Douglas County, Washington

Spanish Castle Resort

A Master Planned Resort (MPR)

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Project Information

Project Information

Project: Spanish Castle Resort

Prepared for: Big River Development
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Reviewing Agency

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INTRODUCTION

Concept

Spanish Castle Resort is proposed as a recreational/residential master planned community envisioned to ultimately consist of up to 1,200 homes (approximately 500 detached single family homes with the remainder as condominium and townhouse units). Most units are anticipated as second-home or vacation dwellings. Also planned are a 100 room hotel, mixed use commercial core, recreational amenities that may include golf, an equestrian center, sports park or other outdoor facilities, spa and related infrastructure and services that include a public water system, on-site wastewater treatment facility and fire station. The development is located on bluffs overlooking the Columbia River. Open space owned by Grant County Public Utility District #2 but outside of the resort property separates the development from the physical river shoreline but serves as a part of the visual amenity that is being offered.

The property borders State Route 28 and is accessed from the highway by Spanish Castle Road, which is to be improved and paved through the site not only to access the resort but also to maintain public access to an existing boat launch on the river. The project will improve Spanish Castle Road (which will be maintained as a County Road) and the County right of way south along the BNSF railroad line in order to provide access to the public boat launch and parcels further south that require access, but are not part of the MPR. Internal roads serving residential and commercial components are to be private, with commercial access open to the public, and residential areas gated. An on-site wastewater treatment facility is to be developed. A privately owned and operated Group 'A' water system will be developed to provide domestic water. Reclaimed water will be used for irrigation. Existing water rights plus the acquired right to 1,000 acre-feet of water are available for these purposes.

Seven major land use types are planned for the resort:

Single Family Residential

Single-family residential development is to be subdivided into individual lots owned by buyers for their own vacation use, rental to others or a combination of both. They consist of two major sub-categories: homes on ½ to one acre lots in the water view and open space (private) resort areas; and smaller more affordable homes on the bluff overlooking the river afforded good but not maximum views.

The waterfront resort home sites are generally located overlooking the river and are designed to maximize the home buyer's visual amenity giving each home an unobstructed view of, and proximity to the Columbia River. The open space (private) resort home sites are located between the top of the bluff and Highway 28 in an area with views generally of the mountains, although some will have views of the river. The open space (private and GPUD) is the visual amenity on which these homes are focused. The net residential density of these areas would be one to two units per acre.

The more affordable homes will have the amenity of access to all resort recreational and commercial amenities as well as to public portions of the river shoreline.
**Townhouse/Condominiums**

Approximately 600 of the residential units are anticipated as townhouse and condominium units, and are proposed in the water view resort area directly above single-family lots and in the open space resort. These units will be individually owned on a full-share or interval ownership basis. The two sub-classifications of this land use are the townhome units, typically consisting of 1,800 square foot three-bedroom multi-story units located generally around the community center. Other condominium units are 600 to 800 square foot one-to two-bedroom units.

**Mixed Use Commercial Core**

As envisioned, this area will include 60,000 to 70,000 square feet of retail, service and office space to be developed in phases and a 100 room hotel; up to 200 of the condominiums described above are to be in this area. The commercial core is expected to include, but is not necessarily limited to, three restaurants, specialty retail, offices for resort-oriented services, and other retail service and entertainment establishments providing the basic day-to-day needs of residents and visitors including movie theater, and convenience market. Resort management and security would also be located in this area.

The community center will be located central to the resort to provide ease of access by pedestrians and bicyclists, and overlooking the river to provide a “destination” feel for the business users. The community center will also consider the possibility of connecting to a marina should that be developed in the future. The commercial core will be approximately 6½ acres, less than one percent of the developed area of the resort, and well within the maximum 8 percent standard required by the Zoning Ordinance.

**Major Recreational**

Two facilities were originally planned in the 2007 MPR: an 18 hole golf course with clubhouse/restaurant and driving range, and an equestrian center consisting of three arenas totaling 225,000 square feet, tack shop, stables and riding trails. The current economic climate indicates that the market for golf courses may be saturated, so other recreational alternatives are being considered as well, including sports complexes (for statewide or regional meets), mountain bike courses, and other golf-related uses.

**Spa/Wellness Center**

A potential 20 room long term hotel providing luxury wellness and therapy services has been propose as one element of the resort. This facility takes advantage of a current trend to provide this type of wellness care in a resort environment. The exact nature of the spa facility will adapt depending on the market for these types of services.

**Utility/Community Support**

This category refers to the major elements of the site necessary for the resort and that are not generally considered to be amenities. These include facilities on larger tracts of land such as wastewater treatment, public water facilities, electrical substation, boat and RV storage and resort maintenance.
facilities. There are also minor facilities incorporated into other elements of the resort that include parking lots, wells, lift stations, resort management offices and security.

Wastewater treatment consists of a treatment facility designed to address wastewater flow projections for the ultimate build-out of the resort, along with smaller systems to support incremental project needs, including below grade aeration septic systems and a community septic tank effluent pumping system. Two well-sites are identified as a water source on sites that are large enough to provide wellhead control zones. A water storage reservoir is to be located on approximately four acres in the upland part of the site.

Sites are set aside for an electrical substation, if needed, a fire station with four residential units for volunteer fire fighter housing and space provided for a Sheriff substation.

Open Space

Total privately owned open space on the site exceeds the minimum forty percent required by the Zoning Ordinance. These areas include the agriculture uses (vineyards and orchards), large outdoor recreational areas as described above, as well as smaller landscaped and natural areas that serve as buffers, incorporate undevelopable areas such as the major ravines and visually break up the developed portions of the site.

Also under consideration as part of the open space are neighborhood parks, a trail network and connections to a public boat launch/water access area at Apricot Orchards (existing).

An approximately 30 acre conservation area is set aside in the southeast corner of the site in an area with relatively high habitat value. It will be kept in a natural undisturbed condition with access only by pedestrians and non-motorized vehicles.

Since it is not part of the resort, the river shoreline area owned by Grant County Public Utility District No.2 cannot be counted toward open space being provided. Nevertheless, it provides for a natural buffer along the western boundary of the site between the resort and the Columbia River.

Phasing and Population

Construction commenced in summer of 2013 to rough-in initial roads; in 2014 additional roads were roughed in and the vineyard was planted. Rather than imposing an arbitrary phasing plan, this project uses a phasing approach that allows flexibility where necessary to facilitate project development, while also creating infrastructure plans for those project elements that must address incremental project impacts (such as traffic generation or wastewater treatment). This approach allows each incremental plat or project element to be constructed while ensuring consistency with the ultimate infrastructure or amenity plan. To facilitate analysis and review of the project as it is proposed in sections over time, wastewater, traffic and sewer plans will identify the threshold where specific infrastructure improvements will be necessary. The same units will be used in all cases: Equivalent Residential Units, or ERUs. This is a typical measure used in planning and engineering to quantify development demands on infrastructure. As the resort is developed, the project developer will provide reviewing agencies with information to compare each residential or commercial portion of the project to the ERU thresholds identified in the plan.
At an estimated 2.5 persons per unit, project population at ultimate build-out is expected to be approximately 3,000 persons. Also, total potential hotel employees and spa guests are estimated at approximately 400.

**Ownership**

Long term ownership consists primarily of two types. Individual ownership of homes, lots and condominium units and organization of these owners in homeowners associations is the first type.

This is distinguished from ownership by the "resort", which is referred to throughout this document as the business entities that operate the facilities for the use and enjoyment of guests, visitors and residents, as opposed to the homeowners and their associations. Most of the infrastructure and utilities, except for those owned by existing public agencies are to be owned and operated by the resort, although probably not as a single entity.

**Suitability of the Area for the Proposed Development**

Suitability is based on the type and density of use, consistency with the specific requirements of the Master Planned Resort chapter of the Douglas County Zoning Ordinance (DCC 18.74), physical characteristics of the site and the availability and capacity of utilities, services and the transportation network.
The resort can support anticipated growth at expected densities. The overall project density is low due to the open space (private) being provided. Access to the site is directly to Highway 28 without resort generated traffic having to pass through other developed or agricultural areas in current production. The plan at ultimate build-out includes community wastewater, domestic and irrigation water systems rather than individual on-site systems; this will allow for higher densities. The project is being designed to provide sufficient buffers from adjacent parcels.

**Physical Suitability**

The primary physical constraints of this site are slopes. Much of the site is sloping, in some areas greater than 45%. However, geotechnical analysis of the site has concluded that the slopes are stable and can be developed with appropriate engineering. Certain soil types have severe limitations, based on NRCS soils classifications, but they tend to be development constraints that require special construction techniques rather than geological hazards.

Grading should be kept to a minimum where possible, although part of the site may require extensive grading to accommodate project construction. When grading is necessary, cuts and fills are expected to balance with minimal need to import fill material and export cut material.

**Availability and Capacity of Utilities, Services and Transportation Network**

The site is served by Washington State Route (SR) 28, Douglas County Spanish Castle Road and two other County rights-of-way, both improved with unpaved roads. SR 28 is a major transportation route designated as a highway of statewide significance. Spanish Castle Road will be improved to meet or exceed resort road standards included in this document and approved by Douglas County as appropriate for resort generated traffic. The other private interior streets, including the other County rights-of-way, will be hard surfaced.

Water and wastewater utilities are to be provided for the resort and will be designed and constructed to provide the necessary service and capacity needed for all increments of development. Reclaimed waste water is to be used for irrigation.

Fire protection service in this area is provided by Douglas County Fire District No.2. A current inventory of Fire District facilities can be found in the Douglas County Capital Facilities Plan. The Fire District Board of Commissioners plans an update to the Fire District Plan, including anticipated construction of a Fire and EMS station at the Spanish Castle Resort. Preliminary planning suggests it is appropriate for a two-bay fire station and two volunteer housing units to be provided by the resort. This facility may be expanded to additional bays with two additional housing units at Fire Department option and expense, although no agreement for Fire Department funding is in place at this time. Planning also shows that a Sheriff Department substation should be provided as a part of this project; the resort will supplement police protection with private security measures.

Other available utilities are electricity and telephone. Needed additional electrical capacity can be obtained from Douglas County Public Utility District No. 1. A site is available for a substation in the resort if needed. Development of on-site distribution networks are the responsibility of the developer.
Location

Master Planned Resorts are permitted in (currently) rural and agricultural zoning districts and are prohibited within the boundaries of the Greater East Wenatchee Planning Area.

About 575 acres of the approximately 854 acre site is zoned Commercial Agricultural (AC-10). The remaining acreage is zoned Rural Resource (RR-20). The Greater East Wenatchee Planning Area is located approximately 14 miles to the north. The nearest Urban Growth Areas are Rock Island and Quincy (in Grant County), both located 11 miles from the site.

Other Zoning Ordinance Requirements

The resort meets other Zoning Ordinance standards as follows:

- It is more than 160 acres, all of which is contiguous acreage.
- A 1,000 foot setback from the outside perimeter of the Master Planned Resort while required in some cases is not applicable because the resort is adjacent to a shoreline.
- Adjacent agricultural parcels are separated from residential development of the site by setbacks of 100 feet or more, except that a sixty foot setback is proposed for the north property line between the river and the railroad where it borders a parcel that is not farmable. The highway and open space (private) buffer effectively provide 500 feet or more of separation between residential and visitor accommodations and agricultural zoned lands directly across SR 28 from the site.
- More than 60 percent of the resort area is dedicated to permanent open space (private), natural areas and recreation areas. It will be perceived as an even greater area when the adjacent GPUD open space is in the field of vision.
- The Commercial Core consists of less than one percent of the developed land area and is being developed incrementally to correspond with development of the resort area.
- Hotel and spa units number 120 and have a gross density of 0.2 units per acre of the overall site.
- Developed areas are clustered and oriented with sensitivity to the location of neighboring agriculture and the characteristics of the landscape.

Compliance with the Douglas County Comprehensive Plan and Growth Management Act

Most Growth Management Act requirements for Master Planned Resorts are repeated in the Douglas County Comprehensive Plan and Zoning Ordinance and are analyzed in more detail later in this narrative. The project complies specifically with the Act in the following respects:

1. As proposed, Spanish Castle Resort is a self-contained and fully integrated planned unit development in a setting of significant natural amenities with primary focus on destination resort facilities consisting of short-term visitor accommodations. The development will include
a number of outdoor recreational facilities. Nearby Columbia River shoreline also provides recreational opportunities.

2. The Resort will consist primarily of short-term visitor accommodations and second homes. The second homes are integrated into and support the on-site recreational nature of the resort.

3. Domestic water, irrigation water, wastewater and storm drainage systems are to be provided on-site by the developer and are only available to the resort. Other utilities and services, including fire protection, police protection, electrical power, and telephone are to be provided by outside service providers, or as is in the case of police protection, provided by an outside agency and supplemented by a resort security force. All costs of service extensions and capacity increases required for the development are to be borne by the developer.

4. Water rights have been obtained for the use of water by the resort as allowed by Chapters 90.03 and 90.44 RCW.

5. The Douglas County Comprehensive Plan and implementing development regulations preclude new urban or suburban land uses in the vicinity of the Master Planned Resort.

**Compliance with the Douglas County Comprehensive Plan**

The Comprehensive Plan recognizes that parts of rural Douglas County are well suited to tourism and recreational development. The plan also emphasizes protecting agriculture from conflicts imposed by other types of development in rural areas.

All applicable goals and policies were evaluated in determining the consistency of the Master Plan with the Douglas County Comprehensive Plan. To facilitate their presentation in this narrative, the analysis of Plan goals and policies is consolidated into the principal areas of concern that seem to emerge. These areas or "themes" are addressed in the following paragraphs. Findings are made as to how the resort fits in with the plan policies for each theme. All of the Comprehensive Plan goals and policies addressed by this analysis are listed in the appendix.

Two sets of Comprehensive Plan policies directly relate to the project and project site. They are the Master Planned Resort Policies (Plan Goal 4.4.1 and Policies MPR-1 through MPR-20) and the Agriculture policies (Plan Goal 5.2.3. and Policies A-1 through A-18). Although these two sets are not addressed separately in this analysis, they are emphasized in the discussion of all of the themes.

**Themes**

**Agriculture is protected as a primary economic activity. Recreation and tourism is an important economic activity.**

Agriculture is referred to by the comprehensive plan as an existing traditional land use and other land uses must be compatible with it. Agriculture is given priority in areas that are designated Agricultural and considered inherent in rural areas.

Master Planned Resorts are allowed in Agricultural lands of long term commercial significance. Plan policies call for maximizing the positive economic impact of tourism and recreational development in the County's economic development efforts while preserving the strength of the existing agricultural
industry. Tourism is considered to benefit the economy as evidenced by policies to promote tourism and capture visitor spending, especially during peak seasons.

Findings:

1. Potential conflicts between resort development and nearby agricultural lands are minimized by mitigation that includes required agricultural setbacks, and physical separation of the resort from adjacent agricultural areas. Also, the Master Planned Resort site is located at the edge of an agricultural area.

2. Most of the development site is either not in resource lands of long term statewide significance or not in productive agricultural land, except for existing orchards on the site. (both private and GPUD), setbacks, physical separation and other measures will be used to buffer the orchards from development.

3. Nearly 200 acres of the site plan is dedicated to irrigated agricultural area use currently planted in vineyards. This allocation furthers the agricultural preferences of the County plan.

4. (both private and GPUD) and buffers with building setbacks of 100 feet or more will be provided between resort development and other adjacent agricultural lands. The notification to purchasers required by the Comprehensive Plan and Zoning Ordinance will be provided for those homes and lots that are within 500 feet of external boundaries of agricultural zoned property.

5. The quality of development and construction for this resort is very high and would benefit the local economy. It will have a primary focus on visitor accommodations and second-homes. It will employ local citizens, and provide opportunities for local businesses and entrepreneurs.

Project design to account for and protect against conflicts with adjacent land uses.

1. Mitigation measures and existing characteristics of the site have been identified to reduce potential land use conflicts with the railroad and neighboring agricultural land. They include buffers, designating the site as a railroad “quiet zone” and providing a signalized railroad crossing.


Sufficient transportation facilities, utilities and public services must be available or provided to serve development.

The Comprehensive Plan requires sufficient capital facilities to be provided, with funding for needed excess capacity by the development.

1. Highway 28 and County roads and rights-of-way provide access to the site. On-site water and wastewater systems will be provided and fire and police protection will be provided capital improvements with service supplemented by the development.
2. Improvements of Highway 28 and Spanish Castle Road that are necessary to accommodate project generated traffic have been identified.

3. Public and private access roads are to be designed and built to accepted engineering standards to ensure safety, adequacy, and provide access for emergency vehicles and public service providers. All will be hard-surfaced. Residential private roads will be gated to limit non-resident traffic and public access to the State Highway will be by a publicly maintained intersection.

4. Capital facilities (other than transportation improvements) include a Group 'A' domestic water system, wastewater treatment facility, reclaimed water irrigation, stormwater drainage system, and resort maintenance facilities. All are sized to accommodate full development at proposed densities.

5. Public services that are to be provided by outside entities include fire and police protection. Improvements and provisions being made to address impacts include providing for Fire District and Sheriff facilities, supplementing police protection with private security and gating residential communities within the resort to limit entry to residents.

6. Pedestrian and bicycle pathway systems are being designed to engineering standards to ensure efficiency and safety and are coordinated to emphasize access to the commercial core and the Columbia River.

**Rural growth and development is anticipated but must be concentrated, not sprawling and it must benefit the local economy.**

Master Planned Developments are permitted in rural areas only when they are designed to discourage growth in surrounding areas. In keeping with the Growth Management Act and County planning policies to prevent sprawl, they must be self-contained and self-supporting with recreation and services internal to the resort.

1. The resort concentrates development and accommodates a component of Douglas County's rural population growth in a manner that is preferable to sprawl.

2. The resort is physically separated from the nearest existing urban growth areas and rural areas of intensive development.

3. About half of the proposed residential development is adjacent to designated irrigated agriculture areas, concentrating the built environment and providing a surrounding buffer of economically productive agricultural open space (private).

4. Douglas County, through its land use policies and implementing regulations prohibits urban and suburban land uses and densities outside of the Master Planned Resort in the immediate vicinity. Project design and resort policies are also intended to discourage such growth.

5. Commercial development on the site will provide basic convenience goods and services to residents and guests. This helps to keep the resort self-supporting and reduces off-site traffic demands. The location of the commercial core internal to the resort and the market it is targeting tend to focus it on the resort.
Capital facilities and services needed solely for the resort will be internalized to the extent possible. This includes water, wastewater and irrigation systems, and the internal transportation network.

Capital facilities and utilities are phased to ensure their availability concurrent with resort development and at levels of service that are appropriate for the specific land uses and areas.

Utilities provided for the resort are not available to properties outside of the resort, and are appropriate for the specified land uses of the resort.

The proposed resort promotes tourism within the County by bringing in more visitors and providing for year-round visitor spending. Maximum use is expected to occur during the peak (summer) season.

Development must blend with and protect scenic, natural and cultural resources and provide public access to them where appropriate.

The resources identified on or near this site include the Columbia River shoreline, areas of the site with higher quality vegetative habitat and the scenic attributes of the surrounding river, mountains and cliffs. Public access to the river shoreline exists in the form of a public boat launch at the south end of the site; the resort will work with the Grant County PUD to improve this access.

Improvement of Spanish Castle Road and other planned improvements will facilitate public access to the Columbia River.

Resource management planning for the resort include the designation of a conservation area in a location characterized by high quality natural habitat; providing other unimproved open space (private); the protection of archaeological resources and control of noxious weeds.

Site planning emphasizes cluster development and substantial areas of undeveloped and recreational (both private and GPUD).

Irrigated agricultural areas are integrated with the residential and public uses to create an appropriate and attractive balance of land uses that are in conformance with County Comprehensive plan initiatives.

Plans to blend site development and architecture with the natural character and features of the land include using Northwest contemporary architecture with exposed beams and timbers, and incorporating rock formations on the site into landscaping.

If a marina is developed adjacent to the Commercial Core, the resort would work in cooperation with the Grant County PUD to provide non-motorized public access to the Columbia River from the resort. NOTE: No plans have been developed with Grant County PUD to provide a marina at this point.
Sensitive critical areas protected from development and development protected from hazards in critical areas.

1. It was determined by geotechnical analysis that the soils in the steep parts of the site have a high content of rock making them more stable.

2. The most sensitive critical areas are slopes in excess of 45% within a ravine through the conservation area and in the area upland from Highway 28. Both areas are to remain in open space (private).

3. Although the site is not identified as an aquifer recharge area, clustered development and the use of a community wastewater system at ultimate build-out, instead of dispersed individual septic systems, is generally consistent with plan policies that would protect water quality.

4. The establishment and preservation of the conservation area will provide wildlife benefits that are consistent with the comprehensive plan including the preservation of a block of undisturbed natural habitat that is contiguous with other undeveloped areas providing connectivity between them.

Consistency with Shoreline Master Program

The Douglas County Shoreline Master Program is an element of the State Shoreline Management Act. The Columbia River is designated a Shoreline of Statewide Significance due to its size and importance to the State as a significant water feature. Shorelines of Statewide Significance are lakes with a surface area of 1,000 acres or greater and rivers (east of the Cascades) whose mean annual flow is 200 cubic feet per second or greater.

Since there is no designated floodway, and the 100-year floodplain is within 200 feet of the river, Shoreline Management Act jurisdiction extends 200 feet from the ordinary high water mark (OHWM) of the river in this location. The location of the west property line was surveyed with respect to the Columbia River shoreline in September 2007 and showed the project boundary to range in distance between 119.85 feet and 258.76 feet from the river shoreline, placing the project boundary within 200 feet of the OHWM in several locations.

The resort property is separated from the river and from most of the Shoreline Management jurisdictional area by the open space land owned by Grant County Public Utility District No. 1. This area effectively serves as a buffer between development and the river, a buffer that is much greater in size than required by adopted policy and regulations. Residential and commercial construction and other resort development will be set back 200 feet from the OHWM, further increasing the buffer.

Recreational development in cooperation with the Grant County PUD may be undertaken in this area in the future, but is not part of this plan and would have to comply with the Shoreline Management Act and permitting requirements in effect at the time. Also County road improvement by the resort will end 200 feet from the OHWM and not extend to the boat launch inside the PUD property and Shoreline Management Act jurisdiction except that it may be graded or similar improvements made if they can be done under a substantial development permit exemption for normal maintenance and repair.

The site is located between River Miles 445 and 456, an area given a Rural Environment designation by the Douglas County Master Plan because of property ownerships, existing activities and current zoning.
The Rural Environment designation is given to areas which because of their physical characteristics and present uses are suitable for agriculture and recreational uses compatible with agriculture. It is intended to serve as a buffer zone from urban areas. Permitted land uses include single-family residences, recreational uses including piers, docks and marinas and commercial development that is dependent on the shoreline and does not alter the natural characteristics of the area. The setback for most development is 25 feet from the ordinary high water mark; single family residences must also be 15 feet in elevation above it.

The master plan would comply with most of these standards, if required to, but since development is to be kept outside of the jurisdictional limits, they do not apply. The large buffer provided by the PUD open space effectively acts as a mitigation measure in a manner that is consistent with adopted policy and standards.

The primary effect of the resort on the shoreline is in terms of public access to the Columbia, an objective of the Shoreline Management Act and County Comprehensive Plan.

County policy for providing public access to shoreline management areas is found in the Shoreline Management Act, the Douglas County Shoreline Master Program and the County Shoreline Access Ordinance (DCC 19.10).

Shoreline Master Program policies for access to recreational areas is for a combination of areas and linear access with linkage of shoreline parks and public access points through linear access such as hiking paths, bicycle trails, and scenic drives. The regulations of DCC 19.10 are more specific and based on actual shoreline land use. Applicable requirements include locating access roads and parking areas inland and linked to the shoreline by pathways, maintaining all new roads more than 200 feet from the ordinary high water mark, providing access parallel to the entire shoreline, maximizing views of the water for residents and the public and no vacation of existing roads with access to the shoreline.

The resort currently has access to the GPUD open space, from which both pedestrian and vehicular access to the Columbia is available. This access is located at the end of Spanish Castle Road at the Apricot Orchards boat launch. The resort plans to work in cooperation with the Grant County PUD to improve this access. Additionally, if a marina is built adjacent to the Commercial Core, the resort would also work with the PUD to provide direct pedestrian access to the facility.

The resort complies with the requirements of DCC 19.10 primarily because development will be kept back 200 feet or more from the ordinary high water mark, no existing roads (i.e., Spanish Castle Road) are being vacated without alternate access provided and the GPUD open space provides access from the resort parallel to the entire shoreline.

In summary, the resort is consistent with the Shoreline Management Act in the following respects:

1. All development, including road improvements, occurs outside of Shoreline Management jurisdiction, providing a buffer that exceeds that required by regulations. Although not under Master Program jurisdiction, residential development does not exceed the density requirements of the Rural Environment. Also, the more intensive development including commercial and parking areas are located inland from the shoreline.

2. The resort master plan facilitates public access to the Columbia River with linkages that would connect the potential access points.
3. With these mitigation measures and site characteristics, the improvements that are made in this part of the site should not materially interfere with normal public use of the water or shorelines.
1. LONG RANGE PLAN

1.1 Planning Horizon & Preliminary Development Schedule

Project completion is projected in seven to eight years at the earliest. However, full build-out and occupancy of the resort may take considerably longer, reflecting market conditions. Planning for full build-out has used a 20-year horizon.

Residential lots, condominiums, the commercial core, recreational facilities, capital facilities, improved and unimproved open space (private) and on and off-site street development will commence simultaneously at project outset. Initial planning indicates commercial elements should be phased in to support resort development with most of the commercial core going in no earlier than approximately 300 housing units and to coincide with opening of the hotel, if possible. However, opportunities for each element of development may dictate a different schedule. The resort’s goal is to provide more services and amenities as soon as feasible along with development of the residential portions of the project.

