

**City of Rainier**  
**Regular City Council Meeting**  
**June 7, 2021**  
**6 p.m.**  
**Rainier City Hall**

**OPEN BUDGET HEARING – ACCEPT PUBLIC COMMENT – CLOSE BUDGET HEARING**

Mayor Jerry Cole opened the public hearing at 6:17 p.m. No public comment was given. Councilor Connie Budge said the budget document has improved from previous years. Cole said it's a good start and easier to understand. There are more ideas that can be added for next year's budget. The hearing was closed at 6:18 p.m.

**OPEN PUBLIC HEARING REGARDING NUISANCE HOUSE AT 516 EAST E STREET – ACCEPT PUBLIC COMMENT – CLOSE PUBLIC HEARING**

Cole opened the hearing at 6:19 p.m. He read an email into the record from attorney Bob Lucas, who is representing the owner's son, Gabriel, on this matter. The owner, Nidia Coy, settled her claim with the insurance company for the house fire and returned to her native Costa Rica. Lucas has agreed to help Gabriel apply for a conservatorship so he can obtain court approval to clean up the property. Gabriel, through Lucas, is asking the city to delay enforcement action that may be costly to the Coys and the city. Lucas suggested that the city revisit the item at its next meeting to see what the status on the conservatorship proceeding is. Judith Taylor, at 520 East E Street, testified that the house is a dangerous nuisance that is falling down. There has been vandalism and children exploring it. Debris blows into nearby houses when the wind blows and the house smells bad. She encouraged council to move forward with declaring the house a nuisance and doesn't see the situation changing. The owner's son hasn't been on board with doing anything about it. The public hearing was closed at 6:23 p.m.

Mayor Jerry Cole called the Regular Council Meeting to order at 6:24 p.m.

**Council Present:** Connie Budge, Robert duPlessis, Mike Kreger, Brenda Tschida

**Council Absent:** Levi Richardson, Jenna Weaver

**City Attorney Present:** No

**City Staff Present:** Gregg Griffith, Police Chief; W. Scott Jorgensen, City Administrator; Sue Lawrence, Public Works Director

### **Flag Salute**

**Additions/Deletions from the Agenda:** Public Works Director Sue Lawrence said she wanted to request approval for a proposed plan by the Lower Columbia Estuary Partnership as a mitigation measure for the city's DEQ fines. Cole said that could be added to new business. Council agreed by consensus.

**Mayor's Address:** Cole presented a plaque to Nolan Borders honoring his ten years of service to the city's police department prior to his retirement June 1.

**Visitor Comments:** There were no visitor comments at this time.

### **Consider Approval of the Consent Agenda:**

Consider Approval of the May 3, 2021 Regular Council Meeting Minutes, February 10, 2021 and March 10, 2021 Planning Commission Meeting Minutes and May 17, 2021 Budget Committee Meeting Minutes-Council President Mike Kreger moved to approve the consent agenda. That motion was seconded by Budge and adopted unanimously.

### **New Business**

- a. Appointment to Council Position #1-Cole said there were three applicants but one backed out. The two remaining candidates, Denise Watson and Scott Cooper, were interviewed by the council. Watson said she was appointed to the Parks Committee and is involved with the Ladies of Rainier and its Belly Brigade to feed the homeless. Cooper said he's lived in town for 15 years and has served on the council, the REDCO board, Planning Commission and the previous Parks Committee. He retired January 1 after a career in IT and with the merchant marines and Coast Guard. Cooper said he likes solving problems and would like to be involved in city government again. Kreger asked the applicants what they think is the most negative aspect of public service. Watson said it's the possibility of disappointing someone. It's never easy, but decisions have to be made. Cooper said if you do your job right, you may upset half of the people in town. Budge asked the applicants what training has been most valuable to them. Cooper touted his recent experience on a city COVID Task force helping to sign people up for vaccines who didn't have internet access. He worked with the senior center to get 89 people vaccinated. Watson described herself as organized and said she has training in de-escalation and how to deal with heated matters with a sense of decorum. She's done some volunteer work with the museum and Meals on Wheels. Councilor Brenda Tschida asked the applicants about their skill sets. Watson said

she has an open mind, an ear to listen and is good at fundraising. Cooper said he's done labor relations and during his prior stint on council, he worked to achieve consensus on matters before the meetings. Councilor Robert duPlessis asked what the applicants thought the city is doing well, what it isn't doing well and how they could help it improve. Cooper said the city has done a good job with its greenspace, park and the riverfront trail. The city needs to prioritize what it wants to do and could further improve its greenspaces. Watson said everyone came together during last winter's ice storm but the city's sewer system needs to be improved. The city should have more amenities like laundromats. She would seek consensus and collaborate on solutions. Council deliberated on the appointment. Kreger described them both as strong candidates and said one has been on council before. Kreger was on Planning Commission before council and it helped. Watson would offer a fresh perspective. Budge said she had also been on Planning Commission prior to council. Tschida said the council could use a new perspective. duPlessis cited Cooper's prior experience on council and the REDCO board. Cooper's stint on council came during a tumultuous time for the city. He was a calming presence on council. Watson has done much community outreach and is involved in many groups. duPlessis has been on council for six years and says he's still learning. Kreger moved to appoint Cooper to Council Position #1. That motion was seconded by duPlessis and passed 3-1, with Tschida dissenting.

### **Unfinished Business**

- a. Riverfront Trail Update-Lawrence said she received a bid for a set of stairs to be added to the area near El Taptio to better enable beach access. Cole said it's a nice trail and the bank is stabilized. It will help to have a defined point of entry. That will add another amenity to the area. Budge moved to approve the bid. That motion was seconded by Cooper and adopted unanimously. City Administrator W. Scott Jorgensen said he spoke with the director of the Cowlitz-Wahkiakum Council of Governments about the \$90,000 grant the city applied for to fund the trail's third phase. The director was optimistic that the city would be receiving the funds and the decision should be made June 24.
- b. Fox Creek Update-Jorgensen said he spoke with Rep. Brad Witt's chief of staff and it seems likely that the city will be receiving \$100,000 for the feasibility study. Cole said he spoke with Witt the previous weekend and was told the same.
- c. Senior and Multi-Generational Housing
- d. Stop Sign on C Street-Cole read an email from the Turleys into the record. They complained that people run the sign and don't feel that it's improved the neighborhood or solved the problem and still want it removed. Jorgensen said that Lawrence had ODOT do a noise study. It

is included in the packet. Tschida said people requested the sign. duPlessis, Kreger and Budge all said speeding has been a problem in that area for a long time. Cole suggested looking into the cost of adding speed humps. It would slow people down and direct traffic to B Street. Council agreed by consensus to direct Lawrence to research the cost of adding speed humps to that area.

- e. Geotech Study-Lawrence said she has reached out for additional bids and should have those by the end of the month. The study needs to be done. Its original cost was \$34,000, but some engineering was added and that brought the cost up to \$49,000. The city has incurred \$9200 in costs for the engineering that's already been done. Cole said he was concerned about the cost. The road goes to two houses and the area has been sliding for years. He proposes a scope of work that involves fixing the affected utility lines. What he doesn't want is for the city to spend \$49,000 on engineering, just to be told that fixing the road is expensive, without a plan to pay for it. The scope of the study has to change. If the goal is to decommission the road and fix the utilities, then the scope of the study has to be for that. Lawrence said the affected water line could be adjusted. That's not a big issue. But the sewer line is, because it's more of a main line. It could possibly be re-routed, or a pump station could be inserted there. The city will have to excavate across the slide area to fix the utilities and the Geotech study has to be done in order for that to happen. Should the city dead end the road or fix it? Budge said the slide is the biggest risk and problem. Lawrence said water is going under the culvert and that's causing much of the damage. Cole asked if the city should make that road usable. He isn't sure there will be money on the back end to fix it and wants the scope to be limited to save money. He's not saying don't do the engineering, but the scope needs to be limited. Lawrence said the scope can be done to remove the road. Those houses are still accessible from Second Street. Budge said the water needs to be re-routed so it doesn't adversely affect peoples' properties. But the underlying issues require a Geotech study. Lawrence said that if the city wants to decommission the road, the scope of the study can be redefined. Cole asked Dan Graham, whose property is near the area, what he thinks. Graham said he doesn't care about the road and just wants the slide to stop. Budge said she wants to eliminate the road and stop the sliding. Lawrence said the road can be eliminated and the utility lines placed in the walking path. Pressure from the roadway is contributing to the problem and the culvert was incorrectly installed. There are ways to solve the problem. Kreger agreed that the road should remain closed to traffic. Cole said he wants to see the area dried out, with no road and the utility lines fixed.

### **New Business**

- b. Ordinance 1079--Repeal RV Park Ordinance

- c. Consider Approval of Resolution #21-06-01 Adopting and Declaring the Tax Levy and General Obligation Bond for the Fiscal Year 2021/2022-Budge moved to approve the resolution. That motion was seconded by Kreger and adopted unanimously.
- d. Consider Approval of Resolution #21-06-02 Declaring the City's Election to Receive State Revenues for the Fiscal Year 2021/2022-Kreger moved to approve the resolution. That motion was seconded by Budge and adopted unanimously.
- e. Consider Approval of Resolution #21-06-03 Adopting the Budget and Making Appropriations for the Fiscal Year 2021/2022-duPlessis moved to approve the resolution. That motion was seconded by Tschida and adopted unanimously.
- f. Consider Approval of Resolution #21-06-04 Resolution Transferring Appropriations for the Fiscal Year 2020/2021-Kreger moved to approve the resolution. That motion was seconded by Cooper and adopted unanimously.
- g. Consider Approval of Resolution #21-06-05 Authorizing the Mayor to Enter into an Agreement for Local Television Services with Kelso Longview Television, Inc., to Provide Local Public, Educational and Governmental Programming to and from the Rainier Community-Cooper moved to approve the resolution. That motion was seconded by Kreger and adopted unanimously.
- h. Proposed Lower Columbia Estuary Partnership Project-Lawrence said the city has been fined by DEQ. But she's been working with the Lower Columbia Estuary Partnership on an environmental enhancement project. Eighty percent of the fine amount can go towards it. The proposed project would be a benefit for water quality and runoff. It would add infiltration on C Street before 2<sup>nd</sup> Street and do stormwater treatment before going into the ground or Fox Creek. Cole asked if the street is wide enough to accommodate it. Lawrence said it is, and there's a grass strip that can be used. Cole said he supports doing the project. Cooper agreed. Kreger moved to authorize the project. That motion was seconded by Cooper and adopted unanimously.

**Staff Report**-Lawrence said there are fewer than 50 new water meters left to install. Around \$123,000 has been spent on that project and she estimates it has a payback of one to two years. The new meters are capturing water that has been in use and the old ones didn't do that. A form for park reservations is now on the city's website. There was a discussion about having a deposit for park reservations to ensure that the users pick up after themselves. Council agreed by consensus to have that matter discussed by Parks Committee. Police Chief Gregg Griffith said that the hiring process has started for his department's vacant position. Jorgensen said he toured the city's watershed with Cole, outgoing forester Byron Rickert and new forester Patrick McCoy. Much work was done to

prepare for the budget committee meeting and he assisted councilors and Planning Commissioners with filing their statements of economic interest. He submitted a request for grant funding for COVID-related expenses and the city has received those dollars. Jorgensen also organized the ribbon cutting ceremony marking the completion of the riverfront trail.

**Council Reports-**Councilors agreed by consensus that they're pleased with the trail and how it turned out.

**City Calendar/Announcements-**Cole said the next council meeting will be July 12. Rainier Days is scheduled for July 9, 10 and 11, with the parade taking place on the 10<sup>th</sup>.

Cole adjourned the meeting at 8:53 p.m.

