



SUNCADIA

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***Preliminary Site and Utility  
Engineering Summary***

**Suncadia Social  
Site Development Plan**

**Suncadia  
Master Planned Resort**

**Suncadia Resort LLC  
Cle Elum, Washington**

**October 27<sup>th</sup>, 2023**

**Prepared by**

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Information presented in this document pertains to preliminary infrastructure design of proposed roads, illumination, drainage, water and sewer facilities, and solid waste management program to serve the Suncadia Social plat.

Information on the proposed roads reflects the requirements of Exhibit J to the Development Agreement. Information on storm drainage reflects the requirements of the Department of Ecology Stormwater Management Manuals, the 1999 Master Drainage Plan and preliminary stormwater engineering for Phase 1.

Information on the proposed water supply, storage, and distribution system is taken from the 2013 Water System Plan as revised January 2016. The development has a Group A water system regulated by the Department of Health which will be served by Suncadia Water Company, LLC (Suncadia Water).

Information on the proposed sewage collection, treatment and disposal system is taken from preliminary engineering for Phase 1 and the March 2000 Site Engineering Technical Summary document for the MPR (Appendix A of the FEIS).

Discussed in this part are the classification of Suncadia Social plat roads, access, roadway illumination and emergency access.

### Roadway Classifications and Sections

The properties within this application are served by Big Hill Drive and Suncadia Trail, both of which were platted in Suncadia Resort Core Phase 1 Division 9. The proposed access roads shown in the Site Development Plan are classified as follows:

Road	Classification Use
Road A	Commercial/Retail Access
Road B Loop	Secondary Traffic Circulation and Commercial/Retail Access
Road C	Commercial/Retail Access
Road D	Secondary Traffic Circulation

These access roads have been modified as allowed by Development Agreement from the Table 1 - MountainStar Roadway Design Criteria in order to achieve the low design speed objectives of the resort, minimize impacts on natural features, and support a safe rural and natural theme.

### Access

PRIMARY ACCESS: As illustrated on the Site Development Plan, primary access to the Suncadia Social plat will be from Suncadia Trail to the south and Bill Hill Drive to the north.

### Illumination

Street lighting designs will conform to the principles of preserving dark skies while providing lighting levels appropriate for roadway safety and security. Street lighting will conform to the following planning criteria.

- a) Use of full-cutoff shielding on outdoor light fixtures;
- b) Mounting of light fixture luminaries at a height of not greater than 30 feet;
- c) Establishment of roadway lighting standards based on needed light distribution and the luminance of roadway surfaces;
- d) Use of LED street lights;
- e) Use of timer or photo-cell controls to regulate when and where lighting would occur; and
- f) Avoiding unnecessary lighting of building facades.

Streetlights will be located at intersections, pedestrian trail crossings, and other locations where needed. Alternative luminary styles will be considered during project design.

### Introduction

The preliminary Stormwater Management Plan for Suncadia Social of the Suncadia Master Planned Resort (MPR) is described in this part. The Stormwater Management Plan reflects application of design guidelines detailed in the Department of Ecology Stormwater Management Manuals as well as information presented in the April 1999 (Rev. July 1999) Master Drainage Plan (MDP) that was prepared by W&H Pacific for the MPR. The MDP outlines stormwater design procedures, guidelines, and protocols for the development.

Updates to the MDP include;

- (1) adoption of the drainage standards set forth in Washington State Department of Ecology's Stormwater Management Manual for Western Washington August 2001 (DOE SMM),
- (2) an addendum to the MDP dated August 2002 that provides (a) water quality protocol information for golf course areas that discharge to surface waters, and (b) revision of golf course water quality protocol summary information for infiltration to conform with the detailed protocol information.

Design specifics addressed in this part include:

- Runoff rate/volume estimation methodology
- Infiltration facility collection and conveyance
- Water quality treatment
- Overflow routing
- Conceptual Stormwater Plan

The proposed Suncadia Social development land use is shown in the General Site Plan for Phase 1. The project site is located north of Suncadia Trail and south of Big Hill Drive.

The Suncadia stormwater system will be owned, operated, and maintained by either the Suncadia Residential Owners Association, or the Suncadia Community Council, depending on the location within the resort. Construction of facilities will be by Suncadia Resort LLC.

### Conceptual Drainage Plan

Runoff from the buildings, access tracts, parking, and landscaped areas at Suncadia Social will be collected in catch basins, conveyed via storm drainage pipes along and Suncadia Trail offsite to the previously constructed existing regional facility in the Prospector Golf Course.

The majority of the project area has a soil classification of Qgm, which consists of glacial moraine deposits - till soils. For additional information regarding the existing geology and soils information, see the EIS Technical Report for Geology, Groundwater and Soils prepared by AESI and dated June 29, 1999.

### Infiltration and Detention Facilities

As noted above in the Conceptual Drainage Plan narrative, no infiltration or detention facilities are proposed on site. The proposed project will be conveyed to existing offsite infiltration and detention facilities.

### Water Quality Treatment

No water quality treatment is proposed on site. Runoff from the impervious areas within the proposed project will be conveyed offsite.

### Source of Water Supply

The Suncadia Social plat has a Group A water system regulated by the Department of Health which will be served by Suncadia Water Company, LLC (Suncadia Water). All of the water connections for the MPR (4,650 units) were approved to be connected to the water systems with the execution of the Development Agreement.

Suncadia Water has included this parcel in their comprehensive planning and will provide a water availability letter. Suncadia Water Company has recently updated their Water Facilities Inventory (June 2021) demonstrating there are 992 active connections. Post Water Facilities Inventory 992 connection count, the following developments shown in Table W-1 below have been submitted for preliminary plat or received final plat on the Suncadia Resort:

TABLE W-1	
Suncadia Development	No. Units*
Phase 1 Division 3 Winemakers Cabins	24
Phase 2 Division 1 Nelson Creek	36
Phase 2 Division 4 Cabins at the Farm	39
Phase 2 Division 6 Nelson Ridge	42
Phase 3 Division 17	80
Phase 2 Division 7	148
Phase 1 Division 14	39
Phase 2 Division 8	72
Suncadia Social	48
<b>Total</b>	<b>528</b>

\*Includes consolidated units post final plat; does not decipher between full-time and part-time use.

### Suncadia Social Water System Description

The preliminary transmission and distribution system for the Suncadia Social plat is illustrated on the enclosed Conceptual Utility Exhibit. The water for the development will be supplied by the MPR water reservoirs. The reservoirs are in the northeast section of the MPR.

The project site will provide 8-inch diameter water main looped system that will connect to the existing water mains in both Suncadia Trail and Big Hill Drive. All homes are to be fire sprinkled on site. Hydrants will be placed at a maximum of 500 feet spacing. Fire flow calculations were developed using a flow of 1500 gallons per minute at 20 pounds per square inch (psi) pressure.

The Resort is served by Fire District 7. A fire station for District 7 is located at the Resort at 31 Firehouse Road, at the northwest intersection of Bullfrog Road.

**Suncadia Solid Waste Management Policy**

Solid Waste Management is currently being performed per the Solid Waste Management Plan dated April 13, 2006.