

WASHINGTON UTILITIES COORDINATING COUNCIL

RECOMMENDED DIGGING GUIDELINES

MANUAL



**Know what's below.
Call before you dig.**

Preface

This manual for safe digging contains certain sections of Washington code, regulations, and the entire dig law – RCW 19.122. In addition it contains information, provided by the Washington Utilities Coordinating Council (WUCC), a non-profit organization established in 1972, on using the 811 call center, as well as details on how to comply with the Washington dig law. Links to national best practices for damage prevention are also included.

The purpose of this statewide organization of utilities, government agencies, contractors, excavators, and other interested organizations and individuals is to cooperate to reduce damages to utility facilities for the safety of the public and property.

With increased numbers of utilities installed underground, the WUCC works to achieve the orderly planning and installation of buried facilities.

This booklet is available to all in the state of Washington as a means to help reduce damage to utilities, avoid interruption of service, and to protect the worker and the general public.

We need your help

We want to know *how* you use this booklet! What information is useful and not useful? How often do you use it? If a future printing occurs, what would you like added? What would you like removed?

Please send feedback to wuccdigbookeditcommittee@gmail.com.

Acknowledgments:

Washington Utility Coordinating Council, Washington 811, Utilities and Transportation Commission, Inland Empire UCC, Northwest Utility Notification Center, Puget Sound Energy, One Call Concepts.

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Important Numbers

Before You Dig: CALL **811** (a.k.a) **1.800.424.5555**

You can request a locate online using **ITIC**. Visit www.callbeforeyoudig.org, select **Washington State**, then choose *contractor* or *homeowner*. Professional excavators must sign up by providing contact info and choosing a user name. Once a staff member at the Call Center emails you a password, you are good to go. Homeowners will have to provide an email address. In both cases, no more waiting on the phone!

Washington CBYD Organizations (information and free dig safely presentations):

Inland Empire Utility Coordinating Council: www.ieucc.org

Northwest Utility Notification Center: C/of ZellaWest, 6111 Tieton Dr., Yakima, WA – 98908

Washington 811: www.washington811.com

Washington Utilities and Transportation Commission: www.utc.wa.gov

National Best Practices for Damage Prevention: www.commongroundalliance.com

NUCA of WA: www.nucaofwashington.com/

Evergreen Rural Water of Washington (ERWOW): www.erwow.org/

Washington Association of Sewer and Water Districts (WASWD): www.waswd.org/

American Public Works Association (APWA): www.apwa-wa.org/

Associated General Contractors of WA (AGC): www.agcwa.com/

Washington Public Utilities District Association (WPUDA): www.wpuda.org/

Life or Death Emergency **911**

Labor & Industries safety rules: www.lni.wa.gov/wisha/rules/construction/default.htm

Washington Utilities and Transportation Commission

UTC Help Line: **1.888.333.WUTC (9882)**

Pipeline Safety Program: **1.360.664.1118**

Other Pipeline Damage Prevention contacts:

Avista Utilities**1.800.227.9187**

Cascade Natural Gas**1.866.412.8829**

Chevron**1.800.762.3404**

K.B. Pipeline Co **1.503.226.4211**

McChord Pipeline Company **1.253.383.1651**

NW Natural **1.800.422.4012**

Olympic Pipeline **1.888.271.8880**

Puget Sound Energy.....**1.888.225.5773**

Transcanada**1.800.661.3805**

Williams Pipeline **1.800.972.7733**

Phillips 66 **1.580.767.7101**

Kinder Morgan Pipeline.....**1.888.767.0304**

Basic Terms and Definitions

“Call 811 (or the online option) **Before You Dig**” is abbreviated as CBYD.

“Notice” Two business days before commencing any excavation (exceptions can be found in the dig law; RCW 19.122.031) the excavator shall call 811 or 1.800.424.5555 to provide notice of their scheduled start of excavation. On busy days (M-W) hold time can be very lengthy. Entering your locate request online, via ITIC, eliminates the hold time. To learn more about ITIC visit www.callbeforeyoudig.org.

“Excavation and Excavate” means any operation, including the installation of signs, in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means (RCW 19.122.020). Emergency excavation is **not exempt** from CBYD.

“Emergency” means any condition constituting a clear and present danger to life or property, or a customer service outage (RCW 19.122.020).

“Emergency Excavation” Emergency excavations are exempt from marking the boundaries of the dig site in white prior to calling 811, and from calling two business days in advance, provided that the excavator provides notice to a one-number locator service at the earliest practicable opportunity (including en route or onsite). In short, report your emergency excavation to the CBYD center, then wait for the locators as long as you can. Dangerous situations require immediate attention, but professional work methods must still be utilized by all parties. *Play it safe: avoid calling in dig jobs as emergency work if it does not meet the legal definition, otherwise your job may be viewed as short notice.* The owner of the underground facility shall have the right to receive compensation for costs incurred in responding to excavation notices given less than two business days prior to the excavation from the excavator.

All parties should strive to maintain a list of cell, home, and after-hours numbers. This process is facilitated by active participation in your local Utility Coordinating Council.

Keep in mind that utilities damaged during any excavation are subject to the claims process by the owner. Keep good notes, photos, and other records; if damage occurs, through no fault of your own, you will need evidence that you followed the RCW and/or best practices.

Limits Of Locating and Marking

Private Property

The utilities will only mark the lines to their own meters. Underground lines beyond the meter or service entrance belong to the property owner, and are that person's responsibility (e.g., apartment houses, mobile home parks, schools, etc.) Private locators are available to provide this service for a fee.

Guidelines for a Safe Excavation

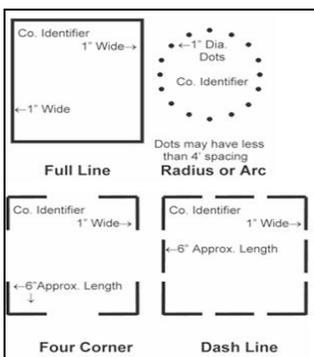
Six Basic Steps to a Safe Dig:

1. **Outline / mark your planned dig site in white**
2. **Two business days before you dig, CALL 811 (Remember, the day you call does not count)**
3. **Do not dig until all known utilities are marked**
4. **Maintain the marks**
5. **Determine the precise location of the marked utilities by hand digging**
6. **Dig safely using proven excavating methods**

Identify your proposed dig site on a map, taking note of city, county, and obvious landmarks. Determine distance and direction from nearest cross street, proximity of planned work to overhead electric lines, location of right-of-way and easements, and if no specific street or address is applicable, the township, range, section, and quarter-section of the work site. Accurate and timely locates are crucial for a successful dig. All owner/operators of buried facilities should endeavor to provide current as-built plans to their locators. Markings should follow industry recommendations (see Single Point Excavation Markings illustration below).

Excavators are required to mark the boundary of the excavation area per RCW 19.122.030 1(a). The use of white marking products (e.g. paint, flags, stakes, whiskers or a combination of these) may be used to identify the excavation site. Review the American Public Works Association (APWA) marking recommendations at the National Utility Locating Contractors Association website: <http://nulca.org/best-practices/> (click APWA: Marking Guidelines).

Single Point Excavation Markings



Provide notice of the scheduled excavation to owner/operators of buried utilities at least two business days in advance, but no sooner than ten business days by **CALLING 811, 1.800.424.5555**, or **online at www.callbeforeyoudig.org**.

Be prepared to provide details as shown in Guidelines step 1, as well as the nature of the work, the date and time you plan to begin digging, the name of your customer, and a number where you can be reached. When finished, you will be given an excavation confirmation number, or ticket number. The ticket number is proof that you called. If you need to call back for any reason, you will be asked for the ticket number – please keep it handy. Utility companies might require your ticket number if you contact them about your locate request or excavation plans. You might also be required to

provide your ticket number to inspectors or law enforcement personnel. When you call before digging the CBYD personnel will provide a list of member utility operators who will be notified of your intent to excavate. Those members have two business days to locate and mark their locatable buried facilities, or provide reasonably available information on their lines that are un-locatable

Washington law requires that all underground facility operators be members of the **CBYD** system. If you discover a non-member facility, you may file a complaint with the Washington Safety Committee at safetycommitteewaucc@gmail.com.

Wait two business days after the day you give notice before beginning your excavation. ***The day of your call doesn't count.***

NO digging is to take place until ALL known utilities are marked or otherwise accounted for with information provided by the facility operator.

Any excavator that violates these rules, and damages buried lines, may be liable for fines and penalties and be held responsible by the owner to pay up to three times the cost to restore the damaged facility, RCW 19.122.070.

Some violations carry criminal charges. ***Note RCW 19.122.090: "Any excavator who excavates, without a valid excavation confirmation code when required under this chapter, within thirty-five feet of a transmission pipeline is guilty of a misdemeanor."***

Excavators shall have the right to receive compensation from the owner of the underground facility for costs incurred if the underground facility operator does not locate/mark its locatable facilities, or provide other information for their unlocatable buried facilities, in accordance with Washington law. ***Note RCW 19.122.020 "Marking means the use of stakes, paint, or other clearly identifiable materials to show the field location of underground facilities, in accordance with the current color code standard (see back cover) of the American Public Works Association. Markings shall include identification letters indicating the specific type of the underground facility."***

Respect the marks which identify the location of the buried facilities. Once the owner/operator of the underground utility marks their buried lines, it is the responsibility of the excavator to MAINTAIN the marks for 45 days, or for the length of the project—whichever is shortest. In any case, the locate marks EXPIRE after 45 days. Compliance with **maintaining marks** may be attained by following the recommended guidelines below.

