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**SITE PLANS AND CERTIFICATE OF STANDARDS AND CONDITIONS  
RE SEPTEMBER 10, 2002 AMENDMENT TO 1998 JACKSON HOLE  
GOLF AND TENNIS CLUB MASTER PLAN**

COMES NOW Benjamin H. Ellis, acting as Chairman of the TETON COUNTY BOARD OF COUNTY COMMISSIONERS, who being sworn on his oath, deposes and says:

- A. THAT the Teton County Board of County Commissioners on September 10, 2002, did approve an Amendment to the original 1998 Jackson Hole Golf and Tennis Club Planned Unit Development for Planned Resort Master Plan; said Master Plan Amendment is included as Attachment A to this document.
- B. THAT Section 2550.C.1.a (3), Recordation, of the Teton County Land Development Regulations (repealed from the Teton County Land Development Regulations by AMD 09-0022, Effective March 26, 2010) required the site plans and a Certificate of Standards and Conditions relating to the Master Plan Amendment to be recorded, upon approval, in the Office of the Teton County Clerk, but through inadvertence no such recording was made upon approval.
- C. THAT the within Site Plans and Certificate of Standards and Conditions is being recorded to comply with the said former Section 2550.C.1.a (3). The complete 2002 Master Plan amendment application is maintained at the offices of the Teton County Planning & Development Department.
- D. THAT the excerpt of the Jorgensen Associates letter of May 28<sup>th</sup>, 2002, referenced in condition #4 below, is included as Attachment B to this document.
- E. THAT the site plan approved as part of said amendment and titled "Proposed Master Site Plan (Overview)" and related documents are included as Attachment C to this document.
- F. THAT said approval was made with eleven conditions listed below. The conditions of approval for the 1998 Resort Master Plan, referenced in condition 1 below, are included as Attachment D to this document.
3. THAT the legal description of the Jackson Hole Golf and Tennis Club Planned Unit Development for Planned Resort is included as Attachment E to this document.
1. In order to be in accordance with many similar concerns that were identified in the 1998 resort master plan review process, several of the 23 Conditions of Approval for the original resort master plan passed on August 18, 1998 shall apply to the Vail Resort Development Company proposal. The conditions that are not considered pertinent to the current Sketch Plan can be eliminated. The Conditions that apply are 2, 3, 4, 5, 8, 13, 14, 15, 16, 17, 18, 19, 20, 22, and 23.
  2. The final development plan shall omit or relocate Lots 42 and 43, which are adjacent to

GRANTOR: TETON COUNTY BOARD OF COUNTY COMMISSIONERS  
GRANTEE: PUBLIC  
Doc 0789009 bk 776 pg 236-363 Filed At 14:55 ON 02/07/11  
Sherry L. Daigle Teton County Clerk fees 507.00  
By Michele Fairhurst Deputy

the Utility Lot. Alternative locations should seek to avoid, to the maximum extent possible, the covertypes and areas identified as "less suitable and unsuitable for development" including the revised building envelopes within the cottonwood stand.

3. The final Development Plan Landscaping Plans shall be designed using documented and specific input from the Wyoming Game & Fish Department, professional environmental consultants, and local or regional wildlife researchers. The general objectives of this plan are the following:
  - a) Facilitate the documented annual elk migration through the central part of the JHG&TC property, especially along the edges of the proposed practice range.
  - b) Provide landscape cover and visual openings at key locations for elk movements. Openings at the pond and north end of the practice range shall be incorporated into the design.
  - c) Extensive landscaping islands within the proposed parking lot shall be presented.
  - d) Vegetation unduly attractive for forage to migrating elk shall be avoided.
4. The fire marshal's requirements shall be met in the final development plan submission. The fire department's specific concerns are enumerated in the Jorgensen Associates letter of May 28<sup>th</sup>, 2002 (included as Attachment B to this document). The issues that need further refinement in the final plan include: the lot and road design, the water supply, and the establishment of a fire station site at the agreed .9-acre location.
5. The final development plans shall demonstrate that the landowner has legal easements for the wastewater sewage pipeline to be extended from a connection in Spring Gulch to the JHG&TC utility lot. The final development plan shall provide all engineering plans for the pipeline system. In the alternative, the final development plan shall provide full engineering plans and meet Wyoming DEQ requirements for the enlarged on-site sewer treatment facility.
6. The final development plan will provide more detailed information on how the resort's exterior lighting system will conform to the "low intensity, low profile, and shielded" specifications enumerated in the Design Element Section 2180.D.6.e. (Teton County Land Development Regulations Second Printing, May 1996).
7. In order to precisely define 30-foot no-disturbance wetland buffers for future builders, the final development plan submittal shall supply a survey that precisely delineates each 30-foot setback boundaries around all jurisdictional wetlands.
8. Mitigation measures shall be taken at the curve next to the Fire Station to address safety concerns and to address speed control in NRO areas.
9. As part of the final development plan, the applicant shall identify potential items for maximizing internal trip capture and any other practical means for mitigating traffic impacts.
10. Should tennis courts be proposed on Lot 44, there will be no lighting of said tennis courts.



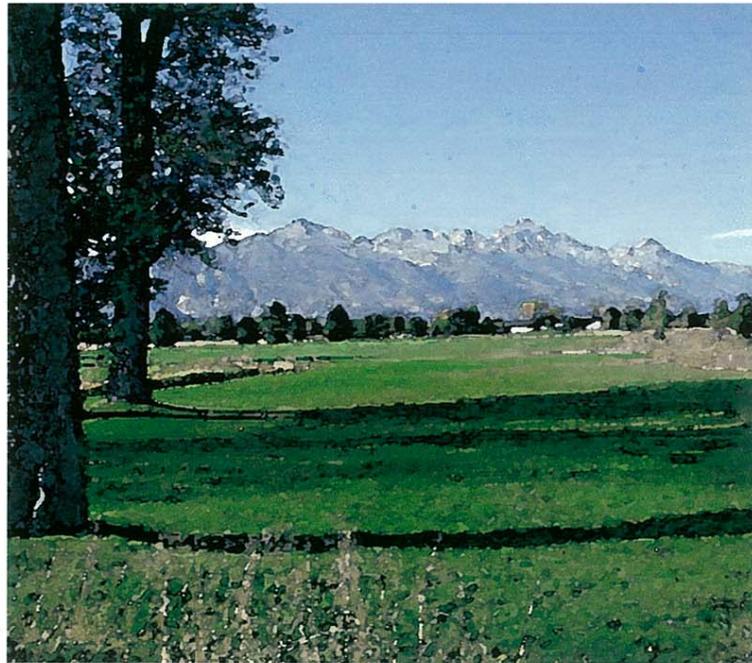
# **ATTACHMENT A**

**Applications For  
SKETCH PLAN And  
OFFICIAL ZONING MAP AMENDMENT  
PERTAINING TO**

**Jackson Hole Golf and Tennis Club**

**PLANNED UNIT DEVELOPMENT DISTRICT FOR PLANNED RESORT**

Submittal Date: March 29, 2002



**SCANNED**

**Owner:**

**JACKSON HOLE GOLF AND TENNIS CLUB, INC.**

Vail, CO 81658

**Applicant:**

**VAIL RESORTS DEVELOPMENT COMPANY**

Avon, CO 81620-959

**Land Planner & Design Consultant:**

**HART / HOWERTON**

New York, NY 10016

**Surveyor & Engineer:**

**JORGENSEN ASSOCIATES, P.C.**

265 East Simpson Street / P.O. Box 9550

Jackson, WY 83002

(307) 733-5150

**OFFICIAL FILE COPY**

DATE: 10-15-07

SIGNED: Carl Moore

CONDITIONS: YES  NO

CC APPROVAL: \_\_\_\_\_

BCC APPROVAL: \_\_\_\_\_

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## **EXISTING RESOURCE ASSESSMENT**

The natural resources give value to a property's suitability for development. In the case of JHGTC, the single most dominant and apparent natural resource is the scenic grandeur and open vistas to the mountains in every direction. None of the property is shown within the Scenic Resource Overlay District. However, a portion of the property straddling Spring Gulch Road is shown as part of the Natural Resource Overlay District. The applicant and owner fully recognize the importance of existing natural resources to formulation of the development plan. To this end, BRCI (Biota Research and Consulting, Inc.) was retained in 1998 to prepare an environmental analysis and preliminary wetland determination for the original Master Plan application submittal. The wetland delineation remains valid, while new EA standards were adopted by the County in 2001. The original wetland determination and an updated EA are included in the Appendix of this packet; in addition the surveyed boundary of the jurisdictional wetlands flagged in July of 2002 have been added to maps 6A and 6B included in the Appendix of the packet.

### **ENVIRONMENTAL ANALYSIS SUMMARY**

The possible effects of future development on wildlife "species of special concern" (SSCs) were analyzed and recommendations are provided which, to the maximum extent practicable, will reduce potential impacts while still allowing future development to occur.

The JHGTC property supports vegetative communities that provide habitat to bald eagles, peregrine falcons, mule deer, moose, elk, great blue herons, river otters, and several raptor species. All of these species or guilds have been identified as SSCs in Teton County. Future development occurring on the JHGTC property may have negative impacts on some of these species and their habitats. The degree to which these species will be affected is directly linked to the location of future development and the extent of ensuing vegetative impacts. Sensitivity to wildlife and their requirements while siting future development on the property will help minimize detrimental effects.

The JHGTC property lies partially within Teton County Natural Resource Overlay (NRO) and the presence of crucial moose winter-yearlong range on the tract is a principle factor for its inclusion in the NRO. Moose are primary users of riparian portions of the property during winter and rely on its vegetation for both food and cover. The parcel also represents non-crucial elk and mule deer habitat used during non-winter months.

Based on the current Environmental Analysis and the location of existing lots and facilities within the NRO limits, that are now show in the Teton County database, this plan proposes to revise the location of the NRO line to the south of the Spring Gulch County Road as shown on Maps 6A and 6B in the Appendix of

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this packet. Additional facilities south of the Spring Gulch County Road have been located within the NRO since the early 70's and include the existing employee housing, golf course maintenance barns, parking, basketball court, septic field, subdivision wells, and many miscellaneous sheds and other items. existing impacted area, and provide NRO mitigation elsewhere.

No development is proposed within the NRO, except as in-fill within these already impacted areas, which were deemed most suitable for development in the Environmental Analysis.

The least valuable vegetative cover types found on the JHGTC property, those most suitable for development, are the non-mesic shrub-sagebrush (xeric), non-mesic grassland (xeric) cover types, and landscaped or disturbed areas. Locating development within these cover types will cause, in relative terms, the least impacts to SSCs. In contrast, the cottonwood cover type variations (especially those located south of the Spring Gulch Road), mesic tall shrub-willow, open water, and wetland cover types represent the most important wildlife habitats relative to other cover types on the parcel. The overstory and shrub and grass layers within cottonwood stands provide excellent foraging opportunities and cover habitat for ungulates as well as other species and development within these cover types will result in more potential negative impacts. Some opportunities exist to reduce potential negative impacts to SSCs and their habitat if development occurs along the edges of the forest cover types through replacement planting at a density greater than the losses resulting from the development.

Employing some common sense measures following development will go far to protect continued wildlife use of this parcel and its vicinity. Impacts resulting from increased human uses may be minimized through self-imposed spatial and temporal limitations of human activities when species of special concern are present. Specifically:

- Minimizing human-caused disturbances to wintering wildlife
- Not inhibiting animal movements through the parcel by erecting impassable fences
- Controlling pets, and not intentionally feeding wildlife

Depending on plant materials used, landscaping efforts may increase the attractiveness of developed areas to moose or deer. Having the wild animals in frequent proximity to humans is not an ideal situation because it increases the likelihood for potentially injurious events to occur (to humans and ungulates).

The following potential impacts to Species of Special Concern were identified:

- Bald Eagles – the JHGTC property does not fall within 400 m of a known bald eagle nest. No development restrictions exist

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- on the property due to nesting. However, the mature river-bottom cottonwoods associated with the Gros Ventre River represent excellent year-round habitat. The required setback of 150 feet from the mean high water line or top of bank of the river should be adequate to reduce negative impacts to foraging bald eagles.
- Peregrine Falcons – the JHGTC property does not represent important peregrine falcon habitat.
  - Trumpeter Swans – Future development occurring on the parcel shall have no negative impacts on trumpeter swans.
  - Snake River Cutthroat Trout – Future development on the parcel will not adversely affect cutthroat trout spawning.
  - Mule Deer – Future development on the parcel may have negative impacts on mule deer. However, since the parcel does not represent crucial or non-crucial winter range and human use on the parcel is already significant, these impacts are expected to be minor.
  - River Otters – River Otters may irregularly occur in the section of the Gros Ventre River but future development will not negatively affect river otters.
  - Great Blue Herons – it is unlikely that future development will have measurable impacts to great blue herons although it may influence when and how herons forage around the ornamental pond and irrigation ditches scattered throughout the property.
  - Raptors – No raptors are known to currently nest on the JHGTC property.
  - Moose – Impacts to moose resulting from future development on the parcel can be minimized by avoiding the cottonwood forest and willow cover types, river channel, and wetlands. In contrast, locating development in the landscape areas, non-mesic shrub-sagebrush, non-mesic grassland cover types, and disturbed areas, which are the least preferred cover types on the parcel, will have fewer or no negative impacts on moose.
  - Elk – Development on the site may have minor negative impact to elk but the overall effect will be minimal since no crucial elk habitat is present and possible elk migration corridors identified by the Environmental Analysis will be preserved by measures recommended in the Analysis and reviewed by the Wyoming Game and Fish Department.

### **PRELIMINARY WETLAND DETERMINATION**

A preliminary wetland determination was conducted on the JHGTC property in Teton County, Wyoming. A combination of existing data, field data, interviews regarding historic conditions, and offsite mapping techniques were used to determine the presence of wetlands and waters of the U.S. on the property. A total of 45.23 acres of the property appear to conform to the definitional criteria for wetlands in the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) or are open waters. Of this, approximately 2.36 acres of the property are recommended as jurisdictional wetlands and 33.34 acres as “waters of the U.S.” for a total of 35.7 acres of aquatic sites afforded

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protection under the federal Clean Water Act. These sites are all located south of the Spring Gulch Road and are shown as flagged by BRCI, Inc. in July of 2002. The remaining 9.53 acres of aquatic resources on the JHGTC property are the result of irrigation and ornamental landscaping activities and are not recommended for jurisdiction. Biota recommends that the Spring Gulch Road serve as the general boundary between jurisdictional and non-jurisdictional aquatic resources on the JHGTC property, with the exception of one irrigation ditch located along the south of said road along which any wetlands are recommended for non-jurisdictional determination.

~~Prior to finalizing the Exaction parcel boundary, precise boundaries of the wetlands in the area will be determined.~~

### **SRO/Scenic Issues**

The scenic grandeur of the JHGTC setting nestled beside the Gros Ventre, with inspiring open views of mountains in every direction; make it one of the most scenic sites in the Valley. However, the Teton County Comprehensive Plan and Land Development Regulations do not include the property within the scenic resource overlay (SRO). Spring Gulch Road was included in the SRO south of the Gros Ventre River.

Notwithstanding, the applicant and owner have elected to establish design objectives that place the preservation of scenic resources at a high priority. The principles set forth for preserving scenic quality in the LDR's are adhered to in this Master Plan. They are:

- extensive open spaces are preserved
- loss of existing mature vegetation is avoided
- extensive landscape restoration and enhancement is planned to blend development into the site
- low profile residential building character is preserved by the small cabin design and single-family height restrictions
- The large mass of a central lodge building is removed from the project
- Development is set back from Spring Gulch Road so as to not interrupt the foreground, and development is kept low so as to leave the skyline uninterrupted.

In spite of the lack of an SRO designation along this portion of Spring Gulch Road, scenic resources from the entire resort site will be addressed. The photographs, sketches, and details presented in this plan bear witness to the careful attention being given.

### **AUDUBON SOCIETY DESIGNATION**

JHGTC has been a member of the Audubon Cooperative Sanctuary Program (ACSP) for Golf Courses since 1993, which is the highest level achievable for existing courses. The ACSP works in cooperation with golf courses to enhance wildlife habitat and protect natural resources. The program is designed specifically to give manager and ground superintendents the information and guidance necessary to implement stewardship projects.

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Areas for environmental quality enhancement include:

- Wildlife and Habitat Management – Since 1993, JHGTC has improved wildlife habitat by increasing naturalized areas bordering the golf course, participated in IPM programs, and constructed nesting boxes for Mountain Bluebirds and bats.
- Integrated Pest Management (IPM)
- Water Conservation – Over several years irrigated turf has been replaced with native vegetation, reducing watering needs an estimated 25%. With the installation of the new irrigation system in 2002, another 40% savings in water usage is anticipated.
- Water Quality Management – Participating with Teton Conservation District to monitor water quality this summer with results to be a matter of public record. With a baseline of water quality information, improvements can be measurable over time.
- Outreach and Education – JHGTC intends to increase awareness and educate members and golfers on environmental issues through signage, and newsletters.

### **CONCLUSION**

The applicant and owner are committed to planning the expansion of the JHGTC Resort to be sensitive to the natural resources of the land. Intrusions into the NRO have been reduced to the greatest extent practicable. Based on the existing facilities on the south side of Spring Gulch Road, the NRO line is proposed to be relocated to exclude these existing impacts. If not designated NRO, this area may be appropriate to consider for the necessary expansion and upgrade of GTLC and golf course maintenance facilities necessary to keep JHGTC competitive as the number one rated course in Wyoming. Recommendations of BRCI, Inc. regarding natural resource and elk migration corridor preservation will be followed.

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## **STATEMENT OF PURPOSE**

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As set forth in Section 2, the objective of the applicant and owner is to redevelop the JHGTC, maintaining and improving the high quality commercial recreation development it has been for the past thirty-five years, serving the community and visitor.

The purpose of the recommendations, plans, and designs contained in this master plan, is to meet these objectives while minimizing impacts to existing developments and preserving the integrity of the community.

This application and the development conform to the purpose and intents of the regulations for PUD Districts for Planned Resorts as follows:

1. *Encourage recreational activities that rely on indigenous natural attributes of the area, contribute to the community's character and economy and have had a long-standing beneficial role in the community.*

The golf course has been a major recreational facility for over 35 years and predates the Jackson Hole Mountain Resort. It was the only golf course in the valley for more than 25 years and is consistently rated the number-one course in Wyoming. This highly rated course has been and will continue to be open to the public, along with social and golf membership opportunities available to the community.

The course and supporting developments are planned in a way to take advantage of and capitalize on the natural scenic grandeur of the site and unobstructed views of the surrounding mountains. Each cabin is sited to capture views either to the Tetons or an interior landscaped common area. The new clubhouse was specifically oriented to frame views of the Grand from interior spaces. In addition, the proposed development will continue to preserve and protect the native cottonwoods and willows found on and around the property.

With respect to economy, the JHGTC is a significant annual contributor to the Jackson Hole Valley, Teton County, and State of Wyoming. With improved facelifts, it is anticipated that the revenues of the JHGTC will climb approximately 25 percent.

2. *Provide flexibility for planning and developing recreational resort facilities in a creative, efficient and coordinated manner in order to provide quality visitor experiences.*

The quality of the visitor's experience has been, and remains, the underlying theme of the resort proposal ranging from a four or five-star quality resort to the enhancement of scenic resources of the valley. In conjunction, quality visitor

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experiences are provided by a multitude of recreation opportunities that accommodate a different visitor type to Jackson.

- 3. Create a process in which Teton County and the Town of Jackson collaborate with landowners in planning and resort master plans that meet community goals and respond to the unique circumstances of the resort area.*

The applicant and owner and their predecessors in ownership, the Grand Teton Lodge Company have and will continue to work cooperatively with the County during the approval phases of this and other projects. They have instigated open dialogue and cooperative planning with the staff in preparation of the Master Plan Amendment. As the only landowner in this PUD development, the Jackson Hole Golf and Tennis Club, Inc. intends to remain active in communicating with Teton County and Town of Jackson representatives.

- 4. Permit resort development that contributes to expanding the winter and shoulder economic seasons.*

The golf and tennis facilities of the JHGTC will continue to be operated as early and late into the shoulder seasons as weather permits. In addition, the expanded restaurant and events facility will be available year-round to promote activity and ~~visitation which~~ visitation, which contributes to the quieter shoulder season economy. A Nordic ski center, operated out of the pro shop, will add to expand winter activity at JHGTC. ~~As winter and shoulder season activity grows at the resort, the opportunity to open and operate a local convenience market is suggested in this Master Plan Amendment.~~

- 5. Ensure that resort plans incorporate a mix of land uses, promote alternative modes of transportation and provide a pedestrian-oriented community in order to alleviate traffic-related impacts.*

The resort plan at JHGTC includes a mix of land uses from commercial (restaurant/event facility) to recreation to residential. The project includes redevelopment and expansion of commercial restaurant and bar facilities, an indoor fitness center, event facilities, and expanded recreation activities. The residential component includes 40-43 cabins, also available for short-term rental, 43-44 single-family lots as well as the required affordable and employee housing. Within the community, a trail system will be developed to encourage pedestrian, bicycle and golf car modes of transit to the clubhouse or other local destinations. Proximity to the Jackson Hole Airport will further alleviate visitor traffic on county roads. In addition, The Jackson Hole Golf and Tennis Club, Inc. intends to expand its existing private transit services associated with Jackson and Jenny Lake Lodges and the Snake

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River Lodge to the JHGTC. This system will provide access to a wide range of year-round activities, from shopping to skiing and snowmobiling to river rafting.

6. *Ensure that resort plans are consistent with the Comprehensive Plan, and therefore, are beneficial to the community.*

The applicant and owner feel the proposal is consistent with the current Teton County Comprehensive Plan. This conclusion has been reached by individually evaluating the proposed project against each chapter of the Comprehensive Plan. This application and the commitments it makes are consistent with the purpose and intent therein.

7. *Enable long-range planning for infrastructure, capital facilities, and community land use patterns by establishing a level of predictability in the maximum potential size and character of each resort area.*

This Master Plan Amendment reflects the completion of all development at the JHGTC. The character and extent of development are clearly stated within this document and restrictions set forth to guide the design, maximum sizes, and implementation. The necessary infrastructure and capital facilities improvements have been identified, phased, and mitigation measures proposed. The planning process gives the community the opportunity to help direct development in a manner that will provide predictability of the result.

8. *Ensure a balance is maintained between tourism and community that promotes social diversity but does not cause undesired shifts away from rural, western community character.*

The proposed development at JHGTC, and improved golf facilities are needed in the valley to sustain a long-range economic tourism economy. The proposed development will provide a level and quality of diverse activities to encourage longer stays and higher income visitors, all of which are beneficial to the community. Diversity is provided by the location of JHGTC, which creates a rural resort atmosphere away from the hustle and bustle of Town and Teton Village. At the same time, the design theme will recall the ranching heritage of Teton County, while highlighting the area's natural scenery.

9. *Produce resort plans that make significant contributions toward protecting attributes of the community that are considered critical to the community's long-term health, welfare, and well-being.*

The plan presented in this application provides for the expansion of existing self-contained infrastructure while minimizing off-site impacts, contributing to the long-term

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health, welfare, and safety of the surrounding residents. The low-density western character of the proposed residences is in direct relation to the character of the adjacent neighborhoods. In addition, the proposed development creates no physical or financial burden to the County. The lowered density levels throughout the county has contributed to higher land values. The idea of this higher density satellite community will increase the inventory of housing to help alleviate demand which is what drives land values up. Accessory dwelling units will be allowed on the single-family lots to encourage available housing stock.

A concentrated community grouping is a good mechanism for accommodating growth in transportation-efficient nodes. Mixed uses can serve to reduce trips. ~~particularly with the proposal to include zoning for a convenience node at a future date.~~ The project has residential diversity – single-family, cabins with short term rental component, affordable/employee housing, all with walkability to the community center – the clubhouse.

Environmental features are also critical to the community's long-term well-being. This proposal minimizes impacts and protects NRO, respects sensitive areas, elk migration corridors, cottonwoods, and will create more wooded character for cabin clusters. Approximately 25% of the project acreage is developed – 114 acres of 451 acres total. Furthermore, this amendment proposes no relocation of Spring Gulch Road into the NRO, thereby reducing the previously approved impact. As an added bonus, the project will result in the replacement of a substandard wastewater treatment facility by connecting the existing JHGTC and Fairways Estates lots, as well as the proposed development, to the Town of Jackson Wastewater Treatment Plant.

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## **LAND DEVELOPMENT PROGRAM**

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This Land Development Program illustrates the applicant's and owner's concept of the proposed development for the Golf and Tennis Club. This concept has been developed after consideration of:

- Facts relative to the market feasibility study.
- The most recent independent county impact evaluation and tourism studies.
- The goals and objectives of the Comprehensive Plan.
- The opportunities and constraints presented by the physiography and natural resources of the property.

The Planned Unit Development District for Planned Resort is intended to provide visitor services that include a self-contained mix of recreation, retail and service opportunities. The applicant and owner see this proposal as a logical improvement of the JHGTC facilities that will enable expansion of golf/Nordic uses and restaurant/events into year-round operations. This will contribute to the County's long-range economic sustainability as a destination resort community.

This program summarizes the extent and dimensional limitation of development at the resort. It is comprised of the following components:

1. Master Plan Summary
2. Dimensional Limitations Plan
3. Land Use Element

### **A. MASTER PLAN SUMMARY**

The resort expansion being proposed will not be a typical lodging facility. Just as each of Vail's three lodging facilities in the valley area uniquely different and serve a specific market niche, the proposed Golf and Tennis Lodge is tailored to serve its own client profile. It will be developed with a quality level to match the number-one rating of the golf course.

The concept of the Master Plan Amendment is to create a first class, five star resort that is uniquely different from other valley destinations. This diversity, however, is not to be provided at the expense of the character of Teton County and the existing neighborhood. In summary, the project consists of an upgraded clubhouse as the focal point of the community, 40 ~~43~~ cabins and 43 ~~44~~ single-family homesites.

In response to the community concern over the activity created by a large commercial lodging structure in this neighborhood, the 130-room lodge facility has been removed from the proposal.

