**Building Department**
102206 E. Wiser Parkway
Kennewick, WA 99338
Phone (509) 735-3500

**Brad O'Brien**
Building Manager

# Fence Guidelines

## Fences over 7 feet in height require a building permit.

To obtain a building permit you will need to complete a building permit application including your tax parcel number. You also need to submit a plot plan (forms/examples included) and one set of building plans.

Provide a listed fencing design per ASTM F537-01 or a design that is stamped by an Architect or Engineer that is registered in Washington State.

Fence posts of wood shall be a wood of natural resistance to decay, or preservative treated.

Fasteners into pressure preservative treated material shall hot dipped galvanized or equivalent.

All field end cuts and holes in treaded lumber shall be field treated.

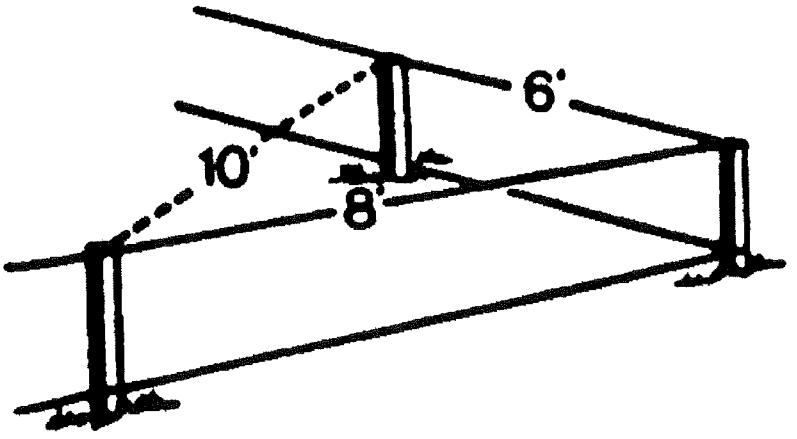
Fence siding boards shall be attached with corrosion-resistive fasteners and constructed of materials approved for this use.

If you have any questions, please call the office Monday-Friday, 8 am-12 pm and 1 pm-5 pm at (509) 735-3500 (except holidays).

## *How To Build A Fence*

### 1. Lay out exact fence line

If the fence is to be situated along your lot line, it is best to discuss the matter with your neighbour(s). If there is a disagreement on where the exact lot line is located, check the survey markers or have your lot surveyed. If you are paying for the entire fence, ensure that the fence is entirely on your property. Run twine along the outside of your proposed fence line. To guarantee a right-angled corner, measure 6' away from the corner in one direction and 8' in the other direction. The corner is square if the distance across the hypotenuse of this triangle is 10'.




### 2. Treating posts

The most important part of your fence is the part that cannot be seen after construction. This is the part of the post that is below ground. Therefore, pressure treated posts or posts treated with a preservative will assure a lasting firm foundation. It is best to soak untreated posts to a point at least 6" above ground level with a preservative. If you cannot soak the posts in this solution, brushing or spraying two or three liberal coats is next best. Full directions are on each can.

### 3. Determine post spacing

**METHOD 1**

Use post spacing as illustrated and shorten your spacing at corners if necessary for the best appearance. (Remember to include gate posts in your calculations.)

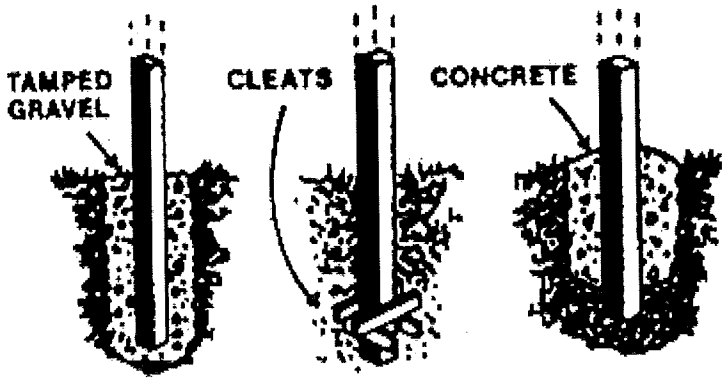
**METHOD 2**

To determine the spacing of your posts, divide each of the fence lengths into even sections. (Warning: the longer the sections, the greater the tendency for your fence to sag.) Lumber comes in standard lengths, make economical use of your lumber.

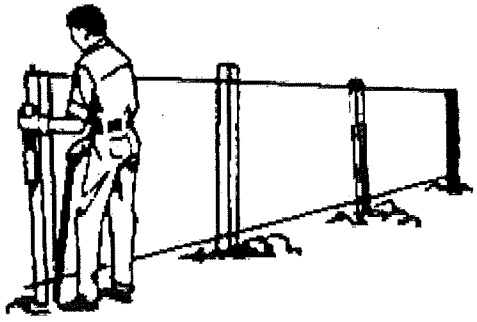
### 4. Setting the posts

A good rule of thumb is that approximately two thirds of the fence post is above ground and at least one third of the post is in the ground. Dig the post hole about 6" deeper that the desired depth of the post and fill in the base of the hole with gravel or small stones. This will drain any moisture away from the post and help prevent the post from rotting. If using concrete to set the posts, ensure that the bottom end of the post extends down past the concrete to keep moisture from collecting around the post. Make the bottom of the post hole wider than the top to provide a solid base and to prevent frost from heaving the post if

concrete is used. Setting the post below the frost line will also help prevent frost heaving. Use a plumb line or level to ensure the post is vertical while filling in the hole. To add extra rigidity to particularly a corner post, nail cleats onto the post. Brace posts until the concrete has set. After setting the corner posts, the intermediate posts may be set.




Stretch twine between the main posts at the top and bottom. Using the twine in conjunction with a level will ensure a vertical post.



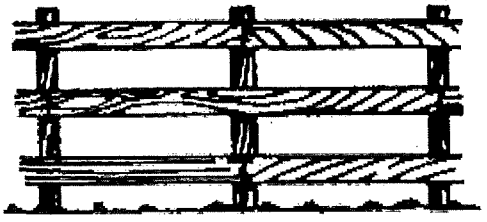
**5. Attaching rails & boards**

Once the posts have been set, the rails can then be nailed into place. The bottom rail should be fastened to the posts at least 6" above the ground. This serves two purposes. (1) It keeps the boards away from the ground and moisture. (2) It allows for easy grass cutting underneath the fence. Fasten lower rail in desired position, ensuring that both ends are the same height off the ground. Measure from the bottom rail to the desired height on posts and nail top rail in position. Cut posts to correct height before nailing if using the top overlap method. Ensure that the top and bottom rails are parallel. With all fences, except the Vertical Louvre, the Patio and the Glenora II, you can now nail the boards onto the rails. These three fences require the boards to be fastened to a frame which, in turn, is fastened to the rails.

### 6. Finishing your fence

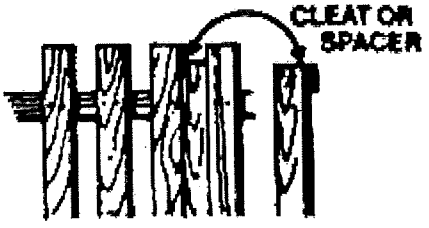
Use 2 or 3 coats of a good quality paint or stain. Many people paint the posts, rails and boards prior to assembly to ensure that all pieces have a complete coating of paint.

### Tips for good fence construction



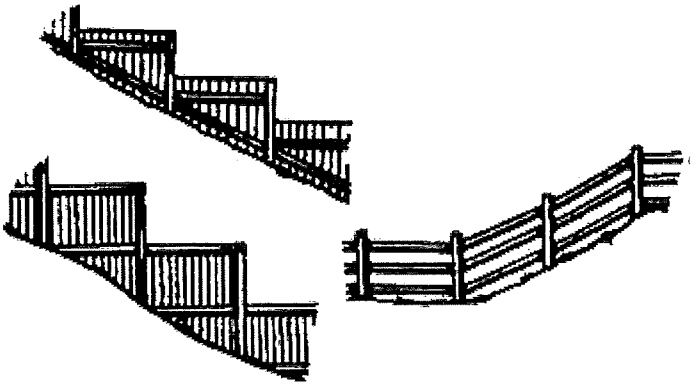
1. When nailing rails or boards horizontally, do not have all the joints on one post. Your fence will be stronger if you stagger the joints.

