



Staff Report to the Weber County Planning Division

Weber County Planning Division

Synopsis

Application Information

Application Request: Consideration and action on a request for final approval of Trappers Ridge at Wolf Creek Phase 6, 2nd Amendment PRUD.
Type of Decision: Administrative
Agenda Date: Wednesday, November 18, 2020
Applicant: Rick Everson
File Number: UVE081620

Property Information

Approximate Address: 5937 E Big Horn Parkway, Eden
Project Area: .08 acres or 4290 Sq. ft.
Zoning: Residential Estates (RE-15)
Existing Land Use: Residential Subdivision
Proposed Land Use: Residential Subdivision
Parcel ID: 22-261-0005
Township, Range, Section: T7N, R1E, Section 26

Adjacent Land Use

North:	Residential	South:	Residential
East:	Residential	West:	Residential

Staff Information

Report Presenter: Felix Lleverino
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Report Reviewer: RG

Applicable Ordinances

- Title 101 (General Provisions) 1-7 (Definitions)
- Title 104 (Zones) Chapter 3 (Residential Estates RE-15)
- Title 104 (Zones) Chapter 28 (Ogden Valley Sensitive Lands Overlay District) Section 3 (Important Wildlife Habitat Areas)
- Title 106 (Subdivisions)
- Title 108 (Standards) Chapter 3 (Planned Residential Unit Development)
- Title 108 (Standards) Chapter 22 (Natural Hazard Areas)

Development History

Trappers Ridge Phase 6 PRUD was recorded on July 17th 2006.

Background

The applicant is requesting final approval of a 1-lot subdivision amendment to Trappers Ridge PRUD Phase 6. This is a proposal to expand the size of lot 114 by 660 square feet bringing the lot size from 3,630 to 4,290 square feet. This lot frontage on Big Horn Parkway, a public right-of-way. No additional roadway or subdivision improvements are part of this amendment. All public and subdivision improvements that are part of the original subdivision approval on July 17th 2006 are complete to a County Standard.

The proposal to enlarge the building pads into the open space reduces the total amount of open space of phase 6 by 660 square feet. The open space remaining after adjusting for the enlargement of the lot amounts to 66.65% combined between phases 5 and 6. The Weber County PRUD Code requires a minimum of 60% open space to be preserved.

As part of the approval process, the proposal has been reviewed against the current Weber County Land Use Code (LUC), and the standards of the RE-15 zone found in LUC §104-3. The following section is a brief analysis of this project against current land use regulations.

Analysis

General Plan: This proposal is in conformity the Residential Development Implementation Plan 1:1 of the Ogden Valley General Plan.

Zoning: The property is located in the RE-15 Zone. The purpose of this zone is stated in the LUC §104-3-1.

“The major purpose of the RE-15 and RE-20 Zones is to provide and protect residential development at a low density in a semi-agricultural or rural environment. It is also to provide for certain rural amenities on larger minimum lots, in conjunction with the primary residential nature of the zone.”

Natural Hazards: This proposal includes two studies to identify geologic hazards and to guide site preparations and excavations throughout the development. The Conclusions and Recommendation portion of the Geologic Reconnaissance Identify hazards and rate the severity of notable hazards. “Earthquake ground shaking and radon are the only hazards that may potentially affect all parts of the project area, while other hazards pose minimal risk.”

There are several recommendations to mitigate notable hazards.

1. It is generally recommended that the proposed structures be at-grade. For structures with basements, it is recommended that further site-specific ground-water levels be ascertained preceding development.
2. It is recommended that IGES observe the foundation excavation for all lots identified in this report.

The Geotechnical Investigation prepared by IGES, dated November 8, 2017, project number 01855-011, to assess the engineering properties and provide recommendations for development is available for review in the Weber County Planning Office.

Flood Zone: The entire development is within an area of minimal flood hazard and determined to be outside the 500-year flood level.

Sensitive Lands: The sensitive lands map indicates that this development is within an Important Wildlife Habitat Area. §LUP104-28-3 states the limits of disturbance, which are as follows:

1. Wildlife areas should have open space connectivity to larger open space areas,
2. Roads and development away from wildlife corridors,
3. Minimize fencing types that would inhibit movement of big game,
4. Retain native vegetation such as trees, native vegetation, and grading between built and natural areas, and
5. Re-seed disturbance areas with native vegetation.

