



Land Use Application

Application Type: Select One

- Administrative Modification
 Conditional Use Permit
 Site Plan Entitlement
 Temporary
 Short Plat (1-9 Lots)
 Subdivision (10+ Lots)
 Shoreline Exemption
 Shoreline

Process? Select One Any land use permit subject to resubmittal fees is eligible for the PREP process.

- Formal
 PREP

Project Information

Project Name: PSE Sammamish - Juanita Transmission Line Project Acres: 10.7 Zoning: BP/MP/UR

Parcel Number(s): 0325059002 (see site plan map book for full route) Site Address: 9221 Willows Road NE

Project Description:

Construct new 115 kV transmission line from Sammamish Substation to the city limits north of Sammamish Valley Park. To accommodate the new transmission line construction, improvements include: 29 new and 11 replacement poles, including 6 replacement and one new pole south of Sammamish Substation; improvements within the Sammamish Substation yard; and widening of the existing rail ballast east of Willows Road NE to create a construction and maintenance access road including replacement of 5 culverts under the access road (3 fish passage and 2 stormwater).

Existing Uses: Utility and vacant

Res. Comm. Office Mfg.
 Existing Dwelling Units (#): N/A

Existing Building (Sq. ft.): N/A

Existing Lots (#): N/A

Proposed Uses: Utility

Res. Comm. Office Mfg.
 Proposed Dwelling Units (#): N/A

Proposed Building (sq. ft.): N/A

Proposed Lots (#): N/A

Demolition? No Yes. If yes, size in sq. ft. N/A; or number of dwelling units N/A

Project Contact Information

Owner Contact Information:

Name: Puget Sound Energy (easement holder)
 Address: PO Box 97034, EST 4W, Bellevue WA 98009
 Phone: 425-462-3821
 Email: kerry.kriner@pse.com

Applicant/Project Manager Contact Information:

Name: Kerry Kriner, Senior Land Planner, PSE
 Address: PO Box 97034, EST 4W, Bellevue WA 98009
 Phone: 425-462-3821
 Email: kerry.kriner@pse.com

Authorized Signature: Kerry Kriner

Digitally signed by Kerry Kriner
DN: cn=Kerry Kriner, ou=PSE, email=kerry.kriner@pse.com,
c=US
Date: 2020.02.18 10:30:25 -0800

Date: 2/14/2020

Submittal Instructions

To start your application please visit the [Plan Review Online](#) page. Once you have applied staff is notified of the request and will follow-up with you regarding the next steps within 24 to 48 hours. Supporting documentation and plans can be uploaded through the [Redmond ePermitting Service \(REPS\)](#), once your application has been accepted by staff. Most applications are subject to a 30-day initial review period. If more information is required, subsequent 14-day review periods will be opened.

Please contact the City of Redmond Planning Department at PlannerOnCall@redmond.gov for any questions or concerns. All submittals shall follow the [Submittal Standards](#). Any submittal item waived at intake may be required by the Administrator at any point during the review process. The submittal checklist is not an exhaustive list of submittal requirements and may be modified in cases where additional information is required to complete the review of an application.

Additional Project Contacts

Billing Contact Information:

Name: Kerry Kriner, Puget Sound Energy
 Address: PO Box 97034, EST 4W, Bellevue WA 98009
 Phone: 425-462-3821
 Email: kerry.kriner@pse.com

E-track Portal Intake Contact Information:

Name: Kerry Kriner, Puget Sound Energy
 Address: PO Box 97034, EST 4W, Bellevue WA 98009
 Phone: 425-462-3821
 Email: kerry.kriner@pse.com

Architect Contact Information:

Name: N/A
 Address: _____
 Phone: _____
 Email: _____

Landscape Architect Contact Information:

Name: N/A
 Address: _____
 Phone: _____
 Email: _____

Environmental Consultant Contact Information:

Name: Kim Anderson, AECOM
 Address: 1111 3rd Avenue , Suite 1600 Seattle WA 98101
 Phone: 206-403-4211
 Email: kimberly.anderson@aecom.com

Arborist Contact Information:

Name: Stan Haralson, Puget Sound Energy
 Address: 1095 Lake Washington Blvd North, Renton WA 98056
 Phone: 253-234-6457
 Email: stan.haralson@pse.com