2. When assembling a large number of boards with equal spacing, ensure that the first board is straight and use a spacer or cleat to ensure equal spacing of the boards.




3. Use 3-1/2" nails for nailing 2x4's to posts, 2-1/4" nails to fasten 1" boards or pickets. Drive nails at least 1" from end of board to prevent splitting. Use galvanized nails or equivalent to prevent staining your finished fence.

4. Cut all boards to length before nailing rails to posts. Often boards must be cut to a nominal length to ensure square corners and smooth ends. If this is the case, rails should be spaced according to board lengths.



When your fence runs up a hill, build it in a step fashion or follow the contour of the land as illustrated.

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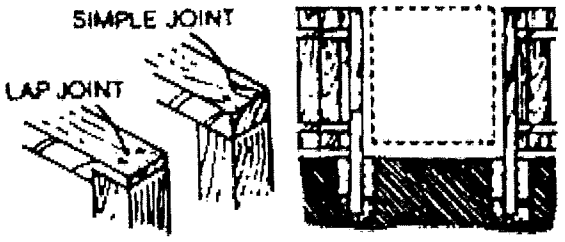
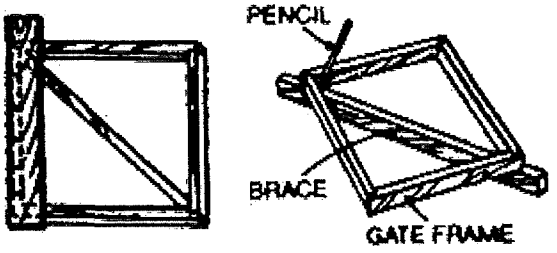
### How to build a fence gate

A gate opening should be at least 36" wide with the posts on both sides of the gate firmly set in the ground. The actual gate frame should have lapped corners and a diagonal brace to ensure strength and rigidity. The vertical rails on the frame should be sawn to fit between the horizontal rails. Always make the frame 1" narrower than the distance between the inside of the two gate posts to allow the gate to swing freely. Measure this distance at the top, middle and bottom of the gate opening before constructing the frame.




These measurements will verify the squareness of your opening. Nail the first board in place flush with the edge of the vertical rail on the hinge side of the gate frame, continue across with additional boards until full width of gate is reached. Fit gate to opening and trim excess material until the gate fits the opening properly. Finally, attach hinges and latch. If a stop is required, nail a piece of fencing material on the latch post.



# BENTON COUNTY BUILDING PERMIT APPLICATION

102206 E. WISER PARKWAY, KENNEWICK, WA 99338 / PHONE (509) 735-3500 APPLICATION #

***Please complete in full and legibly. Incomplete information may slow down the review process.***

**BUILDING OWNER** _____ **PHONE (HM)** _____

**MAIL ADDRESS** _____ **PHONE (WK)** _____

**LEGAL PROPERTY OWNER** _____ **PHONE** _____

**MAILING ADDRESS** _____ **CITY** _____

**TAX PARCEL NUMBER 1-**___ ___ ___ ___-___ ___ ___- ___ ___ ___ ___-___ ___ ___

**CONTACT PERSON** _____ **PHONE** _____

**EMAIL (Legible)** _____

**PROJECT LOCATION:** _____ **CITY** _____

**DIRECTIONS TO JOB SITE** _____

_____

**CONTRACTOR** _____ **MAILING ADDRESS** _____

**PHONE** _____ **L&I LICENSE #** ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ **EXP. DATE** ___ ___/ ___ ___/ ___ ___

**LENDING FIRM** _____ **PHONE** _____

**MAILING ADDRESS** _____

**BUILDING USE: RESIDENTIAL** _____ **AGRICULTURAL (USE)** _____ **COMMERCIAL** _____

**CLASS OF WORK:** [ ] NEW [ ] ADDITION [ ] ALTERATION [ ] REPAIR [ ] MOVE [ ] DEMO [ ] OTHER

**SPECIFIC USE OF BUILDING:** _____

**DESCRIPTION OF PROJECT:** _____

**VALUATION OF WORK**: _____ **LOT SIZE:** _____

**SQUARE FOOTAGE:** MAIN FLOOR: _____ UPPER FLOOR: _____ GARAGE: _____

**BASEMENT**: _____ HEATED: [ ] YES [ ] NO OTHER: _____

**NUMBER OF:** STORIES: _____ BEDROOMS: _____ BATHROOMS: _____

**IS AN ADDRESS POST ON SITE? [ ] YES [ ] NO**

**IF THE BUILDING IS CONDITIONED, ENERGY CODE SELECTIONS ARE REQUIRED AT TIME OF APPLICATION AND AN ORIGINAL COMPLETED COMPLIANCE REPORT REQUIRED AT FINAL**

**PLUMBING (NEW ONLY)**

| QTY. | TYPE OF FIXTURE OR ITEM | QTY. | TYPE OF FIXTURE OR ITEM |
|---|---|---|---|
| | WATER CLOSET (TOILET) | | HOSE BIBBS (2 MIN) |
| | SHOWER | | WATER HEATER |
| | BATHTUB | | FLOOR DRAIN OR FLOOR SINK |
| | SINK OR WASH BASIN | | CLOTHES WASHER |
| | KITCHEN SINK & DISPOSAL | | LAUNDRY TRAY / SINK |
| | DISHWASHER | | OTHER |

**MECHANICAL (NEW ONLY)**

| QTY | TYPE OF FIXTURE OR ITEM | QTY. | TYPE OF FIXTURE OR ITEM |
|---|---|---|---|
| | HEATER-FURNACE | | GAS FIXTURES |
| | EXHAUST FAN | | PROPANE TANK |
| | DRYER | | FIREPLACE(S) |

**I hereby certify that I have read and examined this application to know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. All structures located within a floodplain are subject to the requirements of Chapter BCC 3.26 of the Benton County Code, including certification by a Washington State Registered surveyor and/or Engineer as it may be required.** (Updated 11/1/2022)

**SIGNATURE:**

**PRINT NAME:** **DATE:**

**An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing**

| FOR OFFICE USE ONLY | |
|---|---|
| **PERMIT FEE** | **SQUARE FT. VALUATION/PLUMBING/MECHANICAL:** |
| **PLUMBING FEE** | |
| **MECHANICAL FEE** | |
| **OTHER FEES** | |
| **PLAN REVIEW FEE** | |
| **SUBTOTAL** | |
| **CRITICAL AREA REVIEW FEE** | |
| **ADDRESS POST** | |
| **MISC FEES** | |
| **STATE BLDG CODE FEE** | |
| **TOTAL** | **TOTAL VALUATION:** |

| SPECIAL CONDITIONS/ADDITIONAL INFORMATION: | |
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| **DATE RECEIVED:** | |
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| **ACCEPTED BY:** | **PLAN CHECK/APPROVED BY & NOTIFIED DATE:** |

STATE OF WASHINGTON )
County of Benton )

***To be completed by property/building owner. Please initial applicable items where marked "INT" and complete bottom signature area in full.***

**1. DECLARATION OF OCCUPANCY USE (Accessory buildings only, i.e., garages, shops, barns, etc.)**

INT_____ I understand the structure for which a building permit is being requested does not permit the occupancy of the building for any use that does not comply with the requirements for the zone in which it is placed (unless approved by Conditional Use Permit #_____, if applicable). This structure will not be used or occupied for any use not permitted as outlined in the **2018 International Residential Code Section R105 Permits.** Violations will result in a **$500.00 civil citation** as outlined in **Benton County Code 3.04.065 Violations-Penalties**, including but not limited to applicable building permit fees.

**2. DECLARATION OF ACCESS CONSTRUCTION AND MAINTENANCE (NOT REQUIRED for accessory buildings)**

INT_____ Said structure is served by perpetual non-exclusive access easement, auditor's file number_____, a private driveway in excess of 200' or an unimproved county right of way (contact B.C. Public Works for construction details) and the responsibility for construction and maintenance of this access to the location that the building will be constructed on shall be vested with the property owner and not Benton County.