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The applicant and owner believe that in order to maintain a championship golf course of this stature, additional rounds of golf need to be played during the golfing season. Developing guest facilities and an improved clubhouse and event room that can accommodate small meetings, groups, and individual tourist demands, together with co-marketing the Resort with the Snake River Lodge in Teton Village will allow the JHGTC golf season to be expanded. The comfort of the cabin neighborhood and quality of the clubhouse facilities, as well as the quality of the course and diversity of other recreation opportunities, will attract the type of guests that extend their length of stay. The bottom line is providing high quality facilities and experiences year-round.

## **The Golf Clubhouse**

As shown on the proposed Master Site Plan, the clubhouse is located close to the new tennis courts and within walking distance of the driving range. (See Maps 5 and 7a in the Appendix of this packet.) The site is screened from all adjacent residential properties, and Spring Gulch Road by mature vegetation. This location takes full advantage of the site's existing resources to provide seclusion yet emphasize the extraordinary views to the Tetons.

The clubhouse is designed to accommodate and serve as a central arrival, dining room, event and fitness/pool complex for the existing and proposed neighborhoods. An expanded events facility is a key component of the club building. With separate arrival area, event guests enjoy a 2,500 square foot banquet room (which can seat up to 200) and access to a stone terrace with views of the Grand Teton. Dividable event rooms provide flexibility for a diversity of occasions. This size facility has proven to be in demand by both visitors and locals alike.

Access to the clubhouse is directly off Spring Gulch Road. Over one hundred parking spaces are provided to the east for the community and day guest. It is expected that some residents and their guests will arrive at the clubhouse via walking, cycling, or golf car.

While the previous master plan approval included a large 60-room, three story lodge structure, the revised concept is to provide smaller scaled structures that are more consistent with the existing neighborhood and historical ranch character.

The clubhouse architecture is low profile, with strong ties to regional archetypes. The bulk and scale of the lodge replicates the style and elegance of a cluster of ranch buildings. Indigenous building materials ranging from stone, timbers, cedar shingles and log accents are contemplated. Subdued colors of the native landscape complete the effect.

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Shaping and sculpturing of surrounding earth forms, in addition to strategically located landscape development, will reduce the visual impact. The low bulk and scale of the structure, in concert with the open space landscape development and fairways, provide a park-like resort setting.

## **Recreation**

With this Master Plan Amendment, no golf fairways need to be realigned to allow for development. The owners are contemplating relocation of the first fairway to create a new experience at the course as well as introduce an additional water element into the play of the hole. Approval of this realignment is requested with implementation to occur at the owner's option. The driving range location is also proposed to be adjusted. With the advent of new club-making technology, the driving range at JHGTC is in need of extension. This proposal will extend the driving range 330 yards. In addition, Robert Trent Jones II, Inc. is under contract to complete a master golf course improvement plan. With this information, course improvements can be prioritized and phased. The first phase consists of a two million dollar investment in 2002 course upgrades, most likely to start with the irrigation system.

Four new tennis courts and approximately 39-24 parking spaces are proposed for construction at the west side of the clubhouse. In addition, an expanded parking lot is planned east of the clubhouse. This parking lot is located in what is thought to be an elk migration corridor. It will be designed, per Wyoming Game and Fish Department recommendations to accommodate the continued movement through the area. See Exhibit Showing Preliminary Parking Lot Details in the Appendix of this packet. These new parking lots will handle the parking requirements for the courts, social guests, and local and visitor golf guests. Landscape improvements will screen the courts, clubhouse, and parking from view from Spring Gulch Road.

Redevelopment is planned for the JHGTC clubhouse facility. These improvements include the construction of a 25,000 square foot (maximum) structure to house a 1,200 square foot Pro Shop, office and other support spaces, 2,500 square foot banquet room, a 1,400 square foot grill to seat up to 66 people, new fitness room and members' lockers. These areas are provided as approximations of program elements, with finalized building areas to be determined at the time of development permit approval. A conceptual building layout and sketch are shown on Map 8 in the Appendix of this packet.

The final recreation element is the internal trail network and open space system. The Proposed Master Site Plan includes an extensive pathway system to encourage walking from the cabin clusters and home sites to the clubhouse, or for simply taking a stroll "through the park." This park-like walking environment is illustrated in the

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Master Plan. The system along with other routes will serve as a cross-country ski course during the winter months and be connected to the proposed County Pathway System paralleling Spring Gulch Road.

## **The Cabins**

The concept, as shown on Maps 5 and 7a in the Appendix of this packet, is to cluster cabin units around several central open spaces offering view corridors toward the mountains and golf course. Significant new landscaping will be installed on the street side to enhance the sense of "a cabin in the woods" and blend the neighborhood with the natural surroundings. A fundamental objective of this layout is to preserve the existing small-scale rural character, while creating desirable quaint accommodation units.

Each cabin will have a maximum of 2,000 square feet of aboveground habitable space. An allowance of 600 square feet is proposed for garages. The intent is to construct one car garages, with additional storage area for large "toys" including bikes and kayaks to be available in the extended rear area of the garage or in an optional basement area. The 600 square foot garage allowance will provide flexibility in the event more exterior storage is desired. The individual units contain two to three bedrooms and two baths. There are ~~40~~ 43 proposed cabin units accommodating 86-129 guestrooms. The proposed cabins are smaller in size and scale than other residential structures in the vicinity. Designed intentionally for a low-slung ranch character, the structures will not exceed 24 feet in height, excluding chimneys. The architecture will incorporate indigenous building materials and detailing reminiscent of the regional style. Natural stone fireplaces, timber and log details, and cedar shake are anticipated as building materials. Architectural guidelines included in this document will govern the design and planning process.

The elevations shown on Map 7b in the Appendix of this packet illustrate the cabin cluster design concepts.

## **The Single Family Homesites**

~~Forty-three~~ ~~Forty-four~~ single-family homesites are proposed in a manner consistent with existing neighborhoods. Lots are one acre or greater in size, which exceeds lot sizes in surrounding neighborhoods of Jackson Hole Golf and Tennis Club Estates 2<sup>nd</sup> and 3<sup>rd</sup> Filings. The proposed ~~43~~ 44 lots are significantly smaller than those lots in the Fairways Estates at Jackson Hole, however, the concept of this project is to cluster single-family homesites within the land mass surrounded by golf fairways, rather than spread over an entire site.

All single-family homesites will have building envelopes to control views and establish setbacks. (Refer to Maps 6A and 6B in the Appendix of this packet.) The envelopes for proposed lots 42 and 43, which are located in an area vegetated by trees and shrubs, are

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very restrictive, and sensitively located out of meaningful wildlife forage areas. The envelopes were designed based on a site specific study performed on June 11, 2002 to augment the original field work done earlier in the spring of 2002 for the Environmental Analysis dated May 8, 2002, which is included in the Appendix of the packet.

Most sites orient toward views of the mountains and the golf course to ensure the residents enjoy the natural attributes of the area. Accessory units will be allowed pursuant to the criteria in the LDRs.

Home occupations will be permitted in a manner consistent with county regulations. Home occupations can help alleviate traffic congestion by use of phone, fax and e-mail communications.

### **Affordable and Employee Housing**

These elements are included in the Master Plan – on site. Please refer to the Housing Requirements Section for more detail.

### **Infrastructure**

This amendment to the 1998 Master Plan approval eliminates the proposed relocation of Spring Gulch Road to the southern side of the 9<sup>th</sup> fairway, further reducing impacts to the NRO. In addition, several infrastructure and utility service upgrades including connection to the Town of Jackson Wastewater Treatment Plant are discussed in the capital improvement element. The existing sewer treatment plant site will be maintained as an overflow storage facility and will be included in a separate utility lot. Concept engineering plans are provided as Maps 9A and B in the Appendix of this packet.

### **Exaction Parcel (Public/Semi-public Dedication)**

Two lots, both located south of the Spring Gulch Road, are proposed for dedication to the County. A 3.12-acre lot in the southwest corner of the development is proposed for use as a trailhead, park, wildlife habitat mitigation area, or for other uses determined by the County. A 0.9-acre lot in the southeast corner of the development is proposed as a fire station site. Please refer to the Exaction Requirements Section for more detail.

~~The LDRs require land to be dedicated for public use or improvements at a rate of .03 acres per housing unit or lot. Based on 43 cabin units, 17 affordable housing units and 44 lots, 3.12 acres are proposed to be dedicated. The site is located south of Spring Gulch Road. Potential uses for this site include a public trailhead, a fire station or other uses determined by the county.~~

### **Convenience Node**

At the County's request, opportunity for the future construction of a local convenience market has been included in this Master Plan Amendment. Currently, JHGTC is used primarily during the

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summer, with little activity in the winter. It is unknown whether a small convenience node would be successful in this type of market. However, with the proposed development come opportunities for shoulder season and winter use. Therefore, a lot for a local convenience market/deli of up to 1,200 square feet is provided for at the location of the current snack shop at the ninth green. The existing snack shop could be redeveloped into a small market/deli to serve both golfers arriving by golf car or area residents who walk or drive with access to parking from Spring Gulch Road.

## B. DIMENSIONAL LIMITATION PLAN

The dimensional limitation plan is intended to control the physical characteristics of the proposed development. For JHGTC, this plan shall include Minimum OSR/LSR, Maximum APO's, heights, and square footage restrictions imposed on each development type.

Development Type	Minimum OSR/LSR (1)	Maximum FAR (2)	Maximum APO's (3)	Max. Meeting Space (sf)	Min. Lot Size	Height Limitation	Minimum Street Yard	Minimum Side Yard	Minimum Rear Yard
<b>Resort Lodging</b>									
Clubhouse	N/A		N/A	4000	N/A	34 ft. (6)	N/A	N/A	N/A
Cabins (4)	N/A		240	N/A	N/A	24 ft.	20 ft.	10 ft.	10 ft.
<b>Residential Lots</b>									
Employee and Affordable Housing	.25		N/A	N/A	N/A	24 ft.		(5)	
Single-Family (Market) Lots	.59-.25	.14	N/A	N/A	1.00 ac	18 ft.	25 ft.	20 ft.	25 ft.
<b>Additional Uses</b>									
Utility and Wastewater Treatment	.40		N/A	N/A	N/A	18 ft.			
Maintenance/Admin. Building	.25		N/A	N/A	N/A	24 ft.		(5)	
Exaction								(5)	
Semi-public/Public Convenience Node	.25		N/A	N/A	1.0 ae	30 ft.			
	.25		N/A	N/A	.5 ae	24 ft.			

- (1) Min. OSR/LSR or Open Space Ratio/Landscape Surface Area Ratio reflects the required open space or landscaped area for each lot, and is calculated by multiplying the ratio by the base site area of the lot. Min. OSR/LSR is calculated based on a base site area of 3,372,900sf as shown on the Technical Site Plan located in the Appendix.
- (2) Max. FAR or Floor Area Ratio is calculated by dividing the sum of the gross floor areas of all buildings, excluding basements, by the base site area of the lot. APO is the average number of people housed at peak occupancy. The multiplier used to determine APO is Hotel/Lodge — (2) people/room.
- (3) APO determines the capacity for guest accommodations and pertains only to short-term rental of these units. It is the average number of people housed in short-term rentals at peak occupancy. The affordable housing calculations are in the Housing Requirement Section
- (4) Yard setbacks to apply only to the perimeter of each cabin cluster.

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- (5) To be determined at Final Development Plan Approval for each of these development types.
- (6) The clubhouse height limitation is 34' measured per Teton County Land Development Regulations (Article VIII, Division 8300) EXCEPT for those portions of the lower level of the building that will daylight because of a walk out design; said portions of the building shall not exceed 25% of the total building foundation perimeter. See Exhibit Showing Proposed Clubhouse Elevation Illustrating Walkout Condition in the Appendix of this packet.

## C. LAND USE SUMMARY

The concept for development at JHGTC is centered around disbursement of residential units on existing undeveloped land within the JHGTC golf course at a bulk and scale that will replicate the existing surrounding residential development. The breakdown of acreage per land use is:

### Gross PUD Calculation

<u>Land Use Category</u>	<u>Acreage</u>
Existing Gross Area	451.38
Existing Subdivisions (includes Sagebrush Drive easements)	-100.44
Spring Gulch Road Easement	-9.27
<b>JHGTC Development</b>	
Clubhouse	-6.11
Front Nine	-64.28
Back Nine	-74.14
Driving Range	-8.75
Sewage Treatment Plant	-0.50
Maintenance Area	-1.50
<b>Net Balance of Undeveloped Lands</b>	<b>186.39ac</b>

### Proposed Development

<u>Land Use Category</u>	<u>Acreage</u>
Previous Net Undeveloped Lands	186.39
<b>Resort Expansions</b>	
Clubhouse and Associated Facilities	-0.50
Cabins	-12.72
Single-Family Lots	-47.60
Affordable Housing Lot	-1.64
Access Road	-6.82
<b>Additional Elements</b>	
Exaction and Public/Semi-public Dedication	-3.12
Sewage Treatment Plant Expansion	-0.90
Maintenance Site and Employee Housing	-0.50
Convenience Node	-0.51
<b>Net Balance of Undeveloped Lands After Proposed Development</b>	<b>112.08ac</b>

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As shown, the resort development is extremely low-density with respect to the ratio of developed/undeveloped land. In addition, this amendment represents a large reduction from previously proposed commercial lodging square footage, from 160,000 square feet lodge structure to 4043 cabins that are each a maximum of 2,000 square feet above ground. The chart above uses site area instead of building footprint for the calculation of developed lands. A more precise footprint and calculation will be required to meet the requirements of the dimensional limitation schedule.

**HOUSING REQUIREMENTS**

In Jackson and other places uniquely blessed with extraordinary beauty, the demand for housing has priced out of the market the very residents who create the social fabric of the community. To address the upward spiraling housing costs in the community, the Teton County Land Development Regulations require both employee housing and affordable housing for resort and residential developments. Development existing prior to the adoption of the employee housing regulations within the Teton County Land Development Regulations is exempt from the requirements. Proposed development and redevelopment have been used to calculate required employee housing.

**EMPLOYEE HOUSING**

The JHGTC has a history of providing housing for many of its employees. Jackson Hole Golf and Tennis Club, Inc. and VRDC recognize the value of providing comfortable quarters for their employees, as well as recreational activities and transit opportunities that entice them to return year after year.

**Required Employee Housing**

Based on the current proposal, the requirements for employee housing at the proposed Jackson Hole Golf and Tennis Club resort are:

**1. The Cabins – Employee Housing Requirements**

The cabins will not add to the employee housing requirement. As the cabins are available for short-term rental and are considered a commercial lodging component they might contribute to the employee housing requirement. However, each cabin will be owned as a fee-simple unit and may be used as a long-term residence. Therefore, the cabins will figure into the project affordable housing requirement, and as a result, in accord with County policy, will not also be a factor in calculating the employee housing requirement.

**2. Expansion of Existing Clubhouse Facility**

Proposed expansions to the existing clubhouse will result in an employee housing requirement. The requirement is calculated based on square footage of use (LDR Table 49640.A). Only new square footage enters into the employee housing requirement calculation, which is approximated as follows:

Land Use	Requirement	Proposed SF - Original SF	# Required
Retail and Office	0.42/1000sf	-165 SF	0
Restaurant	1.01/1000sf	+1617	1.63
Lockers and Event Room	.15/1000sf	+4948	0.75
<b>Total required</b>			<b>2.38</b>

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Without the credit, based on current approximations of square footage of each proposed element, the following would be the requirement for the new clubhouse facilities:

Land Use	Requirement	Clubhouse	# Required
Retail	0.42/1000sf	1,200sf	0.504
Restaurant	1.01/1000sf	6,975sf	7.045
Service	0.15/1000sf	5,850sf (fitness)	0.8775
Service	0.15/1000sf	2,500sf (events)	0.375
Office	0.03/1000sf	200sf	0.006
<b>Total required</b>			<b>8.808</b>

## Employee Housing Mitigation Plan

A townhouse-style development of three 3-bedroom employee housing units offering accommodations for up to 9 employees is proposed on-site in the vicinity of an existing employee housing unit and golf maintenance building. These units would be available on a long-term rental basis with first priority given to employees of JHGTC. This mitigation proposal would satisfy the requirement as calculated without using the existing square footage credit.

While this location is somewhat removed from the services available in Town, the convenience of daily access to employment 200 feet away outweighs the trips required to Town.

A final calculation of the employee housing requirement will be presented with the Final Development Plan application.

## AFFORDABLE HOUSING

This amendment to the Master Plan for PUD Resort application includes a request to change property within the PUD boundaries from Rural to Resort PUD. If approved, ~~43~~ 44 single-family lots will be located within the PUD.

In addition to ~~43~~ 44 single-family lots, ~~40~~ 43-cabin residences will provide both short and long term accommodations.

These two development types provide the basis for the affordable housing calculation. The county requires that at least 15% of the total number of occupants of a development be in affordable housing, and assumes that homes with 3 and 4 bedrooms will have 3 and 4 occupants respectively. This calculation assumes three people per residence and. The calculation presented below assumes four occupants per residence on a single-family lot and three occupants per cabin. The calculation does not attempt to make the argument that these properties will most likely be occupied, for the most part, by two people, that many of the single family lots will have only 3-bedroom homes and that some of the cabins may contain only 2-bedrooms.

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Based on the current LDR's, and assuming build out at the maximum proposed number of lots and cabins, the following affordable housing requirements will be imposed on this development:

Calculation for Table 49440.A

Unit Type	Person /Unit	Units Proposed	Total Persons
3-bedroom	3.0	87	261
Required Affordable Housing Percentage:			
Total Persons	Affordable Housing Percentage		Persons Housed
258	0.15		39.15 = 39

The total affordable housing requirement at project buildout would be equal to 39 persons. This plan proposes that all required affordable housing be constructed on-site within proposed Lot 51. Refer to details shown on the Proposed Master Site Plan included as Map 5 in the Appendix of this packet.

The current proposal consists of 17 two-bedroom units. Based on Teton County LDRs, 17 two-bedroom units will house 38.25 persons. The remaining .75 person requirement is proposed to be satisfied by a fee in lieu.

Calculation of Projected Number of Occupants and Market Units:

Unit Types	Assumed # of Occupants/ Unit	# Units Proposed	Total # Occupants
4-Bedroom	4.0	43	172
3-Bedroom	3.0	40	120
			Total = 292

As 15% of the total number of occupants projected for a development are required to be in affordable housing, the total number of market unit occupants represents 85% of the projected total number of occupants of the development. The total number of occupants, then, is calculated as follows:

$$\frac{292 \text{ Total \# Market Unit Occupants}}{0.85} = 343.53 \text{ Total Occupants}$$

And the number of occupants for whom affordable housing must be provided is calculated as follows:

$$343.53 \times 0.15 = 51.53 \text{ occupants}$$

Assuming the affordable units will each contain 2-bedrooms, (actual unit types and numbers will be determined at Final

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Development Plan) the number of units required to house the 51.53 occupants is calculated by using Table 49440A of the Land Development Regulations which assigns 2.25 occupants to a 2-bedroom residence. The calculation is as follows:

$$\begin{array}{r} 51.53 \text{ occupants} \\ 2.25 \text{ occupants/residence} \end{array} = 22.9 \text{ Units}$$

22, 2-bedroom town home units, each containing approximately 1200 S.F., are proposed all to be developed on-site. The fraction of a unit not accounted for is proposed for satisfaction by payment of a fee-in-lieu.

Preliminary details of the affordable housing site are shown on Map 5 in the appendix of this packet.

Illustrative sketches showing a preliminary floor plan and building elevations are found in the Special Exhibits Section of the Appendix of this packet.

In order to mitigate impacts on wildlife on lands adjoining the site at the time of platting of the affordable housing lot a Declaration of Restrictions will be recorded which will include language prohibiting dogs.

## EXACTION REQUIREMENTS

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The Teton County Land Development Regulations require a mandatory dedication of land for parks, playgrounds, schools and other public purposes for all divisions of land to serve the area in which the development is located.

The amount of land to be dedicated is 0.03 acres per housing unit or lot, including affordable housing.

Based on 43 single-family market lots, 40 cabins and 22 affordable housing units the required dedication is currently calculated as follows:

$$43 + 22 + 40 = 105 \text{ Total Units}$$

$$105 \text{ Total Units} \times 0.03 \text{ acres/unit} = 3.15 \text{ acres required}$$

As shown on Maps 5, 6A and 6B in the Appendix of this packet 2 lots comprising a total of 4.02 acres, (0.87 acres in excess of the requirement) are proposed as Exaction Lots. A 3.12 acre lot in the southwest corner of the development is proposed for recreational uses such as a park, pathway trail head, parking area for river access, a wildlife habitat enhancement area, or for other uses as determined by the County. The configuration of this parcel and the total acreage may be varied in the Final Development Plan to accommodate uses desired by the County. A 0.90-acre lot in the southeast corner of the project is proposed as a fire station site to be developed by the County.

A possible development scenario for the fire station site is shown on Map 5 in the Appendix of this packet. The final site design will be determined by the County.

Further, based on requests by the Teton County Engineer and the Road and Levee supervisor, Jackson Hole Golf and Tennis Club, Inc. has agreed to grant an additional right-of-way for Spring Gulch County Road, and a public access easement to the Gros Ventre River and BCM lands from the 3.12 acre exaction lot. Their additional grants impact approximately 3 and 7 acres, respectively.

## **DESIGN GUIDELINES**

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The purpose of these design guidelines is to provide a clear vision of the physical and visual character of the proposed JHGTC Resort. The goal of the applicant and owner is to develop a resort centered around improved golf facilities that coexists in harmony with the surrounding residential community. These guidelines will help to create a resort that is comparable in bulk and scale to surrounding land uses, sensitive to the natural and cultural resources of the region, and that has an identifiable image associated with Jackson Hole. These guidelines will govern the design and construction activities of professionals involved with the final resort plan and development.

Jackson Hole Golf and Tennis Club will be developed to serve a unique clientele during the winter, summer, and shoulder seasons. The center of the resort's activity spectrum will revolve around the 18-hole championship golf course. This will give the resort a distinct flavor with respect to the heritage and culture of the game of golf. In addition, it is the intent of the JHGTC to develop access to recreation opportunities indigenous to the valley. Even the architectural style was developed in response to the environment and available materials creating a simple collection of forms with a distinctly identifiable character.

These guidelines will provide direction for sensitive and responsible site planning, native planting design that responds to the specific requirements of the site, and a distinct architectural character that is both unique and contextual. Planning, landscape design, and architecture are treated as creative art forms meant to be as much an attitude and philosophy than as a mandate of fixed and hard rules or directives.

### **A. SITE PLANNING**

Successful site planning is the result of good design and land planning to integrate the built environment into the natural setting of a development. The key to successful site planning is to make sure that proposed structures and associated facilities don't impact or destroy the very resources that made the site worth selecting for development in the first place. To accomplish this, each site's resources must be identified and taken into consideration in the planning and design process.

Each development/site requires a site inventory and assessment map identifying its opportunities and constraints. Information on existing topography and all physiographic resources has been gathered and is shown on separate maps accompanying this application packet. The assessment, at minimum, has and will continue to take into consideration the following existing resources:

- Slope
- Soils

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- Existing Vegetation
- Groundwater
- Aquatic Resources
- Wildlife
- Solar exposure
- Prevailing winds
- Viewsheds

This inventory is being used to refine the parameters that will be used to finalize the development plan. Within these parameters, there is room for originality and creativity in the design and development of individual structures and their associated environments.

## **1. SITING/ORIENTATION**

Siting of individual buildings can play an important role in the overall visual impact of the resort development on the neighborhood and existing natural resources. It is imperative that all siting of proposed structures take into careful consideration existing wildlife, fauna, and drainage patterns. The following guidelines shall help determine individual location and orientation:

- To the greatest extent possible, buildings shall be oriented to provide protection and privacy from public areas, drop-offs, and parking lots.
- Buildings shall be located to minimize negative impacts on existing wildlife resources and the vegetative communities that support their habitats.
- Buildings shall be sited a safe distance from protected aquatic resources as defined by the Preliminary Wetland Delineation report. All development shall remain outside of proposed setbacks.
- Siting and orientation of buildings shall be designed to minimize visual impacts to existing residential developments and County rights-of way.
- Building location and orientation shall take full advantage of the region's majestic beauty, viewsheds, and visual resources.
- To the greatest extent possible, siting and orientation shall maximize solar exposure to entries, pedestrian use areas, and vehicular drop-off areas

It is imperative that all buildings and facilities be sited and oriented in relationship to the common open space, and pedestrian pathway system. All sites should provide a sense of privacy and seclusion.

## **2. ACCESS/ROADS**

No re-location of Spring Gulch Road is proposed with this Master Plan Amendment. Direct access to all but a few of the proposed residential lots, and a portion of the cabin clusters shall be from a single point of entry off Spring Gulch Road. The remaining

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cabins, clubhouse, Strutting Grouse restaurant, and all parking and service areas are accessed directly from Spring Gulch Road. All roads except Spring Gulch Road will be private according to County definition. The project roads shall be designed under the following guidelines:

- Road alignments and grades shall follow existing site topography and lie lightly on the land.
- Main access roads shall be a maximum of 22 feet wide for two-way traffic and a maximum of 11 feet wide for single-lane traffic.
- To maintain a small rural scale, access drives within the cabin neighborhood shall be ~~15 feet to 20 feet wide~~ be the minimum allowed by Fire codes, and Teton County Land Development Regulations. (For the Cabin area detail see Map 7a in the Appendix of this packet.)
- Alignments shall be curvilinear and winding to produce a park-like experience.
- Surfacing materials and colors shall be consistent with the overall design theme.
- All road grades shall minimize cut and fill, and be kept to a maximum of 8-percent slope.

### **3. PATHWAYS/WALKS**

The applicant and owner consider pathways essential to the planning of the development. The master site plan includes a pedestrian circulation system for residents and guests. This system is comprised of a series of walks, seating areas, trails, and bike paths separate from the golf car path. It will play an integral part in creating pedestrian connections between the single-family homesites, cabins, the clubhouse, tennis facilities, and the golf course. In addition, the pathway system would interconnect with the County's pathway corridor along Spring Gulch Road. The paths could also be utilized as a cross-country ski trail in the winter months. The following guidelines shall be used for the development of the pedestrian circulation system:

General:

- All walkways, paths, and trails shall be handicapped accessible to the fullest extent possible. Where site conditions make accessibility impossible, an alternate route shall be provided.
- Walkways shall be surfaced with indigenous materials consistent with the overall design theme.
- Wherever possible, paths shall be located and aligned to take full advantage of the scenic resources and grandeur of the site.
- Walkways shall meander to provide a park-like atmosphere. In addition, they shall provide a variety of environmental experiences to the pedestrian.
- All paths shall be located a safe distance from golf fairways, tees, greens, and the practice range.