Culinary, Irrigation, and Sanitary Services: Wolf Creek Water and Sewer District will serve culinary, irrigation, and sanitary services for Trappers Ridge.

Review Agencies: The Weber County Fire District and Weber County Engineering and Weber County Planning Division have approved this proposal. Weber County Surveyors are ready to file a record of survey and record the dedication with the accompanying deeds.

Tax Clearance: The 2019 property taxes for all the lot included in this amendment are paid in full.

Staff Recommendation

Staff recommends final approval of Trappers Ridge at Wolf Creek Phase 6, 2nd Amendment PRUD, consisting of 1 amended lot. This recommendation is based on the following conditions:

1. Before recording the subdivision plat, all Weber County review agency comments shall be addressed.

The following findings are the basis for staff's recommendations:

1. The proposed subdivision conforms to the Ogden Valley General Plan.
2. The proposed subdivision complies with the applicable County codes.

Administrative Approval

Administrative final approval of Trappers Ridge at Wolf Creek Phase 6, 2nd Amendment PRUD is hereby granted based upon its compliance with the Weber County Land Use Code. This approval is subject to the requirements of applicable review agencies and the conditions of approval listed in this staff report.

Date of Administrative Approval: 11/18/20

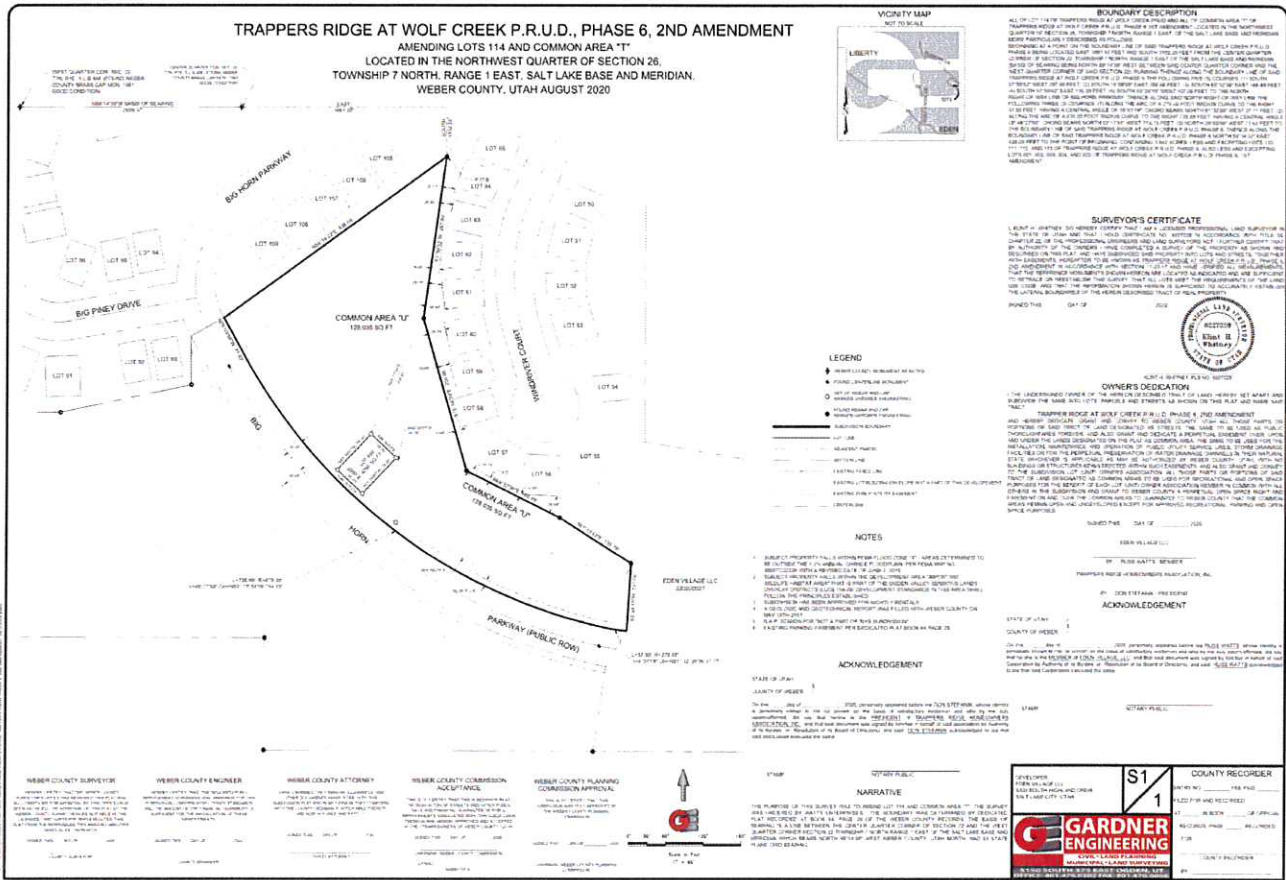

Rick Grover
Weber County Planning Director

Exhibits

- A. Trappers Ridge at Wolf Creek Phase 6, 2nd Amendment PRUD subdivision plat
- B. Geologic Report (select pages)

Area Map





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May 18, 2017

Watts Enterprises
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Salt Lake City, Utah 84117
Attn: Mr. Rick Everson

IGES Project No. 01855-010

Subject: Reconnaissance-Level Geologic Hazards Assessment
Remaining Undeveloped Lots
Trappers Ridge at Wolf Creek Subdivision, Phases 5, 6, and 7
Eden, Utah

Mr. Everson:

At your request, IGES has performed a reconnaissance-level geologic hazard assessment for the remaining undeveloped lots of the Trappers Ridge at Wolf Creek Subdivision, Phases 5, 6, and 7, located in the city of Eden in Weber County, Utah (Figure A-1). This letter-report identifies the nature and associated risk of the applicable geologic hazards associated with the lots, based upon the results of the literature review and site reconnaissance conducted as part of this assessment.

INTRODUCTION

Phases 5 and 6 of the Trappers Ridge at Wolf Creek Subdivision are largely developed, with roadways and utilities installed and most residential lots developed, while Phase 7 is currently completely undeveloped and has no infrastructure yet. Remaining undeveloped lots within Phase 5 include Lots 70, 74, 76, 77, and 79. Remaining undeveloped lots within Phase 6 include Lots 110, 111, 112, 114, 115, 116, 117, 118, and 119. Phase 7 development is to include the construction of 20 residential homes (Lots 130 through 149), an extension of Big Horn Parkway, and the northernmost part of Telluride Road (Figure A-2). IGES recently completed an individual geologic hazard assessment for the Lot 110 property (IGES, 2017), so it is not included in this assessment.

It is our understanding that the proposed residential development will generally consist of two-story single-family residences founded on spread footings with slab-on-grade flooring. The Phase 5, 6, and 7 properties are located in the northwestern quarter of Section 26 of Township 7 North, Range 1 East, approximately 2 miles north of Pineview Reservoir. The properties are bound on the east by the developed Trappers Ridge Phases 1, 2, 3, and 4 lots, on the north by undeveloped Phase 8 property, and on the south and west by undeveloped farmland.

PURPOSE AND SCOPE

This study was performed as a reconnaissance-level geologic hazards assessment to identify any surficial or subsurface geologic hazards that may be extant on the remaining undeveloped

Areas with a high-risk determination always require additional site-specific hazard investigations and associated mitigation practices. For areas with a high-risk geologic hazard, simple avoidance is often considered.

The following are the results of the reconnaissance-level geologic hazard assessment for the remaining undeveloped lots within the Trappers Ridge Phases 5, 6, and 7 areas.