Said structure is served by an access easement, private driveway or unimproved county right of way not reflected by an auditor's file number, but one of the following applies.
***(Initial one statement only)***

INT_____ The following access easement, unimproved country right of way or private driveway has been granted a trail access permit to utilize the unimproved county right of way (access permit attached): _____

INT_____ The following access easement or private driveway is graded and compacted with two (2) inches of base course crushed surfacing; the base course (1 1/2" minus) is to be in accordance with the specifications set forth in Standard Specifications for Road, Bridges and Municipal Construction published by the Washington State Department of Transportation. A minimum improved turning radius of 45' is provided for private driveways in excess of 200'. BCC 3.18.045: _____

INT_____ The following access easement or private driveway will be graded and compacted with two (2) inches of base course crushed surfacing; the base course (1 1/2" minus) is to be in accordance with the specifications set forth in Standard Specifications for Road, Bridges and Municipal Construction published by the Washington State Department of Transportation: _____

**3.**

INT_____ Is your property accessed across a private bridge: YES ____ NO ____

**4. DECLARATION OF OWNER BUILDER**

INT_____ There will not be a general contractor (required to be registered) performing any work on the structure. The owner will verify Sub-contractor(s) license registration.

I, _____, certify under penalty of perjury under the laws of
(PRINT NAME)
the State of Washington that the foregoing initialed statement(s) for the structure is (are) true and correct.

Property parcel number _____for proposed structure location.

_____ _____ _____
Signature of property/building owner Date City, State (where signed)

**Community Development Department**
Prosser Office:
620 Market Street, 1st Floor
Prosser, WA 99350
www.co.benton.wa.us

**Building Division**
102206 E. Wiser Parkway
Kennewick, WA 99338
Phone: (509) 735-3500
www.co.benton.wa.us

# INFORMATION REQUIRED ON PLOT PLAN

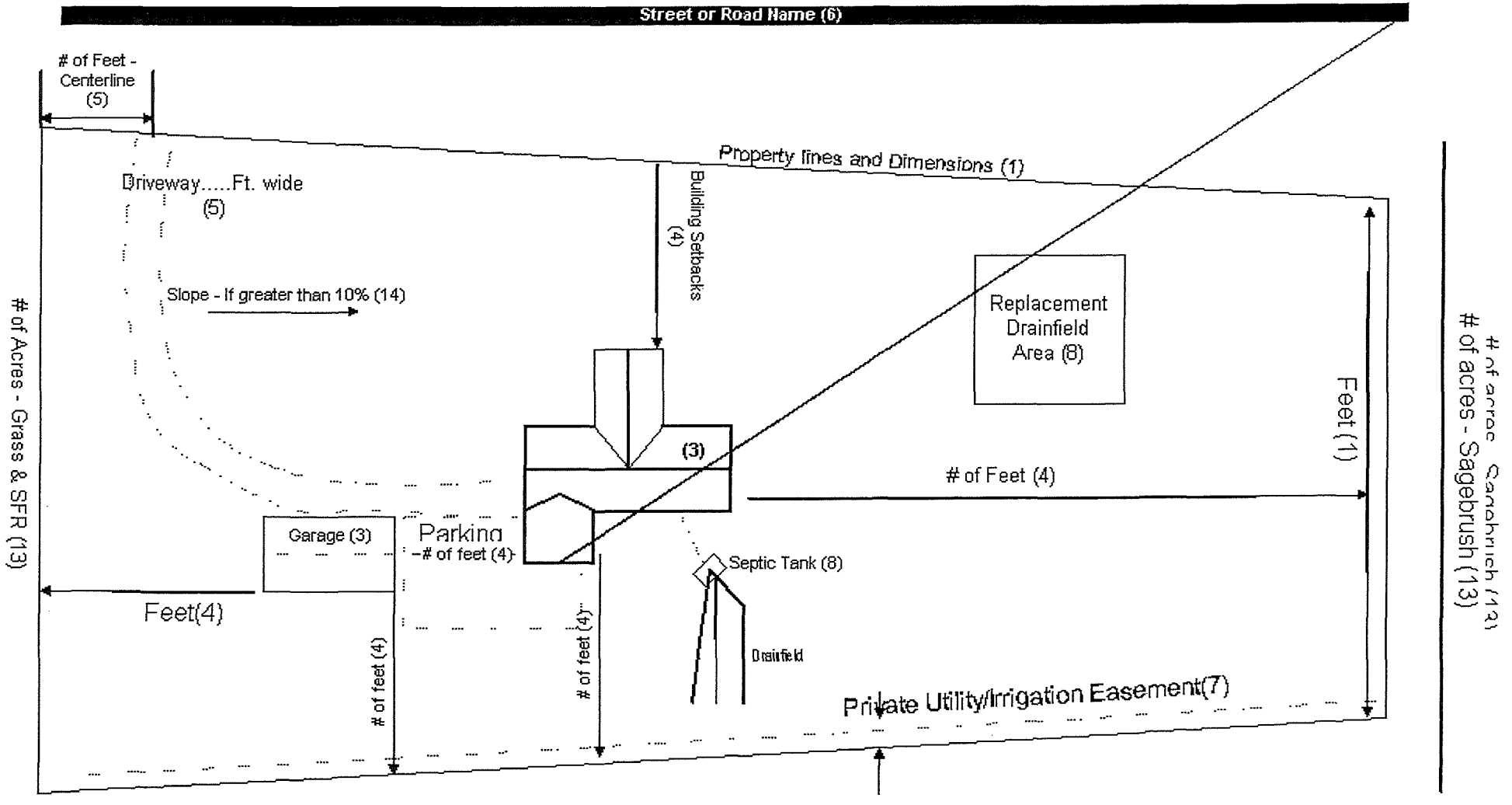
One complete scaled drawing on 8 l/2" x ll" sheet of paper showing the following:

1. Property lines and dimensions
2. Direction of North
3. The proposed structure and all existing buildings
4. Setback of proposed structure from all property lines
5. Indicate main driveway location and distance from centerline of the driveway at the property line to nearest property corner. For parcels that are accessed through an adjacent property or a private road easement, indicate the route from the property line to the public road that will be used for access
6. All road names
7. Existing easements and any adjacent utility/access easements
8. Location of septic tank, drain field or sewer lines
9. Well location
10. Property address
11. Tax parcel number
12. Specify scale
13. Describe adjacent properties ground cover (sagebrush, pasture grass, weeds, etc.)
14. Identify all slopes greater than 10%
15. Date and signature of person drawing plot plan
16. Canals, streams, or drainage easements that your driveway must cross
17. Any proposed permanent or temporary structure including, but not limited to: buildings, signs, fences, etc. within 20 ft. of any PUD facility, such as power lines, power poles, and transformers, require prior approval from the PUD

# SAMPLE PLOT PLAN

North Arrow (2)

Parcel # (11)
Name and
Street Address (10)




**NOTE!!** All Easements must be shown and identiifed.

Drawn to Scale - Note Scale on plot plan ____" =____' (12)