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Mayor Jerry Cole

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W. Scott Jorgensen, City Administrator

## **Chapter 15.15 DANGEROUS BUILDINGS**

Sections:

- 15.15.010 Definitions.**
- 15.15.020 Nuisance declared.**
- 15.15.030 Initial action.**
- 15.15.040 Mailed notice.**
- 15.15.050 Published and posted notices.**
- 15.15.060 Hearing.**
- 15.15.070 Council orders – Notice.**
- 15.15.080 Abatement by the city.**
- 15.15.090 Assessment.**
- 15.15.100 Summary abatement.**
- 15.15.110 Errors in procedure.**
- 15.15.120 Violation – Penalty.**

**15.15.010 Definitions.**

As used in this chapter, the following mean:

A. "Dangerous building" means:

1. A structure that, for lack of proper repairs, or because of age and dilapidated condition or of poorly installed electrical wiring or equipment, defective chimney, gas connection, or heating apparatus, or for any other reason, is liable to cause fire, and which is situated or occupied in a manner that endangers other property or human life.
2. A structure containing combustible or explosive materials or inflammable substances liable to cause fire or danger to the safety of the building, premises or to human life.
3. A structure that is in a filthy or unsanitary condition liable to cause the spread of contagious or infectious disease.
4. A structure in such weak, dilapidated or deteriorated condition that it endangers a person or property because of the probability of partial or entire collapse.

B. "Person" means every natural person, firm, partnership association or corporation. (Ord. 904 § 1, 1987)

**15.15.020 Nuisance declared.**

Every building found by the council to be a dangerous building is declared to be a public nuisance and may be abated by the procedures specified in this chapter or by a suit for abatement brought by the city. (Ord. 904 § 2, 1987)

**15.15.030 Initial action.**

When a city official determines that there is a dangerous building, the official shall report it to the council. The council shall, within a reasonable time, fix a time and place for a public hearing. (Ord. 904 § 3, 1987)

**15.15.040 Mailed notice.**

A. The city recorder shall notify the owner of the building and, if not the same person, the owner of the property on which the building is situated. The notice shall state:

1. That a hearing will be held concerning the nuisance character of the property; and
2. The time and place of the hearing.

B. A copy of this notice shall be posted on the property. (Ord. 904 § 4, 1987)

**15.15.050 Published and posted notices.**

Ten days' notice of the hearing shall be published in a newspaper of general circulation in the city or by posting notices in three public places in the city. (Ord. 904 § 5, 1987)

**15.15.060 Hearing.**

A. At the hearing, the owner or other persons interested in the dangerous building shall have a right to be heard.

B. The council may inspect the building and may consider the facts observed by it in determining if the building is dangerous.

C. If the council determines that the building is dangerous, the council may by resolution:

1. Order the building to be abated; or
2. Order the building to be made safe and prescribe what must be done to make it safe. (Ord. 904 § 6, 1987)

**15.15.070 Council orders – Notice.**

Five days' notice of the council's findings and any orders made by the council shall be given to the owner of the building, the owner's agent or other person controlling it. If the orders are not obeyed and the building not made safe within the time specified by the order (being not less than five days), the council may order the building demolished or made safe at the expense of the property on which it is situated. (Ord. 904 § 7, 1987)

**15.15.080 Abatement by the city.**

A. If the council orders are not complied with, the council may:

1. Specify the work to be done;
2. File a statement with the recorder; and
3. Advertise for bids for doing the work in the manner provided for advertising for bids for street improvement work.

B. Bids shall be received, opened and the contract let. (Ord. 904 § 8, 1987)

**15.15.090 Assessment.**

A. The council shall determine the probable cost of the work and assess the cost against the property upon which the building is situated. The assessment shall be declared by resolution, and it shall be entered in the docket of the city liens and become a lien against the property.

B. The creation of the lien and the collection and enforcement of the cost shall be performed in substantially the same manner as assessment for street improvements. (Ord. 904 § 9, 1987)

**15.15.100 Summary abatement.**

The procedures of this chapter need not be followed if a building is unmistakably dangerous and imminently endangers human life or property. In this instance, the chief of the fire department, the fire marshal or the chief of police may summarily demolish the building. (Ord. 904 § 10, 1987)

**15.15.110 Errors in procedure.**

Failure to conform to the requirements of this chapter that does not substantially affect a legal right of a person does not invalidate a proceeding under this chapter. (Ord. 904 § 11, 1987)

**15.15.120 Violation – Penalty.**

A person who owns or is in possession of or is in charge of a dangerous building, and who allows the building to remain dangerous for as long as 10 days after receipt of the notice specified in RMC 15.15.070, may be fined not more than \$500.00. Each day following the tenth day after receipt of notice that a violation continues shall be considered a separate offense. (Ord. 904 § 13, 1987)

Mobile Version



**ORDINANCE NO. 1079**

**AN ORDINANCE OF THE CITY OF RAINIER  
REPEALING ORDINANCE 1059**

**WHEREAS**, on September 3, 2013, the City of Rainier adopted Ordinance No. 1059 regarding RV Park Rules and Regulations, and

**WHEREAS**, based on input from citizens and city staff, The City of Rainier council has decided that Ordinance 1059 should be repealed, as it is no longer serving its intended purpose;

**WHEREAS**, it appears to the City of Rainier council that the public interest will best be served by repealing this ordinance.

**NOW, THEREFORE**, the City of Rainier ordains as follows: Ordinance No. 1059, adopted on September 3, 2013, is hereby repealed.

Passed by the City of Rainier council and approved by the mayor on the \_\_\_\_ date of \_\_\_\_\_, 2021.

BY: \_\_\_\_\_

Jerry Cole, Mayor

ATTEST:

BY: \_\_\_\_\_

Scott Jorgensen, City Administrator



June 18, 2021

**Attention:** Sue Lawrence  
Public Works Director  
City of Rainier  
PO Box 100  
Rainier, OR 97048  
(503) 396-1736

**Via email:** [slawrence@cityofrainier.com](mailto:slawrence@cityofrainier.com)

**Regarding:** Proposal for Geotechnical Engineering Services - revised  
1<sup>st</sup> Street Landslide  
Rainier, OR 97048  
Proposal No: 21-0359

Strata-Design (Strata) is pleased to submit this proposal to complete a geotechnical study for the above indicated site. This document is a revision of our June 10 proposal which you asked that we include design services. Our proposal is based on a site visit made with you on June 8, 2020 . Our observations at the time indicated distress to the sewer line and surrounding ground at the subject location. We understand that you would like to stabilize and protect the sewer line alignment.

#### **PURPOSE**

The overall intent of our work would be to determine the slope conditions for the purpose of eventually stabilizing the area of the sewer line. Thus, we would need to characterize the slope conditions in the area immediately adjacent to the line by exploring the subsurface conditions. We would use that information to develop a slope model for the purposes of stabilizing the slope and ground at that location.

Rick Thrall, PE, GE, of our office (the undersigned) will conduct and supervise the reconnaissance, subsurface investigation, and analysis, evaluate mitigation alternatives, prepare the report and be available for discussions. Rick recently successfully completed stabilization of a landslide occurring along Old Rainier Road which I believe you are familiar. Rick has worked on multiple projects of this type and will be able to help you determine feasibility and a potential way quickly and accurately forward for the project (see attached mini resume).

#### **ASSESSMENT**

Assessment Scope. We will carry out the following scope of work:

1. Review available geotechnical Information: We will supplement our local knowledge with reviews of available geologic information.
2. We will develop a topographic map (based on available lidar information) and carry out detailed geologic reconnaissance of the proposed slope area noting relevant visible features.

3. Subsurface explorations will be carried out by drilling and sampling two borings at each end of the failure zone. The borings would be drilled to a depths of 35 feet or refusal. A piezometer may be installed into one of the borings for the purposes of monitoring groundwater levels. Samples will be obtained in conjunction with Standard Penetration Tests. The samples will be retained and transported to our Portland soils laboratory for classification test.

The borings will be logged, soils will be visually classified for consistency and characteristics, groundwater and influx of surface water will be observed, and soil samples collected for analysis. All samples will be classified by the Unified Soil Classification, Visual-Manual Procedure and shipped to our Portland soils laboratory for testing. Laboratory index testing will include moisture content on all samples.

4. Slope Stability Analysis: We will develop a slope model based on surface topography, subsurface explorations, and groundwater levels. The overall stability of the slope will be assessed using standard slope stability software.
5. Mitigation Alternatives: We will develop a conceptual mitigation alternative based on the mapping, reconnaissance, subsurface explorations, and groundwater levels. We will estimate the stability increase for the mitigation alternative based on the stability analysis results. We will develop a conceptual cost associated with the alternative.
6. Report Preparation: Data and information collected during the above indicated work will be used to develop an interpreted geologic and geotechnical model of the site. Emphasis will be placed on stabilizing the ground in the vicinity of the sewer line. Our report will address the following:
  - a. Summary boring logs
  - b. Summarize groundwater observation results.
  - c. Summarize the slope model and stability analysis results.
  - d. Prepare a conceptual mitigation alternative with associated conceptual costs.

#### **ASSESSMENT COMPENSATION FOR**

Our fee for the design report is not included in this proposal. The following table summarizes our estimated costs:

Item	Estimated Cost
Direct Labor	\$7,080
Expenses/Equipment Rent	\$275
Laboratory Testing	\$560
Drill rig and Piezometer	\$3,335
Total	\$11,250

The total request for the assessment is a lump sum amount of \$11,250. Any out of scope or unanticipated work will be carried out at Rick's published hourly rate of

\$160/hour, plus expenses. A PDF version of the report will be emailed to you at the above address.

*Design* - Please note that the above scope is for slope assessment only. A separate design geotechnical report will be needed should you elect to proceed with our recommended mitigation alternative. Although we do not know what will be designed, you have asked us for a design budget. The following generally summarizes the work and our estimated ballpark fees needed to develop biddable documents based on the items we think will need to be designed:

1. Re-establish sewer line through failure zone –\$3,500
2. Re-establish culvert and drain upslope pond - \$2,500
3. Stabilize slope in vicinity of the existing roadway - \$7,500
4. Erosion control and stabilization of ravine below the roadway - \$3,000

The above includes drawings, specifications, quantities estimates and an engineer's cost estimate for the construction.

We will provide sufficient documentation for you to obtain the required permits but fees for obtaining the permits is not included. Also, please note that we assume you will conduct the bidding process and select the contractor.

Further, the above does not include for construction observation services which we cannot estimate until we know the contractor's schedule.

## **SCHEDULE**

We anticipate that the assessment work can be started within two weeks after receipt of a signed copy of this Agreement, depending on the drilling rig availability. The final geotechnical report should be available within 4- 6 weeks of beginning the field work.

## **LIMITATIONS**

Strata professional services will be performed, findings obtained, and recommendations prepared in accordance with generally accepted principles and practices for geologists and geotechnical engineers. No other warranty, express or implied is made. The client acknowledges and agrees that:

1. STRATA is not responsible for the conclusions, opinions, or recommendations made by others based upon our findings.
2. The scope of our services is intended to evaluate soil and groundwater (ground) conditions within the primary influence or influencing the engineered improvements. Our services do not include an evaluation of potential ground conditions beyond the lateral limits of the project or depth of our explorations or agreed upon scope of our work.
3. Recommendations provided herein are based in part upon project information provided to STRATA. Our work will apply only to the specific project and subject site. If the project information is incorrect or if pertinent additional information becomes available, the correct or additional information should be immediately conveyed to STRATA for review.

4. The scope of services does not include evaluations regarding the presence or absence of contaminated soils or wetlands.
5. The Pacific Northwest Region is subject to intense subduction zone earthquakes, Tsunamis and geologic hazards, including shallow fault earthquakes, deep earthquakes, massive landslides, debris flows and flooding. As such, we cannot predict nor preclude the possibility of such natural occurrences whose magnitude cannot be anticipated or provided against by the exercise of ordinary care.

**APPROVAL**

You may indicate acceptance of this Agreement by returning a signed copy of the Agreement to me at the above indicated address, or through email. We anticipate that the work can be started within 10 days from receipt of your notice to proceed.