Landslides/Mass Movement/Slope Stability

On the geologic maps reviewed for this assessment, the predominant surficial geology of the property is mapped as various forms of mass-movement deposits, including colluvium and an older block landslide. Additionally, the landslide hazard maps that cover these properties show the properties within an area that contains landslide deposits undifferentiated from colluvial deposits. Though a mapped landslide scarp extends onto the southwestern part of the Phase 5 property and a younger mapped landslide extends into the south-central part of the Phase 6 property, none of the remaining undeveloped lots are located in these areas. No landslide hazards for the property were observed in the aerial imagery or during the site reconnaissance, and the shallowly exposed surficial materials observed during the site reconnaissance were consistent with the gravelly colluvial deposits (QTcg) denoted as being the block slide material. Slopes across these properties have an average gradient ranging between approximately 7:1 and 10:1 (horizontal to vertical), and as such do not warrant site-specific local slope stability analyses. Given this data, the site-specific landslide, mass-movement, and slope stability hazard associated with these properties is considered to be low.

It should be noted, however, that the surficial deposits that cover the properties are possibly underlain by the Norwood Tuff, a geologic unit known to be landslide-prone (Ashland, 2010). Additionally, the stability of the larger, older landslide mass within which the properties are contained is unknown and beyond the scope of work for this assessment.

Rockfall

No bedrock is exposed immediately upslope of any of the lots, therefore there is no rockfall source area. As such, the rockfall hazard associated with the property is considered to be low.

Surface-Fault-Rupture and Earthquake-Related Hazards

No faults are known to be present on or projecting towards the properties, and the closest mapped active fault to the properties is the Weber Segment of the Wasatch Fault Zone, located approximately 6.1 miles to the west of the western margin of the Phase 6 property (USGS and UGS, 2006). Given this information, the risk associated with surface-fault-rupture on the property is considered low.

The entire project area is subject to earthquake-related ground shaking from a large earthquake generated along the active Wasatch Fault. Given the distance from the Wasatch Fault, the hazard associated with ground shaking is considered to be moderate. Proper building design according to appropriate building code and design parameters can assist in mitigating the hazard associated with earthquake ground shaking.

Liquefaction

According to the existing geologic literature for the area, the risk associated with earthquake-induced liquefaction is expected to be low. However, both shallow groundwater and granular soils are possible to be present on the properties; therefore, we cannot preclude the possibility for liquefaction to occur onsite. A liquefaction study, which would include borings and/or CPT soundings to a depth of at least 50 feet, was not performed for this project and is not a part of our scope of work.

Debris-Flows and Flooding Hazards

The Phase 5, 6, and 7 properties are generally located on a broad topographic high between two drainages, and no alluvial fan deposits have been mapped on the property. Additionally, the properties are located outside of the 500-year floodplain for both of the drainages (FEMA, 2015a,b). Given this information, the risk associated with debris-flows and flooding hazards on the property is considered to be low. Though the Phase 5, Lot 70 property abuts the small gully near its northern margin, the drainage is considered to be too small to pose a flooding hazard, and the proposed residence is anticipated to be elevated several feet above the drainage, akin to what has been done with the developed residences present on Lots 69, 71, and 72.

Shallow Groundwater

Groundwater levels are currently unknown for the property; however, the presence of hydrophilic plants on a number of the lots suggests that shallow groundwater conditions do exist. The risk associated with shallow groundwater is to be considered high for any proposed residences that include basements. For any proposed residence that will be an on-grade structure (will not include a basement), the presence of shallow groundwater (if encountered) could necessitate localized dewatering for construction of foundations and/or utilities.

Radon

Limited data is available to address the radon hazard across the properties. However, at least one study (Solomon, 1996) shows the remaining undeveloped Phase 5 and Phase 6 lots within an area designated as having a moderate radon hazard. Though the Phase 7 lots are located outside of the Solomon (1996) study area, it is assumed that these lots also fall within an area designated as having a moderate radon hazard. As such, the radon hazard associated with all lots is considered to be moderate, and a site-specific radon hazard assessment is recommended for each individual lot to adequately address radon concerns across the properties.

CONCLUSIONS AND RECOMMENDATIONS

Based upon the data collected and reviewed as part of this assessment, IGES makes the following reconnaissance-level conclusions regarding the geological hazards present at the remaining undeveloped lots of the Trappers Ridge Phases 5, 6, and 7 properties:

- **From a reconnaissance-level perspective, the remaining undeveloped lots of the Trappers Ridge Phases 5, 6, and 7 properties do not appear to have geological hazards that would adversely affect the development as currently proposed. This includes Lots 70, 74, 75, 76, and 77 of Phase 5, Lots 111, 112, and 114 through 119 of Phase 6, and Lots 130 through 149 of Phase 7. As such, no subsurface geologic**

hazards investigative methods are considered to be necessary for the properties preceding development, and the properties are considered buildable from a geologic perspective.

