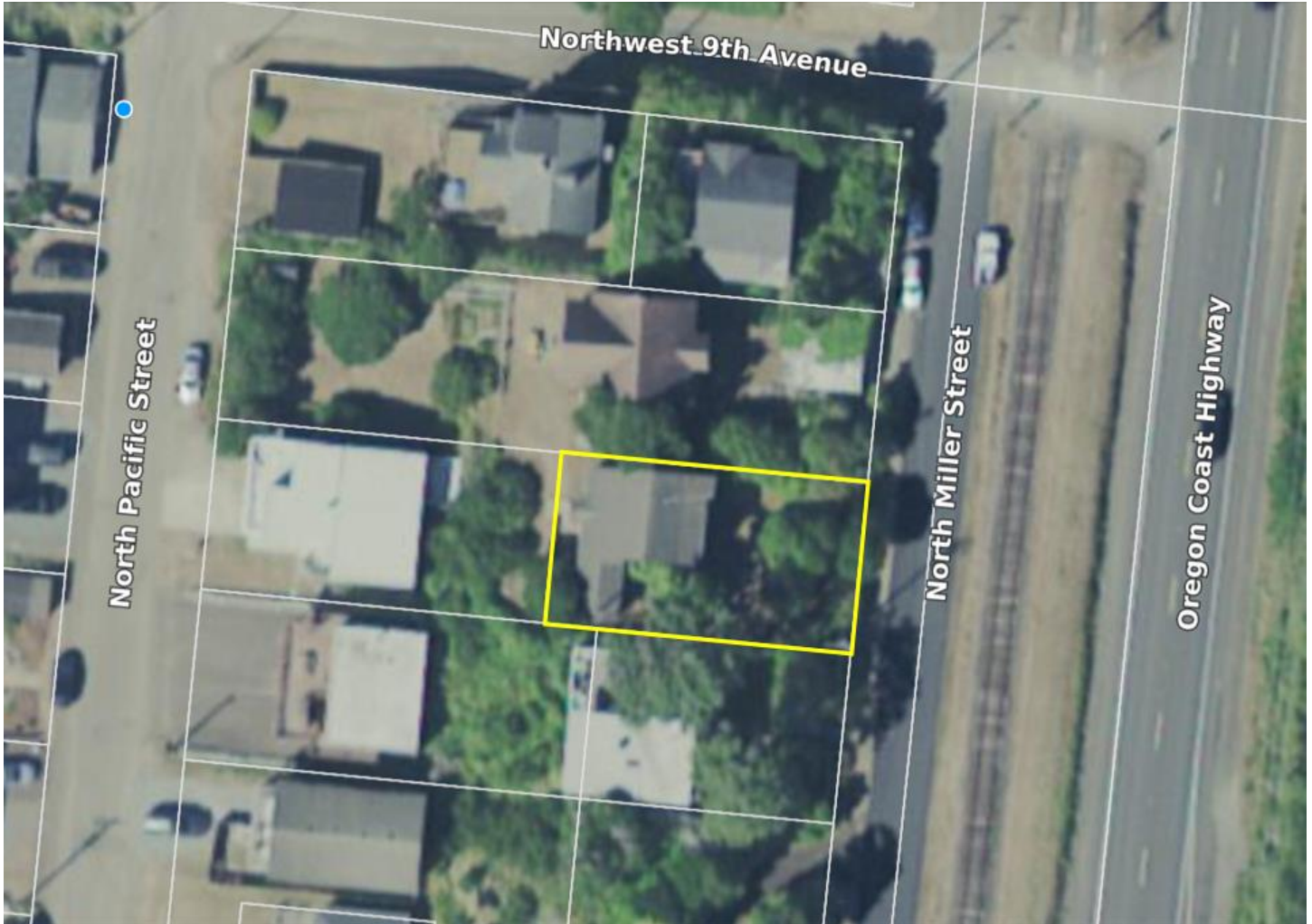
The applicant has addressed the criteria for a variance (see application and findings).

#### **D. CONCLUSION**

If, after hearing the evidence at the hearing, the planning commission agrees that sufficient facts exist to grant the variance, they should direct staff to write findings based on the evidence to permit the variance. If they do not find that sufficient evidence exists to allow the variance, they should direct staff to write findings for denial of the variance.



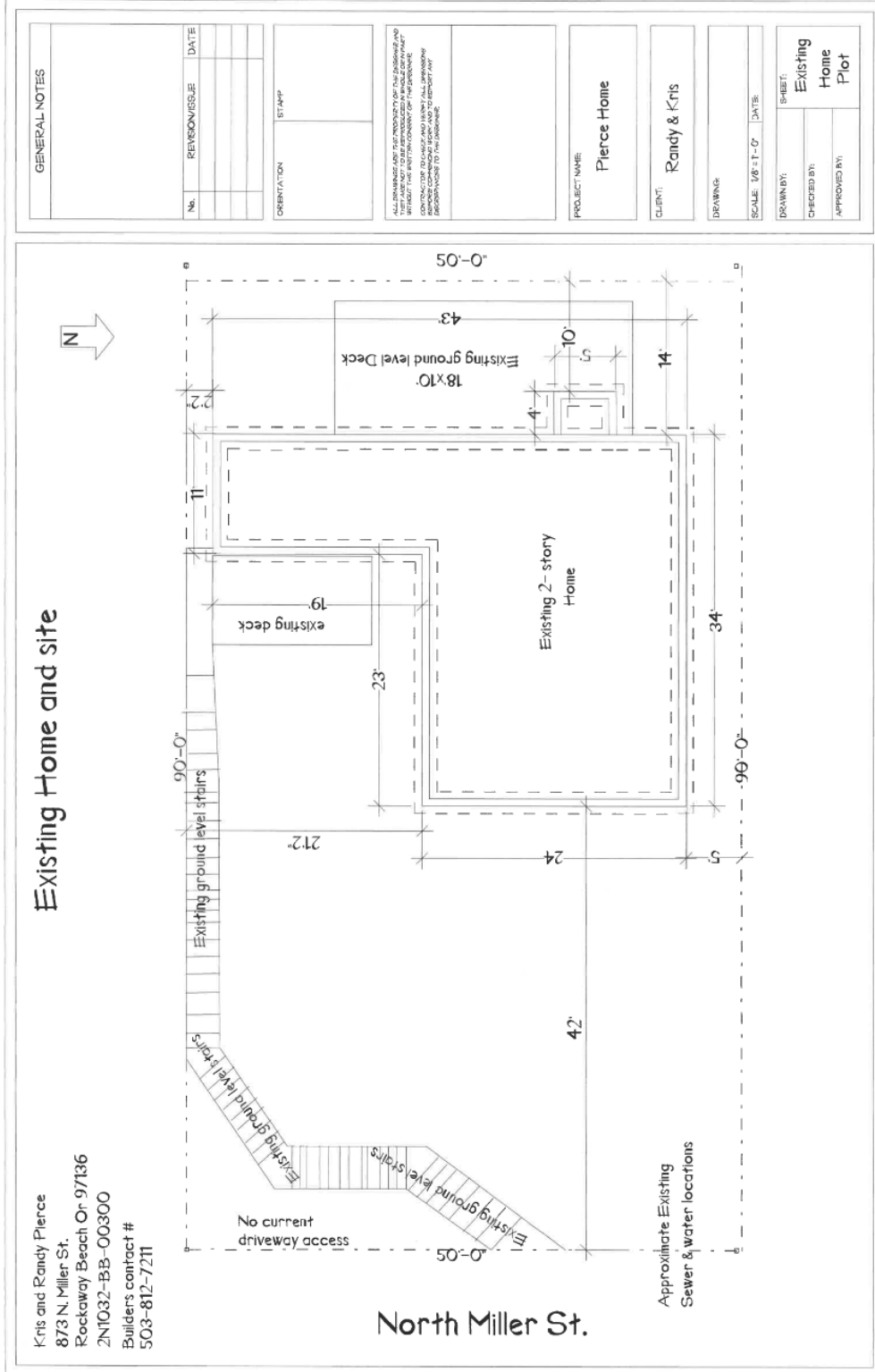
Air Photo & Tax Lot







Site Plan



City of Rockaway Beach, Oregon

276 S. Highway 101, PO Box 5  
Rockaway Beach, OR 97136  
(503) 374-1752 FAX (503) 374-0601  
[www.corb.us](http://www.corb.us) • [cityplanner@corb.us](mailto:cityplanner@corb.us)



VARIANCE APPLICATION

✓ (#22-03)

Non-Refundable Fee \$880.00

Property Owner(s) Name: Kris & Randy Pierce

Full Mailing Address: 11400 Olympus way Wa 98332

Email: Kris.Pierce@comcast.com Phone Number: (253) 204-0494

Location Information:

Situs Address: 873 N Miller AND/OR Map/Tax Lot: 2N1032-BB-10300

Zoning: R-1 Zone

Description of Request: See Attached

Justification of variance request. Explain how the request meets each of the following criteria for granting a variance per Rockaway Beach Zoning Ordinance# 143, as amended, Article 8, Variances, Section 8.020, Criteria

1. That a strict or literal interpretation and enforcement of the specified requirement would result in practical difficulty or unnecessary hardship and would be consistent with the objectives of the Comprehensive Plan.

See Attached

2. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties in the same zone.

See Attached

3. That the granting of the variance will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the near vicinity.

See Attached



4. That the granting of the variance would support policies contained within the Comprehensive Plan.

See Attached

Note: Use extra sheets or documents, if necessary, for answering the above questions.

Attach a scale drawing showing the dimensions of the property, adjacent street(s), dimensions of existing structure and dimensions of proposed development.

I hereby certify that the above information is correct and understand that issuance of a permit based on this application will not excuse me from complying with effective Ordinances and Resolutions of the City of Rockaway Beach and Statues of Oregon, despite any errors on the part of the issuing authority in this application.