Sincerely,  
Strata Design

ACCEPTED BY:

*fgt*

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Rick Thrall, PE GE  
Geotechnical Engineer  
rick@strata-design.com  
971-201-7359c

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Signature

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Name (Please Print)

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Title

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Date

Rick Thrall, PE - Mini-Resume Attached

**Rick Thrall, Ph.D, PE, GE**

**Education:**

Ph.D. - Geotechnical Engineering - Oregon State University - 1982

B.S. - Civil Engineering - Oregon State University - 1976

**Accreditation:**

Professional Civil Engineer - Washington Cert# 23278

Professional Civil and Geotechnical Engineer – Oregon Cert# 12910PE

**Committees & Memberships:**

American Society of Civil Engineers

**General:**

Rick has nearly 35 years of geotechnical engineering experience, with the past 30+ years experience in the States of Oregon and Washington. Rick is presently an Geotechnical Engineer with Strata Design, Inc. A significant portion of Rick's career has been spent as a geotechnical discipline leader responsible for growing and developing profitable professional groups with AMEC (Now AMEC Foster Wheeler), GeoDesign and PBS Engineering and Environmental. Formative years were spent with Golder Associates and Landslide Technology. His assignments have typically included responsibility for overseeing and completing projects; maintaining technical rigor and quality; developing and maintaining professional engineering teams and testing and administrative staff; maintaining good relationships with clients; maintaining billings and schedules; and managing risk to our clients.

**Project Highlights:**

Dr. Thrall has served as project manager on unique combinations of geotechnical and civil engineering projects involving essential facilities. Projects have included major structures and buildings, bridges, dams, landslides, levees, instrumentation, water supply, pumping facilities, and pipelines. He is recognized in his field and can demonstrate professional geotechnical engineering skills. He provides geotechnical expertise common to most geotechnical projects on a day to day basis on a variety of projects and for a variety of clients. These include evaluation and use of materials for fill or select materials, evaluation and mitigation of substandard foundation conditions, slope stability evaluations and mitigation, seismic stability evaluations. He has completed this work typically for heavy civil type projects for Utilities, Municipalities, Major Developers and State and Federal Clients. The following projects are selected to illustrate the range of clients I have been involved with over the years:

- **Minto Fish Ladder Construction, for Slayden Construction, Gates Oregon**
  - **Stabilization of Failing Clarifier Solids Landfill, for Boise Cascade, St Helens Washington.**
  - **Evaluation of Failing Tower 114, for Coos Curry Electric Coop., Bandon, Oregon**
  - **Multiple Coos County Roadway Stabilizations, for Coos County Road Department, Oregon**
  - **Schooner Landing Stabilization, for Schooner Landing Shareholders Association, Newport Oregon**
  - **Overwater Micropile Replacement, 82 bents for San Rafael Bridge - AGRA Foundations and CalTrans, San Francisco, CA**
  - **City of Stevenson Critical Lands Ordinance for Landslide Hazards, for City of Stevenson, Washington**
  - **Denali MP 45 Roadway Evaluation, for FHWA Western Federal Lands, Denali National Park Alaska**
  - **Elk Creek Dam, for Corps of Engineers, Southern Oregon**
  - **Curry Co. Hospital Underpinning, for ERDMAN (general contractor), Gold Beach, Oregon**
  - **Harbor Hills Residential Development Master Plan, for HW3LLC (Private Developer), Brookings, Oregon**
  - **Interstate Maintenance Facility New Construction, for Portland Water Bureau, Oregon**
  - **Fish Creek Slide Flume #4, Pacific Power, Southern Oregon**
  - **Earth Dams Complex, for Cow Creek Band of Umpqua Tribe of Indians, Canyonville Oregon**
  - **Farady Canal Landslide Stabilization, for Portland General Electric, Estacada, Oregon**
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April 16, 2021

SENT VIA: EMAIL

Ms. Sue Lawrence  
Public Works Director  
City of Rainier  
PO Box 100  
Rainier, OR 97048

**SUBJECT: Proposal for Engineering Services for the Landslide Evaluation at W 1<sup>st</sup> Street**

Dear Ms. Lawrence:

The purpose of this letter proposal is to provide the City of Rainier (City) with the proposed Scope of Services, Budget and Schedule to complete an evaluation of the landslide that is developing near the south end of W 1<sup>st</sup> Street, provide a landslide mitigation memorandum and develop a utilities evaluation for the impacted water and wastewater pipelines.

## **SCOPE OF SERVICES**

Following is a list of the key tasks necessary to perform this proposed Scope of Services, each further described below:

- Task 1. Project Management
- Task 2. Geotechnical Services - Landslide Evaluation
- Task 3. Existing Utilities Evaluation and Recommendations

### **Task 1. Project Management**

Project management includes coordination with sub-consultant and internal team, and preparation of two (2) monthly progress reports and invoices.

#### **Task 1 Assumptions**

- The anticipated project duration is two (2) months; therefore, 2 monthly project progress reports and invoices are budgeted.

#### **Task 1 Deliverables**

- West Yost will provide one electronic (PDF) copy of monthly progress reports with invoices.

### **Task 2. Geotechnical Services - Landslide Evaluation**

West Yost will subcontract with McMillen Jacobs Associates to perform a geotechnical evaluation and prepare a mitigation memorandum. The geotechnical evaluation will include the following items:

### ***Subtask 2.1 Site Reconnaissance and Landslide Mapping***

- Review of LIDAR images to identify historical and recent ground deformation features.
- Conduct a site reconnaissance to document the sinkholes, ground cracks, seepages, scarps, exposed soil/rocks, and other features to develop a landslide map for the project.

### ***Subtask 2.2 Geotechnical Explorations and Instrumentation***

- Perform two (2) borings to 30 and 70 feet deep respectively to collect soil samples for laboratory testing and assessing soil parameters for engineering evaluations.
- Installation of one (1) vibrating wire piezometer in the 30-foot boring to monitor and record the groundwater table.
- Installation of one (1) inclinometer in the 70-foot boring to measure the landslide movement in the next few months.
- Conduct laboratory testing on selected samples for moisture contents, sieve analyses, and Atterberg limits.

The geotechnical explorations will be performed by a State licensed drilling company under subcontract to McMillen Jacobs Associates. The utility notification center (One-Call) will be contacted to locate existing utilities prior to any drilling.

### ***Subtask 2.3 Landslide Evaluation and Mitigation Memorandum***

- Develop a geologic cross section for landslide evaluation.
- Conduct slope stability analysis for the landslide and mitigation options.
- Develop feasible options to mitigate the landslide hazard at the roadway.
- Conduct one or two meetings with the City and other design team members to present and discuss the mitigation alternatives as well as select a preferred mitigation approach.
- Develop a landslide evaluation and mitigation memorandum to document our study results and to serve as the base for detailed mitigation design in the next stage.

#### **Task 2 Assumptions**

- City to locate buried utilities unknown to the One-Call locating service.
- Explorations do not include environmental assessments, and site is assumed to be “clean” regarding contaminated and hazardous materials.

#### **Task 2 Deliverables**

- One electronic (PDF) copy of the Landslide Evaluation and Mitigation Memorandum.

## **Task 3. Existing Utilities Evaluation and Recommendations**

Utilities on 1<sup>st</sup> Street have been impacted by the landslide and a solution is needed to assure the water and wastewater pipelines in the roadway are stabilized and protected. West Yost will conduct a site visit to review site conditions. Based on the geotechnical investigations and recommendations, West Yost will then identify and evaluate options for protecting, reconstructing or relocating existing underground utilities in conjunction with the recommended landslide mitigation measures recommended. The recommended utilities approach will be summarized in a technical memorandum along with estimated cost and construction schedule.

### Task 3 Assumptions

- No detailed design will be prepared as part of the technical memorandum.

### Task 3 Deliverables

- One electronic (PDF) copy of the Existing Utilities Evaluation Technical Memorandum.

## PROJECT BUDGET

West Yost's proposed level of effort and budget for each of the tasks described above is summarized in Table 1 below. West Yost will perform the Scope of Services described above on a time-and-expenses basis, at the billing rates set forth in West Yost's current contract for providing City Engineer-of-Record Services, with a not-to-exceed budget of \$49,783.

Any additional services not included in this Scope of Services will be performed only after receiving written authorization and a corresponding budget augmentation.

Table 1. Estimated Project Budget	
Task	Budget, \$
Task 1. Project Management	1,653
Task 2. Geotechnical Services - Landslide Evaluation	38,844
Task 3. Existing Utility Evaluation	9,287
<b>Total Budget</b>	<b>\$ 49,783</b>

## SCHEDULE

West Yost's preliminary project timelines are summarized in Table 2 below.

Table 2. Preliminary Milestone Schedule	
Milestone/Task	Date
Notice to Proceed	April 21, 2021
Geotechnical Services - Landslide Evaluation	May 31, 2021
Existing Utility Evaluation	June 18, 2021

Thank you for providing West Yost the opportunity to be of continued service to the City. We look forward to working with you on this important project. Please call, 503.784.9536, if you have any questions or require additional information

Sincerely,  
WEST YOST



Preston Van Meter, PE  
Principal Engineer  
PE #51615

cc: Bob Ward, Vice President

# A Comparative Study of Speed Humps, Speed Slots and Speed Cushions

LaToya Johnson and A.J. Nedzesky

**Abstract.** The primary objective of this study was to compare speed humps with two newer traffic calming devices that are gaining popularity in the US, the speed slot and speed cushion. Crossing speed and driver behavior were measured at selected traffic calming devices on roadways in the Washington DC metropolitan during the summer of 2003. The subject devices include:

- 12-ft and 22-ft asphalt speed humps;
- 14-ft prefabricated speed humps;
- 22-ft speed slots; and
- 10-ft speed cushions.

All ranged from 2.5 to 4.0 inches in height. Video surveillance technology was used to collect data, including vehicle crossing speed, lateral placement and braking frequency.

Preliminary results revealed that speed slots allowed the highest average and 85<sup>th</sup> percentile crossing speeds. Speed cushions, 12-ft speed humps and 14-ft prefabricated speed humps recorded the lowest crossing speed and relatively high frequency of braking maneuvers.

The designs of the speed hump and speed cushion encouraged drivers to travel centrally within their lane. Lateral positioning while traversing the speed slot was varied; a large percentage of drivers attempted to place the vehicle's left tires in the slot.

## INTRODUCTION

### Statement of the Problem

As the adoption of various traffic calming practices continues throughout the U.S., use of the speed hump as a standard traffic calming device steadily increases. However, speed humps have also become the center of a traffic engineering controversy. Emergency response agencies and community groups have been cited in the belief that speed humps increase the amount of time for an emergency vehicle to respond to calls.<sup>(1,2,3)</sup> This has resulted in hesitation and resistance regarding installation of speed humps. In reply to these concerns, two variations of the speed hump design are beginning to gain popularity in the U.S., the speed slot and speed cushion. Although the use of the speed slot and cushion is fairly common in European countries, its effectiveness as a traffic calming device in the U.S. is yet to be seen. Differences in driver behavior and vehicle characteristics between European countries and the U.S. make research in this area vital to the progress of traffic calming in the United States.

## **Research Goals**

The goals of this effort was to perform a comparative analysis of the three traffic calming devices by examining crossing speed, driver behavior and brake pedal use. Specific questions to be addressed are:

- How do speed humps, slots, and cushions affect driver's speed at the device?
- When the devices are placed in series, is the crossing speed at a second or third device different than at the initial device?
- How do speed slots and cushions affect driver's selection of lateral crossing location behavior differently than speed humps?

## **BACKGROUND**

### **Speed Humps**

In 1997 the Institute of Transportation Engineers (ITE) approved the *Guidelines for the Design and Application of Speed Humps*, RP-023A, which provided recommended practice based on national and international research and experience.<sup>(4)</sup> ITE reported that speed humps should be installed on roadway facilities classified as local streets by the American Association of State Highway and Transportation Officials (AASHTO). The roadway should not be more than two travel lanes or traveled significantly by long wheel-based vehicles. Additionally, it should have a horizontal curve of 300 feet radius or more and a grade of eight percent or less. The posted or prima facie speed limit should be 30 mph or less; ITE warned that installation on roadways with a higher speed limit warranted careful consideration.

### *Design*

The design of a speed hump can be defined by specifying the length of its base, the height of its crown and the shape of its surface profile, as shown in Figure 1. ITE recommended a height of 3-inches for speeds of 20 to 25 mph and 4-inches for speeds of 15 to 20 mph. For length, ITE recommended 12 feet.

