



Memorandum

TO: Planning and Environmental Commission

FROM: Community Development Department

DATE: July 8, 2019

SUBJECT: A request for the review of a Development Plan, pursuant to Section 12-6I-11, Development Plan Required, Vail Town Code, for a new housing development located at 3700 North Frontage Road East/Lot 1, East Vail Workforce Housing Subdivision ("Booth Heights Neighborhood"), and setting forth details in regard thereto. (PEC19-0018)

Applicant: Triumph Development
Property Owner: Vail Corporation
Planner: Chris Neubecker

I. SUMMARY

Triumph Development has submitted an application for the development of the East Vail "Booth Heights Neighborhood", located at 3700 N. Frontage Road East, near the East Vail I-70 Interchange (Exit 180). The Development Plan proposes the construction of 73 residential units, including 61 units of deed-restricted employee housing units (EHUs), (42 EHUs in 3 multi-family apartment buildings, and 19 EHUs in townhomes), plus 12 unrestricted townhomes.

A separate application for a Conditional Use Permit to allow for 30% of the Gross Residential Floor Area (GRFA) on this site to be constructed as Dwelling Units (not employee housing units) has also been submitted. *(Please see the staff memo on PEC19-0019 for more information.)*

This 5.4 acre parcel of land is located within the Housing (H) zone district. Within the Housing (H) zone district, development standards including Lot Area and Site Dimensions, Building Height, and Density Control (including Gross Residential Floor Area) are determined by the Planning and Environmental Commission as part of their review of the Development Plan.

II. DESCRIPTION OF REQUEST

The applicant, Triumph Development, proposes to develop the Booth Heights Neighborhood, located at 3700 N. Frontage Road East, near the East Vail I-70 Interchange (Exit 180). The Development Plan proposes the construction of 73 residential units, including 61 employee housing units (EHUs):

- 42 multi-family deed-restricted employee housing units (EHUs)
- 19 deed-restricted employee housing unit townhomes (EHUs)
- 12 unrestricted townhomes

Wildlife Mitigation Plan

Along with the proposed development, the applicant has submitted an Environmental Impact Report (EIR) (see Attachment I) that identifies the effects of the project on the natural environment, and is proposing a Wildlife Mitigation Plan (see Attachment J) in an effort to offset these impacts.

Key elements of the proposed Wildlife Mitigation Plan, as recommended by the applicant's wildlife biologist, include:

- Project timing to avoid the most disruptive construction outdoors during winter range period (November 15 – April 15)
- Clustering development to reduce the footprint of the buildings and parking
- No sizeable internal parks to minimize development footprint
- Wildlife habitat enhancement on the adjacent 17.9 acre Tract A, Natural Area Preservation parcel
- Construction of a wildlife fence north of the proposed rockfall berm to prevent wildlife entering the site, but also providing wildlife escape ramps. The fence will also act as a barrier to discourage humans from accessing the wildlife habitat.
- Prohibition on construction of trails
- Prohibition on dogs in the multi-family building, and requiring small enclosed fenced areas for townhome owners with dogs
- Prohibition on operation of drones
- Resident education on wildlife issues, and best management practices to reduce impacts to wildlife
- Penalties for non-compliance with neighborhood covenant restrictions

In order to ensure a thorough review of the proposed Development Plan and Wildlife Mitigation Plan, the Town of Vail has consulted with Colorado Parks and Wildlife (CPW). The Town of Vail also referred the Environmental Impact Report and Wildlife Mitigation Plan to two independent consultants, Rick Kahn (Attachment T) and Gene Byrne (Attachment U) for review. The geological hazards reports submitted by the applicant have been referred to the Colorado Geological Survey (CGS) for review, which is also attached (Attachment R).

III. REVIEW SCHEDULE

The review of the Booth Heights Neighborhood Development Plan is anticipated to take several meetings with the Planning and Environmental Commission (PEC). In anticipation of this thorough review, staff and the applicant have proposed the following review schedule with the PEC:

Meeting #1 – June 24, 2019

- Site Visit
- Timeline / Review Schedule
- General Introduction and the Development Review Process
- Site Plan and Architecture
- Overview of Development Standards
- Parking, Transportation and Circulation
- Conditional Use Permit for Market Rate Units

(For more information on these topics, please see the staff memo from the June 24, 2019 meeting)

Meeting #2 – July 8, 2019 (*Today's Meeting*)

- Environmental Impact Report
- Wildlife Mitigation
- Rockfall Mitigation
- Landscaping

Meeting #3 – Date TDB (*Tentatively scheduled for August 12, 2019*)

- Plan revisions since meeting #2
- Subdivision Plan
- Phasing Plan
- Implementation of Developer Commitments

IV. APPLICABLE PLANNING DOCUMENTS

12-6I-13: DEVELOPMENT STANDARDS/CRITERIA FOR EVALUATION:

The following criteria shall be used as the principal means for evaluating a proposed development plan. It shall be the burden of the Applicant to demonstrate that the proposed Development Plan complies with all applicable design criteria.

A. Building design with respect to architecture, character, scale, massing and orientation is compatible with the site, adjacent properties and the surrounding neighborhood.

B. Buildings, improvements, uses and activities are designed and located to produce a functional Development Plan responsive to the site, the surrounding neighborhood and uses, and the community as a whole.

C. Open space and landscaping are both functional and aesthetic, are designed to preserve and enhance the natural features of the site, maximize opportunities for access and use by the public, provide adequate buffering between the proposed uses and surrounding properties, and, when possible, are integrated with existing open space and recreation areas.