Property Owner Signature: Rep:  Date: 8-17-22

OFFICE USE ONLY

Fee \$ 880.00 Date Received: 8/17/22 Receipt # 1.000081 By: JK

Notes: \_\_\_\_\_

Notice Published: \_\_\_\_\_ Public Hearing Date: \_\_\_\_\_

Variance  Granted  Denied Date of Order: \_\_\_\_\_ Final Date to Appeal: \_\_\_\_\_ t \_\_\_\_\_

Planning approved by: \_\_\_\_\_ Date of Order: \_\_\_\_\_

\* 8/18/22 - Application not accepted sent to Applicant for revisions (see email)

\* 9/1/22 - Updated packet & variance application accepted.

## PIERCE GARAGE VARIANCE

**Description of Request:** Request is for reduction of the front yard setback of 15' to 0" setback. The Family (owners) have owned the existing home and property since 1970. The home was built in 1930.

The owners are concerned of not having a garage to keep their vehicles and personal items such as bicycles, kayaks, and lawn furniture out of the coastal environment. The owners are retiring this year and have plans to demolish the existing home to build their new family home and live in Rockaway through their retirement years. There has been no off-street parking for this property since it was built.

- 1. That a strict or literal interpretation and enforcement of the specified requirement would result in practical difficulty of unnecessary hardship and would be consistent with the objectives of the Comprehensive Plan.**

The existing home and property are on a natural sand dune. The practical difficulty and unnecessary hardship are the natural sand dune.

**Difficulty** The existing home is located on top of the dune. The slope of the dune starts at grade with Miller Street and raises quickly and high for a 15' setback, some 12-15 feet in height (1' horizontal to 1' rise) with a 15' setback would put a garage structure 20-30' deep in the dune and under a new home making costs unreasonable and hazardous to nearby structures to excavate.

**Hardship** The dune is a natural feature in this area and a natural hardship to build on. Having had homes built on this dune since the early 1900's to present time has set a precedent. Garages and homes have previously been built along Miller Street with zero setback. As for the difficulty of moving structures into the dune; Sand has an angle of repose of 45 degrees. Digging this deep to meet setbacks would endanger the adjacent properties. (See attached GEO and Civil report & attached photos)

- 2. That there are exceptional or extraordinary circumstances or conditions applicable to the property involved or to the intended use of the property which do not apply generally to other properties in the same zone.**

Circumstances and the extraordinary condition of this property is the natural dune. The property is in a R-1 zone single family dwelling. This area is a small percentage of area in or on a sand dune in R-1 Zones. Most R-1 zones are on level ground or on more stable material to excavate. (See attached Civil engineering & Geo report)

- 3. That the granting of the variance will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the near vicinity.**

The granting of the variance would help to eliminate safety concerns of the adjacent structures on each side of the existing home. By allowing the Variance, it will be consistent with the area and protect the adjacent properties. (See Civil & geo-report highlighted geologist comments)

## PIERCE GARAGE VARIANCE

### 4. That the granting of the variance would support policies contained within the Comprehensive Plan.

The Variance does support the **Comprehensive Plan** and the **criteria** of the application for the request of a zero setback. There are existing garages & structures within the same block, and adjacent blocks North (9<sup>th</sup> St.) and South (7<sup>th</sup> St.) of this block that have zero garage/structures setbacks due to the dune hardship. There are many more areas outside of these blocks North and South on Miller St. (See attached photos)

#### Support of comprehensive;

- a. Planning process #7 (c) The land is physically suitable for the uses to be permitted in terms of slope, geologic stability, flood hazard and other relevant considerations;
- b. Planning process #7 (e) The amendment is compatible with the land use development pattern in the vicinity of the request. [Planning Process Policy 7, amended by Ord. 277, Aug. 29, 1990.]
- c. Planning process #8 (d) The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impact. (See attached photo's)

#### Economic considerations pg7

a. The state-wide economic planning goal encourages "improvement" and "diversity" of the economy of the state. The economic base of Rockaway Beach is tourism, and has been so historically. Whereas neighboring communities rely on agriculture, forestry, fishing or port activities for their livelihood, Rockaway Beach's lakes and Pacific beaches have provided the City with a specific economy. Without a harbor, farmland or industry other than recreation, Rockaway Beach shares with the cities of Lincoln City, Seaside and Cannon Beach the tourist trade of the north Oregon coast. People come to Rockaway Beach to fish, to walk on the beach, to "get away from it all". Rockaway Beach is primarily a family resort, with inexpensive room rates and unsophisticated recreation. [Economic considerations, amended by Ord. 277, Aug. 29, 1990.]

#### Policies Relating to the Economy pg 9

a. #11 The City recognizes that its retirement community represents an important element of the economy. The city will cooperate with community groups on making community improvements that will enhance the City's attractiveness as a retirement community. Particular attention should be given to enhancing the medical facilities available in the region.

#### Energy Considerations pg 12

a. #4 Enforcement of the building code also serves to conserve energy. The insulation requirements for new construction reduce energy consumption for heating and cooling.

#### Physical limitations pg14

The natural attractions of the Rockaway Beach area have traditionally drawn people to the area; the beaches, bays, rivers, lakes and mountains appeal to residents and visitors alike, and that appeal translates into a demand for land. Quite naturally, the most desirable land was developed first – primarily that on the ocean front. Development then spread to other areas physically suited to building, until now. Rockaway Beach is faced with a very straightforward problem: most undeveloped land in the

## PIERCE GARAGE VARIANCE

area suffers substantial physical limitations to building suitability. Compressible soils, poor drainage and landslide hazards are some of the special construction problems often facing today's builder in Rockaway Beach. The physical limitations map (fig. #1) shows four areas that present problems to development: 1) beaches, 2) dunes, 3) wetlands and flood areas and 4) steep slopes.

### Beaches and Dunes policies pg 14

a. #5 (c) Any site on which proposed excavation will produce cut slopes greater than five feet in height or steeper than two horizontal to one vertical (2:1). [Policy 5, amended by Ord. 243, May 13, 1986.]

b. #7 A detailed description of a dune stabilization program shall be a part of the application for a building permit for any proposed development, which potentially will reduce the level of stability of a dune area and threaten adjacent property. The re-vegetation program shall be designed to return areas at least to their predevelopment levels of stability within a specified period of time.

### Hazards pg20.

- a. . Where development is proposed for areas with a slope of 25% or greater, a site investigation report prepared by a registered geologist shall be required prior to the approval of a building permit, land division or other proposed development. (See attached GEO and civil reports)

### Natural Features pg 20

- a. #1 The maintenance of natural terrain and vegetation shall be encouraged throughout the City. In areas with a slope exceeding 25% the City shall require a geological study, grading plan and erosion control plan prior to grading activities or tree removal to ensure that adverse impacts are minimized. (See attached GEO and civil reports)

### Land Use Categories pg.21

a. Land use categories are intended to establish certain uses for certain areas based on neighborhood characteristics, physical limitations, the availability of public services such as streets, sewer and water, the desires to build a strong economy and maintain a clean environment, and other factors. (See attached photos of existing garages in the same neighborhood and 1 block North and South.)

### The Single Family or Duplex Residential Area pg23

- a. This area extends from NW 11th Ave. to N 6th Ave., west of US Highway 101. This area is in the vicinity of the "Ridge", or high stabilized sand dune in the northern part of the City. It is a stable neighborhood composed primarily of single-family homes. There are large motels on either end of this area, and a limited amount of vacant land dispersed among existing structures. The last community questionnaire indicated a strong desire of the townspeople to keep the area a single-family neighborhood. (See attached Geo and civil reports)

### Circulation pg39

- a. #2 . Construction of streets and roads in steep hillside areas should follow contour lines and natural topography wherever possible to minimize the danger of slides.

## PIERCE GARAGE VARIANCE

- b. #8 . In areas of steep topography or other unusual circumstances, the planning commission may waive the street standards in order to minimize slide or other hazards, especially the street width requirements. (On-street parking should be banned where necessary, with additional off-street parking required to compensate for it.)