All of the residential units (except for duplexes for fire fighters) are intended as vacation housing with interval ownership units to be provided along with the single family homes as the resort is developed.

Other timing issues raised by State and County land use policy are addressed as follows:

1. Recreational development, utilities, infrastructure and open space (private) will be phased in, with some of each to be provided during the first increment of development.

2. The initial increment of development would stand alone as a small resort with all of the required elements including visitor accommodations, affordable lots, recreational improvements, limited commercial, and open space (parks, agriculture and natural areas).

3. Each subsequent increment would build on the last with most commercial elements provided approximately at the half-way point of development.

4. None of the elements of later phases are necessary to support earlier phases. Most commercial development is planned for the half-way point of overall development due to its need for a "critical mass" to support it.

Build-Out Thresholds

Spanish Castle Resort will be built over time, with initial residential units, commercial space and amenities in-use prior to complete build-out of the resort. Construction will be dependent to a large degree on market demands, but development of the resort will advance residential, commercial and resort amenities together, consistent with the master planned resort concept.
Initial Development Phase

The initial development effort will be primarily north of Spanish Castle Road and east of the railroad, although some commercial space may be constructed south of Spanish Castle Road near SR 28. The approximate uses in this phase are summarized in the following table.

<table>
<thead>
<tr>
<th>Table 1-1. Planned Initial Development Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
</tr>
<tr>
<td><strong>Recreation</strong></td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
</tr>
<tr>
<td><strong>Commercial</strong></td>
</tr>
</tbody>
</table>

The initial development will create the resort “feel” of the property by establishing the vineyards and constructing road improvements and gateway features with an upscale aesthetic. Spanish Castle Road will be improved from the highway down and across the railroad tracks, and the Resort will coordinate improvements to maintain access to the boat launch as Grant County PUD moves forward with their improvement plan.

As a master planned resort, the residential portions of the project will target short-term stays. Lots are laid out to take advantage of views to the river, and homes constructed will be styled as appealing vacation homes. Condominium (multi-family) and/or hotel space will also be included in this phase; the exact mix will depend on market research and finding appropriate development partners. Convenient pedestrian and bicycle access to a trail system throughout the resort will encourage residents to explore without their vehicles.

Recreational amenities will be a significant part of the initial development phase. The first Recreation Center will be constructed concurrently and in close proximity to the very first homes. The Recreation Center will offer a number of recreational elements to ensure early residents can take advantage of these amenities as other portions of the Resort are developed. A golf driving range and shooting range will be available as well, likely south of Spanish Castle Road.

Commercial areas will be developed as well in this phase. Initial portions of the resort village will be constructed, most likely near the highway for visibility. Storage units will also be constructed, suitable for boat storage.
Future Development Phases

Following phases will likely be similar in nature, although with less agriculture and with more multi-family and commercial space. There may be several of these phases, and the uses would likely look like the distribution shown in the following table.
1.1 Resort Amenities Development

Following the initial development phase outlined in the previous section, more analysis is needed to determine detailed implementation plans for future phases that are balanced among uses and amenities consistent with the Master Planned Resort concept. No home construction beyond the initial phase will be allowed until a detailed resort amenities development plan has been approved by Douglas County.

The resort concept for Spanish Castle Resort is intended to take advantage of the natural setting and location in the heart of outdoor recreation opportunities beyond the boundaries of the resort. As such, amenities will focus on complementing and supporting outdoor recreation such as boating, fishing and hunting. Development of Spanish Castle Resort amenities will focus on three complementary themes: Recreation, Relaxation and Adventure.

| 20,000 sf of commercial space |
| Recreation Centers for each ~300 units of residential (basketball, tennis, swimming, BBQ, event rooms, patio) |
| Additional trails near completed homes and to Recreation Centers |

Resort Amenities

Incremental development of the resort village, including:
- Hotel, spa, restaurant and retail space

1.2 Future Development Phases

Table 1.2: Future Development Phases

Residential
- Approximately 300 units, mix of Single Family and Multi-Family

Recreation
- Additional Recreation Centers for each ~300 units of residential

Agriculture
- Vineyards maintained

Commercial
- Incremental development of the resort village, including:
- Hotel, spa, restaurant and retail space
TRAIL SYSTEM. A trail system, as illustrated in the transportation element of the master plan, will provide pedestrian and bicycle access throughout the resort. Primitive trails will be developed in areas of future resort development, and then improved as the resort is built out. Some trails may remain primitive to appeal to trail runners and bicyclists. Spanish Castle Resort developers are also coordinating with Grant County PUD to identify appropriate access points to PUD-owned shoreline to protect the natural environment and ensure public access; the current Grant County PUD SMP shoreline designation allows for public access along the shoreline for hunting and fishing via unconstructed footpaths. As the Resort is developed, Grant County PUD may revisit the shoreline designation to determine if a different designation is warranted. Any development of public recreational amenities on PUD property is entirely contingent on Grant County PUD approval.

GOLF DRIVING RANGE. A driving range will be developed along with the first residential units to provide an immediate recreation amenity for first residents. The driving range will be located near trails and roadways to provide ease of access.

GOLF COURSE. A golf course has been considered a central element of the recreation amenity package for Spanish Castle Resort. However, development of a golf course will be dependent to a large degree on the economics of operating the course. Currently, golf courses in the region are not very sustainable. Even so, the resort master plan has been laid out to allow for the eventual construction of a golf course on the southern portion of the resort.

EQUESTRIAN CENTER. Similar to the golf course, the resort has been laid out to allow for an equestrian center. This element will also depend on the demand for such facilities by resort residents. The equestrian center does complement other planned amenities at the resort, and could provide an alternative for those not participating in the Adventure Amenities.

Relaxation Amenities

Offering an escape from the daily grind is paramount at Spanish Castle Resort. The Resort will be able to offer several amenities that cater to guests seeking relaxation.

SPA. A spa is planned in conjunction with the hotel facility proposed for the Resort. The spa will offer an upscale, luxurious atmosphere for pure relaxation for those choosing not to participate in outdoor adventures or those needing time to “recover” from the more rigorous activities offered at the resort.

RESTAURANTS. Restaurants will cater to guests and take advantage of the views and setting surrounded by vineyards and orchards to provide destination dining as well as an alternative to home cooking by those staying in the residential portion of the resort.

PUB. An adult-oriented drinking and eating establishment with a pub theme will fit ideally with the outdoor adventure elements of the resort. These types of uses can be sited to take advantage of patio and window views out across the river.
WINE TASTING. The setting in the vineyards with views of the bluffs across the highway and views of the Columbia River offer an ideal opportunity for wine tasting rooms. These have proven successful, especially when clustered together so that enthusiasts can sample a variety of wines.

Adventure Amenities

The Resort will take advantage of the location in the heart of some of the best hunting and fishing in the Western US and develop amenities that appeal to outdoor enthusiasts looking for opportunities to fish on the Columbia River and other rivers and streams in the region, and hunt for game fowl, deer and elk. A "Sportsman's Village" concept could include several components, such as retail space for outfitters, training classes, and guide services. The Resort will also offer nearby access to the Columbia River and hunting areas.

OUTFITTERS. The Resort village will be able to offer space to retailers providing outdoor clothing, hunting equipment such as guns and ammunition, fishing gear and other services such as a gunsmith.

GUIDE SERVICES. The Resort will offer an ideal location as a base for hunting and fishing guides. Shuttles can leave from the village taking groups to fishing and hunting locations throughout North Central Washington.

TRAINING. Classes for outdoor enthusiasts can be offered, either in the retail or hotel conference spaces or outdoors in the plaza or on-site with the river access and nearby hunting locations.
RIVER ACCESS. The Resort will coordinate with Grant County PUD to improve the Apricot Orchards Boat Launch to provide better access to the Columbia River for recreational hunting and fishing users. This will include restroom facilities, additional tow vehicle parking and boarding floats in addition to the improved boat ramp. This access will allow resort users immediate access to the river with guides and for angler training classes to learn new techniques and try out new equipment.

SPORTING CLAYS, TRAP & SKEET. The Resort can develop the quarry site into a range for recreational shooting practice and competitions. The site is isolated from the rest of the property, but close enough to provide a convenient location for those staying at the resort or those shopping at the commercial establishments to try out new equipment and hone their shooting skills.

Amenity Implementation

Amenities will be developed in all stages of resort build out to ensure the project stays true to the Master Planned Resort concept. Not all amenities will be available to initial residents, but as the resort is built more and more amenities will be added. The exact nature and timing of amenities will depend on market conditions, development thresholds, available commercial and open space and the development schedule of resort infrastructure to serve the amenities.

Development of major amenities such as the sportsman’s village, hotel and spa, and golf course and equestrian center will depend largely on achieving thresholds of residential units to support the amenities and finding development partners with the expertise to construct and operate the facilities. The Sportsman’s Village concept could be developed overtime as it includes a number of related, but independent elements; as such, it is very scalable. Market research may indicate a change in the mix of amenities offered would be beneficial. Should that be the case, changes to the resort amenity plan will be addressed through either major or minor amendments to the MPR as appropriate as determined by Douglas County.
The hotel, spa and sportsman’s village will likely develop concurrent with the future residential-focused stages of development discussed above and would comprise part of the commercial space and resort amenities of those phases of development. These uses would likely be clustered together, however, rather than distributed throughout the residential portions of the project. The longer lead-time associated with these user-dependent elements has led the developers to begin negotiations with potential development partners already. Once there are interested partners, and user populations forecast, these elements of the resort would be implemented and developed concurrently with the housing units and would likely move at a faster pace to achieve the critical commercial mass that will make the larger commercial users viable.

<table>
<thead>
<tr>
<th>Table 1-3. Potential Additional Resort Amenities to Develop Concurrently</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hotel</strong></td>
</tr>
<tr>
<td>• Hotel (likely less than 200 rooms)</td>
</tr>
<tr>
<td><strong>Resort Village</strong></td>
</tr>
<tr>
<td>• Retail spaces for outdoor gear</td>
</tr>
<tr>
<td>• Restaurant</td>
</tr>
<tr>
<td>• Pub</td>
</tr>
<tr>
<td>• Hunting and Fishing Guide Services</td>
</tr>
<tr>
<td>• Wine Tasting Rooms</td>
</tr>
<tr>
<td><strong>Spa</strong></td>
</tr>
<tr>
<td>• Spa may be developed in conjunction with hotel</td>
</tr>
<tr>
<td><strong>Food &amp; Wine</strong></td>
</tr>
<tr>
<td>• Restaurant</td>
</tr>
<tr>
<td>• Pub</td>
</tr>
<tr>
<td>• Wine Tasting Rooms</td>
</tr>
<tr>
<td><strong>Shooting Range</strong></td>
</tr>
<tr>
<td>• At the site of the existing quarry</td>
</tr>
<tr>
<td>• Sporting clays, etc.</td>
</tr>
<tr>
<td><strong>Shoreline Trails</strong></td>
</tr>
<tr>
<td>• To be developed pending coordination with Grant County PUD</td>
</tr>
<tr>
<td><strong>Apricot Orchards Boat Launch</strong></td>
</tr>
<tr>
<td>• Improvements coordinated with Grant County PUD</td>
</tr>
<tr>
<td><strong>Golf Course</strong></td>
</tr>
<tr>
<td>• On southern portion of site</td>
</tr>
<tr>
<td><strong>Equestrian Center</strong></td>
</tr>
<tr>
<td>• Stables</td>
</tr>
<tr>
<td>• Corrals</td>
</tr>
<tr>
<td>• Trails</td>
</tr>
</tbody>
</table>
1.2 Objectives, Principles and Standards

This project responds to a need recognized by the developer for resort and second home development in relatively close proximity to major metropolitan areas. Satisfaction of this need also benefits the local economy by bringing visitor expenditures from outside of the area. Members of the baby boom generation have more disposable income than their predecessors and are increasingly looking for luxury resort experiences that are designed to incorporate the unique characteristics of resort surroundings. Communication technology has further increased the number of persons for which such a lifestyle is possible in that being retired (or not having a need to work) is no longer a prerequisite.

New resorts have a more residential component than in the past. Users buy second homes, third homes, etc. and rent them out when they are not using them. A resort offers the advantage of housekeeping, maintenance, room service and management services that are not as readily available in more traditional residential projects.

The Spanish Castle site was chosen due to its combination of access to the Columbia River, unique geological character, view of the mountains and desirable climate. It is also in close proximity to a commercial airport providing for short travel times from major metropolitan areas that is increasingly demanded by luxury resort guests.

Integration of the resort visually and functionally with the physical, cultural and historical context of the site is not only consistent with County policy but is necessary in order to satisfy homebuyers and guests.
References:

Mongan, Jeff; John G. Mansour, John C. Hill, Jr., and Robert C. Glazier
“Redefining Resorts”
Urban Land Vol. 66, No. 2
February 2007
2. DEVELOPMENT STANDARDS & DESIGN CRITERIA

2.1 Construction and Development Plan

The construction and development plan describes in general terms, construction standards and the measures to be taken during construction and development to manage excavation, erosion, dust and stormwater.

Construction

If any of the residential areas obtain access from a single street, certain construction standards need to be met. Under the International Fire Code and Douglas County Code, where 100 or more housing units have only one available access point, sprinkling is required as a construction standard in both residential and non-residential buildings.

The developer could potentially obtain second emergency vehicle-only access across the BNSF railroad, in part to address the impact that would result if a single access road were blocked during an emergency. An approved emergency access has not been approved at this time; if unable to obtain the emergency access, applicable construction requirements, including sprinkling, would be met.

A second emergency access point serving the water view would require a second railroad crossing and approval by the railroad. Such a crossing could be located either north or south of the Spanish Castle Road railroad crossing, and it would be closed to the public. It would be available on a full time basis to emergency vehicles through the use of Knox Boxes or other acceptable means. Since it is not a regularly used road, it would have a minimal 20-foot wide all-weather surface, probably gravel. Preferred sites have been identified by the developer, but an agreement will need to be obtained from BNSF to construct such an access. An emergency access point to serve the southern portion of the site would be a gated approach to Highway 28 likely more than 1,000 feet from the Spanish Castle Road intersection. It would require approval by the Washington Department of Transportation and would be gated and closed to public access, with its only availability to emergency vehicles on an as-needed basis.

Grading

Grading plans will be produced for each project phase. Cuts and fills are expected to balance across the site minimizing the need to import fill material or export cut material. However, certain construction materials may not be available on the site and they would then need to be brought in. They would be obtained from commercial off-site sources.

Excavated material will be stockpiled on-site. With project phasing as proposed, stockpile locations would be available for all increments of development. Development of later increments may require the temporary use of open space (private) areas for this purpose, with their improvement and restoration (where appropriate) occurring at the end of the respective developmental increments.

Stockpiles will be stored on a short-term, temporary basis, watered to control dust and kept sufficient distance from homes and active agricultural operations both on and off of the site to avoid problems.
Erosion

Factors that influence the potential for erosion are soil characteristics, vegetative cover, topography and climate. While climate is a given, site development tends to alter the other three factors resulting in changes in the potential for erosion. Significant factors include relatively more erodible soils, relatively little vegetative cover, and steep slopes. Site development, particularly in the water view portion of the site, will significantly modify the slopes and remove vegetation, resulting in a need for erosion control measures.

If not controlled, erosion could have a number of adverse impacts including the removal of topsoil, siltation of stormwater structures and sedimentation of surface water.

Most of the soil types on the site have a large component of sand, which tend to make them more erodible, notwithstanding other influencing factors. However, many of the soil types also contain substantial rock, reducing their potential for erosion.

The soil types that appear to be the most prone to erosion based on combined factors of slope and soil are Cashmere fine sandy loam, 8 to 15 percent slopes, Pogue loam and Quincy loamy fine sand. All three soil types are characterized by slopes of up to 15 percent. They are generally located in the steeper parts of the upland resort and in the very lowest parts of the water view resort, including areas most likely to support the commercial core (although most of the Quincy soil type appears to be on Grant County PUD property).

Soil types that based on their K Values have low to medium erosion potential regardless of slope include the other Pogue soil types and the Torriorthents soil type that is dominant on the steepest slopes of the site. The other Cashmere soils have high K values but are on flatter slopes. These soils are located primarily in the upland resort. An additional soil type, Ellisforde fine sandy loam, has a medium K value, but is primarily located in the Conservation Area and across Highway 28. Soil types and their erosion potential are shown in Table 2-1.
Table 2-1. Erosion Potential of Site Soils

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>% Slope</th>
<th>K Value</th>
<th>Erosion Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pogue Loam</td>
<td>8-15</td>
<td>.49</td>
<td>High</td>
</tr>
<tr>
<td>Cashmere fine sandy loam</td>
<td>8-15</td>
<td>.37</td>
<td>High</td>
</tr>
<tr>
<td>Cashmere fine sandy loam</td>
<td>3-8</td>
<td>.37</td>
<td>High</td>
</tr>
<tr>
<td>Cashmere fine sandy loam</td>
<td>0-3</td>
<td>.37</td>
<td>High</td>
</tr>
<tr>
<td>Quincy loamy fine sand</td>
<td>0-15</td>
<td>.32</td>
<td>Medium</td>
</tr>
<tr>
<td>Ellisforde fine sandy loam</td>
<td>3-8</td>
<td>.32</td>
<td>Medium</td>
</tr>
<tr>
<td>Pogue fine sandy loam</td>
<td>3-8</td>
<td>.32</td>
<td>Medium</td>
</tr>
<tr>
<td>Pogue fine sandy loam</td>
<td>3-8</td>
<td>.32</td>
<td>Medium</td>
</tr>
<tr>
<td>Logy cobbly sandy loam</td>
<td>3-15</td>
<td>.24</td>
<td>Medium</td>
</tr>
<tr>
<td>Pogue cobbly fine sandy loam</td>
<td>0-15</td>
<td>.24</td>
<td>Medium</td>
</tr>
<tr>
<td>Torriorthents, very steep</td>
<td></td>
<td>.20</td>
<td>Low</td>
</tr>
<tr>
<td>Pogue gravelly fine sandy loam</td>
<td>15-25</td>
<td>.20</td>
<td>Low</td>
</tr>
<tr>
<td>Pogue gravelly fine sandy loam</td>
<td>8-15</td>
<td>.20</td>
<td>Low</td>
</tr>
<tr>
<td>Pogue extremely stony fine sandy loam</td>
<td>3-25</td>
<td>.15</td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: NRCS, Soil Survey of Douglas County, Washington

An NPDES Construction Stormwater General Permit is required for construction activity on this site since it is greater than five acres in area and has the potential to discharge to the Columbia River. The permit requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) and the implementation of measures that prevent soil from being carried into surface waters or storm drains.

Best Management Practices that address twelve basic elements are required in the stormwater plan unless justification is given that any of the twelve elements is not necessary. For this site, the stormwater plan will need to address the erosion potential of the soils on the site, the steep slopes and, in the water view portion of the site, the potential for extensive grading and vegetation removal. Fortunately, these extreme factors do not fully coincide since the steepest slopes in the Water View Resort have a relatively low level erosion potential.

The short term best management practices that are to be included in the Storm Water Pollution Prevention Plan will have to be determined based on the planning and engineering analysis that is required in developing the plan. They will probably be a combination of practices focusing on the use of silt fences, storm drain inlet protection and re-seeding exposed slopes.

Longer term measures include developing the site incrementally with existing vegetative cover left in place until development begins in that area. Newly created slopes will be engineered as specified by the
geotechnical analysis. Natural vegetation is to be preserved in the major ravines while minor drainage ways will be incorporated into the stormwater system. Slopes exposed long term will be re-seeded with wild grasses to prevent erosion.

Dust Control

Two potential sources of dust have been identified on and adjacent to the project site. The first is excavation and construction activities for project development; the second is the proposed outdoor recreation area. With regard to the identified sources, State law requires that reasonable precautions be taken to prevent dust from leaving the property and that dust not interfere unreasonably with the use and enjoyment of property, cause health impacts, or damage property or business.

Dust control plans will be prepared for site development and the outdoor recreational area.

Sandy soils are generally more susceptible to wind erosion whereas stony or gravelly soils tend to have low susceptibility. Most of the soil types on the development site belong to wind erodibility groups characterized as moderately to highly erodible, with Quincy loamy fine sand having the most erosion potential, followed by the Cashmere soil types and Pogue fine sandy loam. The soil classifications with the least erosion potential are Pogue loam, characterized as slightly erodible and Pogue extremely stony fine sandy loam, which is not considered to be subject to wind erosion due to its rock content. Soil erosion potential with respect to wind is shown in Table 2-2.

Table 2-2. Wind Erosion Potential of Site Soils

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>K Value</th>
<th>Wind Erodibility Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quincy loamy fine sand, 0-15%</td>
<td>.32</td>
<td>2 Very highly erodible</td>
</tr>
<tr>
<td>Cashmere fine sandy loam, 0-3%</td>
<td>.37</td>
<td>3 Highly erodible</td>
</tr>
<tr>
<td>Cashmere fine sandy loam, 3-8%</td>
<td>.37</td>
<td>3</td>
</tr>
<tr>
<td>Cashmere fine sandy loam, 8-15%</td>
<td>.37</td>
<td>3</td>
</tr>
<tr>
<td>Ellisforde fine sandy loam, 3-8%</td>
<td>.32</td>
<td>3</td>
</tr>
<tr>
<td>Pogue fine sandy loam, 3-8%</td>
<td>.32</td>
<td>3</td>
</tr>
<tr>
<td>Logy cobbly sandy loam, 3-15%</td>
<td>.24</td>
<td>4 Moderately erodible</td>
</tr>
<tr>
<td>Pogue cobbly fine sandy loam, 0-15%</td>
<td>.24</td>
<td>4</td>
</tr>
<tr>
<td>Torriorthents, very steep</td>
<td>.20</td>
<td>4</td>
</tr>
<tr>
<td>Pogue gravelly fine sandy loam, 8-15%</td>
<td>.20</td>
<td>4</td>
</tr>
<tr>
<td>Pogue gravelly fine sandy loam, 15-25%</td>
<td>.20</td>
<td>4</td>
</tr>
<tr>
<td>Pogue loam, 8-15%</td>
<td>.49</td>
<td>5 Slightly erodible</td>
</tr>
<tr>
<td>Pogue extremely stony fine sandy loam, 3-25%</td>
<td>.15</td>
<td>8 Not subject to erosion</td>
</tr>
</tbody>
</table>

Source: NRCS, Soil Survey of Douglas County, Washington

Keeping in mind that the NRCS erodibility designations primarily apply to cultivation, this analysis indicates that the soil types with the most susceptibility to wind erosion are in the southern portion of
the site and the water view area. The areas with the least susceptibility are on steeper slopes in the central and northern portions of the site.

Construction dust control measures will be specified in the dust control plan but are expected to include using water to keep dust under control, and seeding soils that are exposed longer term. Other measures may include developing the project site in stages, and scheduling construction activities to minimize vehicle and equipment driving over exposed surfaces. Tracked out mud and dirt on paved areas will be washed down if necessary and in a manner that does not conflict with erosion control measures. Stockpiles of dirt and soil will be watered, seeded or covered.

Existing water sources on the project site are to be used for dust control and water rights are believed to be sufficient to do so. However, this will be verified and an alternative source identified by the dust control plan if needed. Water will be applied by a combination of sprinklers, water truck application and hand held spray depending on factors such as size and accessibility of the involved area, the need to address an immediate problems and consistency with erosion control measures.

While the fine sandy loams that make up the project site may require measures to control wind erosion during construction, grass could potentially be planted in portions of the outdoor recreational area providing a stable cover, - and probably can be inter-seeded, significantly reducing this potential impact.

**Stormwater Management**

Improper stormwater management would have significant impacts due to the steep slopes, relatively erodible soils and the anticipated excavation that will be required for development.

The primary impacts on the Columbia River include the introduction of pollutants, turbidity from sediment, changes in groundwater recharge and changes in surface water temperature. They could have adverse effects on water quality, aesthetics and plant and animal life.

Stormwater drainage is being designed by a licensed professional engineer using best management practices from the Stormwater Management Manual for Eastern Washington. The specific elements will be determined as a part of project engineering but will probably consist of on-site retention of site generated runoff. Stormwater that now passes through the site - primarily through natural drainage ways - will continue to its existing natural discharge points. On-site generated runoff is to be conveyed by an artificial conveyance system comprised of ditches, pipes and similar structures and infiltrated on-site.

The larger drainageways will be left open or piped, with pipe size determined by hydrological analysis. Smaller drainageways that are graded will be incorporated into the stormwater system.

**Noise Control**

Impact mitigation on built-out areas from construction noise generated by later developed areas include keeping construction vehicles maintained and in good repair, including their mufflers. Vehicles will also be used in the manner in which they are intended and will not be loaded beyond their capacity.

Where construction is occurring adjacent to built-out areas, operating hours will be limited to 7:00AM to 10:00 PM.
2.2 Potential Equestrian Center

An equestrian center is anticipated as one potential recreational use for the resort. Equestrian centers, by nature, require specific dust control and animal waste management when adjacent or nearby to residential uses. A dust control plan and an animal waste management for the equestrian center will be incorporated into the resource management plan. Both will be based on State, Federal and local requirements and best management practices for these activities.

Dust Control

Horses cannot be kept in dusty conditions, so the resort has an incentive to make its best efforts to control dust. In general this includes using water to sprinkle corrals and high traffic areas, maintaining most of the area used to keep horses in pasture and planting grass in outdoor riding areas and if necessary, riding trails. Windbreaks in conjunction with site landscaping may also be used to minimize dust from leaving the site.