Locate Mark Expiration

RCW 19.122.030 states locate marks expire **45 days** from the date the excavator provides notice.

Best Practices for Maintaining Locate Marks

Onsite personnel, responsible for maintaining the marks, should determine which method would be most effective for the job. Depending on the job/area and size/complexity, individual utility companies may impose separate compliance requests.

Preserve or protect as much of the original marks as possible.

Use off-set staking, in areas where original locate marks will be continuously destroyed by excavation or weather. The off-set staking must be uniformly aligned and must accurately indicated the location of the original locate markings.

Digital photo, or other permanent imaging, or drawings (both to scale) may be used in areas where original locate marks will be destroyed by excavation or weather.

Use white paint to maintain the original markings.

Bookend the original locate marks with solid white squares or brackets.

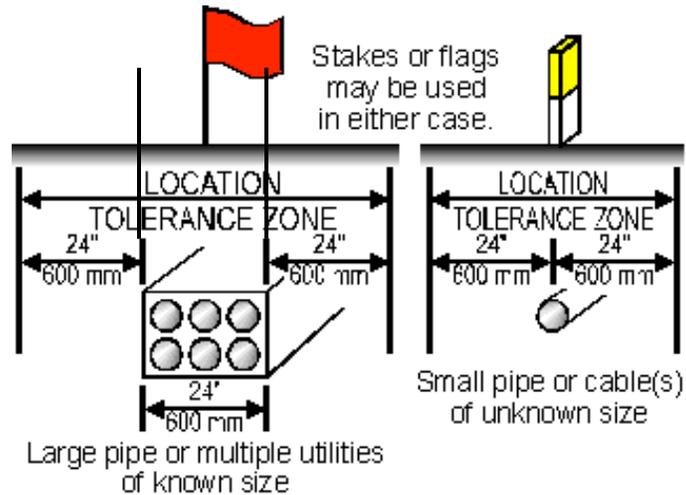
Paint dots between the original locate, using white paint, every eighteen to twenty-four inches, for the whole length of the original marking. Include the type of facility marks, e.g., T for telephone, G for natural gas, W for water, etc.

Request re-locates. The utility owner/operators reserve the right to recover costs of remarking. Requests for re-locates should include information such as the specific sight (area) that needs to be re-located and which utilities need to be re-located.

DO NOT, UNDER ANY CIRCUMSTANCES, PAINT OVER YELLOW PAINT.

Owner/operators of buried utilities are required to mark their locatable buried lines with reasonable accuracy. RCW 19.122.020 (23) states “Reasonable accuracy means location within twenty-four inches of the outside dimensions of both sides of an underground facility.” This area is called the “Tolerance Zone” (See Tolerance Zone illustration below).

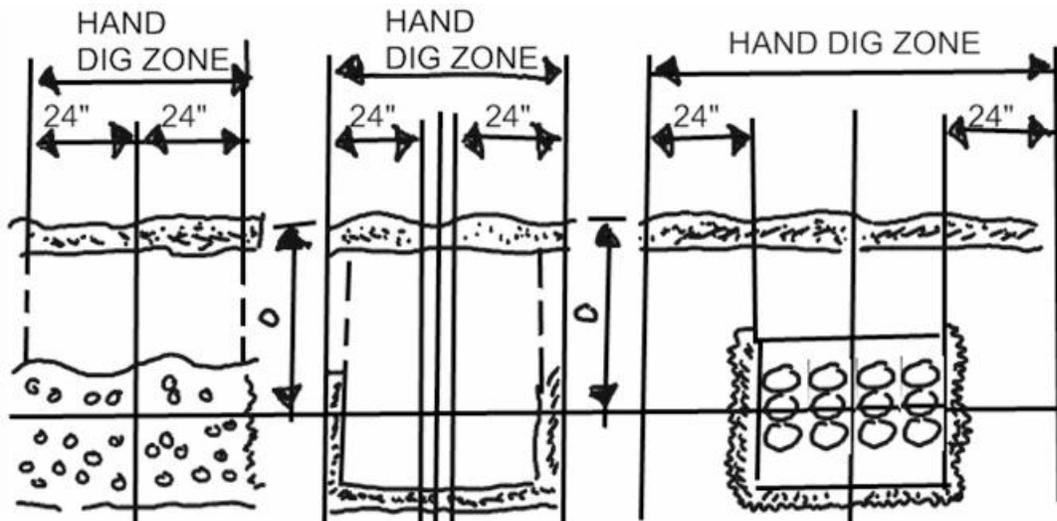
Tolerance Zone



To avoid damaging underground facilities an excavator shall determine the precise location of underground facilities which have been marked. Accepted industry opinion is that precise determination can only be made by exposing the buried utility. Depending on site conditions, one, or a combination of the following options, is recommended: careful hand digging (see Hand Digging illustration below), pot-holing and vacuum excavation, hand tools that use air or water under pressure, or other non-invasive methods.* Exposing buried utilities via any mechanized method (e.g., backhoe, grader, jack hammer, etc.) is not acceptable. For large projects, sub surface engineering may be the least expensive means of determining the precise location of buried facilities.

*(Although considered non-invasive by many, care should be taken when using these methods near pipe coating; they have been known to cause damage to the wrapping.)

Hand Digging



Service Laterals

- In the Washington dig law, special attention was given to helping excavators find service laterals within public right-of-ways and utility easements. Directions to facility operators:
 - Locate and paint service laterals if you are able to do so with reasonable accuracy;
 - Place a triangle at your main utility pointed at the structure or property connected to your service;
 - Arrange to meet with the excavator at their worksite and provide available information about the location of service laterals; or
 - Provide copies of available records of the service laterals via other delivery methods (including electronic or mail).
- Utility facility operators that make a good faith attempt at any of these actions will be deemed in compliance with helping excavators find service laterals, and not liable for damages or injuries.
- Excavators cannot dig until all buried utilities are marked with the appropriate paint, letters and numbers, or otherwise accounted for with other information the facility owner provides.

A facility operator is not required to comply with this section with respect to service laterals conveying only water if their presence can be determined from other visible water facilities, such as water meters, water valve covers, and junction boxes in or adjacent to the boundary of an excavation area identified by white marks.

Reporting of Damages

Under RCW 19.122.053 ALL facility operators and excavators who observe or cause damage to an underground facility must report the damage event to the UTC within **45 days**. They can do so via the UTC's Virtual DIRT site, or similar form, as long as it reports the required information listed in 19.122.053 (3) (a – n).

You can register for reporting on the DIRT site here: www.utc.wa.gov/damagereporting. Be sure to register through the UTC's account by selecting "Washington Utilities and Transportation Commission Virtual Private DIRT."

State Safety Committee

The Washington Dig Law Safety Committee has been formed per RCW 19.122.130 to "advise the commission and other state agencies, the legislature, and local governments on best practices and training to prevent damage to underground utilities, and policies to enhance worker and public safety, and review complaints alleging violations of [the dig law] involving practices related to underground facilities."

The committee members are as follows:

Seat	Name	Company	Term
Natural Gas	Don Patterson	NW Natural	1 year
Electric	Bryan Sabari	Puget Sound Energy	3 year
Member Owned Utility	Gary Hajek	Cross Valley Water	2 year
Contractor	Mark Scoccolo	SCI Infrastructure, LLC	1 year
Pipeline	Justin Adams	Williams NW Pipeline	2 year
Local Government	Dave Christensen (Vice-Chair)	City of Renton Wastewater	3 year
UTC	Anna Gill	Utilities & Transportation Commission	3 year
Excavator	Scot Hattenburg	M & L Construction	1 year
Insurance	Larry Bailey	Water & Sewer Risk Mgmt Pool	3 year
Telecommunications	Joe Robertson	CenturyLink	1 year
Open Position	Jon Cornelius (Chair)	WSDOT	2 year
Open Position	Kemp Garcia	Bravo Environmental	2 year
Open Position	James Yoder	ELM Locating	3 year

For questions, please contact the safety committee Admin at: safetycommitteewaucc@gmail.com.

To file out a complaint, visit: <http://washington-ucc.org/>.

To contact the Safety Committee:

Washington Dig Law Safety Committee
 Attn: Administrative Assistant
 5808 Summitview PMB 227
 Yakima, WA 98908
 Phone: **1.509.966.0272**
 Fax: **1.509.966.0740**

Natural Gas

Pipeline Safety

The Washington Utilities and Transportation Commission has authority, granted by the Pipeline and Hazardous Materials Safety Administration, to enforce compliance with safe operations and work methods around interstate pipeline facilities. They have similar authority over intrastate natural gas providers. State agencies, citizen committees, other organizations devoted to pipeline safety and the citizens of Washington take special notice of issues relating to damage prevention to pipelines; including excavation on or near buried natural gas, or petroleum facilities.