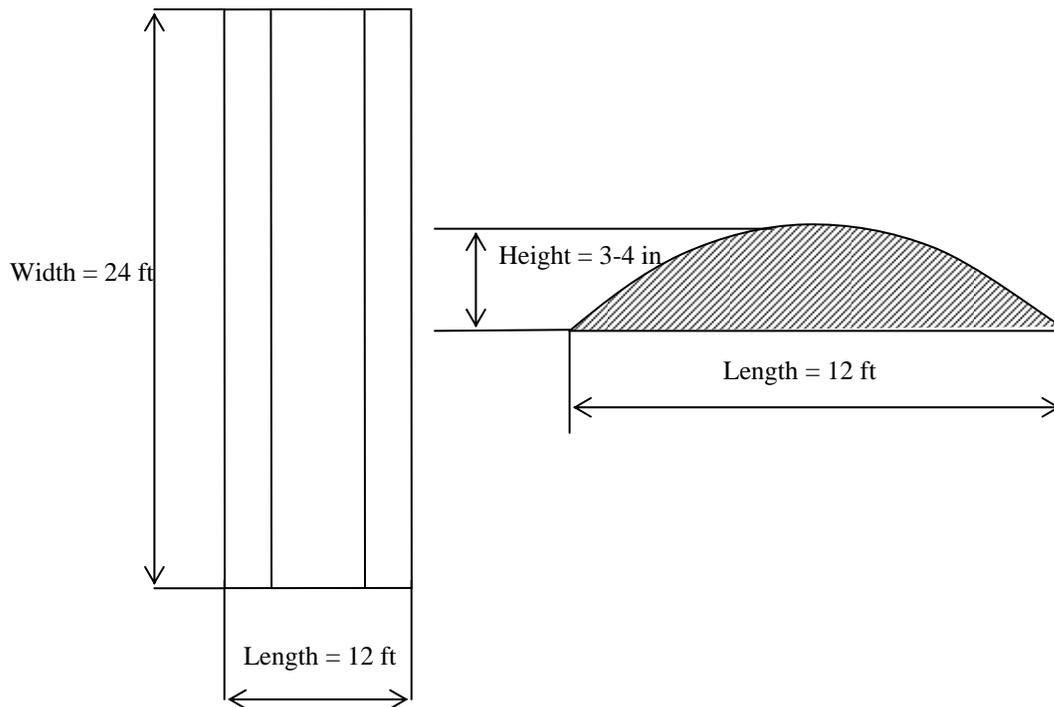


Figure 1. Schematic of a Typical Circular Speed Hump.

For use on a typical residential street, ITE reported that the most common designs are the circular or parabolic speed hump as shown in Figure 2. An alternative design, the flat-topped design, is also shown in the Figure 2.<sup>(4)</sup>

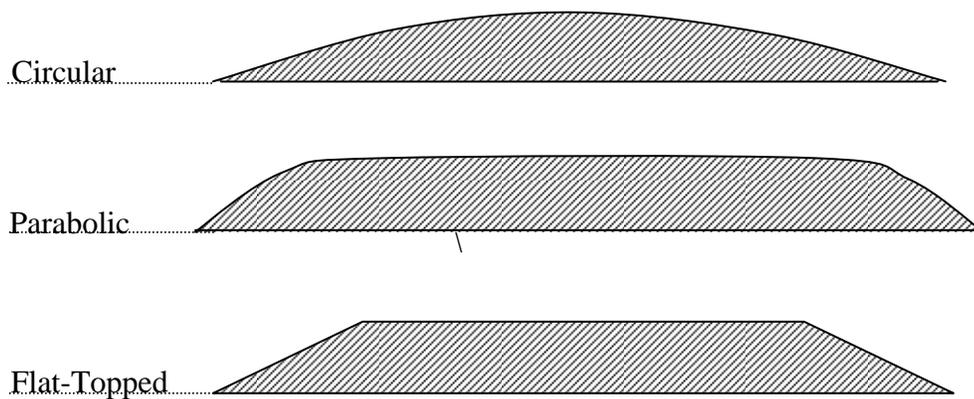


Figure 2. Typical Design Profiles of Speed Humps.

### Speed Slots and Speed Cushions

Due to concerns that speed humps influence response times and passenger comfort of emergency response vehicles, modified designs of speed humps were created.<sup>(1,2,3)</sup> Like speed humps, speed slots and speed cushions are both raised areas across the road with the intent of reducing vehicle speed. However, speed slots and cushions were designed to avoid excessive discomfort or damage to emergency vehicles by making separations in the hump. Figure 3 compares the typical design of speed humps, slots, and cushions. Speed slots are similar to speed humps in that they extend across the roadway but they have “slots” or tire grooves along each side of the centerline in order to allow emergency response vehicles to avoid of the device by driving through the slots along the middle of the road. Unfortunately the emergency vehicle must straddle the centerline and travel in both lanes of the roadway, increasing the risk to both the emergency vehicle as well as other vehicles.

Speed cushions are smaller than lane width and are rectangular or square in shape.<sup>(5)</sup> These characteristics allow for an emergency response vehicle to straddle the cushion while remaining in its respective lane. Figure 3 shows the typical dimensions and layout of speed humps, slot and cushions.

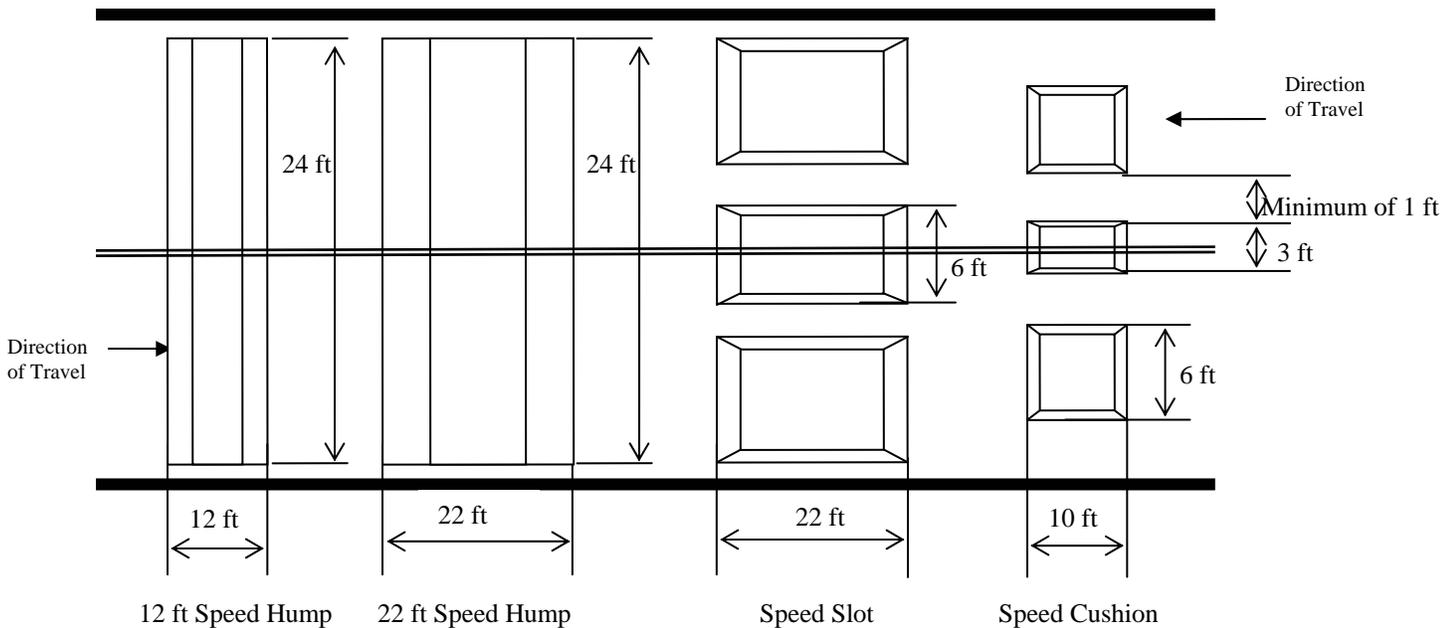


Figure 3. Schematic of Speed Hump, Speed Slot and Speed Cushion.

The basic designs of both the speed slot and speed cushion are very much like the speed hump. However, additional modifications have been made for the speed cushion to accommodate for the wider vehicle width of cars in the US. Table 1 shows recommendations made by the City of Austin Texas and the United Kingdom Department of Transport. Figure 4 shows a diagram of the typical speed cushion.

Table 1. Recommended Speed Cushion Design Characteristics.

Design Characteristics	Austin, TX <sup>(6)</sup>	United Kingdom <sup>(7)</sup>
Base Length	10-ft or 12-ft	2 to 2.5 m (6.56 to 8.20 ft)
Base Width	6.5 ft or 3 ft	1.6 to 1.9 m (5.24 to 6.23 ft)
Maximum Height	3 ±¼ in	80mm (4.15 in)
On/Off ramp Gradient	1:8 at 18 in	1:8
Side Ramp Gradient	1:6 at 24 in	1:4
Transverse Gap	12 in wide	750 and 1000 mm (2.46 ft to 3.28 ft)

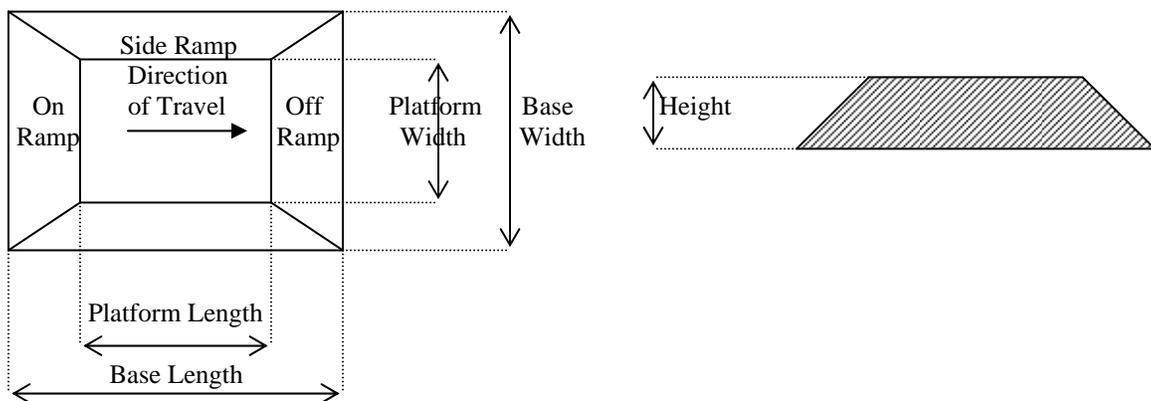


Figure 4. Aerial and Cross-Sectional View of a Speed Cushion.

#### *Speed Cushion Studies*

A 1998 study by Layfield and Parry that examined speed cushion schemes in the United Kingdom concluded that although speed cushions are not as effective as speed humps in reducing speeds, they are important because they decrease driver discomfort especially in large buses. Speed cushions were reported to have two to seven mph higher 85<sup>th</sup> percentile crossing speeds than speed humps and one to two mph higher 85<sup>th</sup> percentile speeds between devices. <sup>(8)</sup>

The study by Layfield and Parry found that passenger discomfort was low at speed cushions for large buses if the cushions were straddled centrally, but otherwise had similar effects as speed humps if not straddled centrally. <sup>(9)</sup>

#### *Driver Behavior at Speed Cushions*

In observing driving behavior, Layfield and Parry found that 55 percent of all cars and 90 percent of all buses in the study attempted to centrally straddle the speed cushions. In the three abreast configuration, 40 percent of all drivers drove with one tire between the nearside and middle cushions. <sup>(8)</sup> A study by Pau on how speed bumps may induce improper driver behavior in Italy, characterized improper movement as total or partial

avoidance in a park or bus lane. This study found that a significant percentage of drivers attempted to totally avoid speed humps by traveling in the park or opposite lane.<sup>(5)</sup>

*Emergency Vehicle Response Time at Speed Cushions*

In a 2000 study by Bunte investigated the effects of the speed cushion on the response times in Austin Texas. Results showed that speed cushions had very little impact, if any, on increasing response times of emergency response vehicles. Average delay times were less than a second, except for the vehicle that was transporting a critically ill/injured patient which had an average delay of 4.84 seconds on total travel time. Overall, the study found that speed cushions are less detrimental to negatively impacting emergency response times than speed humps.<sup>(10)</sup>

DATA COLLECTION METHODOLOGY AND ANALYSIS

**Site Selection**

The study investigated speed humps, slots and cushions in the Washington, D.C. metropolitan area. Beyond device length, which was a function of the device type, the following criteria were used to select the ten sites used in the study:

- Height: 2.5 – 4.0 inches;
- Separation: 150 – 700 ft;
- Street Width: 25 – 35 ft;
- Number of Lanes: 2 lanes, one in each direction;
- Street Classification: Residential, local; and
- Parking: Unrestricted on one or both sides.