The soil types in the upland area that would most likely house the equestrian center are Cashmere and Pogue fine sandy loams. These soil types are classified by the National Resource Conservation Service as being highly erodible in cultivated areas. They are also described as being "somewhat limited" in suitability for riding paths based on soil properties that affect trafficability and erodibility, such as stoniness and surface layer texture. The limitation specified by NRCS for the Cashmere and Pogue soils is their being "too sandy."

The NRCS soil type classification is based on soil suitability for growing crops. A sandy soil such as the Cashmere and Pogue should not pose significant dust conditions for horses or for riding trails. Their limitation for those purposes is based on surface layer texture and its potential for water erosion. It may be desirable to plant the more heavily used riding trails in grass to protect horse hooves from the effects of soil texture, and the same measure could also be used if unacceptable levels of dustiness were to occur.

Dust control would primarily be necessary in corrals and high traffic areas. These areas are fairly small with most outdoor space in the equestrian center planted in pasture grass, maintained in natural vegetation or landscaped. Roads and driveways used by vehicles and walking paths around the equestrian center will either be surfaced with gravel, asphalt or concrete, based on the amount of traffic they receive.

Riding events would primarily take place inside arenas having a sandy soil surface with dust controlled by the application of water. Dust in corrals and other exposed areas would primarily be controlled by regularly wetting down exposed areas without applying so much water to cause a waste discharge or cause mud to be tracked out on hard surfaces by vehicles. Where there is a build-up of mud or dirt, it will be swept, if large enough surfaces are involved, wet sweeping or vacuum filter equipment can be used to minimize dust generation. This cleaning of soil build-up would normally be expected to occur soon after winter weather ends, and at other times as needed.

Pasture

Corrals and other areas with exposed surfaces are fairly small. The primary areas used for holding animals are pastures and indoor stables as well as the arenas when in use. Pasture size has not been
determined with certainty but is likely to be at least 10 acres. Much of the area proposed for the equestrian center has been used historically as wheat fields, therefore have been already been leveled needing only to be planted in pasture grass. If new areas are converted to pasture, best management practices for dust control will be used, such as planting pasture grass as soon as possible after site clearing, planting an annual crop to hold the soil while pasture is being established and using water as necessary to control dust.

Pasture will be maintained with a permanent, uniform vegetative top cover and kept free of noxious weeds. A manager with experience or training in agriculture and horse handling will be responsible for the equestrian center and will ensure that best management practices are used in planting, mowing, pest control and irrigating pastures.

**Waste Management**

An Animal Waste Management Plan will be prepared for the collection and removal of horse manure and incorporated into the Resource Management Plan. Horse manure has relatively low leachate and is also resistant to breeding flies due to its high fiber content.

The primary options are removal of the waste for land application on an agricultural or rangeland site or composting and application on the project site. Removal is the preferred alternative provided that a site is available to accept the waste. If composting is used, it will be done in a location that is at least 100 feet from any residence or resort building and at least one half mile from Highway 28 as required by the County Zoning Ordinance. Due to the latter standard, if composting were to occur, it would need to be done either in a screened location in the golf course or off of the resort site.

Whether composted or stored temporarily for off-site discharge, manure would be kept in covered areas designed to prevent leachate and curbed to divert stormwater runoff around them. If impractical to avoid the generation of leachate, it will be permitted, collected and disposed of in a manner required by law.

Other best management practices for horse waste disposal include regular clean up of manure from corrals, stables and arenas, and frequent and regular transport of waste from the facility.

### 2.3 Trail System

A trail system is planned for the resort and is described in the transportation plan. A potential recreational amenity that may be included as part of the trail system and outdoor recreational area is an off-road or “mountain” bike trail system. This amenity could develop in two ways: as an ultimate element of the amenity plan, or as an interim amenity to be used on undeveloped portions of the site but to be converted to paved trails as those areas develop with homes or commercial uses.

With the interim option, the trails would eventually be paved and that would mitigate any dust issues (other than construction, which is discussed previously). If the unpaved trails are kept as an ultimate amenity (and in the interim, if they are paved ultimately), dust would have to be managed as described previously for outdoor recreation areas. Bicycle use of the trails would not be heavy enough to generate much dust, unless special events were to be held using the trail system. In that case, event-specific dust control plans (likely watering) would be required to mitigate any excessive dust generation.
2.4 Bulk, Design and Dimensional Standards

The Design and Development Manual includes standards for project development that will be required for resort development. They will be codified in Covenants, Conditions and Restrictions for the resort and administered by homeowners associations.

Parking

Parking requirements for the resort were determined by using the standards in the Douglas County Parking Code as a starting point, and comparing them with parking demand data published by the Urban Land Institute and Institute of Transportation Engineers and the code requirements of other jurisdictions. Douglas County requirements were assumed suitable unless shown otherwise.

Based on this analysis and some of the unique characteristics of this project, most Douglas County standards were used, with some modifications and the addition of standards where none exist.

The conclusions are summarized as follows. Actual parking standards are in the Design and Development Manual.

Residential

The standard of two off-street spaces per single-family residence is almost universal and applied here. Counting garage space toward this requirement is allowed. Covenants will prohibit conversion of garages to other uses where this is applicable.

The Douglas County standard of 1.5 spaces per multiple family dwelling unit is retained, although this has been shown by some demand based research to be a little high. However, given the location, and topographical characteristics of this site, it is assumed that more automobile use would be expected than in a more urban setting.

Recreational Facility Parking

The Douglas County parking standard for the golf course and driving range will be used. There is no separate standard for equestrian centers. The most applicable standard from other jurisdictions appears to be based on seating - either one parking space per three or four seats. A seating capacity standard is being applied. Should sports fields or other recreational facilities be developed, Douglas County code and applicable studies will be utilized to characterize a parking supply adequate to serve the facility as approved by Douglas County.

There is substantial area in the upper part of the site when compared with the water view resort, providing the opportunity to increase the amount of parking available to any major recreational facilities if further refinement of their development plans shows that it is warranted.

Water View Resort Parking

Many jurisdictions, including Douglas County, use a "shopping center" parking standard in situations such as this in which a number of land uses share parking. Comparative analysis suggests that the County standard is somewhat higher than that used elsewhere or suggested by demand generated data. On the other hand, the restaurants and condominium units in the commercial core consist of a
higher proportion of use than found in a typical shopping center and tend to have a greater parking need. The Douglas County shopping center standard is being proposed with the clarification that the floor area of restaurants and other high traffic uses that are added to the shopping center calculation be deducted from the total floor area on which it is based. Parking required for the hotel and condominiums require a separate calculation.

The impact on the commercial core area from proposed parking standards is a potentially substantial increase in the area needed for parking, possibly by as much as three to four acres. The use of covered parking spaces beneath the condominium units in the commercial core would reduce some of this need.

If the size of the parking area were increased, it would likely replace open space (private) planned for the site. Separate parking in the upper part of the site with shuttle service is a recommended mitigation measure. This would also have secondary benefits of reducing vehicle traffic across the railroad track and in the higher intensity parts of the water view resort.

The shuttling concept also benefits the resort, residents and visitors due to the more pedestrian focus of the part of the resort that consists of and immediately surrounding the commercial core. The businesses, townhomes and condominiums are in close enough proximity to one another to encourage walking and non-motorized vehicle use. The shuttling concept reduces the amount of traffic that might conflict with pedestrians in the area, reduces the amount of non-resident traffic on the private roads, and reduces trip length within the resort.

Based on these parking standards, a total need for 734 parking spaces is projected for the commercial core. With 264 covered condominium spaces and a parking lot with approximately 200 spaces in the commercial core, an additional 270 parking spaces would be needed in the upland site parking area.

2.5 Landscaping

A landscape plan has been prepared for the resort and is included in the appendix.

A “Landscape Master Plan” was prepared for Spanish Castle Resort by Planting Design of Edmonds, WA. This report stated “the overall design intent of the landscaping within the Spanish Castle Resort is to create the impression of a luxurious oasis and a sense of community. This is accomplished by an abundance of plant material along the roadways, within the neighborhoods, and in open space (private)s and parks.” However, this plan did not take into consideration the natural environment and water resources required to support such landscaping.
A revised landscape plan has been prepared for Spanish Castle Resort that will enhance the community with natural elements appropriate for the region. Proper planting and water management will contribute to both the desirability and livability of the development. This section summarizes the requirements in both public and private spaces. Public space standards will apply to street right-of-way, as streetscape often shapes the character of a community. The landscape standards provide for ecologically-conscious practices to help the project developers as well as individual lot owners choose a more sustainable lifestyle for themselves and the community. A separate "Resource Management Plan" is included in the MPR appendix to address undeveloped open space (private) and critical areas within the Spanish Castle Resort.

**Sustainable Landscaping**

The design of landscaping within the project can be environmentally sensitive and contextual in order to protect the surrounding natural environment and fit into the overall character of the area. Regionally appropriate plants and water conserving landscape practices will be applied and serve as strong unifying elements throughout the public realm and can be further incorporated into the front yards of private homes.

**Water Use.** Landscape improvements will be designed with water-efficiency as a goal. Despite the location adjacent to the Columbia River, the project is located in a relatively arid region.

**Soil Disturbance.** All portions of a lot or tract where existing vegetative cover is removed or soil is disturbed, that are not otherwise proposed to be covered by improvements or landscaping will be successfully reclaimed through re-vegetation with a mix of native, adaptive and drought tolerant grasses and ground covers in accordance with the reclamation and revegetation standards.

**Open Space.** Open space (private) is held in common for the purposes of buffering environmentally sensitive areas adjacent to the project development areas while allowing limited passive uses including walking, running, hiking, wildlife and scenery viewing. Landscaping of open space (private) tracts will be predominantly native and drought tolerant species in accordance with the seed mixes to be applied in accordance with the reclamation and revegetation standards.
**Private Landscaping.** Landscaping of homes and commercial areas is the greatest contributor to the overall character of a community. The challenge is to establish consistency in landscaping while allowing flexibility to allow variety and individuality. In any case, the landscape design of these areas will emphasize efficient water management and the use of regionally appropriate plant and landscape materials.

**2.6 Model Homes**
Model homes may be constructed for each preliminary plat approval for up to nine lots, providing the conditions contained in the Design and Development Manual contained in the appendix are met.

**References**
- Planting Design
  - *Spanish Castle Resort Landscape Plan, September 2012*

- Rubenstein, Harvey M.
  - *A Guide to Site and Environmental Planning* 2nd Ed.
  - John Wiley & Sons
  - 1980

- U.S. Department of Agriculture
  - Natural Resource Conservation Service
  - *Soil Survey of Douglas County, Washington*

- Washington State Department of Ecology
  - *Stormwater Management Manual for Eastern Washington*
  - Publication Number 04-10-076
  - September 2004
3. LAND USE

3.1 Existing Land Use and Zoning

Much of the site and adjacent property is open land. There are about 180 acres of orchards on the site planted in apples, cherries and apricots.

Currently none of the surrounding areas that border the site are in agricultural production, except east of Highway 28. Orchards across Highway 28 have been taken out and a vineyard has been planted.

Property between the site and the Columbia River is open land owned by Grant County Public Utility District #2, associated with its operation of Wanapum Dam and Reservoir. Other than a boat launch, a well and pump stations for irrigating nearby orchards, this land is undeveloped.

A Burlington Northern Santa Fe Pacific railroad passes through the resort site dividing it into two distinct parts, an upland area above the track and the water view resort area below.

Prior to the Spanish Castle Resort MPR, about 575 acres, comprising the majority of the developed site, was zoned Commercial Agriculture (AC-10). Most of the area east of the railroad is either in agricultural production, has water rights for agricultural use or soils with Class 3 agricultural capability classification as determined by the Natural Resource Conservation Service. The area west of the railroad has not been farmed.

The remainder of the site was zoned Rural Remote (RR-20). The zoning of the property was changed from these classifications to that of Master Planned Resort (MPR) by the 2007 MPR.

Commercial Agriculture Zone

The purpose of the AC-10 zoning district is to encourage agricultural development by restricting incompatible uses, and to preserve and encourage existing and future agricultural land uses. Production of food and fiber, and associated support activities including transportation are the primary land uses in the district (DCC 18.36.010).

Permitted land uses besides agriculture and agricultural related industry include single-family dwellings and duplexes, bed and breakfast inns with three or fewer rooms, riding stables, horse boarding and training facilities and certain utility transmission and distribution facilities (DCC 18.36.020). The minimum lot size is ten acres or 1/64th of a section, with limited provision for smaller (usually clustered) lots.

A 100 foot setback from adjacent agriculturally zoned parcels is required for habitable buildings (DCC 18.16.080(F)). Recorded resource disclosure statements are also required within 500 feet of designated agricultural resource areas.

Master Planned Resorts may be allowed in agricultural areas of long term commercial significance if the County finds that the land is better suited, and has more long-term importance for the master planned resort than for agricultural production.
**Rural Resource Zone**

The purpose of the RR-20 zone is to encourage and maintain the County's rural character, provide for agriculture and other resource and rural land uses and to protect sensitive critical/environmental areas. Areas with this zoning may have rangeland uses and may buffer resource areas (such as agriculture) from incompatible land uses. Areas that are remote or have limited development opportunities also characterize this zoning designation.

Permitted land uses are generally the same as in the AC-10 zone but also include agricultural related storage of crops, machinery, equipment, and supplies; certain types of farm chemical storage, community halls and granges (DCC 18.31.020). The minimum lot size is 20 acres or 1/32nd of a section, with limited provision for smaller (usually clustered) lots.

The Growth Management Act and adopted County policies allow Master Planned Resorts in areas with rural zoning such as RR-20.
Figure 3-1. Boundary Survey
3.2 Proposed Land Use & Distribution

The 2007 MPR detailed a development plan that has since been determined to be relatively aggressive and possibly unbuildable given topographical limitations. However, to maintain consistency with the approved elements of the 2007 MPR and EIS as much as possible, this development scheme has been retained as an ultimate build-out scenario in terms of total units and types of land uses to identify appropriate mitigation measures should the resort develop to the level approved in 2007. The following discussion uses this ultimate build-out scenario to analyze proposed land use and distribution. The major elements of the ultimate build-out resort, acreage and distribution are given below. The percentages are based on an approximate overall acreage of 854.17 acres.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>157 Acres</td>
<td>18.4%</td>
</tr>
<tr>
<td>Luxury</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Affordable</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Multi Family Residential</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Townhouse/Condominium</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>Mixed Use Commercial Core</td>
<td>10.6 Acres</td>
<td>1.2%</td>
</tr>
<tr>
<td>Recreation Center</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Potential Retail</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Spa/Wellness Center</td>
<td>27.4</td>
<td></td>
</tr>
<tr>
<td>Potential Spa/Wellness Center</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>Potential Hotel</td>
<td>15.2</td>
<td></td>
</tr>
<tr>
<td>Utilities/Community Support</td>
<td>68 Acres</td>
<td>8.0%</td>
</tr>
<tr>
<td>Sewer/Stormwater/Water/Electrical/Other</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Open area related to utilities (estimate)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Roads &amp; Trails</td>
<td>27 Acres</td>
<td>3.2%</td>
</tr>
<tr>
<td>Open space (private)</td>
<td>525 Acres</td>
<td>61.5%</td>
</tr>
<tr>
<td>Potential Golf Resort</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>Potential Equestrian Center</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Potential Parks</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Conservation Space</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Ir. Ag. (East of 28)</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>Irrigated Agriculture</td>
<td>197</td>
<td></td>
</tr>
</tbody>
</table>
3.3 Future Growth of Population & Employment

A full time population of between 1,275 and 1,617 persons and a transient population that could theoretically reach 4,636 at one time is projected for the resort. However, since the theoretical transient maximum is considered unlikely, estimates based on 2.5 persons per dwelling unit were used in projecting utility and traffic demand. This is the average number of persons per dwelling unit on a statewide basis and accounts for expected less than full occupancy of second homes and vacation units.

Table 3-1. Projected Dwelling Units and Population

<table>
<thead>
<tr>
<th>Period</th>
<th>Dwelling Units</th>
<th>Cumulative Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Year Horizon</td>
<td>200</td>
<td>3,323</td>
</tr>
</tbody>
</table>

Since most of the resort is expected to be used on a transient basis, this number underestimates the total number of persons using the resort over a period of time. It also overestimates the full time population, especially during the earlier phases and at certain times of the year. The population figures given are assumed to be a reasonable estimate of the effective population, especially during the peak season. However, vacation accommodations, including single family homes and condominiums as well as lodging units have their own separate occupancies.

Table 3-2. Projected Full-Time Dwelling Units and Population

<table>
<thead>
<tr>
<th>Period</th>
<th>Dwelling Units</th>
<th>Cumulative Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Year Horizon</td>
<td>469</td>
<td>1,668</td>
</tr>
</tbody>
</table>

Full-time year-round population is projected in Table 3-2, based on the projected number of full-time versus temporary residential units as calculated in the Housing Chapter. The projected population for the 20 year time horizon consists of a projected increase in full time housing units as homes that were purchased for retirement become primary residences. This is based on National Association of Realtor survey data that show 27 percent of vacation homes and 14 percent of investment homes becoming primary residences after retirement. The timing of conversion from retirement home to permanent residency is not known and will probably take place over an extended period of time. It is assumed, based on the age profile of buyers, that they are all converted after completion of project build-out, but within the 20 year planning horizon.

To account for the possibility that this projection understates full-time resort population before the last units are built out, an alternate projection was made based on persons per housing unit in several Washington cities (and one county) that would be expected to have high proportions of second homes. Population and housing unit projections made by the Office of Financial Management were used to determine these ratios. As would be expected, all of the ratios, shown in Table 3-3 are low, compared to most cities and counties in the State, between one and two persons per unit.

Table 3-3. Persons per Housing Unit for Selected Cities and Counties; 2006

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Population</th>
<th>Housing Units</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelan</td>
<td>3,755</td>
<td>2,220</td>
<td>1.69</td>
</tr>
<tr>
<td>Long Beach</td>
<td>1,455</td>
<td>1,293</td>
<td>1.13</td>
</tr>
</tbody>
</table>
Since the resort does not have other industries or a previously established population, the lowest ratio was applied to derive an alternate full time resident projection as shown in Table 3-4.

### Table 3-4. Projected Full-Time Residents, Ratio of 1.13 Persons per Housing Unit

<table>
<thead>
<tr>
<th>Total Dwelling Units</th>
<th>Cumulative Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>366</td>
<td>1,275</td>
</tr>
</tbody>
</table>

Based on an assumed maximum occupancy of two persons per lodging unit or per bedroom, the theoretical maximum capacity of the resort is determined by multiplying all of the bedrooms and lodging units by two, after deducting the projected number of full-time residential units. This is considered theoretical, because it is unlikely that every accommodation unit in the resort will be at its maximum capacity at the same time. It is also likely that occupancy may sometimes exceed two per lodging unit or bedroom – triple occupancy or four in a hotel room for example. But this should not occur in all units simultaneously, and the maximums shown in Table 3-5 is expected to account for that potential.

The 20 year planning horizon shows a reduction in the total number of lodging units to reflect the expected conversion over time of retirement and vacation accommodations to full time residences.

Based on National Association of Realtors and U.S. Census data, resort homebuyers are expected to be older, primarily from the Baby Boom generation – those born between the years 1946 and 1964. Census Bureau data show that in 2004, 67 percent of vacation second home buyers were 55 years and older, white 56 percent of those buying second homes for investment purposes were in this age group. National Association of Realtors survey data from 2002 showed that the typical vacation homebuyer was 55 years old and the typical investment property owner was 47. Eighty-four percent of those second home buyers had no children under the age of 18. An updated National Association of Realtors survey in 2006 raised the age of the typical vacation home buyer to 59 and the typical investment buyer to 55.

### Table 3-5. Projected Maximum Lodging and Accommodation Unit Occupancy

<table>
<thead>
<tr>
<th>Period</th>
<th>Lodging Units &amp; Bedrooms</th>
<th>Cumulative Maximum Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Year Horizon</td>
<td>2,318</td>
<td>4,290</td>
</tr>
</tbody>
</table>

The 20 year planning horizon shows a reduction in the total number of lodging units to reflect the expected conversion over time of retirement and vacation accommodations to full time residences.

Based on National Association of Realtors and U.S. Census data, resort homebuyers are expected to be older, primarily from the Baby Boom generation – those born between the years 1946 and 1964. Census Bureau data show that in 2004, 67 percent of vacation second home buyers were 55 years and older, white 56 percent of those buying second homes for investment purposes were in this age group. National Association of Realtors survey data from 2002 showed that the typical vacation homebuyer was 55 years old and the typical investment property owner was 47. Eighty-four percent of those second home buyers had no children under the age of 18. An updated National Association of Realtors survey in 2006 raised the age of the typical vacation home buyer to 59 and the typical investment buyer to 55.
was 55 years old and the typical investment property owner was 47. Eighty-four percent of those second home buyers had no children under the age of 18. An updated National Association of Realtors survey in 2006 raised the age of the typical vacation home buyer to 59 and the typical investment buyer to 55.

The larger occupancies in our projections by these older home buyers are accounted for factors that include shared occupancy (or ownership) by two or three couples and use of the unit for extended family gatherings. This also indicates a smaller full time population and fewer children.

### 3.4 Surrounding Land Use and Potential Conflicts

Most of the surrounding property is either undeveloped vacant land or former agricultural land not currently in production.

Adjoining property east of the site is zoned Rural Remote, so it is not farmland of long term commercial significance, and it is not in agricultural production. There are some small surface mining sites in this area. With the buffer provided by the conservation area and open space (private) across Highway 28, significant land use conflicts with surface mining is not anticipated.

There appear to be three potential significant land use conflicts: potential conflicts with the surrounding agricultural lands; access issues with respect to both the development and adjacent vacant lands; and potential conflicts with the railroad.

### Agricultural Land Use

Douglas County requirements to protect agricultural land from potentially incompatible adjacent land uses consists primarily of a 100 foot building setback and a recorded resource disclosure statement for the subdivision of land within 500 feet of an agriculturally designated area. The actual distance from residential and visitor accommodations to existing agricultural lands, considered to be the vineyard across Highway 28, is greater than required by those standards. A buffer of at least 100 feet is also to be provided from other agriculturally zoned lands, including open land to the north. A reduction of the required 100 foot setback is proposed for the portion of the property lying north of the resort property between the railroad track and the Columbia River.

With regard to the irrigated agriculture - vineyard property across Highway 28, the following additional characteristics (besides setbacks and recorded resource disclosure statement) tend to mitigate the impacts of resort development on agricultural land:

1. SR 28 is a physical barrier between the property and the resort. It would discourage trespassing, for example, and the potential for objections by resort residents and guests about noise, spraying and other attributes of active agricultural use.

2. Vehicles traveling to and from the resort would not pass through this property except on Highway 28, which already carries a substantial amount of non-agriculturally related traffic.

Other agriculturally zoned lands border the upland resort on the north and partially surround portions of the housing community. The use of machinery and truck traffic by the operation, and activity that could go on during late (or very early) hours also pose adverse impacts.
Transition Buffer

Residential development is to be set back 100 feet from adjoining agricultural lands as required by County Ordinance. The regulations only require that the building itself be 100 feet from the property line. Normally, all or part of the residential lot could be within this buffer and used by the lot owner for a yard, etc. However, to further address concerns about compatibility, this setback is proposed to effectively be a transition buffer, entirely outside of the housing lots. The 100 foot setback mitigates adverse impacts the resort may have on keeping animals on adjacent agriculturally zoned land because it effectively eliminates the requirement to set barns, animal shelters and other agricultural buildings and practices back from the resort property.

The agricultural setback should be sufficient to protect resort development from adverse impacts from agricultural spray. Combined with landscaping such as fences, berms or trees, it should be sufficient to protect residents from noise and operations at late hours. This site is characterized by sufficient air circulation that wind machines – a significant source of noise – are not needed.

Topography of the site also provides for some protection. Much of the site is physically separated from neighboring agricultural land by topography; for this reason, further separation of more than 100 feet from parts of adjacent agriculturally zoned land is likely.

An agricultural setback is normally required for the part of the water view area that borders agriculturally zoned land to the north. However, the maximum reduction allowed by the Zoning Ordinance, to 60 feet, is being requested under DCC 18.16.080(F) because the adjacent land lying between the railroad and the Columbia River, like the land in the water view area, does not contain any of the qualifying characteristics for agricultural land under the Comprehensive Plan (except possibly the availability of water rights, which has not been determined). This property is characterized by the Torriorthents soil classification, is steep and rocky and has not been in agricultural production.

In this location, the buffer is being proposed as a normal 60 foot setback, applying only to structures used for human habitation, since no significant impacts are being mitigated. It is being provided to conform to a technical Zoning Ordinance requirement.

Access Issues

Legal access for the entire resort consists of County rights-of-way that include Spanish Castle Road and two other rights-of-way across the property. All traffic accesses Highway 28 at the existing County intersection with Spanish Castle Road.

The legality of one of the rights-of-way has been called into question. A portion of the right-of-way for Vulcan Road, Road 921 now called Vulcan Siding Road, provides access from Spanish Castle Road to northeast portion of the site. This right-of-way, which is still occupied by a dirt road, was originally designed and built by Douglas County in 1915. It is the belief of the developer and project surveyor and to their understanding of the Douglas County agreement, that no portion of Road 921 has been vacated. The roadway has been in continuous, although infrequent use since 1915. This is demonstrated by aerial photographs dated 1949, 1962 and 2005.

A former Great Northern railroad right-of-way crosses this portion of the site. It has been assigned a separate parcel number and is shown by County Assessor records as being owned by another party. If
this parcel is under separate ownership, it is a significant impact on the resort master plan because it cuts off access to a significant portion of the site planned for development.

The following measures are being taken to address this impact:

1. This document addresses the development concepts and impacts of the maximum potential build-out. Thus if the railroad right-of-way is resolved, whether by establishing clear title, access to the isolated part of the property or other means, the development of this area may be pursued.