Information about specific petroleum pipeline companies is available by calling them directly see contact info at front of book.

The following info provided by Puget Sound Energy has been prepared to help you understand the potential hazards involved when working near energized overhead or underground power lines as well as natural gas pipelines.

Natural Gas Demands Respect

A leading cause of natural gas pipeline incidents is third party damage. As with buried electric cable, excavators must take particular care when working and digging near natural gas pipelines.

Natural gas is a safe, reliable, and predictable fuel when properly handled and consumed.

Natural gas ignition occurs with a gas to air ratio between 4 to 14%, and 1100 degrees. Natural gas has a specific gravity of .6 which is lighter than air allowing it to rise. A distinctive odorant is added to aid in leak detection. If a pipeline rupture or leak occurs, natural gas may migrate under paved or hard surfaces into buildings and surrounding areas. If you detect a leak, leave the area immediately and contact your natural gas provider or 911. *Do nothing to create a spark.*

Natural gas is distributed in a variety of pressures and types of pipe. Steel and plastic pipelines are widely used throughout Washington ranging in size from ½ inch to 36 inches in diameter. Operating pressures vary between Low pressure (LP 6" Water Column), Intermediate pressure (IP 60 psig) and High pressure (HP100+ psig). Any excavation occurring around **high pressure (HP) pipelines** must be monitored continuously by utility personnel.

Natural Gas Incidents

Always call the local utility immediately to report any damage, leaks or any other natural gas incident. If gas is leaking, evacuate immediate areas where gas is present. Keep people and traffic away and remove any sources of ignition (open flames, turn off engines /equipment, radios, etc.) around the area of the damaged line until the local utility arrives (key numbers listed at front of book). If concerned with public safety always call 911 first.

Don't try to repair a damaged or broken natural gas line by covering, crimping, bending, or otherwise restricting the flow. Don't touch a plastic pipe that is leaking. A spark from static electricity on plastic pipe could become an ignition source. All repairs must be made by the local natural gas provider. *Any time pipe is dented, or the wrap is scraped the local natural gas provider will need to inspect it before it is buried or covered with fill.* Even if the pipe is just nicked or bent, leave it exposed so the local natural gas provider can inspect it and make any necessary repairs. Care should be taken to avoid breaking the small wires located on or near natural gas pipelines. Companies with buried pipelines use different types

of wires, some are for locating plastic pipelines and others are necessary to monitor steel pipelines for proper protection from corrosion. If the wire is broken, call the local utility so repairs can be made to damaged facilities

Don't try to extinguish a gas flame or fire. If the natural gas is burning let it burn! If there is a threat to life or property call 911.

Work Practices

Directional boring: Gas lines must be pot-holed and identified prior to boring operations. Contact the local utility to verify pot-holed facilities prior to the bore operation. Leave pot-holes open and periodically inspect the facilities during the bore operation. Notify utility immediately of any concerns.

Open trenches: Once exposed, all natural gas facilities must be properly supported and protected from damage. If excavating parallel to a gas pipeline, call your local natural gas company for help with determining adequate support, protection and separation of the pipeline. Failure to properly support pipelines could result in a break or rupture. Use acceptable back-fill material, with no sharp rocks, gravel or slurry which can damage the coating on steel pipelines and cause failure of plastic pipelines over time.

Encroachment: Don't build any structures such as sheds, decks, etc. over any pipelines or other facilities. Aside from being a serious safety issue, natural gas utilities must have access to their buried gas lines at all times. For this reason, a minimum of 12 inches of separation shall be maintained when crossing or running parallel to distribution lines. High-pressure supply lines require 36 inches of separation unless special permission is granted by the utility.

Supporting Exposed Gas Pipeline

Excavators are required to provide structural support for underground facilities that have been undermined or exposed by the excavation activity. Each structural support used for an exposed pipeline must be made of a durable, noncombustible material, and must be designed and installed such that: Free expansion and contraction of the pipeline between supports, or anchors is not restricted. Movement of the pipeline does not cause disengagement of the support equipment. Damage to the pipe and its coating is prevented where the pipe contacts the support or anchor. When steel piping is supported or anchored, the pipe shall be insulated from the support or anchor. The temporary support or anchor shall be removed in its entirety without damage to the pipe and its coating. Steel cables, steel chain, or any sharp object shall not be used to support gas piping.

Backfilling Natural Gas Pipelines and Hazardous Liquid Pipelines

When a trench is backfilled, it must be backfilled in a manner that provides firm support under the pipe, and prevents damage to the pipe and pipe coating from equipment or from the backfill material. Always use sand or rock free dirt and back-fill six inches above and below natural gas pipelines, and avoid compacting directly over the pipeline.

Backfill material shall *not* contain: garbage, cans, glass, recycled glass products, decomposable organic material, or construction debris, washed gravels, including pea gravel, material that will not compact, sharp objects, frozen clods, large rocks or stones, pieces of pavement, construction debris, wood skids or wedges, timbers, hay bales, boulders, or other material that may cause damage to the pipe, pipe coating, or casing/conduit.

NOTE: Do not unload backfill or pile it directly on top of PE pipe until proper support is provided for the pipe.

Backfill for General Construction

Initial backfill shall be sand, or rock-free native soil, or soil-based select material that does not contain any rocks. If the native soil contains rocks, then a total of 12 inches of initial backfill shall be placed over the gas pipeline and across the full width of the trench.

Final backfill may be soil-based select material or native soil, but shall not contain rocks larger than 10 inches in diameter to prevent impedance of gas system maintenance.

Final backfill shall be sufficient to withstand normal wear and tear from foot traffic, weather, and other activities that may cause erosion.

Compaction

All backfill shall be consolidated according to the terms of applicable permits and right-of-way agreements. In unimproved areas, the backfill shall be consolidated to match the original soil structure.

Care shall be taken to prevent damage to the buried gas facilities and other underground lines when compacting backfill.

Care shall be taken when compacting around service and branch connections and points of transition between polyethylene and steel to insure well-compacted support and to protect the pipe and fittings from excessive external loads.

Backfill material shall be compacted in lifts thick enough to prevent damage to the pipe. If the trench is wide enough, the spaces to the sides of the pipe shall be compacted first. If compaction is done by:

- Powered hand-operated equipment (such as Bigfoot or Jumping Jack), then the initial backfill lift over the pipe shall be a minimum of 12 inches.
- Machine-operated equipment (such as Hoe-Pack or Hydro-Hammer), then the initial backfill lift over the pipe shall be a minimum of 24 inches.

Electricity

Electricity Demands Respect

Electricity can shock, burn, or kill workers if it is not handled properly on the job site. Since it is always seeking the easiest path to ground, you or any other type of conductor (metal, wet wood, trees, machinery/equipment, tools, etc.) touching a power line could provide an immediate path to ground. The result can be severe injury or death.

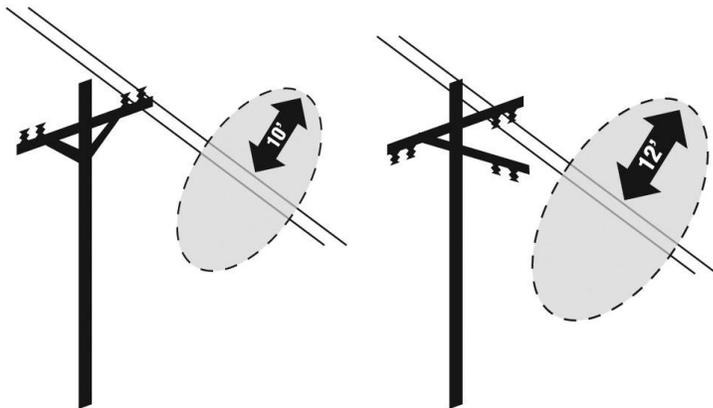
Before Starting to Work, Think Safety!

Be observant. If you have work to do near power lines or power facilities **always consider them to be energized or hot.**

Call the local utility for more information or to make arrangements that will guarantee working conditions are safe. For your safety, the utility may turn off electricity, place barriers on lines or as a last resort, relocate them. Because it takes time to complete this work, allow for this time in your job schedule and let the utility know. For example, if it is feasible to take lines out of service, advance notice is required. There may be a charge for work performed by the utility.

Basic Rules for Electrical Safety

- **Ten feet is considered a minimum safe and legal clearance** for equipment, tools and people when working near overhead power lines and facilities. Never assume that power installations are insulated. State regulations require that a minimum of ten feet be maintained from energized overhead high voltage electrical conductors (up to 50,000 volts) with additional distance required for higher voltages (for example 12 feet 2 inches is required for 115,000 volts). (See *Legal Clearance* illustration below.) For exact distances and other requirements of the law when working near power lines, refer to the appropriate section in Washington Administrative Code (WAC 296-155-428).



Legal Clearance

- **Equipment near lines can contact the line accidentally** and injure the worker using the equipment. Hand-carried tools or materials are a common cause of accidents. Use extreme caution when carrying ladders, scaffolding poles, piping, or high-rise metal tools near power lines. Heavy or large equipment can be driven into lines accidentally. Care should be taken not only with cranes; front-end loaders, backhoes, concrete pump trucks may have sufficient reach to get into power lines.
- **Plan ahead.** If your equipment will be operating in the vicinity of power facilities, check to make sure there is no possibility of accidentally striking a power line or digging into a buried cable.
- **Don't touch electrical equipment** and never attempt to move or raise overhead or underground electric lines or equipment. If you need help to make the lines safe, or have any doubts or questions about the safety of your job site, call the utility.