D. A pedestrian and vehicular circulation system is designed to provide safe, efficient and aesthetically pleasing circulation to the site and throughout the development.

E. Environmental impacts resulting from the proposal have been identified in the project's environmental impact report, if not waived, and all necessary mitigating measures are implemented as a part of the proposed development plan.

F. Compliance with the Vail comprehensive plan and other applicable plans. (Ord. 29(2005) § 23: Ord. 19(2001) § 2: Ord. 3(2001) § 2)

CHAPTER 12 – ENVIRONMENTAL IMPACT REPORTS

12-12-1: PURPOSE:

Submission and review of an environmental impact report on any private development proposal or public project which may affect to any significant degree the quality of the environment in the town or in surrounding areas is required to achieve the following objectives:

A. Availability of Information: To ensure that complete information on the environmental effects of the proposed project is available to the town council, the planning and environmental commission, and the general public.

B. Environmental Protection a Criterion: To ensure that long term protection of the environment is a guiding criterion in project planning, and that land use and development decisions, both public and private, take into account the relative merits of possible alternative actions.

C. Review and Evaluation Procedure: To provide procedures for local review and evaluation of the environmental effects of proposed projects prior to granting of permits or other authorizations for commencement of development.

D. Avoid Geologic Hazard Areas: To ensure that buildings are not constructed in geologic hazard areas, by way of illustration, floodplains, avalanche paths, rockfall areas, where such hazard cannot practically be mitigated to the satisfaction of the planning and environmental commission and the town council.

E. Protect Water Quality: To ensure that the quality of surface water and ground water within the town will be protected from adverse impacts and/or degradation due to construction activities. (Ord. 29(2005) § 31: Ord. 37(1980) § 10: Ord. 19(1976) § 14: Ord. 8(1973) § 16.100)

12-12-2: APPLICABILITY:

An environmental impact report shall be submitted to the administrator for any project for which such a report is required by federal or state law, or for any project which the administrator determines may significantly change the environment, either during construction or on a continuing basis, in one or more of the following respects:

A. Alters an ecological unit or land form, such as a ridgeline, saddle, draw, ravine, hillside, cliff, slope, creek, marsh, watercourse, or other natural landform feature.

B. Directly or indirectly affects a wildlife habitat, feeding, or nesting ground.

C. Alters or removes native grasses, trees, shrubs, or other vegetative cover.

D. Affects the appearance or character of a significant scenic area or resource, or involves buildings or other structures that are of a size, bulk, or scale that would be in marked contrast to natural or existing urban features.

E. Potentially results in avalanche, landslide, siltation, settlement, flood, or other land form change or hazard to health and safety.

F. Discharges toxic or thermally abnormal substances, or involves use of herbicides or pesticides, or emits smoke, gas, steam, dust, or other particulate matter.

G. Involves any process which results in odor that may be objectionable or damaging.

H. Requires any waste treatment, cooling, or settlement pond, or requires transportation of solid or liquid wastes to a treatment or disposal site.

I. Discharges significant volumes of solid or liquid wastes.

J. Has the potential to strain the capacity of existing or planned sewage disposal, storm drainage, or other utility systems.

K. Involves any process which generates noise that may be offensive or damaging.

L. Either displaces significant numbers of people or results in a significant increase in population.

M. Preempts a site with potential recreational or open space value.

N. Alters local traffic patterns or causes a significant increase in traffic volume or transit service needs.

O. Is a part of a larger project which, at any future stage, may involve any of the impacts listed in this section. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.200)

12-12-3: EXEMPT PROJECTS:

An environmental impact report shall not be required for the following projects:

A. Alteration, repair and maintenance of existing structures and site improvements.

B. A phase of a project for which an environmental impact report previously was submitted and reviewed covering the entire project, provided that the project was approved and not subsequently altered.

C. A project which, on the basis of a preliminary environmental assessment covering each of the factors prescribed in section 12-12-2 of this chapter is found to have an insignificant impact on the environment. The preliminary environmental assessment and the finding on environmental impact shall be made by the administrator. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.300)

12-12-4: STUDIES AND DATA REQUIRED:

A. Range Of Studies: The environmental impact report shall be based on systematic studies conducted by the town staff or by professional consultants, as determined by the administrator. The environmental impact report on a public project may be prepared by the responsible public agency or by professional consultants it engages. The range of studies needed to develop the technical data for an environmental impact report includes the following natural systems and other studies:

1. Hydrologic conditions, such as surface drainage and watershed characteristics, ground water and soil permeability characteristics, natural water features and characteristics, and any potential changes or impacts.
2. Atmospheric conditions, such as airshed characteristics, potential emissions, and any potential changes or impacts.
3. Geologic conditions, such as landforms, slope, soil characteristics, potential hazards, and any potential changes or impacts.
4. Biotic conditions, such as vegetative characteristics, wildlife habitats, and any potential changes or impacts.
5. Other environmental conditions, such as noise levels and odor characteristics, and any potential changes or impacts.
6. Visual conditions, such as views and scenic values, and any potential changes, impacts, or marked contrasts.
7. Land use conditions, such as characteristics of uses, compatibility with officially approved land use and open space policies and objectives, and potential changes or impacts.
8. Circulation and transportation conditions, such as volumes and traffic flow patterns, transit service needs, alternative transit systems, and potential changes or impacts.
9. Population characteristics, such as residential densities, neighborhood patterns, potential displacement of residents or businesses, and potential changes or impacts.