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- Curb drops shall be located in the center of road crossings and shall be a natural extension of the walk.
- Paths will avoid proximity to private areas of the residences.

## **a) Walkways**

Walkways provide the transition zone from exterior to interior spaces. For the purpose of this plan, Walkways will be defined as paved surfaces that provide connection from parking areas and street to the building entries.

- Minimum widths for walkways are as follows:
  - 1) Clubhouse: 8'
  - 2) Cabin Clusters: 4'
- Surfacing materials shall be indigenous stone, concrete pavers, colored or scored concrete, and/or exposed aggregate concrete.
- All walkways shall be laid out in a manner to facilitate snow removal.
- All walkways shall be graded to a maximum of 5-percent slope and a minimum 0.05-percent slope.
- All buildings shall have a safe and continuous pedestrian walkway system servicing adjacent streets and parking areas.

## **b) Pathways/Trails**

Pedestrian trails provide the connection between the single-family homesites, cabin clusters, tennis courts, clubhouse facility, and golf holes. The following guidelines shall control the development of these paths:

- All paths shall have a minimum width of 30 inches.
- Adequate signage and low levels of lighting shall be provided for easy and safe passage from individual use areas.
- Surfacing materials shall provide a safe walking surface and shall consist of compacted soft surface materials.
- Maximum slope for all pathways is 8 percent, with a minimum slope of 0.05 percent.

## **4. GRADING (SLOPES, RETAINING WALLS)**

Some site grading will be used in order to soften the impact of the clubhouse and cabin clusters to neighboring residential communities. Natural looking landscape mounds may be used to visually screen the buildings and reduce the overall perceived height. The natural valley landform is fairly flat with gentle contours. Berms will emulate natural contours rather than appearing as buried Volkswagens. The use of landform as a design element will not only aid in screening the development from off-site users, but will also incorporate the structures into the golf course setting.

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In addition to simple contouring of slopes, it will be necessary to develop several retaining walls for privacy as well as changes in grade. These walls will be an integral part of the architectural theme and context of the resort.

The following general guidelines will direct the site grading at the Jackson Hole Golf and Tennis Club Resort:

- There shall be a smooth transition between all grade changes.
- Cut or fill slopes in excess of 2:1 and eight feet in height shall employ retaining walls to reduce impacts of grading.
- Cut and fill shall be kept to a minimum and balanced on-site.
- Retaining walls shall be an integrated part of the building structure, mound(s) and design theme of the resort. All walls shall be constructed of materials that visually match the color and design of architectural elements.
- Retaining walls shall not exceed eight feet in height before tiers are introduced.
- All grading shall be contained within the site boundaries.

## **B. LANDSCAPE DESIGN**

The primary goal of the landscape design at JHGTC Resort is to provide an aesthetically pleasing, park-like atmosphere for resort visitors and adjacent residential neighbors that responds to the character of Jackson Hole. Important to this concept are the use of native plant materials and an effort to blend the proposed planting with the existing landscape. Typical landscape archetypes include cottonwood and willow groupings along streams, irrigation ditches, sagebrush flats, aspen grooves, stone outcroppings, and spruce stands.

In addition to the native planting palette, it is necessary to integrate the resort landscape with the golf course. The JHGTC course is a unique synergy of man, his environment, and sport. From the well-manicured greens and hazards, to the pristine fairways, and hazardous roughs, the golf course is a special environment on which to play the game of golf. A resort developed within a golf course should take on the character of the course while respecting the natural environment of its surroundings. A distinct goal of the JHGTC Resort will be to integrate the magnificence and grandeur of the Teton Range with the subdued elegance of the course.

All proposed development within the JHGTC Resort will comply with the Teton County Land Development Regulations and meet or exceed all plant unit standards.

Design elements included within these regulations are:

1. Landscaping
2. Signage
3. Lighting

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## 4. Site Furnishings

### 1. LANDSCAPING

The landscaping at the JHGTC Resort will strive to integrate the proposed development with the existing golf course, adjacent subdivision, and the larger Jackson Hole regional landscape. In order to accomplish this, the following guidelines will direct the landscape plan:

- The resort landscape shall be developed to ensure integration between the recreational and residential use of the resort with the greater regional environment and character of the Teton Valley.
- Landscaping shall emphasize indigenous species, but also will use non-native species to minimize attraction to wildlife. All proposed plant materials shall be indigenous.
- Proposed plantings shall be spaced and arranged in a natural manner reflecting native plant groupings of the surrounding ecosystems.
- Proposed development shall take every precaution to protect and enhance and/or expand wildlife habitats. Existing old growth trees and plantings shall be preserved when possible.
- The resort landscaping shall produce a park-like atmosphere for the resort guest and visitor. Trail, planting, and seating areas shall take advantage of views to the surrounding mountains. A variety of experiential spaces shall be provided from open vistas to the covered canopy of an aspen grove.
- Proposed structures shall be screened from off-site users at an amount determined by use area, which is further explained in the following sections.

Several use areas are defined on the master plan and require individual screening levels. The proposed level of screening is to help mitigate visual impacts to off-site users along Spring Gulch Road and residential owners in adjacent subdivisions. Proposed screening percentages are determined when plant materials are in full leaf. The following guidelines shall be a benchmark for screening performance:

- Golf Clubhouse – the clubhouse and associated facilities at the JHGTC resort shall be screened a minimum of sixty (60) percent from Spring Gulch Road. A minimum screen of forty (40) percent will be required from residential properties in adjacent subdivisions within a period of five years.
- Cabins – each cabin shall be screened a minimum of forty (40) percent of the outside building surface area from all off-site users within a period of five years.
- Employee Housing – the employee housing complex shall be screened from Spring Gulch Road at a minimum of

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sixty (60) percent of the outside building surface area within a period of five years.

- Maintenance Yard - the maintenance yard shall be screened from Spring Gulch Road at a minimum of seventy-five (75) percent of the outside building surface area within a period of five years.
- Sewage Treatment Plant – the existing treatment plant, which will serve as an overflow tank, shall be screened from the Spring Gulch Road ROW and all adjacent residential properties at a minimum of eighty (80) percent of the outside building surface area within a period of five years.

## **2. SIGNAGE**

The purpose of the JHGTC signage program will be to help visitors safely and efficiently negotiate their way to all destination areas within the resort. In order to accomplish this, all signage will be direct, easy-to-read, and of limited size and lighting to accommodate the majority of users.

In addition, it is important that signage be designed to enhance the surrounding environment and update the overall resort image. To this end, proposed signage will be an integral part of the design theme for the resort. The design and quality of all materials, forms, and lighting will be updated to reflect the existing golf and tennis club facilities western regional spirit and be consistent in character with the proposed resort architecture. Future signage will be easily identifiable while being an integrated part of the site landscaping.

There are two categories of signage to be developed at the proposed JHGTC Resort. They are:

- Highway Signage
- Resort Signage

### **a) Highway Signage**

The signage program for the JHGTC Resort will include a single highway sign located at the junction of Highways 26, 89, and 197 and Sagebrush Drive. This sign will be in the same style and character of other signage for Grand Teton National Park destinations along this highway. It would be installed and manufactured under the guidelines for signage along this roadway segment as developed by the Park Service. The signage map illustrates the proposed sign locations.

### **b) Resort Signage**

The JHGTC resort signage program will include all signs necessary to safely and efficiently direct guest and visitors through the resort. All signs will be installed during the phased development of the resort. In addition, the existing signage program for the golf and tennis will be upgraded to match the proposed signage character and style. All proposed signage

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will be in accordance with the Teton County Land Development Regulations.

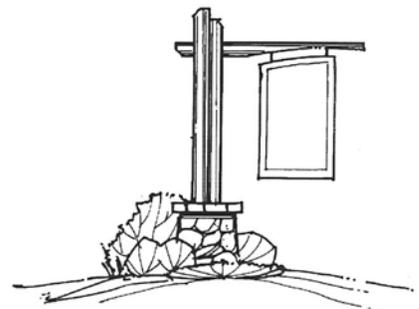
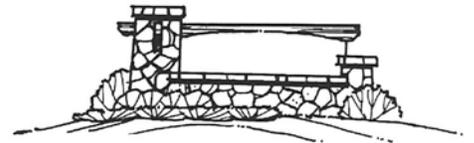
Sign types to be covered under the design guidelines are:

1. Golf and Tennis Club Identification – This sign may be located at the junction of Sagebrush Drive and Spring Gulch Road and is intended as a directional sign to the JHGTC complex.
2. Resort Identification – This sign may be located at the junction of Spring Gulch Road and the resort drive, and will serve as a visual entry to the resort.
3. Building or Use Identification – A sign to identify a specific use, area, and/or building (maintenance, service, etc.)
4. Vehicular Directional – A sign designed to direct or restrict vehicular traffic.
5. Pedestrian Directional – A sign designed to direct or restrict pedestrian traffic.
6. Regulatory – A sign designed in accordance with traffic laws to provide for the health, safety, and welfare of traffic operation.

The following general guidelines will direct the signage program at the JHGTC Resort:

- All signage shall be simple, clear, and concise in delivery of its message.
- Signs shall be located wherever necessary to ensure safety to pedestrian and vehicular circulation.
- Signs shall be located in a logical and easy-to-follow manner. Signs will be limited to the amount necessary to provide clarity without undue visual clutter and confusion.
- Illumination of signs shall be in conformance with Section 49370 of the Teton County Land Development Regulations. All exterior luminaries shall be consistent with the architectural style and character of the resort development, and Section 3, Lighting.

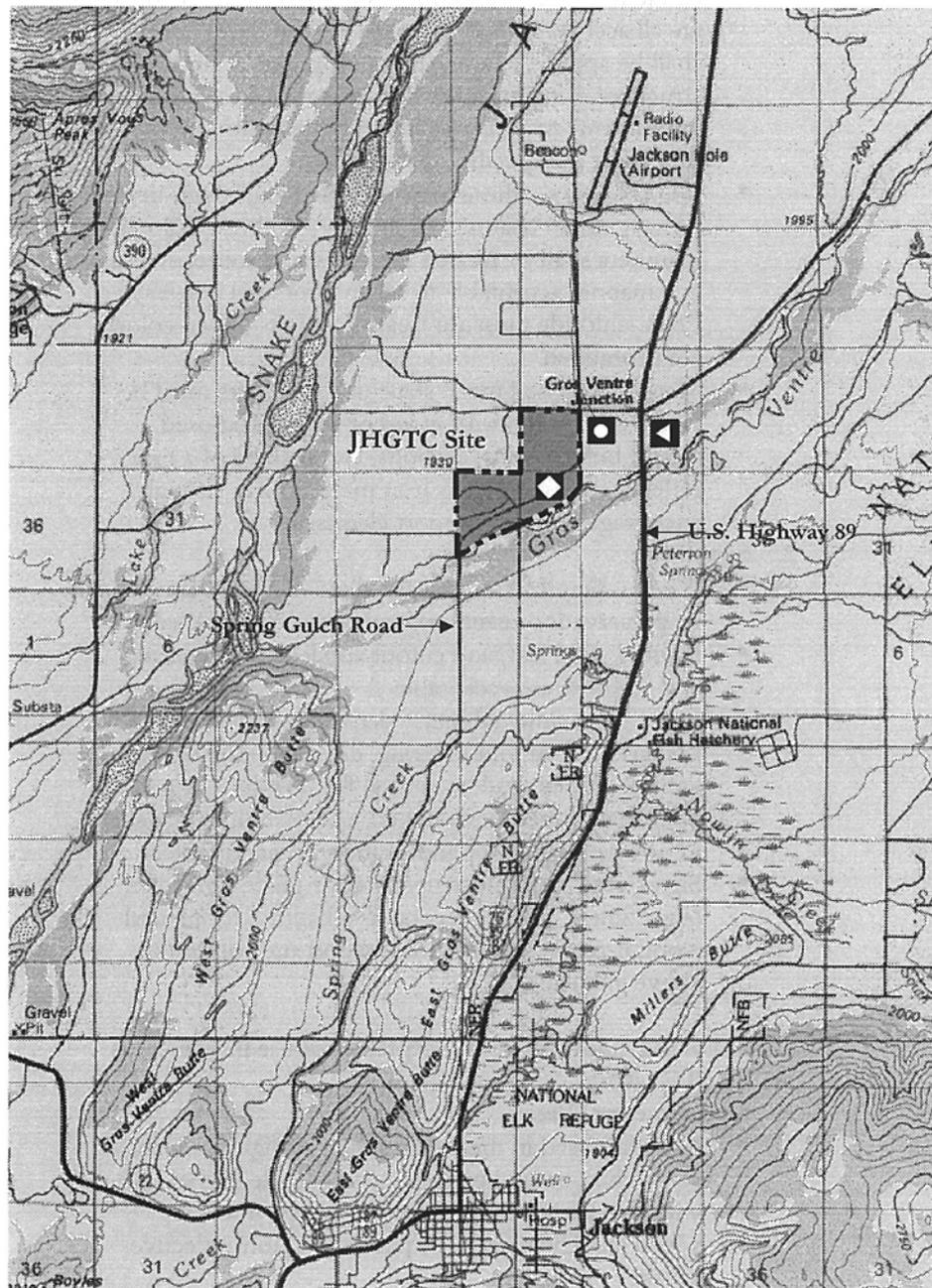
The following palette of materials and colors is provided to help direct the design character of proposed signage at the JHGTC resort. The use of native materials and subdued colors will help integrate the signage with the neighboring residential communities while reducing overall visual impact.



Sign Concepts for JHGTC

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## LEGEND

- ▣ Highway Signage
- ▣ JHGTC Identification
- ◊ Resort Identification

## JHGTC Resort Master Plan

Proposed Identification Signage  
Location Map

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1. Sign Structure/Base
  - Stone – All stone used for signage materials shall be indigenous rock quarried from local or regional extraction sites. Flagstone, ledgerstone, and boulders are all acceptable forms for use in sign bases. Stone shall be applied to appear as a mortared or drystack structural element rather than as a veneer. Monolithic monuments may also be incorporated into sign base if they meet the specific size regulations.
  - Log/Timbers – these may be peeled log, rough-hewn posts, glu-lam beams, and or heavy timbers. All wood members shall be treated for water and rot resistance in a manner acceptable to retain structural integrity. Penta-chloride pressure-treated timbers (green color) are prohibited.
  - Metal – Exposed metal structural members must be faced, or covered with wood or stone. Exposed straps, bolts, chains, eyebolts, etc. shall be of a non-reflective finish. Heavy iron metalwork is strongly encouraged as sign support elements.
2. Sign faces
  - Wood – Sandblasted or carved wooden sign faces shall be preserved to retain original character and quality.
  - Painted, gold leaf, and cutout applied vinyl lettering and graphics are acceptable.
  - Metal – Ornamental metal elements shall be allowed for raised or cut out lettering, detailing, and/or sign lighting. They shall be natural finishes such as patina, oiled, hammered, acid-etched, and cast. Finishes such as powder coating or anodization are acceptable.
  - Sign Foam – High-density exterior-grade sign foam (e.g. “Sintra”) is an acceptable substitute for natural wood if finished to resemble wood and within the above guidelines.



Building Sign

The following color palette is acceptable for use in signage at the JHGTC resort:

1. Sign Structure/Base
  - Materials used in the construction of sign bases shall retain their natural properties or a shade of that color with exception of metal straps, hinges, bolts, etc. which shall be painted or patina to a non-reflective finish.
  - All colors shall be consistent with the architectural color palette.
2. Sign faces
  - Painted and or applied colors shall be of the local color palette and considered subdued or natural in appearance. Fluorescent colors are unacceptable.
  - All colors shall be consistent with the architectural color palette.

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- Colors utilized for lettering on sign faces shall be in contrast with the sign face material.

### **3. LIGHTING**

For the purpose of this PUD Master Plan Amendment, lighting guidelines will focus on the type of lighting to be used and the quantity of light to be applied at specific use areas. Light is a vital part of vehicular and pedestrian circulation during the night hours and shall be included at such use areas as: parking, transit drop-off, service, pedestrian pathways, roads, and building entries. The intent of these guidelines is to provide the minimum amount of subdued lighting necessary to provide a safe and accessible resort complex.

General lighting guidelines are:

- Light fixtures shall be constructed of materials and colors consistent with the architectural character of the resort.
- Light fixtures shall be incorporated into architectural elements, sign bases, site walls, and adjacent structures whenever possible. Freestanding fixtures are discouraged except where located in transit zones and/or parking areas.
- Adequate lighting shall be provided at all parking and transit drop-off areas to ensure the safety of visitors and guests.
- Exterior lighting shall be subdued, downcast, and utilize a hidden light source.
- The light source shall be shielded and shall not be visible from adjacent dwellings, open spaces or roads.
- High-density flood lighting shall not be directed on building facades, architectural elements, or landscaping.
- Low-level landscape lighting is allowed where necessary to provide path and exterior space lighting.
- No internally lit signs shall be permitted.
- No neon lighting shall be permitted.

### **4. SITE FURNISHINGS**

The site furnishings are an indispensable part of the resort and should reflect that quality, character, and style of the overall development. Furnishings include, but are not limited to:

- Benches
- Tables and chairs
- Trash and ash receptacles
- Bicycle racks
- Light fixtures
- Bollards

These general guidelines will direct the selection of site furnishings for the resort:

- All site furnishing shall be in conformance with ADA guidelines and shall provide for the health, safety, and welfare of the resort guest.

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- Color, materials, and finishes shall be durable and consistent with the overall architectural character of the resort.
- Seating areas for guest and visitors shall be provided for rest at appropriate intervals along the pedestrian path system. These areas shall be sited a safe distance from the play of the course while taking advantage of the scenic qualities of the surrounding landscape.

## C. ARCHITECTURE

The intent of the architectural guidelines is to establish basic criteria derived from traditional western regional building forms. These criteria have been established from the basic elements of architecture, site interaction, scale, form and massing, materials, detail, and color.

The following general guidelines will direct the architecture at JHGTC:

### 1. CHARACTER

A primary goal of the architectural component at the JHGTC Resort is the harmony of the building with its region. The Rocky Mountain region has a flavor and design vernacular all its own. Derived from a response to need, environment and available material, traditional western building forms are unique in a special way. It would be inappropriate to import the style of another region or era. The architecture at the resort should respond to the rustic ranch character of Jackson Hole, the heritage of the National Park System, and the simple forms of a homesteader's house.

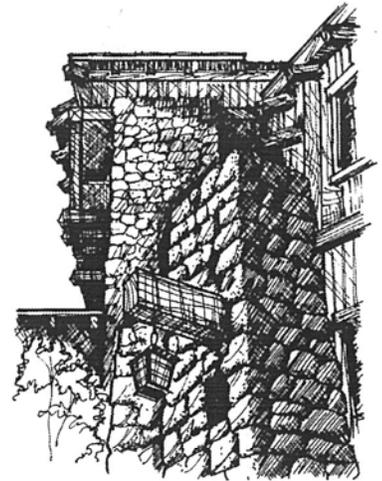
### 2. MATERIALS

The use of native materials contributes to the continuity and harmony of the development with its environment. Indigenous stone, wood, and extracted metals make an excellent palette. Typical to many western buildings, a stone base provides that apparent weight, mass, and strength of a structure. Wood is commonly used in the upper levels. Vertical siding, shingles, hewn log and milled lumber with chinking are encouraged. Timbers, and glu-lams provide the structure and should be exposed to provide detailing. Whole logs may be utilized as an accent. The use of spruce, pine, redwood, and cedar would be appropriate for the region.

### 3. COLOR

Color plays a large role in the integration of a structure with its environment. Strong color schemes can exaggerate the size of a building and draw undue attention. The buildings at the Resort shall be designed in accordance with the following standards:

- Paint may be utilized in subdued colors that match the medium colors and values of the surrounding environment, with brighter accents limited to window frames, trim and details.



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- Transparent stains or washes are encouraged on external wood fascia, siding, and trim, to allow the texture of the materials to read through.
- Natural or simulated patinas are to be incorporated on metal details, accents, and fasteners where appropriate.
- Large unbroken planes of a single color are to be avoided.
- Bold color schemes that conflict with the natural environment and setting are not to be used. The use of white is strongly discouraged.

## 4. MASS AND SCALE

The mass of a building refers to the overall perceived size and impact. Several architectural approaches help to minimize the mass of a building:



- Varying building heights breaks up the horizontal nature of a structure. Use of wrapping porches is strongly encouraged.
- Adding dormers, ridge vents, and varying roof pitches create detail and provide a more intimate scale.
- Recessed windows and textured materials help provide interest to a large wall.
- Blending the structure into the landscape and shaping the surrounding grade offset the size and height of a structure.
- Wall surfaces shall not exceed eighteen (18) feet in height or be longer than twenty-five (25) feet without interruption.

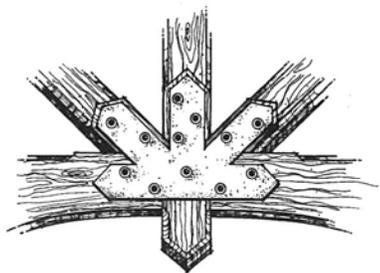
## 5. ROOFS

The roof form is visually the single most important element in creating the architectural character. Simple gable forms are the predominate elements of western vernacular architecture. The use of dormers, porches, and skirt roofs is encouraged to add vitality to the roof form. Roofs shall have pitches not less than 4:12 and not greater than 12:12 in slope. Roof overhangs of greater than three feet are encouraged to control heat gain from summer sun.



Covered porches and trellises help add to the character of western buildings while functionally creating spaces and weather screens for residences.

Roof material shall consist of cedar shakes, asphalt shingles and corrugated metal. Standing seam metal roofs are not allowed.



## 6. DETAILING

While the form and massing, roof shapes and wall compositions create the general character of a building; the lasting impression is derived from the detailing. The traditionally simple forms of ranch houses were given elegance by the detailing of window trims, fascia boards, and exposed structural elements. Openings within exterior walls should have trim to accent the composition. Roof fascias should be detailed by the use of two- or three-piece fascias, with cut reliefs to avoid large flat surfaces, or provided with exposed rafter tails. Expressing the structure of a roof, wall or porch through the introduction of beams, trusses, rafter tails and columns

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can break up blank surfaces. Careful attention should be paid to the proportions of each element to avoid under or over sized beams, or columns that are too thin.

## **D. IMPLEMENTATION MECHANISM**

The required implementation mechanism for development at JHGTC is the process defined by Teton County in the Land Development Regulations. After approval of the Planned Resort Master Plan Amendment, additional approvals including Subdivision, Final Development Plan, Subdivision Permit, and building permit approvals will be required prior to the commencement of construction and operation of any new land within the development. (For a Planned Resort a Master Plan approval is equivalent to a Sketch Plan approval.)

Final Development plan applications shall be in accordance with the Planned Resort Master Plan Amendment and approved pursuant to Land Development Regulations Section 51200 Development Plan. Final Development Plans will not be approved if a submission is inconsistent with the approved JHGTC PUD District for Planned Resort Master Plan.

Final Development Plans may include only a portion of the overall resort development if it is in accordance with the approved phasing plan contained in this submission. This will allow development to move forward at an accelerated pace while ensuring the County and adjacent lands that it will move forward in a logical sequence, including all amenities and necessary public service expansions.

As with the PUD for Resort Master Plan approval process, the implementation process will be a joint review process by the Town of Jackson and Teton County. The intent of the joint process is to provide opportunity for cooperation in planning and mitigation of potential impacts on neighboring jurisdictions. The Town Planning Commission's role in the approval of the JHGTC plans and permits is advisory only and does not include voting participation.

## **TRANSPORTATION ELEMENT**

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(See the Appendix for base calculations used in this report.) The purpose of this section is to address transportation impacts resulting from the development, and to identify the mitigating measures the project will employ to reduce the impacts of traffic generated by the proposal. The transportation element is comprised of two components:

1. Traffic Impact Analysis
2. Transportation Demand Management (TDM) Plan

### **A. TRAFFIC IMPACT ANALYSIS**

#### **1. Introduction**

The purpose of this study is to analyze the impacts of traffic generated by the current development proposal for the Jackson Hole Golf and Tennis Club (JHGTC) being made by Vail Resorts Development Company. In 1998, based on the development concept being proposed at that time, a traffic impact study was performed for the JHGTC by The Sear-Brown Group's Salt Lake City office. Since that study, the proposed development for JHGTC has been revised. In addition, the Spring Gulch Road and WY 22, a.k.a. SR 22, intersection has been signalized. This report updates the 1998 analysis based on the new development proposal and intersection conditions.

#### **2. Study Area Conditions**

Currently the JHGTC property consists of a 172-acre public golf course, a clubhouse, tennis courts, swimming pool, restaurant, condominiums, and maintenance area. Residential and rural areas surround the property. The three roads that provide access to the proposed development and other land parcels in the area are Spring Gulch Road, Sagebrush Drive, and US 89.

*Spring Gulch Road* is a gravel and paved two-lane road south of the Gros Ventre Bridge and a paved two-lane road north of the bridge. In July of 1996, the Wyoming Department of Transportation collected average daily trips (ADT's) on Spring Gulch Road as part of the current transportation master planning process. The ADT north of the resort was 1,813, and estimated to grow to 2,643 in 2020. ADT south of the resort and north of King's Highway was 1,245, and is estimated to grow to 1,360 in 2020. ADT south of King's Highway was 1,038, and is estimated to grow to 1,237 in 2020. Spring Gulch Road has intersections with SR 22 and Sagebrush Drive. Neither intersection is signalized. The Spring Gulch Road/Sagebrush Drive intersection is one lane in each direction. The Spring Gulch Road/SR 22 intersection is one lane in each direction except for a right turn lane on westbound SR 22.

*Sagebrush Drive* is a paved two-lane road with intersections at Spring Gulch Road and US 89. Only the segment between these two intersections is included in the study area. There are no turn lanes

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within this section. ADT's between the intersections were 3,011, and are estimated to grow to 6,938 ADT in 2020. Both intersections are stop-controlled.

*US Highway 89 (US 89)* is a paved two-lane north/south road connecting the town of Jackson and points north such as the airport and Grand Teton National Park. US Highway 89 intersects Sagebrush Drive at Gros Ventre Junction. ADT's just south of Gros Ventre Junction were 13,772, and are projected to be 26,764 in 2020. Right and left turn lanes are provided at Gros Ventre Junction for vehicles traveling both directions on US 89.