In the Event Electrical Contact Occurs with Equipment

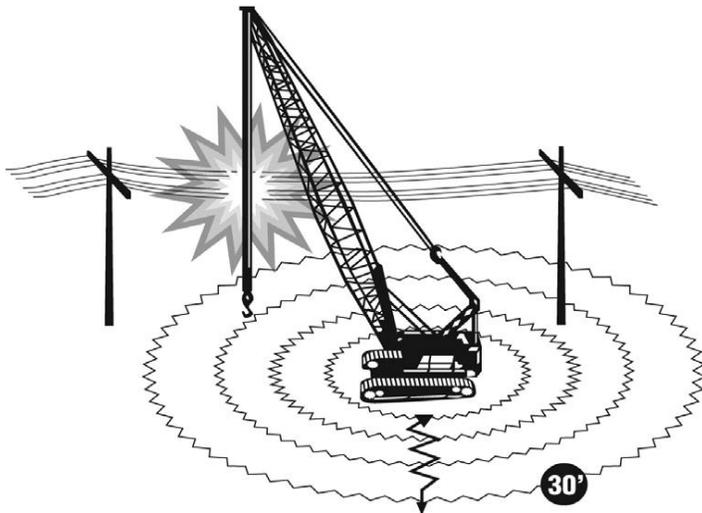
- **Do not panic! Remain on the equipment!**

You should be safe where you are. Do not try to get off the crane or excavator. Touching the power source and the ground at the same time could be fatal.

- **If the equipment is on fire** and it is necessary to exit the vehicle or equipment, jump clear of the vehicle while keeping both feet together, avoiding any wires that might be on the ground. Stay calm and

jump carefully so that you don't fall back against the equipment or touch the ground and the equipment at the same time. Then **shuffle**, with both feet together, keeping both feet on the ground and touching at all times. **Continue shuffling for at least 30 feet from the accident site.**

- **Instruct all other personnel to stay at least 30 feet away** from the equipment, ropes, and the load. The entire equipment, load, and the ground around it could be energized.



- **The equipment operator may try to remove the contact (only if it is safe to attempt)** unaided, and without anyone approaching the equipment. Move away from the line in the reverse direction to that which caused the contact (for example, if you swung left into the wire, swing right to break the contact).

Remember: *Once an arc has been struck, it can draw out a considerable distance before it breaks, so keep moving away from the line until the arc breaks and then continue moving until you are at least 10 to 15 feet away from the line.*

Caution: *If the wire rope/material appears to be welded to the power line, do not move away from the line as it may snap and whip. Stay where you are until help arrives.*

- **If the equipment cannot be moved away** or disengaged from the contact, remain onboard until a qualified electrical utility worker de-energizes the circuit and confirms that conditions are safe.

- **Report every incident** involving contact with a live line to local electric utility so inspections and repairs can be made to prevent damaged power lines from failing at a later date.

Underground Power-line Safety

Digging trenches or excavating in areas where there might be underground power lines can be dangerous and expensive. One misplaced shovel or bucket could cause serious injury, knock out services, or damage surrounding homes and businesses. Washington Administrative Code and Washington Industrial Safety and Health Act (WISHA) rules (296-155 "Safety Standards for Construction Workers") require "before opening an excavation or trench, underground utilities such as sewer, telephone, natural gas, electric, water line or other installations shall be located". Excavators are responsible for ascertaining the location and voltage of any underground electric lines employees may be working around and providing any protective measures and methods for working safely around them.

If an accident does happen, stay calm!

There are a number of basic steps to follow in case of an electrical accident:

- **Do not touch the injured or any equipment in contact with the injured person.** Even if it appears that the accident caused the electricity to be de-energized, use caution. Always assume the power lines are hot or energized. Power lines usually relay back into service and become energized several times within a matter of seconds following an accident, or they may not shut-down at all.
- **Do not attempt to rescue and prevent others from approaching the victim** and any electrically energized vehicles, objects, or structures.

DO NOT ATTEMPT TO DE-ENERGIZE HIGH-VOLTAGE POWER LINES. CALL the local electric utility IMMEDIATELY!

- **Send for help.** Call 911 to notify both the police and the fire department. Also call the utility so the electricity can be turned off.

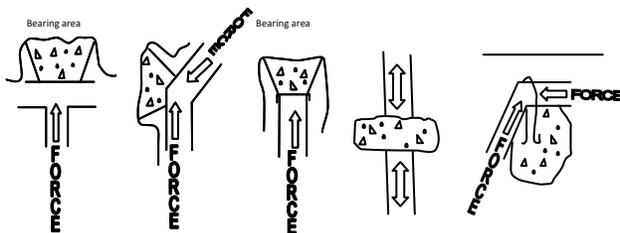
Water, Sewer and Storm Lines

The Following Material is Included to Help Excavators Avoid Problems When Excavating Near Pressurized Water Lines.

Pressurized water lines are often used to provide drinking water, fire protection, and irrigation, and if damaged during construction, can cause significant loss of service, property damage, and injury. Pressure range can be from 25 psi (pounds per square inch) to above 200 psi. When working in any area near water lines, make sure the valve boxes remain accessible in case an emergency shut-down is needed.

Bends, Tees, Caps and Thrust Blocks

Bends, tees and caps are installed on lines to change direction of piping. Thrust blocks are installed at the bends, tees and caps to keep the pipe in place and take the force the pressurized waterline exerts when deflected in different directions. Thrust blocks are typically designed for the bearing area of the ground around them.



Example: At 25 psi, an 8" line could have 1256 pounds of force exerted on the thrust block. At 200 psi, this 8" line could have 10,048 pounds of force exerted on the thrust block (Not considering surcharging).

Do not disturb the ground around the thrust block or the thrust block itself. This may result in major leaks or break in water lines.

Do not expose a pressurized water main line for a distance greater than 1 stick of pipe or it may move vertically or horizontally and rupture. Support line and excavate or expose only enough of the pressurized line to complete the crossing.

Do not use calcified backfill material against water lines such as concrete or CDF unless water lines are wrapped in 8 ml plastic.

Water Services

Water services can be made of pliable materials such as soft copper or polyethylene, or more rigid material such as galvanized pipe, schedule 40 or 80 PVC, or other materials. Water service lines should be bedded in sandy, rock-free material prior to backfilling. Caution should be taken when compacting to prevent damaging of service or pulling from mainline.

Do not pull or dent water services. Dents and kinks may not leak immediately, but the water moving inside the service will wear on the defect and create a leak in the future. Report any dents, kinks, or pulling to the water purveyor.

Do not shut down water main lines without the purveyor's permission. Tampering with a public water system is a Federal Offense (US Code Title 42, Section 300i-1). Most water purveyors also have policies with fine schedules that forbid an excavator from tampering or shutting down the existing public system. Conditions or customers such as clinics, hospitals, and home medical equipment cannot have the water shut off without notice.

Always contact the water purveyor if you have any questions.

The Following Material is Included to Help Excavators Avoid Problems When Excavating Near Sanitary Sewer Lines

Sanitary sewer lines are primarily used to dispose of human, industrial and commercial waste that can contain fecal matter, chemicals, gases, and blood borne pathogens. If damaged during construction, sanitary sewer lines can cause significant loss of service, costly property or wildlife damage, and injury. When working in any area where sewer is nearby, make sure the manhole lids remain accessible in case of an emergency back up or damage occurs.

Manholes

Manholes contain contaminants, flammables, and raw sewage that can affect the air quality inside the manhole. For that reason, confined space entry procedures required by federal, state or local agencies should be followed for manhole entry, if entry is allowed by the sewer purveyor.

Do not allow construction debris or fluids to enter the manholes or sewer line at any time. This may cause costly blockage and back-ups. If debris enters sewer system, contact the sewer purveyor.

Do not excavate enough material near the manhole to create uneven loading on the sides of the structure or it may topple.

Excavation and backfill practices near sewer main and services

Sewer lines (mains and services), consist of many different types of pipe. Clay, concrete, PVC, HDPE, ductile iron, steel, cast iron, etc. Older brittle pipe may be present. Extreme caution must be used when excavating near existing sewer lines. 18" minimum vertical separation when crossing perpendicular above existing sewer line is desired. Sewer lines should be re-bedded in rock free material. Caution must be taken when compacting to prevent damaging the pipeline.

Anticipate side sewer laterals to service the structures nearby.

Do not pull, damage or dent any sewer mainline or service. The damaged area may not leak immediately but could in the future. Report any damage to the sewer purveyor immediately.

Most sewers are gravity, but many areas have sewer force mains that are installed similar to a water main. If working near a sewer force main under pressure, familiarize yourself with the "working around water main guidelines" and contact the sewer purveyor for more information.

Fiber Optic Lines

The following material is included to help excavators avoid problems when digging around or near fiber optic lines.