2. Smaller lots may be considered within the area to which there clearly is access to maximize the potential number of lots. This change and its effects are discussed.

Several of the parcels adjoining the resort property appear to have access limited to Spanish Castle Road and other County road rights-of-way through the resort. Other parcels adjoining the site appear to have no access other than direct frontage on SR 28, and others appear to have no access at all. Any of them may gain access by easements that would only appear on recorded title and survey documents.

Where legal access is available from county right-of-way and this is the case in several locations, the determination of whether access is allowed is a County decision.

The resort will extend access corridors to adjacent properties. These corridors are intended to mitigate the apparent lack of legal access to these properties.

The intent of this approach is to balance County Comprehensive Plan policies that discourage direct access to arterials with Master Planned Resort policies that are intended to discourage sprawl.

In providing a minimal number of access linkages, the resort is meeting the intent of the former without creating a substantial roadway network that could be argued to contribute to sprawl. The regulations of the AC-10 and RR-20 zoning districts are being relied upon as the restrictions that are required by the Growth Management Act to preclude new urban or suburban development in the vicinity of the resort.

**Railroad**

There are currently 17 freight trains and 2 passenger trains daily on the Burlington Northern Santa Fe railroad line at speeds of 50 and 60 miles per hour respectively. Sidings located three miles north, and five miles south of the crossing allow trains to move quickly through the area. A signal (for trains) is located just south of the Spanish Castle Road crossing. The location of the signal, combined with good sight distance for southbound trains approaching from the north reduces the likelihood of trains blocking the crossing for long periods (due to obstructions on the track ahead, for example). Development of the resort in this location, relative to the railroad poses two significant impacts on resort residences and visitors: noise from train horns, and safety, primarily at the single crossing on the site, at Spanish Castle Road.

**Noise**

A train horn is a significant source of noise. Although the sound level varies due to a number of factors and is not uniform at a given distance from the train, train horns generally deliver about 90 decibels at 500 feet measured at right angles from the track. Although not enforceable against trains in this
context, Washington State and Douglas County noise regulations indicate that acceptable noise levels for residential areas, where noise duration would be less than five minutes in an hour, are 70 decibels and 60 decibels at night.

Based on these noise standards, train horns would significantly impact units within 500 feet of the railroad, and probably additional dwellings since all other factors being equal, it would take substantial distance to reduce the noise level from 90 decibels at 500 feet to the acceptable levels. However, on this site the actual number of affected residences may be less due to site characteristics at certain locations that tend to reduce the impact.

In site selection and design, factors that tend to reduce noise impacts from railroads include:

1. Distance from the building to the railroad.
2. Shielding by topography, constructed barriers such as berms, walls or both.
3. Building location upwind of noise sources (this is more effective at greater distances).
4. Building orientation, either perpendicular to the noise source, with more sensitive rooms opposite the source, or parallel to the source with windowless walls made of sound buffering building materials on the side facing the source and sensitive rooms opposite the source.
5. Building orientation and configuration to control or reduce the reflection of sound waves. Orientation of multiple buildings or walls that reflect sound waves and cause them to reverberate should be avoided.
6. Use of trees, although multiple rows are necessary.

The resort site has the following characteristics with respect to these factors:

*Distance*

Although more than 600 residential units are within 500 feet of the railroad, substantially fewer are within 200 feet of the railroad. No residential units are proposed within 200 feet of the crossing.

*Topography*

When the variations of topography are taken into account, the number of potentially affected residential units to sound drops considerably. In general the residential lots in the water view resort that are within 200 feet of the railroad are 10 feet to 50 feet or more in elevation below that of the railroad, with most more than 15 feet lower. All of the condominiums and townhomes are set back 200 feet or more from the railroad. However, as taller buildings, they may be more affected, especially those that are only 15 to 30 feet in elevation lower than the track.

Lots in the resort south of Spanish Castle Road and east of the railroad that are within 200 feet of the railroad are 10 to 20 feet higher in elevation, probably not enough to benefit from the standpoint of

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topography. The lots that are within 500 feet of the railroad are 15 to as much as 60 feet higher in elevation.

Of the dwelling units that are within 500 feet of the Spanish Castle Road crossing, 12 are water view resort lots may be 30 feet or more lower in elevation. Street design in this location is also likely to include retaining walls that would shield these lots from the crossing.

Wind Direction

Since the water view resort is generally upwind, it may derive some benefit. However, this is probably not as much of a factor as topography.

Building Orientation

The condominiums and townhomes are planned to be oriented parallel to the track and are not arranged in a manner that should create significant reverberation.

Use of Trees and Landscaping

If a golf course is developed as part of the outdoor recreation resort area, its development may provide some benefit to resort lots that are closest to the railroad.

Based on analysis of lot location relative to the factors that reduce noise impacts, it appears that the condominiums, townhomes and lots in the affordable housing community are the most affected.

Safety

Concerns are centered on the Spanish Castle Road crossing. Currently it is not signalized. However, a safety risk exists to some extent along the entire length of track. With development of the resort, both vehicles and pedestrians would cross the railroad track at Spanish Castle Road at an improved, signalized at-grade crossing. This new crossing is being designed in coordination with BNSF and Douglas County to meet their requirements and will provide increased safety.

Mitigation

1. The resort developer is working with the BNSF railroad to improve the crossing at Spanish Castle Road. Pending BNSF and County approval, plans include signalizing and equipping the crossing with crossing gates to mitigate the hazard from trains on the tracks, with a trail constructed across the tracks to direct pedestrians and avoid conflicts with vehicles when crossing gates are down (crossing configuration is shown in Figure 3-2).

2. To reduce the possibility of pedestrians wandering onto the track, a berm and/or a six foot high fence is to be installed between the track and proposed residential elements of the resort. This fence would be constructed incrementally by phase as new dwelling units are constructed along the railroad tracks.

3. The developer is pursuing an improved at-grade railroad crossing at Spanish Castle Road. The developer will work with Douglas County to apply to the railroad and Washington Utilities and Transportation Commission for designation of the site as a quiet zone. This would allow trains
to pass through the resort without using their horns on the approach to the Spanish Castle Road crossing. This process takes some time and will involve the following steps:

- Spanish Castle must enlist the County as applicant, as it is a county road.
- From the FRA (Federal Railroad Administration) website, this crossing is number 06586D. Having an existing crossing is important, as the FRA and WA have a ‘No New Crossings’ policy.
- An on-site “Stakeholders Meeting” was held in August of 2013.
- The current crossing will be evaluated for Standard Safety Measures (SSM’s) and Additional Safety Measures (ASM’s) and an action plan prepared for crossing improvements prepared.
- The County will make the initial application for improvement. Because it is an Amtrak line, WA UTC will necessarily become involved. If BNSF supports the improvements, it goes to FRA for database update. If BNSF does not support, it can go for appeal if the County so desires.
- After the SSM & ASM analysis is approved a Quiet Zone (QZ) application can be made.
- Currently the timing is 2 to 4 months for BNSF supported QZ and 12 months plus for appealed QZ with about half being denied.

4. The wayside horn is the preferred alternative to implementing the quiet zone. The horn, installed at the crossing would sound as the train approaches the crossing, set to a minimum 35 second warning time. The wayside horn has less of a noise impact than train horns because its stationary location localizes the impact. It is also directional; potentially increasing the distance subject to higher sound levels for residences located in line with the crossing, but reducing the overall number of affected residential units, since most are located at oblique angles from the crossing.

The most likely affected dwelling units are lots located in the upland resort south of Spanish Castle Road between 200 and 1,000 feet away from the crossing. Berms, trees and landscaping used in the recreational open space (private) design could be used to shield these lots. None of the water view lots are assumed to be affected because they are lower in elevation, shielded by topography and generally not at right angles from the railroad at the crossing.

**3.5 Influence of the Douglas County Comprehensive Plan**

The Douglas County Comprehensive Plan was found to have the following effects on the master plan.

1. Additional open space (private) is provided for, particularly in the form of agricultural setbacks and a larger transition buffer than may have been otherwise provided.

2. Allowable density of surrounding properties (one dwelling unit per ten acres in the AC-10 zone and one dwelling unit per twenty acres in the RR-20 zone) influences the plan in terms of site configuration and the need to accommodate access for the future development of some of these areas. Also by generating incremental additional traffic that affects required transportation impact mitigation. The number of allowable lots is not high enough to comprise sprawl or conflict with Growth Management Act requirements for Master Planned Resorts, however especially since County policies encourage clustering in these surrounding areas.
3. County policies encouraging the provision of public access to shoreline areas influenced the plan to improve access at the existing boat launch.
This figure illustrates an pedestrian gate placement with a pedestrian gate arm.

The figure shows a post-mounted flashing-light signal with two red lights shown mounted in a horizontal line and a red and white diagonally striped automatic gate assembly. A rounded-lap audible device is shown mounted on top of the post. A white crossbuck sign with the words "RAILROAD CROSSING" in black is shown mounted on the post below the audible device and above the post-mounted lights.

The automatic gate is shown in the horizontal position to the left of the post, extending across the curb and roadway. The automatic gate arm is shown with 45-degree diagonal alternating red and white stripes and three red lights along the top edge. The pedestrian gate is shown in the horizontal position to the right of the post, extending across the sidewalk. This gate also is shown with diagonal red and white stripes but is shorter than the automatic gate and is shown with only one red light along the top edge.

The base of the post assembly is shown as a dimension of 100 mm (4 in) MAX. thick. The distance from the outside edge of the post-mounted light to the beginning of the roadway beyond the curb is shown as a dimension of 0.6 m (2 ft) with the note:

Figure 3-2. At-Grade Railroad Crossing
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4. HOUSING

4.1 Resort Housing

There are four general housing types to be provided in the resort. They are luxury single-family residential housing, more affordable single-family housing, townhouse condominiums and more traditional condominiums. In addition, transient accommodations include a 100 unit hotel and 20 unit spa/wellness center.

In addition to the resort housing, up to four dwelling units will be made available for firefighters employed at the station on the site. Two of the units are to be provided by the developer, with infrastructure made available to the Fire District for two additional units.

The main differences between luxury and more affordable single-family housing are the size of the lot, size of the home and number of bedrooms. In the case of condominiums, the more affordable units are smaller, single-level and some have fewer bedrooms. Luxury housing also tends to be located with better unobstructed views or adjacent to the outdoor recreational open space (private).

Single family housing will be on individual lots owned in fee simple with site development and quality controlled by recorded Covenants, Conditions and Restrictions (CC&R's). Luxury lots are ½ to one acre in size with approximately 3,000 to 4,000 square foot homes having three or four bedrooms. The smaller single-family homes are approximately 1,400 square foot two- to five-bedroom homes on approximately 5,000 square foot lots. They are priced more affordably, with the luxury homes at higher price levels.

Townhouse and traditional condominiums are planned as multiple-family. Townhomes are approximately 1,800 square foot, multi-story units located closer to the community center. The more traditional condominium units will be approximately 600 to 800 square foot units with two- to three bedrooms.

A number of the condominium units (not including the townhomes) may be offered as fractional ownership units.

Tenure

All of the dwelling units being developed for the resort (except for the fire fighter housing) are intended as, and will be marketed as second homes and vacation accommodation. However, it is recognized that some proportion will be occupied on a year-round basis either by the owners, or as rental units. Based on nationwide data, when second homes are purchased for the purposes of earning rental income, they are usually occupied as the principal residence of the renter.

The number of owner-occupied units is also expected to increase over time, as those who purchased the units for retirement do so. Others may be occupied by employees, managers and business owners directly involved with the resort and some proportion may be owner-occupied by residents of nearby communities.
Data from research by the National Association of Realtors is used to project the number of dwelling units that will be occupied on a year-round basis as opposed to accommodation units or second homes. Based on this research, 86 percent of vacation-home buyers do not rent their property. This percentage is being applied to all of the housing and water view resort as they become available. The number of units that are owner-occupied will increase over time, but it is assumed that this will occur after completion of build-out.

It is likely that a smaller percentage of the homes in the affordable housing community will be purchased for vacation or retirement. When compared to vacation homes, the National Association of Realtors research shows that only 21 percent of second homes purchased for investment are not rented out by their owners. Those that are rented out are the most likely to be occupied full-time, generally as year-round dwellings. However, since the more affordable housing is still resort housing, it is expected that a larger proportion of the housing will be vacation or second homes.

Estimates of the number of dwelling units occupied less than year-round in the more affordable housing are based on second-home data collected by the National Association of Realtors in 2002 (for all second homes, not just vacation or retirement homes). Since the data tabulates the responses of purchasers, rather than purchases, it does not necessarily apply directly to property sales, but it is believed to be a good approximation and is consistent with the developer's projection of the percentages of owner-occupied versus transient accommodations in the affordable housing community.

According to the survey results, 51 percent of second-home owners use their second homes primarily as a vacation getaway, and 18 percent own or bought for future retirement and use them periodically for weekends and vacations. Of the 31 percent who purchased for investment, only 15 percent said it was to obtain rental income, the other 16 percent was to diversify investments. Put another way, 69 percent of the 2002 survey respondents were using their second homes on a less than permanent residency basis and it is not clear what percentage of the 16 percent who own to diversify their investments intended to rent, rather than use their second homes themselves while they appreciate, or improve and resell them at a profit.

The results of U.S. Census data collected in 2004 break down the results by second homes used for vacation homes versus those purchased for investment. Those data found that 72 percent of vacation home buyers purchased either for a residence after retirement, personal or family retreat, or vacation use.

Applying these percentages to the more affordable housing, it is assumed that 70 percent of the housing purchased will be used for vacation or retirement, with the remaining 30 percent more likely to be occupied on a year-round basis.

If 86 percent of the luxury resort housing units and 70 percent of the 199 more affordable units are assumed to be used as vacation and second homes, the remaining units, consisting of 130 luxury housing units and 60 more affordable housing units are projected to be occupied on a year-round basis. Adding the four fire fighter housing units, this brings the total to 194 dwelling units.

Vacation rental units are projected to be nearly at full occupancy during the peak summer months and the two weeks that encompass the Christmas and New Year's holiday; at a lower occupancy rate during the shoulder seasons from March to May and for one week in October and at the lowest occupancy
during January and February (after New Year is over) and from mid-October to Christmas. These seasons are based on that typical for the area when not in close proximity to winter sport areas.

For utility demand planning, a full year occupancy rate of 75% is assumed for all of the housing units except for the more affordable housing. The transportation plan (updated in 2012) uses an 80% occupancy rate for roadway infrastructure planning. Although this is somewhat higher than that projected based upon this analysis, it is conservative from an engineering standpoint and assures that there is sufficient capacity for full build-out.

4.2 Employee Housing

It is projected that the resort will employ approximately 400 people with employment phased over the development period. In addition, construction activities on the site may require additional workers. To the extent that these jobs are not filled by persons already living in the surrounding area, new housing units would be needed. Some resort employment may be filled by family members of households in the resort on at least a seasonal or temporary basis and owners of businesses in the commercial core may also own and reside within the resort. Some of the employment is seasonal requiring either short term housing for seasonal workers, or local residents who find other occupations during the off-season.

The need for employee housing would also be based on the incremental construction of the resort development, and would not occur all at once. Moreover, the level of impact from housing supply and affordability would be based on housing supply and demand dynamics at that time, rather than as they are today.

Employee Housing in Nearby Communities

Housing is assumed to be available in nearby communities. If not available, resort employees may be forced into longer commutes. This has occurred in other resort areas around the country, although the supply of land in many resort areas is much more constrained.

The nearest incorporated communities to the resort are Quincy and Rock Island, both eleven miles from the site, and Wenatchee and East Wenatchee, generally 12 to 20 miles from the site. Trinidad and Crescent Bar are only 4 to 6 miles from the resort, but it is assumed that they would not offer significant housing opportunities for Spanish Castle Resort employees.

Population statistics for the four area cities in 2000 and 2006 based on Office of Financial Management data are displayed in Table 4-1.

<table>
<thead>
<tr>
<th>City</th>
<th>2000 Population</th>
<th>2006 Population</th>
<th>Change</th>
<th>% Change (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quincy</td>
<td>5,044</td>
<td>5,395</td>
<td>351</td>
<td>7%</td>
</tr>
<tr>
<td>Rock Island</td>
<td>863</td>
<td>865</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td>East Wenatchee</td>
<td>5,757</td>
<td>11,420</td>
<td>5,663</td>
<td>6.5%</td>
</tr>
<tr>
<td>Wenatchee</td>
<td>27,856</td>
<td>29,920</td>
<td>2,064</td>
<td>7%</td>
</tr>
</tbody>
</table>

(1) Adjusted for East Wenatchee because most of its population increase from 2000 to 2006 (5,290) was due to annexation rather than natural growth and net migration.

Table 4-2 displays affordable home purchase prices by household income level for the Fourth Quarter of 2006 from the Washington Center for Real Estate Research at Washington State University. Also calculated is the affordable housing expense for each income group, consisting of the principal and interest component of a monthly house payment. This is being used for the purposes of this analysis to represent the affordable rent level for each wage group. It should be noted that this data was prior to the global recession; however, as of 2013 home prices had just begun to recover.

Table 4-2. Affordable Housing Expense and Purchase Price by Income, 2006

<table>
<thead>
<tr>
<th>Household Income</th>
<th>Affordable Housing Expense (P&amp;I)</th>
<th>Home Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25,000</td>
<td>$521</td>
<td>$86,738</td>
</tr>
<tr>
<td>$50,000</td>
<td>$1,042</td>
<td>$183,114</td>
</tr>
<tr>
<td>$75,000</td>
<td>$1,563</td>
<td>$309,005</td>
</tr>
</tbody>
</table>


Based on the affordable housing data, and the majority of resort employees earning less than $50,000 per year, up to around 350 housing units for $183,114 or less would be necessary for purchase or rentals for $1,042 per month or less for employees. Potential workers who already live in the area and some others in households with other wage earners would reduce this number.

Table 4-3. Housing Price and Affordability, First Quarter 2007

<table>
<thead>
<tr>
<th>County</th>
<th>Median Resale Price</th>
<th>Housing Affordability Index (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelan</td>
<td>$221,000</td>
<td>102.9</td>
</tr>
<tr>
<td>Douglas</td>
<td>$223,000</td>
<td>95.8</td>
</tr>
<tr>
<td>Grant</td>
<td>$132,000</td>
<td>149</td>
</tr>
</tbody>
</table>

(1) Housing Affordability Index is a measure that compares the average cost of housing with average income. Values of 100 indicate that the cost of buying the average home is affordable to a household earning the average income, whereas a value less than 100 indicates a gap in housing affordability.


Average rents in the area as reported by the Washington Center for Real Estate Research were not as high relatively, although the vacancy rates indicate the supply is tight, especially in Chelan and Douglas Counties. The average rent for a one-bedroom apartment in September 2006 was within the range of what an employee earning $25,000 could afford in all three counties, while it was somewhat higher for two-bedroom units in Chelan and Douglas Counties.
Table 4-4. Apartment Rental and Vacancy Rate, September 2006

<table>
<thead>
<tr>
<th>County</th>
<th>One Bedroom Apartment</th>
<th>Two Bedroom/One Bath</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Rent</td>
<td>Vacancy Rate</td>
</tr>
<tr>
<td>Chelan/Douglas</td>
<td>$522</td>
<td>1.1%</td>
</tr>
<tr>
<td>Grant</td>
<td>$419</td>
<td>5.5%</td>
</tr>
<tr>
<td>Statewide</td>
<td>$706</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Source: Washington Center for Real Estate Research / Washington State University Washington Apartment Market, Fall 2006

The data suggest that the area is becoming less affordable, and if the trend continues it could significantly impact the resort work force. However, there are also indications that the communities are responding to current constraints in the housing supply. For example, the City of Quincy has recently annexed additional land and over 1,000 new residential lots were at various stages of development, including a 390 lot affordable home subdivision and 30 to 40 duplexes (as of the approval of the original MPR approval).

Based on population projections from the Washington Office of Financial Management (OFM), this is a substantial increase in the number of new lots. According to OFM, Quincy had 1,705 housing units in 2006. The addition of 1,000 units would bring the total to 2,705 housing units; and would accommodate a population of over 8,000 based on the current average of 3 persons per household. This represents a 56 to 61% increase in the City's 2006 population of 5,395. As shown in the table above, the population only increased 7% during the entire period from 2000 to 2006.

This analysis indicates a significant impact on employment due to constraints in the supply of affordable worker housing in surrounding communities if current trends continue. However, the upcoming increase in the supply of residential lots suggests that housing availability and affordability may stabilize.

Comprehensive Plan Policy MPR-11 encourages the employment of local workers and provision of employee housing, but not necessarily on site. It also states that housing should be provided “where appropriate.” In the absence of a long term housing shortage, on-site employee housing could be under-utilized. It could also impact the Palisades School District from additional elementary school students. Plan Policy MPR-11 is as follows:

“Encourage the MPR to employ local citizens and provide affordable housing for its employees where appropriate for a given MPR site” (Plan Policy MPR-11).

Measures that could be taken by the resort to mitigate potential impacts are as follows:

1. The more affordable housing units within the resort are available for purchase and may be available for rental by employees and the resort will not deliberately deny them for that purpose. These are probably only affordable to a few workers but could offer housing to, for instance, the more highly paid employees, and members of households with higher incomes due to additional wage earners or other income sources.

2. Preference in hiring will be given to existing residents in the surrounding communities provided that they are otherwise qualified and available.
3. Depending on the condition of the area housing market at the time, it may be appropriate for measures to provide for seasonal worker housing when the hotel opens with appropriate measures determined at that time. Providing these workers with a housing allowance is an example of a means by which this could be done.

In addition, it should be noted that the resort will provide approximately an additional 1,100 to 1,300 units to the local housing supply over the planning period. Even though they are a specialized type of housing units, they will contribute to the overall supply of housing, reducing competition for other units in the area and increasing potential local availability through "move-up" home buying.

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Washington Center for Real Estate Research -Washington State University

Washington Apartment Market, Fall 2006
Washington Center for Real Estate Research/Washington State University
5. EFFECT ON THE CHARACTER AND VITALITY OF NEARBY COMMUNITIES

The Zoning Ordinance requires an analysis of how the proposal will preserve the character and vitality of existing nearby communities (DCC 18.74.050(C)(4)(b)). This chapter addresses fiscal impacts of the resort on assessed value, tax levy collection for special districts and estimated sales tax revenues on construction. It also addresses the potential impact of the resort on the Palisades School District.

5.1 Fiscal Impacts

Assessed Value

Based on projected home and property valuations within the resort, it will provide a large new tax base for Douglas County and the special districts in which it is located. They are the Palisades School District, Douglas County Fire Protection District No. 2, and the Port and Library Districts.

Based on current sales projections, residential lots will range in value from under $200,000 to $1,000,000. These are considerably higher values than typical residential properties in this area. They will undoubtedly have some positive effect on surrounding property values, due to the aesthetic desirability of the resort and the recreational opportunities available to area residents. Proximity to the commercial and recreational amenities also provide value to surrounding properties, although limited by the location of the amenities interior to the resort, and density limitations of the surrounding zoning.

The ability of the owners to increase the number of lots by subdivision of nearby parcels does not change as a result of this action because the zoning is not changed outside of the resort property. Under the Growth Management Act, the establishment of a Master Planned Development is not the basis for increasing development potential of surrounding lands, with the exception of increasing the boundaries of the resort by amendment.

Therefore, while there may be some increase in value of adjacent properties due to their proximity to the resort, their value due to increased development potential should not. The exception to this may be to the extent that improving roads to previously land-locked parcels, or to parcels that could not be subdivided due to the infeasibility of meeting County road improvement standards.

Policies that would tend to limit the increased development potential of surrounding parcels are:

1. Growth Management Act requirements that master planned resorts not provide urban level services to surrounding property.

2. Growth Management Act policies that encourage current use as opposed to highest and best use valuation of lands designated farmlands of long term commercial significance.

3. The availability of current use tax assessment under the Open Space Taxation Act to agricultural property and in some cases, open space (private) land.
Tax Levy Collection for Special Districts

Special districts also derive some benefit from increased property valuations, although not on a directly proportional basis due to the one percent cap imposed on levy assessments unless approved by the voters. The net effect is then, without a special levy or larger increase in regular levies, the effect of much higher valued property is to lower the overall assessment on all of the properties in the special district. In the case of the resort, much of the tax burden is effectively shifted from existing land owners to resort owners. However, this has no benefit to the District itself if there is a corresponding need for capital facilities above and beyond its level of funding.

The Growth Management Act response is to require the resort to fully fund the additional infrastructure it needs. This shifts much of the funding burden to the new resort homeowners because the up-front capital costs are priced into their property purchases and more of the operating levy costs due to their high property valuation. If enough nearby property owners or the County avail themselves of the opportunities for current use taxation, the shift to resort owners would be even greater.

An additional benefit of the resort on special districts is a higher overall valuation for the district that can be used for bond issuance. Negative aspects include the potential need to go to the voters for levy increases and the costs associated with having to do so.