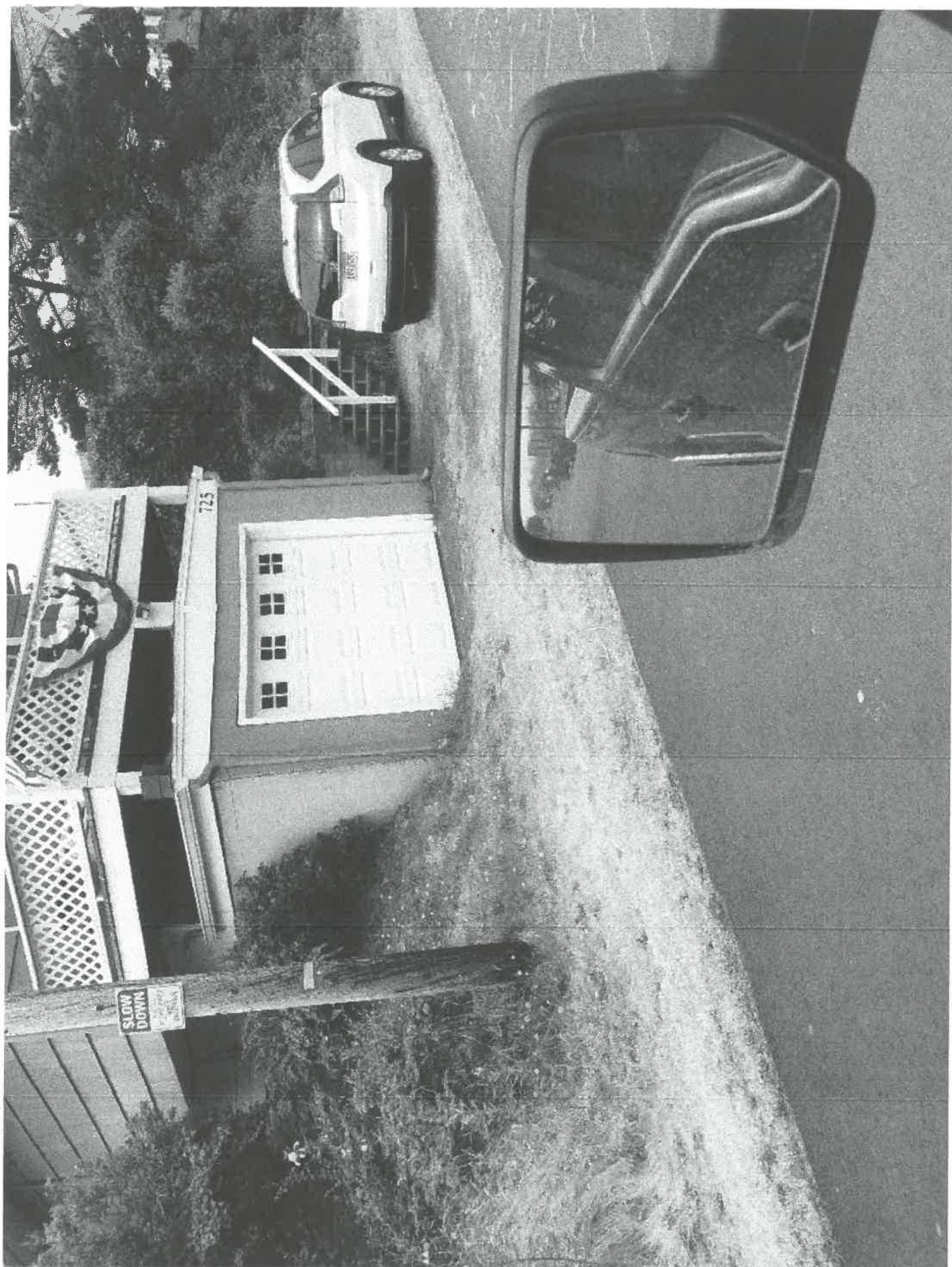
**In closing,** we believe that the request for variance of reduction of the front setback meets the criteria and is in support of the Comprehensive Plan. It will also protect the 2 adjacent properties from dangerous undermining. Also, this will provide the 2 off-street parking required for properties in a R-1 Zone. Additionally providing the owners a covered garage in order to protect their vehicles and personal property throughout their retirement.

To minimize any hazardous situations to the adjacent properties, the new residential structure will be constructed in the same area as the existing home (see the existing home plot plan).

On behalf of the Pierce Family, Kris and Randy would like to thank the City Planning Commission and Staff for your consideration.