Fiber optic lines are used by a variety of organizations for the efficient transfer of large volumes of information. They can be very costly and time consuming to repair with additional monetary penalties related to temporary loss of provided services.

In all suggestions or recommendations listed below, the fiber optic owner may have differing requirements. The following are suggested guidelines and are not intended to be all-inclusive or exclusive of local requirements.

Fiber optic systems

The amount of underground fiber optic facilities is increasing as more organizations deploy it. Existing facilities can include; direct bury, poly conduit, metal conduit or clay. Damage can disrupt public, private or governmental services with the cost of repair and lost service justifying any extra effort to avoid damage.

Safety

If a fiber line is damaged, never look directly into the fiber as non-visible laser light can damage the eye. Use caution with the fiber strands themselves, as small particles of glass can enter the body and be undetectable by X-Ray.

Always call for locates

Some fiber optic cables do not contain metal, making them difficult to locate. In some cases, the locating conductor is contained within the conduit or as a separate locating wire. When using a locator, always use the direct connection method as opposed to induction. The fiber optic owner should be contacted if there are any problems in finding a suitable connection.

Contact is key

An on-site pre-construction meeting with the excavator and facility owner provides an opportunity to acquire plans and contact information. Some organizations insist on having a spotter present during any excavation.

Damage

Always immediately alert the fiber optic owner to even small amounts of damage to a fiber optic cable. Disruptions in service and reliability may not always be visible or may manifest themselves over time. Never attempt to repair a damaged line or backfill over it. Always notify the owner to any damage in the conduit or the locating wires.

Chapter 19.122 RCW: Underground utilities

RCW Sections

- [19.122.010](#) Intent.
- [19.122.020](#) Definitions.
- [19.122.027](#) One-number locator services -- Single statewide toll-free telephone number.
- [19.122.030](#) Notice of excavation to owners of underground facilities -- One-number locator service -- Time for notice -- Marking of underground facilities -- Costs.
- [19.122.031](#) Exempted activities.
- [19.122.033](#) Notice of excavation to pipeline companies.
- [19.122.035](#) Pipeline company duties after notice of excavation -- Examination -- Information of damage -- Notification of local first responders.
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- [19.122.045](#) Exemption from liability.
- [19.122.050](#) Damage to underground facility -- Notification by excavator -- Repairs or relocation of facility.
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- [19.122.055](#) Failure to notify one-number locator service -- Civil penalty, if damages.
- [19.122.060](#) Exemption from notice and marking requirements for property owners.
- [19.122.070](#) Civil penalties -- Treble damages -- Existing remedies not affected.
- [19.122.075](#) Damage or removal of permanent marking -- Civil penalty.
- [19.122.080](#) Waiver of notification and marking requirements.
- [19.122.090](#) Excavation without a valid excavation confirmation code -- Penalty.
- [19.122.100](#) Violation of RCW [19.122.090](#) -- Affirmative defense.
- [19.122.110](#) False excavation confirmation code -- Penalty.
- [19.122.120](#) One-number locator service to provide excavation confirmation code.
- [19.122.130](#) Commission to contract with nonprofit entity -- Safety committee -- Review of violations of chapter.
- [19.122.140](#) Commission authority -- Receipt of notification of violation of chapter -- Referral to attorney general.
- [19.122.150](#) Commission authority -- Violations of chapter -- Imposition of penalties.
- [19.122.160](#) Damage prevention account.

[19.122.170](#) Damage prevention account -- Use of funds.

[19.122.180](#) Damage prevention account -- Deposit of penalties.

[19.122.900](#) Severability -- 1984 c 144.

[19.122.901](#) Short title -- 2011 c 263.

19.122.010

Intent. (*Effective January 1, 2013.*)

In this chapter, the underground utility damage prevention act, the legislature intends to protect public health and safety and prevent disruption of vital utility services through a comprehensive damage prevention program that includes:

- (1) Assigning responsibility for providing notice of proposed excavation, locating and marking underground utilities, and reporting and repairing damage;
- (2) Setting safeguards for construction and excavation near hazardous liquid and gas pipelines;
- (3) Improving worker and public knowledge of safe practices;
- (4) Collecting and analyzing damage data;
- (5) Reviewing alleged violations; and
- (6) Enforcing this chapter.

[2011 c 263 § 1; 1984 c 144 § 1.]

Notes: Report -- 2011 c 263: "By December 1, 2015, the utilities and transportation commission must report to the appropriate committees of the legislature on the effectiveness of the damage prevention program established under chapter [19.122](#) RCW. The legislative report required under this section must include analysis of damage data reported under section 20 of this act." [2011 c 263 § 26.]

Effective date -- 2011 c 263: "This act takes effect January 1, 2013." [2011 c 263 § 27.]

19.122.020

Definitions. (*Effective January 1, 2013.*)

The definitions in this section apply throughout this chapter unless the context clearly requires otherwise.

- (1) "Bar hole" means a hole made in the soil or pavement with a hand-operated bar for the specific purpose of testing the subsurface atmosphere with a combustible gas indicator.
- (2) "Business day" means any day other than Saturday, Sunday, or a legal local, state, or federal holiday.

(3) "Commission" means the utilities and transportation commission.

(4) "Damage" includes the substantial weakening of structural or lateral support of an underground facility, penetration, impairment, or destruction of any underground protective coating, housing, or other protective device, or the severance, partial or complete, of any underground facility to the extent that the project owner or the affected facility operator determines that repairs are required.

(5) "Emergency" means any condition constituting a clear and present danger to life or property, or a customer service outage.

(6) "End user" means any utility customer or consumer of utility services or commodities provided by a facility operator.

(7) "Equipment operator" means an individual conducting an excavation.

(8) "Excavation" and "excavate" means any operation, including the installation of signs, in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means.

(9) "Excavation confirmation code" means a code or ticket issued by a one-number locator service for the site where an excavation is planned. The code must be accompanied by the date and time it was issued.

(10) "Excavator" means any person who engages directly in excavation.

(11) "Facility operator" means any person who owns an underground facility or is in the business of supplying any utility service or commodity for compensation. "Facility operator" does not include a utility customer who owns a service lateral that terminates at a facility operator's main utility line.

(12) "Gas" means natural gas, flammable gas, or toxic or corrosive gas.

(13) "Hazardous liquid" means:

(a) Petroleum, petroleum products, or anhydrous ammonia as those terms are defined in 49 C.F.R. Part 195 as in effect on March 1, 1998;

(b) Carbon dioxide; and

(c) Other substances designated as hazardous by the secretary of transportation and incorporated by reference by the commission by rule.

(14) "Identified but unlocatable underground facility" means an underground facility which has been identified but cannot be located with reasonable accuracy.

(15) "Large project" means a project that exceeds seven hundred linear feet.

(16) "Locatable underground facility" means an underground facility which can be marked with reasonable accuracy.

(17) "Marking" means the use of stakes, paint, or other clearly identifiable materials to show the field location of underground facilities, in accordance with the current color code standard of the American public works association. Markings shall include identification letters indicating the specific type of the underground facility.

(18) "Notice" or "notify" means contact in person or by telephone or other electronic method, and, with respect to contact of a one-number locator service, also results in the receipt of a valid excavation confirmation code.

(19) "One-number locator service" means a service through which a person can notify facility operators and request marking of underground facilities.

(20) "Person" means an individual, partnership, franchise holder, association, corporation, the state, a city, a county, a town, or any subdivision or instrumentality of the state, including any unit of local

government, and its employees, agents, or legal representatives.

(21) "Pipeline" or "pipeline system" means all or parts of a pipeline facility through which hazardous liquid or gas moves in transportation, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping or compressor units, metering and delivery stations and fabricated assemblies therein, and breakout tanks. "Pipeline" or "pipeline system" does not include process or transfer pipelines.

(22) "Pipeline company" means a person or entity constructing, owning, or operating a pipeline for transporting hazardous liquid or gas. "Pipeline company" does not include:

(a) Distribution systems owned and operated under franchise for the sale, delivery, or distribution of natural gas at retail; or

(b) Excavation contractors or other contractors that contract with a pipeline company.

(23) "Reasonable accuracy" means location within twenty-four inches of the outside dimensions of both sides of an underground facility.

(24) "Service lateral" means an underground water, storm water, or sewer facility located in a public right-of-way or utility easement that connects an end user's building or property to a facility operator's underground facility, and terminates beyond the public right-of-way or utility easement.

(25) "Transfer pipeline" means a buried or aboveground pipeline used to carry hazardous liquid between a tank vessel or transmission pipeline and the first valve inside secondary containment at a facility, provided that any discharge on the facility side of the first valve will not directly impact waters of the state. "Transfer pipeline" includes valves and other appurtenances connected to the pipeline, pumping units, and fabricated assemblies associated with pumping units. "Transfer pipeline" does not include process pipelines, pipelines carrying ballast or bilge water, transmission pipelines, or tank vessel or storage tanks.

(26) "Transmission pipeline" means a pipeline that transports hazardous liquid or gas within a storage field, or transports hazardous liquid or gas from an interstate pipeline or storage facility to a distribution main or a large volume hazardous liquid or gas user, or operates at a hoop stress of twenty percent or more of the specified minimum yield strength.