Sales Tax Revenues

Sales tax revenues from new construction in the resort are presented in Figure 5-1. They are based on the current State sales tax rate of 6.5% and the local rate for unincorporated Douglas County of 1.1% for a total of 7.6%. Also shown are the benefits from excise taxes on property transfers and real estate taxes. The overall benefit from the full project is estimated to be about $7.8 million. Since the majority of buyers are expected to come from outside of Douglas County, this would represent new revenue to the County.
Figure 5-1. Spanish Castle Resort

Additional Revenue Benefits for Douglas County

<table>
<thead>
<tr>
<th>Additional Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction &amp; Sales Phase:</td>
</tr>
<tr>
<td>Sales Taxes During Construction:</td>
</tr>
<tr>
<td>Estimated Increase in Taxable Construction Costs</td>
</tr>
<tr>
<td>Douglas County Taxable Rate (1.1% of 7.6%)</td>
</tr>
<tr>
<td>Excise Taxes (on property transfers):</td>
</tr>
<tr>
<td>Estimated Increase in Sales Value of Properties Developed</td>
</tr>
<tr>
<td>Douglas County Taxable Rate</td>
</tr>
<tr>
<td>Real Estate Taxes:</td>
</tr>
<tr>
<td>Estimated Increase in Sales Value of Properties Developed</td>
</tr>
<tr>
<td>Douglas County Taxable Rate</td>
</tr>
<tr>
<td>Ongoing on an Average Annual Basis (today’s dollars)</td>
</tr>
<tr>
<td>Sales Taxes</td>
</tr>
<tr>
<td>Excise Taxes assuming properties transfer every 5 years on average</td>
</tr>
<tr>
<td>Real Estate Taxes</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: It is anticipated that the increase in revenues detailed above will come from outside Douglas County as the vast majority of the future owners of the resort properties will be from west of the mountains.

Palisades School District
The site is served by the Palisades School District, a Kindergarten through Grade 5 District with a 2010 enrollment of 18 and capacity of 60 students. Students from Grade 6 and beyond go on to the much larger Eastmont School District in East Wenatchee. Given the resort's focus on second homes and the age of its target population, few children in the age groups that would attend the Palisades School are expected. However, due to the small size of the School District, even a small amount of variation in estimating the number of students could significantly impact the district.

Based on the average age of second-home buyers, most would be older than typical parents of elementary school aged students. Nationwide research has found that only 16% of second-home buyers have children under the age of 18 — fewer would have children between six and eleven years old. Moreover, most vacation home buyers would probably keep their school aged children in the districts in which their primary homes are located. Therefore, in evaluating the impact of the resort on the Palisades District, it is assumed that only the affordable housing community and the four fire fighter housing units have the potential to enroll new students in the district. (Where the fire fighter housing is not referenced in the following discussion for simplicity, these units are included in the analysis).

The estimate of the number of students from the resort that might attend Palisades School corresponds to the number of year-round versus vacation home residents estimated in the Land Use Chapter. It is assumed that the number of children in the applicable age groups living in the resort corresponds to the average statewide percentage of children in the age group that would be expected to be in Kindergarten through fifth grade. No adjustments were made for parents who might choose home-schooling, or to send their children to private schools, or to another school district.

Washington State Office of Financial Management population projections for the years 2006 and 2007 show that 7.9 percent of the statewide population are between the ages of six and eleven, the age groups that would generally be in Kindergarten through fifth grade. Data from current and previous years for these age groups and groups of five years and younger were also examined to ensure no significant changes in the percentages and that there are no larger than normal age groups approaching. Applying the Statewide percentage to the projected number of full time residents generates a projection of the number of students that might attend the Palisades School. This is presented in Table 5-1.

Based on current capacity, the resort could bring the School District closer to capacity at ultimate build-out and would significantly impact it based on future growth. Population growth could cumulatively impact the school with other population growth in the School District.

<table>
<thead>
<tr>
<th>Homes</th>
<th>Residents</th>
<th>School Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>1200</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 5-1. Potential Number of Palisades School Children

Given the low numbers involved, very little variation from the projection would be needed to significantly change the results. And the variation could go either way, against the School District or the resort. It also makes appropriate mitigation hard to determine.
With the high property valuations associated with the resort, the small size of the school district, and a small percentage of resort homes with students in the school district, there is a potential for substantial shifts in property tax payments as the resort develops, all other factors remaining equal. The tax assessment on homeowners within the resort that have no children would be disproportionately high, over 90 percent of the total assessment generated by resort housing. There would also be a substantial shift from current taxpayers in the district to those in the resort. At the same time, the increase in assessed valuation should lift the school district's capacity for bond issuance.

Given the uncertainty of these projections, the vulnerability of the School District to even a small increase in the number of students, and the long term financial benefits being provided by the project, the means of mitigating the impacts should be determined when there are real data on the actual number of students from the resort, percentages of long term to vacation owners and other factors. These could be reviewed by the resort in consultation with the School District on completion of the first significant increment of project development, with the completion of a Needs Assessment if appropriate and further mitigation determined and provided as necessary.
6. TRANSPORTATION

A “Traffic Investigational Analysis and Impacts Report” was prepared for Spanish Castle Resort by Western Pacific Engineering & Survey, Inc. Completed in September 2007, this report was based on the phasing plan established in the MPR document and identified appropriate transportation improvements and traffic impact mitigation for each phase of the development. A conceptual lot layout and road network was also developed (see Figure 6.1), along with road sections for use within Spanish Castle Resort. In August of 2012 an updated Spanish Castle Resort Transportation Plan was prepared to better characterize project traffic, roadway and trail needs and off-site impacts. This section of the MPR provides a summary of the transportation plan while the full plan is included in the appendix.

6.1 Transportation Plan for Full Build-Out

A Spanish Castle Resort Transportation Plan has been prepared for full build-out conditions. This plan includes the following components:

- **Trip Generation.** A vehicle trip generation estimate for the project at full build-out, based on Institute of Transportation Engineers (ITE) rates established for the land uses identified in the MPR. For land use designations without established rates (such as the equestrian center), trip generation rates for comparable land uses will be used. The trip generation rate is based on the lot layout shown in the MPR to ensure consistency with previous analysis, but allow for some adjustments based on more recent information about site constraints and constructability. This should provide for a conservative analysis, as the original lot layout did not account fully for topographical or infrastructure constraints.
  
  o **Peak Season.** Homes in Spanish Castle Resort are anticipated to be secondary vacation homes to a large degree. ITE rates for recreational homes are approximately one-quarter that of a typical single-family home. However, during peak season periods, the resort will most likely see higher occupancy rates. To maintain a conservative traffic impact analysis, the traffic operations analysis considers conditions with the recreational homes 80% occupied.
  
  o **Peak Hour.** The PM peak hour has been shown to be the most congested on area roads. This will likely be true within the resort, as well. Therefore, the traffic operations analysis focused on the PM peak hour.

- **Trip Distribution and Assignment.** Vehicle trip distribution was well-established on SR 28 in the 2007 study. Trip distribution within Spanish Castle Resort was developed based on the land uses and lot counts shown in the 2007 MPR, and forecasted traffic volumes assigned to the roads and intersections within the project based on this distribution. This facilitates the determination of appropriate intersection control and channelization at all intersections.

- **Intersection Operations.** Intersection operations were analyzed for full build-out, peak period conditions to evaluate the need for improvements to the transportation infrastructure and guide roadway design decisions.
Figure 6-1. Conceptual Layout
- **Queuing and Blocking.** All intersections were analyzed in terms of vehicle queuing to ensure there are no excessive queues or blocking problems at full build-out with the proposed roadway and intersection designs. Particular attention was paid to the SR 28 / Spanish Castle Road intersection and the intersections near the BNSF railroad crossing.

- **Volume to Capacity.** An intersection’s capacity is expressed by the volume to capacity ratio (v/c), where 1.00 indicates an intersection has reached its theoretical full capacity. All project intersections were evaluated to ensure roadway and intersection designs provide adequate capacity for the project at full build-out.

- **Delay.** Intersection delay was analyzed according to Highway Capacity Manual criteria for Level of Service (LOS). All project intersections were measured against LOS standards to ensure delay will not exceed acceptable levels.

- **Turn Lane Warrants.** Turn lane warrant evaluation was completed according to the methodology contained in the WSDOT Design Manual for the SR 28 / Spanish Castle Road intersection to help determine the threshold for improvements at this location.

- **Signal Warrants.** The SR 28 intersection was analyzed in terms of meeting signal warrants based on the Manual on Uniform Traffic Control Devices (MUTCD) standards.

- **Intersection Channelization and Control.** Potential options for intersection geometry and channelization were analyzed to ensure improvements constructed earlier in the resort development will meet the needs at full build-out. Options for intersection control (stop control, roundabouts and signals) were analyzed to help plan for the appropriate intersection control at each location.

- **Project-Wide Traffic Simulation Model.** Synchro, SimTraffic and Sidra traffic modeling software were used to develop a project-wide model for traffic operations. This model can then be easily adapted to analyze each element of the project as they are readied for development to verify the assumed needed improvements and identify the threshold at which major improvements (such as the signalization at SR 28) are necessary.
6.2 Incremental Traffic Impacts

Incremental traffic impacts will be readily evaluated using the project-wide traffic model developed for the full build-out transportation plan described above. Traffic volumes for each proposed development element will be added to the traffic simulation model to determine the incremental increase in traffic volumes at each subject intersection and any necessary improvements to mitigate the related impacts. Both the traffic impacts and mitigation will be compared to the ultimate transportation plan’s proposed improvements to ensure consistency and validate the long-term traffic projections. A report will be provided for Douglas County review.

6.3 Road Network

A conceptual road network was identified as part of the full build-out transportation plan for the project to identify preferred alignments for significant roads, key intersection locations and crossings points on the BNSF railroad. A preliminary road network plan and classification map is attached as Figure 6.2.

All access to Spanish Castle Resort will be from the state highway (SR 28) along the east side of the project. Within the project, there will be both private and Douglas County roads. The County roads include Spanish Castle Road itself from SR 28 to the BNSF railroad, and Vulcan Siding Road, which runs generally north and south through the project site and provides water access. The remainder of the proposed roadways in the project will be private streets.

6.4 Road Standards

Recognizing that the specific topography of the project site and the varying nature of different project elements suggest different priorities depending on location, Spanish Castle Resort has worked with Douglas County staff to develop revised roadway sections for the different functional classifications as depicted in Figure 6.2. These proposed roadway sections are included in the design manual.

6.5 Trail Network

The MPR has proposed a trail network throughout the Spanish Castle Resort to provide non-motorized access and connections to all major project elements. A preliminary conceptual trail layout has been developed to identify key crossing points with the roadway network and demonstrate the non-motorized connectivity between various project elements. The trail network will be a major component of the resort amenities, and will be developed incrementally along with other project elements. Trails will be 8' wide and asphalt paved. A preliminary conceptual trail plan is shown in Figure 6.3 and a preliminary cross-section is shown in Figure 6.4.
Figure 6-2. Preliminary Road Network
Figure 6-3. Preliminary Trail System
**SCR-004A  Typical Trail - Parallel To Road**

Section

Not To Scale

**SCR-004B  Typical Trail - Connected To Road**

Section

Not To Scale

Figure 6-4. Preliminary Trail Cross-Section
7. RESOURCE LANDS AND CRITICAL AREAS

7.1 Agricultural Resource Lands

Most of the site is zoned Commercial Agriculture (AC-10) and designated agricultural lands of long term commercial significance by the Douglas County Comprehensive Plan. Adjacent properties to the north and northeast have the same zoning and plan designation. For part of the site, this designation is based solely on the presence of soils designated agricultural capability class 3 by the Natural Resource Conservation Service (formerly Soil Conservation Service or SCS). There is currently no irrigation available in these areas and they were not in agricultural production as of December 31, 1995 or since.

The Growth Management Act allows the development of agricultural land for Master Planned Resorts if the County finds that the land is better suited and has more long-term importance for the master planned resort than for commercial agricultural production (RCW 36.70A.360(4)(c)). The Douglas County Zoning Ordinance requires the identification, inventory and analysis of the potential impacts on resource lands including agricultural lands within, adjacent to or affected by the proposal. It also requires measures to mitigate any impacts (DCC 18.74.050(6)(a)).

The impacts of the resort on commercial agriculture were evaluated by an agricultural economist as required by DCC 18.74.070(L). This analysis also identified the least productive agricultural lands and evaluated the appropriateness of a change in land use to non-agriculture. The agricultural economist reports are in the appendix.

About 300 acres of the site is either now in agricultural production (orchards) or is uncultivated bare ground with agricultural water rights. The remaining agriculturally zoned lands do not meet any of the Comprehensive Plan criteria for agricultural designation except that some areas have soils designated agricultural capability class 3.

About 100 acres of the site, located west of the railroad, have no qualifying characteristics for agricultural designation at all, but were undoubtedly zoned along with adjacent lands under identical parcel number or ownership. More than half of the residential units and most of the visitor accommodation units are to be concentrated in the "unqualifying" area that consists of less than one-quarter of the agriculturally zoned part of the site.

With the exception of streets and infrastructure to serve other parts of the site, only a small area of the development is planned in the currently producing orchards and adjoining bare ground. (The orchards are planned to be kept in production as part of the project, until they are developed.

The MPR boundary includes other areas that will be developed as vineyards. These areas will be maintained as agricultural after the construction of the resort homes and commercial areas. Based on these factors the agricultural economist concluded that the agriculturally zoned areas of the site outside of the currently producing orchards are the least productive agricultural lands, and that their rezoning would have no impact on the agricultural industry. For the orchard area, he concluded that the proposed rezoning may be justifiable to the extent that agriculture is replaced by another primary economic activity that brings in revenue from outside of the area.
The following findings are proposed to support a conclusion that that the orchard area is better suited and has more long-term importance for the master planned resort than for commercial agricultural production:

1. Because of the relative isolation of these orchards, the grower is more vulnerable to labor shortages. This has been the case in the past relative to growing cherries, and the response to this risk was diversifying the type and variety of fruit being grown in the orchard. If any of the types or varieties of fruit were taken out of production there would be a less consistent demand for labor throughout the growing season.

2. Replacing the orchard with the master planned resort may maximize the value of this property to the County in the long run, due to the risks associated with agricultural production in this isolated location and the benefits derived from "import" revenue generated by an influx of visitors.

3. The project site is in a relatively isolated location at the most southerly tip of irrigated agriculture in Douglas County. Removal of agricultural land for the proposal is preferable in this location, which is also physically separated from other producing orchards, than would another location surrounded by, and less isolated from areas in agricultural production.

4. The agricultural economist concluded that given the relative isolation of the site that the proposed rezoning may be justifiable to the extent that agriculture is replaced by another primary economic activity that incurs revenue from outside of the area and that a Master Planned Resort may bring a higher influx of revenue over the long run into the area than an orchard.

5. The proposed action would result in a loss to agriculture of about $2.1 million to $3.2 million in land value. The revenue to the County just from sales, real estate and excise taxes generated by resort construction and real estate transactions is estimated to be $7.8 million dollars. Most would come from outside of Douglas County as "import" revenue. In addition, ongoing revenues of an estimated $6.3 million would be incurred from excise and real estate taxes on an average annual basis. None of this accounts for revenue to the local economy which would be much more.

The orchards are not proposed for designation as agricultural resource lands under DCC 18.74.070(l) (3) because they are ultimately to be removed. However, good farming practices will be employed as part of their maintenance. Distance should prevent significant conflicts between early resort development and the orchards while they are in production.

Significant land use conflicts between the existing orchards and newly planted vineyards on the site and new resort development are not expected. In fact, having homes surrounded by orchards and vineyards is part of the charm of the resort. There will be separation between the residential and agricultural uses due to the road and trail networks that serve the homesites.

Bees for the orchards on the site have been kept near the Spanish Castle Road railroad crossing in a location that is 500 feet or more from the nearest proposed development. Although this distance should be great enough to avoid significant hazards for residents of those lots, storing the bee boxes in this location will cease prior to occupancy the first increment of development to avoid conflicts with pedestrians, bicyclists and motorists using the road. Storage will occur in a more remote location on the
orchard site. The removal of the orchards from development will eliminate this conflict on the project site.

**Cultural and Natural Resources**

The development site is located in the Columbia Plateau, a physiographic region characterized by basalt flows from volcanic activity during the Miocene epoch, and channeled by catastrophic flooding associated with Pleistocene epoch continental glaciation. Both were dominant forces in shaping the landscape of the region and the project site. The site occupies a relatively narrow valley of the Columbia River where it cuts through uplands formed by the foothills of the Cascade Mountains to the west and relatively lower hills to the east. The valley generally consists of a broad terrace sloping gently and then steeply to the valley floor, most of which has been inundated by the reservoir impounded by Wanapum Dam.

Most of the site consists of Quaternary sediments of non-glacial origin lying on basalt flows. Above the terrace are outcroppings of basalt flows located entirely across Highway 28 in this location. The deeply incised Columbia River valley is attributed to the pre historic Spokane Floods, and the site is located a few miles south of the downstream end of Moses Coulee, a major geological feature that carried those prehistoric floodwaters and if not a result of the flooding, its current size and configuration can be attributable to it.

The water view resort part of the site is covered by numerous boulders that probably resulted from this Pleistocene epoch flooding. This finding is supported by the geotechnical analysis, which determined that they are not part of the bedrock. Although there is some reference to them as erratics, they probably originated nearby, as opposed to being deposited by rafting icebergs originating in continental glaciers. The largest of these boulders are the size of small buildings.

Soils on the site as classified by the Douglas County Soil Survey consist primarily of Cashmere fine sandy loam, Quincy loamy fine sand, Torriorthents, very steep and several classifications of Pogue sandy loam ranging from fine sandy loam to extremely stony fine sandy loam.

Ellisforde fine sandy loam is a soil type found in the conservation area and across Highway 28 in an area planned for wastewater treatment. Additional soil types found across Highway 28 in an area not planned for development include Cheviot-Ralls-Rubble land complex, Grinrod-Ralls-Rubble land complex and Logy cobbly sandy loam. These soil types, with the exception of the Logy are characterized by slopes that are steeper than 30% and as much as 70%.

Most of the soils consist largely of sand, silt, and larger rock fragments including gravel, cobbles and boulders. According to NRCS soil survey data and as confirmed by the geotechnical analysis they are generally well drained.

Torriorthents, and some of the Pogue soil types are mapped as steep slopes and severe building soils by the Critical Areas Ordinance and are discussed in more detail under “Critical Areas” (There is no discussion of the critical area soil types west of Highway 28 since there are no plans to develop them). The Pogue and Cashmere soils also have agricultural soil capability classification 3, a Douglas County qualifying characteristic for farmlands of long term commercial significance.

The development site is in an area associated with the Middle Columbia Indians, and visited by neighboring groups. David Thompson was the first white explorer through this area. He commented in
his journal specifically on the richness and abundance of wildlife in the riparian shrub steppe habitat (at Rock Island). The first European settlement was associated with the establishment of the Great Northern Railroad in 1894 and development of agriculture along the Columbia River. Many of the homes and farms were abandoned and inundated by Wanapum Dam in the early 1960’s. This includes the Spanish Castle, a large home that was located across the Columbia River in Kittitas County.

Natural Resources

Topographical Features of Concern

Three major topographical features on the site are the most vulnerable to slope stability, erosion and impacts from runoff. They are the cliffs and bluffs across Highway 28, the steepest slopes of the water view resort, and two ravines that contain intermittent streams, the larger ravine in the Conservation Area, the smaller one crossing the north end of the Water View Resort. A third ravine across the site will mostly be in open space (private), although it will be graded and incorporated into resort landscaping.

The steeper slopes in the water view resort are proposed for extensive development, but were found to be stable by the geotechnical analysis with recommendations for maintaining stability made where the slopes are to be reconstructed. The soil type that is characteristic of the steeper slopes in this area is of low erodibility, while the more erodible Quincy loamy fine sand lies mostly off-site although it may extend into the lower parts of the site. Many of the steeper slopes in this area are proposed in dedicated open space (private) or in areas of proposed residential lots that would not themselves be developed.

The cliffs and bluffs are not planned for development; the ravine through the conservation area will be dedicated undeveloped open space (private).

The second ravine originates in the area proposed for the more affordable homes, crossing through a culvert in the railroad and exiting in the northern part of the water view resort. This drainage is much smaller than the ravine in the conservation area and is moderately incised. Natural runoff would continue in this drainage way as in the past, while project generated runoff would be kept separate and not discharged into it. This ravine is to be maintained as dedicated undeveloped open space (private) except as necessary to cross it with street, utilities and pedestrian path.

Grading and excavation will be mitigated in the three major drainages in the following manner:

1. No development is planned in the drainage way through the conservation area as a part of this project. It is possible that further highway widening or street, and utility construction would occur adjacent to Highway 28 at the upper end of the ravine, but such action is not a part of this project and would be addressed and mitigated separately when and if it were to occur.

2. Excavation, grading and buildings will be set back from the edge of the drainage way in the conservation area.

3. No development is planned in the drainage way below the railroad track through the north end of the water view resort, except that a street and utilities would cross it, and except for a pedestrian path. Streets will be constructed with a culvert or other structure to convey natural runoff as determined by a professional engineer using hydrological analysis. Street drainage would be conveyed by curbs or pipes away from and not into the ravine.
4. This drainage way would be reserved as dedicated undeveloped open space (private) and delineated by the boundaries of residential lots.

An additional feature that is dominant in the water view resort area is the collection of boulders ranging in size from that of riding lawn mowers to small buildings. These are larger specimens of rocks that are found throughout this part of the site both on and below the ground surface. These rocks should not be considered rare or unique, and are similar to geologic features found throughout the channeled scabland region of Eastern Washington. But they are defining features of this landscape and although neither necessary nor practical to try to preserve them all, they will be incorporated into the landscape design to integrate site development with the character and natural history of the area.

Priority Habitat Area

The site has been identified by the Washington Department of Fish and Wildlife as priority habitat areas for Chukar and Rocky Mountain Mule Deer. Both are considered game species and are of recreational or commercial importance, or are recognized species used for tribal ceremonial and subsistence purposes, and are vulnerable to habitat loss or degradation.

Priority habitat areas for Chukar are areas that support regular concentrations and regular large concentrations in primary Chukar management zones. Regular concentrations mean that the priority areas are commonly or traditionally used by a group of animals on a seasonal or year-round basis. Regular large concentrations mean that the priority areas are commonly used by significantly large aggregations of animals, relative to what is expected for a particular species or geographic area.

Priority habitat areas for mule deer include areas that support regular concentrations and regular large concentrations, as well as breeding areas and migration corridors between seasonal ranges.

The site supports regular concentrations of Chukars but not regular large concentrations. Vegetation provides cover for breeding and brooding.

The site supports regular concentrations of Mule Deer but not regular large concentrations. This is due to its proximity to the river and the favorable characteristics of elevation and gradient which provides winter range for the animals.

Both Mule Deer and Chukar must have food, with water and cover in close proximity and minimal disturbance and road use. Conversion of habitat to other land uses reduces the amount of vegetation available for food and cover to animals. This results in an increase in the potential for conflicts between animals and humans as animals increasingly browse agricultural crops and ornamental plantings that have taken the place of their food source. Introduction of domesticated dogs and cats also pose a threat.

Native shrub-steppe habitat on the resort site, which is dominated by bunch grass, sagebrush and bitterbrush, with rabbitbrush upland, has largely been degraded by historical over-grazing, agriculture and other development activities that have taken place over the years. The exception is an approximately 31% acre area at the eastern end of the site, which is mostly isolated from the rest of the resort by a deep ravine containing good quality vegetative habitat. This area is to be set aside as a conservation area and left undisturbed as habitat for wildlife, including Chukar and Mule Deer. It is a large enough patch of intact native vegetation to provide continuity and the ability for animals to move from the Columbia River to the hills north and northeast of the resort.
An outdoor recreation area could potentially be placed adjacent to the conservation area. This area would be largely undeveloped; As such, it provides a transition from the more intensively developed areas further to the west. It is also a preferable land use with respect to wildlife in that it falls more directly under the management of the resort, allowing more control over the activities of people. Mitigation measures are summarized as follows:

1. Degraded portions of the conservation area will be re-seeded and restored.
2. The resort will agree to waive liability claims against the State for damage caused by wildlife. To the extent allowed by law, single family lot owners will also be required to waive claims.
3. Individual lot owners will be notified that the area is inhabited by deer and of the risks to ornamental vegetation.

### 7.2 Critical Areas

Soil types on parts of the project site have been mapped as severe building soils and as steep slopes by Douglas County. These areas are considered to have a known or suspected risk of being geologically hazardous under the Critical Areas Ordinance.

According to the Washington Department of Fish and Wildlife (WDFW), the area that includes the resort is designated a priority habitat and species area containing Rocky Mountain Mule Deer and Chukar habitat. Under the Douglas County Critical Areas Ordinance, if this were an area in which "endangered", "threatened" or "sensitive" species had a primary association, it would be designated a fish and wildlife habitat conservation area by the Critical Areas Ordinance (DCC 19.18C). However, Rocky Mountain Mule Deer and Chukars are both "game" species and are classified under WDFW Priority Species criterion '3': "Species of Recreational, Commercial and/or Tribal Importance that are Vulnerable". They are not endangered, threatened, or sensitive species.

### Steep Slopes

Steep slopes mapped by Douglas County are classified as slopes greater than 45% with a vertical relief of ten feet or more except for areas composed of consolidated rock. Such areas are considered potentially subject to landslides by the Critical Areas Ordinance. Based on NRCS soils mapping, the areas with this designation have the soil type called "Torriorthents, very steep". This soil type occurs on the slope down to the Columbia River in the water view resort, along the west edge of the orchards, in a sloped area in the affordable housing community, and in the ravine in the conservation area.

A cursory review of topographical survey data for the site indicates that there are actually much fewer areas with slopes of 45% or more than suggested by NRCS mapping, although slopes of 15% or more are common in several areas.

The steepest slopes (45% or more) are scattered along the side of the bluff in the water view resort and the ravine through the conservation area. They are also common across Highway 28 from the main resort, in an area not planned for development.
In general, these steepest parts of the developed site are along the bluff through the water view resort between the elevations of 600 and 700 feet. They generally correspond to the small scattered open spaces (private) in this area with some of them also on the larger residential lots.

Geotechnical analysis of the site determined that existing steep slopes in parts of the site proposed for development are stable due to there being a substantial amount of rock in the soil. Newly created slopes will be re-engineered to ensure stability. Terracing may be necessary to cut large enough building pads for some of the buildings and finished grade should be no steeper than 2:1. Multi-level buildings and buildings with stepped foundations will probably be necessary because of the rock.