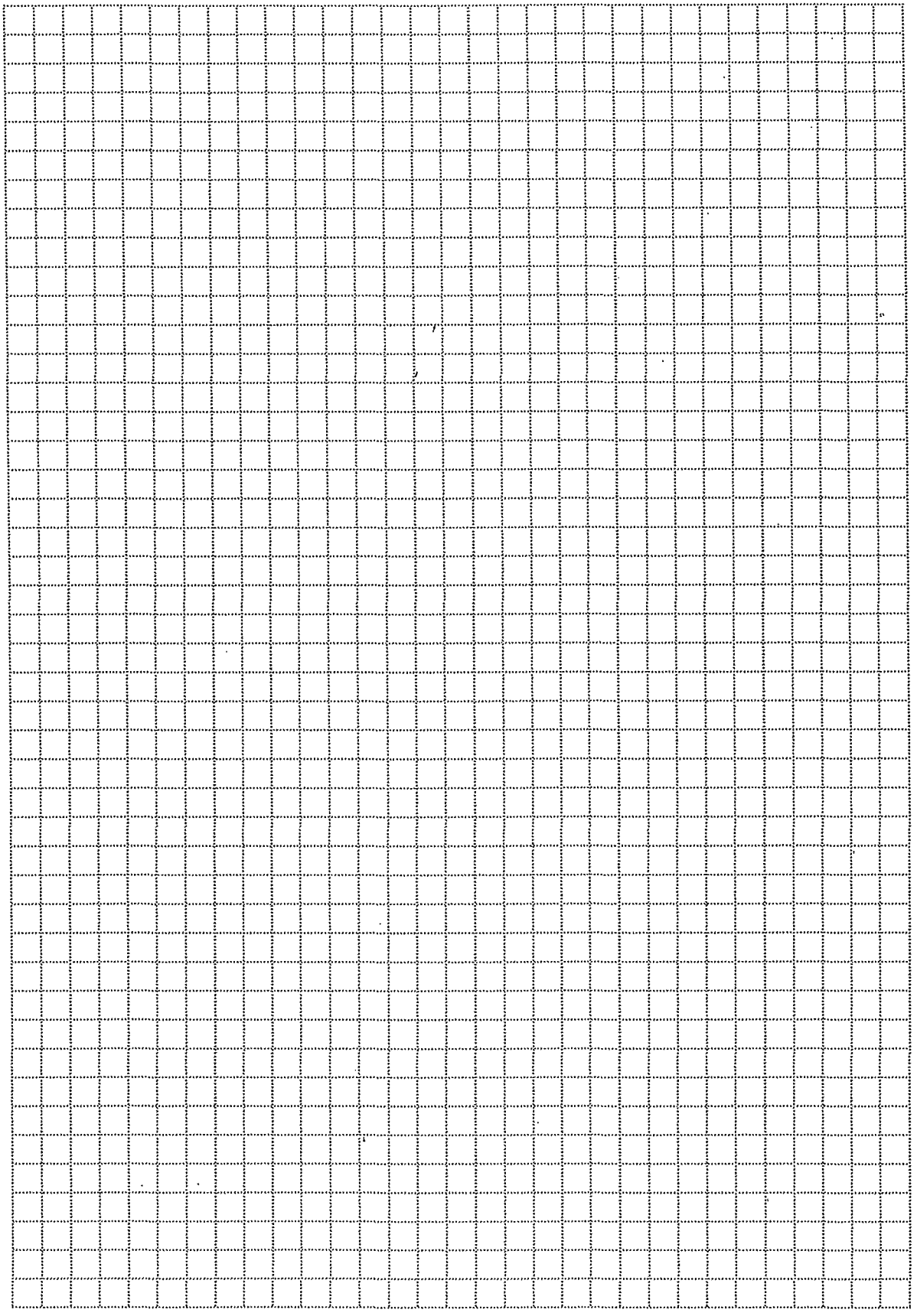
# of acres - Sagebrush (13)

SITE PLAN FOR _____

Scale 1" = 50' or 1" = 100'

Please specify

PLEASE INDICATE NORTH



# CATCHING RAIN:
## Low Impact Development — Protecting Our Waters

1

Low Impact Development (LID) is one way we can help keep our waterways, as well as the surrounding land, healthy and safe. This is a beautiful place to live, so it is no wonder that an additional 1.9 million people are expected to move here by 2040. As we grow, we replace forests and prairies with rooftops and pavement, thereby increasing stormwater runoff and the associated pathogens and chemicals it carries to our waterways. The health of humans and our ecosystems is threatened.

Look for the other helpful fact sheets in this series:

1. ✔ Low Impact Development
2. LID Stormwater Regulations
3. LID Development Process
4. Pavement Maintenance
5. Rain Garden Maintenance
6. Rain Garden Construction Checklist
7. Rain Garden Construction Sequencing

### What's the problem with stormwater?

Stormwater is created by precipitation (rain or snowmelt) that doesn't soak into the earth but instead creates puddles and runs off. This stormwater can pick up pollution and carry it directly into storm drains, streams, rivers, lakes, inlets, and bays.

***Some consequences of stormwater pollution and increased surface runoff include:***

- Pollutants such as motor oil, yard chemicals, and pet wastes contaminate local waterways, threatening human health and wildlife health.
- Numerous beaches are too polluted to harvest shellfish.
- Several fish species face the threat of extinction.
- Groundwater is not replenished, decreasing drinking water supplies and drying out streambeds.
- Winter rain quickly runs off paved surfaces and into streams, leading to the scouring of stream channels.

### What is Low Impact Development and how can it help?

LID seeks to manage stormwater onsite—either by encouraging it to soak into the ground or using plants to transpire it back to the atmosphere. LID helps keep pollution out of our waterways. It focuses on recreating or protecting existing natural landscape features to minimize the amount of impervious (hard) surfaces. Stormwater is then treated with soils that have been amended with compost, vegetation, and other techniques.

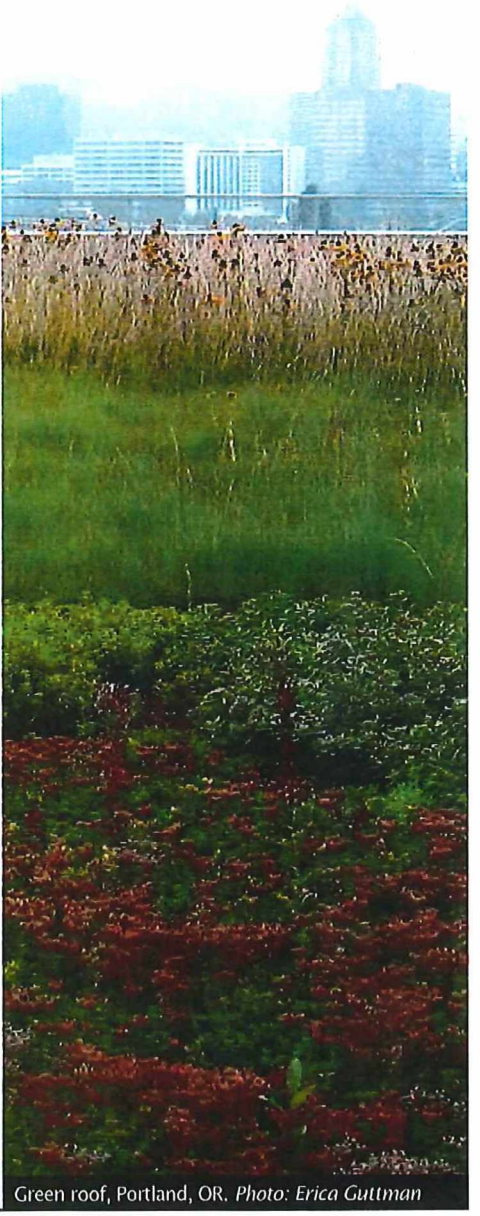
LID strategies can be used in virtually every situation—residential homes or commercial businesses, in rural or urban settings. Some benefits include:

- Creates more beautiful and easily managed landscapes.
- Encourages water to soak into the ground, replenishing drinking water supplies.
- Reduces contamination of local waterways, including recreational and shellfish growing areas.
- Preserves or restores trees and other vegetation, attracting birds, butterflies and other wildlife.
- Can reduce development costs (decreased infrastructure and land clearing costs) as well as stormwater management costs.

### Vegetation Preservation and Restoration

During site development, clearing and grading should be minimized as much as possible. This will protect native soils and vegetation while also preventing compacted soils that do not allow water to soak in as readily. Mature trees are not easy to replace and their contribution to managing stormwater run off and preventing erosion is invaluable. When clearing land, small native plants can be removed and saved for replanting once development is complete.

Reducing lawn sizes and replacing that space with native or water-wise plants reduces maintenance and watering needs and may reduce the need for fertilizers and pesticides.



Green roof, Portland, OR. *Photo: Erica Guttman*

# CATCHING RAIN:
## Washington's New LID Stormwater Regulations

2

Washington State has new rules for how cities and counties manage stormwater runoff. Washington cities and counties under a Municipal Stormwater Permit have a legal obligation to prevent pollution from rainwater that washes over roofs, driveways and developed areas. The new rules will require many future developments to incorporate certain Low Impact Development (LID) techniques.