(27) "Underground facility" means any item buried or placed below ground for use in connection with the storage or conveyance of water, sewage, electronic, telephonic or telegraphic communications, cablevision, electric energy, petroleum products, gas, gaseous vapors, hazardous liquids, or other substances and including but not limited to pipes, sewers, conduits, cables, valves, lines, wires, manholes, attachments, and those parts of poles or anchors that are below ground. This definition does not include pipelines as defined in subsection (21) of this section, but does include distribution systems owned and operated under franchise for the sale, delivery, or distribution of natural gas at retail.

(28) "Unlocatable underground facility" means, subject to the provisions of RCW [19.122.030](#), an underground facility that cannot be marked with reasonable accuracy using available information to designate the location of an underground facility. "Unlocatable underground facility" includes, but is not limited to, service laterals, storm drains, and nonconductive and nonmetallic underground facilities that do not contain trace wires.

(29) "Utility easement" means a right held by a facility operator to install, maintain, and access an underground facility or pipeline.

[2011 c 263 § 2; 2007 c 142 § 9; 2005 c 448 § 1; 2000 c 191 § 15; 1984 c 144 § 2.]

Notes: Reviser's note: The definitions in this section have been alphabetized pursuant to RCW [1.08.015](#)(2)(k).

Report -- Effective date -- 2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.027

One-number locator services — Single statewide toll-free telephone number. (*Effective January 1, 2013.*)

- (1) The commission must establish a single statewide toll-free telephone number to be used for referring excavators to the appropriate one-number locator service.
- (2) The commission, in consultation with the Washington utilities coordinating council, must establish minimum standards and best management practices for one-number locator services.
- (3) One-number locator services must be operated by nongovernmental agencies.
- (4) All facility operators within a one-number locator service area must subscribe to the service.
- (5) Failure to subscribe to a one-number locator service constitutes willful intent to avoid compliance with this chapter.

[2011 c 263 § 3; 2005 c 448 § 2; 2000 c 191 § 16.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.030

Excavator and facility operator duties before excavation. (*Effective January 1, 2013.*)

(1)(a) Unless exempted under RCW [19.122.031](#), before commencing any excavation, an excavator must mark the boundary of the excavation area with white paint applied on the ground of the worksite, then provide notice of the scheduled commencement of excavation to all facility operators through a one-number locator service.

(b) If boundary marking required by (a) of this subsection is infeasible, an excavator must communicate directly with affected facility operators to ensure that the boundary of the excavation area is accurately identified.

(2) An excavator must provide the notice required by subsection (1) of this section to a one-number

locator service not less than two business days and not more than ten business days before the scheduled date for commencement of excavation, unless otherwise agreed by the excavator and facility operators. If an excavator intends to work at multiple sites or at a large project, the excavator must take reasonable steps to confer with facility operators to enable them to locate underground facilities reasonably in advance of the start of excavation for each phase of the work.

(3) Upon receipt of the notice provided for in subsection (1) of this section, a facility operator must, with respect to:

(a) The facility operator's locatable underground facilities, provide the excavator with reasonably accurate information by marking their location;

(b) The facility operator's unlocatable or identified but unlocatable underground facilities, provide the excavator with available information as to their location; and

(c) Service laterals, designate their presence or location, if the service laterals:

(i) Connect end users to the facility operator's main utility line; and

(ii) Are within a public right-of-way or utility easement and the boundary of the excavation area identified under subsection (1) of this section.

(4)(a) A facility operator must provide information to an excavator pursuant to subsection (3) of this section no later than two business days after the receipt of the notice provided for in subsection (1) of this section or before excavation commences, at the option of the facility operator, unless otherwise agreed by the parties.

(b) A facility operator complying with subsection (3)(b) and (c) of this section may do so in a manner that includes any of the following methods:

(i) Placing within a proposed excavation area a triangular mark at the main utility line pointing at the building, structure, or property in question, indicating the presence of an unlocatable or identified but unlocatable underground facility, including a service lateral;

(ii) Arranging to meet an excavator at a worksite to provide available information about the location of service laterals; or

(iii) Providing copies of the best reasonably available records by electronic message, mail, facsimile, or other delivery method.

(c) A facility operator's good faith attempt to comply with subsection (3)(b) and (c) of this section:

(i) Constitutes full compliance with the requirements of this section, and no person may be found liable for damages or injuries that may result from such compliance, apart from liability for arranging for repairs or relocation as provided in RCW [19.122.050\(2\)](#); and

(ii) Does not constitute any assertion of ownership or operation of a service lateral by the facility operator.

(d) An end user is responsible for determining the location of a service lateral on their property or a service lateral that they own. Nothing in this section may be interpreted to require an end user to subscribe to a one-number locator service or to locate a service lateral within a right-of-way or utility easement.

(5) An excavator must not excavate until all known facility operators have marked or provided information regarding underground facilities as provided in this section.

(6)(a) Once marked by a facility operator, an excavator is responsible for maintaining the accuracy of

the facility operator's markings of underground facilities for the lesser of:

(i) Forty-five calendar days from the date that the excavator provided notice to a one-number locator service pursuant to subsection (1) of this section; or

(ii) The duration of the project.

(b) An excavator that makes repeated requests for location of underground facilities due to its failure to maintain the accuracy of a facility operator's markings as required by this subsection (6) may be charged by the facility operator for services provided.

(c) A facility operator's markings of underground utilities expire forty-five calendar days from the date that the excavator provided notice to a one-number locator service pursuant to subsection (1) of this section. For excavation occurring after that date, an excavator must provide additional notice to a one-number locator service pursuant to subsection (1) of this section.

(7) An excavator has the right to receive reasonable compensation from a facility operator for costs incurred by the excavator if the facility operator does not locate its underground facilities in accordance with the requirements specified in this section.

(8) A facility operator has the right to receive reasonable compensation from an excavator for costs incurred by the facility operator if the excavator does not comply with the requirements specified in this section.

(9) A facility operator is not required to comply with subsection (4) of this section with respect to service laterals conveying only water if their presence can be determined from other visible water facilities, such as water meters, water valve covers, and junction boxes in or adjacent to the boundary of an excavation area identified under subsection (1) of this section.

(10) If an excavator discovers underground facilities that are not identified, the excavator must cease excavating in the vicinity of the underground facilities and immediately notify the facility operator or a one-number locator service. If an excavator discovers identified but unlocatable underground facilities, the excavator must notify the facility operator. Upon notification by a one-number locator service or an excavator, a facility operator must allow for location of the uncovered portion of an underground facility identified by the excavator, and may accept location information from the excavator for marking of the underground facility.

[2011 c 263 § 4; 2000 c 191 § 17; 1988 c 99 § 1; 1984 c 144 § 3.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

Damages to facilities on state highways: RCW [47.44.150](#).

19.122.031

Exempted activities. (*Effective January 1, 2013.*)

- (1) The requirements specified in RCW [19.122.030](#) do not apply to any of the following activities:
- (a) An emergency excavation, but only with respect to boundary marking and notice requirements specified in RCW [19.122.030](#) (1) and (2), and provided that the excavator provides notice to a one-number locator service at the earliest practicable opportunity;
 - (b) An excavation of less than twelve inches in depth on private noncommercial property, if the excavation is performed by the person or an employee of the person who owns or occupies the property on which the excavation is being performed;
 - (c) The tilling of soil for agricultural purposes less than:
 - (i) Twelve inches in depth within a utility easement; and
 - (ii) Twenty inches in depth outside of a utility easement;
 - (d) The replacement of an official traffic sign installed prior to January 1, 2013, no deeper than the depth at which it was installed;
 - (e) Road maintenance activities involving excavation less than six inches in depth below the original road grade and ditch maintenance activities involving excavation less than six inches in depth below the original ditch flowline, or alteration of the original ditch horizontal alignment;
 - (f) The creation of bar holes less than twelve inches in depth, or of any depth during emergency leak investigations, provided that the excavator takes reasonable measures to eliminate electrical arc hazards; or
 - (g) Construction, operation, or maintenance activities by an irrigation district on rights-of-way, easements, or facilities owned by the federal bureau of reclamation in federal reclamation projects.
- (2) Any activity described in subsection (1) of this section is subject to the requirements specified in RCW [19.122.050](#).

[2011 c 263 § 5.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.033

Notice of excavation to pipeline companies. (*Effective January 1, 2013.*)

- (1) Before commencing any excavation, an excavator must notify pipeline companies of the scheduled commencement of excavation through a one-number locator service in the same manner as required for notifying facility operators of excavation under RCW [19.122.030](#). Pipeline companies have the same rights and responsibilities as facility operators under RCW [19.122.030](#) regarding excavation. Excavators have the same rights and responsibilities under this section as they have under RCW [19.122.030](#).
- (2) Project owners, excavators, and pipeline companies have the same rights and responsibilities relating to excavation near pipelines that they have for excavation near underground facilities as provided in RCW [19.122.040](#).
- (3) The state, and any subdivision or instrumentality of the state, including any unit of local government, must, when planning construction or excavation within one hundred feet, or greater distance if required by local ordinance, of a right-of-way or utility easement containing a transmission

pipeline, notify the pipeline company of the scheduled commencement of work.