B. Summarization: The environmental impact report shall summarize the findings and recommendations of the technical and other supporting studies in terms that can be assessed and evaluated by town officials and the general public. Technical data shall be submitted as supporting documentation. Technical data prepared as a part of any other procedure or requirement of this chapter, or of any other ordinance or federal, state or town regulation, also may be used to support an environmental impact report. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.401)

12-12-5: REPORT CONTENTS:

A. Information And Analysis: The environmental impact report shall contain information and analysis, in sufficient detail and adequately supported by technical studies, to enable the town council to judge the environmental impact of the project and to judge measures proposed to reduce or negate any harmful impacts.

B. General Statement; Descriptive Materials: The environmental impact report shall include a general statement, describing the proposed project and its purpose, identifying the owner and/or sponsors, and, if a public project, identifying the funding source and time schedule. Descriptive materials, maps, and plans shall be submitted showing the following information:

1. Project boundaries and boundaries of the area within which environmental impact is likely to be significant.
2. Present and proposed uses of the site.
3. Present and proposed zoning of the site.
4. Quantitative information relative to the project, such as site area, numbers of residential units, proposed height and bulk of buildings, building floor area in square feet, and such other data as will contribute to a clear understanding of the scale of the project.
5. A list of regulatory or review agencies and the specific regulations to which the project will be subject.

6. Copies of subdivision maps, development plans, or other pertinent documents illustrating the proposed project.

7. Proximity to water bodies, the distance from the centerline of live creeks or streams to any proposed structural development within the project:

8. Soil types based upon the National Cooperative Soil Survey, USDA, Soil Conservation Service and interpretations of soil types, vegetation shall be described and three (3) masses shown.

C. *Environmental Inventory:* The environmental impact report shall include an environmental inventory, providing complete information on the environmental setting existing prior to the proposed project and containing sufficient information to permit independent evaluation by reviewers of factors that could be affected by the proposed project. The environmental inventory shall include maps, photographs, or other appropriate illustrative material.

D. *Categorized By Impact Type:* Areas categorized according to type of possible impact shall be identified. The environmental inventory shall describe both the physical and biological natural setting, and the manmade setting of the site and its surroundings.

E. *Analysis:* The environmental impact report shall include a comprehensive, qualitative and quantitative analysis of any significant impact that the proposed project will have on the environment. The analysis shall describe temporary effects that will prevail during construction, and long term effects that will prevail after completion. The analysis shall describe both beneficial effects and detrimental effects. The analysis shall consider primary effects and secondary effects which will result from the project. The analysis portion of the environmental impact report shall fully assess the following items:

1. Adverse effects which cannot be avoided if the proposal is implemented.
2. Mitigation measures proposed to minimize the impact, including water quality, erosion control and revegetation measures.
3. Possible alternatives to the proposed action.
4. Relationships between short term and long term uses of the environment.
5. Irreversible environmental changes resulting from implementation of the proposal.

6. Growth inducing impacts of the project. (Ord. 29(2005) § 31: Ord. 37(1980) § 10: Ord. 8(1973) § 16.402)

12-12-6: REPORT; ADDITIONAL MATERIAL:

The administrator may further prescribe the form and content of an environmental impact report, setting forth in greater detail the factors to be considered and the manner in which the report shall be prepared, and may require submission of information in addition to that required by section 12-12-5 of this chapter. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.403)

12-12-7: TIME SCHEDULE:

The environmental impact report required under this chapter shall be prepared within thirty (30) days of the date that plans are submitted for design review as prescribed in sections 12-12-4 through 12-12-6 of this chapter, subject to extension of the time period to a maximum of ninety (90) days by the planning and environmental commission. The time period may be extended to a maximum of one hundred eighty (180) days if seasonal conditions prevent a comprehensive analysis. (Ord. 29(2005) § 31: Ord. 16(1978) § 2(a): Ord. 8(1973) § 16.404)

12-12-8: FEE:

In the event that the town engages professional consultants to prepare an environmental impact report, the cost shall be paid by the sponsor of the project. The sponsor may be required to deposit a fixed sum in advance to cover the cost of the report, with the unexpended balance returnable to the sponsor. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.405)

12-12-9: SUBMISSION OF REPORT TO OFFICIALS:

The environmental impact report shall be submitted to the administrator. The administrator shall prescribe the number of copies to be submitted. The administrator shall notify the town council, the planning and environmental commission, and the design review board of receipt of an environmental impact report, and shall transmit copies of the report upon request. Environmental impact reports shall be available for public review in the offices of the town. (Ord. 29(2005) § 31: Ord. 8(1973) § 16.501)

12-12-10: TIME LIMIT; SUPPLEMENTARY INFORMATION:

A. Time Limit: The planning and environmental commission shall review the report within thirty (30) days of submission subject to an extension of the time period thirty (30) additional days in order to obtain additional information from the

town staff, from the sponsor of the project, or the author of any portion of the report.

B. Supplementary Data: The commission may receive additional statements or supporting materials from the sponsor of a project, from the town staff, from professional consultants, or from others. Such additional materials may be considered as supplementary or amendatory to the environmental impact report. (Ord. 29(2005) § 31: Ord. 16(1978) § 2(b): Ord. 8(1973) § 16.502)

12-12-11: ACTION BY COMMISSION:

A. Criteria For Decision: Following review of the environmental impact report, the planning and environmental commission shall approve, disapprove, or request changes in the project in writing. The planning and environmental commission shall approve the project unless it finds that either the project will have significant long term adverse effects on the environment with respect to the natural systems or other factors studied as prescribed in section 12-12-4 of this chapter or the project will have short term adverse effects on the environment so detrimental that public health, safety or welfare considerations preclude approval of the project. In the case of either finding, if changes in the project are feasible which ameliorate or avoid the adverse effects on the environment sufficiently to permit approval of the project, the planning and environmental commission, in writing, shall describe those changes and request those changes be made. If the planning and environmental commission determines that the changes are not feasible, it shall disapprove the project in writing, describing the adverse effects on the environment, the significance of the effects either to the natural systems or other factors studied as prescribed in section 12-12-4 of this chapter or to the public health, safety or welfare and the planning and environmental commission's reasons for concluding that no changes in the project are feasible to ameliorate or avoid those effects.