## **PROPOSED DEVELOPMENT**

### **1. Site Location**

The site location of the proposed JHGTC development remains within the boundaries of the development analyzed in the 1998 study. The proposed development will occur on the JHGTC property in Teton County, Wyoming. This land is located north and west of the Town of Jackson and is bounded by Sagebrush Drive to the north and Spring Gulch Road to the east. Sagebrush Drive is a private roadway, while Spring Gulch Road falls under the jurisdiction of Teton County, Wyoming (Road No. 22-4). There are three intersections within the study area; two are stop sign controlled and one is signalized. These intersections are:

- Sagebrush Drive & Spring Gulch Road – (stop sign)
- Sagebrush Drive & US Highway 89 (US 89) – (stop sign)
- Spring Gulch Road & State Road 22 (SR 22) – (signalized)

### **2. Land Use**

The proposed development consists of residential units, an office building, and a new clubhouse. The residential units will consist of single family homes, cabins, affordable housing, and employee housing. Included in the clubhouse will be a pro shop, lockers, a fitness room, a restaurant, an event room, and office space. As the existing facility is too small to house the current maintenance operations, the maintenance building will be increased from 4,000 square feet to a maximum of 12,000 square feet (total). A convenience node is being considered as an addition to the existing snack shop. The node would serve as a location where local residents could obtain local convenience items such as milk and bread, rather than traveling to Town for these basic needs. Conceptually, the node would consist of a maximum of 1,200 square feet with minor parking. The goal is to plan the node now, with its construction slated for sometime in the future. Because the timing of implementing the node is unknown, and it would reduce some trip making on the external roadway system, the node has not been included in this analysis.

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### **3. Existing Traffic Conditions**

This study uses the same existing conditions as the original study, with one exception. When the Sear-Brown study was performed the intersection of Spring Gulch Road and SR 22 was a stop sign controlled intersection with southbound traffic on Spring Gulch Road being the stop condition. The intersection was upgraded to traffic signal control by the Wyoming Department of Transportation (WYDOT) in 2001. A left turn lane has been added to accommodate left turns for eastbound traffic on SR 22. All other intersection geometrics remain unchanged.

In August of 1998 Sear-Brown collected AM and PM peak hour traffic volume counts at the three study intersections. Those volumes were used in this study as existing conditions, and are attached to this report.

### **4. Proposed Traffic Conditions**

The Sear-Brown study developed proposed background traffic volumes for the year 2020. These traffic volumes are an estimate of traffic increases for the study area that will occur by year 2020 without the proposed JHGTC development. As part of this study, we have reviewed the assumptions made to arrive at the 1998 projections, and believe they are appropriate for use in this study. By assuming these same projected volumes, the two studies will remain consistent.

### **5. Trip Generation**

The proposed JHGTC development will consist of residential units, an office building, a maintenance building expansion, and a new clubhouse for the golf course. The clubhouse will include a pro shop, fitness room, lockers, restaurant and snack bar, event room, and office space. The existing JHGTC clubhouse contains many of these same components. A trip generation estimate was conducted for both the existing and proposed clubhouses. The trips generated by the existing clubhouse were subtracted from the trips generated by the proposed clubhouse to determine the additional trips generated. The pro shop, lockers, restaurant, office space, and snack bar are all present in the existing operation. While they will be revamped for more efficient, upgraded use, their intensity of use is not anticipated to increase. Therefore, no additional trips were added for the golf course and these specific amenities, as they are already present in the background traffic. Trips were added for the event room and fitness room, which will be new uses, as discussed below. Trips associated with the maintenance building expansion are also already present, as the expansion will merely house existing maintenance equipment and not result in an increase of employees.

The trips generated by the proposed development were determined using *ITE Trip Generation, 6<sup>th</sup> Edition*, and by making some assumptions. The single-family housing was assumed to be single-family detached residences, and the cabins were assumed to be

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residential townhouses. The JHGTC maintains data on occupancy rates of the existing residences in Jackson Hole Golf & Tennis Club Estates. The proposed residences will be of a similar use. They are not expected to be year round residences, but they are expected to see full time use during the summer months. Their trip generation rates were based on persons residing in the development. The number of persons was estimated from existing conditions at Jackson Hole Golf & Tennis Club Estates. The average number of residents per home in the Estates is 2.16, and the maximum occupancy rate is 93% during June, July, and August. These factors were multiplied by the number of proposed units to get an estimate of the persons residing in the new development. The affordable and employee housing units were assumed to be full-time, year-round residences. Below is a table showing the trip generating land uses in this project and how they were classified.

**Table 1**  
**Proposed Development Land Uses**

Land Use	ITE Trip Generation, 6th Edition Land Use	Independent Variable	Independent Variable Value for JHGTC
43-44 Single Family Housing	(210) Single-Family Detached Housing	Persons*	86.89
40-43 Cabins	(230) Residential Condominium/Townhouse	Persons*	80.86
22-47 Affordable Housing	(230) Residential Condominium/Townhouse	Dwelling Unit	22.47
3 Employee Housing	(220) Apartment	Dwelling Unit	3
Administration Building	(710) General Office Building	1000 sf	3.00
Fitness Room	(493) Health/Health Club	1000 sf	2.08

\* Number of Persons was derived from the average residents per dwelling unit and the maximum occupancy rate of the existing Jackson Hole Golf & Tennis Club Estates.

Not included in the above table is the event room and maintenance building expansion. There is no appropriate land use in *ITE Trip Generation, 6th Edition* to correspond with the event room, and therefore the trip generation rate has been assumed. Because the maintenance building addition is being constructed to retrofit an inadequate facility, and will result in no additional employees, no additional traffic is being added.

The estimated trips generated by the event room were derived with a few assumptions. It was understood that the event room would be used primarily for weddings and other private gatherings. It was assumed that the event room would be used 3 to 4 days a week. Typically, these events occur in the afternoon, in the evening, or on weekends, and therefore would not coincide with the evening peak. The trips we have added for the event room during the peak hours are to account for people arriving and/or departing during the peak

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hour, and for employees and deliveries. The event space and the restaurant will share the same kitchen and restrooms.

Table 2, 3, and 4 show the trips generated by the residential component, the administration building, and the clubhouse respectively, of the proposed development. These trips are in addition to the trips already generated by the facility.

**TABLE 2  
PROPOSED TRIP GENERATION – RESIDENTIAL**

Land Use	Units	Units	AM Peak Hour		PM Peak Hour	
			Rate	Total Trips	Rate	Total Trips
Single Family Housing	Persons	86	0.21	18	0.28	24
Cabins	Persons	86	0.19	16	0.24	19
Affordable Housing	D.U.	22	0.44	10	0.54	12
Employee Housing	D.U.	3	0.51	2	0.62	2
<b>Total Residential Trips Generated</b>				<b>4544</b>		<b>57</b>

**TABLE 3  
PROPOSED TRIP GENERATION – ADMINISTRATION BUILDING**

Land Use	Units	Units	AM Peak Hour		PM Peak Hour	
			Rate	Total Trips	Rate	Total Trips
Administration Building	1000 sf	3	1.56	5	1.49	4
<b>Total Admin. Trips Generated</b>				<b>5</b>		<b>4</b>

**TABLE 4  
PROPOSED TRIP GENERATION – CLUBHOUSE**

Land Use	Units	Additional Units	AM Peak Hour		PM Peak Hour	
			Rate	Total Trips	Rate	Total Trips
Fitness Room	sf	1,220	0.3	1	4.3	5
Event Room	capacity	200	-	12	-	24
<b>ADDITIONAL TRIPS GENERATED</b>				<b>13</b>		<b>29</b>

## 6. Trip Distribution

All trips generated by the proposed development were distributed to the study area intersections. For each land use the ratio of trips entering the site versus trips exiting was taken from *ITE Trip Generation, 6<sup>th</sup> Edition*. For the event room a 50% / 50% split of trips entering and exiting the site was assumed. In the Sear-Brown study 70% of the traffic generated by proposed development was assigned to Spring Gulch Road north of JHGTC and 30% was

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assigned to the south. This study assumes this same 70% / 30% split. At the study intersections the existing traffic conditions were used to distribute the trips generated by the development.

## 7. Total Traffic

The generated and distributed proposed trips were added to the background traffic of the year 2020 to obtain a total projected traffic volume for each intersection, and are attached to this report.

## TRAFFIC ANALYSIS

Based on the trips generated by the proposed development, an analysis of the impacts of the additional traffic was performed on the study intersections. An operational analysis of the roadway segments was not performed as part of this analysis. This is because the trips generated by this development proposal in the a.m. and p.m. peak are less than that of the 1998 proposal. The 1998 Sear-Brown did evaluate the roadway segment LOS for Spring Gulch Road, Sagebrush Drive, US 89, and SR 22 based on their larger traffic generation, and determined that the incremental traffic increase caused by the 1998 proposal did not degrade the LOS on any of these segments beyond that of the background traffic.

Using Highway Capacity Software Version 3 (HCS-3) level of service (LOS) analysis was conducted for the three study area intersections during AM and PM peak hours under three conditions: 1998 traffic, 2020 background traffic, and 2020 total traffic. To maintain a consistency between the two reports, the 1998 traffic and the 2020 background traffic used in the Sear-Brown report were also used in this study. The total traffic is the projected generated trips added to the background trips.

The Sagebrush Drive intersections with Spring Gulch Road and US 89 are stop sign controlled intersections with Sagebrush Drive stopping at both. The LOS reported for these intersections are for the stop directions only, (westbound leg)/(eastbound leg). The Spring Gulch Road SR 22 intersection is a signalized intersection and the LOS reported for it ~~are~~ is given for the intersection as a whole. The tables below show the AM and ~~PM results~~ PM results of the LOS analysis.

**TABLE 5**  
**LEVEL OF SERVICE – AM**

Intersection	1998	2020	
	Background	Background	Background plus JHGTC
Sagebrush Drive & Spring Gulch Road	A/B	B/B	B/B
Sagebrush Drive & US 89	A/A	F/B	*/B
Spring Gulch Road & SR 22	A	F	F

\* LOS delay is greater than 999.9 seconds per vehicle

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**TABLE 6**  
**LEVEL OF SERVICE – PM**

Intersection	1998	2020	
	Background	Background	Background plus JHGTC
Sagebrush Drive & Spring Gulch Road	A/B	B/B	B/B
Sagebrush Drive & US 89	A/A	C/B	D/B
Spring Gulch Road & SR 22	A	*	*

\* LOS delay is greater than 999.9 seconds per vehicle

The results of the analysis show that under existing conditions the three intersections work well.

Background traffic in 2020 will slightly drop the level of service for the Sagebrush Drive and Spring Gulch Road intersection, but the intersection will still perform well. The Sagebrush Drive & US 89 will begin to see a noticeable decrease of LOS with only background traffic in 2020. The largest impact will be to the westbound leg of the intersection (Gros Ventre Road). A majority of the vehicles on this leg turn left (south) onto US 89 and the opposing traffic will make this movement more difficult than it is presently. In 2020 the background traffic will cause the failure of the Spring Gulch Road and WY 22 intersection. The projected traffic volumes will make it difficult to maintain a satisfactory level of service for this intersection given its current configuration. The low operational projections for these intersections are mostly attributable to the high traffic volumes anticipated on the state highway system (US 89 and WY 22) as opposed to the volumes anticipated on the Teton County Road network (Spring Gulch Road and Sagebrush Drive).

The total 2020 trips for the Sagebrush Drive and Spring Gulch Road intersection will have little effect on the LOS as compared to the 2020 background traffic. The addition of the proposed development traffic to the Sagebrush Drive / US 89 intersection will decrease the LOS for the stop legs of the intersection. In this scenario most of the conflict still comes from vehicles on the westbound leg turn left onto US 89. The introduction of the development traffic makes this movement more difficult. The addition of the proposed development traffic has little effect on the Spring Gulch Road / SR 22 intersection. The relatively few trips added by the development will not have a significant impact on the intersection which intersection, which will be failing due to background traffic alone.

## STUDY COMPARISON

The different compositions of the 1998 and 2002 proposed JHGTC development brought on the need for this study. The developments in the two studies were comprised of very different elements. This difference in development composition resulted in

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a difference in the trips generated, and therefore the impact on the study area intersections.

## 1. Trip Generation Comparison

The Sear-Brown study and this study used *ITE Trip Generation, 6<sup>th</sup> Generation* to develop an estimate for the trips to be generated by the development. The two studies are comparable. In the AM the 2020 proposed development produced 12 less estimated trips than the 1998 proposed development. In the PM the 2002 proposed development produced 21 more estimated trips than the 1998 proposed development.

## 2. LOS Comparison

The LOS analysis conducted for the 1998 Sear-Brown study used an older version of the Highway Capacity Software than was used for this study. In order to make an accurate comparison between the two studies, LOS analysis was conducted for the Sear-Brown 2020 total traffic using HCS-3. Since this study used the same traffic volumes as the Sear-Brown study for 1998 and 2020 Background conditions, LOS analysis was done using HCS-3 as part of this study. Furthermore, the 1998 and 2020 Background conditions for both studies are the same, so comparing LOS for these conditions isn't necessary. The table below shows how the LOS of the Sear-Brown study and this study compare for 2020 Total trips.

**TABLE 7**  
**LEVEL OF SERVICE COMPARISON**

<i>Intersection</i>	<i>AM</i>		<i>PM</i>	
	<i>1998 Study</i>	<i>2002 Study</i>	<i>1998 Study</i>	<i>2002 Study</i>
Sagebrush Drive & Spring Gulch Road	B/B	B/B	B/B	B/B
Sagebrush Drive & US 89	*/B	*/B	D/C	D/B
Spring Gulch Road & SR 22	F	F	*	*

\* LOS delay is greater than 999.9 seconds per vehicle

The estimated trips generated by the 1998 and 2002 proposed developments will have mostly the same effect on the study area intersections. The Sagebrush Drive and US 89 intersection performs slightly better in the PM with the 2002 proposed development.

## B. TRANSPORTATION DEMAND MANAGEMENT

In an effort to help minimize the traffic impacts of the development The Sear-Brown report presented some suggestions for a Transportation Demand Management (TDM) plan. We have reviewed the recommendations, and updated the TDM to reflect measures appropriate for the new development concept. TDM components are summarized below:

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1. Internal Capture: As a resort development, a certain amount of internal capture of trips will occur, which was not accounted for in the traffic analysis. The site includes amenities such as a golf course, tennis courts, and a restaurant, ~~as well as future considerations for a convenience node.~~ Some of the trips generated by the residential units will be to and from these amenities and will not reach the study intersections. The trail system will provide residents with the option of walking or biking to use the amenities, thereby reducing traffic impacts on the internal road system. An estimate for this internal capture could have a fairly wide range. Given the small traffic impact the development will have on the study intersections, pin-pointing a capture rate would not yield a significant increase in intersection LOS.
2. Employee Housing Program: On site housing will be provided for 9 employees, in addition to the duplex that currently houses the course manager and his family. The onsite housing reduces the number of trips required to commute to and from work.
3. Shuttle Service for Residents: As owner and operator of the Snake River Lodge and Spa at Teton Village, Snake River Lodge could employ a direct shuttle service between the JHGTC and Teton Village. This shuttle would provide transportation between these resorts for Teton Village visitors planning a round of golf at JHGTC, and residents of the JHGTC wanting to visit any of the amenities at Teton Village. The shuttle could also be scheduled for service to downtown Jackson.

The nature and location of the development provide some other trip mitigating considerations worth mentioning. The proximity to the airport allows trips to and from the airport to occur without going through the Town of Jackson. Located on Spring Gulch Road, the development has some redundancy in trip making routes. In other words, trips to destinations west and south of Town can be made via Spring Gulch Road, as opposed to traveling through downtown Jackson. Residents will have access to a T-1 line for higher speed internet access. This allows home offices to operate efficiently, as well as online shopping.

## **CONCLUSIONS**

The existing roadway network can accommodate the additional trips generated by the proposed development. Improvements to the roadway network may be needed to handle the 2020 background traffic. Such improvement would mean the proposed development would have lesser effect on the study intersections LOS.

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Effective TDM measures could help further reduce the traffic impacts that the development produces.

The estimated trips generated and their corresponding LOS are conservative. The trips were not reduced for internal capture, and the demographics of the potential residents were not taken into account. If the single-family homes and cabins are second and third homes for their owners, and they are used for vacation purposes, then their occupants will not tend to have the same travel patterns as full-time residents who live and work in the area. Vacationers will tend to travel during non-peak hours. The result would be a greater level of service (lower impacts on the road system) than is predicted.

## C. PARKING AND LOADING

Based on the development standards in the LDRs, parking requirements for "Resorts" are "in accordance with approved PUD District for Planned Resort." For the purpose of the Amended Master Plan for the JHGTC Resort PUD, the following assumptions have been used to calculate the parking demand and required number of spaces.

- All parking requirements are determined at full build-out of the resort.
- Parking requirement estimations are determined using the formulae provided in Section 4200, Table 4240, as follows.

Follows are preliminary calculations for required parking as JHGTC based on the above-referenced assumptions:

### Residential Uses

#### 1. Single Family Lot Requirements

2 spaces/dwelling unit	@	43.44 =	<u>86.88 stalls</u>
<b>Total Required</b>			<b>8688 stalls</b>

#### 2. Cabin Requirements

2 spaces/dwelling unit	@	40.43 =	<u>80.86 stalls</u>
<b>Total Required</b>			<b>8086 stalls</b>

#### 3. Employee Housing Requirements

2 space/dwelling unit	@	3 =	<u>6 stalls</u>
<b>Total Required</b>			<b>6 stalls</b>

#### 4. Affordable Housing Requirements

2.5 -spaces/ dwelling unit	@	=	<u>55 stalls</u>
<b>Total Required</b>			<b>55 stalls</b>

SUBTOTAL RESIDENTIAL USES		<u>227,480 STALLS TOTAL</u>
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### Golf Club Uses

#### 4.5. Clubhouse Requirements

1 space/employee	@	20 =	20 stalls
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1 space/3 seats in restaurant	@	66 =	22 stalls
1 space/2 seats in bars	@	20 =	10 stalls
1 space/20 sf assembly room	@	2,500 sf =	83 stalls
5 spaces/1,000 golf retail	@	1,200 sf =	6 stalls
<b>Total Required</b>			<b>141 stalls</b>
<b>5.6. Tennis Facility Requirements</b>			
2 spaces/court	@	4 =	8 stalls
<b>Total Required</b>			<b>8 stalls</b>
<b>6.7. Swimming Pool Requirements</b>			
1 space/employee	@	1 =	1 stalls
1 space/100 sf of pool	@	2,400 =	24 stalls
<b>Total Required</b>			<b>25 stalls</b>
<b>7.8. Golf Course and Driving Range Requirements</b>			
3 spaces/hole	@	18 =	54 stalls
1 space/10 linear feet of range	@	300 lf =	30 stalls
<b>Total Required</b>			<b>84 stalls</b>
<b>8.9. Maintenance Area Requirements</b>			
1 space/employee	@	20 =	20 stalls
1 space/1000 sf of shop space	@	10000 sf =	10 stalls
<b>Total Required</b>			<b>30 stalls</b>

**SUBTOTAL GOLF CLUB USES 288 STALLS TOTAL**

The total number of JHGTC parking stalls (residential plus golf club use) that would be required by a strict linear interpretation of LDR Section 4200 Table 4240 is 515,468. As currently illustrated on the Proposed Master Site Plan, all residential parking requirements will be met in accordance with the LDR's on each development site. It is proposed that the 288 parking spaces generated by separate calculations of the numerous uses at the JHGTC clubhouse and maintenance areas deliver an excessively high quantity of parking required for the proposed project. It is a fair assumption that a family may arrive in a single vehicle and visit several uses. In addition, the golfer who visits the pro shop, warms up on the driving range, plays 9 holes and then has a bite to eat in the grill should not be assumed to park for all of those uses. Accordingly, the resort proposes the demand will be met through existing parking areas in the following locations:

Main Parking at Clubhouse	=	<u>113,420</u> stalls
Pool and Tennis Parking	=	<u>39,30</u> stalls
<b>Total Existing Parking Spaces</b>	=	<b><u>152,450</u> stalls</b>

Additional parking is contemplated for employees in the vicinity of the existing maintenance building

Loading requirements for the development at JHGTC are calculated using Table 4280.A. of the county LDR's. Two loading berths are required for a commercial lodging facility with a gross square footage of 24,999 square feet. These berths are provided off the southeastern corner of the lodge, in the service area.

## **CAPITAL IMPROVEMENTS**

The County Land Development Regulations requires that a Master Plan for a Planned Resort contain a capital improvements element that ensures infrastructure and essential services will be provided in an efficient and timely manner to accommodate the projected resort demands. The element must identify service providers, take into account current demand, existing facilities, and the potential impacts of the proposed development, and provide a plan for facilities and services needed by the resort. The capital improvements plan presented here to serve the development that will occur under this Master Plan Amendment focuses on the following elements:

- Potable Water System
- Wastewater Collection and Treatment
- Utilities
- Stormwater Management Plan
- Roads and Pathways (See Transportation Element for Traffic Analysis)

Concept plans for the proposed improvements can be found in the Appendix of this packet as Maps 9A and B.

## **OPERATOR OF WATER AND SEWER SYSTEMS**

The Gros Ventre Utility Company (a subsidiary of Jackson Hole Golf and Tennis Club, Inc.) owns and operates the water and wastewater systems at the JHGTC. The operations budget comes from the general operating budget of the JHGTC. Maintenance staff for JHGTC also provide operation and maintenance for the water and wastewater systems of the Gros Ventre Utility Company.

### **A. POTABLE WATER SYSTEM**

The Gros Ventre Utility Company has provided and will continue to provide culinary and fire protection water service to the Jackson Hole Golf and Tennis Club, the Fairways Estates, the Golf and Tennis Estates, Teton Shadows Condominiums, and Golf Creek Ranches.

#### **Existing System**

Domestic water is presently supplied by two wells, each capable of pumping an estimated 375 gallons per minute (gpm) directly into the distribution system. The two constant-speed pumps are each powered by a 25-hp motor. Well No. 1 is located south of Spring Gulch Road, west of the superintendent's residence. Well No. 2 is located at the north end of the development, adjacent to the No. 3 green. On/off well operation is controlled by means of pressure switches (48psig-start/60psig-stop) mounted on the discharge pipes, and hydro-pneumatic tanks limit the frequency of pump starts. There are no other reservoirs or storage tanks. The wells presently operate without any type of disinfection. A 75 kW standby generator is located at each well.

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The distribution system consists of 4-, 6-, and 8-inch water lines of ductile iron, asbestos cement and PVC materials. The original distribution system was constructed to serve the Golf and Tennis Club and later was expanded to serve Golf Creek Ranches, Teton Shadows Condominiums, and Fairways Estates. Fire hydrants are located throughout these developments.

There is a separate irrigation supply and distribution system that provides irrigation water for both the golf course and most private residences within the Golf and Tennis Estates. The irrigation water originates from the Gros Ventre River via surface water supply ditches. A high-capacity well supplements the surface water supply.

## **Impact Analysis**

Peak water demand occurs during the summer months while the Country Club is in operation, occupancy is high, and irrigation demands are at a high. The peak demands are, however, less than what would typically be expected for a residential area like this due to the fact that irrigation water is supplied to most residences within the Golf and Tennis Club Estates (all except two according to the maintenance supervisor) through a separate irrigation system. The domestic system does provide irrigation water to several large lots within the Fairways Estates.

Based on ~~discussions with Teton County Fire Protection~~ Resolution the local Fire Marshall, the required fire demand for residential subdivisions with 30 or more lots at a density greater than one unit per three acres is 1,000 gpm for two hours. Fire demands for the proposed lodge remodel will be determined based on final building square footage and type of construction. Based upon similar structures recently completed in the area, discussions with the Fire Marshall anticipates that an automatic sprinkling system will be required (in accordance with building code requirements) at the lodge. This system will have a total fire demand of between ~~500~~ 300 and ~~700~~ 500 gpm for a minimum of one hour.

Water meters located at each well ~~site have been~~ are inoperable for sometime and have only recently been replaced; therefore ~~no~~ little historic well pumping or usage records are available. Consequently, demand estimates for both present and future needs are based on typical usage factors. Existing and proposed water demands and supplies are as follows:

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<b>Water System Demand</b>				
	<b>Ave. Day</b>	<b>Max. Day</b>	<b>Peak Inst.</b>	<b>Fire Flow</b>
	<b>gpd</b>	<b>gpd</b>	<b>gpm</b>	<b>gpd</b>
<b>Existing Demand</b>				
<b>Development</b>				
1997	41,000	90,000	255	--1000
Buildout	<del>72,000</del>	<del>197,000</del>	345	--1000
	<u>91,800</u>	<u>54,300</u>	<u>445</u>	
<b>Proposed Project Demand</b>				
Buildout	<del>33,000</del>	<del>93,000</del>	340	1,000
	<u>83,000</u>	<u>191,000</u>	<u>530</u>	
<b>Total Demand</b>				
Buildout	<del>115,000</del>	<del>290,000</del>	685	1,000
	<u>174,800</u>	<u>445,300</u>	<u>975</u>	
		(202 310 gpm)		
<b>Existing Firm Supply Capacity</b>				
Buildout	--	540,000(1)	375	--
<b>Proposed Firm Supply Capacity</b>				
Buildout	--	1,800,000(2)	1,250	--

(1) Existing - Total of two 375-gpm wells, with one well on standby.

(2) Proposed - Total of two ~~500~~ 650-gpm wells and two 375-gpm wells, with the largest well on standby.

Wyoming DEQ regulations require water systems without storage to be able to supply the peak instantaneous demand, or fire demand plus maximum day demand (whichever is greater), with the largest capacity well out of service. The two 375-gpm existing well pumps will do not be able to satisfy this requirement at present buildout projections.

### Proposed System Improvements

The following proposed system improvements will be funded and constructed by the Gros Ventre Utility Company, concurrently with the proposed project.

~~Two new 500-gpm wells will be constructed adjacent to the existing wells.~~ The two existing wells will be fitted with electronic variable frequency drives, that are coordinated by new controls that will operate the existing and proposed well functions. The initial pump tests performed when these wells were installed suggest that their production capacity can be increased. However, because each well was completed with perforations and open casing bottoms (that are more prone to introduce sand at higher pumping rates) the production capacities ~~should~~ will be maintained at their present rates.