(4) Any unit of local government that issues permits under codes adopted pursuant to chapter [19.27](#) RCW must, when permitting construction or excavation within one hundred feet, or greater distance if required by local ordinance, of a right-of-way or utility easement containing a transmission pipeline:

(a) Notify the pipeline company of the permitted activity when it issues the permit; or

(b) Require, as a condition of issuing the permit, that the applicant consult with the pipeline company.

(5) The commission must assist local governments in obtaining hazardous liquid and gas pipeline location information and maps, as provided in RCW [81.88.080](#).

[2011 c 263 § 6; 2000 c 191 § 18.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.035

Pipeline company duties after notice of excavation — Examination — Information of damage — Notification of local first responders. (*Effective January 1, 2013.*)

(1) After a pipeline company has been notified by an excavator pursuant to RCW [19.122.033](#) that excavation will uncover any portion of the pipeline company's pipeline, the pipeline company shall ensure that the pipeline section in the vicinity of the excavation is examined for damage prior to being reburied.

(2) Immediately upon receiving information of third-party damage to a hazardous liquid pipeline, the company that operates the pipeline shall terminate the flow of hazardous liquid in that pipeline until it has visually inspected the pipeline. After visual inspection, the pipeline company shall determine whether the damaged pipeline section should be replaced or repaired, or whether it is safe to resume pipeline operation. Immediately upon receiving information of third-party damage to a gas pipeline, the pipeline company shall conduct a visual inspection of the pipeline to determine whether the flow of gas through that pipeline should be terminated, and whether the damaged pipeline should be replaced or repaired. A record of the pipeline company's inspection report and test results shall be provided to the commission, consistent with reporting requirements under 49 C.F.R. Parts 191 and 195, Subpart B.

(3) Pipeline companies shall immediately notify local first responders and the department of ecology of any reportable release of a hazardous liquid from a pipeline. Pipeline companies shall immediately notify local first responders and the commission of any blowing gas leak from a gas pipeline that has ignited or represents a probable hazard to persons or property. Pipeline companies shall take all appropriate steps to ensure the public safety in the event of a release of hazardous liquid or gas under

this subsection.

(4) No damaged pipeline may be buried until it is repaired or relocated. The pipeline company shall arrange for repairs or relocation of a damaged pipeline as soon as is practical or may permit the excavator to do necessary repairs or relocation at a mutually acceptable price.

[2011 c 263 § 7; 2000 c 191 § 19.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.040

Underground facilities identified in bid or contract — Excavator's duty of reasonable care — Liability for damages — Attorneys' fees. (*Effective January 1, 2013.*)

(1) Project owners shall indicate in bid or contract documents the existence of underground facilities known by the project owner to be located within the proposed area of excavation. The following are deemed to be changed or differing site conditions:

- (a) An underground facility not identified as required by this chapter or other provision of law; or
- (b) An underground facility not located, as required by this chapter or other provision of law, by the project owner, facility operator, or excavator if the project owner or excavator is also a facility operator.

(2) An excavator shall use reasonable care to avoid damaging underground facilities. An excavator must:

- (a) Determine the precise location of underground facilities which have been marked;
- (b) Plan the excavation to avoid damage to or minimize interference with underground facilities in and near the excavation area; and
- (c) Provide such support for underground facilities in and near the construction area, including during backfill operations, as may be reasonably necessary for the protection of such facilities.

(3) If an underground facility is damaged and such damage is the consequence of the failure to fulfill an obligation under this chapter, the party failing to perform that obligation is liable for any damages. Any clause in an excavation contract which attempts to allocate liability, or requires indemnification to shift the economic consequences of liability, that differs from the provisions of this chapter is against public policy and unenforceable. Nothing in this chapter prevents the parties to an excavation contract from contracting with respect to the allocation of risk for changed or differing site conditions.

(4) In any action brought under this section, the prevailing party is entitled to reasonable attorneys' fees.

[2011 c 263 § 8; 1984 c 144 § 4.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.045

Exemption from liability.

Excavators who comply with the requirements of this chapter are not liable for any damages arising from contact or damage to an underground fiber optics facility other than the cost to repair the facility.

[1988 c 99 § 2.]

19.122.050

Damage to underground facility — Notification by excavator — Repairs or relocation of facility.
(Effective January 1, 2013.)

(1) An excavator who, in the course of excavation, contacts or damages an underground facility shall notify the facility operator and a one-number locator service, and report the damage as required under RCW [19.122.053](#). If the damage causes an emergency condition, the excavator causing the damage shall also alert the appropriate local public safety agencies and take all appropriate steps to ensure the public safety. No damaged underground facility may be buried until it is repaired or relocated.

(2) A facility operator notified in accordance with subsection (1) of this section shall arrange for repairs or relocation as soon as is practical, or permit the excavator to do necessary repairs or relocation at a mutually acceptable price.

[2011 c 263 § 9; 1984 c 144 § 5.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.053

Report of damage to underground facility. *(Effective January 1, 2013.)*

(1) Facility operators and excavators who observe or cause damage to an underground facility must report the damage event to the commission.

(2) A nonpipeline facility operator conducting an excavation, or a subcontractor conducting an excavation on the facility operator's behalf, that strikes the facility operator's own underground facility is not required to report that damage event to the commission.

(3) Reports must be made to the commission's office of pipeline safety within forty-five days of the damage event, or sooner if required by law, using the commission's virtual private damage information reporting tool (DIRT) report form, or other similar form if it reports:

(a) The name of the person submitting the report and whether the person is an excavator, a representative of a one-number locator service, or a facility operator;

(b) The date and time of the damage event;

(c) The address where the damage event occurred;

(d) The type of right-of-way, where the damage event occurred, including but not limited to city

street, state highway, or utility easement;

(e) The type of underground facility damaged, including but not limited to pipes, transmission pipelines, distribution lines, sewers, conduits, cables, valves, lines, wires, manholes, attachments, or parts of poles or anchors below ground;

(f) The type of utility service or commodity the underground facility stores or conveys, including but not limited to electronic, telephonic or telegraphic communications, water, sewage, cablevision, electric energy, petroleum products, gas, gaseous vapors, hazardous liquids, or other substances;

(g) The type of excavator involved, including but not limited to contractors or facility operators;

(h) The excavation equipment used, including but not limited to augers, bulldozers, backhoes, or hand tools;

(i) The type of excavation being performed, including but not limited to drainage, grading, or landscaping;

(j) Whether a one-number locator service was notified before excavation commenced, and, if so, the excavation confirmation code provided by a one-number locator service;

(k) If applicable:

(i) The person who located the underground facility, and their employer;

(ii) Whether underground facility marks were visible in the proposed excavation area before excavation commenced;

(iii) Whether underground facilities were marked correctly;

(l) Whether an excavator experienced interruption of work as a result of the damage event;

(m) A description of the damage; and

(n) Whether the damage caused an interruption of underground facility service.

(4) The commission must use reported data to evaluate the effectiveness of the damage prevention program.

[2011 c 263 § 20.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.055

Failure to notify one-number locator service — Civil penalty, if damages. (*Effective January 1, 2013.*)

(1)(a) Any excavator who fails to notify a one-number locator service and causes damage to a hazardous liquid or gas underground facility is subject to a civil penalty of not more than ten thousand dollars for each violation.

(b) The civil penalty in this subsection may also be imposed on any excavator who violates RCW [19.122.090](#).

(2) All civil penalties recovered under this section must be deposited into the damage prevention account created in RCW [19.122.160](#).

[2011 c 263 § 10; 2005 c 448 § 3; 2001 c 238 § 5; 2000 c 191 § 24.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent--Finding--Effective date -- 2001 c 238: See notes following RCW [80.24.060](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.070

Civil penalties — Treble damages — Existing remedies not affected. (*Effective January 1, 2013.*)

(1) Any person who violates any provision of this chapter not amounting to a violation of RCW [19.122.055](#) is subject to a civil penalty of not more than one thousand dollars for an initial violation, and not more than five thousand dollars for each subsequent violation within a three-year period. All penalties recovered in such actions must be deposited in the damage prevention account created in RCW [19.122.160](#).

(2) Any excavator who willfully or maliciously damages a marked underground facility is liable for treble the costs incurred in repairing or relocating the facility. In those cases in which an excavator fails to notify known facility operators or a one-number locator service, any damage to the underground facility is deemed willful and malicious and is subject to treble damages for costs incurred in repairing or relocating the facility.

(3) This chapter does not affect any civil remedies for personal injury or for property damage, including that to underground facilities, nor does this chapter create any new civil remedies for such damage.

[2011 c 263 § 11; 2005 c 448 § 4; 1984 c 144 § 7.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Damages to facilities on state highways: RCW [47.44.150](#).

19.122.075

Damage or removal of permanent marking — Civil penalty. (*Effective January 1, 2013.*)

Any person who willfully damages or removes a permanent marking used to identify an underground facility or pipeline, or a temporary marking prior to its intended use, is subject to a civil penalty of not more than one thousand dollars for an initial violation, and not more than five thousand dollars for each subsequent violation within a three-year period.

[2011 c 263 § 14; 2000 c 191 § 23.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

Intent -- Findings -- Conflict with federal requirements -- Short title -- Effective date -- 2000 c 191: See RCW [81.88.005](#) and [81.88.900](#) through [81.88.902](#).