For each site, observations and photographs were taken at each location to record road geometry, classification, posted and advisory speeds, traffic volume and speed hump, slot, or cushion characteristics. Table 2 presents the ten sites and type of associated traffic calming device. Additional information about each site is found in Appendix A. During the site selection process, local transportation officials were contacted.

Table 2 Sites Selected for Study.

Site ID	Device Type	Road Classification	Segment Length	Street Width and Parking	Posted Speed
1	Hump-12-ft	Residential, school	1079 ft	24 ft wide, parking on both sides	25 mph*
2	Hump-12-ft	Residential	1388 ft	24 ft wide, parking on both sides	25 mph*
3	Hump-12-ft	Residential, school	1427 ft	32 ft wide, parking on both sides	25 mph
4	Hump-22-ft	Residential, Collector for local interstate, school	816 ft	27 ft wide, permit parking on both sides	25 mph

5	Hump-22-ft	Residential, Local, school	1866 ft	25 ft wide, parking on both sides	25 mph**
6	14-ft Prefabricated Hump	Residential, school, major hotel	1372 ft	30 ft wide; 2 lanes parking on one side	25 mph
7	Slot	Residential	2857 ft	34 ft wide, 2 lanes, parking on both sides	25 mph
8	Slot	Residential, collector for Route 50, school	2837 ft	36 ft wide, 2 lanes, parking both sides	25 mph
9	Cushion	Residential	2743 ft	26 ft wide, 2 lanes, parking on both sides	25 mph
10	Cushion	Residential; cut-through for two local arterials	2456 ft	27 ft wide, 2 lanes, parking on one side	25 mph

\* 15 mph advisory speed placard at device

\*\* 20 mph advisory speed placard at device

### Vehicle Classification

Vehicles were classified as to belonging to one of seven different groups. These classifications were primarily based on vehicle suspension, handling and ground clearance. The seven classifications are as follows:

- Passenger car;
- Luxury / High performance car;
- Pick-Up Truck;
- SUV / Minivan;
- Trucks;
- Buses; and
- Other (service vans, etc).

### Data Collection Methodology

Video camera surveillance was used to collect speed data and to document driver behavior. A digital video camcorder discretely set-up at the site recorded driver response to the devices. The placement of the video camcorder permitted the observation of the traffic calming device and at least a 50 ft approach to the device. Data for vehicles traveling in both directions were collected simultaneously. Data were collected for two-hour periods during weekdays between 10 am and 2 pm during good weather conditions.

### Data Reduction

Videos from the video camera surveillance were viewed; speed and lateral position data were extracted and put in an Excel spreadsheet. Devices that were in a series were designated as first, middle, or last at a particular site and the same type of device was used throughout the series. A series consisted of either two or three devices.

Video-frame analysis was used to collect the crossing speed data. Based on the knowledge that the video camcorder recorded 30 frames per second, the number of frames needed for the vehicle's front tire to traverse the length of the device was used to calculate the vehicle's average crossing speed. Only vehicles traveling under free-flow conditions were used for the analysis; following vehicles were of no interest due to the influence of a lead vehicle. Data were extracted for vehicles traveling in each direction. Approximately 100 data points were used for each site when possible.

Crossing vehicles were classified as passenger car, sports utility vehicle or pickup truck/minivan. Also, braking and any erratic behavior such as evidence of loss of control was documented.

Data relating the driver's choice of lateral placement when crossing the device was subjectively recorded from the video. Lateral placement was classified as the following:

- Driving in the center of the lane;
- Crossing over the centerline;
- Driving with the left tires in the groove (only for slots and cushions); or
- Driving towards the right side of the lane.

## RESULTS

### Speed Analysis

Descriptive statistical analysis was performed, in which the average and 85<sup>th</sup> percentile speeds and standard deviation were calculated. Various results will be highlighted in the following tables. Table 3 shows the average and 85<sup>th</sup> percentile speeds of devices that were either stand-alone or were the first in a series. As can be seen, the 12-ft speed humps, 14-ft speed prefabricated speed humps and the speed cushions all generated average speeds that were approximately 10 mph and 85<sup>th</sup> percentile speed that were less than 15 mph. The 22-ft speed humps and the speed cushions had higher average speeds. The 85<sup>th</sup> percentile speed at the speed slots was over 25 mph.

Table 3. Average and 85<sup>th</sup> Percentile Speed (in mph), by Device Type.

Device Type	Average Speed	85 <sup>th</sup> Percentile Speed
Speed Hump-12-ft	9.6	12.3
Speed Hump-22-ft	15.2	18.8
Prefabricated Speed Hump-14-ft	10.6	14.3
Speed Slot	20.5	26.5
Speed Cushion	10.1	12.8

Table 4 shows the average and 85<sup>th</sup> percentile speeds for devices that were installed in series. For installations that consisted of only two devices, the middle device column contains "n/a." Site 4 consisted of only one speed hump. Recall that all roads were posted at 25 mph.

From the table it can be seen that speeds tended to remain relatively constant at each of the devices in the series. Two sites demonstrated a variation in their average and 85<sup>th</sup> percentile speeds. At site ID 5 (22-ft humps) speeds decreased and then increase along the series of humps, which were spaced approximately 500 feet apart. At site ID 9 (speed cushion) there was an increase along the series of cushions, which were separated by 550 feet apart.

It was observed that most drivers depressed their brakes when crossing any of the devices, independent of the position of the device in the series.

Table 4 Average and 85<sup>th</sup> Percentile Speeds for the Various Devices, (in mph).

Site ID	Type of Device	First Device		Middle Device		Last Device	
		Average	85 <sup>th</sup> Percentile	Average	85 <sup>th</sup> Percentile	Average	85 <sup>th</sup> Percentile
1	12-ft-hump	10.8	12.3	n/a	n/a	9.9	12.3
2	12-ft-hump	10.1	12.2	n/a	n/a	10.2	12.3
3	12-ft-hump	9.4	11.9	n/a	n/a	9.4	12.2
4	22-ft hump	14.3	17.3	n/a	n/a	n/a	n/a
5	22-ft hump	16.3	19.6	14.6	17.4	19.2	23.7
6	Prefab 14-ft hump	10.6	14.3	n/a	n/a	10.5	13.0
7	Slot	19.5	24.7	18.3	23.7	18.6	23.7
8	Slot	21.2	26.5	17.7	21.4	19.4	22.5
9	Cushion	10.1	13.6	n/a	n/a	13.6	20.0
10	Cushion	10.1	12.0	9.7	11.4	10.5	13.3

#### Analysis of Traveling Speed by Vehicle Type

Crossing speeds were analyzed for each of the devices based on vehicle type. Speed were classified as fitting into one of the following groups:

- 0.0-9.9 mph;
- 10.0 – 14.9 mph;
- 15.0 – 19.9 mph;
- 20.0 – 24.9 mph;
- 25.0 – 29.9 mph;

- 30.0 – 34.9 mph; and
- 35.0 mph and over.

No one vehicle group performed differently than any other vehicle group for a given type of device. For the 12-ft humps, the most common traveling speed for each vehicle type was in the 0.0-9.9 mph speed category. For the 22-ft humps, the most travel speed for each type of vehicle was in the 15.0-19.9 mph speed category. For the 14-ft temp humps, approximately half of the vehicles were classified in the 0.0-9.9 mph speed category and half in the 10.0-14.9 mph speed category. For speed cushions, the majority of speeds were in the 0.0-9.9 mph speed category.

Table 5 presents the percentage of vehicles traveling in each speed category at the speed slots. For the most part, travel speeds were in the 15.0-19.9 mph speed category. The only result of interest was the percentage of vehicles (shown in italics) that were identified in the speed categories 30.0-34.9 and 35.0 mph and over.

Table 5. Percentage of Vehicles Traveling in each Speed Category, by Vehicle Type for Speed Slots.

Vehicle Type	Number of Observations	Traveling speed (mph)						
		0.0 - 9.9	10.0 – 14.9	15.0 – 19.9	20.0 – 24.9	25.0 – 29.9	30.0 – 34.9	35.0 +
Passenger Cars	238	2.1	18.5	48.7	22.3	3.8	<i>2.1</i>	<i>2.5</i>
Luxury and High Performance	72	2.8	15.3	55.6	11.1	12.5	0.0	2.8
Pick-up trucks	34	2.9	23.5	35.3	17.6	11.8	<i>5.9</i>	<i>2.9</i>
SUVs and Minivans	155	3.9	18.1	41.3	22.6	5.8	<i>4.5</i>	<i>3.9</i>
Trucks	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	10	20.0	30.0	10.0	10.0	20.0	<i>10.0</i>	0.0
Other, (e.g., service vans)	25	0.0	32.0	44.0	16.0	4.0	0.0	<i>4.0</i>

### Lateral Placement Analysis

A similar analysis was performed looking at driver selection of the vehicle’s lateral placement when crossing the device. Vehicles were classified as either driving in the center of the lane, crossing the centerline, driving towards the left (or right) of the lane.

As expected, since speed humps do not offer the driver the opportunity of traversing with a tire (or pair of tires) not contacting the hump, lateral placement of the vehicle tended to be in the center of the travel lane. Lateral placement at speed slots was also consistent; however, at speed slots most drivers tended to drive with their left tires along the grooves of the slot.

Table 6 shows that when traversing a speed cushion, most drivers either chose to have their vehicle centrally located over the cushion or traverse the cushion with their left tire in the groove. The lateral placement selected by pick-up truck drivers is of possible concern. Even with the small sample size of 27 it was noted that almost twice as many pick-up trucks crossed the centerline, in an attempt to cross the smaller cushion located under the centerline. The average speed of vehicles crossing the centerline was 10 mph, which indicates that these drivers were not traveling at an unsafe speed, but this is an erratic maneuver that may surprise oncoming drivers. No other erratic behavior (e.g., sudden braking, swerving, etc.) was observed at the speed cushions.

Table 6. Lateral Placement of Vehicles by Vehicle Type for Speed Cushions.

Vehicle Type	Number of Observations	Lateral Placement			
		Center	Over Centerline	Left Tire in Groove	Towards Right, Right Tires in Slot
Passenger Cars	246	39.0	12.2	39.0	9.8
Luxury and High Performance	64	32.8	10.9	53.1	3.1
Pick-up trucks	27	44.4	22.2	25.9	7.4
SUVs and Minivans	103	40.8	8.7	42.7	7.8
Trucks	0	0.0	0.0	0.0	0.0
Buses	0	0.0	0.0	0.0	0.0
Other, (e.g., service vans)	9	33.3	22.2	33.3	11.1

## CONCLUSION

After collecting data for almost 2000 vehicles, it was found that speed slots followed by 22-ft speed humps allowed the highest average and 85<sup>th</sup> percentile crossing speeds. Twelve-ft speed humps, speed cushions and prefabricated 14-ft speed humps recorded the lowest crossing speeds.

The design of the speed hump encouraged drivers to travel centrally within their lane. Lateral positioning while traversing the speed slot and cushion varied. At speed slots a large percentage of drivers shifted to the left, in an attempt to place the vehicle's left tires in the slot. At speed cushions, drivers tended to drive either centrally down the lane or shifted towards the left of the lane to place the left tires in the groove.

Speed slots, with many drivers shifting towards the left side of their lane, exhibited the highest average and 85<sup>th</sup> percentile speeds in this study, and speed cushions, with a large percentage of pick-up truck drivers crossing the centerline in order to traverse the cushion, would appear to present a safety concern to the unsuspecting, oncoming driver.