725 W. Miller





905



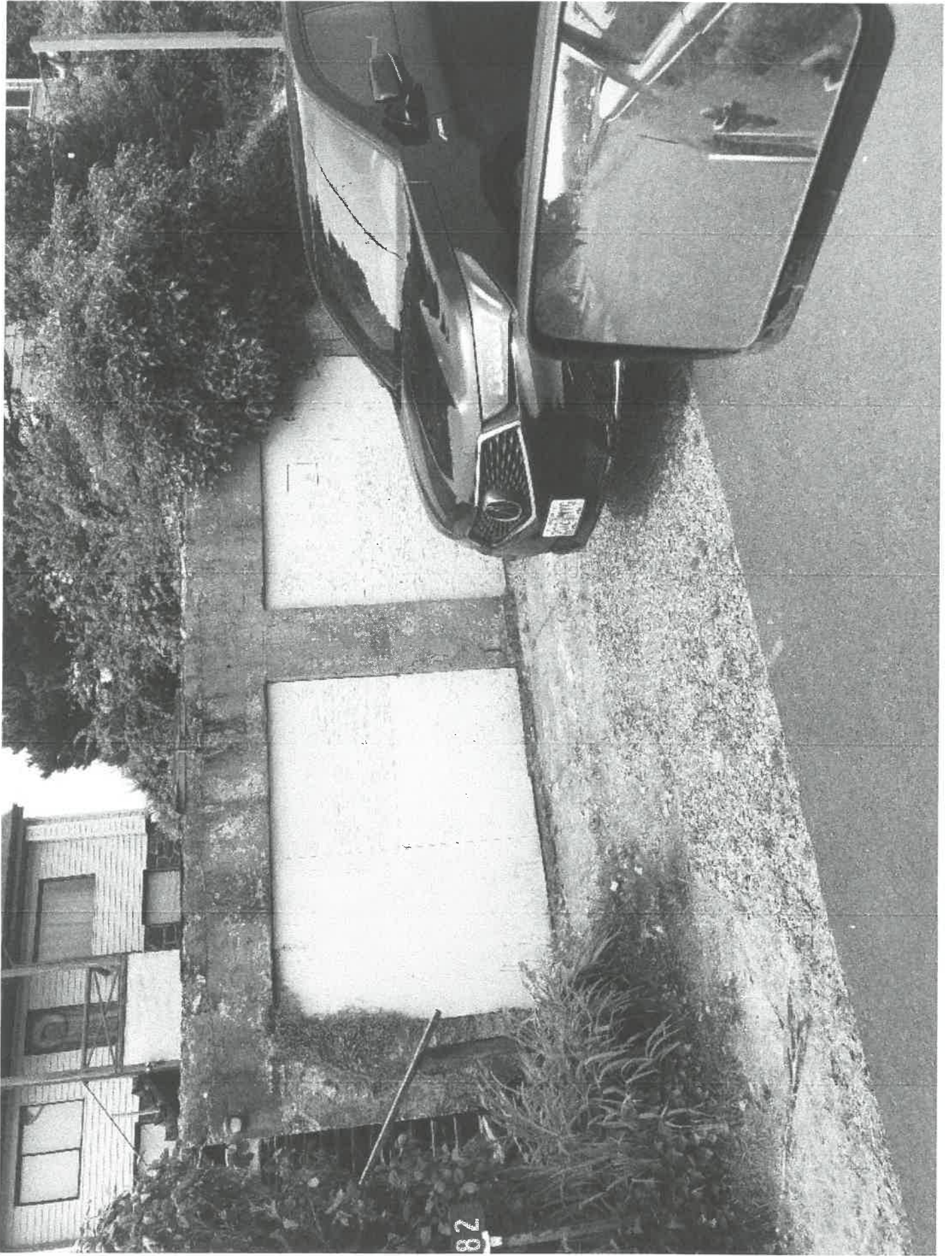


1035 Miller





882 N Miller neighbor to north



82

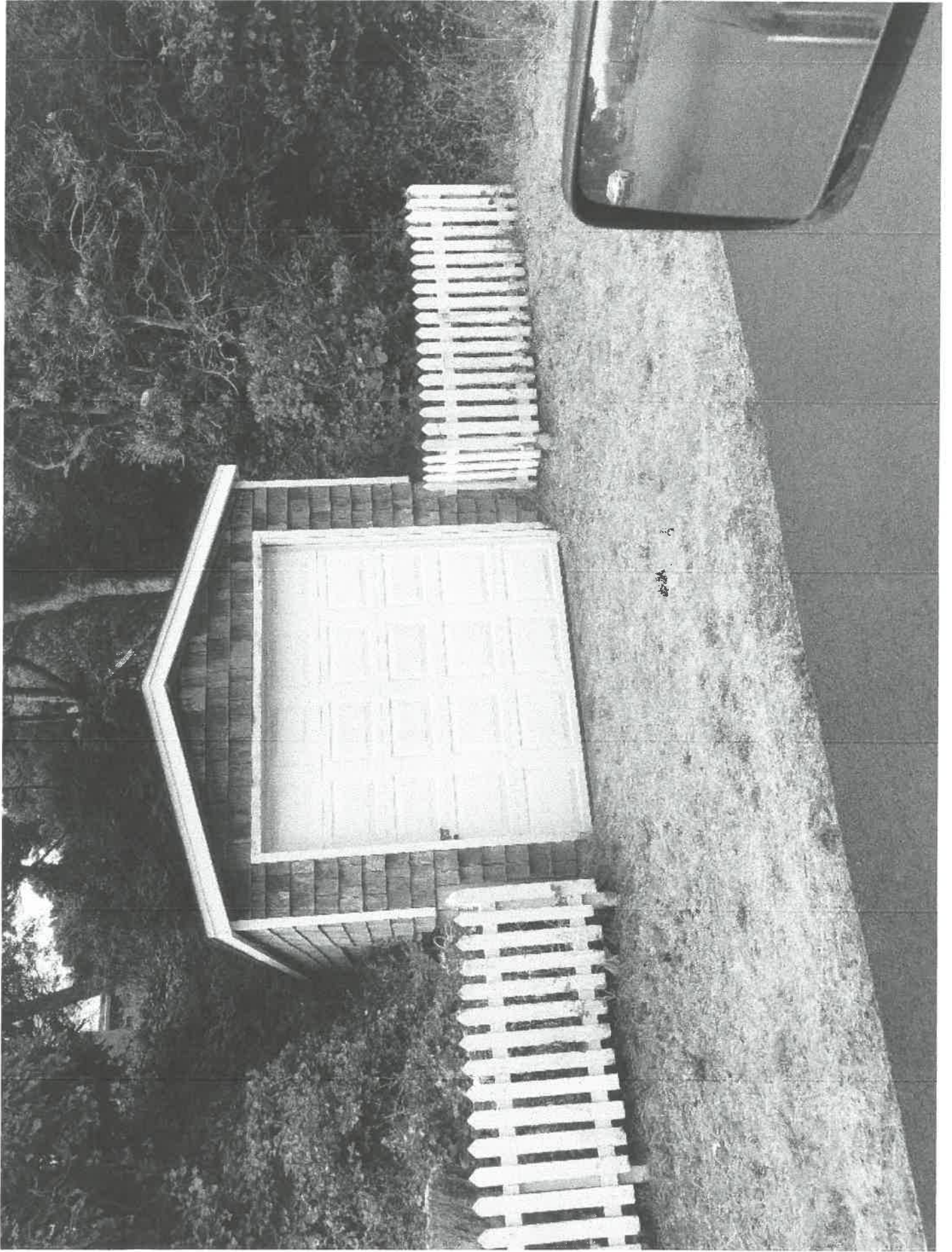


777 N. Miller



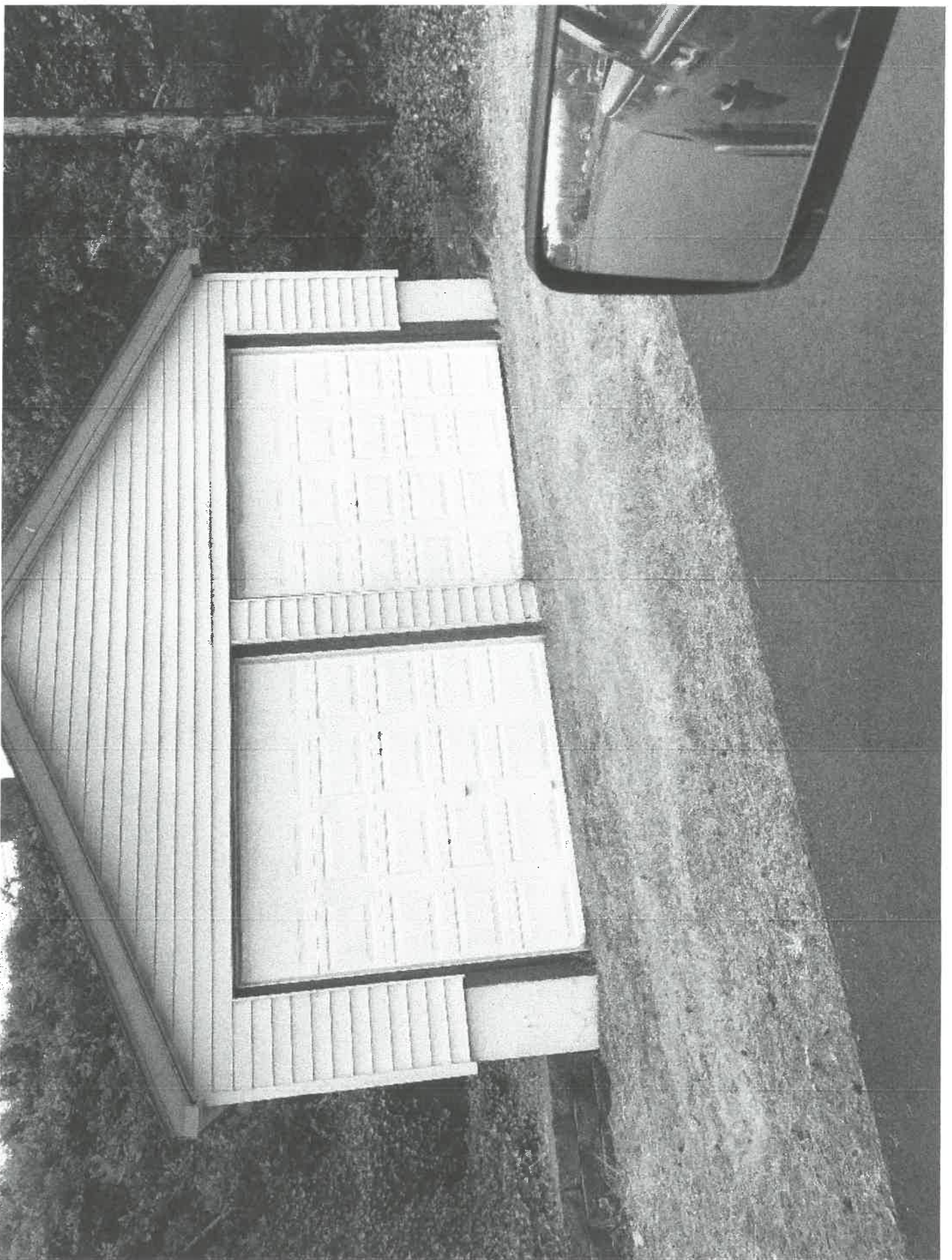


SOUTH OFF





(765)? 2nd, House Surr 777 N. Miller







# MORGAN CIVIL ENGINEERING, INC.

PO Box 358, Manzanita, OR 97130

ph: 503-801-6016

[www.morgancivil.com](http://www.morgancivil.com)

July 26, 2022

Randy & Kris Pierce  
11400 Olympus Way N-201  
Gig Harbor, WA 98332

[rh Pierce50@gmail.com](mailto:rh Pierce50@gmail.com)

**Re: *Engineering Portion of Geologic Hazard Report for Tax Lot 00300, Map 2N 10W 32BB, Lot 3, Block 14 of LAKE LYTLE, City of Rockaway Beach, Tillamook County, Oregon (873 N Miller Street)***  
**Project #22-04-Pie**

Dear Mr. & Mrs. Pierce:

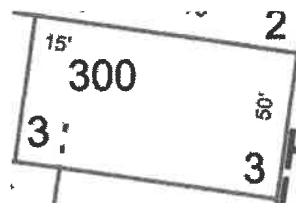
At your request, we have completed the site investigation of your property, referenced above. Available maps and previous reports of nearby properties were utilized in this investigation. This investigation also included a site inspection of the subject property with Warren Krager, Certified Engineering Geologist. Mr. Krager investigated the geologic conditions of the site and has addressed them in his report. Morgan Civil Engineering, Inc. (MCE) has then developed the engineering recommendations related to construction on the site. The two reports combined constitute the Geologic Hazards Investigation required by the City of Rockaway Beach. This engineering portion of the report is prepared for your use in the construction of a new single-family home on the property. The standards set forth herein should be incorporated into the development plans for that project.

Site elevations noted in this report are based on topographic information obtained from the Oregon Department of Geology and Mineral Industries (DOGAMI) LiDAR project. The elevations are based on the NAVD88 datum, which is approximately sea level.

We understand that the building on the property is to be removed and replaced. A new rectangular home is to be constructed near the center of the property with a parking area at the eastern end of the site. Stairs will be installed to access the building.

## Site Conditions

The site and its geologic conditions are generally as described by the geologist in his report. Mr. Krager has investigated the geologic hazards on the site and included those hazards in his report. Krager's 6-page report, dated June 6, 2002 is attached for your use. The property is a rectangular parcel that fronts North Miller Street to the east for 50 feet and extends 90 feet to the west. See the attached portion of the assessor's map for property orientation and dimensions.



The property is developed with a single-family home. According to Tillamook County Tax Rolls, the property was developed in 1930. The home is located near the western end of the property. Parking is along North Miller Street, with a set of wooden stairs to the home.

North Miller Street is a flat road that borders the railroad tracks. It is a paved road and all utilities are located in the right-of-way. Services are extended into the property for the existing home.

The property consists entirely of dune sand. Over the last 90-plus years, we expect the site is entirely disturbed in some manner.

Elevations on the property vary from about 22 feet at North Miller Street to 44 feet at the west end of the property. There is a steep slope up from North Miller Street to a bench at the front of the house, near elevation 33 feet. The yard at the west side of the house is near elevation 44 feet. The slopes are both steep, over 60 percent, and heavily vegetated.

Vegetation on the property is mainly salal in the eastern portion of the property. The area around the house includes landscaping plants, and there is a grass lawn to the west of the house.

The site is located in a 135 miles per hour basic wind gust speed zone, unprotected from the ocean winds (Exposure 'D' as per the 2021 State of Oregon Residential Specialty Code (ORSC)). Therefore, the building must be designed in order to withstand the minimum required lateral wind gust loads. In general, one- and two-story wood frame construction designed in order to withstand 135 miles per hour Exposure 'D' wind loading will also withstand even severe earthquake loads. According to the International Building Code (IBC) and ORSC, structures in Exposure 'D' are typically required to have an engineering analysis calculation of lateral wind loads. Such calculations must be submitted with the building permit application.

### **Findings and Hazards Analysis**

The primary relevant geologic hazards on this site relate to: 1) steep slopes; 2) loose sand; 3) possible fill; 4) buried organic debris, and; 5) regional seismic hazards.

Mitigation of these hazards is discussed in the Development Standards addressed herein and in the detailed recommendations set forth in the report prepared by the geologist.

The North Oregon Coast is defined by the 2021 ORSC as lying within a D<sub>2</sub> Seismic Design Category. As such, structures built in this area must, at a minimum, comply with the structural requirements for the D<sub>2</sub> Seismic Design Category. Strong seismic acceleration will likely result in widespread landsliding and no slope can be considered immune from failure under these conditions.

### **Mandatory Development Standards**

In addition to the required standards of the Rockaway Beach Zoning Ordinance, the following site-specific standards shall also be required:

**A. Development Density** – This property should be developed for uses consistent with current zoning (outright or conditional uses). All development should take place in conformance with all other requirements of the Rockaway Beach Zoning Ordinance, **or approved variances, as applicable.**

**B. Structure Foundation and Road Location** – No site-specific setbacks were recommended by the geologist in his report. Excavation should be designed in order to avoid disturbing the adjacent properties. Set footings near the surface or plan on temporary shoring to the north and south of the house.

The building foundations should be designed in accordance with Development Standard "E", noted below. Site access should take place from North Miller Street.

The house structure should be placed upon this property in accordance with City setback standards. Footing design and the depth of all footings should be in accordance with Development Standard E, noted below.

**C. Land Grading Practices** – All excavations for the parking area and house foundation construction should be done during reasonably dry weather (while it is not raining hard). All cut slopes should be retained using temporary or permanent means of stabilization. No excavated material should be placed in any sidehill fill, unless it is supported by a retaining structure. All excavated material should be disposed of by hauling it off the site or placing it behind a retaining wall.

Cut slopes should be supported by a retaining wall, designed by a licensed engineer, and constructed according to the standards set forth herein. The top of retaining walls, including foundation walls, should be set at least 5 feet horizontally from the face of the retained slope.

Unretained permanent slopes should be no steeper than 2H:1V. Temporary cut slopes should not be steeper than 1.5:1.