Civil Engineer Contact Information:

Name: Nico Vanderhorst, Otak
 Address: 11241 Willows Road NE, Suite 200 Redmond, WA 98052
 Phone: 425-739-4212
 Email: nico.vanderhorst@otak.com

Surveyor Contact Information:

Name: Adam LaPlant, David Evans and Associates
 Address: 14432 SE Eastgate Way, Suite 400 Bellevue WA 98007
 Phone: 425-519-6547
 Email: Aala@deainc.com

Other Contact Information:

Affiliation: N/A
 Name: _____
 Address: _____
 Phone: _____
 Email: _____

Other Contact Information:

Affiliation: N/A
 Name: _____
 Address: _____
 Phone: _____
 Email: _____

ATTACHMENT A

Plan Set			
Submittal Item	Item Description	Applicant	Staff Use Only
		Included?	Waived/Received/Missing
Building Elevations	Building elevation information is located within Article III of the Redmond Zoning Code.	<input checked="" type="checkbox"/>	
Composite Plan	Shall be prepared by a qualified professional and include composite site plan, civil engineering plan, composite utility plan and a composite landscape plan showing the entire site.	<input checked="" type="checkbox"/>	
Cover Sheet	Cover sheet standards are located within the Cover Sheet Standards Handout .	<input checked="" type="checkbox"/>	
Cross Section Plan	The cross section plan shall be consistent with Site Plan Standards .	<input checked="" type="checkbox"/>	
Drainage Plan	Drainage information is located within the Stormwater Technical Notebook .	<input checked="" type="checkbox"/>	
Fire Plan	Fire code standards are located within the Redmond Fire Code .	<input type="checkbox"/>	
Floor Plan	Plan for all floors at, above, and below grade.	<input type="checkbox"/>	
Grading Plan	Grading information is located within the Stormwater Technical Notebook .	<input checked="" type="checkbox"/>	
Irrigation Plan	Irrigation information is located within Article II of the Redmond Zoning Code. General information regarding backflow prevention is located within the Cross Connection Control Handout .	<input type="checkbox"/>	
Landscape Plan	Landscaping information is located within Article I , Article II , and Article III of the Redmond Zoning Code. Additional information regarding planting types is located within the Landscaping Handout .	<input type="checkbox"/>	
Lighting Plan	Lighting information is located within Article II of the Redmond Zoning Code. Additional information is located within the City of Redmond Illumination Design Manual .	<input type="checkbox"/>	
Mitigation Plan	Critical area mitigation information is located within Appendix 1 of the Redmond Zoning Code.	<input checked="" type="checkbox"/>	
Phasing Plan	Phasing information is located within Article V of the Redmond Zoning Code.	<input type="checkbox"/>	
Public Notice Site & Tree Preservation Plan	Public notice site and tree preservation plan information is located within the Public Notice Site & Tree Preservation Plan Handout . Additional information on public notice sign requirements is available in the Applications & Forms section of www.Redmond.gov .	<input checked="" type="checkbox"/>	
Roof Plan	Rooftop screening information is located within Article III of the Redmond Zoning Code.	<input type="checkbox"/>	
Screening Plan	Screening information is located within Article III of the Redmond Zoning Code.	<input type="checkbox"/>	
Sign Plan	Sign information is located within Article II of the Redmond Zoning Code		
Site Plan	Site Plan standards are located within the Site Plan Standards Handout . A sample site plan is available for reference.	<input checked="" type="checkbox"/>	

Transportation Plan	Transportation information is available within Article II of the Redmond Zoning Code. Additional information is located within Appendix II of the Redmond Zoning Code.	<input type="checkbox"/>
Tree Preservation Plan	Tree Preservation information is located within Article IV of the Redmond Zoning Code. Additional information regarding tree protection is located within the Tree Protection Handout .	<input checked="" type="checkbox"/>
Utility Plan	Utility information is located within the Water & Wastewater System Extensions Design Requirements Manual . Additional information is located within the Standard Specifications and Details Addendum .	<input type="checkbox"/>