- Earthquake ground shaking, shallow groundwater, and radon are the only hazards that may potentially affect all parts of the project area, while other hazards pose minimal risk.
- Landslide, rockfall, surface-fault-rupture, debris-flow, and flooding hazards are considered to be low for all of the aforementioned lots.
- Groundwater levels are currently unknown, but are likely to be near-surface. Shallow groundwater hazards are considered to pose high risk to development for any proposed residents with a basement. Shallow groundwater is considered to pose minimal risk to development for any proposed residence that is to be an on-grade structure, though the presence of shallow groundwater (if encountered) could necessitate localized dewatering for construction of foundations and/or utilities.
- Published literature indicates that the liquefaction potential for the site is expected to be low. However, due to the likely presence of granular soils, unknown depth to groundwater, and the unknown character of the subsurface soils, the potential for liquefaction occurring at the site cannot be ruled out.

Given the conclusions listed above, IGES makes the following recommendations:

- To adequately address the radon hazard, a site-specific radon assessment for each individual lot is recommended.
- To avoid hazards associated with shallow groundwater, it is generally recommended that all of the proposed residences be on-grade structures without basements, unless site-specific subsurface data suggests otherwise. In some cases, residences with walk-out basements may be feasible without additional mitigation. For those residences that involve the construction of a basement, it is recommended that data regarding the anticipated groundwater levels be ascertained preceding development, such that appropriate mitigation practices for dealing with shallow groundwater hazards can be implemented (if necessary). If a basement is planned, a foundation drainage system is recommended.
- Though no landslide features were observed on the lots, the surficial deposits present across the Phase 5, 6, and 7 properties are mapped as being located within a larger block landslide mass and potentially underlain by the Norwood Tuff, which is a known landslide-prone unit. Individual lot owners should understand and accept that, while the potential for landslides impacting the site is qualitatively assessed to be low, considering these items of note, the risk associated with landslide is not zero. Additionally, it is recommended that IGES observe the foundation excavation for all lots identified in this report to assess subsurface soil conditions and to assess the presence of evidence of any

near-surface landslide-related features that may pose a localized threat to development on the lots.

- Given that many of the lots have excavation-induced breaks in slope present on them, appropriate grading measures are necessary on a lot-by-lot basis to reduce the risk that residences are susceptible to potential small-scale localized slope instabilities. For all lots in which these features are present, a setback of the proposed structure from the steeper slope of at least 15 feet is recommended, measured horizontally from the bottom of the foundation to the face of the slope. Additionally, reducing the risk of over-steepened slopes may include retaining walls, rockeries, and/or grading of the slope to a 2:1 H:V gradient.

LIMITATIONS

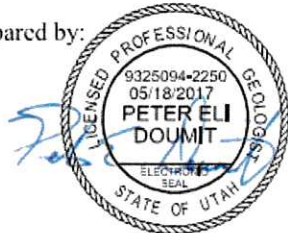
The conclusions and recommendations presented in this report are based on limited geologic literature review and site reconnaissance, and our understanding of the proposed construction. It should be noted that these conclusions are based solely upon the readily-available geological data available at the time of the preparation of this report. It is possible that geologic hazards are present that may not be identified until construction activities expose adverse geologic conditions. Therefore, the geologic hazard classifications as denoted in this report are potentially subject to change with data collected from site-specific excavations across the property. This report was prepared in accordance with the generally accepted standard of practice at the time the report was written. No warranty, expressed or implied, is made.

CLOSURE

We appreciate the opportunity to provide you with our services. If you have any questions, please contact the undersigned at your convenience at (801) 748-4044.

Respectfully Submitted,
IGES, Inc.

Prepared by:



Peter E. Doumit, P.G., C.P.G.
Senior Geologist

Reviewed by:

A handwritten signature in blue ink that reads "David Glass".

David A. Glass, P.E.
Senior Geotechnical Engineer