The two ~~additional new 500~~ 650-gpm wells will be constructed adjacent to the existing wells. Well logs and pump test data from other high-capacity wells in the vicinity indicate that ~~500~~ 650-gpm wells can be constructed in this area with depths in the range of 100 to ~~500~~ 200 feet. The two 375-gpm wells and the two ~~500~~ 650-gpm wells will satisfy all system demands with ~~one~~ the largest well

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out of service. Flow meters with recorders will be installed at each well.

Due to their age (20+ years) and the fact that they are buried directly in the ground, the existing hydropneumatic tanks will be abandoned, and the two existing well pumps fitted with electronic variable frequency drives. These drives will allow the wells to operate without pressure tanks, pumping directly into the distribution system on the basis of actual demand while maintaining a constant system pressure. A small array of hydropneumatic tanks may be constructed, in addition to the 500-650-gpm wells, to provide storage during late evening/early morning low demand times.

All wells will be fitted to accommodate with chlorine solution disinfection systems, capable of disinfecting and maintaining a system residual. DEQ regulations require all public water systems to have disinfection facilities available. Disinfecting is not actually required at this time, unless bacteria are found within the system. Pending EPA Safe Drinking Water Act regulations will require all groundwater systems to provide disinfection in the future. Disinfection is a potential concern for Well No. 1, which takes water from a depth of only 50 feet. The fact that the system serves the public adds to the need for disinfection facilities. The distribution system will be looped and extended, as shown on the conceptual layout, to serve the proposed project. (See Maps 9A and 9B of the Appendix)

## **B. WASTEWATER COLLECTION AND TREATMENT**

The Gros Ventre Utility Company has provided and will continue to provide wastewater collection, treatment, and disposal service to the Jackson Hole Golf and Tennis Club. Wastewater collection is presently accomplished by a conventional gravity collection system consisting of 8-inch PVC pipe and concrete manholes, which conveys wastewater to a small onsite treatment plant. A lift station serves the Golf Creek Clusters. The collection system will be extended to serve the proposed project.

### **Existing System**

The existing wastewater treatment plant is located on the southeastern corner of the property. This plant serves the Golf and Tennis Club Estates, the Golf Creek Ranch Cluster units, the Teal Eye Lodge (employee housing), and the JHGTC facilities.

The existing treatment plant has a long history. ~~As best we can determine~~ The information obtained indicates, a the small package plant was originally constructed in the 1960's. In 1975, a lift station, polishing ~~ponds~~ tanks (in concrete tanks), and chlorination equipment was constructed. In 1981, the package plant was abandoned, a comminutor installed, the polishing tanks converted to aeration basins with floating aerators, and a clarifier, chlorine contact tank, standby generator, and laboratory building

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constructed. In 1986, the floating aerators were replaced with a diffused-air system, and a small building constructed to house the blowers. The plant discharges to the Gros Ventre River, a Class 2 stream, via a ditch about 1/4 mile long. The 1981 design drawings state the design capacity of the plant to be approximately 62,000 gallons per day (gpd).

## Impact Analysis

Wastewater influent flow records for 1999, 2000, and 2001 were evaluated. As would be expected, peak wastewater flows occur during July and August, when occupancy is highest and the JHGTC is in full operation. Per capita contributions were typical for this type of development, and it did not appear that infiltration was excessive. Based on the existing per capita contributions, buildout flow projections were prepared for the existing development and the proposed project. The flow projections and existing plant capacity are summarized as follows:

	Ave. Annual gpd	Max. Month gpd	Max. Day gpd
<b>Existing Flow</b>			
1999, 2000, 2001	18,000	32,000	50,000
Buildout	45,000	75,000	89,000
<b>Proposed Project Flow</b>			
Buildout	22,000	35,000	40,000
<b>Total Demand</b>			
Buildout	67,000	110,000	129,000
<b>Existing Capacity</b>	--	--	62,000
<b>Proposed Capacity</b>	--	--	300,000

Based on the flow projections, the existing treatment plant will not have sufficient capacity to handle the proposed project.

Additionally winter operation of the existing package plant is difficult because of the cold temperatures, and the low flow fluctuations experienced at the plant.

## Wastewater Treatment

The Gros Ventre Utility Company considered three alternatives that would provide the needed treatment capacity to serve the proposed project:

1. Construct New Package Treatment Plant on Existing Site.
2. Construct Pump Station and Pipeline to Town of Jackson Plant.
3. Upgrade the Existing Treatment Plant.

## Proposed Alternative

The Wyoming Department of Environmental Quality (DEQ) has made it clear that they prefer to have sewage treated centrally wherever possible. Small package wastewater treatment plants, similar to the existing plant at JHGTC, are difficult to operate and often neglected, leading to poorly treated effluent. In addition, Condition 5 placed on the original Master Plan Approval by the

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Board of County Commissioners on August 18, 1998 states "The sewer line connection to the Town of Jackson should be considered the preferred alternative as the means for treating wastewater at Golf and Tennis." ~~Therefore, after obtaining~~ The Gros Ventre Utility Company has obtained the requisite County, Town and private permits, agreements and easements, the Gros Ventre Utility Company has begun for construction of a the wastewater conveyance system that will send the wastewater from the JHGTC collection system to the Town of Jackson Wastewater Treatment Facility in South Park. However, commencement of construction has been delayed by a lawsuit filed by landowners along Spring Creek Gulch Road who object to Teton County charging for the use of the public right-of-way. JHGTC is ready to proceed with construction as soon as an agreement is reached.

The conveyance system will consist of a lift station at the site of the existing treatment facility, a sewage force main to pump the sewage across the Gros Ventre River and up to the bench near the Lucas Ranch. From there, the sewage will flow by gravity to the Spring Creek Sewer System. The Spring Creek Lift Station pumps the sewage into the Town of Jackson collection system. The alignment of the JHGTC lines will utilize the Spring Gulch Road right-of-way.

The conveyance system has built-in the capacity to accept wastewater from Teton Shadows condominiums. Currently Teton Shadows operates a similar wastewater treatment facility as exists at JHGTC. Teton Shadows has expressed an interest in connecting with JHGTC in the future. The pipe used at the Gros Ventre River crossings is specially designed for this application and additional monitoring equipment will be installed to detect problems should they occur.

## **C. CABLE AND GAS UTILITIES**

Underground power, telephone, and cable TV service is currently provided to the Golf and Tennis Club. Lower Valley Energy provides power, Qwest Communications the telephone service, and AT&T Broadband the cable television. These entities will continue to provide these services to the Golf and Tennis Club. All utility extensions will be underground. Utilities will be extended concurrently with the general infrastructure project, and costs paid by JHGTC.

According to LVE, the existing power distribution system within the Golf and Tennis Club was not sized to serve the additional loads of the proposed project. This system will need to be rebuilt in some areas to serve the project. The feeders are of adequate capacity.

## **D. STORMWATER MANAGEMENT**

The Teton County Land Development Regulations require that certain stormwater management standards be met. The regulations

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require that the flow rate and velocity of runoff leaving the site shall not exceed the predevelopment conditions. In addition, runoff shall not cause scour or erosion and onsite detention basins shall be provided to limit the rate of runoff.

The JHGTC site is relatively flat, sloping generally at about 1 percent to the southwest. The proposed impervious area is small compared to the total site area. Stormwater will be handled on-site. Stormwater facilities will most likely include detention ponds receiving runoff from the clubhouse, clubhouse parking areas, and expanded restaurant parking lot, and swales around the cabins and cabin parking areas. Runoff will not be discharged directly into any of the ditches leaving the site.

## **E. ROADS AND PATHWAYS**

There will be approximately 7800 feet of new roadway and driveways built for this project. The roads will be 20 feet wide in a 60-foot wide right-of-way. Portions of this road system would be classified as Major Local while the majority of the system will be classified as Minor Local. The right-of-way is also reserved as a general utility easement. There will be 6 new access points into Spring Gulch Road. Currently there are two access points proposed for the fire station. This allows the fire station to have a drive through configuration. One of these access points doubles as the road into the affordable housing development. The final decision regarding the second access to the fire station will rest with the County at the time they develop the site.

Discussions on safety at the sharp curve by the proposed fire station have brought to light several options for this area. Berms, large rocks, or guardrails may be used to discourage errant vehicles. A three way stop is also being considered as a way to control traffic movement and improve safety at the curve. The three way stop would require some work at the intersection and likely additional right-of-way from Grand Teton National Park to align the intersection properly.

As part of the development plan, JHGT will grant an additional 20' of right-of-way to Teton County, for the Spring Gulch County Road. The 20' will be on the south side of the existing right-of-way and will become the primary location for a pathway, to be constructed by the developer, that will be given to Teton County. The pathway will run from near Cattleman's Bridge to the Grand Teton National Park boundary. This pathway would be the first leg of an extensive Spring Gulch pathway system the County hopes to build in the future.

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## **PHASING**

The land development regulations state that a Master Plan for a PUD for planned resort shall include a Phasing Element that ensures that the all development takes place in a logical sequence including all resort amenities, infrastructure improvements, and necessary public service expansion. In addition, the phasing element should identify target timelines for the implementation of the TMD Plan and Housing Mitigation Plans.

The resort improvements at JHGTC will be constructed over a four year period with several plan elements separated into individual design, approval and construction sets. These individual elements are:

- Sewer Line Connection to the Town of Jackson Wastewater Treatment Plant and Construction of Requisite Lift Station
- Golf Course Improvements - which include construction of a new irrigation system, and improvements to, and possible realignments of Fairway No. 1 and the driving range
- Potable Water Service Upgrades - which include all upgrades proposed in the Capital Improvements Element of this master plan amendment, including installation of the main lines required to serve the single-family market lots, employee housing, affordable housing, clubhouse upgrade and cabin areas. In addition, all services to single-family lots will be installed concurrently. These improvements will meet the required instantaneous fire demand requirement.
- Sanitary Sewer Upgrades - which includes all upgrades proposed in the Capital Improvements Element not specifically associated with the construction of the main sewer line connection to the Town and associated lift station, including the installation of the main lines required to serve the single-family market lots, employee housing, affordable housing, clubhouse upgrade and cabin areas. In addition, all services to single-family lots will be installed concurrently.
- Wire Utility Upgrades - includes installation of main lines serving the development concurrent with sanitary sewer and water service upgrades
- TDM Plan
- Single-Family Market Lot Development - which includes the planning and approval process for the subdivision of lots and construction of access roads
- Clubhouse Development - which includes construction of a new clubhouse and associated parking, installation of landscaping, and the relocation of tennis courts
- Cabin Development - which includes the planning and approval process for townhouse lots, the subsequent construction of cabin units, construction of the access driveway network and parking, and installation of water, sewer, wire utility services, and landscaping

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- Affordable Housing – includes the planning and approval process for the subdivision of ~~22+/-17~~ on-site townhomes, the subsequent construction of the units, the required access drives and parking, and the installation of water, sewer, wire utility services, and landscaping
- Employee Housing - includes the construction of 3 on-site 3-bedroom units, and required access drives and parking, and installation of water, sewer, wire utility services, and landscaping
- Maintenance Building Addition
- Administration Building Construction
- ~~Convenience Node – may be developed when warranted by local market conditions~~

A proposed construction schedule time line follows.



## COMMUNITY SERVICE

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The PUD regulations define resorts as an integral part of the community through participating in civic initiatives and implementing community goals. Jackson Hole Golf and Tennis Club, Inc. respects this role and accepts its responsibilities. Several examples of community services identified in the regulation that the JHGTC currently provides are:

- Hosting Parks and Recreation Activities, including swimming, golf and Nordic skiing.
- Hosting local non-profit events, including free recreational activities and transportation.
- Reduced facility rates for community events and non-profit organizations at the events room and restaurant.
- Local appreciation and promotional reduction in activity fees.
- Activity fees that are affordable to the permanent population.

The goal of the JHGTC is to both enhance overall visitor experience to the Valley while contributing to the quality of life in the community. For over 35 years, our properties and facilities have been available for use by the local community. The current owner's commitment is to continue this tradition in the development of the JHGTC.

**- ENVIRONMENTAL ANALYSIS -  
JACKSON HOLE GOLF AND TENNIS CLUB,  
TETON COUNTY, WYOMING**

Prepared For

**Vail Resorts Development**

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**May 8, 2002**

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## EXECUTIVE SUMMARY

A revision of the 1997 Environmental Analysis (EA) of the Jackson Hole Golf and Tennis Club (JHGTC) property in Teton County, Wyoming was conducted in 2002. This EA revision confirms and updates environmental information collected on the JHGTC parcel between 1995 and 1998. It also broadens the scope and scale of the environmental analysis and assessment of potential impacts of proposed development and infrastructure modifications to comply with recently adopted changes to Teton County EA regulations.

The focus of the EA is on the possible adverse effects of proposed development on sensitive resources and wildlife "species of special concern" (SSCs), including threatened, endangered, and sensitive species. The parcel provides habitat to bald eagles, peregrine falcons, mule deer, moose, elk, great blue herons, river otters, and several raptor species. The property lies partially within the Teton County Natural Resource Overlay (NRO) and the presence of crucial moose winter-yearlong range on the tract is the principal factor for its inclusion in the NRO. Moose are primary users of southern riparian portions of the property during winter and rely on riparian vegetation found here for both food and cover. The parcel also represents non-crucial elk and mule deer habitat used during non-winter months, as well as an elk migration corridor. Recently collected information on autumn elk migration on and in the vicinity of the project area is included and discussed. Future development occurring on the property may have negative impacts on some of these wildlife species and their habitats. The degree to which these species will be affected is directly linked to the location of future development, the extent of ensuing vegetative impacts, and ultimately, how human behaviors affect wildlife distribution and use. Sensitivity to wildlife and their requirements while planning future development will help minimize detrimental effects.

The least valuable vegetative covertypes to SSCs on the property and, therefore, those most suitable for development are the non-mesic shrub-sagebrush (xeric) and non-mesic grassland (xeric) covertypes, and existing landscaped and disturbed areas associated with the golf course. Locating development within these covertypes will cause, in relative terms, the least impacts to these species. In contrast, the mesic deciduous forest-cottonwood and wetland covertypes, and open water, especially those located south of the Spring Gulch Road, represent the most important wildlife habitats on the parcel. The overstory, shrub, and herbaceous strata occurring within these covertypes provide excellent foraging opportunities and cover habitat for ungulates as well as other species. Development within these more important covertypes will result in more potential negative impacts to SSCs. Opportunities exist to reduce potential negative impacts to SSCs and their habitat if development occurs outside of or along the edges of these covertypes and incorporates replacement plantings at a density greater than losses.

Recommendations are provided which, to the maximum extent practicable, will reduce potential impacts while still allowing future additional development to occur on the tract. Employing some habitat mitigation and monitoring measures following development will go far to protect continued wildlife use of this parcel and its vicinity. Impacts resulting from increased human uses can be minimized through self-imposed spatial and temporal limitations of human activities when SSCs are most likely present. Minimizing human-caused disturbances to wintering wildlife, not inhibiting animal movements by erecting impassable fences, controlling pets, and not intentionally feeding wildlife are appropriate measures when building on or adjacent to important wildlife habitat. Depending on plant materials used, future landscaping efforts may intentionally or unintentionally increase the attractiveness of developed areas to moose and deer. Having these wild animals in frequent proximity to humans, although not ideal, will likely be difficult or impossible to prevent.

**- ENVIRONMENTAL ANALYSIS -**

**JACKSON HOLE GOLF AND TENNIS CLUB PROPERTY,  
TETON COUNTY, WYOMING**

**INTRODUCTION**

An environmental analysis (EA) of the 347-acre Jackson Hole Golf and Tennis Club (JHGTC) PUD Resort Master Plan was performed by Biota Research and Consulting, Inc. (Biota) in 2002. This EA was conducted at the request of Ms. Francesca Paolucci-Rice with Jorgensen and Associates in Jackson, Wyoming, agent for the JHGTC. Information provided in this EA is required by the Teton County Planning Department in an attempt to assess and minimize negative impacts to wildlife "species of special concern" resulting from future development proposed on the JHGTC property. This requirement is imposed because the parcel is located partially within the delineated Natural Resource Overlay (NRO).

The focus of the EA is on reporting existing baseline environmental conditions, assessing the possible adverse effects of future proposed development on sensitive wildlife species, and determining if feasible alternatives exist to minimize or avoid any adverse impacts. As part of this effort, previously defined NRO boundaries were examined and evaluated for accuracy. Recommendations are provided which, to the maximum extent practicable, will reduce potential impacts while still allowing future additional development to occur on the tract.

**BACKGROUND**

A preliminary environmental analysis of the JHGTC property was first performed by Biota in 1995 and a more comprehensive EA, including a wetland determination, was subsequently prepared in 1997. The EA reported here is a revision of this work and confirms and updates environmental information collected on the JHGTC property between 1995 and 1998. Cindy Riegel, Terrestrial Ecologist, and Leigh Baker, Field Biologist, performed recent site visits, in March, 2002. This EA broadens the scope and scale of the environmental analysis and assessment of potential impacts of proposed development and infrastructure modifications on the JHGTC property to comply with recently adopted changes to Teton County EA regulations.

**LOCATION, PHYSIOGRAPHY, AND SOILS**

The JHGTC property is located about 7 miles north of Jackson in Teton County, Wyoming (T42N R116W Section 27 & 34; Figs. 1, 2). Access to the property from the Town of Jackson is gained by traveling north on U.S. Highway 89 to the Gros Ventre Junction, then west and south about 1.0 mile on Spring Gulch Road. The JHGTC property is situated both north and south of Spring Gulch Road.

The parcel is located partially within the riparian zone of the Gros Ventre River and this river has had a major influence on the geology of the area. Terrain of the JHGTC property is relatively flat at an elevation around 6,340 feet. Soils on the parcel consist of Tineman gravelly loam, Tetonville gravelly loam, Charlos loam, and Tetonville-Riverwash complex within the Gros Ventre River channel (Young, 1982).

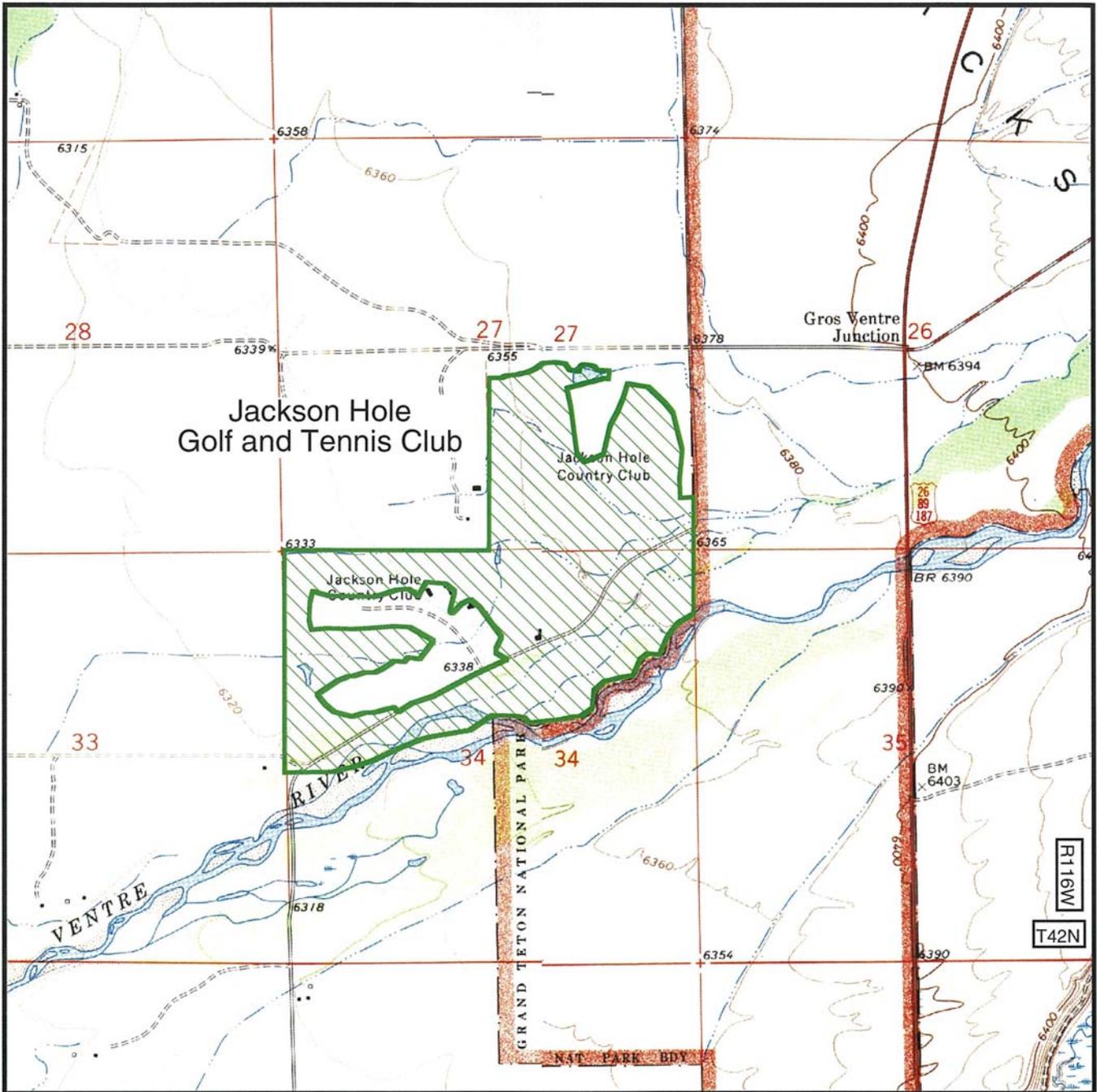


Figure 1. Location and topography of the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 2,000 feet

6th P.M., T42N, R116W  
 Section 27 SE/4, Section 34 N/2  
 USGS 7.5' Series Topographic Maps: Jackson, Wyoming Quadrangle

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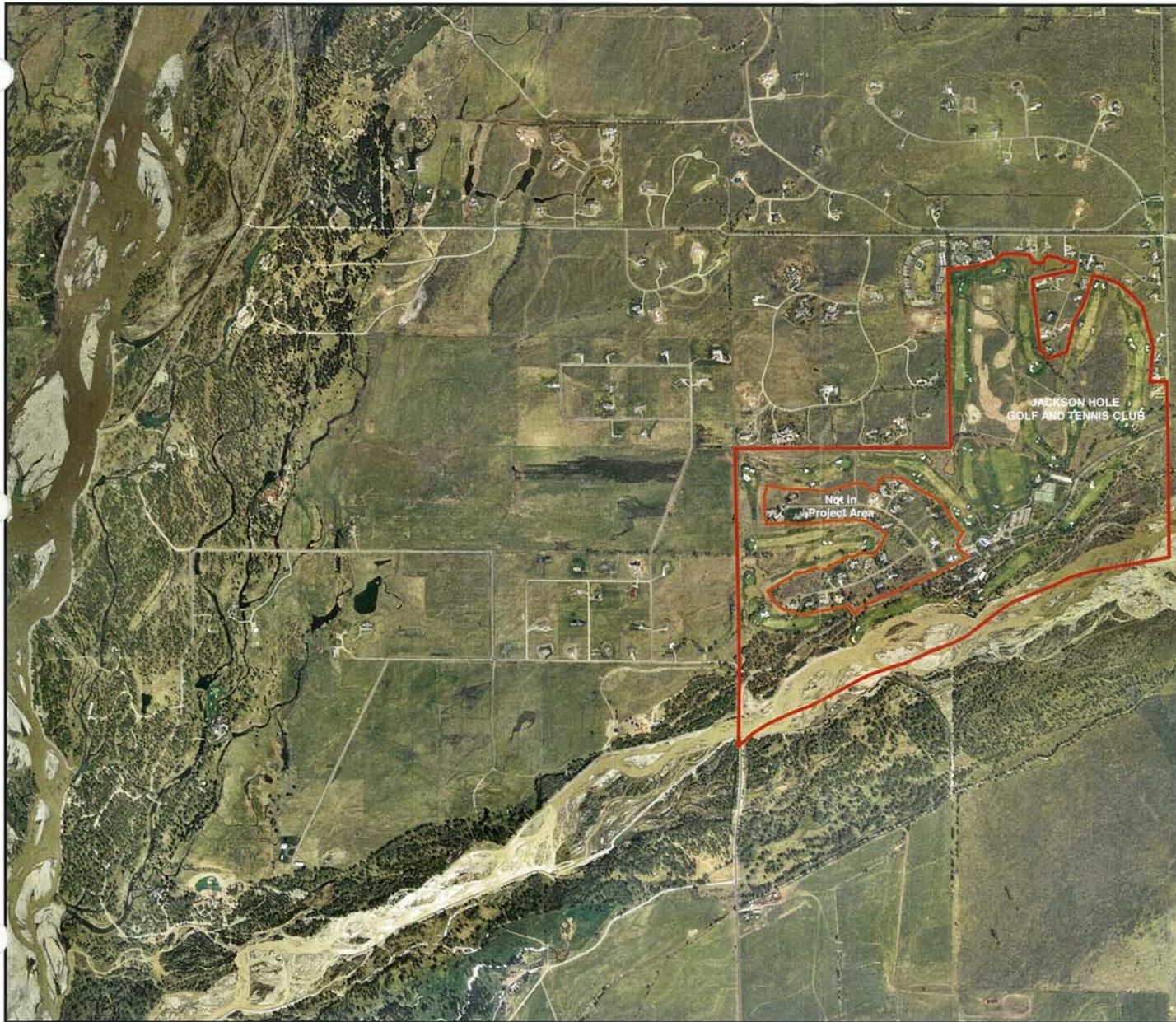
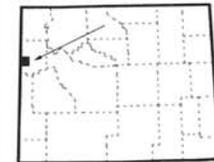


Figure 2. Aerial photography and existing development in the vicinity of the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Scale: 1" = 1,250'



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## EXISTING DEVELOPMENT

According to a previous owner of lands that include what is now the JHGTC property, the project area was historically vegetated primarily in a sagebrush-grassland community, except for the portion located within the Gros Ventre River floodplain (Robert May, pers. comm.). Evidence supporting this is still visible today on surrounding, non-irrigated parcels located east and north of the property on adjacent Grand Teton National Park (GTNP) lands. The sagebrush-grassland coevertype was historically the most common and widespread vegetative community on the valley floor in Jackson Hole until large pieces of private lands were converted to hay and pasture meadows. Beginning in the early 1950's, lands encompassing the JHGTC property were converted to agricultural meadows via plow, burning, and irrigation (Robert May, pers. comm.). Following subsequent development of the property as a golf course and residential area, manicured grass communities maintained by irrigation have replaced both sagebrush-grasslands and agricultural meadow coevertypes.