Planning			
Submittal Item	Item Description	Applicant	Staff Use Only
		Included?	Waived/Received/Missing
ALTA Survey	Shall be prepared by a qualified professional surveyor licensed in the State of Washington, in accordance with the standards specified by the American Land Title Association (ALTA).	<input checked="" type="checkbox"/>	
Critical Areas Aquifer Recharge Report	Shall be prepared by a qualified professional hydrogeologist, geologist, or engineer, licensed in the State of Washington. Additional information is located within Appendix 1 of the Redmond Zoning Code.	<input type="checkbox"/>	
Critical Areas Report	Shall be prepared by a qualified professional. Additional information is located within Appendix 1 of the Redmond Zoning Code.	<input checked="" type="checkbox"/>	
Cultural Resources Report	Shall be prepared by a qualified professional archaeologist in compliance with the definition located within the Revised Code of Washington Section 27.53.030 .	<input checked="" type="checkbox"/>	
Decision Criteria Analysis & Response Applicant Memo	Shall be in compliance with decision criteria located within RZC 21.76.070 . Applicable to the following permits only: Alteration of Geologic Hazard, Conditional Use, Master Planned Development, Essential Public Facility, Temporary Use – Long Term.	<input checked="" type="checkbox"/>	
Extraordinary Notice	Only required for major land use actions . Additional information is located within Appendix 6 of the Redmond Zoning Code.	<input checked="" type="checkbox"/>	
GHG Emissions Worksheet	Shall be submitted for all applications. The worksheet is available in the Applications & Forms section of www.Redmond.gov .	<input type="checkbox"/>	
Joint Aquatic Resources Permit Application	Only required for shoreline and shoreline exemption applications. The form is available on the Applications & Forms section of www.Redmond.gov	<input type="checkbox"/>	
Land Use Application	Shall be completed in full. It is the applicant's responsibility to confirm that all submittal items are included and check the corresponding check box for each submittal item prior to submittal. The application is available in the Applications & Forms section of www.Redmond.gov .	<input checked="" type="checkbox"/>	
Memorandum of Understanding	Only required for applications that have selected the PREP Process. The memorandum is available in the Applications & Forms section of www.Redmond.gov .	<input checked="" type="checkbox"/>	
Neighborhood Meeting Notice	Only required for applications that require a neighborhood meeting per RZC 21.76.060.C . The template is available in the Applications & Forms section of www.Redmond.gov .	<input type="checkbox"/>	
Noise Analysis	Shall be prepared by a qualified professional noise consultant compliant with the definition located in Redmond Municipal Code 6.36 .	<input type="checkbox"/>	
Photographs	Shall be submitted for all applications. The photographs shall be of current site conditions and surrounding properties.	<input checked="" type="checkbox"/>	

ATTACHMENT A

Previously Approved Plan Set	Only required for applications that have received a previous approval.	<input type="checkbox"/>
Previously Approved Staff Report or Notice of Decision	Only required for applications that have received a previous approval.	<input type="checkbox"/>
Project Narrative	Shall be submitted for all applications.	<input checked="" type="checkbox"/>
SEPA Application Form	Shall be submitted for all applications. The form is available in the Applications & Forms section of www.Redmond.gov .	<input type="checkbox"/>
SEPA Checklist	Shall be submitted for all applications. The checklist is available in the Applications & Forms section of www.Redmond.gov .	<input type="checkbox"/>
Title Report or Plat Certificate	Shall be dated within 90 days of the submittal date.	<input type="checkbox"/>
Tree Health Assessment Report	Shall be prepared by a certified arborist in compliance with the definition located within Article VII of the Redmond Zoning Code.	<input checked="" type="checkbox"/>
Waiver Request Letter	Shall be submitted for any application that does not include all submittal requirements. Waiver request letters shall include a justification for the omission of all submittal items not included in a submittal.	<input checked="" type="checkbox"/>

Design Review Board

Design Review Board (DRB) meetings are held at 7:00 P.M. on the 1st and 3rd Thursday of each month. The purpose of the meetings is to review the designs of any land use projects subject to DRB approval under [RZC 21.76.020.E](#). The following DRB materials must be submitted at least 14 calendar days prior to the meeting in **one PDF document titled "Design Review Board Materials."** The applicant should anticipate three or more total Design Review Board meetings prior to any recommendation by the board.