Severe Building Soils

The two soil types on the site that are mapped as severe building soils by Douglas County are the "Torrorthents, very steep" soil identified above as steep slopes and "Pogue gravelly fine sandy loam, 15 to 25% slopes." These two soil types are considered by the NRCS to have severe limitations because of slope. Torrorthents also has "large stones content". Neither soil type has a high potential for erosion.

NRCS mapping shows the Pogue soil type in a swath through the area currently in orchard and continuing into the equestrian center. Torrorthents soils occur as described above under "Steep Slopes." Review of topographic data indicates that the prevalence of slopes greater than 15% in the upland portion of the site is less than that shown by soils mapping, with the steeper slopes more scattered rather than continuous across the site. With the exception of some areas in the northern portion of the site, most of the steeper slopes in the upland part of the site appear to be in the area likely to be used for recreational space.

A topographic map of the site is included as Figure 7-1.

Due to steep slopes in northern parts of the site likely to be developed for residential use, the area will need to be laid out to conform to the topography rather than being developed in a grid layout as shown on the initial development plan.

Cultural Resources

As required by the Zoning Ordinance, the site was evaluated by a professional archaeologist for its archaeological and historical significance. Although the site as a whole was not determined to have a high level of significance, five potential historical or archaeological finds were made. Measures will be taken to preserve the three sites that were determined to be potentially significant.

Of the five finds, two are building foundations of relatively recent origin determined to not be eligible for historic listing and for which further documentation is not necessary. One of these sites is located in an area not planned for development; the other would probably be removed well before completion of project build-out.

Two of the three remaining finds are isolated prehistoric finds, and the third is an archaeological site of unknown age. Their significance was not determined and would require further evaluation to determine if they have the potential to yield important information. Preservation of the three locations in place is recommended as an acceptable alternative and is described in more detail in the Resource Management Plan.
As recommended by the archaeologist, 10 meter (33 foot) buffers will be provided around the three sites. If located within a platted lot or other otherwise developed area, the outer edge of the buffer will be identified and marked, and site design measures will be utilized to protect the location.
Figure 7-1. Spanish Castle Topography
References

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May 2007

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Elizabeth Rodrick and Ruth Milner, Technical Editors
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Priority Habitats and Species List
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8. CAPITAL FACILITIES AND UTILITIES

Capital facilities within the resort will consist of the Group ‘A’ water system, including wells, reservoir, and distribution system; the wastewater system including treatment plant, lift stations, collection system, and distribution system for reclaimed water; drainage system; electrical distribution system (that may include a substation); and streets, roads and paths. Street improvements include intersection improvements at Spanish Castle Road and SR 28, road improvements consistent with the road sections shown in the transportation section and railroad crossing improvements.

Parks and open space (private) areas are also capital facilities, including the parks that may be open to the public. A fire station is proposed and there may be an electrical substation. Not all of these facilities will be owned by the resort.

Facilities operated by the resort as part of its business are generally not included in this chapter because their responsibility would not normally be in the public realm. They include the improved open space (private) associated with the commercial center.

Public services include emergency service providers, police and fire protection service, public schools and solid waste collection. With the exception of resort security, these services are provided by outside agencies. Solid waste will be collected by a private contractor.

The water and wastewater systems along with private roads and most open space (private) areas are to remain privately owned and operated. They may be considered and referred to as “public“ facilities in some contexts since they are available to the general public. In particular, this is true of the domestic water system. The following is a listing of the utilities and capital facilities included in this chapter:

Publicly owned:

- SR 28, Spanish Castle Road, and County rights-of-way.
- Public Park
- Fire Station
- Electrical substation and distribution system

Privately owned:

- Private streets
- Paths and trails
- Street lighting system
- Group ‘B’ Water System
- Group ‘A’ Water System including distribution and water tower
- Sanitary sewer system and wastewater treatment facility
- Recycled water irrigation system
- Storm water management system
- Orchard irrigation system
- Open space (private) areas (except for outdoor recreational areas).
Privately owned by others:

Telephone distribution system

8.1 Existing Utilities and Capital Facilities

Streets and Roads

State Highway (SR) 28 is a 44 1/2 foot wide two lane state highway with 200 feet of right-of-way and a posted speed limit of 60 miles per hour. It is owned and managed by the Washington State Department of Transportation.

It is a designated Highway of Statewide Significance. Such highways are defined to include principal arterials that are needed to connect major communities in the State. The designation helps assist with the allocation and direction of funding. As an arterial it is subject to Douglas County Comprehensive Plan policies that discourage direct access. This issue is addressed in the Transportation chapter and Spanish Castle Resort Transportation Plan.

Spanish Castle Road is a two-lane gravel-surfaced County-maintained road without shoulders. It is the primary access to the site. It currently provides access to the orchards on the site. Below the railroad tracks it serves to access the Columbia River shoreline, including a boat launch at the end of the road.

Rudolph Road is a private gravel road providing access to the orchards and the residences within. It will be eliminated as a part of project development, although portions may be included in the alignment for new resort streets. It will remain as a private operations and maintenance road for the orchards prior to the development of the golf resort and wellness spa.

Vulcan Siding Road is an unpaved gravel road in an existing County right-of-way. It provides access from Spanish Castle Road to the northern portion of the site. This road has been vacated by Order issued October 14, 2014.

Orchard Irrigation System

The existing solid set irrigation system and on-site irrigation well will remain in use while the orchards are in production. It will be modified as needed to allow the construction of access streets and utilities through the orchard to other parts of the resort. The system will be owned and managed by the resort. It is to be financed independently of other resort operations by orchard generated revenues and is not discussed further in this chapter.

Electrical System

Douglas County Public Utility District (PUD) currently provides electrical power to the orchards, residences on-site and pump stations used by nearby properties. Transmission line capacity is 10 megawatts; however, as it is intended to provide service at a reduced voltage, this will reduce the power capacity of the system by 50% during the transition period. Thus, the new infrastructure would need to be in place before exceeding 5 megawatts of power usage.
Solid Waste

Douglas County is primarily served by the Greater Wenatchee Regional Landfill, although two other landfills in Washington will accept municipal solid waste from within the County. According to correspondence from the Washington Department of Ecology, the Greater Wenatchee site may not be available in the future. At the present time the landfill can accept both construction and municipal waste.

A carrier that is able to haul solid waste from the resort according to the Department of Ecology website is Washington Waste Hauling & Recycling, Inc. dba Waste Management of Greater Wenatchee. Its service area is identified as including a major portion of Douglas County, the southern half of Chelan County and a portion of Grant County "known as Crescent Bar."

The Boulder Park, Inc. facility near Mansfield is permitted to accept biosolids from the wastewater treatment facility.

8.2 Demand and Facility Needs for Resort

The Growth Management Act requires a forecast of the future needs for capital facilities and that they be coordinated with and maintain the adopted levels of service (LOS) of capital facilities for other service providers.

Wastewater

For the purposes of wastewater demand, a preliminary planning-level estimate assumes each residence will have 2.5 persons using 80 gallons per person per day. Adding the demand projected for the golf course, wellness center, hotel and other restaurants, stores, recreational open space (private), and resort facilities full demand of 358,000 gallons per day for wastewater flow at resort completion.

Domestic Water

The preliminary domestic water demand was calculated differently than wastewater demand in part to account for some irrigation and other uses of water that do not contribute to sewage flow. Based on a projected use of 120 gallons per bedroom per day, an additional factor for irrigation and projected commercial, recreational lodging facilities, 600,000+ gallons per day was projected for water demand or the equivalent to 776 acre-feet of water per year. The peak hourly demand is projected to be 2,000 gallons per minute.

Fire Flow

Since the site is not located in an area with developed fire flow, minimum two hour fire flow duration is required by the Fire Code at 1,000 gallons per minute. Taking other factors into account, including building size and type of construction, a somewhat higher fire flow may be used to design for commercial and hotel uses in future phases of development or as directed by the fire marshal.
Irrigation

At full build-out, with parks and landscaping, irrigation demand would exceed 4.5 million gallons per week of reclaimed water, in excess of the average production of 2.5 million gallons per week (358,000 gallons per day). The excess can be provided for by short-term equalization and longer term storage, since the peak irrigation demand occurs during the peak growing season, while wastewater is generated year-round.

Prior to completion of recreational open space (private), reclaimed wastewater production would exceed demand and measures could be taken to utilize the excess.

Water Storage

A water storage tank or tanks will be installed in an upland location of the site to provide adequate water pressure throughout the project. Since the site will be developed in phases, multiple tanks in different locations may be required. Preliminary planning indicates a tank of about 600,000 gallons would meet the needs of the resort. The tank would have a height of 140 feet and a diameter of no more than 35 feet. This would provide for 300,000 gallons for fire flow, 150,000 gallons of equalizing storage, 116,000 gallons of standby storage and 34,000 gallons of working storage. It would provide normal operating pressures of between 40 and 60 psi.

Assumptions used in determining tank size and elevation include fire flow requirements and yield of the new well being developed for the water system. Updated information on either of these factors could reduce the required amount of storage. If the storage tank is located at a lower elevation, a taller structure may be needed.

Electrical Service

Electrical service will also be required to accommodate the increased demand. Douglas County Public Utility District No. 1, the provider of electricity, currently requires additional infrastructure to provide the capacity to serve the resort. Approximately fourteen megawatts will be required for residential development and about 500 kilowatts (80 kw/acre) will be required for commercial development on the site. Thus approximately an additional 4.5 megawatts of transmission capacity will be required to bring required power levels to the site; however, this estimate would vary depending on the number and type of homes built. As noted in section 8.1, this additional capacity should be in place prior to exceeding 5 megawatts of power usage.

Emergency Services

Additional police, fire and emergency service is necessary to accommodate the resort. Since the nearest DCFPD #2 fire station is more than ten miles away in Rock Island, there is a need for additional fire protection in this part of the County with or without the resort. Grant County Fire District #3 is able to respond on a mutual aid basis from its main station in Quincy and a smaller station about six miles away in Crescent Bar. Both fire districts are exploring a jointly operated station to serve additional fire...
protection needs in the area. Spanish Castle Resort would not be responsible under Growth Management Act master planned resort requirements to provide for such a need, beyond that required for the resort itself.

A current inventory of Fire District facilities can be found in the Douglas County Capital Facilities Plan. According to the Fire Chief, as part of a planned update to the Fire District Plan, the Fire District Board of Commissioners has identified response time deficiencies and added language for a minimum facility to house fire apparatus and EMS vehicles in the future, to address lightweight construction impacts on fire growth and to address the growing need for rapid medical interventions in the pre-hospital setting. RCW 52.33 authorized the fire district to determine the facility needs and standards for the future. The approved plan for Douglas County Fire District No. 2 includes the anticipated construction for a Fire and EMS station at the Spanish Castle Resort; the facility is to be provided in coordinated design with other fire district buildings while addressing service impact created with the development of the Spanish Castle Resort, in the spirit of the Growth Management Act (RCW 36.70A.360(2)).

A fire station location is planned in the upland part of the resort with the building site and a two-bay station being provided by the resort. Additional bays may also be provided by the Fire District. This location is centrally located with respect to both the resort and surrounding parts of the Fire District.

The Douglas County Sheriff employs 20-30 deputies in addition to the Sheriff, Under-Sheriff and a Marine Division with one boat and one Deputy serving this part of the County. Due to the site location in the southerly end of the County near the Grant County line, additional enforcement and traffic control activities requires the extension of service into an area that had relatively little need in the past.

The Sheriff has identified a need for an additional community resource deputy as a result of resort development who would also be assigned to serve the general area between Palisades and the Grant County line in taking calls and traffic enforcement. The resort share of the additional law enforcement is estimated to be 65 to 70 percent. This is to be off-set by supplementing police protection with resort security and gating most residential streets to control access by non-owners.

Under the Growth Management Act, Master Planned Resorts must fully fund fire and police protection capacity increases required by the resort. If existing public service purveyors are used the funded increases must not promote sprawl outside of the resort.

The Fire Station and additional police protection should not promote sprawl or encourage the development of nearby lands outside of the resort beyond what is allowed by their present zoning. Unlike utilities such as sewer or water lines, fire and police protection are normally provided in rural areas. There is not an economic need for higher density development to be located as close to a fire or police station as possible.

**Solid Waste**

Solid waste generated by the resort includes municipal solid waste generated by residential and commercial development, biosolids from the wastewater treatment facility. Also wood waste from site development, since it will be chipped or removed from the site rather than burned in order to protect air quality. Chipped wood waste may be reused on-site. Construction debris other than natural unprocessed vegetation will be taken to a disposal site authorized to take it. Municipal waste and biosolids are dealt with below.
According to the Department of Ecology, in 2005, 2.85 tons of solid waste was generated per person per year in Washington State. Factoring out other types of waste, but including recycled waste, the 2005 per capita rate is approximately 1.8 tons per year. Rounding this number to 2 tons to compensate for estimating, and assuming 2.5 persons per dwelling, a total of 5,700 tons of solid waste and recyclables per year generated by the resort at build out, and up to 6,770 tons for the 20 year planning horizon. Since the Department of Ecology included all types of waste in its per capita calculation, this municipal waste is assumed to include waste generated by commercial use of the resort.

Some of the waste generated by the wastewater treatment plant is solid waste that is disposed of along with other municipal solid waste. This includes screenings, such as trash, that cannot be treated by the facility and grit that is washed into the sewer system and must be removed to protect the treatment plant from damage. These materials are prepared for solid waste disposal by washing or compacting and dewatering.

The third type of waste material is biosolids, which consists of excess micro-organisms generated by the wastewater treatment process. This material cannot be disposed of in a solid waste facility unless there is no other financially viable alternative. At full build-out, an annual average of 980 pounds per day is expected, with 1,225 pounds per day expected during the maximum loading month at full design operation.

Levels of Service

The level of service (LOS) standard for rural state highways is 'C'. Improvements of the Spanish Castle Road intersection are needed relatively early in project development to maintain LOS at the intersection to 'C' or above. Based on current traffic impact analysis, additional improvements may be necessary towards the end of project build-out; however, additional review is proposed at that time to validate current projections. These improvements are discussed in more detail in the Transportation Chapter.

Douglas County roads outside of the Greater East Wenatchee planning area utilize a combination of condition and operation levels of service. Since the planned improvements of Spanish Castle Road and the other County rights-of-way through the site are sufficient to maintain traffic concurrency through the planning horizon, the characteristics are summarized here, but a full level of service analysis has not been performed.

Spanish Castle Road is probably a Class 3 Road from SR 28 to the railroad crossing and a Class 4 or 5 Road beyond, as those terms are defined by the Comprehensive Plan. The functional classification would be local access. It is a gravel surfaced road that serves a few residences near the SR 28 intersection and in the orchards on the site. It serves as a farm to market route to the orchards.

Planned improvements of Spanish Castle Road, and traffic generated by the resort and required road improvements will upgrade it to a Class 1 Road and a minor collector road from SR 28 to the property boundary at the edge of the Grant County PUD open space.
8.3 New Utilities and Capital Facilities

Dry Utilities

Electrical power and telephone are available to the site from transmission lines located on Highway 28. Electrical utility needs include new distribution lines, transformers and potentially a substation. All utilities will have to be extended to the site and distribution systems developed within the site.

Water System

An interim Group ‘B’ water system will be developed for initial homes. As warranted, a Group ‘A’ water system will be developed utilizing two water wells, a reservoir, and distribution system. Sufficient existing water rights plus the acquired right to 1,000 acre-feet of water is available to meet the overall demand for the resort including domestic water and fire flow requirements. Potential demand is reduced by the use of reclaimed water for most irrigation.

The source of water for the resort is two wells, an existing well historically used for orchard irrigation and the other well being developed.

There are three water-right certificates that provide for 1,213 acre-feet of water withdrawn at 2,860 gallons per minute, well above the projected demand of 776 acre-feet per year at a maximum peak demand of 2,000 gallons per minute. Modification of the water-right certificates are being undertaken to modify their existing permitted uses from irrigation, and food supply, as well as seasonal limitations to the domestic and irrigation needs of the resort.

Wastewater

The wastewater treatment plant is designed to treat the current projection of 358,000 gallons per day of wastewater. Treated wastewater is to be used for irrigation of open space (private) areas during the irrigation season and stored during the rest of the year in on-site storage ponds.

Storage ponds will be incremental to accommodate full build-out of the resort. This would also allow other alternatives to be considered both for discharge of excess wastewater prior to completion of the golf course and for seasonal flows. These alternatives include irrigation of other areas on the site. Alternate discharge to the Columbia River is recommended as the most cost effective alternative to on-site storage and may also be considered, although it is not now part of the proposal.

The treated wastewater will be reclaimed as class ‘A’ reclaimed for effluent quality meaning that it receives biological treatment and is filtered to reduce pollutants (Biological Oxygen Demand and total suspended solids) by at least 85% and limit turbidity, and disinfected to reduce pathogens to near non-detectable levels. Nitrogen and Phosphorus are also monitored to prevent nutrient overloading in irrigated areas. In most cases, should a golf course be included as a future recreational amenity, nutrients in the effluent are insignificant compared to agronomic uptake when used for irrigation.

Under the Reclaimed Water Act (Chapter 90.46 RCW) the authority for reclaimed water lies jointly with the Washington Departments of Ecology and Health. Usually the Department of Ecology issues the permit in conjunction with a state or NPDES wastewater discharge permit and issues the Department of Health requirements within the permit. Permit conditions assure that the wastewater is treated so
that the effluent is no longer considered a wastewater under State law. A detailed engineering report is required that includes specific information about the use sites, a water balance and an assessment of reliability.

**Transportation**

New internal streets and related improvements, including walking paths and stormwater drainage facilities, will be provided by the resort. The intersection of Spanish Castle Road and SR 28 is to be improved with three lanes on Spanish Castle Road and a left turn lane and acceleration and deceleration lanes on the highway. Spanish Castle Road may also be realigned through parts of the resort and it will be improved to paved standards, including boulevard standards with a paved non-motorized trail in locations. The internal street system is described in more detail in the transportation element.

**Stormwater Management**

Stormwater Management will consist primarily of rural ditches and culverts and be designed according to Douglas County standards and requirements.

**Parks and Open Space**

The park and portions of other open space (private) areas are to be improved, primarily by landscaping including lawn and possibly sports fields in the parks. If accepted by a public agency, the park will be improved in the manner determined by that agency.

**Solid Waste**

Municipal solid waste will be collected within the resort by a contract carrier and taken to a permitted solid waste landfill, preferably the Greater Wenatchee Landfill provided that it is able to accept at the time. If not, another permitted disposal site will be used. Other sites that are permitted to accept municipal waste according to the Department of Ecology website include the Okanogan Central Landfill in Okanogan County and Roosevelt Regional Landfill in Klickitat County.

Given that the Greater Wenatchee Landfill is the primary disposal site for an area with a population of over 100,000 it is likely that another alternative will be available if Greater Wenatchee were to reach full capacity. While the additional solid waste generated by Spanish Castle may be contributing to a cumulative adverse environmental impact, it is not the primary cause and hauling costs and tipping fees incurred at whatever location that waste may be taken would be the primary mitigation.

Other measures include participating in a recycling program, as both available carriers and disposal sites appear to provide them. Disposal of biosolids by land application also mitigates the impact that would result if they were taken to municipal landfills.

### 8.4 Financing

The Growth Management Act requires capital facility improvements to be planned and financing in place no more than six years from development. Improvements that belong to the resort including the water, wastewater, stormwater and internal street systems are to be financed privately by the resort as they are developed. As will the improvements of SR 28 and Spanish Castle Road.
Most capital facilities will be owned and managed by the resort and will be funded by lodging revenues, rents charged to businesses, and homeowner maintenance fees. Some capital facilities will continue to be owned and maintained by Douglas County or existing special districts and utilities with operation and maintenance funding provided by those entities. These include Spanish Castle Road, and other County access roads, the backbone of the electrical system, and substation.

Fees will be collected for some of these utilities in the same manner as they are elsewhere. Property taxes will be collected by the County and Fire Protection District and contribute to the operation and maintenance of their facilities, again, in the typical manner. Improvements by the developer of the County road and construction of the distribution systems within the resort will relieve the public agencies from the up-front cost of bringing these facilities to standards needed to support the resort. Annual maintenance fees will be collected from all property owners, including the resort to fund private capital facilities.

Ownership of common areas of the resort and the private infrastructure and utilities is to be by a homeowners association or several associations for the various elements of the resort under the umbrella of a master association. The associations as described here would consist of the resort and business and homeowners served by the facilities. The association would be funded by annual maintenance fee paid by all of the entities and will include reserves to fund capital improvements and replacement costs.

Common areas and private infrastructure consists of the domestic, irrigation and wastewater systems, streets, and walking paths. The several homeowner associations may be broken down by resort element (i.e., golf course, commercial center, affordable housing community) or by infrastructure, in particular where a public agency retains a prospective interest in the utility element, as may be required for both public water and wastewater systems.

A non-profit organization (or organizations) certified as a Satellite Management Agency (SMA) will be established to own and operate the water and sewer utilities or they will be operated and managed by an existing qualified SMA. If operated by the resort, Douglas County will be authorized to request and receive copies of reports in regard to sewer and water utility operation that are required to be filed with the State of Washington.

Financing for these improvements are to be provided in the following manner:

**Spanish Castle Road**

The road, including stormwater drainage systems will be built by the developer to standards developed for the resort (standards are described in more detail in the Transportation chapter and Spanish Castle Resort Transportation Plan). This improvement will extend from the SR 28 intersection to no closer than 200 feet from the ordinary high water mark of the Columbia River at the boundary of the Grant County PUD open space. Final design terminus of the Spanish Castle Road will require coordination with Douglas County and the Grant County PUD so improvements made by GCPUD are seamlessly integrated into the access point of the Spanish Castle MPR. On-going maintenance will be by Douglas County.
SR-28

Intersection improvements necessary to maintain LOS C or higher at the intersection of Spanish Castle Road and SR 28 will be made by the developer during the initial increments of development as described in the transportation chapter.

There is currently no funding for the further intersection improvements identified to maintain concurrency at the intersection with SR 28 at full build-out. Further analysis to be funded by the resort will be conducted prior to commencing the final increment of development to confirm whether or not the improvement is still necessary and to confirm the improvement implementation strategy outlined in the transportation element to accommodate continued build-out of the resort.

Vulcan Siding Road

This County road will be upgraded according to the road sections contained in the transportation element. This improvement will extend from the road’s intersection with Spanish Castle Road to the gated entry to residences north of Spanish Castle Road.

BNSF Railroad Crossing

The railroad crossing will be in coordination with BNSF to meet railroad standards and County requirements.

Internal Roads

Roads internal to the site will be built by the developer to standards developed for the resort and illustrated in road sections in the transportation element.

Stormwater Drainage

Stormwater system is intended to be mostly located within the public and private streets with operation and maintenance by Douglas County in public streets and the resort in private streets. Stormwater design will include providing for runoff from individual lots, driveways, parking lots and other improvements that are outside of the street system.

Police Protection

Supplementing police protection through a resort security force and gating most residential streets to reduce the amount of non-resident/guest traffic are proposed mitigation measures to be fully funded by the resort. Space will be made available for a police substation.

Electrical Power

Douglas County Public Utility District #1 has identified a need for transmission lines and a substation to provide the resort power. The developer intends to phase the implementation of this infrastructure, raising the capital costs for each phase as housing units are sold. Other electrical power needs will be funded by the developer through normally required hook-up fees and utility rates.
References

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Spanish Castle Resort Wastewater Management Planning
Esvelt Environmental Engineering
Memo Report
June 21, 2007

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Golf Course Development in Residential Communities
2001

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Western Pacific Engineering, Inc.
June 2007
9. OPEN SPACE

Over half of the total acreage of the resort is in a mixture of permanent open space (private), agricultural areas, natural areas and recreational areas. Open space (private) areas in this resort serve a variety of purposes that include recreational amenities, public access to certain designated areas, protection of certain cultural and natural resources, maintaining a sense of openness and to integrate site development with the natural character and natural and cultural resources of the area.

Distribution and type of open space (private) is described as follows:

**Natural Areas**
- Conservation Area
- Water view natural area

**Agricultural Open Space**
- Orchards (prior to development)

**Recreational Open Space**
- Potential Golf course
- Potential Equestrian Center
- Commercial Core open space
- Water View (public) park
- Community park

**Other Open Space Areas**
- Transition Buffer
- Open space in the residential areas
- Open space surrounding utility installations and vehicle storage areas including wastewater treatment plant and substation
- Miscellaneous open spaces around the edges of the site and northeast of SR 28 (but excluding the wastewater treatment facility).

Open space (private) areas include landscaped and constructed areas such as recreational open space (private), and open areas in the commercial core. Unimproved open space (private) areas are primarily the natural areas and most of the area across Highway 28 from the site. Agricultural open space (private) areas are improved to the extent that they are not maintained in natural vegetation. Most resort open space (private) will have a combination of improved and unimproved areas.

The approximate distribution of open space (private) types is shown in Table 9-1. This distribution is based on the lot layout developed for the 2014 MPR Major Amendment; while the lot layout will be
different to some degree, the total open space (private) percentages will meet or exceed the values in Table 9-1.

### Table 9-1. Spanish Castle Open Space

<table>
<thead>
<tr>
<th>Open Space Category</th>
<th>Acreage (1)</th>
<th>Percent of Site</th>
<th>Cumulative %</th>
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<td><strong>Dedicated</strong></td>
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<td>Natural Areas</td>
<td>64</td>
<td>7%</td>
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<td>Recreational Open Space</td>
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<td>Other Open Space utility areas</td>
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<td><strong>Not Dedicated</strong></td>
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</tr>
<tr>
<td>Miscellaneous</td>
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</tr>
</tbody>
</table>

(1) Approximate

### Natural Areas

An approximately 60 acre area in the eastern part of the site is planned for the conservation area. A deep ravine that crosses through the site physically isolates this area from the rest of the resort adding a further level of protection. The conservation area will be preserved in its current state.