Unfortunately, crash data was not collected as part of this exercise. Future research to investigate these hypotheses may be justified.

It is recommended that further research investigate lateral acceleration generated by the various devices for selected vehicle types as well as device spacing.

**Special Thanks**

The authors would like to thank the local traffic engineers working in the City of Alexandria, Arlington and Fairfax Counties, Virginia, Washington D.C. and Montgomery County, Maryland. Additional thanks are also due to Dr. Karen Dixon and Dr. Gabriel Rousseau.

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APPENDIX A: SELECTED SITE SPEED DEVICE PROFILE

Site ID	Profile/ Configuration	Height	Length	Width	Gap	Separation	Construction	Markings
1	Parabolic	2.5 in	12-ft	n/a	n/a	Range of 130-383 ft	Asphalt	Zebra
2	Parabolic	3.0 in	12-ft	n/a	n/a	437 & 419 ft	Asphalt	Zebra
3	Parabolic	3.0 in	12-ft	n/a	n/a	600 ft	Asphalt	Chevron
4	Parabolic	3.0 in	22-ft	n/a	n/a	460 ft	Asphalt	Chevron
5	Parabolic	3.5 in	22-ft	n/a	n/a	Range of 430-530 ft	Asphalt	Zebra
6	Flat-top	4.0 in	14-ft	n/a	n/a	150 & 161 ft	rubber	arrow on road prior to hump
7	symmetrical about centerline	3.0 in	22-ft	5 ft & 12-ft	18 in	490-535	Asphalt	Diagonal Lines
8	symmetrical about centerline	3.0 in	22-ft	5 ft & 14-ft	17.5 in	470-575 ft	Asphalt	Diagonal Lines
9	three cushion abreast; symmetrical about centerline	3.0 in	10-ft	7 ft	24 in	505 & 634 ft	Asphalt	Arrow
10	three cushion abreast; middle cushion off set from centerline	3.5 in	10-ft	7 ft	18 in	285 & 470 ft	Asphalt	Arrow

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## Speed Humps along West C Street

Area between Old Rainier Road and West 8<sup>th</sup> Street – 1770 feet

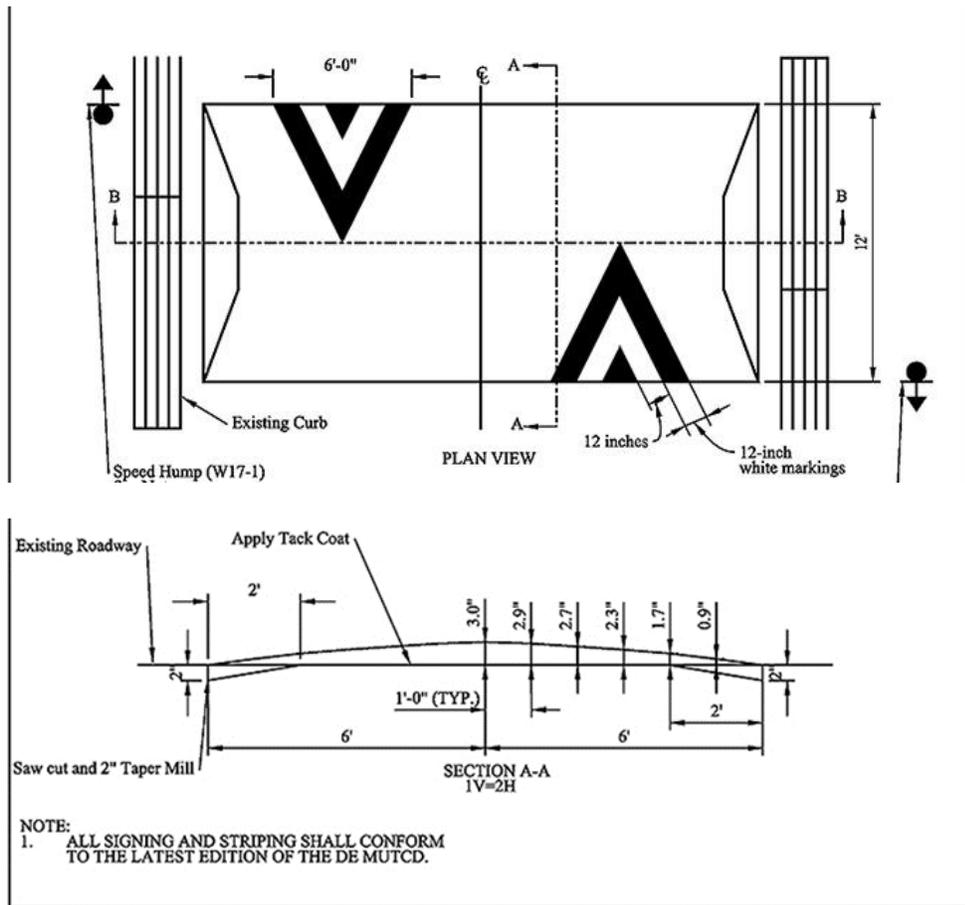
Area between Old Rainier Road and West 7<sup>th</sup> Street – 2100 feet

To achieve 85 percent compliance with speed limits, studies have shown the speed humps should be 10' wide and 3" tall with spacing not to exceed 500 foot intervals. This would indicate about 3 speed humps would be installed along this road.

The spacing needs to not impact, streets, driveways, or owner access. I have not field verified the locations but in front of 1114 West C, 1008 West C and 904 West C.

To do asphalt humps correctly, the asphalt has to be ground out on the edges and the hump installed to prevent the edges from breaking off. It will take at least 2 days for staff to do three humps. The asphalt grinder would need to be rented. The cost of the asphalt would be \$603.00, signs would be \$100 to \$300 depending on how many needed, marking of the humps would be about 1 day additional and the sections of the street would have to be closed for awhile for it to dry or if we use the thermo plastic it would be \$200 but traffic would only be restricted while it was installed.

I would estimate total cost including staff time to be \$6000.



To purchase and install manufactured ones, it would cost about \$3594.00 for the humps, same price for the signs, and about 1 day for two guys to install. No marking would need to be added.

I would estimate total cost including Staff time to be \$4962.





RAINIER CITY	2020	2019	2018
CUSTOMERS	550	531	521
CUST % CHANGE	3.6%	1.9%	

Key Drivers	
<b>Inflation</b>	
CPI-U West Change since July 2019	4.8%
<b>Hudson Garbage Expense Changes</b>	
Direct Labor Expense-Market Adjustment	14.7%
Commodity Processing-Improving (\$/ton)	-25.0%
Disposal Fees	2.6%
Other Direct Costs	1.0%
<b>Requested Price Increase</b>	<b>2.6%</b>

**Rainier's Historical Rates**

	<u>2017-07</u>	<u>2018-05*</u>	<u>2019-07</u>	<u>2020-07</u>
	\$ 23.84	\$ 24.66	\$ 25.57	No Change
	\$ 101.20	\$ 104.69	\$ 108.98	No Change
Residential %	0.00%	3.44%	3.69%	0.00%
Commercial %	0.00%	3.45%	4.10%	0.00%
Reason	None	Recycling	General Costs	None
<b>Relative CPI</b>	2.3%	2.9%	2.5%	1.7%

City of Rainier Rates			
	Current	Proposed	
32 Gal Wkly	\$ 25.57	\$ 26.23	
1 Yard Wkly	\$ 108.98	\$ 111.81	





## City of Rainier Park Reservations

Date	June 17, 2021	
Reserved By	Denise Watson	
Phone No.	541-992-4512	
Address	803 West C St. Rainier , OR. 97048	
Email	Rainierladies@ gmail.com	
Date and Time for Reservation	July 25, 2021	12:30 - 2:00
Name for Sign	Ladies of Rainier	
Area Requested	681 W A St Rainier , OR	Rainier City Park
Approved By/Date		

All rules and regulations in Rainier Municipal Code 12.25 must be followed:

- Hours are from 5:00 AM to 10:00 PM
- No Littering and large amounts of trash will need to be removed.
- No Tobacco Use
- No Alcohol unless permitted for special events.
- Animals must be under control with collar and leash. Animal feces must be collected and disposed of properly.
- Penalties will apply as outlined in RCMC 12.25.

## Chapter 2.20 PUBLIC LIBRARY BOARD

Sections:

- 2.20.010 Rainier public library established.**
- 2.20.020 Library board.**
- 2.20.030 Board organization.**
- 2.20.040 Library board general powers.**
- 2.20.050 Acceptance of gifts for library purposes.**
- 2.20.060 Internal administrative policies and procedures.**
- 2.20.070 Prohibited actions and penalties.**

**2.20.010 Rainier public library established.**

A. A public library is hereby established for the city of Rainier under the provisions of ORS 357.400 to 357.621.

B. The public library shall be financed through the use of general fund monies, revenue obtained from the operation of the library, grants, gifts, donations and bequests received and designated to be used for library purposes, and any tax levies that may be authorized by the electors. (Ord. 934 § 1, 1992)

**2.20.020 Library board.**

A. The Rainier public library board is hereby created. The board shall consist of five members to be nominated by the mayor and appointed and confirmed by the city council.

B. The term of office of the board members shall be four years and their terms shall commence on July 1st, in the year of their appointment. The terms of office shall be staggered so that the terms of not more than two board members will expire in the same year. Of the first five board members appointed, one member shall initially hold office for one year, one for two years, one for three years and two for four years. At the expiration of the term of any members of such board, the city council shall appoint a new member or may reappoint a member for a term of four years. If a vacancy occurs during a term of office, the governing body shall appoint a new member for the unexpired term. No person shall hold appointment as a member for more than two full consecutive terms, but any person may be appointed again to the board after an interval of one year.

C. The Rainier library board shall include one alternate nominated by the mayor and confirmed by the council. During periods of absence of a regular voting member the alternate shall, by a majority vote, assume the right to vote for the absent board member. The term of the alternate shall be for a period of four years and shall not serve more than two consecutive terms.

D. Members of the board shall receive no compensation for their services, but may be reimbursed for expenses incurred in the performance of their duties. (Ord. 997, 2002; Ord. 934 § 2, 1992)

**2.20.030 Board organization.**

A. The library board shall elect a chairperson from its members.

B. The library director shall serve as secretary to the board and keep the record of its actions.

C. The board may establish and amend rules and regulations for its government and procedure consistent with the laws of the state of Oregon and with the Charter, ordinances, resolutions, and regulations of the city of Rainier.

D. The board shall meet at least 10 times each year and at such other times as it may provide by its rules. (Ord. 934 § 3, 1992)

**2.20.040 Library board general powers.**

The library board shall be an advisory board and shall have no executive or administrative powers or authority, and this chapter shall not be construed as depriving elected or appointed officials of the city of any power they may have under the laws of the state or the Charter of the city. The board shall have powers and duties as follows:

A. The library board shall assist in the interview process of selecting and appointing a library director. The city recorder, as the fiscal and internal administrative agent for the library, shall have primary responsibility for library personnel, including recruitment, selection, classification and pay and supervision.

B. The library board shall make recommendations to the city council about rules and policies for the efficient and effective operation of the library, its services and programs.

C. The library board shall assist the library director in preparation of the annual budget request to be submitted by the library director to the city recorder.

D. The library board shall make recommendations for the acceptance, use, or expenditure of any real or personal property or funds donated to the library under RMC 2.20.050, or make recommendations for the purchase, control, or disposal, or real and personal property necessary for the purposes of the library.

E. The library board shall make recommendations for the selection of sites for public library buildings or for location of library facilities.

F. The library board shall review and recommend to the city council terms for contracts and working relationships with private and public agencies regarding library services.

G. The library board shall approve an annual report to the State Library and to the city council submitted in a timely manner on a form supplied by the State Library.