Submittal Item	Item Description	Applicant Included?	Staff Use Only Waived/Received/Missing
Completed Design Standards Checklist	Shall be submitted for all applications subject to Design Review Board approval. The checklist is available in the Applications & Forms section of www.Redmond.gov .	<input type="checkbox"/>	
Design Concept Narrative	Shall be submitted for all applications subject to Design Review Board approval. The narrative shall be based on a well-defined concept which responds to the community goals and policies identified within RZC 21.58 through 21.62 .	<input type="checkbox"/>	
Photographs	Shall be submitted for all applications subject to Design Review Board approval. The photographs shall be of current site conditions and surrounding properties.	<input type="checkbox"/>	
Plan Set	Shall be submitted for all applications subject to Design Review Board approval. Shall include: (1) Building Elevations (Full Color, Existing and Proposed), (2) Cover Sheet, (3) Site Plan, (4) Floor Plan, (5) Landscape Plan (Within 100 feet of the proposed structure), (6) Lightning Plan (Including cut sheets and photometrics) (7) Parking Plan, and (8) Roof Plan.	<input type="checkbox"/>	
Renderings	Shall be submitted for all applications subject to Design Review Board approval. Shall include: Color renderings of the proposed building in perspective from public rights-of-way, public trails, other public spaces, and neighboring structures. Shall identify proposed materials and colors on the color renderings.	<input type="checkbox"/>	
Special Design Requirements Memo	Only required for applications subject to special design requirements. Shall outline applicable special design requirements for specific districts, neighborhoods or uses and detail how the proposal meets these additional requirements.	<input type="checkbox"/>	
Material and Color Board	Shall be prepared for all applications subject to Design Review Board approval. May be brought to the Design Review Board meeting by the applicant rather than submitted with the Land Use Application. Shall be at least 24"x36" in size and include: (1) Exterior Finish Color Chips (minimum of 4"x4"), (2) Doors/Frames, (3) Roofing, (4) Rooftop Mechanical Equipment Screening Materials, (4) Trim, Flashing, etc., (5) Windows/Frames.	<input type="checkbox"/>	

Transportation			
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Submittal Item	Item Description	Applicant	Staff Use Only
		Included?	Waived/Received/Missing
Transportation Certificate of Concurrency	This form must be filled out	<input type="checkbox"/>	
Transportation Management Program		<input type="checkbox"/>	
Traffic Study Phase 1	<p>Submit Phase One Traffic Study to show the trip generation for the proposed project. If the project will generate 20 or more net PM peak hour new trips, then the Phase I traffic study will also include trip distribution and identify intersections that are affected by 20 or more PM peak hour new trips. Upon approval of the Phase I traffic study, a decision will be made if a Phase Two Traffic Study is required and if the project is subject to transportation concurrency review in accordance with section 21.52 of the Redmond zoning Code. If applicable, the applicant shall submit a request for a certificate of concurrency. (Requirements for Traffic Study). Please note that additional traffic related analyses such as but not limited to Entering/Stopping Sight</p> <p>In Phase One of the traffic analysis process, the traffic consultant is required to submit a technical memorandum summarizing the forecasted trip generation for the proposed project, along with justification for the methodology used in the forecast. This memorandum is then reviewed by the City and possibly by other affected public agencies. Upon approval of the trip generation estimate a determination will be made if the project is subject to transportation concurrency review in accordance with section 21.52 of the Redmond Zoning Code. If applicable, the applicant shall submit a request for a certificate of concurrency. The project applicant will be required to pay for the traffic modeling that is part of the concurrency evaluation.</p>	<input type="checkbox"/>	
Traffic Study Phase 2	If a Phase Two Traffic Study is required, submit the scope for review. The scoping will be primary based on the outline presented in Part 4 -Requirement for Traffic Study. Depending on the size and character of the proposed project, a formal scoping meeting with traffic consultants may be necessary to determine certain elements of the outline may be added to or reduced from to the scope. Once the scope of the traffic study is approved, traffic	<input type="checkbox"/>	

consultant will prepare and submit the Phase Two Traffic Study for review. (See Requirement for Traffic Study).