B. Design Changes Require Resubmission To Design Review Board: If the planning and environmental commission requests any changes in the project which would alter the design of the project previously approved by the design review board, and the sponsor of the project makes those changes, the revised design shall be resubmitted to the design review board for its approval unless the planning and environmental commission waives this requirement. (Ord. 29(2005) § 31: Ord. 16(1978) § 2(b): Ord. 8(1973) § 16.503)

12-12-12: PERMIT ISSUANCE:

A. Conformance To Environmental Impact Report: Upon approval of the project, applicable permits may be issued and the project may proceed, subject to such additional requirements, permits, or authorizations as may be required by this title and by other applicable ordinances or regulations of the town. No permits shall be issued and no authorizations shall be granted which would allow a

project to proceed in the event that the planning and environmental commission does not grant approval of the environmental impact report after review. No permits shall be issued and no authorizations shall be granted for any project which does not conform substantially to the description of the project contained in the environmental impact report.

B. Exception: This section shall not apply to a project for which an environmental impact report is not required, as prescribed in section 12-12-3 of this chapter. (Ord. 29(2005) § 31: Ord. 16(1978) § 2(b): Ord. 8(1973) § 16.504)

V. ENVIRONMENTAL IMPACT REPORT

The applicant has submitted an Environmental Impact Report (EIR) prepared by Western Ecological Resources, Inc. The EIR includes an analysis of environmental aspects of the development site including: hydrology; atmospheric conditions; geology and hazards; soils; vegetation resources; wildlife resources; noise; odors; visual resources; land use; access and transportation; and population.

The primary environmental impacts identified in the EIR for this site include: wildlife resources, wetlands, geology, and removal of vegetation. The report indicates that site contains no federally listed species that are threatened, endangered or proposed for listing. The EIR also indicates that habitat that could be impacted by the proposed development include those of the bighorn sheep, elk, mule deer and black bear.

Wildlife Resources

Bighorn Sheep

The primary wildlife species of concern identified in the EIR is the Rocky Mountain bighorn sheep, coinciding with concerns raised in the Vail community. According to the EIR, the Rocky Mountain bighorn sheep is on the U.S. Forest Service designated “sensitive species” list, which includes “*species declining in number or occurrence or whose habitat is declining, either of which could lead to Federal listing if action is not taken to reverse the trend, and species whose habitat or population is stable, but limited.*”

Portions of the development site overlap with the mapped bighorn sheep winter range; nearby this site, but not overlapping, is a mapped bighorn sheep winter concentration area. Farther uphill from the site (about 1.6 miles), above the Booth Creek cliffs, is the bighorn sheep production area where ewes will deliver their lambs. The average sheep winter range period is estimated from November 15 to April 15, per the EIR. These are the dates when sheep are most likely to occupy an area during winter and heavy snowfall.

Elk

According to the elk winter range mapped by Colorado Parks and Wildlife, the subject site does not overlap this mapped area; but this mapping is in error, according to the EIR. The winter range mapped boundary was artificially drawn along the northern and eastern property boundary, and the true winter range should include this development site and the adjacent Natural Area Preservation parcel (Tract A). The EIR indicates that elk use the subject property mostly at night, and primarily when moving back and forth between the Pitkin and Booth Creek drainages. Based on game cameras, the elk only use the site at night, and only forage in this area at night.

Black Bear

Colorado Parks and Wildlife have mapped the black bear summer concentrations in the Vail area, which includes the proposed development site. According to the EIR, the subject lot also includes a moderate density of berry-rich serviceberry shrubs that represent important summer forage for bears. Evidence of bears was also found on the adjacent NAP parcel.

Peregrine Falcon

In addition to the bighorn sheep and other big game, there is a peregrine falcon nest on the south side of I-70, about 600 feet above the valley bottom. The nesting cliff is about 0.36 miles from the development site. The proposed development will have no direct impact on the cliffs or the known nests, but development on this site would remove some potential hunting habitat. The EIR indicates that some wildlife, including peregrine falcons, can habituate to chronic but benign human activities. Also, according to the EIR, the young aspen forest on the proposed development site *"does not support even moderate concentrations of prey species that would be particularly attractive to peregrines using the adjacent next cliff, but it does support potential avian prey that could contribute to the local pair's prey base."*

Wetlands

There are two small wetland areas on the site that are identified in the EIR. One wetland exists at the west end of the site; it is an ephemeral stream, which is 2-feet wide, 68 linear feet which crosses the site. There is little wetland vegetation along the creek channel, per the EIR. The proposed access road would impact this drainage by placing the water into a culvert at the new access road.

At the east end of the site there is a 705 sq. ft. wetland area, of which 377 sq. ft. occur on this development site. No development is proposed within these wetlands.

Permits from the Army Corps of Engineers would be required for any impacts to the wetlands. Due to the small size of the impacted wetlands, no mitigation of the wetlands would be required by the Army Corps, according to the EIR.

Geology

Rockfall Hazard

The entire development site is located within a High Severity Rockfall hazard area, according to the Town of Vail's official rockfall hazard maps. The main source of potential rockfall is an existing exposed cliff face upslope from the development site, at an elevation of 9,040' to 9,080'.