Since the resort site has been identified as a priority species habitat area for Mule Deer and Chukar, the conservation area provides a contiguous area ranging from 700 feet to over 1/4 mile in width that allow for the movement of wildlife from the Columbia River to hills to the north and northeast.

Open space (private) and outdoor recreation areas, likely to be built in a location with much more degraded vegetative habitat, will separate the conservation area from the more intensively developed areas of the site, serving to benefit the conservation area as a buffer.

Vegetative habitat on most of the rest of the site has been degraded by previous grazing, agriculture and other development activity. Nevertheless, a small ravine that crosses the water view resort near the north end of the site is to be kept in a natural state.

The ravine is relatively difficult to develop topographically and provides natural drainage. Keeping the ravine in open space helps to break up the site visually and allows integration of new development with the natural character of the area. It will be necessary, however, to cross the ravine with streets, utilities and pedestrian path.
The area will be left in natural vegetation with the large boulders left intact, except as necessary for street and utility improvement.

**Recreational Open Space**

Recreational open space (private) primarily consists of the golf course and equestrian center but also includes the esplanade. Also some recreational facilities such as ball fields and playground equipment may be provided in the parks.

**Agricultural Open Space**

Agricultural open space (private) consists of the existing orchards and recently added vineyards.

It may be necessary to construct streets across parts of the agriculture spaces during the initial increments of development to access other portions of the site to be developed. Utility lines may also be extended across the agricultural spaces. Although these activities will remove some plants from production, they will leave large enough blocks to allow continuance of agricultural production.

Irrigated agricultural, which includes vineyards has been added to the design interspersed as another component of the open space (private). This use is anticipated to feature irrigated agricultural uses, such as vineyards or tree fruit as part of the ambiance and amenities that enhance the resort plan.

**Other Open Space Areas**

These areas include small open space (private) areas in the water view resort (other than the natural areas), transition buffers, sites that are difficult to develop for other uses due to size, shape or location, open areas around the substation, other utility areas, and parks. Some of these areas will have a combination of unimproved open space (private) and landscaping.

The open space area owned by Grant County PUD located outside of the resort property contains less degraded habitat and although not being provided or maintained by the resort, provides some benefit to both the community and the environment as a large continuous open space.

Archaeological resource sites will be preserved in place either in designated open space (private) areas or with 10 meter (33 foot) buffers.

**9.1 Open Space Preservation and Administration**

The Douglas County Zoning Ordinance requires designated open space (private) to be preserved through deed restrictions and administered by an owner's association, government agency, private nonprofit trust or similar entity (DCC 18.74.090). The mechanisms proposed for administration and preservation of certain designated open space (private) areas are described here.

Not all of the areas described in this chapter are to be designated as permanent open space (private). There are currently no other plans for most of them. Areas around the utility sites and on the opposite side of Spanish Castle Road from the main resort (upland from the railroad) may be used for other purposes in the future, probably related to resort administration, and are not proposed for permanent preservation.
Open land opposite the site across Highway 28 is being counted as open space (private) for the purposes of this plan but is available for wastewater management purposes and parts could be used for other purposes in the future.

Natural areas, transition buffers, the proposed parks and open space (private) areas will be designated and preserved in the manner required by the Zoning Ordinance. Exceptions in the deed restrictions will be necessary to allow future road and utility improvements in the open space (private) areas where they front on Highway 28 in case these improvements are needed to benefit the resort or for widening of Highway 28 if needed. Open space (private) areas that are designated for long term preservation along with the recreational open space (private) comprise approximately 60% of total resort acreage.

All designated open space (private) areas will be protected by deed restrictions that preserve them for open space (private) and limit the uses that may take place on them. The limitations are generally described in the Resource Management Plan.

The conservation area, water view open space (private) and natural areas and agricultural and transition buffers will be under common ownership of homeowners association or associations and protected by restrictive covenants.

Since it is not practical for homeowners associations to own or manage them, outdoor recreational areas will be owned and managed by the resort. Some of these amenities may be operated for profit, although the establishment of a separate entity or entities to own the land will be considered if necessary to do so.

A park, once developed, will likely be offered to Douglas County or other public agency for administration and management as a public park. If not accepted, it will be administered by a homeowner’s association or associations and managed by the resort in the same manner as other dedicated open space (private).
10. **FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT**

10.1 **Fact Sheet**

**TITLE OF DOCUMENT**


**PROPOSED ACTION / ALTERNATIVES**

The proposed action is the adoption by the Board of Douglas County Commissioners of this major amendment to the sub-area plan, to adopt this major amendment under the Douglas County Comprehensive Plan and rezone that modifies the approximately 660 acres of Master Planned Resort, by redefining the boundary of the MPR to 860 acres and continue to allow the development of a destination resort consisting of about 1,129 total vacation ownership dwelling units, a proposed 100 room hotel, possible spa, future outdoor recreational activities, commercial space and associated infrastructure and support facilities.

The residential component of the resort consists of a potential 497 detached single family homes on subdivided lots, and envisions approximately 628 condominium units. Additional subdivided single family lots may be provided in the future.

The proposed outdoor recreational uses include an 18 hole golf course includes club house and restaurant, driving range and maintenance facility. An equestrian center is anticipated that would likely consist of arenas open area with pasture, stables and riding trails. The spa is envisioned as a long term lodging facility providing luxury wellness and therapy services.

The mixed use commercial core anticipates a hotel, convention facilities, restaurants, wine shop, athletic club, movie theater, convenience market, specialty retail center, and office space. Proposed condominium units are to be incorporated into this part of the development.

Related infrastructure and support services may include boat and recreational vehicle storage area, a water system with wells and reservoir, a potential wastewater treatment plant with storage ponds, possible electrical substation and if warranted, a fire station.

Douglas County owned and maintained Spanish Castle Road and two County road rights-of-way will be improved and paved from Highway 28 through the site as primary access to the resort and to improved public access to the Columbia River and other adjacent properties. Other resort roads are to be hard-surfaced private streets.

10.2 **Project Location**

The resort site is located south and west of the intersection of State Route 28 and Spanish Castle Road between the highway and the Columbia River. It is about eleven miles south of Rock Island
and eleven miles west of Quincy. The site is located in Sections 4, 9, and 10, Township 20 North, Range 22 East, W.M.

10.3 Site Description

The site consists of three major parts, an area designated “water view resort” on slopes between the railroad track through the site and the Columbia River, an upland area between the track and SR 28 and a third area located across SR 28. This latter area will remain substantially undeveloped.

The site originally consisted of about 575 acres zoned Commercial Agriculture (AC-10) and about 80 acres zoned Rural Resource (RR-20). Both zones were in areas with corresponding comprehensive plan designations. One hundred eighty acres of this area is commercial orchards and irrigated agriculture; the remainder is not being farmed.

Current uses in the revised boundary of the MPR also include irrigated agriculture in the form of vineyards which is a use allowed Design and Development Manual in this amendment.

10.4 Project Proponent

Big River Development
3559 Road K NW
Quincy WA 98848

SCJ Alliance
15 Palouse Street
Wenatchee, WA 98801
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www.scjalliance.com

10.5 Lead Agency

Douglas County Transportation and Land Services
140 19th Street NW, Suite A
East Wenatchee, Washington 98802 (509) 884-7173

RESPONSIBLE OFFICIAL: Mark Kulaas, FAICP
EIS CONTACT PERSON: Curtis Lillquist, AICP

REQUIRED LICENSES & APPROVALS

10.6 Required Licenses & Approvals

Douglas County: Adoption of Sub-Area plan – Major Amendment Subdivision Approval.
Building Permits Grading Permits
Washington Department of Health: Drinking Water Operating Permit
Washington Department of Ecology: On-site sewage disposal permit
Waste Discharge Permit for reclaimed water - NPDES Construction Stormwater General Permit
10.7 Draft Supplemental (DSIEIS) Authors And Major Contributors

In addition to the contributors of the original Spanish Castle Resort MPR, whose work is the foundation for this Major Amendment, the author of this Major Amendment, including: Transportation, Civil, Agricultural, Landscape, Rail, and Wildlife

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Water System:

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Archaeological Assessment

Cultural Resource Consultants, Inc.
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Bainbridge Island, WA 98110
10.8 Environmental Summary

The proposed action is a major amendment to the Douglas County Comprehensive Plan adopted Spanish Castle Master Planned Resort Sub-Area Plan under the current approved Master Planned Resort. This is a planned amendment pursuant to WAC 197-11-164 for development of the master planned resort.

10.9 Objectives – Purpose and Need For Major Amendment

The principal objective is to redefine the boundary of the resort to reflect on-going negotiations and concluded issues that were originally identified in the development of the Spanish Castle destination resort previously approved and adopted. The resort continues to consist of single-family and multiple family condominium vacation homes, planned hotel, commercial center, outdoor recreational development, spa and resort support facilities.

The resort benefits from its location on property owned by the proponent overlooking the Columbia River and Cascade Mountains with direct access to the river via Spanish Castle Road.

The resort is intended to offer the public a high quality outdoor recreational-residential experience with integrated irrigated agriculture creating open, yet productive space that takes advantage of the climate, topographic features and views of this location. A combination of homes is to be offered, along with condominiums available on both a full share and fractional ownership basis. Lodging, spa/wellness center, eating, entertainment and shopping opportunities and infrastructure necessary to fully support the resort are also to be provided.

It is also the objective of the developer and of Douglas County to integrate the resort with the natural and cultural character of the surrounding area including incorporated irrigated agriculture in the design and land uses of the resort. This Major Amendment revises some of the planning and measures taken to design the project within the physical capabilities and characteristics of the land and sensitivity to surrounding resources and identifies thresholds using ERU’s (Equivalent Residential Units) as a basis for required improvements to the resort support infra-structure.

The approved MPR has been enhanced by this Major Amendment as the new developer has identified demand for the type of recreational amenities and living units that are proposed due in part to the desirable climate of the region, scenery, amenities that will be provided, and its relative proximity major population areas.
Satisfaction of this continuing demand also benefits the surrounding community by bringing in revenue from outside of the County and by providing new supply of these lots and living units as an alternative to increased competition with local residents for existing properties and living units.

10.10 Alternatives

1. Proposed Project: Big River Development would develop the master planned resort as described by this Major Amendment.

2. No Action: The existing land use designations, goals and policies of the MPR plan would be maintained in those certain areas. Areas of the MPR that no longer fall within the developer’s control would be allowed to occur under current zoning and land use designations would allow in roughly the same patterns as observed today. This change in consolidated ownership defeats the purpose of the MPR and creates a scenario that will be evaluated in this document only in general terms, since any proposal would likely require an independent review under SEPA.

10.11 Major Conclusions

The amended boundary of the resort can support anticipated growth at expected densities. Overall density of less than two dwelling units per acre is low due to the open space (private) being provided. Access to the site is directly to Highway 28 without resort generated traffic having to pass through other developed or agricultural areas that are currently in production. Wastewater, domestic and irrigation water systems will be implemented based on ERU demand. There is very little surrounding rural or agricultural development and sufficient room to provide buffers from adjacent parcels.

More than half of the residential units and most of the visitor accommodation units are concentrated in an area of less than one-quarter of the site that has no characteristics that qualify it for farmland of long term commercial significance under the comprehensive plan.

Much of the site is sloping, in some areas greater than 45%. Douglas County Critical Areas mapping has also identified severe building soils on the site. However, geotechnical analysis of the site has concluded that slopes are stable.

Part of the site will require extensive grading to accommodate the proposed site plan, particularly in the water view area, but in other areas as well including some of the steeper parts of the housing community. The geotechnical analysis has concluded that project development can be accomplished as long as finished slopes are no steeper than 2:1. Terracing may be necessary to cut large enough building pads for some of the buildings. Multi-level buildings and building with stepped foundations will probably be necessary because of the rock.

In 2007 there were about 180 acres of orchard on the site planted in apples, cherries and apricots and an additional 120 acres of uncultivated bare ground with agricultural irrigation rights. Including orchard, there are now 320 acres of Irrigated Agriculture, the balance in the form of vineyards that will be integrated into the aesthetics and lifestyle of the resort. The other parts of the site are areas that have been determined by an agricultural economist to be unproductive farmland.

The greatest potential for land use incompatibility is between the resort and the railroad through the property. There are two compatibility issues with the railroad: noise from train engine horns, and safety, primarily at the Spanish Castle Road crossing of the track. The crossing is to be
signalized. The railroad through the site is to be established as a quiet zone at the crossing as an alternative to the use of train horns to mitigate noise impacts.

An updated traffic study, utilizing enhanced sensitivity forecasting has been conducted and append to the amendment. This study implements a set of standards to be used for the initial stage of construction and identifies Equivalent Residential Units (ERU’s) as a basis for requiring additional sensitivity study of certain intersections that will need enhancement should ERU values exceed Douglas County enforced and State established thresholds.

Archaeological assessment of the site identified three potentially significant archaeological finds. Preservation of the sites in place is planned with their protection by 10 meter buffers.

10.12 Significant Areas of Controversy and Uncertainty

This draft supplement considers areas of concern, identified in initial scoping and commentary of the original DEIS a how the proposed Major Amendment might affect each item previously identified. In preparing the scope of the DEIS, Douglas County invited comments from State and local agencies, affected Indian Tribes and the public. A public scoping meeting was held on May 16, 2007. Written comments were accepted until May 23, 2007 and both written comments and comments made at the public meeting were incorporated into the Scope of the SEPA Integrated Document for Planned Action issued on June 18, 2007.

Some of the comments made at the scoping meeting and submitted written comments concerned areas of controversy. These areas were identified as follows and have been updated to reflect this amendment:

Access:

Title to the former Great Northern right-of-way is not clear. The proposed lots will be limited to that part of the property that has clear access but will be reduced in number from 214 to 199 and reduced in size from 7,000 to 5,000 square foot lots.

The validity of the right-of-way for Douglas County Road No. 921 has been questioned.

UPDATE:

The lot size issue, Great Northern right-of-way and the Douglas County Road No. 921 right-of-way have all been resolved through property consolidation, boundary adjustment, negotiations with parties and the re-design of the northern area residential area based on the amended boundary.
Adjacent Agricultural Property:

Concerns have been raised about the impact of project development on a property formerly used as a feedlot but since abandoned.

The former feedlot borders the part of the site proposed for the housing community, boat and RV storage.

Part of the site bordering on agricultural zoning is the portion of the housing community that appears to be isolated by the former railroad right-of-way as described above.

UPDATE:

No health effects have been determined on the resort from the former feedlot, Re-establishment of the feedlot in this location is prohibited by the County Zoning Ordinance and is probably not feasible.

Through the consolidation of parcel ownership and negotiations with the County and other agencies, the Access items have been resolved, The Feedlot land-use and adjacency has been eliminated by closure of the feed lot and incorporation of the land within the Resort boundary.

Palisades School District Impacts:

Based on the expected number of full time residents versus vacation home buyers in the resort, it was projected that it would contribute up to 13 Kindergarten through fifth grade students to the Palisades School District at final build-out. Currently, the School District has experienced downward trends in enrollment.

UPDATE:

The population estimates are linked with ERU thresholds that require additional study when ERU demand determines additional analysis is warranted. This will affect the student impact on the School district, which has experienced declining enrolment since the study was originally conducted.

Review of this Major Amendment, may identify an unforeseen or unknown condition no yet addressed, however this draft indicates the resolution of issues or further issues that are identified is final outcome of this amendment.
10.13 Summary of Environmental Impacts and Mitigation

This summary describes the significant environmental impacts and proposed mitigation. It is organized to follow the original June 18, 2007 scoping notice.

Each item was reviewed by the Developer and the County for update due to the Major Revision considerations of boundary. When additional study was deemed necessary updates or supplemental analysis was conducted and included by appendix to this Major Amendment document.

For each of the scoped elements of the environment, the scope of review from the notice is restated, followed by identified significant impacts and proposed mitigation. In some instances, impacts that are not significant are included because they are key issues identified in the scope or are questions to be answered. The extent to which the no-action alternative would have identified environmental impacts follows.

• Earth - Geology and Soils

SCOPE OF REVIEW

Describe regional and local geology and soil types. Describe how the proposed development plan is consistent with the Critical Areas Ordinance: Geologically Hazardous Areas. Describe planning-scale estimates of quantities and management of on-site excavation. Describe geologic hazards such as steep slopes and severe building soils which would impact the project. Describe the health effects, if any that the adjacent abandoned feedlot would have from animal waste migrating to soils in the area.

IMPACTS

There will be a significant amount of grading, especially in the water view resort and including areas that are mapped as steep slopes and severe soils by the Critical Areas Ordinance. Geotechnical analysis of the site determined that existing steep slopes in parts of the site proposed for development are stable.

Additional study was conducted for those portions of the property that were not surveyed in the original plan boundary. The impact remained unmodified. Supportive documents are appended.

MITIGATION

A geotechnical analysis has been conducted and grading plans will be prepared by a licensed professional engineer.

Planning scale estimates of quantities will be determined for grading plans.

Excavated material will be stockpiled on-site. With project phasing as proposed, stockpile locations would be available for all phases.

Newly created slopes will be re-engineered to ensure stability. Terracing may be necessary to cut large enough building pads for some of the buildings and finished grade should be no steeper than
2:1. Multi-level buildings and buildings with stepped foundations will probably be necessary because of the rock.

Due to steep slopes in parts of the housing community, it will be configured in a manner that is consistent with topography taking into account steep slopes and the intermittent stream through the area.

**NO-ACTION ALTERNATIVE**

Cutting and filling to the extent necessary for the proposed alternative would be avoided, especially in the area between the railroad and the Columbia River. Some cutting and filling could occur if the property were subdivided as currently allowed by the zoning but not to the extent proposed by the project.

- **Earth - Topography**

**SCOPE OF REVIEW**

Describe existing topographical features of concern with regards to slope stability, erosion and runoff.

**IMPACTS**

Three major topographical features on the site are considered vulnerable to slope stability, erosion and impacts from runoff. They are the cliffs and bluffs across Highway 28 from the site, the steepest slopes of the water view resort, and two ravines that contain intermittent streams, the larger ravine in the conservation area, and the smaller stream across the affordable housing community and the north end of the water view resort.

**MITIGATION**

The cliffs and bluffs across Highway 28 and the ravine through the Conservation Area are not planned for development; the ravine through the Conservation Area will be kept in dedicated open space (private).

The slopes in the water view area were found to be stable by the geotechnical analysis. Reconstructed slopes will be engineered following the recommendations of the geotechnical analysis.

The ravine through the housing community and the north end of the water view resort will be retained as open space (private) except as necessary to cross it with street, utilities and pedestrian path.

**NO-ACTION ALTERNATIVE**

The three topographical features of concern would be difficult and expensive to develop on a small scale, so most impacts would probably be avoided.
• **Earth - Soil Erosion**

**SCOPE OF REVIEW**

Describe erosion potential for native soil to be disturbed as part of facility construction. Describe soil prevention measures both during construction and long term.

**IMPACTS**

Most of the soil types on the site have a large component of sand and silt, which tends to increase their potential for erosion, although some also contain substantial rock, which reduces the potential. Uncontrolled erosion could remove topsoil, cause siltation of stormwater structures and sedimentation of surface waters.

**MITIGATION**

For construction, a NPDES Construction Stormwater General Permit will be obtained and a Stormwater Pollution Prevention Plan (SWPPP) prepared. Measures identified in the plan will be implemented to prevent soil from being carried into surface waters or storm drains. Although specific measures will be determined by the planning and engineering analysis that is required to develop the plan, they are expected to include the use of silt fences, storm drain inlet protection and re-seeding exposed slopes.

Longer term measures include developing the site with existing vegetative cover left in place until development begins in that project. Newly created slopes will be engineered as specified by the geotechnical analysis. Natural vegetation is to be preserved in the major ravines while minor drainage ways will be incorporated into the stormwater system. Slopes exposed long term will be re-seeded with wild grasses to prevent erosion.

**NO-ACTION ALTERNATIVE:**

The potential for adverse impacts is greatly reduced because development would not be at the proposed scale. However, development allowed under current zoning would disturb the soil and the likelihood for smaller scale development to not occur in accordance with best management practices could contribute to cumulative impacts.

• **Air Quality**

**SCOPE OF REVIEW**

Describe the methods for dust control during excavation and construction for disturbed areas. Describe the plan for on-going dust control for the equestrian center. Describe the effects and health implications of the animal feedlot and its animal waste from dust blowing on adjacent residential, commercial or recreational development.

**IMPACTS**

Most of the soil types on the project site belong to NRCS wind erodibility groups characterized as moderately to highly erodible. Dust control measures are necessary to protect existing and future agricultural, residential, recreational and commercial land uses.
The feed lot is closed, no-longer an allowed use, and planned to developed and restored to residential and irrigated agriculture uses. The health implications of blowing feedlot waste dump are no longer relevant or greater than that for any blowing dust. The feedlot property was enjoined from allowing fugitive dust to leave the property by a Court Order.

MITIGATION

Dust control plans will be prepared prior to development of the site and for outdoor recreational uses such as an equestrian center. Construction dust control measures to be taken will be specified in the dust control plan but are expected to include using water to keep dust under control, and seeding soils that are exposed longer term. Other measures may include developing the project site construction activities to minimize vehicle and equipment driving over exposed surfaces. Stockpiles of dirt and soil will be watered, seeded, or covered.

Dust control measures would be required for an equestrian center with corrals and other outdoor areas that will be used extensively by horses. Other outdoor recreational areas would be surfaced, landscaped, planted in grass or not disturbed. Dust will be controlled primarily by regularly wetting down exposed areas without applying so much water to cause a waste discharge or cause mud to be tracked out on hard surfaces by vehicles. Where there is a buildup of mud or dirt, it will be swept, if large enough surfaces are involved, wet sweeping or vacuum filter equipment can be used to minimize dust generation.

NO-ACTION ALTERNATIVE

Impacts are likely to be at a smaller scale and would be avoided with no development. Any development that removes vegetation or disturbs the soil has the potential to generate dust.

- **Water - Runoff/Absorption**

SCOPE OF REVIEW:

Identify mitigation for the increase in stormwater runoff and retention for all phases (during construction and on-going post construction). Include impacts on the Columbia River from stormwater runoff. Identify a plan to address the operation and maintenance of private stormwater facilities. Identify mitigation and design concepts to mitigate the effects of grading and excavation on the natural drainages. Identify mitigation and design concepts to mitigate the effects of locations of structures in or near natural drainages.

IMPACTS

Improper stormwater management would have significant impacts due to the steep slopes, relatively erodible soils and the substantial excavation that will be required for development. Post-construction impacts would result from runoff from roads and residential and recreational areas containing pollutants and being heated from impervious surfaces.

The primary impacts on the Columbia River include the introduction of pollutants, turbidity from sediment, changes in groundwater recharge and changes in surface water temperature. These could have adverse effects on water quality, aesthetics and plant and animal life.
MITIGATION

Stormwater drainage is being designed by a licensed professional engineer using best management practices from the Stormwater Management Manual for Eastern Washington. The specific elements will be determined as a part of project engineering and will provide for on-site retention of site generated runoff. The most likely drainage measures will be for on-site generated runoff to be conveyed by ditches, pipes and similar structures and infiltrated on-site. Larger drainage ways would be left open or piped with pipe size determined by hydrological analysis. Smaller drainage ways that are graded will be incorporated into the stormwater system.

An animal waste management plan should be prepared when a potential equestrian center is initiated. The plan would include best management practices that include regular clean-up of manure from corrals, stables and arenas, frequent and regular transport of waste from the center, with waste kept in covered areas that are designed to prevent leachate if practical and curbed to divert stormwater runoff around them. If impractical to avoid leachate generation, it will be permitted, collected and disposed of in a manner required by law.

No development is planned in the drainage way through the conservation area. Nor is it planned in the drainage way through the north end of the water view area, except for a pedestrian pathway, and street and utilities crossing. Excavation, grading and buildings will be set back from the edge of the ravines in which these drainage ways are located. Stormwater generated from developed parts of the site will not be discharged into them except possibly as full dispersion, if it can be done in accordance with best management practices. Residential lot boundaries will delineate the open space (private) area where they border the ravine in the water view resort.

NO-ACTION ALTERNATIVE

Most impacts would be avoided or at a much smaller scale.

- **Water - Groundwater movement / quantity / quality**

SCOPe OF REVIEW

Describe the amount of water necessary to serve the development. Provide information on water rights that have been obtained and any planned transfers to meet anticipated water demand. Describe the effect of the adjacent abandoned feedlot on groundwater quality.

IMPACTS

Projected water demand at build-out is over 600,000 gallons per day or the equivalent to 776 acre-feet of water per year. Peak hourly demand is projected to be 2,000 gallons per minute with fire flow at 2,500 gallons per minute.

MITIGATION

Three water-right certificates provide for 1,213 acre-feet of water withdrawn at 2,860 gallons per minute, well above the projected demand of 776 acre-feet per year at a maximum peak demand of 2,000 gallons per minute. The use of a storage reservoir would allow for fire flow of 2,500 gallons per minute without exceeding the water rights.
NO-ACTION ALTERNATIVE

Non-agricultural development allowed under current zoning and in the same patterns as now exist would not require the amount of water necessary for this project.

- Plants and Animals

SCOPE OF REVIEW

Identify the potential for increased wildlife / human conflicts. Identify design concepts for landscaping and screening to increase compatibility between different intensities of land use, screen undesirable views of surrounding properties and provide a visual separation and physical buffer between varying intensities of abutting land uses. Describe consistency of the development plan with the Critical Areas Ordinance: Fish and Wildlife Habitat Areas. Identify plans for long term maintenance of the open space (private) / conservation areas.