LID techniques imitate the natural processes that help rainfall absorb into the ground, instead of running into pipes and large holding ponds that drain to streams and water bodies. LID measures, such as rain gardens, bioretention facilities, and permeable pavements, treat and retain stormwater at the source. These practices help preserve fish and wildlife by keeping natural waters clean.

Washington State Municipal Stormwater Permits, administered by the Department of Ecology, govern how cities and counties manage stormwater runoff. Three separate permits covering different parts of the state were recently updated, and LID requirements were added. The Phase I permit applies to Tacoma, Seattle, and the four most populous counties in Western Washington. The Phase II permit for Western Washington covers 80 cities and the urban portion of four counties. The Phase II permit for Eastern Washington covers 18 cities and urban areas of six counties.

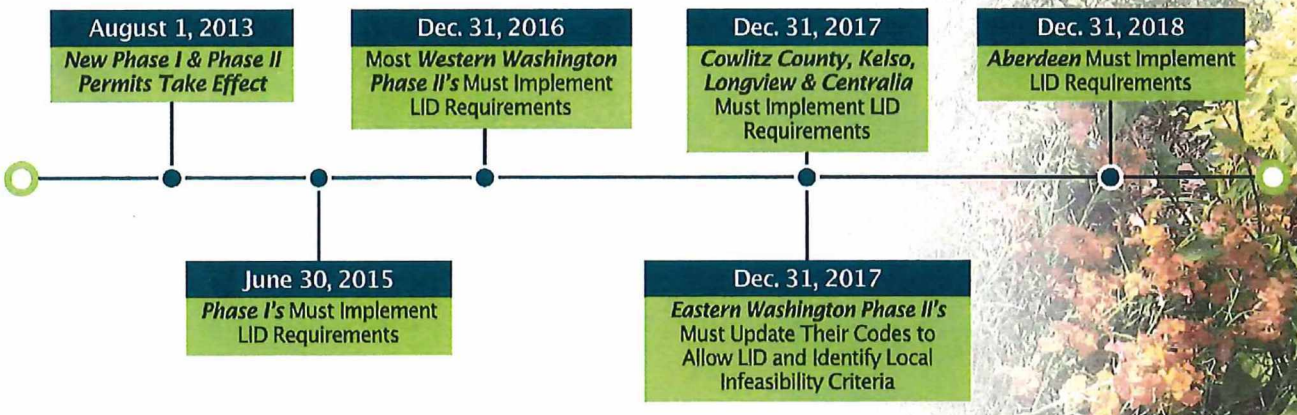
Look for the other helpful fact sheets in this series:

1. Low Impact Development
2. ✔ LID Stormwater Regulations
3. LID Development Process
4. Pavement Maintenance
5. Rain Garden Maintenance
6. Rain Garden Construction Checklist
7. Rain Garden Construction Sequencing

### Local Development Codes will be Revised to Include LID Measures

The new permits require Phase I cities and counties to enact codes incorporating LID measures by June 30, 2015, and most Phase II jurisdictions in Western Washington must follow suit by the end of 2016. The Stormwater Manual for Western Washington, revised in 2012, contains the LID design details. The Eastern Washington permittees must update their codes, if needed, by December 31, 2017. The Department of Ecology, in collaboration with Eastern Washington permittees, is still developing a stormwater manual with LID practices for the east side of the state.

### Timeline for New LID Requirements in Washington State



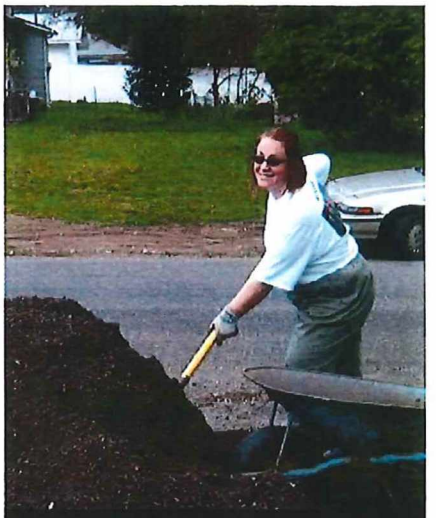

The permits for eastern and western portions of the state take substantially different approaches, because the soil, climate and geology vary substantially between the two regions, and these factors have a major influence on how stormwater runoff behaves. The LID measures for Eastern Washington are less developed, requiring only that initial steps be taken to implement LID techniques. For example, new developments in Eastern Washington will be required to retain runoff on-site or in regional stormwater facilities. Most Eastern Washington cities and counties covered by the permit already meet this requirement; the others can develop criteria for when LID measures are not feasible. LID measures must be allowed in Eastern Washington, but will not be required.

*Continued >*

## Amending Soils

Healthy soil grows healthier plants, allows stormwater to soak in, stores water for plants in the summer, and reduces the need for chemicals such as pesticides and fertilizers.

Where soil must be disturbed, breaking up compaction, replacing topsoil or tilling in compost is very beneficial.

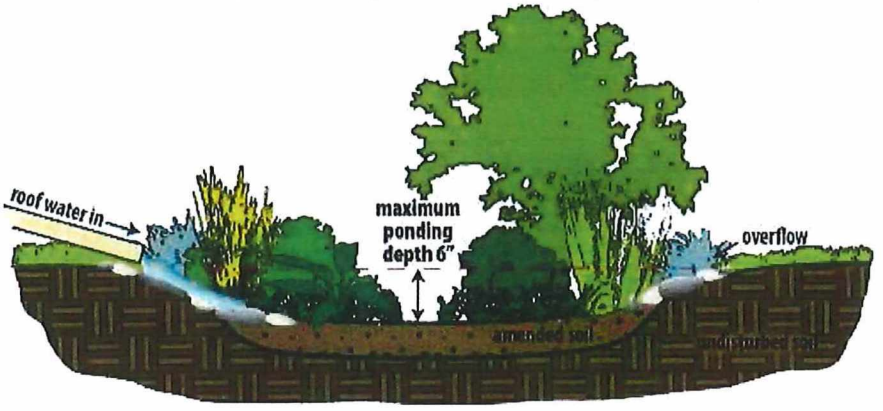


Compost in landscapes filters and slows rainwater and results in healthier soils and plants. *Photo: Erica Guttman*

## Rain Gardens

Rain gardens are a landscape amenity that also serves to treat polluted runoff and manage drainage by using natural processes: plants and soils work together to filter and absorb water from streets, rooftops, driveways and other hard surfaces.

This landscaping technique is beautiful and inviting to birds and butterflies. Using native plants and amended soils can reduce maintenance needs. Rain gardens can be constructed in many different shapes and can be landscaped with a variety of plants.




A rain garden is an attractive way to manage polluted runoff on site. *Photo: Erica Guttman*

## Managing Water on Roofs

***Green Roofs:***

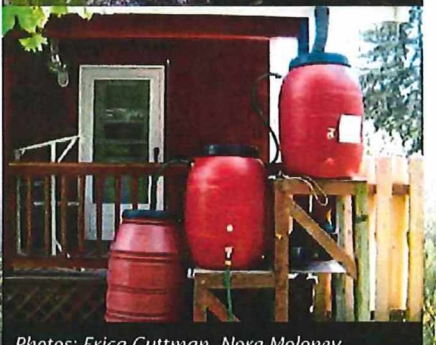
Green roofs are a great way to absorb and slow down roof runoff. They improve aesthetics to the residence or business as well as reduce noise and lower heating and cooling costs. Unlike conventional roofs, green roofs have less UV degradation, so they last much longer—it is recommended that after 50 years the waterproof membrane be replaced, but all other components can be reused on the same roof!