Phase Two of the transportation impact analysis process entails scoping of the analysis and preparation of the report by the transportation consultant. Once the traffic modeling is complete, the applicant's consultant should contact the City to set up a meeting to formally scope the transportation impact analysis. The analysis will be based primarily on the outline presented on the following pages. The specific list of intersections that will need to be reviewed in the transportation impact analysis will be developed from the trip assignment for the project. Depending upon the size and character of the proposed project, certain elements of this outline may be reduced in scope or eliminated. However, other items may also be added if special issues relating to transportation exist on the project.

Requirements for a Traffic Study

Information Provided by the City

Information which is part of the City of Redmond's traffic data base can be found on the City's web site at: <https://www.redmond.gov/863/Traffic-Counts>. Additional information required for the study will need to be acquired at the applicant's expense. The City will provide the following information if it is available:

- Current AWDT information (current shall mean within one year of the study date).
- Current PM peak hour counts (current shall mean within one year of the study date).

I. Introduction

Location of Project Site

- a. On local vicinity map.
- b. In relation to other major uses or landmarks.
- c. In relation to the adjacent street system.

Description of Proposed Project or Action

- a. Proposed land use and/or character of project.
- b. Size of project (square feet, number of units, number of employees, etc.)
- c. Number of parking spaces provided.
- d. Number and location of accesses to street system.
- e. Anticipated project phasing, if applicable.

Scope of Analysis/Organization of Report

- a. Specific issues analyzed.
 - b. General layout of transportation report.
 - c. Additional Information Required
-

II. Existing Conditions

Definition of Study Area for Analysis

- a. All signalized intersections impacted by 20 or more project-generated trips in the PM peak hour (total one-way trips through the intersection).
- b. Intersection of site accesses with street system.
- c. Non-signalized intersections as directed by the City.

Physical Characteristics of Study Area Street System

- a. Streets within study area.
 - i. Number of lanes (typical and at intersection).
 - ii. Street and shoulder widths.
 - iii. Posted speed limit.
 - iv. Approximate street grades.
 - v. Other geometric features.
- b. Non-motorized & transit facilities.
 - i. Location of sidewalks and trails within the area.
 - ii. Residential projects should identify walk routes to schools within 1-mile radius.
 - iii. Location of bike lanes within the area.
 - iv. Location of transit facilities within the area.
- c. Key intersections in study area.
 - i. Traffic Control (signals, signs, etc.).
 - ii. Turn restrictions.
 - iii. Lane alignment.
 - iv. Sight distance restrictions.

Operational Characteristics of Study Area Street System

- a. Traffic Volumes.
 - i. Average weekday traffic volumes (AWDT) on streets.
 - ii. PM peak hour turning movement volumes at key intersections.
 - iii. Schematic of street system showing AWDT and PM turning movements.
- b. Traffic Operations.
 - i. Level of service at all signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection.
 - ii. Level of service at all non-signalized intersections using Highway Capacity Manual (Special Report 209). Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement.
 - iii. Warrant analysis of non-signalized intersections as determined by the City.
 - iv. 85th percentile speed on streets.

Traffic Accident History within Study Area

- a. Three-year accident summary at all key intersections. Include accident diagrams.
 - i. Intersection accident rates shall be stated in million entering vehicles (MEV) = $(\text{annual \# of accidents} \times 106) / (\text{annual traffic entering})$
 - ii. Accident rates for street sections shall be stated in million vehicle miles travels (MVM) = $(\text{annual \# of accidents} \times 106) / (\text{annual vehicle-miles of traveled})$
 - iii. Vehicle-miles = $\text{AADT} \times 365 \text{ days/year} \times \text{section length}$
- b. Identification of problem areas and accident trends.

Parking Demand/Supply

- a. Existing location and supply.
 - b. Existing use characteristics (demand, turnover, etc.).
 - c. Additional Information Required
-

III. Forecasted Conditions

Forecast of Non-Project Traffic Volumes

- a. Forecast year.
 - i. Year of project build out.
- b. General traffic volume growth.
 - i. Annual percentage growth in traffic volumes (typically 2%).
- c. Specific traffic volume growth.
 - i. Trip generation from other planned developments.
 - ii. Diversion of traffic due to planned street improvements.