Debris Flow

There is potential for debris flows on the site, but these are not mapped by the Town of Vail. According to the EIR, *"an intense, prolonged precipitation event or rapid snowmelt has the potential to trigger a fast-moving, hyper-concentrated debris flow."*

Per the EIR, *"Rockfall and debris flows can be mitigated with a single barrier system which will reduce but not eliminate rockfall and debris flow hazards. The barrier system would also act as a wildlife barrier and limit human activity in wildlife habitat."*

Landslide

Historic landslide activity is also mapped in the EIR, but does not impact the development site. Landslides have previously occurred on the adjacent Tract A parcel to the east.

According to the attached Geological Hazards Analysis, *"Skyline recommends implementing a slope monitoring program during construction or grading activities near the landslide. If development within the extents of the landslide is planned, additional geological and geotechnical analysis should be performed to further characterize the landslide and the potential impact the proposed development would have on slope stability."*

Removal of Vegetation

The primary vegetation resource on the site is an aspen forest, approximately 2.7 acres of which is proposed for permanent removal. The woody understory of the forest includes serviceberry, snowberry and chokecherry shrubs, plus a mix of mountain maple, mountain big sagebrush, mountain mahogany and common juniper. The remainder of the vegetation includes a mix of grasses and forbs.

VI. WILDLIFE MITIGATION PLAN

A Wildlife Mitigation Plan has been prepared by Rick Thompson, Certified Wildlife Biologist with Western Ecosystems, Inc. and submitted by the applicant. The purpose of the Wildlife Mitigation Plan is to recommend site design features and management

activities that can help to reduce the impacts to wildlife, and to offset the impacts of the proposed development through the creation of improved habitat and foraging areas.

Project Design

Design features of the proposed development, as recommended by the applicant's wildlife biologist to reduce potential impacts, include:

- Clustering of the development
- No upper level decks facing the wildlife habitat to the north and west. (Some decks are proposed on the south sides of buildings, and small patios are proposed on the townhomes)
- No sidewalk proposed within the smooth brome foraging area between the development and the frontage road
- Screening of the development site from sheep habitat with existing aspen forest, rockfall berm and new landscaping
- No sizeable internal parks, to limit the development footprint
- Fencing to block human access from the property into important wildlife habitat, as requested by Colorado Parks and Wildlife
- Maintaining an east-west access across the rear of the property for wildlife

Construction Mitigation

Construction activity is anticipated to last at least two years. During this time, the bighorn sheep would be most affected by construction during winter, when the sheep move to lower elevations and into the winter concentration habitat. The proposed construction would remove 0.3 acres of on-site habitat. Wintering sheep off-site could also be impacted by construction activity, including construction noise and human activity. However, according to the Wildlife Mitigation Plan, *"the most obtrusive disturbances from site clearing, excavation, grading and wildlife/rockfall berm construction would not occur outside buildings during the winter range period."*

Proposed construction methods to minimize impacts to wintering sheep include:

- Scheduling construction to avoid the most obtrusive disturbance during the winter, November 30 – April 15 (Site clearing, use of heavy equipment, installation of utilities)
- Construction of a physical barrier, either the wildlife fencing and rockfall berm, or substantial impervious construction fencing, prior to bighorn winter range period
- Construction only during daylight hours
- Installation of fencing to screen construction activity from the sheep habitat to the north and west
- Prohibiting construction personnel from bringing animals (i.e. dogs) onto the site
- Prohibit construction personnel from feeding or baiting wildlife

Management and Enforcement

After the development is completed, the ongoing management and enforcement of best management practices to reduce the potential impact on the wildlife and environment will be needed. Human activity on the site, after construction is complete, has a potential for negative impacts to wildlife. In order to reduce the human impacts on the wildlife and environment as much as reasonably possible, the applicant has proposed the following programs and restrictions for the development:

- Resident education about the site's sensitive location within wildlife habitat
- Prohibiting construction of new trails on private property
- Prohibiting dogs within the 42-unit multi-family building
- Prohibiting unmanned aerial vehicles (drones)
- Prohibiting community gardens
- Penalties for non-compliance, including fines and possible evictions (Enforcement within the 42-unit multi-family building may include evictions, since tenancy will be a condition of employment at Vail Resorts for many of the residents.)
- Enforceability of commitments is proposed through private covenants enforced by the Home Owners Association. Staff is discussing enforcement measures with the Town Attorney to determine which commitments should also be made enforceable by the Town of Vail. A discussion on the enforcement methods and authority is planned for the meeting of August 12, 2019.

Proposed Mitigation and Habitat Enhancement

In addition to the commitments and design features mentioned above, the applicant proposes a wildlife habitat enhancement plan to improve habitat for bighorn sheep and elk on the 17.9 acres to the east of the subject site. The proposed habitat enhancement would be oriented at restoring 14.6 acres of bighorn sheep winter range by restoring the mountain shrub forage. Proposed habitat enhanced would be achieved through the following:

- Removal of vegetation on the adjacent NAP parcel completed before the first winter of construction (Cutting standing aspen, removing jackstraw trees and shrubs)
- Burning the slash and log piles, when dry
- Re-seeding the treatment area
- Fertilizing after spring snowmelt
- Installation of a berm and wildlife fencing
- A commitment by the applicant to keep the habitat enhancement area free from aspen growth to maintain quality winter range

The beneficial effects of the proposed habitat enhancement are proposed through the removal of an ineffective habitat, and replacement with an enhanced habitat area.