After construction of the house on this property is complete, the area immediately around the foundation should be protected from sand deflation. It is my recommendation that a minimum 6-inch-thick layer of 3/4"-minus crushed rock is the most cost-effective method for dealing with the sand deflation problem. Concrete walks or driveways constructed up against the foundation will provide similar protection. A sand stabilization method, such as concrete walks, asphalt driveways or crushed rock surfacing, should be employed in all areas around the foundation. All concrete structures, such as walks or driveways, should be similarly protected by an edging of crushed rock. Planting vegetation near the structure will also help protect from sand deflation.

The property should be graded in order to provide positive surface drainage away from the proposed building.

**D. Vegetation Removal and Revegetation** – All areas that are disturbed by construction should be promptly revegetated in order to reduce the potential for erosion. The Oregon Fish and Wildlife Department’s recommended revegetation program for sites such as this is as follows:

Seed disturbed areas with the following grass mixture. Application rate is 12 to 14 pounds per acre.

<b>Species</b>	<b>Percentage of Mixture</b>
Annual Ryegrass	26%
Potomac Orchardgrass	25%
New Zealand White Clover	20%
Perennial Ryegrass	15%
Annual Crimson Clover	14%

Use a 16-20-0 fertilizer in order to speed the establishment of the cover material. In order to further contribute to the stability of the disturbed areas, jute matting, straw cover, or another stabilization product such as SoilGuard®, should be placed over the soil in order to help protect against erosion before the seeds are allowed to germinate. In addition, planting shrubs and trees, such as salal, red elderberry, barberry, beach pine, escallonia, cistus, ceanothus, etc., will further contribute to the long-term stability of the site.

Prior to planting, I recommend spreading organic topsoil over the disturbed areas in order to improve the likelihood of long-term vegetation growth. Use topsoil imported from a nearby site.

Vegetation on the sand slopes should be monitored and replaced, as necessary. Ground cover is important to stabilizing any disturbed slope and prevents future sloughing.

**E. Foundations** – The foundation should be a continuous, reinforced concrete perimeter system, using reinforced concrete foundation walls, where required. The site lends itself toward the use of a daylight basement design for the home to economically use the existing slope of the site.

All footings should rest on firm compacted sand. Regardless of depth, the bottom of all footings and pads should be excavated to below any organic material or loose sand. There is a potential for buried topsoil or isolated pockets of organic material that extend deeper into the bearing material than in other locations. Regardless of depth, all organic debris and topsoil should be removed from the building footprint.

The construction of a concrete slab on grade is acceptable on a prepared pad. The area to support the slab should consist entirely of firm sand and be covered with at least 6 inches of compacted crushed rock.

Below any concrete slab, I recommend the use of a capillary break in order to prevent moisture directly under the slab. Below the slab, use a layer of plastic sheeting, clean 3/4-inch crushed rock (no fines), or a combination of both options.

If a crawl space is planned beneath a wood first floor, I recommend the use of continuous, reinforced concrete strip footings running between perimeter foundation walls, in order to allow for continuity of the reinforced concrete footings. Isolated footings should not be used within the perimeter foundation walls. Interior footings should be integral with the continuous perimeter footings. The first-floor joists should then be supported either with conventional posts and beams, or pressure treated pony walls on continuous strip footings tied together with the continuous perimeter footings.



Given the likely presence of loose and compressible sand on the lot, I recommend that the entire footprint of the footings for the proposed home be recompact. Re-compaction should be done at the bottom of all foundation footings, regardless of depth. The degree of compaction sought is 95 percent of optimum density. Water will need to be added during compaction to increase the moisture content of the sand in order to obtain adequate compaction.

Soil bearing pressures at the bottom of all footings should not exceed 1500 pounds per square foot after compaction is completed. All footings should be at least 18 inches in width.

Any retaining walls should be designed according to the following criteria:

Allowable Soil Bearing Pressure, psf (after compaction is completed)	1,500
Lateral Soil Bearing Pressure on Unrestrained retaining walls with level backfill, pcf/ft of depth, equivalent fluid weight (Active pressure excluding surcharge effects)	40
Lateral Soil Bearing Pressure on Restrained retaining walls with level backfill, pcf/ft of depth, equivalent fluid weight (Active pressure excluding surcharge effects)	50
Lateral Soil Bearing Pressure (Passive), pcf/ft of depth	300
Friction Angle, degrees	30°
Maximum unit weight, pcf	120
Coefficient of Friction	0.35

Design retaining walls with a minimal heel in order to reduce excavation.

All retaining walls should also be designed to account for any surcharge loads or sloping backfill conditions. Native material is acceptable for backfill behind retaining walls. The retaining wall designer should determine whether a retaining wall is restrained or not.

**F. Driveway Location and Design** – No driveway is planned. The proposed parking area is located directly off of North Miller Street. The parking area should be constructed to be supported entirely on firm sand. Access should be from North Miller Street; any location along the front the property is acceptable.

Retaining walls for the parking area should also be shown in the plans and designed by an engineer.

**G. Stormwater Management, Runoff and Drainage** – All roof drainage should be collected with eave gutters and downspouts and then piped in order to discharge into the drywells away from the house. Accumulated surface drainage should also be allowed to infiltrate into the sand. The complete roof drainage system, including roof gutters and downspouts, should be installed immediately after the roof sheathing in order to protect the ground from erosion during construction. When the surface is not protected from roof run-off, the surface soil will continue to shift and settle.

Typical erosion controls are not practical on this property. Silt fencing would obstruct construction. The sand will absorb most stormwater run-off from the site. I recommend avoiding stockpiles on the site that could dry out and erode.

**H. Foundation Drains** – Considering the topography of the sites and the adjacent areas, groundwater is not expected to be a problem. Additionally, the site consists entirely of free-draining native sand, which will allow water to infiltrate quickly. Therefore, foundation drains are not required for this site.

## Summary Findings and Conclusions

1. A residential structure can be built upon this property if built in accordance with these recommendations and standards without unreasonable risk other than that of long-term frequency seismic events (300 to 600 years).
2. A residential structure built upon this property in accordance with these recommendations and standards will not cause appreciable environmental damage or danger to the property of others.

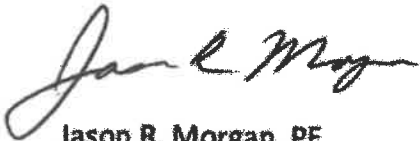
## Limitation

The engineering portion of this report is based on a site inspection of the subject property and vicinity, as well as a review of the site topography. The engineering conclusions and recommendations in this engineering portion of the report are based upon the conclusions presented in the geologic report prepared by Warren Krager, CEG. The engineering conclusions and recommendations presented herein are believed to represent the site and are offered as professional opinions derived according to current standards of professional practice for a report of this nature. No warranty is expressed or implied. This report has been prepared for the timely use of the above addressee and parties to the pending development of the subject property, and it does not extend to the activities of unidentified future owners or occupants of the property for which the writer bears no responsibility.

Should you have any questions regarding my investigation or this report, please contact me.

Sincerely,

**MORGAN CIVIL ENGINEERING, INC.**



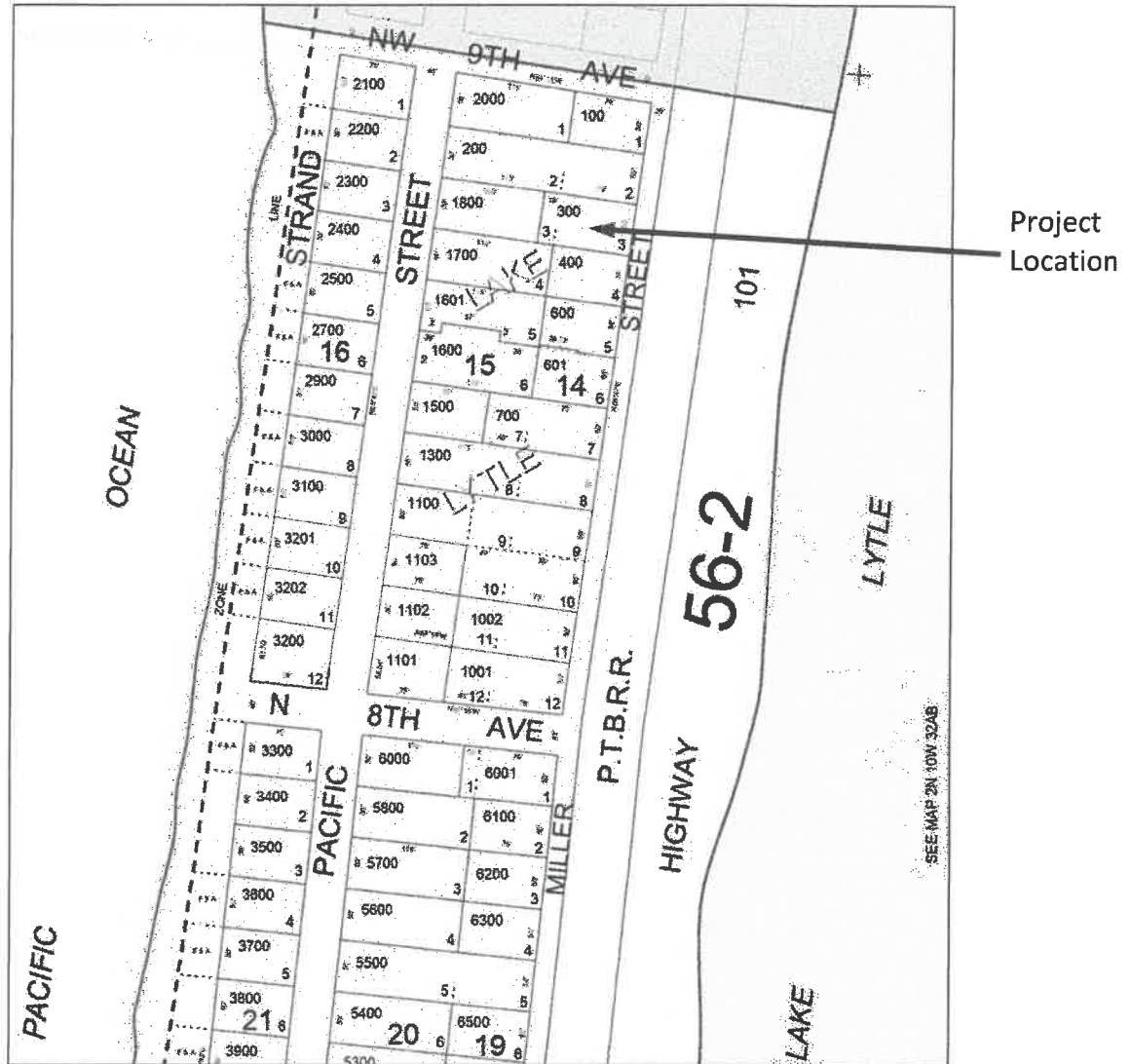
**Jason R. Morgan, PE**  
**Professional Engineer**

cc: [saibuild@hotmail.com](mailto:saibuild@hotmail.com)  
Project File #22-04-Pie