Forecast of Project Generated Traffic Volumes

- a. Trip Generation
 - i. ITE Trip Generation (7th Edition) or City approved methodology.
 - ii. Breakdown of new, pass-by and diverted trips.
- b. Mode Split
 - i. Proportion of trips via SOV, HOV, walking, bicycle, or other modes.
- c. Trip Assignment
 - i. Assignment of project trips to specific travel routes as per the short-term trip assignment provided by the City of Redmond traffic model (if used for concurrency testing).
 - ii. Show all streets and intersections impacted by 20 or more trips in the PM Peak Hour. Show other intersections as directed by the City.

Analysis of Forecast Year Traffic Operations With and Without Project

- a. Level of Service
 - i. All signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection.
 - ii. All non-signalized intersections using Highway Capacity Manual (Special Report 209). Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement.
 - iii. All project accesses to street system using applicable methodology outlined above.
 - iv. Schematic of street system showing AWDT and PM turning movements.
- b. Project Specific Mitigation: Use the following guidelines in determining whether mitigation is required at specific intersections:
 - i. If the intersection will operate at LOS-D or better in the forecasted year with the proposed project, no mitigation is required.
 - ii. If the intersection will operate at LOS-E/F in the forecasted year with the proposed project, and the addition of the project traffic decreases the LOS, mitigation may be required to alleviate project impacts. For signalized intersections, the consultant should then use the HCM 209 methodology to assess potential physical improvements to improve the operation of the impacted intersection. The City will review these potential improvements and may require their construction to mitigate project impacts.

Safety Condition within Study Area

- a. Analysis of safety problems identified in Existing Conditions section.
- b. Residential projects should coordinate with the City and Lake Washington School District to identify gaps or hazards for school walk routes.
- c. Options available to reduce or eliminate safety problems.
- d. Analysis of entering and stopping sight distance at project accesses and along street frontage(s).

Note: The design speed is used in any analysis shall be 10 mph over the posted speed limit unless otherwise approved by the City.

Parking Demand/Supply

- a. Proposed parking supply.
 - b. Analysis of expected parking demand.
 - i. ITE Parking Generation (2nd Edition) or City approved methodology.
-

- c. Comparison of supply/demand to City Code Requirements.
- d. Additional Information Required

IV. Summary of Analysis and Mitigation

Executive Summary of Transportation Impact Analysis
Summary of Impacts and Project Specific Mitigation

Stormwater		Applicant	Staff Use Only
Submittal Item	Item Description	Included?	Waived/Received/Missing
Easement Documents	The documentation for any easements that will be applicable to the project.	<input checked="" type="checkbox"/>	
Geotechnical Report	This report may be required depending upon the scope of the project and characteristics of the site. The measured infiltration rate, or the recommendation from a Geotechnical Engineer regarding full/limited infiltration of the site shall be included in the Geotechnical report. Please contact the Development Engineering Division at 425.556.2876 to verify if the report is required.	<input checked="" type="checkbox"/>	
LID Feasibility Analysis and Site Plan	Analysis for LID based on Appendix N of the Redmond Stormwater Technical Notebook should be completed as part of the initial project design. The LID Feasibility study is required at the kickoff intake.	<input checked="" type="checkbox"/>	
Stormwater Report	The Preliminary Stormwater Report must follow the format provided in the 2012 Department of Ecology Stormwater Manual for Western Washington as amended in 2014 (2014 SWMMWW), Volume I, 3.1.7). Project shall provide On-site Stormwater Management BMP's to meet Minimum Requirement #5 and demonstrate compliance with the LID Performance Standard. See Requirements for Preliminary Stormwater Report for further detail.	<input checked="" type="checkbox"/>	

Requirements for Preliminary Stormwater Report

Stormwater Technical Notebook which is based on the Stormwater Management Manual for Western Washington.