Removing the standing aspen and jackstraw logs is intended to create a habitat that is normally maintained by periodic wildfires. *“While broadcast burning¹⁴ to restore the mountain shrub community could be the most cost effective, quickest, and most widespread treatment option that would best meet the goal of mountain shrub restoration/reinvigoration and nutrient recycling, the approach recommended by the TOV would involve cutting and stacking trees and downed logs, cutting shrubs, then burning the slash and log piles when dry (P. Cada and M. Novak, TOV, Jan. 11, 2019 pers. comm.).”*

According to the applicant’s wildlife biologist, *“The enhancement would be oriented at restoring bighorn sheep winter range, which has been degraded over the last 30 years by aspen encroachment, fallen aspen, and a mountain shrub community where much of the browse has grown out of the reach of sheep and elk, all effects of wildfire suppression. The enhancement would also benefit elk winter range use and black bear and mule deer summer range use.”* Also, the proposed mitigation plan *“will be one of the most significant wildlife enhancement projects in the history of the Town on private property.”*

VIII. GEOLOGICALLY SENSITIVE AREAS

Rockfall

The entire development site is located within a High Severity Rockfall hazard area, according to the Town of Vail’s official rockfall hazard maps. As a result, the applicant has hired a Professional Geologist to study the geology of the site, to review the proposed development, and to make recommendations on how to minimize the associated risks. Two documents (Cesare Inc. - Rockfall Hazards Study, dated June 19-2017, and Skyline Geoscience letter and Analysis, dated February 13, 2019) are attached for review. (See Attachment L and Attachment M) Geological hazards addressed in these analyses include rockfall, debris flows and existing landslide. The Colorado Geological Survey (CGS) has reviewed the applicant’s geological studies and has provided comment in an attached letter. (See Attachment R)

The potential rockfall source is located about 1,240 to 1,280 feet upslope of the development site. Based on the anticipated material, size and shape of potential falling rocks, Skyline estimated the potential energy that falling rocks would create, and compared this to the design of the proposed rockfall berm. In the conclusion of the Skyline report, the Professional Geologist supports the proposed 12’ tall rockfall berm, with a design to withstand a maximum impact energy estimate of 2,300 kJ. The report indicates that the face of the barrier should be as vertical as possible, but that a 1:1 slope would be an option.

The recommendations of the two geological studies provided by the applicant are supported by the Colorado Geological Survey (CGS). Also recommended by CGS is that the Town requires the completion of an avalanche hazard analysis for this site, and that the applicant designs any necessary mitigation prior to approval of the

Development Plan. CGS further recommends that any such hazard analysis or mitigation design be reviewed by the Colorado Avalanche Information Center.

Rockfall Berm Maintenance

In addition to the construction of a berm, Skyline recommends the following ongoing maintenance efforts:

- Observation and inspection by a qualified engineering geologist or geotechnical engineer during construction
- Adequate space uphill from the berm for access of equipment for future removal of any rockfall accumulation
- Maintenance of the catchment area to keep the area clear of rocks to maintain effectiveness
- Surface drainage to be controlled with adequate slope of the ground surface, to avoid accumulation of water behind the berm
- Routine inspection of the barrier system to determine maintenance and repair needs of the barrier system.

Debris Flow

As identified in the Skyline report, the development site is not within limits of the Town of Vail mapped debris flow hazard zone, but that there is a potential for debris flow at the site. This determination was made based on review of LiDAR (Light Detection and Ranging) and aerial photography of the site. Evidence of incised channels with flowing water was also used to determine the potential for debris flows. According to the Skyline report, debris flow hazards can be mitigated within a single barrier system with the rockfall hazards.

Landslide

The Skyline report indicates that the site has potential for landslide, based on studies of the soil and historic landslides in the region, including a landslide on the adjacent 17.9 acre Tract A. Skyline recommends avoiding development within or near the mapped extents of the landslide on the adjacent Tract A. Skyline also recommends the implementation of a slope monitoring program during construction activities near the landslide.

IX. LANDSCAPING

The existing development site is characterized primary by a young aspen forest. Most of the existing vegetation on the site is proposed for removal for the development and for the construction of the rockfall berm at the north side of the development. Landscaping is proposed near the entrance to the site, north and west of the driveway connection to the N. Frontage Road. Plantings are also proposed along the parking lots, and pedestrian walkways, as well as within the landscaping islands between the driveways at the proposed townhouses.

Proposed landscaping includes a mix of shade trees, evergreen trees, ornamental trees, shrubs, grasses and perennial plantings. A small amount of manicured turf/sod is proposed at the townhouses (between the driveways and in the rear yards) and near the community gathering space on the south side of the neighborhood.

Wildlife seed mix is proposed along the rockfall berm, and a mix of native grasses is proposed in disturbed areas between buildings, and at the entry to the project. Where retaining walls are required, native boulder dry stack walls are proposed.

The Town of Vail's Senior Landscape Architect, Gregg Barrie, has reviewed the proposed landscaping plan and has provided feedback on the proposed planting list mix. Mr. Barrie recommends changes to the seed mixes to include only native seed but also to remove the Crested Wheatgrass which is highly aggressive and could lead to a monoculture. Also recommended is a greater variety of evergreen trees, rather than exclusively Blue Spruce trees.

SPECIES	COUNT	SIZE
Shade Trees		
Lanceleaf Cottonwood	17	2" caliper
Quaking Aspen	91	1.5 inch caliper
Evergreen Trees		
Colorado Blue Spruce	26	6' tall
Ornamental Trees		
Shubert Chokecherry	3	2" caliper
Deciduous Shrubs		
Variety	896	5 gallon container
Ornamental Grasses	98	1 gallon container

Please see Attachment D for more details on the proposed landscaping species mix.