H. The library board shall develop and recommend to the city council long-range plans for library service, consistent with city priorities and with state, regional and national goals for libraries. (Ord. 934 § 4, 1992)

**2.20.050 Acceptance of gifts for library purposes.**

Gifts of any real or personal property or funds donated to the library and accepted by the governing body shall be administered in accordance with each gift's terms, and all property or funds shall be held in the name of the city of Rainier. (Ord. 934 § 5, 1992)

**2.20.060 Internal administrative policies and procedures.**

The city recorder shall be the fiscal and internal administrative agent for the Rainier public library and the library shall operate in conformance with city administrative procedures including those pertaining to the following:

- A. Personnel, including recruitment, selection, classification and pay for library personnel.
- B. Receipt, disbursement, and accounting for monies.
- C. Maintenance of general books, cost accounting records, and other financial documents.
- D. Budget administration.
- E. Operation and maintenance of equipment and buildings. (Ord. 934 § 6, 1992)

**2.20.070 Prohibited actions and penalties.**

A. It shall be unlawful for any person to willfully or maliciously detain any library materials belonging to the Rainier public library for 30 days after notice in writing from the library director that the library material is past due. The notice shall bear upon it's face a copy of ORS Sections 357.975 and 357.990.

B. Violation for willful detention of library materials is punishable upon conviction by a fine of not less than \$25.00 nor more than \$250.00. Such conviction and payment of the fine shall not be construed to constitute payment for library material, nor shall a person convicted under this section be thereby relieved of any obligation to return such material to the library. (Ord. 934 § 7, 1992)

Mobile Version



**BEFORE THE CITY COUNCIL OF  
THE CITY OF RAINIER**

**RESOLUTION #21-07-01**

**A RESOLUTION TO ESTABLISH A PROPERTY OWNER ASSISTANCE PROGRAM TO  
ENCOURAGE THE REMOVAL OF HAZARDOUS TREES FROM PUBLIC RIGHTS OF  
WAY AND THE PLANTING OF NEW TREES**

**WHEREAS**, City staff occasionally receives requests from property owners for assistance with the removal of hazardous trees located in public rights-of-way; and

**WHEREAS**, The City has limited resources with which to assist private parties with such requests; and

**WHEREAS**, it is a goal of the City Council and staff to have Rainier designated as a Tree City; and

**WHEREAS**, having a program in place to offer limited financial assistance for the removal of hazardous trees in public rights-of-way and to encourage the planting of new trees could help Rainier earn the Tree City USA designation.

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the Common Council of the City of Rainier, Oregon that:

1. The council has created a property owner assistance program through the city's General Fund beginning in the 2021-22 Fiscal Year in an amount not to exceed \$5,000 per fiscal year and subject to budget funding availability; and
2. Requests for the awarding of funds through the program are to be reviewed by a committee appointed by the Council on an individual basis according to financial need and other relevant factors.

**PASSED AND ADOPTED** by the City Council of the City of Rainier, Oregon this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Jerry Cole, Mayor

Attested:

\_\_\_\_\_  
W. Scott Jorgensen, City Administrator

## ORDINANCE NO. 1080

### AN ORDINANCE OF THE CITY OF RAINIER ESTABLISHING RULES AND REGULATIONS FOR VACATION RENTAL DWELLING (VRD)

1. **Purpose.** The Vacation Rental Dwelling (VRD) Permit is in recognition of the desire of some residents to rent portions of their property on a short-term basis. These standards and procedures are in addition to City ordinances and Federal and State laws and regulations.
2. **Standards.** In all zones allowing VRDs, a permit shall be issued as an accessory use and in accordance with the administrative conditional use provisions provided the application can demonstrate by written application that all of the following standards are met:
  - A. **Maximum Allowed Rentals.** No more than half of the bedrooms of a single family dwelling may be made available for short-term rental. Separate or detached structures do not count towards that limit.
  - B. **Parking.** One 9' x 18x off-street space will be provided for each bedroom in the unit that is available for short-term rental, but in no event shall fewer than two spaces be provided.
  - C. **Number of Occupants.** The maximum number of occupants cannot exceed three persons (over the age of three) per bedroom available for short-term rental. The maximum occupancy, along with good neighbor rules, shall remain posted inside the front door in a conspicuous place. It is the owner's responsibility to ensure the renters are aware of these limitations. The number of overnight renters or the maximum number of occupants may be reduced by the Fire Marshal at the time of inspection for valid code reasons.
  - D. **Residential yard areas.** Front, side and rear yards must maintain a residential appearance by limiting off-street parking within yard areas. At least 50 percent of each yard area which is not occupied by buildings must be landscaped in some fashion so that parking will not dominate the yard.
  - E. **Local responsible party.** A local responsible party that permanently residents within the county must be identified by the owner. The responsible party will serve as an initial contact person if there are questions regarding the operation of the VRD. The owner shall provide the telephone number of the local contact person to the City, and to the immediate neighbors within the notification area (within 200 feet of the subject property).
3. **Notice and Administrative Decision.** Upon submittal of a complete application, notice of the request shall be mailed to all property owners within 200 feet of the property.
4. **Appeals.** Within 15 days of the administrative decision, the decision may be appealed.
5. **Approval conditions.** All approval must include the following conditions:
  - A. Vacation rentals must comply with City ordinances regarding noise, smoke, dust, litter, odor and solid waste collection. Weekly solid waste pick-up is required during all months.
  - B. Prior to issuance of a vacation rental dwelling permit, the building in question must be inspected and be in substantial compliance with the Uniform Housing Code. Those inspections can be conducted by a licensed professional with expertise on fire, life an safety issues.

- C. It is the property owner's responsibility to ensure that the vacation rental dwelling remains in substantial compliance with the Oregon State requirements for the following: Health, Safety, Building and Fire Codes, and Traveler's Accommodation Statutes and with the Uniform Housing Code.
- D. Vacation rental dwelling permits are personal in nature and accordingly are not transferable. Upon transfer of the property, the new owner, if he or she so desires, may apply for a new permit in accordance with this Section.
- E. A City Business License is required, and any transient room tax provisions apply to VRDs. The business license must be obtained prior to any rental of the property. Renewals must be made in January of the permit year. If the business license fee or the transient room tax payments are 30 days past due, the VRD Permit will be revoked unless a written extension is granted by the City Administrator.
- F. Upon receipt of two written complaints from two or more occupants of different residences who claim to be adversely affected by the use of the property as a VRD, or by notice that requirements or conditions of approval are not being met, the City will work with the parties involved to settle any conflicts. Failure on the applicant's part to meet the standards or conditions will result in denial of the application. If the problems are not resolved, the City Administrator has the authority to revoke the VRD Permit. The owner may appeal the Administrator's decision to the City Council.

Passed by the City of Rainier council and approved by the mayor on the \_\_\_\_ date of \_\_\_\_, 2021.

BY: \_\_\_\_\_

Jerry Cole, Mayor

ATTEST:

BY: \_\_\_\_\_

Scott Jorgensen, City Administrator

June 30, 2021

Project: Replace Boat Launch Ticket Machine

Description: The City utilizes a ticket vending machine for the parking at the Boat Launch. The City collects the revenue and utilizes it for repair and maintenance. The Revenue for Boat Launching has average \$30,799 per year for the last 5 years.

The vending station is obsolete and spare parts are limited. If it goes out, it will take months to replace as repairing will be almost impossible.

The cost for the replacement unit that can also take debit and credit cards which is frequently requested by the public is \$10,788.00 with a \$95.00 a month fee for card transactions and software. This would be a recurring cost of \$1140.00 annually.

I estimate Public Works averages one callout a month which is 2 hours of overtime. In the past, the ticket machine could be down for a whole weekend. We have instituted procedures to get it functional as quickly as possible, but we still see a revenue loss. The cost to the city for the fee could be offset by the difference in lost revenue from equipment down time and overtime required to respond when the unit is not working.

This was budgeted in 2021/2022 under the security/upgrade technology from the general fund along with additional cameras.

Northwest Parking Equipment Company  
 13500 Lake City Way NE  
 Suite 208  
 Seattle, Washington 98125  
 (bus) (206) 363-5265  
 (fax) (206) 367-6578

**PROPOSAL**

Submitted to: 

<b>Sue Lawrence</b>	<b>Date: February 4, 2021</b>
City of Rainier	
106 West "B" Street	
Rainier, OR. 97048	

Customer P.O. No. 

--

Delivery Site: 

Same As Above Unless Noted.

QUANTITY	DESCRIPTION OF ITEM	AMOUNT
1	Pay N Display venSTATION- ac powered with battery backup inclusive of Online credit/debit card acceptance including 4G wireless kit.	9,995.00
1	6" Pedestal mount with bolts.	393.00
1	On site setup of components, server setup, Pay Station rate table configuration & programming, as well as operational training to staff on the Pay Station and our web based venVUE reporting software.	495.00
1	System V trade in credit.	-400.00
	**Online Fee is \$95.00 per month and includes the following services: Digital Wireless Service, PCI Compliance, Server Hosting, and Web based venVUE Reporting User Subscription.**	
	**\$1.00 Purchase Option (60) Month Lease Pricing Is Approximately \$ 228.71 Per Month.	
	**Includes "Tilt" Angle LCD.**	
	**Includes "Dual Hybrid" Credit/Debit Card Reader.**	
	**Quote Valid FOR (60) Days.	
	**Optional Pay By License Keypad If Desired Is \$675.00.	

SHIPPING CHARGES	305.00
WSST	N/A
<b>TOTAL</b>	<b>\$10,788.00</b>

**OTHERS TO SUPPLY:** Pedestal and machine installation and ac power hookup. Merchant Account information required also.  
**WARRANTY:** One year on site parts & labor.

In the event that legal action must be taken to collect any and/or all of the contract price, Northwest Parking Equipment Company shall be entitled to reasonable attorneys' fees, court costs and preparation time. Preparation time will be calculated at Northwest Parking Equipment Company's shop rate and is in addition to attorneys' fees and late charges. Unless otherwise stated on invoices, all invoices will be payable, in full, thirty (30) days from invoice date. In addition, a 1.5% late charge per month will be assessed on all past due accounts. Northwest Parking Equipment Company's performance under this agreement is contingent upon strikes, accidents, delays of carriers and other delays unavoidable or beyond the reasonable control of Northwest Parking Equipment Company.

ACCEPTANCE

**PAYMENT TERMS:** Zero deposit with order.  
 \$10,788.00 due within 30 days of shipment.

The above prices, descriptions, and conditions are satisfactory and are hereby accepted. You are authorized to proceed with the items specified by this proposal in accordance with the terms herein.

ACCEPTED:  
 \_\_\_\_\_  
 [Company Name]  
 By: \_\_\_\_\_  
 \_\_\_\_\_  
 Date

NORTHWEST PARKING EQUIPMENT COMPANY  
 \_\_\_\_\_  
 Roy Whipple, Jr.  
 President  
 February 4, 2021  
 \_\_\_\_\_  
 Date

# Simple Electronic Payment Options

Customer selects payment option at Pay Station

Options can be configured as code/card entry required, optional, or not allowed

If allowed Customer enters code using keypad or swipes card

Valid code/card provides discount amount programmed for 1 to 100 percent value

Code is verified; if approved transaction is complete.

Simple electronic payment options are available to VenTek clients and their customers.

Easy for you to operate.  
Easy for your customers to use.