I. Report Components

- a. Project overview
- b. Describe the existing conditions.
- c. Describe the proposed development.
- d. State how the site currently drains.
- e. Provide a brief description of the downstream conveyance system.
- f. Provide the Basin Analysis map for a minimum quarter mile downstream of the site with the TDAs and Natural Discharge locations. Show the flow direction arrows.
- g. Include exhibits of the existing and proposed pervious and impervious areas with the following:
 - i. North arrow.
 - ii. Scale (larger engineering scale may be used where appropriate).
 - iii. Title block.
 - iv. Property lines.
 - v. Existing impervious, Proposed impervious (PG15 & NPG15)
 - vi. Drainage area to SWM Facility.
 - vii. Off-site areas draining on-site.
 - viii. Tables showing hard surface and pervious area (SF & AC)
 - ix. Legend of symbols.
 - x. Road and stream names.
- h. Drainage calculations:
 - i. Pre-developed conditions:

- Pre-developed land use (typically forested)
 - Drainage calculation results.
 - ii. Post-developed conditions:
 - Pervious area.
 - Hard surface area
 - Drainage calculation results.
 - Backwater Analysis.
 - i. Quantity control:
 - i. Release rate(s) as identified in 2014 SWMMWW, Volume I, Chapter 2, Minimum Requirement #7.
 - ii. Storage volume required.
 - iii. Storage volume provided.
 - iv. Quantity control facilities.
 - j. Quality control:
 - i. Water quality volume required (6-month, 24-hour).
 - ii. Treatment volume provided.
 - iii. Quality control facilities.
 - k. Minimum Requirement #5:
 - i. Compliance with either List #1 or List #2 for all surfaces
-

Utilities

Submittal Item	Item Description	Applicant	Staff Use Only
		Included?	Waived/Received/Missing
Other	Please contact your utilities reviewer for additional application specific submittal requirements.	<input type="checkbox"/>	

Fire

Submittal Item	Item Description	Applicant	Staff Use Only
		Included?	Waived/Received/Missing
City Approved Water Supply and Hydrant	See below	<input type="checkbox"/>	

City approved water supply and hydrants

- i. Water System improvements shall be consistent with the City of Redmond Water Plan
- ii. Residential areas shall be master planned to provide a minimum of 1500 gpm
- iii. Most commercial areas shall be master planned to provide a minimum 3500 gpm
- iv. Hydrants must be capable of providing sufficient fire flow to meet the required flow of the project as calculated by the Fire Marshal.
- v. Any one hydrant shall be capable of providing a minimum of 1500 gpm and any two or three hydrants (depending upon demand) flowing simultaneously shall be capable of providing the demand flow.
- vi. A fire flow report may be required. This report may consist of:
 - Results of a functional flow test performed by a fire protection consultant.
 - The test shall record pitot gauge readings for all ports opened, flow calculations for each port flowed, static and residual pressure readings, location of the test (identify specific hydrants used and what each was used for), calculated flow at 20 psi residual, and a flow graph.
 - A hydraulically modeled fire flow estimate from the City of Redmond Water Utility. This flow estimate shall be the gallons per minute available at 20 psi residual for the maximum instantaneous peak.
 - The water pressure zone(s) shall be identified. Any peculiarities of the water supply system at the location should also be noted.
- vii. Hydrants shall be located in relation to the building or area they serve.
- viii. The Fire Marshal may consider existing hydrants within 300-feet of a single family residential project as providing some portion of coverage.
- ix. Maximum hydrant spacing is 300-feet on center for commercial, multi-family, or single family residential 6,000 square feet or more.
- x. Maximum hydrant spacing is 600-feet on center for surface parking lots, and single-family residential 6000 square feet or more.
- xi. Where structures on a dead-end street access are over 150-feet from a hydrant, an additional hydrant may be required within 150-feet and placed in relation to the overall development and existing hydrant layout.
- xii. Proposed hydrant and FDC locations and existing hydrant locations shall be shown. Hydrant locations must be coordinated with and approved by both the water supplier and the Redmond Fire Department.
- xiii. Hydrants shall be no closer than 12' to a carport, garage, building or dumpster. Planter islands or peninsulas for hydrants require a minimum diameter of 8 feet. Four feet is to be maintained between face of curbs and fire protection equipment and if applicable between hydrants, FDCs and PIVs. If closer to the curb, approved protective posts are required.
- xiv. Hydrants, FDCs and PIVs should be a minimum of 40 feet from other structures and on the opposite side of the access from the building they serve, unless approved otherwise.
- xv. FDCs and PIVs shall be located adjacent to a hydrant, unless approved otherwise.
- xvi. Bollards are required around natural gas meters if the driving surface is within 20 feet.