The Community Development Department believes that the development could be improved with the preservation of a significant cluster of existing trees along the south side of the proposed development. Many of these trees are proposed for removal due to site grading, retaining walls and other improvements. Existing trees south of the multi-family buildings and the townhomes (Buildings E, F, G and H) would help to soften the visual impact of the proposed development by screening these buildings. Preserving more existing trees south of the new buildings will require changes to the grading plan and removal of some patios and walkways, however, some of the walkways are required for access and egress.

X. REVIEW CRITERIA

According to Section 12-6I-13, Development Standards/Criteria for Evaluation, of the Zoning Regulations of the Town of Vail, the following criteria shall be used as the principal means for evaluating a proposed development plan. It shall be the burden of the applicant to demonstrate that the proposed Development Plan complies with all applicable design criteria.

A. Building design with respect to architecture, character, scale, massing and orientation is compatible with the site, adjacent properties and the surrounding neighborhood.

Please see the staff memo from June 24, 2019 for a discussion of these issues.

B. Buildings, improvements, uses and activities are designed and located to produce a functional Development Plan responsive to the site, the surrounding neighborhood and uses, and the community as a whole.

Please see the staff memo from June 24, 2019 for a discussion of these issues.

C. Open space and landscaping are both functional and aesthetic, are designed to preserve and enhance the natural features of the site, maximize opportunities for access and use by the public, provide adequate buffering between the proposed uses and surrounding properties, and, when possible, are integrated with existing open space and recreation areas.

The proposed useable open space is limited to a few areas at the rear of the townhomes, and the outdoor picnic areas near the multi-family buildings. Due to the slope of the site, there is not a natural gathering area, or flat area that would easily accommodate useable open space. Also, the required rockfall berm takes up a large portion of the site. Further, due to wildlife concerns, human activity outdoors, particularly during winter, would have greater potential for impacting bighorn sheep and other big game that may use the area.

Opportunities to use the adjacent National Forest property to the north will be discouraged through the installation of the berm and the wildlife fencing to reduce conflicts between humans and wildlife, as recommended in the EIR.

Landscaping can be improved through the preservation of existing trees, especially along the south side of the development. The existing tree canopy, if preserved, would help to reduce the scale of the development.

D. A pedestrian and vehicular circulation system is designed to provide safe, efficient and aesthetically pleasing circulation to the site and throughout the development.

Vehicular access to the site is proposed from a new curb cut at the west end of the site. The new road is designed to follow the natural contours of the site to minimize cut and fill grades, although some cut and fill, as well as retaining walls, are proposed. Based on the completed traffic study, no acceleration/deceleration lanes or turn lanes are required, and none are proposed.

Internal pedestrian circulation is proposed along a new sidewalk on the south side of the new driveway, near the multi-family building. No sidewalks are proposed near the townhome buildings. Walkways are proposed at the south side of the multi-family buildings to provide access to the garden level residential units.

A staircase and walkway are proposed at the east end of the site to provide pedestrian access to the existing Falls at Vail bus stop. Pedestrian access to the proposed bus stop at the west end of the development is also proposed. Current plans show a proposed crosswalk to access an eastbound bus stop on the south side of the frontage road; the applicant and Town Engineer are in discussions on how to improve bus service through construction on a single bus stop/turn-around to the west of the new road curb cut. Construction of a bus stop at the west end of the site conflicts with recommendations by Colorado Parks and Wildlife to limit loss of habitat and pedestrian activity at this end of the site.

The applicant and Town Engineer have begun discussions about the opportunity to improve pedestrian access at the Exit 180 underpass. As of the publication of this memo, no determination has been made to the feasibility for safe pedestrian access in the underpass.

E. Environmental impacts resulting from the proposal have been identified in the project's environmental impact report, if not waived, and all necessary mitigating measures are implemented as a part of the proposed development plan.

By developing this site, several acres of habitat for bighorn sheep, elk, black bear, and other big game species will be permanently eliminated. The applicant proposes to mitigate the impact of the proposed development through the implementation of a Wildlife Mitigation Plan, which includes the improvement to 14.6 acres of wildlife habitat on the adjacent 17.9 acre Tract A, which is zoned Natural Area Preservation.

The proposed habitat enhancement was recommended by the applicant's wildlife biologist, and is intended to improve winter range habitat and grazing areas through the removal of existing vegetation and fallen trees, which limit access and are not the preferred habitat for grazing sheep. The area of the proposed habitat enhancement is within the bighorn sheep winter range, but is currently an area that does not have much bighorn sheep use due to the tree canopy and jackstraw fallen trees, according to the Wildlife Mitigation Plan. The proposed habitat enhancement would create new areas that bighorn sheep, elk and mule deer can use for grazing that is away from the development. The increased forage areas are proposed to compensate for the direct loss of habitat from the proposed development.

The Wildlife Mitigation Plan recommends prohibiting dogs in the 42-unit multi-family building. The applicant proposes to prohibit dogs in these units thorough enforcement of HOA regulations. Since dogs have a natural hunting instinct, almost any dog could become a nuisance or threat to wildlife in the vicinity. The Community Development Department recommends that all dogs be prohibited on site, including for owners, tenants and visitors of the townhome units, unless otherwise protected by law (i.e. service dogs and emotional support dogs).