***Directing Downspouts:***

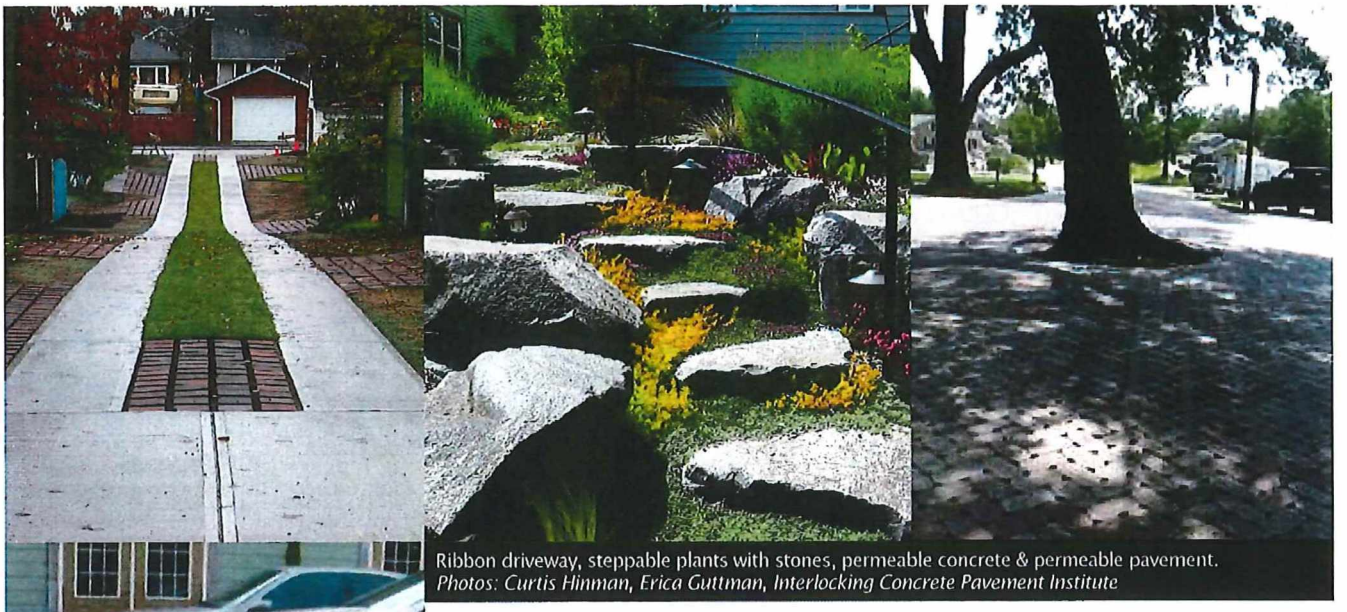
If green roofs are not an option, water can be directed from downspouts to areas such as a rain garden or planted area (versus pavement), where it can soak into the ground.

***Rainwater Harvesting:***

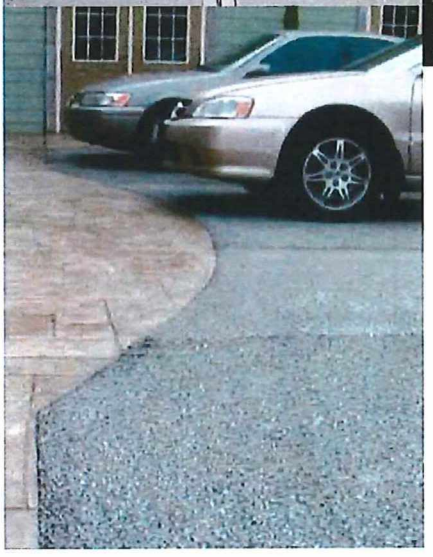
Rainwater harvesting combines two important LID goals: reduce flows from rooftops, and conserve water that comes from drinking-water supplies. Rainwater can be collected in rain barrels or cisterns where it can be stored. The collected water can then be used for a variety of things such as watering and cleaning jobs around the outside of homes.



*Photos: Erica Guttman, Nora Moloney*



Ribbon driveway, steppable plants with stones, permeable concrete & permeable pavement.
*Photos: Curtis Hinman, Erica Guttman, Interlocking Concrete Pavement Institute*



## Options to Reduce Hard Surfaces

Driveways and walkways often account for a large amount of impervious area surrounding homes. Several LID solutions allow stormwater runoff to soak into the earth, preventing pollution from entering waterways and decreasing possible flooding risks.

***Driveways and Parking Lots:***

Many beautiful and functional materials and strategies allow rainwater to soak into driveways and parking lots. Reducing the length and width of driveway and parking areas is a perfect way to start reducing impermeable surfaces. Some style and material alternatives include the ribbon driveway, broken-concrete mosaic, permeable pavers, grid aggregate containment systems, pervious concrete and porous asphalt.

***Walkways, Patios, and Decks:***

Traditional concrete or mortared patios and walkways can be replaced with a variety of LID options. Raised decks made from recycled plastics are an excellent alternative. Walkways and patios can be constructed using stones or broken concrete with plantings in the gaps between stones to absorb water. Pervious systems, including stone pavers and interlocking plastic grids are great options as well.

*Photo: PIN Foundations*

## Foundations

When planning new construction or an addition to a home or business, a key strategy is to disturb soils as little as possible. Two LID techniques include:

***Small Footprint:***

A building's footprint can be reduced by decreasing the amount of space taken up all together or by creating two stories instead of a large one-story.

***Minimal-excavation Foundation:***

A minimal-excavation foundation dramatically limits soil disturbance over traditional grading and foundation installation.

# CATCHING RAIN:
## Low Impact Development — Protecting Our Waters

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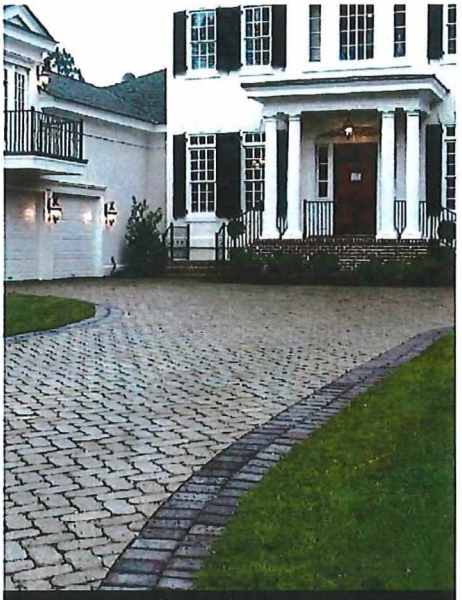
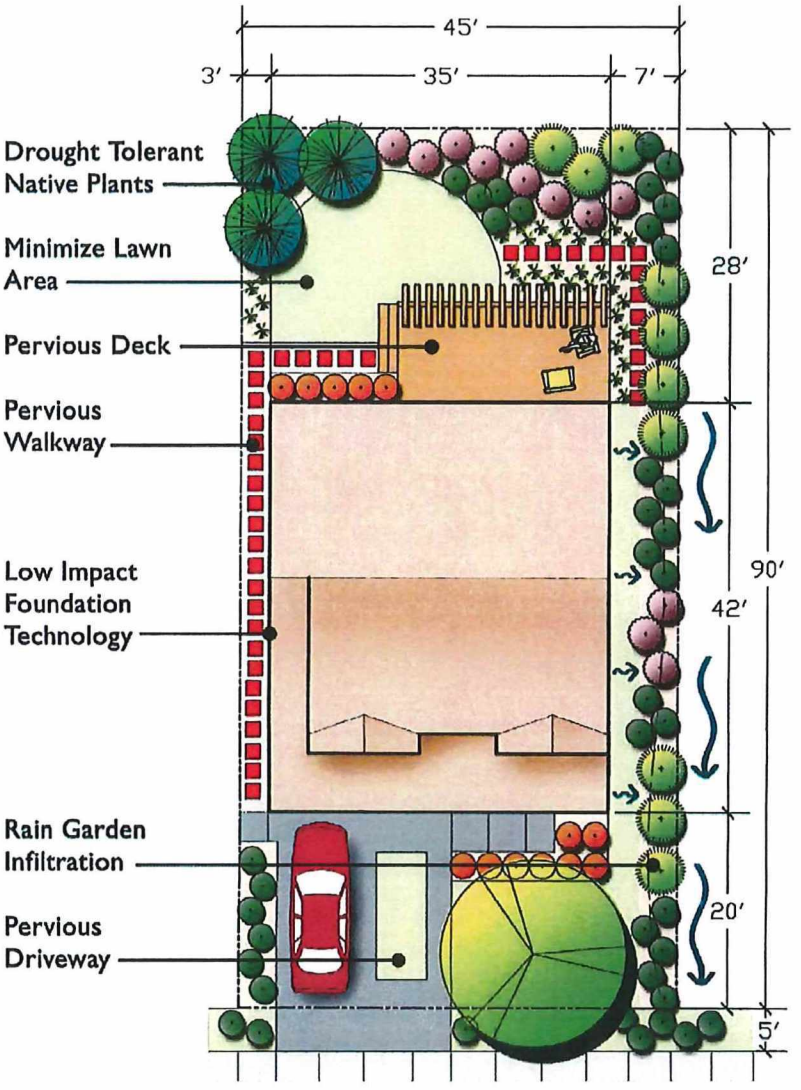
### Residential Area with LID Features