A substantial portion of land around the perimeter of and internal to the property has been previously developed for recreational and residential purposes (Fig. 3). A golf course, several tennis courts, a swimming pool, restaurant, golf pro shop complex, maintenance facility, and assorted appurtenant structures are now present on the parcel. In addition, considerable residential development can also be found within and in proximity to the property. Most development is located north of the Spring Gulch Road although 3 golf course holes, a small snack bar, the golf course maintenance facility, and superintendent's residence are located south of the road.

The majority of the JHGTC property is maintained as a golf course and is in a highly manicured state. Golf greens, tees, fairways, and roughs are vegetated in a domestic grass-dominated plant community and are present throughout the northern three-quarters of the project area. A remnant stand of sagebrush-grassland is still present in the area north of the Spring Gulch Road between Holes 6 and 8 and in the southeast corner east of the Hole 9 tee. Narrow linear stands of cottonwood and willow are present along the various irrigation ditches that pass through the property. Some disturbed areas are also present in the form of roads, cart paths, tennis courts, building complexes, and maintenance and equipment storage areas. These disturbed areas are either unvegetated or dominated by plant species typically associated with disturbed sites. Sagebrush-grasslands and stands of cottonwood riparian forest are present in the area south of the Spring Gulch Road, adjacent to the Gros Ventre River.

## ZONING

In 1997, in recognition of the importance of the major recreational activity provided by the golf course, the Board of County Commissioners approved an amendment to the text of the Land Development Regulations that included the JHGTC in those areas eligible for a Planned Unit Development (PUD) District as a Planned Resort. Following the text amendment, the Grand Teton Lodge Company prepared a Master Plan for the Resort, which was approved by the Board of County Commissioners in August of 1998. Within the previously approved Master Plan, several nodes within the golf course area were reserved for residential development of up to 21 single-family lots. To guarantee that development within the nodes would not become available for short-term rental or future commercial use, they were excluded from the Planned Resort and were considered for development under suburban zoning.

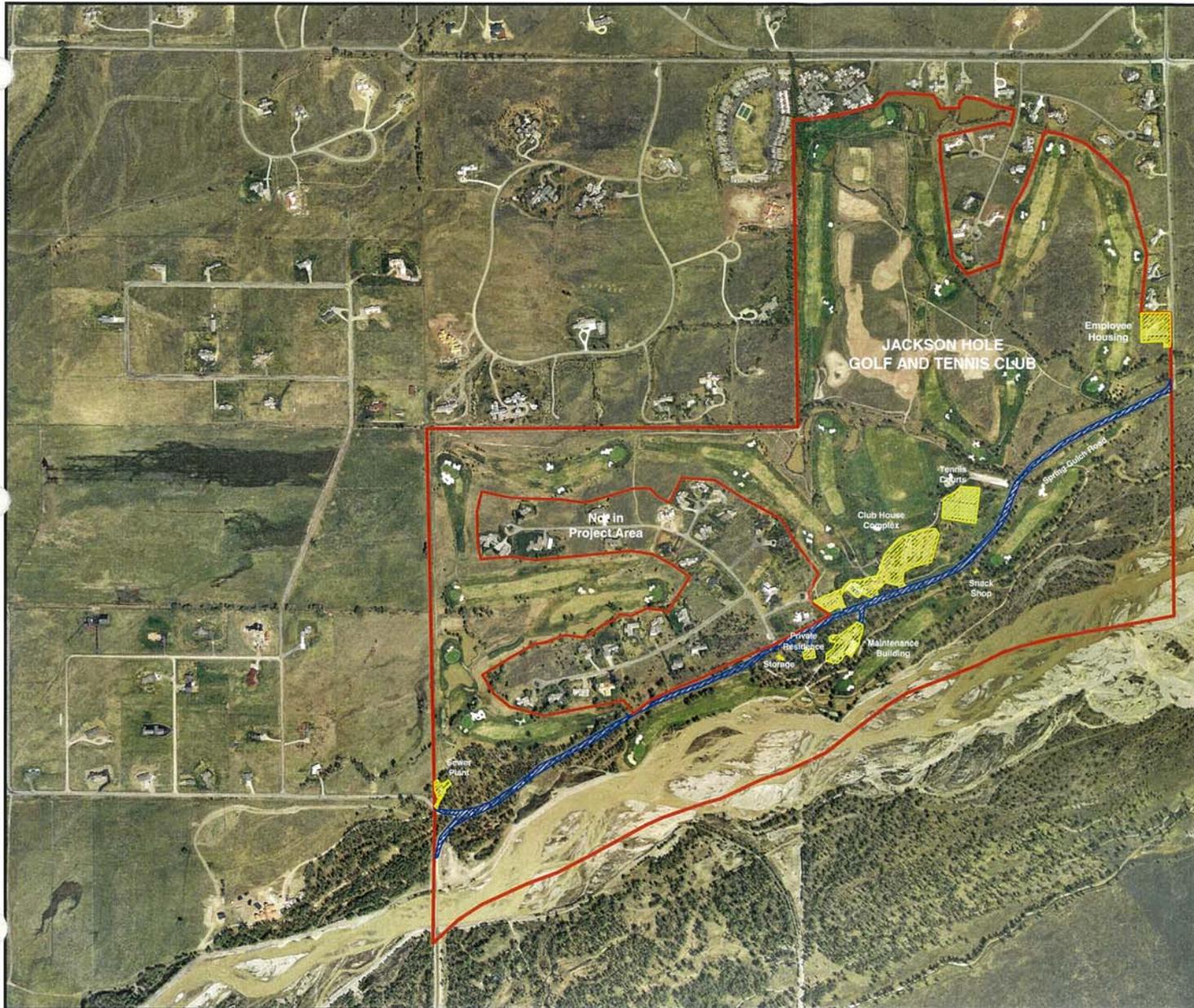
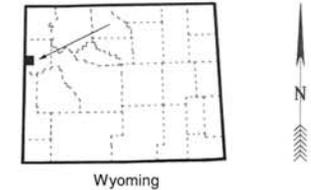


Figure 3. Existing development within the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Scale: 1" = 700'

**LEGEND**

-  Property Boundary
-  Buildings and Facilities
-  Paved Roads



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## NATURAL RESOURCE OVERLAY (NRO)

The original mapping of the NRO on the JHGTC parcel showed all lands south of the Spring Gulch Road and a portion of lands north of the road as being within the NRO (Fig.4). The presence of delineated crucial moose winter-yearlong range is the principal factor for its inclusion in the NRO. This broad mapping of crucial moose winter range on and in the vicinity of the JHGTC was based on maps provided to Biota by the Wyoming Game and Fish Department (WGFD) while working under contract with Teton County prior to and during the revision of the Comprehensive Master Plan in the early 1990's. The WGFD mapping and its associated lines depicting crucial wildlife habitats were subsequently used to define the original boundaries of the NRO.

Substantial effort was expended during previously completed environmental analyses to more accurately define the boundaries of the NRO on the property. The original WGFD mapping of crucial wildlife habitats used to define the NRO was provided at a scale of 1:100,000 and was subsequently revised to a 1:24,000 scale (USGS Quad Map) so that it could be more useful. This broad mapping was not intended to be "set in concrete" and relied on future site-specific environmental analyses to refine these lines. Information gathered and analyzed by Biota in 1997 and further refined with input from Teton County and WGFD resulted in the revised NRO boundary depicted in Figure 4 and Biota supports this revision.

## SURFACE HYDROLOGY

Surface hydrologic features found on the JHGTC property consist of the Gros Ventre River, its associated side channels, and several irrigation ditches and ponds (Fig. 5). The primary surface hydrological feature is the Gros Ventre River, a cobble-bed mountain stream that drains approximately 600 square miles of eastern Jackson Hole and the mountains farther east. The Gros Ventre River is steeply sloped (i.e., ~ 28 feet per mile) and, as a result, flows at high velocities even during low flows. It is also quite wide and heavily braided because geologic materials are of low erosion resistance and the river transports high bedloads of aggregate material during runoff. The Gros Ventre River also has a tendency to reform its channel bed annually through avulsion (i.e., sudden major channel shifts into minor channels) as opposed to progressive bank erosion and point bar creation associated with true meandering rivers. The numerous gravel bars found within the river channel have little or no vegetative cover as a result of annual flooding and erosion.

The section of the Gros Ventre River flowing through the JHGTC property has a history of becoming dewatered or nearly so on an annual or semi-annual basis as a result of upstream irrigation diversions and losses through an unconsolidated streambed. The southern property boundary is defined by the center thread of the main channel. Teton County has designated the Gros Ventre River a protected river resulting in the application of a 150-foot development setback from the levee within which no development may occur.

A variety of irrigation ditches flow through the property (Fig. 5). Ditches originate at various diversion points along the Gros Ventre River and flow seasonally during the irrigation season (May through September). The Cyclone Ditch enters the JHGTC through its eastern boundary and flows northwest through the parcel. The White and Gallagar ditches also enter the property along the eastern boundary but both flow westerly, roughly paralleling each other. The Buckskin Ditch flows through the southern portion of the parcel, just north of Spring Gulch Road. Several man-made ponds are found along these ditches and function as both aesthetic ponds and as

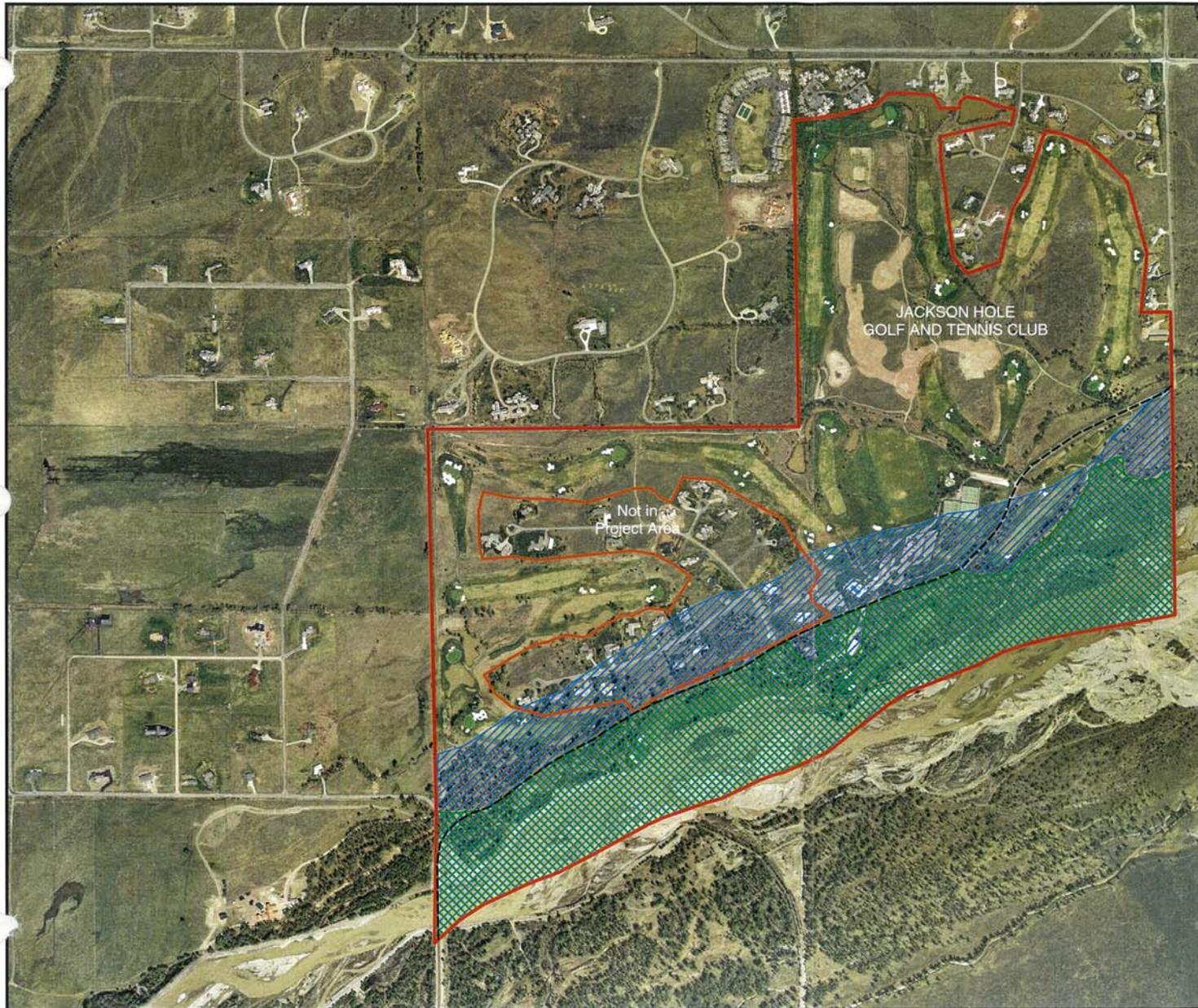
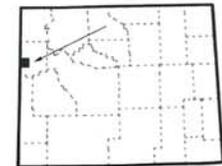


Figure 4. Original and revised Natural Resource Overlay (NRO) mapping on the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Scale: 1" = 700'

**LEGEND**

-  Original NRO
-  Revised NRO (1998)
-  Property Boundary
-  Spring Gulch Road



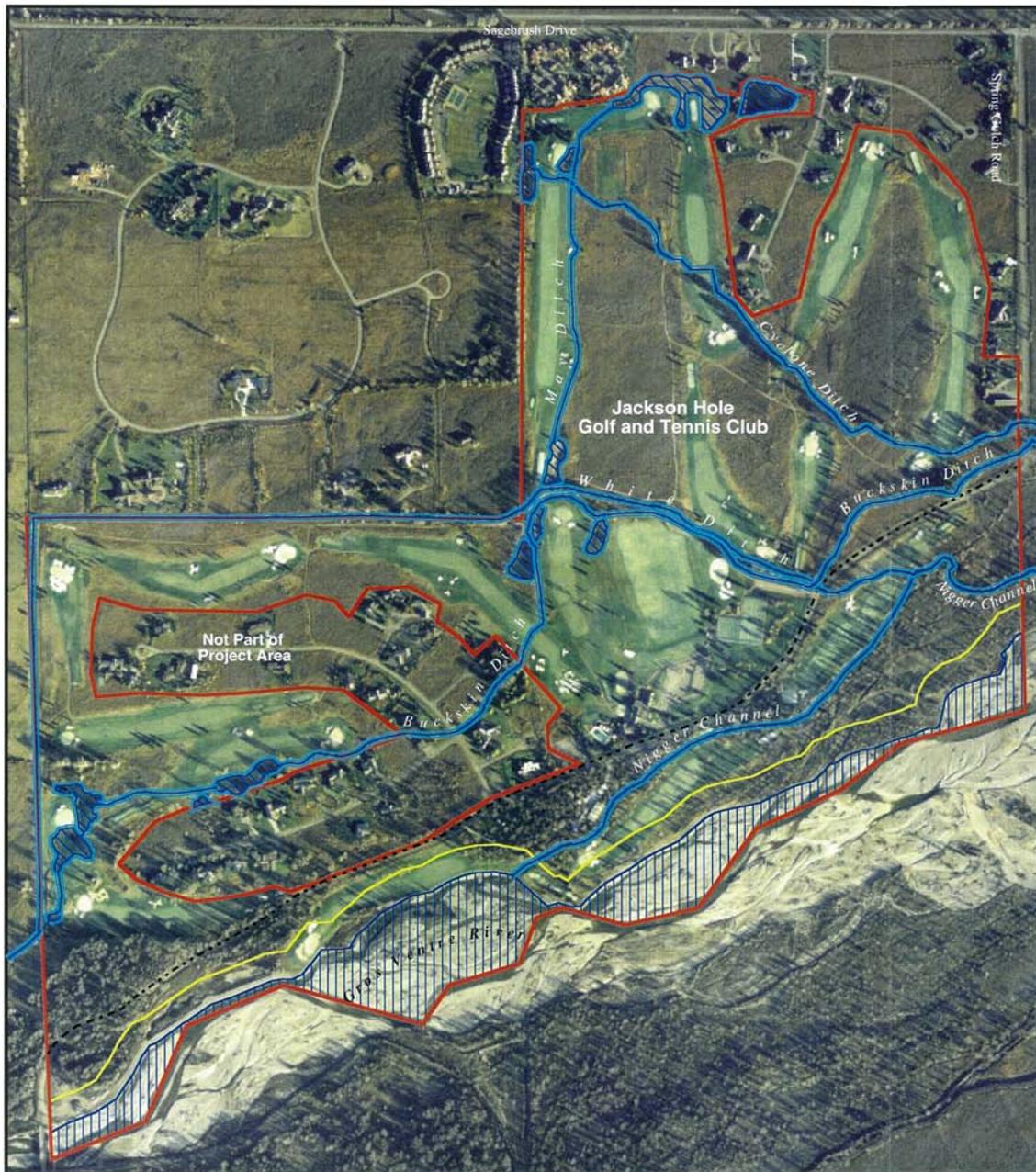
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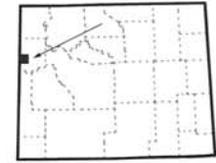
JHGTC Environmental Analysis

Figure 5. Surface hydrological features and associated setbacks on the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 625 feet

**LEGEND**

-  Property Boundary
-  Spring Gulch Road
-  Irrigation Ditch
-  Pond
-  150 ft Setback
-  Gros Ventre River
-  15 ft setback



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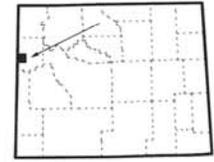
JHGTC Environmental Analysis

Figure 6. Approximate locations of wetlands and associated setbacks on the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 625 feet

**LEGEND**

-  Spring Gulch Road
-  Jurisdictional Wetlands
-  30 ft Setback
-  Jurisdictional Waters of the U.S.



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sources for golf course sprinkler irrigation. Teton County has assigned a 15-foot development setback from all man-made ponds and irrigation ditches.

## WETLANDS

Biota conducted a wetland delineation on the JHGTC property in the fall of 1997, which was subsequently verified by the U.S. Army Corps of Engineers (Corps). Approximately 45.23 ac of the property were determined to conform to the definitional criteria for wetlands as described in the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) or were open water features (Table 1). The Corps determined that 35.7 ac of these aquatic sites (2.36 acres as jurisdictional wetlands and 33.34 ac as “Waters of the U.S.”) were afforded protection under the federal Clean Water Act. The remaining 9.53 ac of aquatic resources on the property result from irrigation and ornamental landscaping activities and are not jurisdictional. Locations of jurisdictional and non-jurisdictional wetlands are depicted in Figure 6 as are the Teton County required 30-foot development setback from all jurisdiction wetlands. Wetland boundaries will be re-flagged and surveyed during the summer of 2002, prior to initiation of proposed development.

**Table 1.** Acreages of aquatic sites present on the Jackson Hole Golf and Tennis Club property, Teton County, Wyoming.

Aquatic Resource Type	Acreage
Wetlands	2.36
Open water (Waters of the U.S.)	<u>33.34</u>
Jurisdictional Aquatic Sites	35.70
Irrigation Ditches (may include fringe wetlands)	3.61
Ornamental Ponds (may include fringe wetlands)	<u>5.92</u>
Non-Jurisdictional Aquatic Sites	9.53
<b>Total Aquatic Resources</b>	<b>45.23</b>

Two wetland types (palustrine emergent and palustrine scrub-shrub) are present on the property. Palustrine emergent wetlands are characterized by erect, rooted, herbaceous hydrophytic plants, excluding mosses and lichens. Vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants such as sedges (*Carex spp.*), rushes (*Juncus spp.*), spikerush (*Eleocharis spp.*), cattails (*Typha spp.*) or various grasses. Emergent wetlands may exist in a variety of geomorphic settings and water regimes. Water regimes strongly influence plant species composition of emergent wetlands. During wetter climatic periods emergent wetlands may revert to open water habitats. Emergent wetlands have been assigned an ordinal ranking of 9 by Teton County.

Palustrine scrub-shrub wetlands are dominated by woody vegetation less than 20 feet tall. Plant species often include true shrubs, young trees and trees and shrubs that are stunted due to environmental conditions. Scrub-shrub wetlands may represent a seral stage leading to a forested wetland or they may be stable, self-perpetuating plant communities. Scrub-shrub wetlands in Jackson Hole are usually dominated by willows, but may also be dominated by alders (*Alnus spp.*), birches (*Betula spp.*) or other shrubs. Scrub-shrub wetlands exist in a variety of water regimes and geomorphic settings. As with other wetland types, water regime may have a strong influence over plant species composition of scrub-shrub wetlands. Scrub-shrub wetlands have been assigned an ordinal ranking of 9.

## VEGETATIVE COVERTYPES

Plant communities on the JHGTC property include a mix of mesic deciduous forest-cottonwood (mature, medium-aged, and immature), non-mesic shrub-sagebrush (xeric), non-mesic grasslands (xeric) and landscaped areas (Fig. 7). Disturbed areas and open water are also present on the parcel. Acreages, relative areas, and relative habitat values of each covertype are summarized in Table 2. Land use regulations (Jackson-Teton County 1994) ranked the relative values of habitats in the county by assigning each an ordinal value ranging from 0 (lowest value) to 10 (highest value). Criteria used by Teton County to determine relative habitat values were developed by Minta and Campbell (1991) and included wildlife species diversity and reliance, abundance and distribution of covertypes, and the degree of alteration associated with the covertypes.

**Table 2.** Habitat covertypes, acreages, percent occurrence, and relative rankings of covertypes found on the Jackson Hole Golf and Tennis Club property, Teton County, Wyoming.

Covertype	Acreage	Tract %	Ranking
Mesic Deciduous Forest-Mature Cottonwood	23.53	6.8	6
Mesic Deciduous Forest-Medium-aged Cottonwood	9.88	2.8	7
Mesic Deciduous Forest-Immature Cottonwood	1.91	0.6	8
Non-mesic Shrub-Sagebrush (xeric)	25.95	7.5	3
Non-mesic Grassland (xeric)	0.66	0.2	1
Open Water/River Channel	31.28	9.0	Not Ranked
Landscaped	230.59	66.2	Not Ranked
Disturbed	24.14	6.9	0
<b>Totals</b>	347.94	100.0	

### COTTONWOOD RIVERBOTTOM FOREST

Low elevation floodplains and drainages found in Jackson Hole are sometimes dominated by a riverbottom forest consisting predominantly of narrowleaf cottonwood trees. Understory dominants often include various species of willows, Douglas hawthorn, chokecherry, alders, red-osier dogwood, river birch, and Wood's rose. Also present are serviceberry, Oregon grape, common juniper, buffaloberry, silverberry, and currants. Grasses and forbs found growing within this habitat include Kentucky bluegrass, redtop, timothy, and stinging nettle. This community is typically located within the historic flood zone of river drainages such as the Snake River, but is sometimes found growing on upland sites away from natural drainages when sufficient water is present (either naturally occurring or human-caused) to allow cottonwoods to become established and survive. The cottonwood riverbottom forest often represents crucial moose winter range, especially when associated with riparian zones as is the case on the JHGTC property.

Mature Cottonwood Forest - Overstory vegetation in the mature cottonwood covertype variation is dominated by narrowleaf cottonwood trees that exceed 40 feet in height although a few medium-aged trees (20-40 feet in height) are intermixed. Understory dominants include several grass species, silverberry, willow, red-osier dogwood, and buffaloberry. The mature cottonwood covertype variation covers approximately 23.53 acres (6.8%) of the property. Teton County assigned mature mesic cottonwood covertypes an ordinal ranking of 6. This habitat value reflects the limited abundance of cottonwood habitats in Teton County, the declining trend of cottonwood stands due to flood control and stream dewatering for irrigation, their multi-storied growth form, the importance of cottonwoods to a vast array of vertebrates, and their important visual qualities.



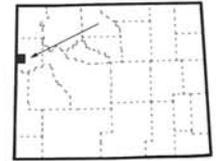
IHGTC Environmental Analysis

Figure 7. Vegetative covertypes within the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 625 feet

**LEGEND**

-  Mesic Deciduous Forest-Cottonwood (mature)
-  Mesic Deciduous Forest-Cottonwood (medium-aged)
-  Mesic Deciduous Forest-Cottonwood (immature)
-  Non-mesic Shrub-Sagebrush (xeric)
-  Non-mesic Grassland (xeric)
-  Open Water/River Channel
-  Disturbed
-  Landscaped-Golf Course
-  Property Boundary



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Medium-aged Cottonwood Forest - This covertype variation represents an intermediate stage of the mesic deciduous forest-cottonwood covertype. Plant species composition is similar to the mature cottonwood variation but the average height of the canopy is 20-40 feet. Medium-aged cottonwood stands make up 9.88 acres or 2.8% of the property. The medium-aged mesic cottonwood covertype has been assigned an ordinal habitat ranking of 7.

Immature Cottonwood Forest - The immature cottonwood covertype variation represents the earliest successional stage of the mesic deciduous forest-cottonwood covertype and is often present as a result of some sort of disturbance. The dominant cottonwoods are < 20 feet in height and willow and a few grass species can be found in the understory. Immature mesic cottonwood stands were assigned an ordinal ranking of 8. As with the mature variation this relatively high habitat value reflects the limited abundance of immature cottonwood stands in Teton County, the declining trend of these stands, and their importance to a vast array of vertebrates. The immature cottonwood covertype covers 1.91 acres or 0.6% of the parcel.