<V:\22-04-Pie\Reports\Pierce GHR.docx>



GHR for 873 North Miller Street  
City of Rockaway Beach, OR



**Tax Lot 00300, Map 2N 10W 32BB  
Lot 3, Block 14 of LAKE LYTLE  
City of Rockaway Beach, Tillamook County, Oregon  
(873 N Miller Street)**

June 6, 2022

Rodney Breazile, SAI Design & Build LLC, for Pierce residence

in care of: Jason R. Morgan, P.E.

Morgan Civil Engineering, Inc.

PO Box 358, Manzanita, OR 97130

**Re: Preliminary Engineering Geologic Reconnaissance and Site Investigation Report  
Building Site Evaluation, Replacement Pierce Residence  
873 N. Miller Street, Rockaway Beach, Oregon**

Dear Mr. Breazile, and Mr. Morgan,

As requested, I am pleased to submit my engineering geologic reconnaissance report for the above referenced property and proposed replacement home. The property contains steep slope up to about 50 percent in dune sand soil.

The scope of services includes a site reconnaissance visit of the property on April 22, 2022, with home builder Rodney Breazile, Jason R. Morgan, P.E. of Morgan Civil Engineering, and with R. Warren Krager, R.G., C.E.G. We observed and discussed the existing home and ground surface soil, slope, and vegetation conditions. We also discussed plans for removal of the existing home and construction of a new home, generally within the existing home's footprint. This evaluation also included review of geologic mapping, literature and available site information, and preparation of this report for use in final site planning and engineering design.

In preparing this report, I reviewed the following reports, maps, aerial photographs, and other background information:

- Environmental Geology of the Coastal Region of Tillamook and Clatsop Counties, Oregon, Oregon Department of Geology and Mineral Industries (DOGAMI), Bulletin 74, 1972.
- Geologic Map of the Tillamook Highlands Northwest Oregon Coast Range, Nehalem 15-Minute Quadrangle, United States Geologic Survey, (USGS), Open File Report 94-21, 1994.
- Google Earth, aerial images of the Rockaway Beach and local vicinity, dated September 3, 1994, July 29, 2000, June 15, 2003, June 29, 2005, December 12, 2005, August 1, 2011, July 6, 2012, July 30, 2014, August 23, 2016, June 23, 2017, and April 15, 2021.
- City of Rockaway Beach Zoning Ordinance, as amended June 10, 2020.
- Building site plan, elevations and foundation plan provided by Client.



**Figure 1-** Site Location Plan, Tillamook County Tax Map 02N-10-32BB.

The subject property consists of Tax Lot 300, of Tillamook County Tax Map 02N-10-32BB, in Rockaway Beach, Oregon, as shown in Figure 1. The property contains the existing, 1930-constructed home with address of 873 North Miller Street. The property also contains exterior deck and stairway on landscaped slope and some lawn area. The lot is bounded on the east by North Miller Street, and on the south, west and north by developed lots with existing residences.

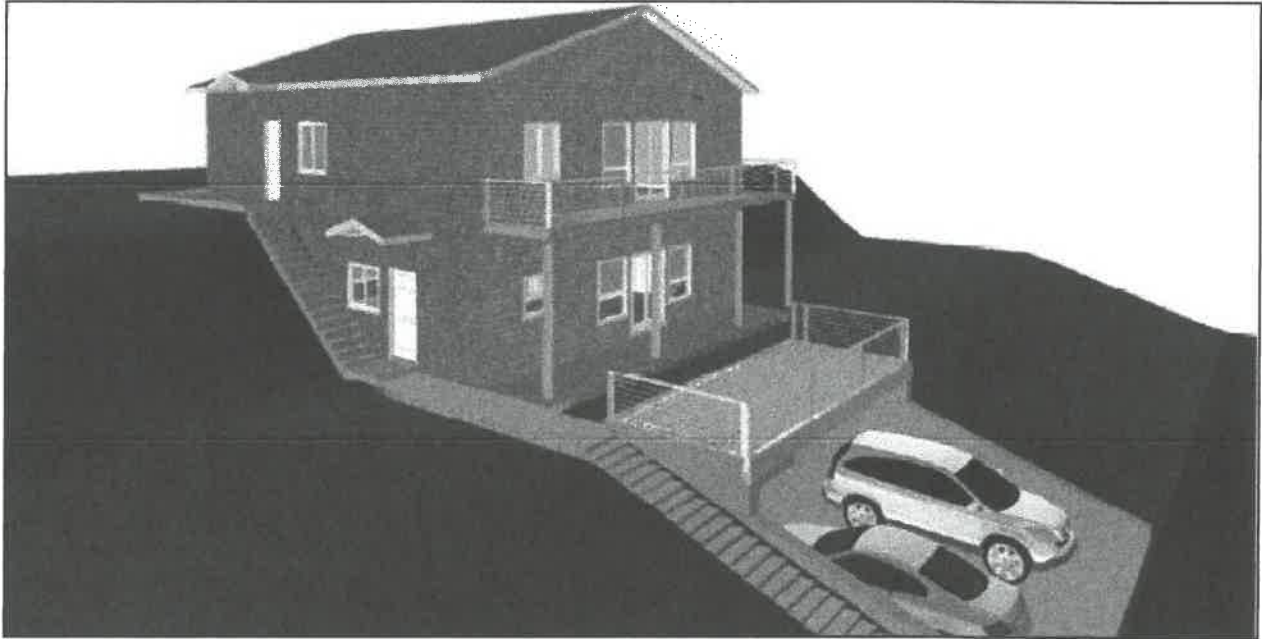
Tax Lot 300 has a north-south aligned dune ridge through its mid-section. The existing home and adjacent homes on lots to the north and south are situated atop the dune ridge at a crest elevation of about 44 feet above mean sea level. The low point of the property, along the eastern margin of the lot adjacent to North Miller Street, is about 24 feet mean sea level. The 20-some foot high sand dune slope is partially supported by existing foundation retaining wall, and landscape terrace. Some of the undisturbed sloped areas of the property are probably part of the natural dune precipitation slope that formed when the dunes were actively building along the coast.

### **Proposed Replacement Residence**

It is my understanding that the existing home will be demolished and removed. A new home of similar plan and foundation profile will be constructed, generally within the footprint of the removed home. New foundation, floor slab and retaining walls are proposed. A concept elevation sketch of the proposed home in a similar dune crest position, is shown in Figure 2. I interpret that engineered retaining wall will be used on embedded foundation walls on portions of three sides of the home. I interpret that additional retaining wall will be used on embedded walls of a below-grade, separate parking structure at or above street level on the east side the new home. I am not aware of details of demolition and new construction sequence. I expect that excavation and construction of the embedded/ covered parking garage may occur early in the process, such that new concrete garage retaining walls can be constructed and structurally backfilled to support new foundation subgrade for shallow footings on the east side of the home.



Some temporary slope shoring, or foundation protection may be needed for adjacent homes north and south of the subject property. I would not expect construction disturbance or slope concerns on the western margin of the property. The adjacent home on the lot to the west of Tax Lot 300 appears to have a rear retaining wall that supports the western descending dune slope.