19.122.080

Waiver of notification and marking requirements. (Effective January 1, 2013.)

The notification and marking provisions of this chapter may be waived for one or more designated persons by a facility operator with respect to all or part of that facility operator's underground facilities.

[2011 c 263 § 15; 1984 c 144 § 8.]

Notes: Report -- Effective date -- 2011 c 263: See notes following RCW [19.122.010](#).

19.122.090

Excavation without a valid excavation confirmation code — Penalty.

Any excavator who excavates, without a valid excavation confirmation code when required under this chapter, within thirty-five feet of a transmission pipeline is guilty of a misdemeanor.

[2005 c 448 § 5.]

19.122.100

Violation of RCW 19.122.090 — Affirmative defense. (Effective January 1, 2013.)

If charged with a violation of RCW [19.122.090](#), an equipment operator is deemed to have established an affirmative defense to such charges if:

- (1) The equipment operator was provided a valid excavation confirmation code;
- (2) The excavation was performed in an emergency situation;
- (3) The equipment operator was provided a false confirmation code by an identifiable third party; or
- (4) Notice of the excavation was not required under this chapter.

[2011 c 263 § 16; 2005 c 448 § 6.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.110

False excavation confirmation code — Penalty. (Effective January 1, 2013.)

Any person who intentionally provides an equipment operator with a false excavation confirmation code is guilty of a misdemeanor.

[2011 c 263 § 17; 2005 c 448 § 7.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.120

One-number locator service to provide excavation confirmation code.

Upon receipt, during normal business hours, of notice of an intended excavation, the one-number locator service shall provide an excavation confirmation code.

[2005 c 448 § 8.]

19.122.130

Commission to contract with nonprofit entity — Safety committee — Review of violations of chapter. *(Effective January 1, 2013, until December 31, 2020.)*

***** CHANGE IN 2012 *** (SEE [2223-S.SL](#)) *****

(1) The commission must contract with a statewide, nonprofit entity whose purpose is to reduce damages to underground and above ground facilities, promote safe excavation practices, and review complaints of alleged violations of this chapter. The contract must not obligate funding by the commission for activities performed by the nonprofit entity or the safety committee under this section, and is therefore exempt under RCW [39.29.040](#)(1) from the requirements of chapter [39.29](#) RCW.

(2) The contracting entity must create a safety committee to:

(a) Advise the commission and other state agencies, the legislature, and local governments on best practices and training to prevent damage to underground utilities, and policies to enhance worker and public safety; and

(b) Review complaints alleging violations of this chapter involving practices related to underground facilities.

(3) The safety committee will consist of thirteen members, who must be nominated by represented groups and appointed by the contracting entity to staggered three-year terms. The safety committee must include representatives of:

(a) Local governments;

(b) A natural gas utility subject to regulation under Titles [80](#) and [81](#) RCW;

(c) Contractors;

(d) Excavators;

- (e) An electric utility subject to regulation under Title [80](#) RCW;
- (f) A consumer-owned utility, as defined in RCW [19.27A.140](#);
- (g) A pipeline company;
- (h) The insurance industry;
- (i) The commission; and
- (j) A telecommunications company.

(4) The safety committee must meet at least once every three months.

(5) The safety committee may review complaints of alleged violations of this chapter involving practices related to underground facilities. Any person may bring a complaint to the safety committee regarding an alleged violation.

(6) To review complaints of alleged violations, the safety committee must appoint at least three and not more than five members as a review committee. The review committee must include the same number of members representing excavators and facility operators. One member representing facility operators must also be a representative of a pipeline company or a natural gas utility subject to regulation under Titles [80](#) and [81](#) RCW. The review committee must also include a member representing the insurance industry.

(7) Before reviewing a complaint alleging a violation of this chapter, the review committee must notify the person making the complaint and the alleged violator of its review and of the opportunity to participate.

(8) The safety committee may provide written notification to the commission, with supporting documentation, that a person has likely committed a violation of this chapter, and recommend remedial action that may include a penalty amount, training, or education to improve public safety, or some combination thereof.

(9) This section expires December 31, 2020.

[2011 c 263 § 18.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.140

Commission authority — Receipt of notification of violation of chapter — Referral to attorney general.
(*Effective January 1, 2013, until December 31, 2020.*)

(1) The commission may enforce the civil penalties authorized in RCW [19.122.070](#) or [19.122.075](#) when it receives written notification from the safety committee created under RCW [19.122.130](#) indicating that a violation of this chapter has likely been committed by a person subject to regulation by the commission, or involving the underground facilities of such a person.

(2) If the commission receives written notification from the safety committee pursuant to RCW [19.122.130](#) that a violation of this chapter has likely been committed by a person who is not subject to regulation by the commission, and in which the underground facility involved is also not subject to regulation by the commission, the commission may refer the matter to the attorney general

for enforcement of a civil penalty under RCW [19.122.070](#) or [19.122.075](#). The commission must provide funding for such enforcement. However, any costs and fees recovered by the attorney general pursuant to subsection (3) of this section must be deposited by the commission in the fund that paid for such enforcement.

(3) In a matter referred to it by the commission pursuant to subsection (2) of this section, the attorney general may bring an action to enforce the penalties authorized in RCW [19.122.070](#) or [19.122.075](#). In such an action, the court may award the state all costs of investigation and trial, including a reasonable attorneys' fee fixed by the court.

(4) This section expires December 31, 2020.

[2011 c 263 § 19.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.150

Commission authority — Violations of chapter — Imposition of penalties. (*Effective January 1, 2013, until December 31, 2020.*)

(1) The commission may investigate and enforce violations of RCW [19.122.055](#), [19.122.075](#), and [19.122.090](#) relating to pipeline facilities without initial referral to the safety committee created under RCW [19.122.130](#).

(2) If the commission's investigation of notifications received pursuant to RCW [19.122.140](#) or subsection (1) of this section substantiates violations of this chapter, the commission may impose penalties authorized by RCW [19.122.055](#), [19.122.070](#), [19.122.075](#), and [19.122.090](#), and require training, education, or any combination thereof.

(3) With respect to referrals from the safety committee, the commission must consider any recommendation by the committee regarding enforcement and remedial actions involving an alleged violator.

(4) In an action to impose a penalty initiated by the commission under subsection (1) or (2) of this section, the penalty is due and payable when the person incurring the penalty receives a notice of penalty in writing from the commission describing the violation and advising the person that the penalty is due. The person incurring the penalty has fifteen days from the date the person receives the notice of penalty to file with the commission a request for mitigation or a request for a hearing. The commission must include this time limit information in the notice of penalty. After receiving a timely request for mitigation or hearing, the commission must suspend collection of the penalty until it issues a final order concerning the penalty or mitigation of that penalty. A person aggrieved by the commission's final order may seek judicial review, subject to provisions of the administrative procedure act, chapter [34.05](#) RCW.

(5) If a penalty imposed by the commission is not paid, the attorney general may, on the commission's behalf, file a civil action in superior court to collect the penalty.

(6) This section expires December 31, 2020.

[2011 c 263 § 21.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.160

Damage prevention account. (*Effective January 1, 2013.*)

The damage prevention account is created in the custody of the state treasurer. All receipts from moneys directed by law or the commission to be deposited to the account must be deposited in the account. Expenditures from the account may be used only for purposes designated in RCW [19.122.170](#). Only the commission or the commission's designee may authorize expenditures from the account. The account is subject to allotment procedures under chapter [43.88](#) RCW.

[2011 c 263 § 12.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.170

Damage prevention account — Use of funds. (*Effective January 1, 2013.*)

The commission may use money deposited in the damage prevention account created in RCW [19.122.160](#) to:

- (1) Develop and disseminate educational programming designed to improve worker and public safety relating to excavation and underground facilities; and
- (2) Provide grants to persons who have developed educational programming that the commission and the safety committee created pursuant to RCW [19.122.130](#) deem appropriate for improving worker and public safety relating to excavation and underground facilities.

[2011 c 263 § 13.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.180

Damage prevention account — Deposit of penalties. (*Effective January 1, 2013.*)

All penalties collected pursuant to RCW [19.122.150](#) must be deposited in the damage prevention account created in RCW [19.122.160](#).

[2011 c 263 § 22.]

Notes: Report -- Effective date--2011 c 263: See notes following RCW [19.122.010](#).

19.122.900

Severability — 1984 c 144.

If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

[1984 c 144 § 9.]

19.122.901

Short title — 2011 c 263. (*Effective January 1, 2013.*)

This act may be known and cited as the underground utility damage prevention act.

[2011 c 263 § 25.]

Notes: Report -- Effective date--**2011 c 263:** See notes following RCW [19.122.010](#).

APWA (AMERICAN PUBLIC WORKS ASSOCIATION) COLOR CODE

Color-coded surface marks indicate the locations of buried utility lines. Know how to identify buried lines by their color.

Red = Electric power lines, cable

Yellow = Gas, Oil, Petroleum

Orange = Telephone, Cable TV

Blue = Drinking Water

Green = Sewer

Purple = Non-Drinking Water

Pink = Survey Marks

White = Excavator Marks