LID practices may be incorporated around homes and businesses in countless ways. Just a few methods can be used or an entire lot can be designed and developed using LID techniques for everything from building design to landscape design. These techniques create beautiful homes and yards, keeping the sites safer from flooding risks. Utilizing LID methods helps to absorb polluted water into the earth, which protects water bodies, wildlife, and human health.



Pervious pavers filter and manage water on site.
*Photo: Interlocking Concrete Pavement Institute.*




### *Resources:*

**Washington Stormwater Center:** http://www.wastormwatercenter.org/
**Washington Department of Ecology:** http://www.ecy.wa.gov/programs/wq/stormwater/
**Puget Sound Partnership:** http://www.psp.wa.gov/stormwater.php
**Municipal Research and Services Center of Washington: Local Stormwater Programs and Regulations**
http://www.mrsc.org/subjects/environment/water/sw-local.aspx
**EPA Low Impact Development:** http://water.epa.gov/polwaste/green/
**WSU Rain Garden Website:** http://raingarden.wsu.edu

### *Online Publications and Videos:*

**2012 Stormwater Management Manual for Western Washington**
http://www.ecy.wa.gov/programs/wq/stormwater/manual.html
**Low Impact Development Technical Guidance Manual for Puget Sound**
http://www.psp.wa.gov/LID_manual.php
**Building a Raingarden: Keeping our Pacific Northwest Waters Clean Video:** http://vimeo.com/21474307
**Raingarden Handbook for Western Washington Homeowners**
http://county.wsu.edu/mason/nrs/water/Documents/Raingarden_handbook.pdf

DEPARTMENT OF ECOLOGY
State of Washington

WASHINGTON STATE UNIVERSITY EXTENSION

Developed by Washington State University Extension with funding from the Washington State Department of Ecology.
Authors: Erica Guttman, Nora Moloney and Bob Simmons. Source: *Low Impact Development Technical Guidance Manual for Puget Sound*, 2012.

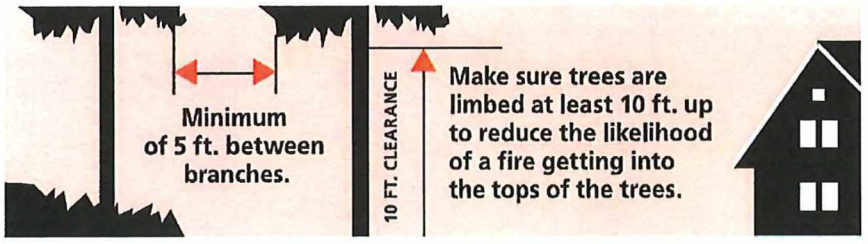
WASHINGTON STATE DEPARTMENT OF
**Natural Resources**
Peter Goldmark - Commissioner of Public Lands

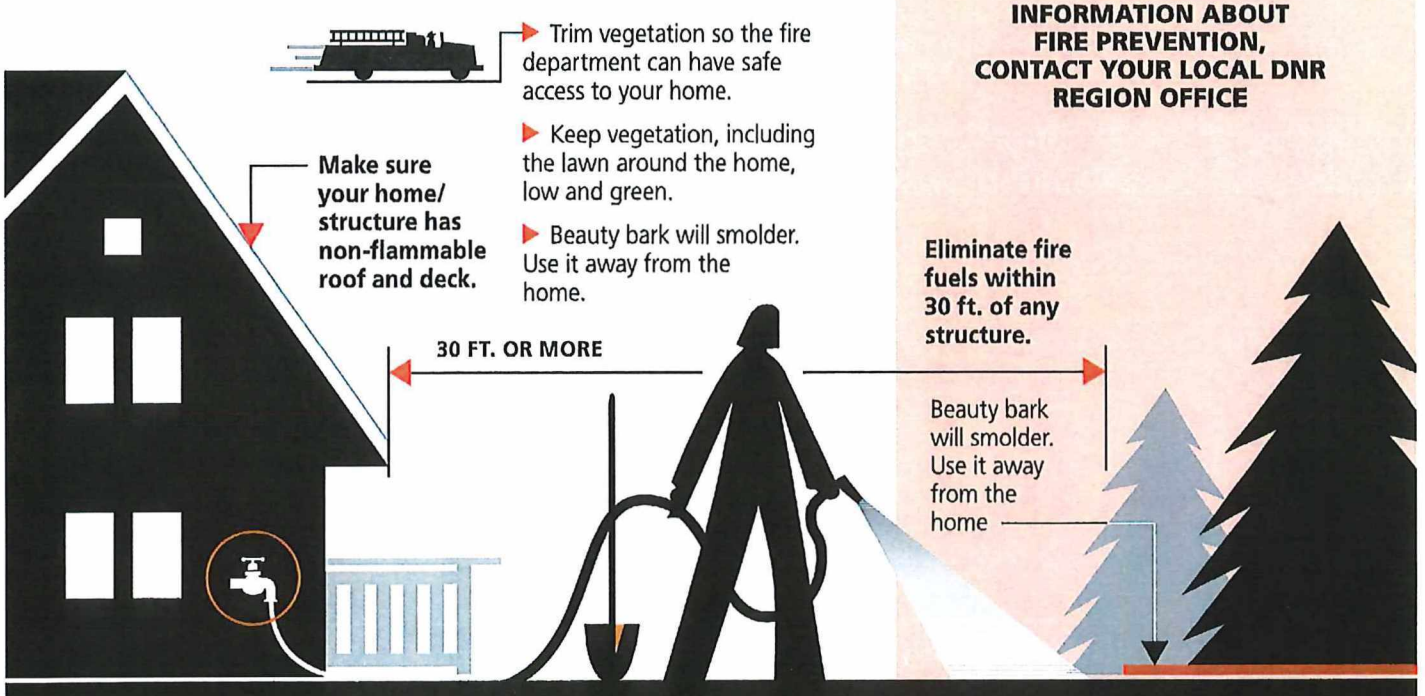
# Fire Prevention

# Defend Your Home from Wildfire

**NO COST EVALUATION**

* If you live in **DNR's Northeast Region, 509-684-7474** or **DNR's Southeast Region, 509-884-3472**, DNR foresters can come out and assess your home at no cost.





**FOR MORE INFORMATION ABOUT FIRE PREVENTION, CONTACT YOUR LOCAL DNR REGION OFFICE**

dnr.wa.gov

**TO REPORT A FIRE, PLEASE CALL 1-800-562-6010**

WASHINGTON STATE DEPARTMENT OF
**Natural Resources**
Peter Goldmark - Commissioner of Public Lands

# Prevención de Incendios

# Defienda Su Casa de Incendios Forestales

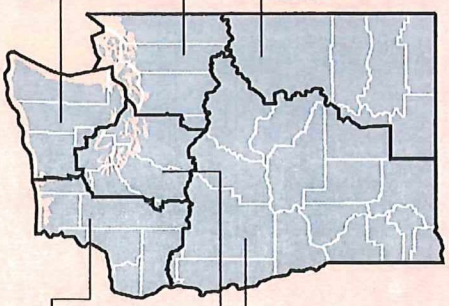
**EVALUACIÓN GRATIS**

* Si vive en la **Región Noreste de DNR (Departamento de Recursos Naturales), 509-684-7474** (inglés) o en la **Región Sudeste de DNR, 509-925-8510** (inglés), y no está seguro de cuan segura es su casa contra incendios, personal de DNR puede venir a evaluar su casa sin costo alguno.