### **NON-MESIC SHRUB-SAGEBRUSH (XERIC)**

Prior to agricultural conversion and ultimately development as a golf resort, the JHGTC property was comprised mostly of sagebrush-dominated plant communities. This is evidenced by vegetative cover on surrounding lands occupying similar topographic positions and elevations. Sagebrush habitats are complex communities of 100+ plant species and provide habitat for a variety of animals. Sagebrush-grasslands typically have relatively high forage values for wild ungulates and for rodent species that are important prey to predators (Minta and Campbell 1991). Ordinal rankings assigned to the xeric shrub-sagebrush covertype is 3. The primary dominant shrub found in this covertype is big sagebrush (*Artemisia tridentata*). The non-mesic shrub-sagebrush covertype occupies about 25.95 acres (7.5%), occurs in the eastern portion of the parcel, and is the third most abundant vegetative covertype on the property.

### **NON-MESIC GRASSLAND (XERIC)**

Xeric grasslands are sites with a perennial grass and forb ground cover of less than 50%. Herbaceous growth is sparse and ground cover is incomplete and lacking in many places. Xeric grasslands are generally less important to wildlife species, although both deer and elk may seasonally graze these covertypes. One small area along the western boundary is vegetated with the non-mesic grassland covertype encompassing only about 0.66 acres (0.2%) of the property. The ordinal ranking assigned to the xeric grasslands covertype is 1.

### **LANDSCAPED-GOLF COURSE**

Areas on the JHGTC property where natural vegetation had been replaced by actively maintained cultivated plant and tree species are referred to as landscaped areas. Many such areas exist on the parcel in association with the golf course and residential and commercial structures. Generally, these areas are lawns with some areas of sparsely scattered mature cottonwoods. Ornamental ponds and watercourses that supply them, paved golf cart trails and maintenance roads are also present in these landscaped areas. Although this covertype does not represent important habitat to any SSCs due to its monotypic nature, elk and perhaps mule deer may use these areas for grazing and movement during non-winter months. Landscaped areas on the JHGTC are the most abundant covertype, comprising 230.59 acres or 66.2% of the property.

### **OPEN WATER/RIVER CHANNEL**

A total of 31.28 acres of open water (9% of the property) are present on the property, making it the second most abundant covertype. This area is comprised primarily of the active channels of the Gros Ventre River south of the flood control levee. Much of this channel is unvegetated due

to annual flooding and scouring but some small stands of cottonwood and willow and areas vegetated in herbaceous annuals are present along the levee. Other open water habitats are associated with several ornamental ponds found scattered around the parcel.

**DISTURBED**

Disturbed land, although not actually a covertime, comprises about 24.14 acres (6.9%) of the property and includes areas where natural vegetation has been destroyed or highly degraded. Disturbed lands are primarily associated with roads, irrigation ditches, and the flood control levee along the Gros Ventre River.

**WILDLIFE SPECIES OF SPECIAL CONCERN**

Natural vegetative communities found on the JHGTC property represent habitat for a variety of birds and mammals, some of which have been classified as Species of Special Concern (SSC) in the Jackson-Teton County Comprehensive Plan and Land Use Regulations (1994). In addition, neo-tropical migratory birds and amphibians are addressed in the section because they are considered sensitive species and are often used as ecological indicators by management agencies.

<u>Species name</u>	<u>Classification/Status</u>
Bald eagle	SSC/Threatened
Peregrine falcon	SSC
Trumpeter swan	SSC
Snake River cutthroat trout	SSC
River otter	SSC
Great Blue heron	SSC
Raptors (shrub-grassland & forest)	SSC
Mule deer	SSC
Moose	SSC
Elk	SSC
Neotropical migratory birds	Sensitive
Amphibians	Sensitive

**BALD EAGLE**

The bald eagle is presently listed as a threatened species under the Endangered Species Act (ESA). A proposal for “delisting” the bald eagle (removal from threatened and endangered species list) was issued on July 4, 1999. However, after a 1-year comment period, the U.S. Fish and Wildlife Service has postponed delisting indefinitely because of unresolved issues related to future protection, permitting, and politics. If delisting does occur, select bald eagle populations will be monitored for at least 5 years and individual eagles and nests will continue to have protection under the Bald Eagle and Golden Eagle Protection Act and Migratory Bird Treaty Act.

The riparian zones along the Snake and Gros Ventre Rivers represent potential foraging and nesting habitat for resident bald eagles. Two different bald eagle nest territories are located within 2.5 miles of the project area. The Gros Ventre nest territory has been occupied and productive for several years and is centered at the confluence of the Snake and Gros Ventre Rivers. The Bar-B-Bar nest territory is on the Bar-B-Bar Ranch and was first established in 1999. An adult bald eagle was observed perching in the project area in a cottonwood tree adjacent to the Gros Ventre River in March 2002.

Management recommendations for bald eagles proposed by the Greater Yellowstone Ecosystem Bald Eagle Working Team establish 3 zones based upon lineal distance from a bald eagle nest

(1996). Zone 1, called the occupied nesting zone, extends from 0-1/4 mile (0-400 m) from the nest; Zone 2, the primary use area, from 1/4-1/2 mile (400-800 m); and Zone 3, the entire home range, from 1/2 to 2.5 miles (800 m to 4 km).

The occupied nesting zone (Zone 1) is considered to be the most critical area for successful nesting and the need for protection of this area from human intrusion has been well documented. The proposed management recommendations for this zone are minimum to light levels of human activity, habitat alterations only for the enhancement of eagle habitat, no development that may increase human activity, no permanent development suitable for human occupancy, and no utility lines. Zone 2 bald eagle habitat represents the primary use area of a nesting eagle pair. Approximately 75% of the foraging and loafing activity of adult nesting eagles occurs within this zone during the nesting season and human activity and disturbance should be very limited within this zone to insure continued use by nesting eagles. Recommendations for Zone 3 bald eagle habitat include keeping human activity to moderate levels, insuring that the availability of prey is not degraded by development within the zone, and maintaining perch and snag trees as well as trees for visual screening from development. Although the JHGTC property does not lie within Zone 1 or Zone 2 eagle habitat, it is within in Zone 3 of 2 active bald eagle nests.

In addition to spring, summer, fall, and winter use by resident breeding and non-breeding bald eagles, migrant birds from northern latitudes spend much or all of the winter in this same area. The Wyoming Game and Fish Department (WGFD) has classified the Snake and Gros Ventre Rivers between Moose and the South Park Bridge as important reproductive and winter bald eagle habitat. The area in the vicinity of the JHGTC property, in particular channels of the Gros Ventre River to the south, represents real and potential year-round eagle habitat.

#### **PEREGRINE FALCON**

Peregrine falcons are not known to nest on or in the vicinity of the property but 2 pairs do nest within 15 miles. Fifteen miles is thought to be the maximum foraging distance for nesting peregrine falcons. Peregrines are known to use the Snake River riparian zones, wetlands, and tributaries for foraging and it is possible that falcons use the habitats found on this parcel for foraging, although any use is believed irregular.

#### **TRUMPETER SWAN**

The property does not occur within or contain any designated crucial winter/spring trumpeter swan habitat as mapped by the WGFD. Occasional swan use may occur in the vicinity of the parcel during the winter and spring when swans may exploit unfrozen channels of the Gros Ventre River but concentrated or consistent swan use has not been recorded. No records of swans nesting on or using the parcel have been found.

#### **SNAKE RIVER CUTTHROAT TROUT**

Snake River fine-spotted cutthroat trout are present in the section of the Gros Ventre River flowing through the property; no spawning habitat for the cutthroat trout has been documented on the parcel. The vast majority of cutthroat trout spawning in Jackson Hole is currently confined to several spring-fed tributaries flowing into the Snake River. The property does not represent important cutthroat trout spawning habitat.

#### **RIVER OTTER**

The Snake River has been identified as important river otter habitat (Rudd et al. 1986) but river sections between flood control levees do not typically represent good river otter habitat (COE 1989). Otters are undoubtedly present throughout lower sections of the Gros Ventre River but

sections containing levees, as is the case on the JHGTC property, are probably relatively unimportant in terms of otter habitat.

## **GREAT BLUE HERON**

Great blue herons are abundant in Jackson Hole and the vegetative cover types and aquatic features found on the parcel provide some foraging and nesting habitat for this species; no heron nesting on the property was observed. Herons are easily disturbed and usually will not tolerate human presence.

## **RAPTORS**

Three general groups of raptors are expected present on the study parcel including forest, shrub-grassland, and water-dependent species. It is likely that all raptor species listed below use the property in conjunction with adjacent areas but the extent of their use is unknown.

### **Forest Raptors**

Northern goshawks  
Cooper's hawks  
Sharp-shinned hawks  
Saw-whet owls  
Great gray owls

### **Shrub-grassland Raptors**

Red-tailed hawks  
Great horned owls  
American kestrels  
Northern harriers  
Swainson's hawks  
Prairie falcons

### **Water Dependent**

Ospreys

No evidence of any raptors presently or historically nesting on the property was discovered.

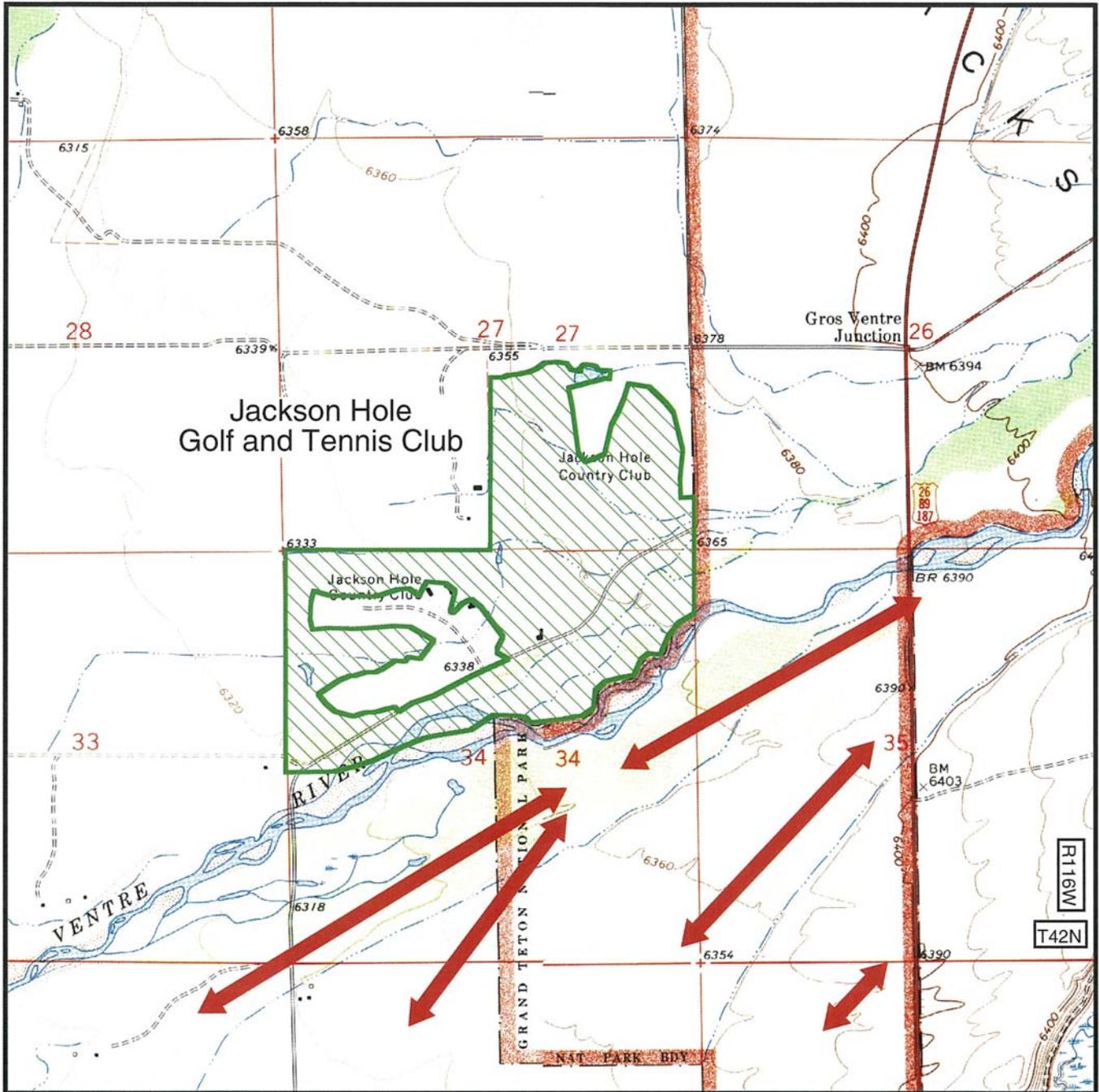
## **MULE DEER**

Jackson Hole provides year-round habitat for mule deer. Primary mule deer summer range is on mountain slopes surrounding the valley, but deer can also be found summering within the Snake River floodplain. Mule deer are expected to use the property and evidence of recent use was observed during field visits, including one observation of a doe and a fawn mule deer. The project area and its vicinity are classified as spring-summer-fall mule deer habitat. No mule deer winter range or migration routes are found on the tract, however a mule deer movement corridor is located south of the project area (Fig. 8).

## **MOOSE**

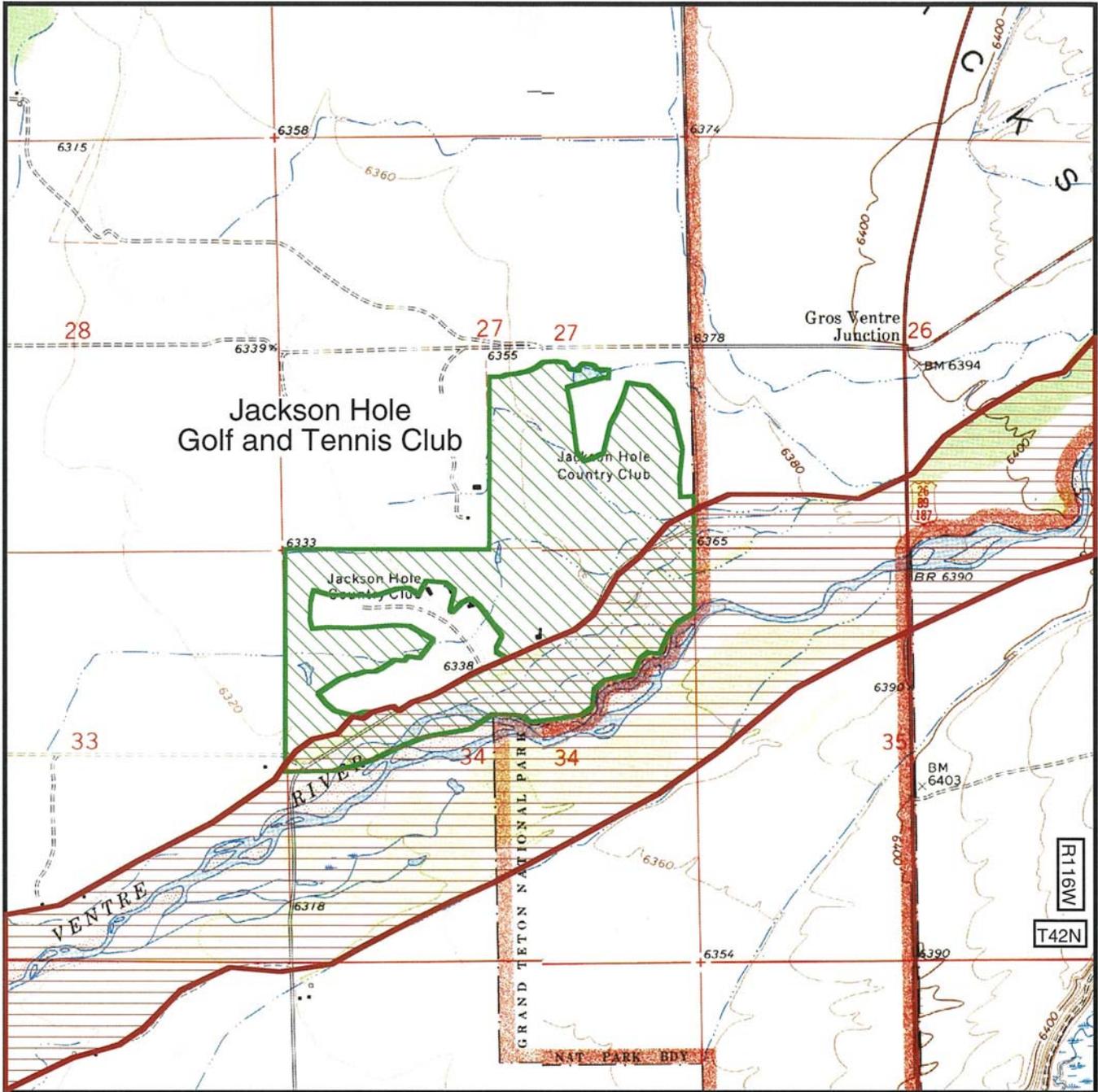
Much of the Gros Ventre River riparian zone, including the portion crossing the JHGTC property, has been classified as crucial moose winter-yearlong range by WGFD (Fig. 9). Crucial winter-yearlong range means that animals can be found in and around the property during anytime of the year but use is concentrated during the winter. These areas are believed vital to the survival of these animals during critical winter periods and are used by moose during 8 of every 10 winters (WGFD, pers. comm.). Animals will find food and/or cover here during the most inclement and difficult winter conditions due to the physiographic and vegetative characteristics (Minta and Campbell 1991).

Observational evidence, in the form of tracks, pellet groups, browsed vegetation (especially willows and red-osier dogwood shrubs), and bedding sites, show moose use is concentrated in the riparian zone associated with the Gros Ventre River but also occurs along ditches and in residential areas to a lesser degree. Cottonwood forest cover types found on the parcel provide the best available winter habitat for moose because animals can find both food and thermal and escape cover in cottonwood stands. Silverberry and willow growth along ditches also provide moose with food and some cover. Sagebrush communities that have an antelope bitterbrush component are also attractive to moose in the late fall and early spring, when snow cover is



↔ Mule Deer Movement Corridor

<p>Wyoming</p>	<p>Figure 8. Mule deer movement corridors in the vicinity of the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.</p> <p><i>Approximate Scale: 1 inch = 2,000 feet</i></p> <p>6th P.M., T42N, R116W          Section 27 SE/4, Section 34 N/2          USGS 7.5' Series Topographic Maps: Jackson, Wyoming Quadrangle</p>	<p>research &amp; consulting inc.</p> <p>P.O. Box 8578 • 211 East Broadway          Jackson, Wyoming 83002-8578          Phone: 307-733-4216 • Fax: 307-733-1245</p>
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 Crucial Moose Winter Range

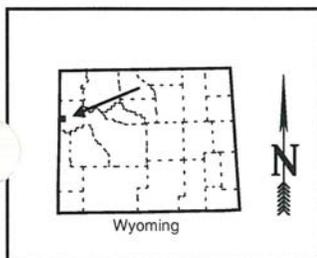


Figure 9. Crucial moose winter range on and in the vicinity of the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 2,000 feet

6th P.M., T42N, R116W  
 Section 27 SE/4, Section 34 N/2  
 USGS 7.5' Series Topographic Maps: Jackson, Wyoming Quadrangle



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minimal. Landscaping associated with residences also provides supplemental moose forage in the project area and vicinity. The proximity of the project area to the Gros Ventre River and GTNP make it especially attractive to moose; however, because of its small size, moose must use the JHGTC property in conjunction with adjacent and surrounding areas.

## **ELK**

The property does not contain any WGFD designated crucial elk habitat, but elk likely use the project area and vicinity as spring-summer-fall range and non-crucial winter-yearlong range. Scattered elk use of riparian lands along the Snake and Gros Ventre Rivers is known to occur and small amounts of elk sign (both recent and old) were observed in the project area south of the Spring Gulch Road within riparian and sagebrush communities. Although elk use this area primarily during non-winter months, some use may occur during the winter. Winter elk use appears closely linked to environmental conditions and probably occurs more consistently during late fall/early winter and early spring months or during winters with low snow accumulations.

Elk use the project area as a migration corridor and recent evidence collected by Wachob and Smith (2002, pers. comm.) suggests that as many as 300 elk migrate through JHGTC and vicinity while moving from summer ranges in GTNP to winter range on the National Elk Refuge (NER) and elsewhere. Historically, elk migrated through the JHGTC project area in "large numbers" as indicated by WGFD mapping (Fig. 10) but specific details on the actual number of elk using these routes is unknown. Although secondary migration routes were believed to have been abandoned in the vicinity of the JHGTC as a result of residential development, tracking studies during the fall migration seasons of 1999, 2000, and 2001 indicate otherwise (Wachob and Smith, 2002, pers. comm.; Fig.10).

Wachob and Smith (2002, pers. comm.) located, observed, and tracked elk moving from GTNP to the NER through private lands on the east side of the Snake River. Elk trails were followed and recorded using Global Positioning System (GPS) units accurate to within approximately 25 meters (Wachob, pers. comm.). Numbers of individuals following a given route were estimated through direct observations and/or track counts. Between 27 and 300 elk migrated through the JHGTC project area during the fall migration seasons of 1999, 2000, and 2001 (all 3 years that the study was conducted). The primary route taken by these elk follows Hole 17 from west to east with elk then crossing over Holes 18 and 1 in a southeasterly direction, continuing through the tennis court area, across Spring Gulch Road, and on to the Gros Ventre River riparian zone. Elk migration routes were also documented south of the project area along the Gros Ventre River and north of the project area through the Bar-B-Bar and Circle E-W developments (Wachob and Smith, 2002, pers. comm.).

## **NEOTROPICAL MIGRATORY BIRDS**

Neotropical migratory birds include raptors, passerines, and shorebirds that breed in North America, but migrate to Mexico, Central and South America for the winter. In Wyoming, 162 bird species are considered neotropical migrants (Cеровski et al. 2001) with peak migration periods occurring in May and September through early October. Nesting is typically initiated from mid-May to mid-June and potential nesting habitat includes shrublands, including sagebrush and linear shrub communities along watercourses and ditches as well as cottonwood stands. Neotropical migrants also likely nest in residential and landscaped areas associated with the golf course.

## **AMPHIBIANS**

Amphibians are considered by WGFD as bio-indicators of the health of an ecosystem. Artificial ponds and wetlands on the property could provide breeding habitat for several amphibian species that may forage or disperse in nearby upland habitat. These species include tiger salamanders,

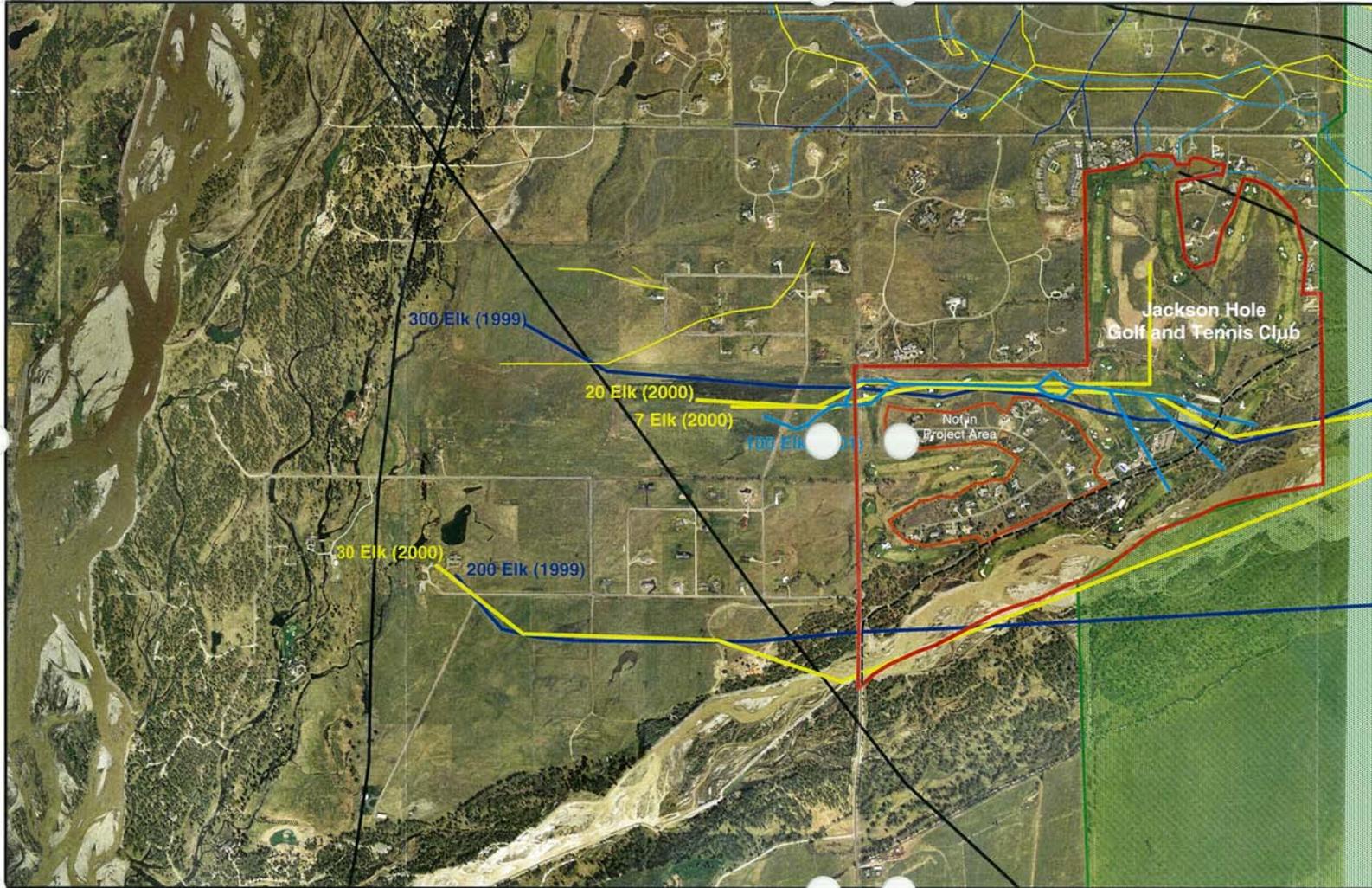


Figure 10. Elk migration corridors on and in the vicinity of the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.  
*(D. Wachob & B. Smith, unpub, 2002)*  
 Scale: 1" = 1,250'

**LEGEND**

- WGFD Data
- Wachob-Smith Data 1999
- Wachob-Smith Data 2000
- Wachob-Smith Data 2001
- GTNP Lands
- Property Boundary
- Spring Gulch Road

Wyoming

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western chorus frogs, boreal toads, and Columbia spotted frogs. Populations of these species have been observed along the Gros Ventre River and in adjacent GTNP.