IMPACTS

The site has been identified by the Washington Department of Fish and Wildlife as a priority habitat area for Chukar and Rocky Mountain Mule Deer. Conversion of their habitat to other land uses reduces the amount of vegetation available for food and cover. As a result, there is an increase in the potential for conflicts between animals and humans as animals increasingly browse agricultural crops and ornamental plantings that have taken the place of their food source. Introduction of domesticated dogs and cats also pose a threat. Since neither species is “endangered”, “threatened” or “sensitive,” the site is not a designated fish and wildlife habitat conservation area under the Critical Areas Ordinance.

MITIGATION

Approximately 31½ acres area at the eastern end of the site, mostly isolated from the rest of the resort by a deep ravine and that contains good quality vegetative habitat will be set aside as a conservation area and left undisturbed for wildlife habitat. It is a large enough patch of intact native vegetation to provide continuity and the ability for animals to move from the Columbia River to the hills north and northeast of the resort.

An outdoor recreation area is located between the conservation area and resort and residential areas serving as a transition between them. Hay and animal feed will be stored in buildings or fenced to protect them from deer. Degraded portions of the Conservation Area will be re-seeded and restored. The resort will agree to waive liability claims against the State for damage caused by wildlife. To the extent allowed by law, buyers of single-family residential lots will be also be required to waive claims against the State for damage caused by wildlife. Individual lot owners will be notified that the area is inhabited by deer and of the risks to ornamental vegetation.

NO-ACTION ALTERNATIVE

Most impacts would be avoided due to the smaller scale of development permitted under current zoning. However, some reduction of habitat and human animal conflicts are probable. There is no provision for the protection of the higher quality habitat of the conservation area and uncoordinated development could break up the continuity that would be provided for animal movement.
• **Environmental Health - Noise**

**SCOPE OF REVIEW**

Identify design considerations (land use and crossing engineering) proposed to mitigate the impacts of train warning horns on the development. Identify the design and operational considerations for mitigation of noise from the construction of future phases on development within built-out phases.

**IMPACTS**

Train horns are a significant source of noise, delivering about 90 decibels at 500 feet measured at right angles from the track. Noise levels above 60 decibels at night and 70 decibels during the day significantly impact residential areas.

Construction noise occurring in the vicinity can adversely impact the residents of built-out phases.

**MITIGATION**

Designation of the resort as a “Quiet Zone” would allow trains to cross the property without using their horns. Construction of a signalized crossing at Spanish Castle Road and the installation of would replace the use of train horns through the site.

The County, State and BNSF Railway have commenced with the signalized crossing design to meet the design standards of a rule compliant Quiet Zone. The trail crossing is also considered as part of the design. Construction noise mitigation includes keeping construction vehicles maintained and in good repair, including mufflers. Vehicles will be used in the manner in which they are intended and not loaded beyond their capacity. Where construction is occurring adjacent to built-out areas, operating hours will be limited to 7:00 AM to 10:00 PM.

**NO-ACTION ALTERNATIVE**

Unless, established as a quiet zone, trains are required to signal at all crossings, such as currently exists at Spanish Castle Road. Most impacts from train horn noise would be avoided because lower density development would probably locate at greater distances from the track. However, location of homes in close proximity is likely, and without the Quiet Zone designation, the area affected by train horns would continue.

Construction noise could be an impact, although affecting fewer people.

• **Land and Shoreline Use - Relationship to Existing Land Use Plans and to Estimated Population**

**SCOPE OF REVIEW**

Identify how proposed development is consistent with the Douglas County Countywide Comprehensive Plan and Shoreline Master Program.

**IMPACTS:**
No significant inconsistencies with the Douglas County Comprehensive Plan or Shoreline Master Program were identified.

MITIGATION

None.

NO-ACTION ALTERNATIVE

Since no impacts were identified, none would be avoided under the no-action alternative. Development activities undertaken under existing zoning could be inconsistent with either the plan or Shoreline Master Program. They would have to be evaluated on their own merits.

- **Land and Shoreline Use - Housing**

**SCOPE OF REVIEW**

Identify the housing demand generated by employees of the development and mitigation measures. Describe the various types and amounts of housing, including breakdown by tenure. Identify a projected population range at various times of the year for use in utility and facility impacts.

**IMPACTS**

Up to approximately 350 housing units at specific price points for purchase or monthly rental may be needed for resort employment. Employment would be incremental, with the largest increase during non-residential development. The ratio of specific price point units may be less if that employment is filled by existing residents or by members of households with other wage earners or other sources of income.

If the supply of local affordable housing conditions continues to be limited, seasonal employees may have difficulty finding affordable housing.

**MITIGATION**

Preference in hiring will be given to existing residents in the surrounding communities provided that they are otherwise qualified and available.

The condition of the housing market will be evaluated prior to development of the hotel. If appropriate based on those study conditions, measures to mitigate housing impacts on seasonal workers will be identified. For example, a housing allowance may be provided for workers.

**NO-ACTION ALTERNATIVE**

Significant housing impacts would be avoided.

- **Land and Shoreline Use - Cultural Resources**

**SCOPE OF REVIEW**
Identify areas within the boundary of Spanish Castle Resort that may contain cultural and/or historical resources in order to either avoid development in the area or mitigate for unavoidable disturbances to the resource. Revised Code of Washington (RCW) 27.53.070 states that archaeological field investigations on private lands shall be conducted by a professional archaeological firm.

Appendix 13 contains preliminary cultural and archaeological reviews of the Spanish Castle Resort project area. These studies include desk audits and on-site pedestrian surveys. A review of available databases and other publicly available resources that identify known historic properties, known archaeological sites, and other indicators of potential historic resources that might be impacted was conducted. Washington Information System for Architectural and Archaeological Records Data (WISAARD), which is managed by Washington State Department of Archaeology and Historic Preservation (DAHP), and the National Register of Historic Places were queried for previously known historic/cultural properties. The Spanish Castle Resort area has been surveyed using walking transects to identify the presence (or potential for the presence) of cultural resources.

IMPACTS

The area in and around Spanish Castle Resort is known to have had a long history of human habitation, starting as many as 10,000 years ago. The DAHP’s Statewide Predictive Model places the Proposed Project Area in an area with a “Very High Risk” to contain cultural resources. The DAHP states that a cultural resources survey is “Highly Advised.” Previous cultural studies described in Appendix 13 identified some cultural sites and some cultural isolates on the property (see Appendix 13). Because the area has been populated for such an extensive length of time, and since cultural resources have already been identified in previous surveys of the area, ground disturbing activities associated with the development of Spanish Castle Resort could impact cultural resources if the resources are not identified in advance.

MITIGATION

Prior to developing specific areas of the resort, a more in-depth cultural resources study will be conducted on the property, particularly in areas where ground disturbing activities will take place. Washington Department of Archaeology and Historic Preservation (DAHP) has published The Washington State Standards for Cultural Resource Reporting - Survey and Inventory Standards (February 2014). The manual provides guidelines, describes survey standards, and provides guidance for preparing and submitting inventory forms, and will be followed by the professional archaeological firm hired to conduct the field investigation and cultural report.

Based on that analysis, mitigation or avoidance measures will be developed as appropriate. If an area is found to have significant cultural importance, the area may need to be avoided altogether. If avoidance is not possible, and ground disturbing activities have to be conducted, an Archaeological Site Alteration and Excavation Permit may be required.

If cultural materials are found at any time during the execution of this project, activity will stop and the State Archaeologist at the DAHP will be notified immediately. If human remains, suspected human
remains, or any items suspected to be related to human remains are encountered, the area around the discovery will be secured and the Douglas County Coroner and Douglas County Sheriff will be contacted. The State guidelines listed at the following location will also be adhered to.

www.dahp.wa.gov/pages/Archaeology/documents/GuidelinesfortheDiscoveryofHumanRemains

**NO-ACTION ALTERNATIVE**

Potentially greater impacts since it is unlikely that a survey would have been conducted in the first place for any use of the property allowed by current zoning, and the resort is better prepared to identify the sites and set up the mechanisms necessary to protect them.

- **Land and Shoreline Use - Agricultural Crops**

**SCOPE OF REVIEW**

Identify the potential impacts on surrounding agricultural lands and agricultural operations. Include agricultural spray, beekeeping, frost pockets, agricultural hours of operation, odor, noise, etc. Identify measures to mitigate these potential impacts and minimize complaints pertaining to agricultural lands and operations, e.g., buffers, disclosure statements, operational considerations, etc. Describe how the land is better suited and has more long-term importance for the master planned resort than commercial agricultural production. What are the impacts to the local / regional agricultural economy of removing the subject property from production permanently?

**IMPACTS**

The final build-out of the project, envisions a golf course, outdoor recreational activities and wellness center spa. Previously 300 acres was allocated as open-space. This amendment increases that open-space allocation to over 500 acres and allows integration of irrigated agriculture as an open-space use. There is no impact on the agricultural industry.

Bees for the orchards on the site have been kept near Spanish Castle Road in a location that poses potential conflicts with pedestrians, bicyclists and motorists using the road.

Resort development has potentially significant impacts on adjacent existing and future agricultural land uses in agriculturally zoned areas because of the potential for conflicts or complaints about agricultural practices that generate noise, odors, late night activity, agricultural spray and other potential hazards.

**MITIGATION**

An agricultural economist concluded that given the relative isolation of the site that the proposed rezoning may be justifiable to the extent that agriculture is replaced by another primary economic activity that incurs revenue from outside of the area and that a Master Planned Resort may bring a higher influx of revenue over the long run into the area than an orchard. By this amendment, there is no loss of agricultural use, rather it is retained and integrated as open space with an allowed use of irrigated agriculture, current tree fruit and vineyards, and thus there is no impact.

Originally, the MPR proposed a net loss to agriculture of about $2.1 million to $3.2 million in land value; the revenue to the County just from sales, real estate and excise taxes generated by resort
construction and real estate transactions is estimated to be $7.8 million dollars. Most would come from outside of Douglas County as “import” revenue. In addition, ongoing revenues of an estimated $6.3 million would be incurred from excise and real estate taxes on an average annual basis and there would be additional revenue to the local economy. As the loss of agriculture is now significantly reduced or eliminated, the existing analysis of potential increased revenue through the implementation of the MPR is still relevant, as the amendment does not modify the new use gains.

Bee boxes will be stored in a more remote location on the orchard site.

Residential development is integrated within the defined irrigated agriculture open space areas, using the adjacency as an asset. Due to topography the residential areas are separated from the irrigated agriculture areas yard set-backs, utilizing the irrigated agriculture open space as a planning asset for the residential units.

NO-ACTION ALTERNATIVE

Most adverse impacts would be avoided by no action although residences would only be subject to the 100 foot setback. Also there is no assurance that existing orchards would remain in production with or without the rezone.

- **Transportation - Transportation Systems**

**SCOPE OF REVIEW**

Identify road standards for transportation facilities associated with the proposal that are supported by the traffic study. Road standards shall include cross-sections and construction standards. Describe how road standards meet emergency vehicle access requirements to all proposed areas and structures. Describe how the transportation system fosters the long-range transportation objectives of the County including continuity of pedestrian and trail systems to the road network and future access to adjoining properties. Provide a plan for operation and maintenance of private transportation facilities. Describe mitigation for impacts to County staff for engineering review and field inspections throughout all phases. Identify measures to mitigate demand for routine maintenance and maintenance associated with winter snowfall.

**IMPACTS**

A significant number of privately owned roads and pathways will require ongoing maintenance and capital improvements.

Traffic generated by the resort will increase the amount of routine maintenance performed on County Roads and the State Highway in this area. The impact on the State is not significant, because resort traffic comprises a minor percentage of overall traffic. For the County, it is a significant increase in maintenance of rural roads in a relatively remote area.

**MITIGATION**

Privately owned roads and pathways within the resort will be operated and maintained by homeowner’s associations under the umbrella of a master association. A road maintenance agreement would provide for ongoing maintenance, funding and capital improvement fund.
Improvement of the County rights-of-way with private roads, except for Spanish Castle Road reduces the amount of maintenance required of the County in this area.

The developer is willing to enter into a suitable agreement to assist the County with routine maintenance and maintenance associated with winter snowfall and to provide a site for stockpiling equipment, gravel and other maintenance materials.

Pedestrian pathways and sidewalks are being provided throughout the resort to provide for pedestrian access and to link recreational areas, including access points to the Grant County PUD open space, across the railroad crossing to provide pedestrian access to both upper and lower parts of the resort site and to SR 28.

**NO-ACTION ALTERNATIVE**

Assuming that potential development of the site under the no-action alternative would not generate enough traffic to warrant improvement of Spanish Castle Road or the other rights-of-way, these impacts would be avoided.

- **Transportation - Vehicular Traffic**

**SCOPE OF REVIEW**

Prepare a traffic study that analyzes the traffic associated with the proposal including, but not limited to the existing County road intersection with SR 28, the condition of existing County roads, current and proposed future use of the County road to access the Columbia River, access to proposed residential, commercial and recreational areas.

**IMPACTS**

Without improvements the project would have a significant traffic impact on the intersection of Spanish Castle Road and SR 28 by the completion of Phase I.

Even with recommended improvements the project may have a significant traffic impact on the intersection with level of service dropping to ‘E’ for the left turn movement from Spanish Castle to the highway after full build out.

The additional traffic generated by the use of Spanish Castle Road for access to the Columbia River was determined to be statistically insignificant, so its impact is considered to have been addressed by the traffic study. No significant traffic impacts were identified on the internal roadways when improved as proposed for the project.

**MITIGATION**

The SR 28 – Spanish Castle Road intersection will be improved to increase Spanish Castle Road to three lanes as a part of first development of the project. The three lanes include a dedicated right-turn lane, a 150-foot dedicated left turn lane, and an entrance lane.

Sensitivity analysis will be used to determine the future projects proposed within the MPR and the need for additional improvements to the intersection. Supplemental analysis with slightly higher
traffic volumes assumes that the intersection is improved prior to the 2030 horizon. It is anticipated that Spanish Castle Road, SR 28 will be widened to four lanes at the intersection, consisting of acceleration and deceleration lanes, a 200-foot long dedicated left turn lane for westbound traffic entering the development, and a westbound dedicated acceleration lane for traffic turning out of Spanish Castle Road toward Wenatchee. Illumination will be required for the channelization.

Sensitivity analysis will be conducted before commencing with construction of each increment of the Spanish Castle MPR development to evaluate the growth rates, internal capture rates and other assumptions and to establish their accuracy. Mitigation, which at this time is assumed to be a traffic signal at the intersection would also be evaluated in light of the actual situation that exists at the time.

NO-ACTION ALTERNATIVE

Development of the site and surrounding property to levels allowed by current zoning would contribute cumulatively to impacts on Highway 28 traffic.

- **Transportation - Waterborne, Rail, and Air Traffic**

  **SCOPE OF REVIEW**

  Identify mitigation measures and design concepts for mitigating impacts of increased pedestrian and vehicular traffic crossing the railroad tracks.

  **IMPACTS**

  The existing un-signalized crossing will have significant safety impacts, both vehicular and pedestrian.

  **MITIGATION**

  The railroad crossing will be improved with warning lights, safety gates, sidewalk and pedestrian safety equipment as a part of initial development. It will be designed to BNSF railroad and Washington Utilities and Transportation Commission standards.

  NO-ACTION ALTERNATIVE

  The impact would be less significant because of the lower amount of vehicular and pedestrian traffic, but the crossing would not be as safe as it will be with proposed alternative mitigation.

- **Transportation - Parking**

  **SCOPE OF REVIEW**

  Identify the parking standards that will be used to mitigate parking demands for all forms of land use proposed in the development.

  **IMPACTS**

  There appears to be inadequate area for parking in the commercial core given the high demand for the hotel and other commercial land uses, and the topography and density of the waterfront resort.
The provision of separate condominium parking beneath the dwelling units would reduce this impact.

Additional parking area at the commercial core, which could be as much as three to four acres, would likely reduce the amount of open space.

MITIGATION

An appropriate parking standard is provided in the Design and Development Manual.

NO-ACTION ALTERNATIVE

This impact would be avoided.

- **Transportation - Movement / Circulation of People and Goods**

  **SCOPE OF REVIEW**

  Identify access rights for all rights-of-way and access corridors for all proposed development phases including provisions to extend the road network to property to the north and south of the proposed development.

  **IMPACTS**

  The Great Northern Railway issue has been resolved and no longer is an impact.

  Legal access for issues for certain parcels have been resolved and are no longer an impact.

  **MITIGATION**

  There are no known access issues proposed in the Major Amendment.

  **NO-ACTION ALTERNATIVE**

  Some of these access issues no longer exist. Other issues, no longer in the MPR may still exist without the proposed project so they would not be avoided. Some of the impacts would affect fewer people. The effect of precluding access to surrounding parcels is likely to be the same with the no-action alternative.

- **Transportation - Traffic Hazards**

  **SCOPE OF REVIEW**

  Identify the intersection improvements necessary to mitigate the impacts on the intersection of SR 28 and Spanish Castle Road.

  **IMPACTS**

  The improvements identified by the traffic study to mitigate the impacts on the SR 28 Spanish Castle Road intersection include providing three lanes on Spanish Castle Road, a dedicated right-turn lane, 150-foot dedicated left turn lane and an entrance lane. Additional improvements on SR
28 based on future sensitivity analysis may include acceleration and deceleration lanes on the west side of the roadway, a 200-foot long dedicated left turn lane for westbound traffic entering the development, and a westbound dedicated acceleration lane for traffic turning out of Spanish Castle Road toward Wenatchee. Illumination will also be required.

MITIGATION

Three lanes will be provided on Spanish Castle Road as a part of its initial improvement. Sensitivity analysis required for each additional project within the MPR will determine the evolution of the intersection with future development.

NO-ACTION ALTERNATIVE

If the maximum density of the site and surrounding properties allowed by current zoning were to use the Spanish Castle Road intersection for access, they may impact the intersection, at least cumulatively.

- **Public Services and Utilities - Fire**

  **SCOPE OF REVIEW**

  Describe the impact of the proposed development on fire protection and emergency medical service in the area. Describe development standards (fire flow, sprinklers) and fire district measures necessary to mitigate the impacts. Identified impacts include, but are not limited to fire flow, structural construction standards – sprinklers, and response time.

  **IMPACTS:**

  Since the nearest DCFPD #2 fire station is more than ten miles away in Rock Island, there is a need for additional fire protection in this part of the County with or without the resort.

  Some residential areas proposed in the resort are accessed from a single street. This could pose a significant hazard during a fire if the one access were blocked in a manner that stopped or delayed emergency vehicles.

  Since the site is not located in an area with developed fire flow, the minimum two hour fire flow duration required by the Fire Code is 1,500 gallons per minute. Taking other factors into account, including building size and type of construction, a fire flow of 2,500 gallons per minute is being used for utility design.

  **MITIGATION**

  The land for a future fire station is set aside. When the Fire District is able to plan and budget the crew required, the fire District may elect to build a station.

  The developer is investigating the possibility of obtaining second emergency vehicle-only access points in two locations. One involves crossing the railroad and would require approval of the railroad and Washington Utilities and Transportation Commission. The other would be a second access to SR 28 and would require approval by the Washington Department of Transportation. Both would be gated crossings only available in emergencies. If unable to obtain these emergency accesses, applicable construction requirements, including sprinkling would be met.
With existing water rights and the proposed water system, fire flow required by the Fire Code can be met. With a reservoir, the higher fire flow standard being used for utility planning can be met. A conceptual design of the system has been prepared and added to Appendix 10 water system plan.

NO-ACTION ALTERNATIVE

A need for additional fire protection in this area has already been identified, although the need would not be as great with the no-action alternative because of less development and fewer people.

The impact of a single emergency vehicle access would be avoided because there would be no development of residential units. Nor would these fire flow standards be required.

• Public Services and Utilities - Police

SCOPE OF REVIEW

Describe the impact of the proposed development on police protection and emergency service in the area. Describe development design standards and Sheriff Department measures necessary to mitigate impacts. Identified impacts include, but are not limited to response time, deputy coverage (land and water).

IMPACTS

The Douglas County Sheriff currently has 25 deputies in addition to the Sheriff, an Under-Sheriff and a Marine Division with one boat and one Deputy serving this part of the County. The need has been identified for an additional community resource deputy who would also be assigned to the general area between Palisades and the Grant County line. Resort share of the additional law enforcement service is estimated to be 65 to 70 percent.

MITIGATION

Space for a police station will be made available in the commercial core.

Police protection will be supplemented by resort security and gating most residential streets to control access by non-owners.

NO-ACTION ALTERNATIVE

The Sheriff has identified an additional need for law enforcement in this part of the County, although it would probably not be significant for the no-action alternative.

• Public Services and Utilities - Schools

SCOPE OF REVIEW

Describe the estimated number of school age children residing year round in the proposed development and the measures necessary to mitigate impacts on the Palisades School District.

IMPACTS:
The resort would contribute an estimated 13 students to the Palisades School at build-out. The initial contribution is estimated to be 3 students. Since 2007 enrollment has dropped. At peak enrollment and the small size of the district, the resort could have a significant impact at build-out. It is possible that a cumulative impact due to other growth in the area could be significant at an earlier date. Currently, the District could accommodate the potential students.

MITIGATION

Because of the small numbers involved, any variation in the estimated number of students could be significant and could either impact the school district or the developer. A review by the resort should be done in consultation with the School District on completion of sensitivity analysis to validate the estimates and Needs Assessment completed if appropriate and further mitigation determined and provided as necessary.

NO-ACTION ALTERNATIVE

Because of the small amount of capacity in the Palisades School District, any new residential development could have significant cumulative impacts. New residential development of the type that now characterizes the area would also be likely to have a higher number of school aged students per dwelling unit than projected for the resort.

- **Public Services and Utilities - Parks or Other Recreational Facilities**

  SCOPE OF REVIEW

  Identify to what level the recreational/commercial amenities will be utilized by people other than those who own an interest in the proposed development.

  IMPACTS

  No significant impacts identified.

  MITIGATION

  None.

  NO-ACTION ALTERNATIVE

  There would be no impact with no new recreational or commercial amenities.

- **Public Services and Utilities - Water / Stormwater**

  SCOPE OF REVIEW

  Identify the methods of providing water (domestic and fire flow) to all areas of the proposal. Provide a plan to address the operation and maintenance of stormwater facilities.

  IMPACTS

  The entire site must be served by the water system since on-site systems would not be permitted.
MITIGATION

A Group ‘A’ Water System will be developed utilizing two water wells, a reservoir, and distribution system. Water-rights provide for 1,213 acre-feet of water withdrawn at 2,860 gallons per minute, above the projected demand of 776 acre-feet per year at a maximum peak demand of 2,000 gallons per minute. Potential demand is reduced by the use of reclaimed water for most irrigation.

A water storage tank of about 600,000 gallons is planned. It provides for 300,000 gallons for fire flow, 150,000 gallons of equalizing storage, and 116,000 gallons of standby storage and 34,000 gallons of working storage. It would provide normal operating pressures of between 40 and 60 psi.

Operation and maintenance of the stormwater system is by Douglas County in public streets and the resort in private streets. An operation and maintenance plan is part of stormwater management planning. It will address the best management practices to be used for operation and maintenance and identify responsible parties.

NO-ACTION ALTERNATIVE

This impact would be avoided.

- **Public Services and Utilities - Sewer / Solid Waste**

SCOPE OF REVIEW

Identify methods of wastewater treatment for various areas of development within the project. If septic systems are proposed, identify which areas of development will use septic and necessary development standards to accommodate on-site systems. Provide a solid waste plan that identifies the long term management of waste from the following sources: residential, commercial, biosolids and manure waste from the equestrian center.

IMPACTS

Sufficient wastewater service and treatment is required given the size, density and physical constraints of the site.

Solid waste generated by the resort could have cumulative significant impacts on the Greater Wenatchee Landfill, scheduled to close in 2014.

Septic systems are not being proposed.

MITIGATION

The incremental-growth wastewater treatment system is added supplement to the Appendix 9 Wastewater section and includes the first segment of a scalable design that begins as a large on-site septic system (LOSS) that will determine the ERU capacity until exhausted by State regulation. Additional study will be required for the design and installation of a mechanical treatment plant.

Municipal solid waste will be collected by a contract carrier and taken to an available landfill or disposal site. Recycling will be made available.
Future Biosolids from a mechanical wastewater treatment facility or animal waste from an equestrian center would be transported to alternate sites for land application. Bio-solids could be taken to the Boulder Park, Inc. facility near Mansfield.

NO-ACTION ALTERNATIVE

Significant impacts are avoided.

- **Public Services and Utilities - Other Governmental Services or Utilities**

  **SCOPE OF REVIEW**

  Identify the ability to provide electrical power to the proposed development and what measures will be necessary to mitigate impacts to the electrical system.

  **IMPACTS**

  Douglas County Public Utility District No. 2 requires 14 megawatts for residential development and about 500 kilowatts (80 kW/acre) for commercial development of the site. An additional approximately 4.5 megawatts of transmission capacity is required to provide electrical power to the site. The PUD is capable of providing the required additional capacity and service.

  **MITIGATION**

  The developer proposes to fund this improvement at the time that homes are sold using a funding mechanism being developed by the PUD.

  NO-ACTION ALTERNATIVE

  Impacts are avoided

- **Fiscal Impacts**

  **SCOPE OF REVIEW**

  Identify impacts of the proposed development on assessed value, tax levy collection for special districts, and estimated sales tax revenues on construction.

  **IMPACTS**

  No significant adverse impacts identified.

  NO-ACTION ALTERNATIVE

  Would not likely provide as large of a tax base or source of revenue from outside of the County as the preferred alternative.