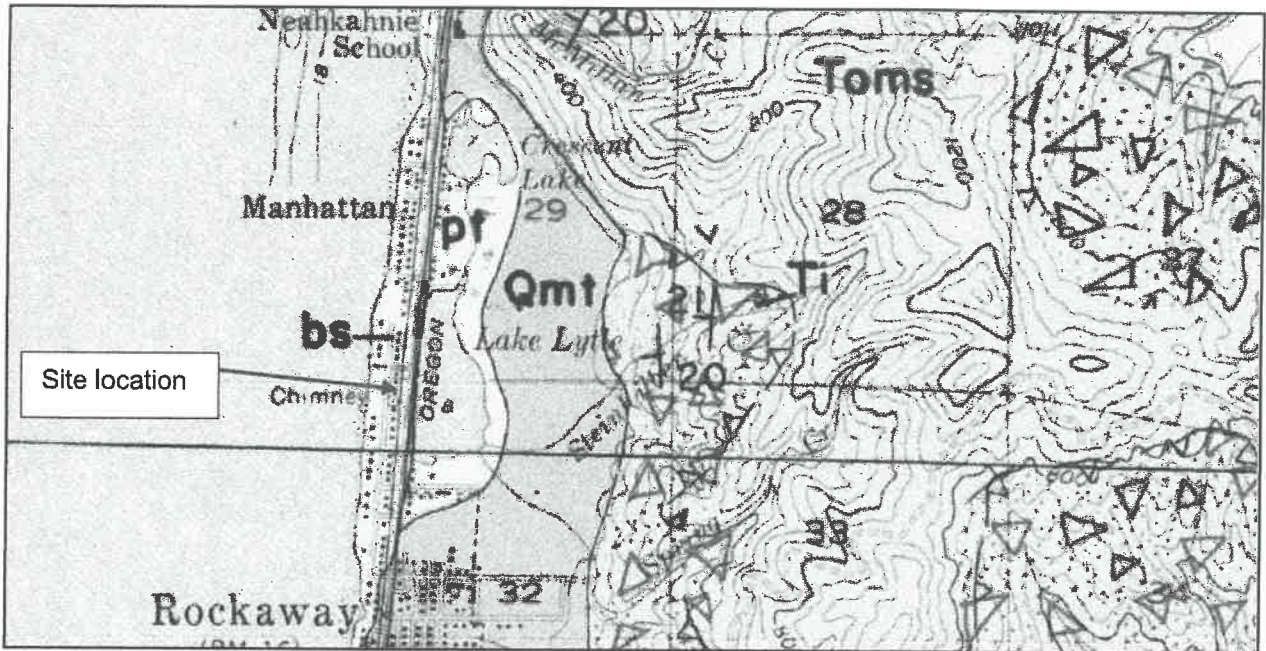


**Figure 2-** Concept southeast elevation perspective.

### **Soil and Geologic Background Summary**

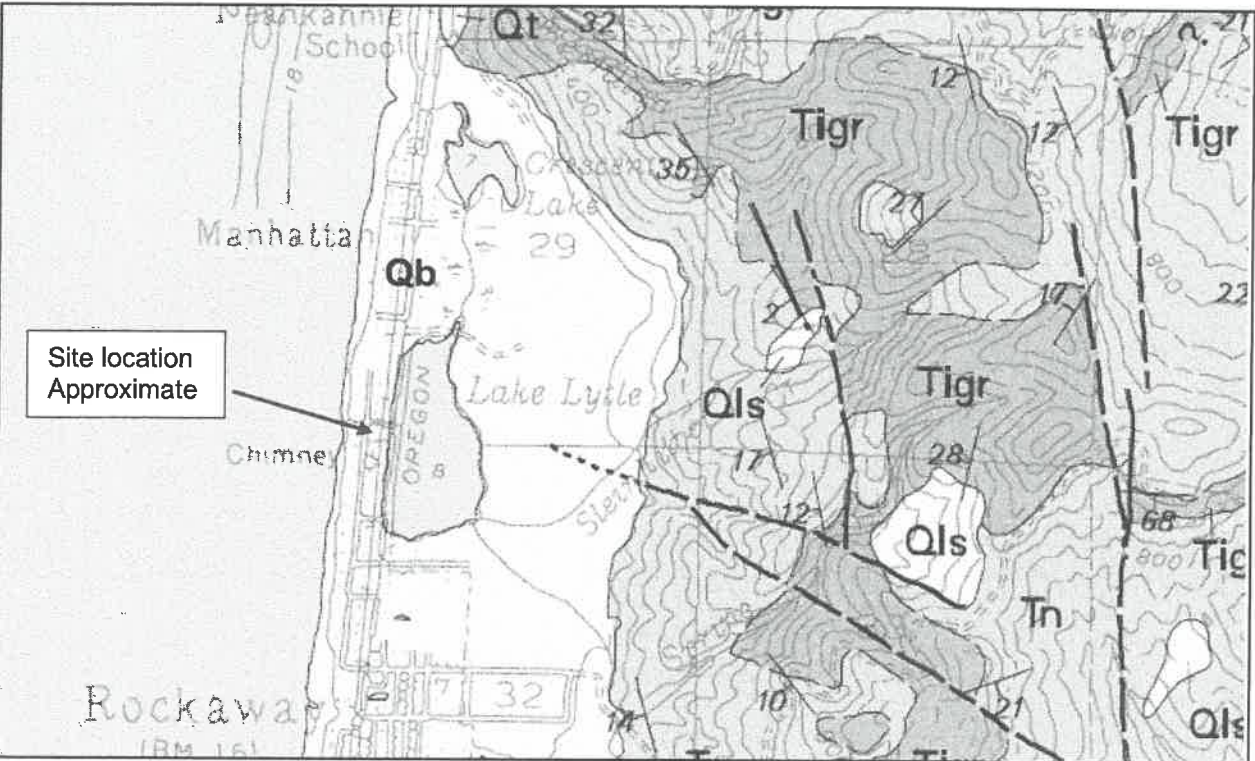
Surface soils in the project area are mapped by the USDA NRCS Web Soil Survey as Waldport fine-sand, thin-surface, 15 to 60 percent slopes. This is a thin, poorly developed eolian soil formed in coastal shoreline foredunes, blowouts, and dunes on marine terraces. The typical soil profile described by the USDA includes fine-grained sand to 60-inches below the ground surface.

The sand dunes in the project area are not considered active but a relic of abundant sand supply conditions of late Pleistocene age when wide ice-age beaches and marine terraces were repeatedly exposed and submerged during sea level fluctuations of late-stage continental glacial advances and retreats. Based on the DOGAMI geologic mapping, **Figure 3**, geologic deposits of the project area include Quaternary beach sand and dune deposits (map unit **bs**), overlying Quaternary marine terrace deposits (map unit **Qmt**). Older consolidated Tertiary marine mudstone and sandstone underlies the terrace deposits at unknown depth. Peat deposits are mapped in coastal lagoon Lakes Lytle and Crescent.



**Figure 3-** Portion of Geologic Map of Nehalem Quadrangle, Environmental Geology of the Coastal Region of Tillamook and Clatsop Counties, Oregon, DOGAMI Bulletin 74, 1972.

The geologic surface unit mapped in the project area by the United States Geologic Survey in Open File Report 94-21, **Figure 4**, consists of Quaternary to Holocene beach and dune Deposits, map unit **Qb**.



**Figure 4-** Portion of Geologic Map of the Tillamook Highlands Northwest Oregon Coast Range, Nehalem 15-Minute Quadrangle, USGS Open File Report 94-21, 1994.

## Seismic Hazard Discussion

Potential geologic hazards at this location include strong seismic ground shaking during a Cascadia Subduction Zone earthquake. The Cascadia Subduction Zone, CSZ, is an active thrust fault at the tectonic plate convergence zone located in the sea floor about 60 miles off the northern Oregon coast. A CSZ earthquake is the principal seismic geologic hazard and structure design concern throughout western Oregon. Geologic and geophysical research over the past few decades has established that the CSZ has repeatedly produced large earthquakes on an approximately 300-year to 700-year recurrence interval with some lesser or greater time intervals. Historic Japanese tsunami records and modern tree ring dating techniques have established that the most recent CSZ earthquake occurred in January of 1700 AD. The next CSZ earthquake is widely expected to occur within a few decades. Scientists and engineers generally agree that the potential intensity of the next CSZ earthquake could potentially exceed magnitude 8.5 to 9.5. The duration of strong ground shaking could last a few minutes. The initial shock and ground shaking may be followed by days or weeks of strong aftershocks.

In dune and shoreline areas underlain by loose or soft soil and shallow groundwater, seismic ground response may include soil liquefaction and ground surface deformation, settlement, or slope instability. The CSZ earthquake thrust fault displacement will cause an ocean tsunami that will arrive at the Oregon coast within about 15 to 30 minutes after the strong earthquake occurs. There is no complete engineering mitigation available for seismic hazard at this site.

## Conclusions and Recommendations

In my opinion, demolition of the existing home and replacement with a new home and new embedded, covered parking is feasible as proposed, without influencing or negatively impacting slope stability or geologic hazards.

Existing site slopes in vegetated landscaped areas are considered conditionally stable sand dunes with vegetation left intact. Care should be taken to protect adjacent homes and foundation-support from slope and soil disturbance. If temporary excavation slopes steeper than 2-horizontal to 1-vertical are needed on the north or south margins of the building area, I recommend a shoring system be used to maintain slope stability and foundation support in adjacent structures. Exposed sand slope should be replanted or covered with appropriate erosion protection landscape material at completion of construction. Although low risk of strong seismic ground motion may apply, a home with appropriate foundations bearing on firm, native inorganic sand, or new compacted crushed rock fill would not be expected to have catastrophic reaction to seismic ground motion. The highest elevation of the subject property does appear to lie within the tsunami inundation zone expected from a strong CSZ earthquake.

Native undisturbed sand is considered suitable for support of shallow spread foundation designed according to prescriptive methods outlined in the Oregon Structural Specialty Code OSSC. I recommend that sand foundation and floor subgrade soil be covered with a thin layer of compacted crushed rock to protect sand from loosening and disturbance during construction.



Grading practices and specifications in OSSC Appendix J- Grading, are considered generally appropriate for the site clearing, excavation and backfill expected for the expected construction. It is recommended that the Engineering Geologist or Civil Engineer be contacted for review of final plans prior to construction. It is also recommended that the Engineering Geologist or Civil Engineer be contacted to observe and document foundation subgrade surface, compaction of structural fill, retaining wall drainage backfill or other grading.

### Limitations

The engineering geologic reconnaissance and geologic hazard review services performed for this project have been conducted with that level of care and skill ordinarily exercised by members of the profession currently practicing in this discipline and area under similar budget, time, and work scope constraints. No warranty, expressed or implied, is made regarding the interpretations and conclusions of this report.

This report may be used only by the client and their authorized agents for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both on- and off-site), or other factors may change over time and could materially affect our findings. Therefore, this report should not be relied upon after 24 months from its date of issue. If the project is delayed by more than 24 months from the date of this report, I would be happy to review site and design conditions and revise this report if appropriate. If you have any questions regarding the information presented in this report, please do not hesitate to contact me at 360-903-4861 or warrenkrager@gmail.com.