Can be added anytime to your VenTek Revenue Collection System

For use as:  
Annual passcards  
Parking coupons  
Validated parking  
Free Parking/Entry

Works with:  
Pay and Display  
Pay by Space  
Pay by Plate  
Pay on Foot

For more information please contact us today  
(707) 773-3373      [sales@ventek-intl.com](mailto:sales@ventek-intl.com)

**Made in the USA**

**VenTek International**  
engineering the future of automated payment systems

[www.ventek-intl.com](http://www.ventek-intl.com)

# venSTATION

Innovation and excellence

## PAY BY LICENSE

### REAL-TIME PAYMENT PROCESSING & CENTRALIZED SYSTEM MANAGEMENT

- PCI-DSS Level 1 & PA-DSS Data Security Certifications
- Real Time Payment Authorization & Automated Settlement
- Relational System Database
- Central Communications Facility

### MULTIPLE PAYMENT METHODS

- Coins & Bills
- SmartCards & Value Cards
- Validations: Cards & Remote
- Credit Cards
- Debit Cards
- Electronic Coupons

### MULTIPLE VENDING MODES

- Permit Issuance
- License Plate Recognition
- Handheld and/or Vehicle Mouted Enforcement
- Integration with LPR Optical Readers and Enforcement Systems
- DMV Integration for Residency Validation

### NETWORK SUPPORT FOR 2 TO 200+

- DSL, Cable, Frame Relay
- Wi-Fi 802.11 (WPA/WPA2)
- Satellite and Dial-up for Remote Locations
- Digital Cellular Wireless (GPRS/CDMA)

### REMOTE RATE MANAGEMENT PROGRAMMABLE BY...

- Variable Rates
- Flat Rates
- Multiple Picks
- Variable Time Durations
- Times of Day
- Days of Week
- Specific Dates (Special Events)

### REAL-TIME LOCAL/ REMOTE REPORTING & NOTIFICATION

- Audit Reports
- Sales Reports
- Cash Collection Reports
- Service Alerts
- Intrusion Detection
- Enforcement Reports



#### Interface

Large, easy to read LCD display  
ATM-style menu driven interface  
Custom graphics & colors available  
Full QWERTY Illuminated Keypad

#### Payment Processing

US & Canadian & International Currency  
Customer-controlled electronic pay cards  
PCI Compliant Credit Card Processing  
VISA, Mastercard, AMEX and Discover  
Tokens: Programmable value

#### Change Giving (Optional)

All Coin Denominations  
Programmable Coin Acceptor  
600 Coin Capacity Coin Hopper

#### Ticket Printer

Low maintenance thermal printer  
In excess of 5,000 tickets per paper roll

#### Security

10 Gauge steel with 1/4" steel reinforcement  
Maximum security Medeco lock  
Audible & remote alarm capability  
Sealed cash system  
High-strength, Double-locking Coin bag  
1,000 Note Double-locking Bill Cassette  
Audit reports & Complete Transaction Log History

#### Dimensions

Approximately 25" w x 58" h x 15" d  
Full ADA with max keypad height of 54"

#### Power Sources

110v A/C (w/optional Battery Backup)  
Solar - Battery



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For more information please contact us today  
(707) 773-3373 [info@ventek-intl.com](mailto:info@ventek-intl.com)

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# venSTATION

Innovation and excellence

ENTRY/ANNUAL PASSES

CAMPSITE RESERVATION

BOAT/INSPECTION FEES



## REAL-TIME PAYMENT PROCESSING & CENTRALIZED SYSTEM MANAGEMENT

- PCI-DSS Level 1 & PA-DSS Data Security Certifications
- Real Time Payment Authorization & Automated Settlement
- Relational System Database
- Central Communications Facility

## PARKS AND RECREATION FEES

- Entry & Annual Pass
- Campsite Fees
- RV Storage & Dump Fees
- Boat Launch Fees
- Inspection Fees
- Electrical Metering

## MULTIPLE PAYMENT METHODS

- Coins & Bills
- SmartCards & Value Cards
- Validations: Cards & Remote
- Credit Cards
- Debit Cards
- Electronic Coupons

## MULTIPLE VENDING MODES

- Permit Only
- Campsite Reservation with website integration
- Permit & Receipt
- Payment/Credential Gate Access
- Turnstile Access

## NETWORK SUPPORT FOR 2 TO 200+

- DSL, Cable, Frame Relay
- Wi-Fi 802.11 (WPA/WPA2)
- Satellite and Dial-up for Remote Locations
- Digital Cellular Wireless (GPRS/CDMA)

## REMOTE RATE MANAGEMENT PROGRAMMABLE BY...

- Price & Time Availability
- Informational Screens
- Multiple Choices
- Variable Time Durations
- Times of Day
- Days of Week
- Specific Dates (Special Events)

## REAL-TIME LOCAL/ REMOTE REPORTING & NOTIFICATION

- Audit Reports
- Sales Reports
- Cash Collection Reports
- Service Alerts
- Intrusion Detection
- Sales by Product Based Reports



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**Proudly built in the USA**

### Interface

Large, easy to read LCD display  
ATM-style menu driven interface  
Custom graphics & colors available

### Payment Processing

US & Canadian & International Currency  
Customer-controlled electronic pay cards  
PCI Compliant Credit Card Processing  
VISA, Mastercard, AMEX and Discover  
Tokens: Programmable value

### Change Giving (Optional)

All Coin Denominations  
Programmable Coin Acceptor  
600 Coin Capacity Coin Hopper

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Low maintenance thermal printer  
In excess of 5,000 tickets per paper roll

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10 Gauge steel with 1/4" steel reinforcement  
Maximum security Medeco lock  
Audible & remote alarm capability  
Sealed cash system  
High-strength, Double-locking Coin bag  
1,000 Note Double-locking Bill Cassette  
Audit reports & Complete Transaction Log History

### Dimensions

Approximately 25" w x 58" h x 15" d  
Full ADA with max keypad height of 48"

### Power Sources

110v A/C (w/optional Battery Backup)  
Solar - Battery

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# venVUE®

Your Secure, Web-Based Software  
For Sales Revenue Management

WEB-BASED ACCESS ANYWHERE

COMPLETE CLOUD BASED REVENUE CONTROL

PCI CERTIFIED NETWORK

## CONNECT

- The power of the Cloud; no software or applications to install.
- Access venVUE from any web-enabled PC, laptop or Smartphone.

### **For Pay Station Networks**

- Visualize real-time device status, transaction counts and operation details for each location independently.
- Create, update or alter rates remotely and have changes download automatically.
- Generate instant device status alerts to staff via email and/or text messaging.

## PROCESS

- Authorize web or pay station-based credit/debit card sales transactions in real-time on a PCI-Certified payment platform.
- Efficiently process electronic payment refunds.

## REPORT

- Quickly view, print, and/or export data from your revenue system using a full suite of report forms.
- Sales reports based on transaction type, location, date, permit value, and/or product type.
- Electronic payment transactions; pending or settled by date of sale or date of settlement.

### **For Pay Station Networks**

- Cash Transactions showing details on bills/coins inserted and change dispensed for each transaction.
- Event reports showing operational history of each device.
- Interim and Final Cash Audit reporting for each device.

## CUSTOMIZE

- Electronic coupons providing up to 100% discount for permit purchases.
- Use your web-based mobile device for enforcement, permit issuance and to monitor space occupancy through space sensors.
- Accept alternate electronic payments such as Annual Pass, value or campus cards.

### **For Pay Station Networks**

- Remote validation for pay-by-space settings - add time from web based devices.
- Allow customers to add time using Pay-by-Cell.
- Multiple Custom Permits based on pick selection.



*venVUE® Controlled  
User Access*

*Remote Access &  
Configuration  
to Information  
& Settings*

*PCI Credit Card  
Processing  
& Refund  
Capability*

*Real Time Sales Data  
& Device Status*



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**BEFORE THE CITY COUNCIL OF  
THE CITY OF RAINIER**

**RESOLUTION ADOPTING RESIDENTIAL SEWER )  
RATES FOR USERS OUTSIDE OF RAINIER ) RESOLUTION NO. 14-02-03  
CITY LIMITS FOR FISCAL YEAR 2013-2014 )**

**WHEREAS**, Ordinance #896 prescribes the regulations and rates for the water system of the City of Rainier; and

**WHEREAS**, City Residents bear the Property Tax and Budget burden for maintenance, construction and capital improvements to the City Waste Water Treatment and Collection System; and

**WHEREAS**, Customers residing outside the City Limits receive the benefit of using City Sewer and place demand on the system without bearing any potential cost for capital improvements, therefore the monthly fixed fee amount will be equal to double that of a Resident residing in the City limits; and

**WHEREAS**, Residential is defined as any single family dwelling unit.

**NOW, THEREFORE, IT IS HEREBY RESOLVED**, that the Common Council of the City of Rainier, Oregon, Adopts the following Monthly Sewer Rates Effective April 1, 2014:

<b>Description</b>	<b>Fixed Fee Amount</b>
Fixed Fee	\$85.00
<b>Usage Charge, c.c.f.</b>	
Residential Usage	\$3.00 per 100 cubic feet

This Resolution Repeals All Prior Resolutions.

**PASSED AND ADOPTED** by the City Council of the City of Rainier, Oregon, this 18<sup>th</sup> Day of February, 2014.

  
\_\_\_\_\_  
Jerry Cole  
Mayor of the City of Rainier

Attested:

  
\_\_\_\_\_  
Debra Dudley  
City Administrator/Finance Director/Recorder

BEFORE THE CITY COUNCIL OF  
THE CITY OF RAINIER

**RESOLUTION ADOPTING RESIDENTIAL WATER )  
RATES FOR USERS OUTSIDE OF RAINIER CITY ) RESOLUTION NO. 14-02-02  
LIMITS FOR FISCAL YEAR 2013-2014 )**

**WHEREAS**, Ordinance #896 prescribes the regulations and rates for the water system of the City of Rainier; and

**WHEREAS**, City Residents bear the Property Tax and Budget burden for maintenance, construction and capital improvements to the City Water Treatment and Distribution System; and

**WHEREAS**, Customers residing outside the City Limits receive the benefit of using City Water and place demand on the system without bearing any potential cost for capital improvements; therefore the monthly fixed fee amount will be equal to double that of a Resident residing in the City limits; and

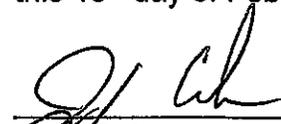
**WHEREAS**, Residential is defined as any single family dwelling unit.

**NOW, THEREFORE, IT IS HEREBY RESOLVED**, that the Common Council of the City of Rainier, Oregon adopts the following monthly Out-of-City-Limits Water Rates effective April 1, 2014:

<b>Description</b>	<b>Meter Fee</b>
¾ Inch Meter	\$ 38.24
1 Inch Meter	67.66
1.25 Inch Meter	105.88
1.5 Inch Meter	151.74
2 Inch Meter	268.70
3 Inch Meter	605.40
4 Inch Meter	1,076.28
6 Inch Meter	2,420.10
 <b>Consumption Charge, c.c.f.</b>	
Residential Usage	
0-400	\$2.67 per 100 cubic feet
401-3342	2.84 per 100 cubic feet
3342+	3.28 per 100 cubic feet

This Resolution Repeals All Prior Resolutions.

**PASSED AND ADOPTED** by the City Council of the City of Rainier, Oregon, this 18<sup>th</sup> day of February, 2014.

  
\_\_\_\_\_  
Jerry Cole  
Mayor of the City of Rainier

ATTESTED:  
  
\_\_\_\_\_  
Debra Dudley, City Administrator/  
Finance Director/Recorder

City Administrator Report  
July 12, 2021 Rainier Council Meeting

Mayor Cole and Members of the Council,

I began advertising for our police officer position on June 1. However, the initial round of advertisements did not draw a single applicant by the original June 18 deadline, so I had to expand the timeline to August 2 and broaden the scope of media outlets running the ad.

On June 2, I had a call with officials at the state Department of Land Conservation and Development about updating the city's flood plain ordinance. I also met that day with our city forester and Mayor Cole about the scope of work to be done in the watershed.

June 3, I met with Rainier School District Superintendent Joseph Hatrick to finalize details of the city's intergovernmental agreement for library operations. Later on that day, I worked with the city attorney and finance officer to finalize the paperwork for the city's DEQ loan.

I verified the city's election to receive state revenue share funds with officials from the state Department of Administrative Services on June 8. A meeting was held with county officials about the bike hub project that afternoon, and I was among the participants.

The following day, I met with the son of the owner of the nuisance house on E Street.

On June 10, I attended the Chamber of Commerce meeting in the park, along with Mayor Cole. I also organized the REDCO Budget Committee meeting and submitted the paperwork to the Oregon Division of State Lands for the special use renewal for the city park.

Much time and effort was spent in the second half of the month ensuring that the city's agreements with the school district and KLTV and the city's collective bargaining agreement with its police officers were acceptable to all involved and signed before the end of the 2020-21 fiscal year.

I met again with the city forester June 28 to discuss an upcoming timber sale that he has planned. The following day, I attended a local managers meeting in Clatskanie.

Finally, on June 30, I worked with a representative of KLTV to ensure that everything would be set for tonight's council meeting to be broadcast on their website.

Sincerely,

W. Scott Jorgensen, Executive MPA  
City Administrator