**Región Olympic**
360-374-2800
(inglés)

**Región Noroeste**
360-856-3500 (inglés)

**Región Noreste***
509-684-7474 (inglés)

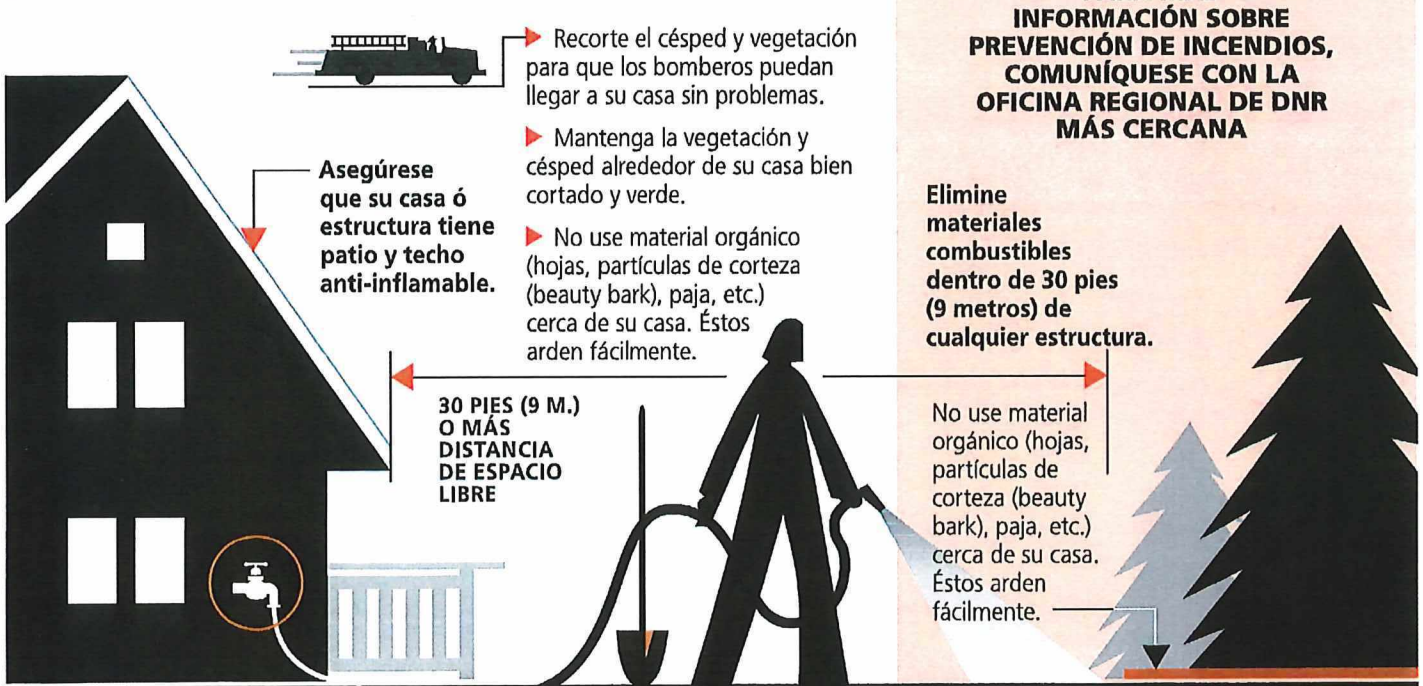


**Región Pacific Cascade**
360-577-2025
(inglés)

**Región Sudeste***
509-925-8510 (inglés)

**Región South Puget Sound**
360-825-1631 (inglés)


**PARA MÁS INFORMACIÓN SOBRE PREVENCIÓN DE INCENDIOS, COMUNÍQUESE CON LA OFICINA REGIONAL DE DNR MÁS CERCANA**




dnr.wa.gov

**PARA REPORTAR UN INCENDIO, POR FAVOR LLAME AL 1-800-562-6010 (INGLÉS)**

# HOW TO PREPARE YOUR HOME FOR WILDFIRES

WILDFIRE RISK REDUCTION STEPS THAT CAN MAKE YOUR HOME SAFER DURING A WILDFIRE

## VEGETATION MANAGEMENT

### 1. HOME IGNITION ZONES

Limiting the amount of flammable vegetation, choosing fire-resistant building materials and construction techniques, along with periodic exterior maintenance in the three home ignition zones - increases the chances your home will survive a wildfire when exposed to embers and/or a surface fire. The zones include the **Immediate Zone**: 0 to 5 feet around the house; **Intermediate Zone**: 5 to 30 feet; and the **Extended Zone**: 30 to 100 feet.

### 2. LANDSCAPING AND MAINTENANCE

To reduce ember ignitions and fire spread, trim branches that overhang the home, porch and deck and prune branches of large trees up to (depending on their height) 6 to 10 feet from the ground. Remove plants containing resins, oils and waxes and ensure mulches in the **Immediate Zone** (0 to 5 feet around the house) are non-combustible options like crushed stone and gravel. Maintain vegetation annually.

## FIRE RESISTIVE CONSTRUCTION

### 3. ROOFING AND VENTS

Class A fire-rated roofing products offer the best protection. Examples include: Composite shingles, metal, concrete and clay tiles. Inspect shingles or roof tiles and replace or repair those that are loose or missing to prevent ember penetration. Box-in eaves, but provide ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

### 4. DECKS AND PORCHES

Never store flammable materials underneath decks or porches. Remove dead vegetation and debris from under decks/porches and between deck board joints.

### 5. SIDING AND WINDOWS

Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster or stucco and dual-pane tempered glass windows.

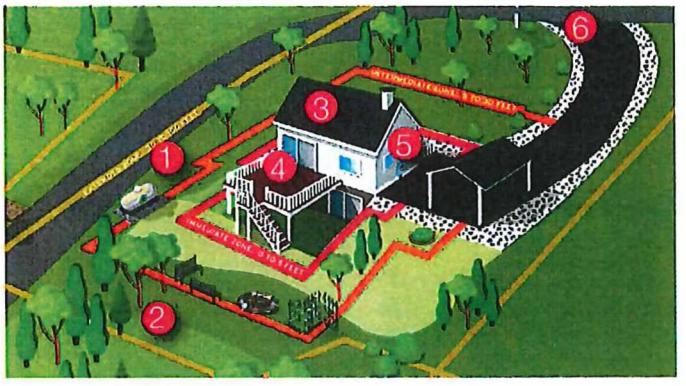
### 6. EMERGENCY RESPONDER ACCESS

Ensure your home and neighborhood has legible and clearly marked street names and numbers. Driveways should be at least 12 feet wide with a vertical clearance of 15 feet, for emergency vehicle access.

## BE PREPARED

Develop, discuss and practice an emergency action plan with everyone in your home. Include details for pets, large animals and livestock. Know two ways out of your neighborhood and have a pre-designated meeting place. Always evacuate if you feel it's unsafe to stay – don't wait to receive an emergency notification if you feel threatened from the fire.

Conduct an annual insurance policy check-up to adjust for local building costs, codes and new renovations. Create/update a home inventory to help settle claims faster.




## OTHER CONSIDERATIONS

- Store firewood away from the home
- Mow the lawn regularly
- Prune low-hanging tree branches
- Landscape with fire-resistant plants
- Create small fuel breaks with hardscaping features

**TALK TO YOUR LOCAL FORESTRY AGENCY OR FIRE DEPARTMENT TO LEARN MORE ABOUT THE SPECIFIC WILDFIRE RISK WHERE YOU LIVE.**

NFPA | FIREWISE USA™
RESIDENTS REDUCING WILDFIRE RISKS

VISIT FIREWISE.ORG FOR MORE DETAILS

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Order a Reducing Wildfire Risks in the Home Ignition Zone checklist/poster at Firewise.org