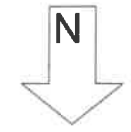
Sincerely,



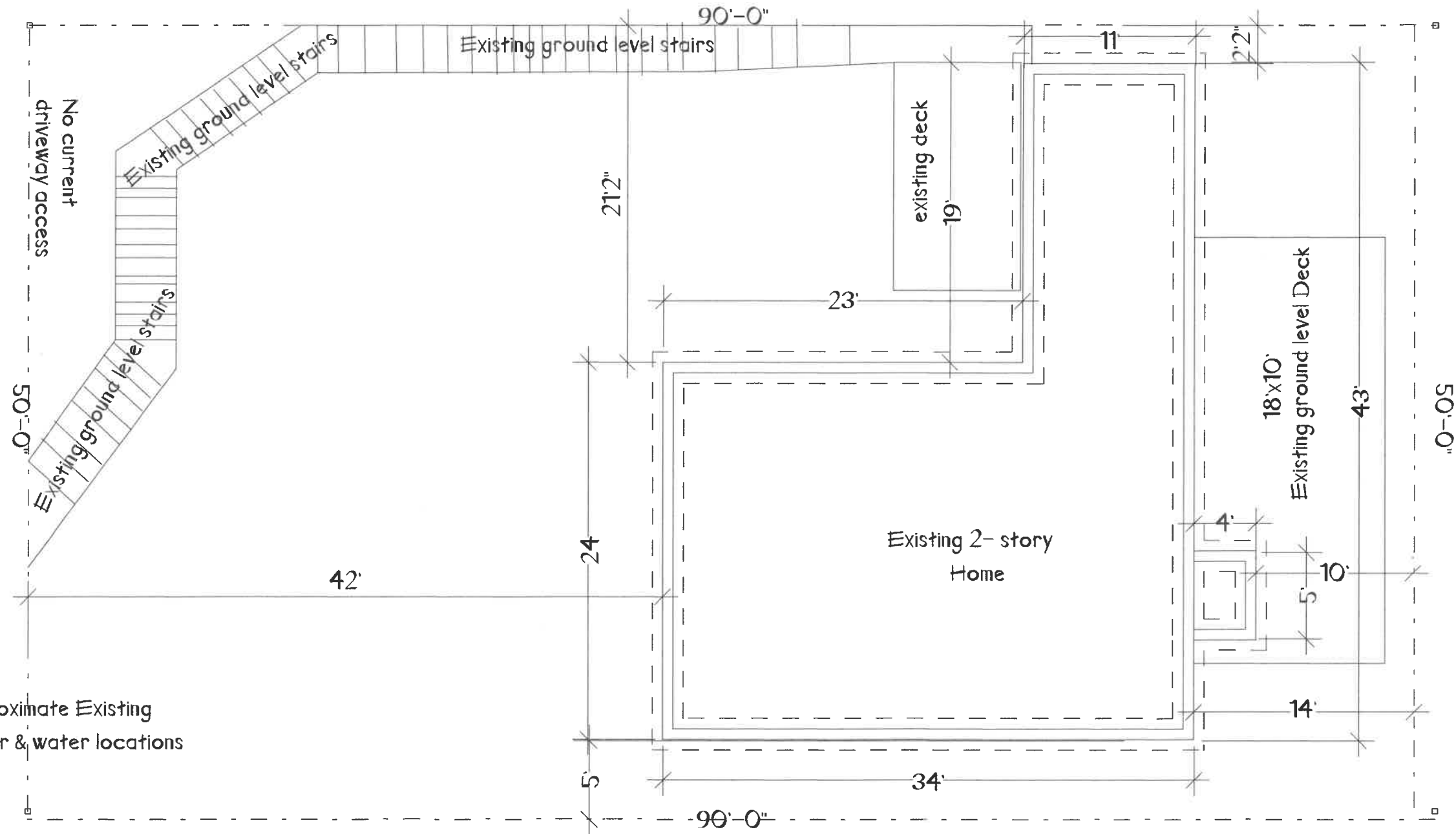
R. Warren Krager, R.G., C.E.G.  
Oregon Licensed Engineering Geologist E-957

Kris and Randy Pierce  
 873 N. Miller St.  
 Rockaway Beach Or 97136  
 2N1032-BB-00300  
 Builders contact #  
 503-812-7211

# Existing Home and site



North Miller St.



## GENERAL NOTES

No.	REVISION/ISSUE	DATE

ORIENTATION	STAMP
-------------	-------

ALL DRAWINGS ARE THE PROPERTY OF THE DESIGNER AND THEY ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER.  
 CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK AND TO REPORT ANY DISCREPANCIES TO THE DESIGNER.

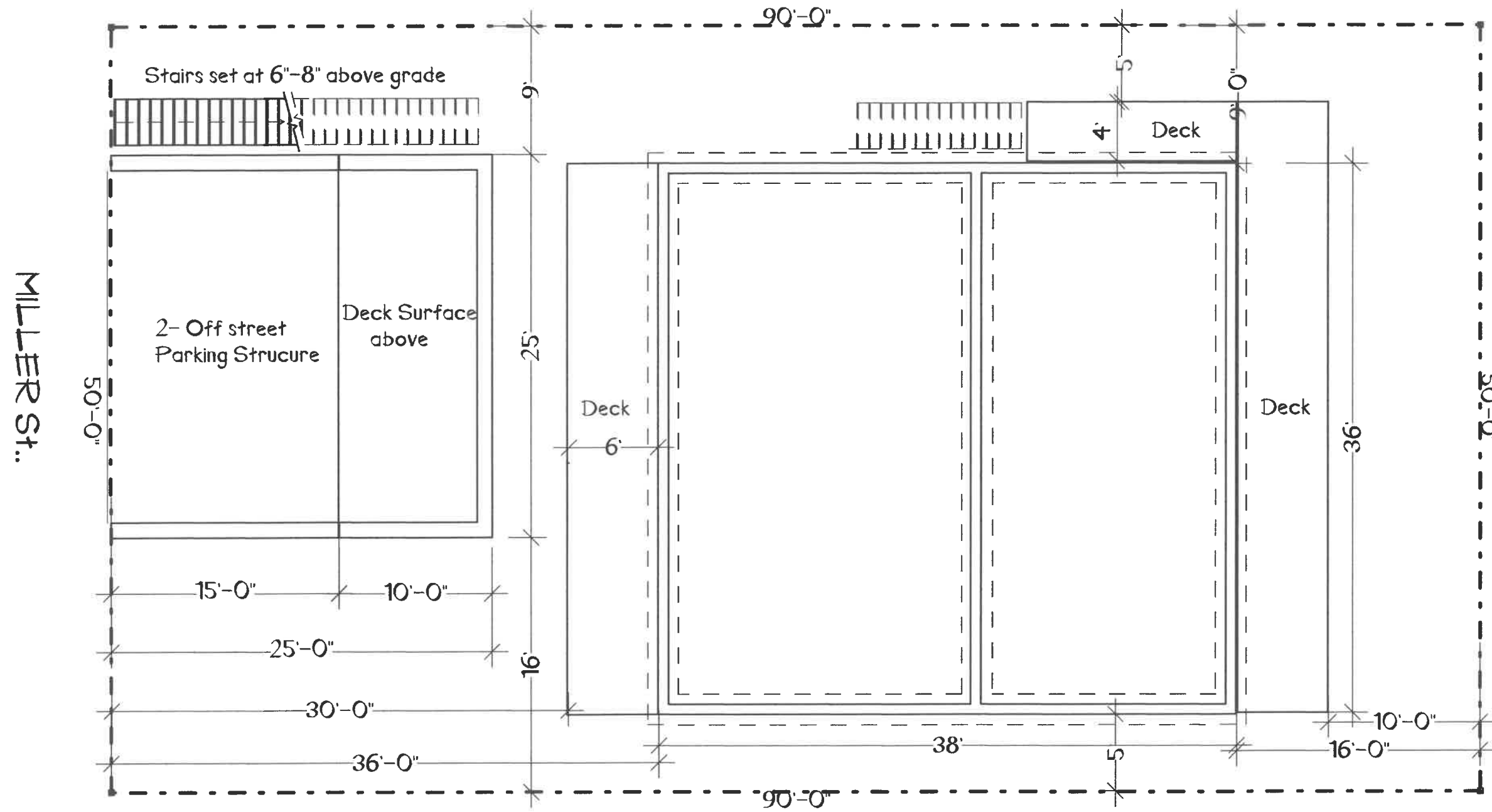
PROJECT NAME:  
**Pierce Home**

CLIENT:  
**Randy & Kris**

DRAWING:  
 SCALE: 1/8" = 1'-0"      DATE:

DRAWN BY:	SHEET: <b>Existing Home Plot</b>
CHECKED BY:	
APPROVED BY:	

873 Miller St  
2N1032-BB-00300



NOTE;  
EXISTING HOME  
TO BE  
DEMOLISHED

GENERAL NOTES

No.	REVISION/ISSUE	DATE

ORIENTATION	STAMP

ALL DRAWINGS ARE THE PROPERTY OF THE DESIGNER AND THEY ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER.  
CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK AND TO REPORT ANY DISCREPANCIES TO THE DESIGNER.

PROJECT NAME:  
**Pierce Home  
873 Miller St.**

CLIENT: **Randy & Kris Pierce  
Home**

DRAWING:

SCALE: 1/8" = 10"      DATE: **4-11-22**

DRAWN BY:	SHEET: <b>Proposed New Plot Plan</b>
CHECKED BY:	
APPROVED BY:	





VIEW FROM THE  
SOUTHEAST LOOKING  
NORTHWEST

Approved parking structure



VIEW FROM THE  
NORTHWEST LOOKING  
SOUTHEAST

GENERAL NOTES

No.	REVISION/ISSUE	DATE

ORIENTATION	STAMP

ALL DRAWINGS ARE THE PROPERTY OF THE DESIGNER AND THEY ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER.  
CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE COMMENCING WORK AND TO REPORT ANY DISCREPANCIES TO THE DESIGNER.

Rendering

PROJECT NAME:  
**Pierce Home**

CLIENT:

DRAWING:

SCALE: **NTS** | DATE:

DRAWN BY:	SHEET:  <b>NTS</b>
CHECKED BY:	
APPROVED BY:	