The independent reviews of the applicant's Wildlife Mitigation Plan question some of the findings and assumptions in the applicant's proposal. The letter from Colorado Parks and Wildlife (CPW), CPW states *"it is unclear if on-site treatments will offset the impacts associated with the direct loss of winter range. In the absence of disturbance, bighorn sheep exhibit strong site fidelity and often occupy ranges because of their openness, high visibility, and proximity to escape terrain over sites with higher quality forage. (Bleich and Wiedmann 2014). CPW encourages the use of treatments to enhance adjacent habitat to the proposed development; however, it remains unclear if it will result in any meaningful winter use by the Booth Creek herd."*

Other concerns from CPW relate to the location of the proposed wildlife fencing and site access. CPW recommends that the fencing be relocated from the north side of the rockfall berm to the south side to further discourage access by residents and to expand the potential habitat available to wildlife. CPW also recommends relocating the access driveway as far east as possible to reduce the impacts of traffic (vehicles, pedestrians and cyclists), and locating the bus stop and ADA access to the east end of the site. Finally, CPW recommends ongoing maintenance of any new wildlife habitat created, and in particular suggests that the adjacent 17.9 acres of NAP land be placed in a conservation easement.

The other independent reviews by wildlife biologists consulted by the Town of Vail share some of the concerns raised by CPW. In general, the Town's other biologists (Kahn and Byrne) question the effectiveness of the proposed wildlife habitat enhancement on the adjacent NAP parcel, and the likelihood that it will actually be used by bighorn sheep. This is based on the fidelity of bighorn sheep, particularly ewes and lambs, to their historic habitat, and poor pioneering to new, even nearby, potential habitat. The letter from Rick Kahn indicates that the proposed habitat enhancement will, however, likely be used by elk and mule deer. Byrne specifically indicates that *"habitat projects focused in areas close to rocky escape cover (Booth Creek cliffs) could have the most positive impact on the bighorns in this herd."*

Byrne also suggest that the number of sheep estimated in the herd by the applicant's Biologist, Rick Thompson, could be more than double the estimate of 41 sheep, based on the difficulties of accurate population counts. According to Byrne, *"It is very possible the sheep population could be more than double this number (41 sheep). There are many reasons for inaccurate wildlife counts especially in a large and rugged area such as the Gore Range where the animals can occur almost anywhere."*

F. Compliance with the Vail comprehensive plan and other applicable plans.

The Booth Heights Neighborhood Development Plan is in compliance with many aspects of the Vail Comprehensive Plan and advances the employee housing goals of the Town. The development of employee housing units is supported by the Vail Housing 2027 Strategic Plan, the Town of Vail Economic Development Plan, and the Environmental Strategic Plan, and furthers the actions/strategies outlined with the Vail 20/20 Strategic Plan.

The proposed private development of 61 deed restricted EHUs will help advance the Town's goals of obtaining 1,000 new employee housing deed restrictions over the next 10 years. By developing more EHUs within Town, total vehicle miles traveled from workers commuting into Vail can be reduced, helping to reduce the Town's green house gas emissions. This development will upgrade the existing employee housing base.

The Town of Vail also values environmental sustainability and preservation of the natural ecosystem and wildlife habitat. The natural beauty of Vail and the wildlife that inhabit this valley are some of the reasons why many visitors love Vail, and why many locals choose to live here. Many of the Town's comprehensive planning documents reflect environmental stewardship values and recommend incorporating sustainability into projects, and protecting environmentally sensitive lands from development, or mitigating the impacts of development.

The proposed development will have permanent and irreversible impacts to 2.7 acres of existing wildlife habitat, and temporary loss to 2.3 acres of similar habitat for the construction of the rockfall mitigation berm. The applicant proposes to mitigate the loss of habitat through the enhancement of 14.6 acres of wildlife habitat on the adjacent 17.9 acres parcel.

XI. STAFF RECOMMENDATION

In order to ensure staff has good direction from the PEC and to ensure we provide the right information for the next meeting, we have the following questions:

- Does the PEC support the proposed Wildlife Mitigation Plan?
- Does the PEC have comments on the proposed landscaping for the project, and the staff recommendation to preserve a buffer of trees south of the development?
- What additional information, if any, is needed for the PEC to make a decision on the proposed Booth Heights Neighborhood Development Plan?

We recommend that the Planning and Environmental Commission **table** this item to the meeting of August 12, 2019.

“The Planning and Environmental Commission tables this request for the review of a Development Plan, pursuant to Section 12-6I-11, Development Plan Required, Vail Town Code, for a new housing development located at 3700 North Frontage Road East/Lot 1, East Vail Workforce Housing Subdivision (“Booth Heights Neighborhood”), to the meeting of August 12, 2019 (PEC19-0018)

XII. ATTACHMENTS

- A. Vicinity Map
- B. Booth Heights Neighborhood Applicant Narrative, dated May 28, 2019
- C. Booth Heights Neighborhood – Architectural Plans, dated June 24, 2019
- D. Landscaping Plans, dated 05/21/2019
- E. Civil Plans, date 05/28/2019
- F. *Omitted*
- G. Survey
- H. Parking Analysis
- I. Environmental Impact Report
- J. Wildlife Mitigation Plan
- K. Wetland Delineation Report
- L. Geologic Hazards Analysis
- M. Geologic Hazards Memo
- N. Rockfall Hazard Study
- O. Traffic Impact Study
- P. Site Photos
- Q. Public Comment received as of 12:00 PM July 5, 2019
- R. Letter from Colorado Geological Survey, June 21, 2019
- S. Letter from Colorado Parks and Wildlife, June 27, 2019
- T. Letter from Rick Kahn – Independent Review, July 5, 2019
- U. Letter from Gene Byrne – Independent Review, July 5, 2019