## THREATENED AND ENDANGERED SPECIES

In addition to SSCs, recent changes to the Teton County's Land Development Regulations pertaining to the preparation of Environment Analyses (EAs) require that all animals and plants listed under the Endangered Species Act as threatened or endangered be analyzed in the EA. Below is a list of threatened and endangered species that have been documented in Teton County and could potentially occur within the project area. Although 4 listed plant species occur in Wyoming, 3 plants (i.e., Colorado butterfly plant, blowout penstemon, and desert yellowhead) have very specific habitat requirements and ranges outside of Teton County. The fourth listed plant, Ute ladies' tresses, also has not been documented in Teton County but is discussed below because of its occurrence along the South Fork of the Snake River in Idaho.

<u>Species name</u>	<u>Classification/Status</u>
Bald eagle	Threatened
Grizzly bear	Threatened
Gray wolf	Experimental/Non-essential
Canada lynx	Threatened
Whooping crane	Experimental/Non-essential
Ute Ladies' Tresses	Threatened

### BALD EAGLE

See above Species of Special Concern Section.

### GRIZZLY BEAR

The core population of grizzly bears in the region is centered in Yellowstone National Park (YNP). Although grizzly bears could travel along the Snake River from YNP and GTNP, habitat within and in the vicinity of the project areas lacks substantial wild berries, whitebark pine trees, calving ungulates, significant numbers of spawning fish, and other preferred bear foods, making it unsuitable for grizzly bear occupation. Denning conditions are also unfavorable due to the lack of high elevation conifer forests and avalanche terrain.

### GRAY WOLF

Two packs of gray wolves (10 individuals total) have established territories that include portions of Teton County, Wyoming. They primarily use public lands associated with the Gros Ventre River drainage including the Bridger-Teton National Forest (BTNF), NER, and GTNP (M. Jimenez, USFWS, pers. comm.). No records of gray wolves using the project area or immediate surroundings were discovered. Although there is a chance that a dispersing wolf could move through the JHGTC property, they are not expected to establish home ranges that include the project area.

### CANADA LYNX

Canada lynx are not expected to utilize the project area or vicinity primarily because the distribution of this species is closely tied to that of snowshoe hare and optimal foraging habitat for snowshoe hares consists of subalpine coniferous forests with extensive understory growth (Ruediger et al. 2000). Since lynx have large home ranges and can travel great distances, there is a chance, though minor, that a Canada lynx would use the Gros Ventre River, in the vicinity of JHGTC as a movement corridor.

## **WHOOPING CRANE**

Historic records indicate that whooping cranes used portions of western Wyoming (R. Drewien 1989). A cross-fostering program at Gray's Lake, Idaho has resulted in a few whooping cranes summering (April-October) in the Greater Yellowstone Area since the mid-1970s. These introduced cranes are part of an Experimental/Non-essential population. Although suitable habitat (wetlands, upland deciduous and coniferous edges near water, and irrigated agricultural fields) is present in and near the project areas, whooping cranes have not been documented within the project areas nor are they expected to use it.

## **UTE LADIES' TRESSES**

Habitat for Ute ladies' tresses consists of palustrine wetlands with low-growing graminoids and forbs (Fertig 1994). Although suitable habitat conditions appear to exist in Teton County, extensive searches along the Snake River, its tributaries, and elsewhere have failed to document populations of this species. For this reason, surveys for Ute ladies' tresses within Teton County are no longer required by the U.S. Fish and Wildlife Service (USFWS 2001).

## **DEVELOPMENT IMPACT ASSESSMENT**

Proposed development on the JHGTC property will have some detrimental effects on vegetative covertypes that SSCs rely upon for habitat.

### **DESCRIPTION OF PROPOSED DEVELOPMENT AND IMPACTS TO VEGETATION**

#### **Single Family Lots #1-37**

Thirty-seven single-family lots are proposed for development in the northern portion of the project area, north of the Spring Gulch Road. Lots vary in size from 1.0-1.1 acres for a total proposed development acreage of approximately 37.27 acres. These single-family lots will be clustered within the land surrounded by fairways of Holes 1-8. Covertypes that would be impacted by this proposed development include landscaped golf course (67%) and non-mesic shrub-sagebrush (33%).

#### **Single Family Lots #38-42**

Five single-family lots are proposed for development on the eastern portion of the property, both north and south of Spring Gulch Road. Lots vary in size from 1.00-1.16 acres for a total proposed development acreage of 5.36 acres. Within this proposed development area, covertypes that would be impacted include mesic deciduous forest-cottonwood-mature (10%), non-mesic shrub-sagebrush (85%), and landscaped-golf course (5%).

#### **Single Family Lots # 43-44 and Utility Lot #45**

Two single family lots totaling 2.83 acres and an expansion of the existing utility lot to 1.40 acres are proposed for development along the western property boundary north of Spring Gulch Road near the King's Highway corner. Proposed development totals 4.23 acres and impacted covertypes consist of mesic deciduous forest-cottonwood-mature (95%), non-mesic grassland-xeric (2%), and disturbed (3%).

#### **Exaction Parcel Lot #46**

The proposed exaction parcel lot is located south of Spring Gulch Road in the southwest portion of the property. Proposed development would affect 3.12 acres of mesic deciduous cottonwood-mature (95%) and disturbed (5%) covertypes. Additionally, this area is within the Gros Ventre River riparian corridor and the NRO. Possible development that might occur in this area includes a public trailhead, fire station or other unspecified uses.

### **Retail Lot #47 (Snack Shop)**

The proposed expansion of the existing snack shop area would include a local convenience market/deli, a 10-space parking lot, and parking area for golf carts. The proposed expansion would impact about 0.51 additional acres of mesic deciduous cottonwood-mature (100%) habitat covertype. The proposed expansion is located south of Spring Gulch Road.

### **Cabin Lots #48-50**

Cabin lots include Lot #48 (8.37 acres), Lot #49 (2.53 acres) and Lot #50 (1.82 acres). All cabin lots are proposed in landscaped-golf course (60%), disturbed (30%), and non-mesic shrub-sagebrush-xeric (10%) covertypes located north of Spring Gulch Road in the eastern portion of the parcel. A total of 43 cabins are proposed for development within the three lots which could provide both short and long term accommodations.

### **Affordable Housing Lot #51**

A total of 1.64 acres of landscaped-golf course (98%) and mesic deciduous mature cottonwood (2%) covertypes located north of Spring Gulch Road on the eastern portion of the property are proposed for development. These affordable housing units would include 17 two-bedroom units.

### **Golf Course Lot #52**

No additional structures are proposed for development within Lot #52 except those associated with the subcategories Maintenance/Employee Housing Area, Clubhouse and Associated Facilities Area, and County/Public Trail as described below.

#### Maintenance/Employee Housing Area

Additional development on 0.50 acres is proposed in the existing maintenance area located south of Spring Gulch Road. Proposed development in this area includes three, 3-bedroom employee housing units, an administration building, employee parking, and an addition to the existing maintenance building. Proposed development within this area is partially within the NRO and is vegetated in a mesic deciduous cottonwood-mature (100%) covertype.

#### Clubhouse and Associated Facilities Area

An additional 0.50 acres is proposed for redevelopment within the existing clubhouse area north of Spring Gulch Road. Proposed redevelopment includes a new clubhouse, 4 relocated tennis courts, and a total of 129 parking spaces (including existing and new). Because the proposed activities will occur within an already disturbed (100%) vegetative covertype, no additional impacts have been estimated.

#### County/Public Trail

A county/public trail has been proposed for development along the entire south side of Spring Gulch Road within the JHGTC project area. While no acreages were provided for this proposed development, mesic deciduous cottonwood-mature and landscaped-golf course habitat covertypes would likely be impacted (percentages unknown).

### **Road Lot #53**

Direct access to the proposed single-family Lots #1-37 and cabin Lots #48-49 is proposed via an access road that would impact approximately 6.82 acres of landscaped-golf course (90%), non-mesic shrub-sagebrush-xeric (8%) and mesic deciduous cottonwood-mature (2%) covertypes.

## **IMPACTS TO WILDLIFE**

Bald Eagles - Local land use regulations protect bald eagle nest sites by prohibiting development within 400 m (Zone 1) of a standing/occupied, active or inactive bald eagle nest without an "incidental taking permit or a statement of no jeopardy from the U.S. Fish and Wildlife Service, pursuant to the federal Endangered Species Act." Since the JHGTC property does not fall within 400 m of an active or inactive bald eagle nest, no development restriction are required and direct impacts to nesting bald eagles are not expected.

Mature riverbottom cottonwood forest associated with the Gros Ventre River represents perching and roosting habitat for bald eagles and a portion of the property is vegetated in this covertime. Some indirect negative impacts to bald eagles may result from proposed development on the parcel associated with the removal of mature cottonwood trees (8.7 acres). The required 150-foot setback from the Gros Ventre River should be adequate to protect cottonwood trees most likely to be used for perching and roosting and to reduce negative impacts to foraging bald eagles.

Peregrine Falcons - The property does not represent important peregrine falcon habitat. Peregrines may be observed flying over or hunting on the parcel, although no sightings have been documented. Any use of the parcel by peregrines is believed peripheral and confined to transient or migrant individuals in flight or to birds during hunting forays. Direct and indirect negative impacts to peregrine falcons resulting from proposed development are not expected.

Trumpeter Swans - Adhering to the 150-foot protective setback from the Gros Ventre River will provide adequate protection from any direct negative impacts to trumpeter swans resulting from proposed development. Indirect impacts on trumpeter swans could occur as a result of increased human use along the Gros Ventre River, particularly in the winter and early spring months. Trumpeter swan use of golf course ponds has not been documented.

Snake River Cutthroat Trout - Proposed development for the parcel is not expected to adversely affect cutthroat trout habitat or spawning.

River Otters - River otters may occur irregularly in the section of the Gros Ventre River flowing through the parcel but proposed development will not directly affect river otters or their habitat. Indirect impacts could occur as a result of increased human use along the Gros Ventre River but because the habitat is marginal, this impact is considered negligible.

Great Blue Herons - It is unlikely that proposed development will result in measurable negative impacts to great blue herons although it may influence when and how herons forage in and around the ornamental ponds and irrigation ditches scattered throughout the property. Individual herons also hunt along the Gros Ventre River and this use is expected to continue unaffected. Because of the heron's shyness and intolerance of disturbance, regular human activity in any foraging area may be sufficient to reduce its attractiveness to herons. However, foraging habitat is abundant throughout Jackson Hole and possible reductions in habitat use associated with the proposed development are believed minor. Nesting habitat for great blue herons will not be affected by the proposed development. Setbacks associated with the riparian corridor of the Gros Ventre River should be adequate to preserve heron use along the river.

Raptors - No raptors are known to currently nest on the property, although potential nesting habitat for several species is present. Foraging habitat for several raptor species is abundant within the project area and areas proposed for residential development will reduce the availability of foraging habitat for shrub-grassland dependent raptor species. In addition, removal of cottonwood trees will reduce potential nesting habitat for a variety of raptors. Direct and indirect impacts on local raptor populations resulting from the proposed development are expected to be minor but cumulative impacts from residential development on the east side of the Snake River may have a lasting negative effect on certain raptor populations.

Mule Deer - Proposed development on the parcel may have minor negative impacts on mule deer as a result of increases in residential and human use occurring on undeveloped portions of the parcel and/or negative impacts to shrubs. However, since the parcel does not represent either crucial or non-crucial winter range and human use on the parcel is already significant, these impacts are expected to be minor. Mule deer are not limited by a shortage of spring, summer, or fall habitat in Jackson Hole.

Moose - Proposed development occurring on the parcel may have some direct negative effects on individual moose. The proposal will potentially reduce the attractiveness of portions of the property to some individual moose due to physical disturbances resulting from construction of buildings and associated roads/driveways. Some indirect impacts to individual moose can also be expected. Avoiding disturbances to covertsypes that are important to moose, reducing disturbance of native vegetation caused by construction, and controlling human use and domestic pets (especially dogs) in areas where moose are wintering will reduce direct and indirect impacts to moose.

Proposed development in landscaped and disturbed areas north of Spring Gulch Road will result in negligible negative impacts on moose since these covertsypes generally do not provide food or cover for moose. However, additional seasonal or year-round occupation will increase the frequency and intensity of human uses occurring on the property when compared to existing uses. Human uses often equate to disturbances to resident ungulates and these encounters can easily displace animals intolerant of humans from their winter range. Establishing any recreational trails through the shrub and forest habitats and subsequent use of these trails by people and their pets will diminish the availability and quality of moose habitat found on the parcel.

Residential development in the cottonwood community north of Spring Gulch Road on the west side of the project area will impact a small amount of moose winter foraging habitat and cover. A few moose pellet groups were observed in this area during field surveys in March 2002 and silverberry growing along an old ditch was heavily browsed. Expansion of the maintenance and snack shack areas on the south side of Spring Gulch Road will also reduce availability and quality of foraging habitat for moose. Some moose may avoid this portion of the Gros Ventre River riparian areas in the winter due to increased human activity. Residential development in the non-mesic sagebrush covertsype on the east side of the project area, south of Spring Gulch Road is expected to have minimal impacts on moose since the habitat in this area is highly degraded and lacks both winter forage and protective cover.

In general, moose appear to tolerate or adapt to human presence and their associated disturbances and it is common to find moose in developed areas throughout much of the winter and even during other months. Moose often continue to use developed areas within historic winter range following buildout. Landscaping efforts sometimes prove very attractive to moose; these animals are capable of effectively exploiting this artificial and unintentional food source. Damage to landscaping efforts are likely to occur since future development will be located in an area consistently used by moose; this should be accepted and expected. Planting native vegetation that is less palatable to moose would help reduce the potential for human-moose encounters and damage to landscaping.

Elk - Low levels of elk use occurs on the property, primarily in areas located south of the Spring Gulch Road along the Gros Ventre River, where elk can find limited foraging and marginal escape cover. This occasional and low-level usage occurs primarily during the non-winter months. The value of the parcel as elk foraging habitat, however, is greatly diminished as a result of residential development located on and around the property and thus additional development is expected to have negligible impact on elk habitat. However proposed development north of Spring Gulch Road (cabins, realigned parking lot, redeveloped clubhouse) may result in negative impacts to elk migration in the absence of appropriate mitigation measures. Elk have been documented migrating through this portion of the project area during the past 3 fall migration seasons (Wachob and Smith, 2002, pers. comm.).

Biologists generally believe that elk use both short and long-range targets during migration (Wachob, 2002, pers. comm.). Short-range targets in the JHGTC property likely include cottonwood trees along ditches and landscaped trees on the golf course. The long-range target for

elk moving through the area is the Gros Ventre River and the NER. If these targets are removed or access to them is blocked (physically or by something that makes the elk nervous), elk may abandon well-established routes. The proposed development north of Spring Gulch Road in conjunction with expansion of the Snack Shop may negatively affect and potentially modify, reduce, or eliminate elk migration through the project area. The number of animals potentially affected is between 27 and 300 elk. In general, proposed redevelopment and subsequent human use of the JHGTC property is expected to be seasonal (F. Paolucci-Rice, 2002, pers. comm.) with uses peaking in the summer and, to a lesser degree during the winter. Shoulder seasons for the JHGTC are expected to be during the fall and spring (F. Paolucci-Rice, 2002, pers. comm.) and coincide with elk movements to and from winter range. Several measures to reduce or minimize adverse impacts to elk migration routes could be implemented (see Mitigation Section below).

Elk have also been documented using a migration corridor south of the project area on the south side of the Gros Ventre River and north of the project area on the nearby Bar B Bar Meadows parcel. It is unclear whether or not elk migrating through the JHGTC property would adjust their movement patterns to use the Gros Ventre River corridor, Bar-B-Bar corridor, or some other corridor. It seems likely, however, that future development proposed for the JHGTC property will not prevent elk from reaching their migratory goal (i.e., winter range on the NER).

Neotropical Migratory Birds – Proposed development on the JHGTC property is expected to result in some minor direct impacts on neotropical migratory birds. Depending on when construction occurs, nesting birds could be disturbed and productivity of individual pairs reduced. In addition, removal of cottonwood snags on the King's Highway corner could result in loss of cavities potentially used by neotropical migrants for nesting. However, because development is concentrated in previously disturbed and degraded areas and impacts to the most ecologically valuable riparian plant communities are minimized, overall impacts on neotropical migratory birds are expected to be negligible.

Amphibians – Because all wetland habitat will be avoided and constructed ponds will remain intact, habitat for amphibians will not be negatively impacted by the proposed development. It is recommended that if hibernation or breeding habitats of amphibian species are discovered within the JHGTC project area, Biota or WGFD be contacted and informed of their presence.

Threatened and Endangered Species – Proposed development on the JHGTC property may affect but is not likely to adversely affect threatened or endangered species.

## **PROJECT VICINITY IMPACT STATEMENT**

Cumulative impacts from the proposed development, ongoing development on the east side of the Snake River, flood control on the Snake and Gros Ventre Rivers, and increased traffic and human use in the vicinity of the project area is expected to result in a lasting adverse impact on the quality and quantity of habitat available to wildlife and may impede wildlife movement and migration routes through the area. The extent of this cumulative impact will depend on where, when, and how development occurs and what mitigation measures are implemented to reduce the negative impacts. The most important habitat within the JHGTC neighborhood, from both a wildlife and ecological process perspective, is found along the Snake and Gros Ventre rivers. Development in riparian zones associated with these rivers is likely having the most detrimental effect on the health of the region. In addition, flood control on both rivers and dewatering on the Gros Ventre River is preventing processes critical for support and regeneration of riparian vegetation. By avoiding development within the Gros Ventre River riparian zone, protecting the elk migration route through the project area, carefully planning paths, trails and other human recreational uses, and restoring riparian and wetland habitat where possible, the JHGTC proponents will go far toward doing their part for the ecological health of the neighborhood.

## DEVELOPMENT RECOMMENDATIONS

The JHGTC property provides potential habitat to a variety of wildlife species. A portion of the property falls within the delineated NRO of the Jackson-Teton County Comprehensive Plan and Land Use Regulations (1994). The NRO represents a combination of important wildlife habitats including crucial winter range and migration corridors for elk, moose, mule deer and bighorn sheep; nesting areas for bald eagles and peregrine falcons; and spawning areas for Snake River fine-spotted cutthroat trout. The JHGTC property contains crucial habitat for moose and this drives the NRO designation on the parcel. Foraging opportunities for bald eagles, peregrine falcons, other raptors, great blue herons, river otters, mule deer, and elk are or may be present on the property, as well as habitat for the fine-spotted cutthroat trout. A portion of the project area also represents an elk migration corridor.

### PROTECTED NATURAL RESOURCES

Protected Rivers - The Gros Ventre River, as a protected river, has been given a prescribed setback of 150 feet from the waterside top of the flood control levee by Teton County within which development is not allowed. The setback associated with the Gros Ventre River is depicted on Figure 5.

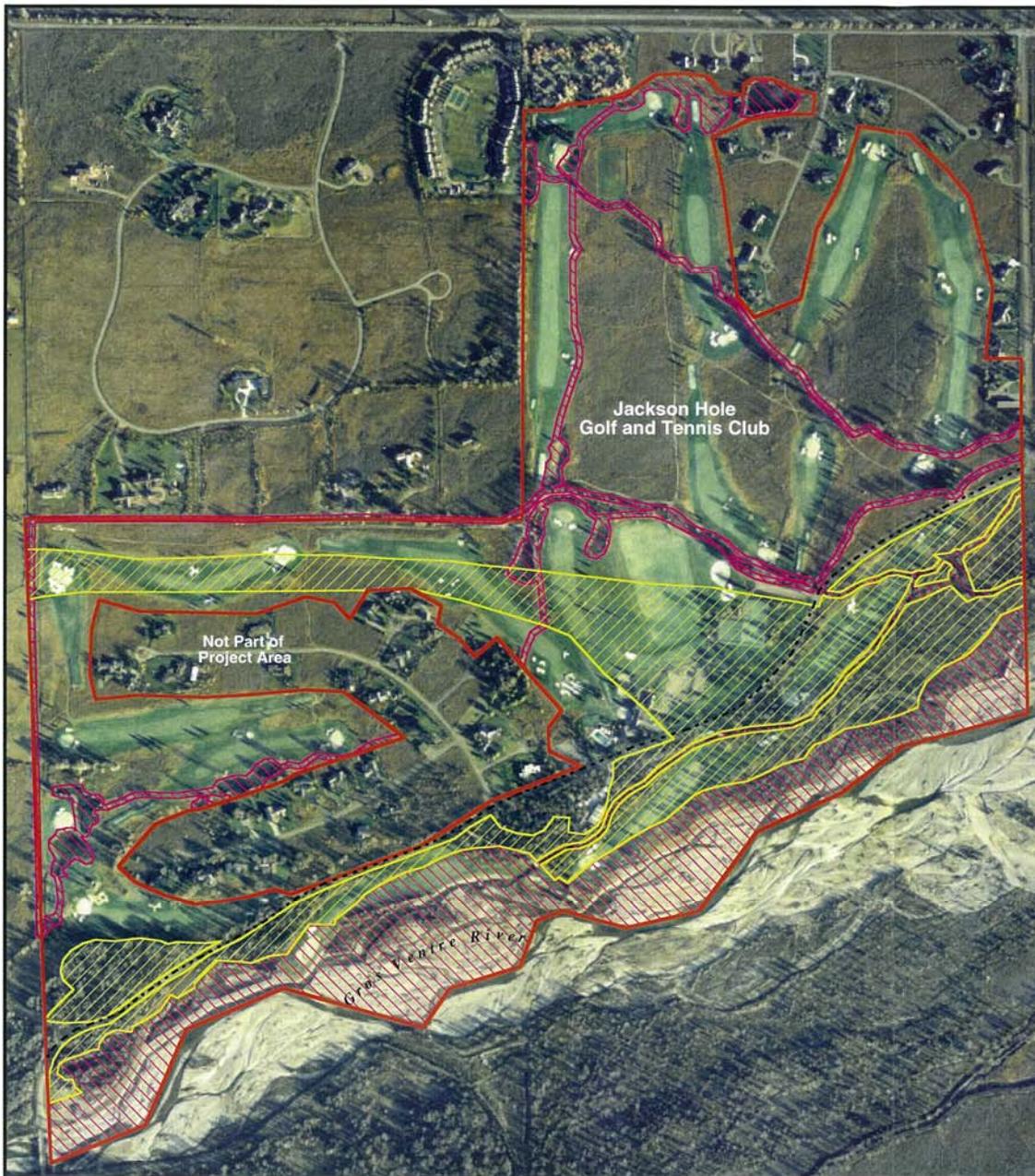
Wetlands - All jurisdictional wetlands are given a 30-foot setback buffer by Teton County within which development is prohibited. A wetland delineation performed by Biota located and mapped areas on the JHGTC property that met definitional criteria for wetlands. A subsequent jurisdictional determination made by the Corps allows jurisdictional wetlands and their associated setbacks to be depicted in Figure 6.

Covertypes Important to Wildlife - Although development in covertypes that are valuable to wildlife is not explicitly prohibited by the Jackson-Teton County Comprehensive Plan (1994), the intent of the plan is that parcel-specific development be located in areas that minimize adverse impacts to SSCs and their habitats. Ideally, development should be confined to the least valuable covertypes found on any given tract. In general, the most valuable covertypes occurring in developable areas on the JHGTC property are the cottonwood and willow covertypes, especially those located south of the Spring Gulch Road and along the Gros Ventre River. Building in these covertypes should be avoided if at all possible and, if not, impacts to them should be minimized to the maximum extent practicable and/or mitigated. The least valuable habitats are non-mesic shrub-sagebrush (xeric) and non-mesic grassland (xeric) covertypes, landscaped areas and disturbed areas and development should be focused into these areas.

Crucial Elk Migration Corridor - The Jackson-Teton County Comprehensive Plan prohibits development in crucial elk migration routes, "unless the developer can demonstrate that the development can be located in such a way that it will not detrimentally affect the ability of elk to migrate from their summer ranges to their crucial winter ranges" (Teton County 1994). A crucial elk migration route is defined as one that is used by elk during 8 out of 10 migration seasons. The elk migration study performed by Wachob and Smith (2002, pers. comm.) took place over the course of 3 years (during the fall migration only) and since the JHGTC project area was used 3 out of 3 years, it may meet the definitional criteria as a "crucial elk migration route" sometime in the future. Continued use of the project area by migrating elk can be accomplished in conjunction with proposed development if minor adjustments to the development proposal are made and careful planning, mitigation, and monitoring are implemented.

### DEVELOPMENT SUITABILITY

Results of this EA are brought together in a set of recommendations regarding where development might be sited on the parcel while minimizing real and potential impacts to



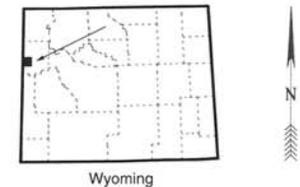
JHGTC Environmental Analysis

Figure 11. Areas most suitable, less suitable, and unsuitable for development within the Jackson Hole Golf and Tennis Club project area, Teton County, Wyoming.

Approximate Scale: 1 inch = 625 feet

**LEGEND**

-  Property Boundary
-  Spring Gulch Road
-  Most Suitable for Development
-  Less Suitable for Development
-  Unsuitable for Development



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sensitive wildlife species and their habitats. These recommendations identify areas which, based on information gathered during the study, are believed to be “unsuitable” for development, “less suitable” for development, and “most suitable” for development. Figure 11 depicts unsuitable, less suitable and most suitable. Such designations are made as follows:

Areas “Unsuitable” for Development - All areas that include protected natural resources and their respective protective setbacks as identified in the Jackson-Teton County Comprehensive Plan are considered “unsuitable” for development.

Areas “Less Suitable” for Development - All covertypes and habitat components important to sensitive wildlife species but which are not explicitly protected by the Jackson-Teton County Comprehensive Plan are considered “less suitable” for development. It is the intent of the Jackson-Teton County Comprehensive Plan to minimize adverse development impacts to important habitat features of sensitive wildlife species. “Less suitable” areas do not encompass protected natural resource or their setbacks but, relative to remaining areas on the subject property, are more important to sensitive wildlife species.

Areas “Most Suitable” for Development - All areas within which, relative to other areas on the subject property, development would cause the least adverse impact to habitats of sensitive wildlife species or other protected natural resources, are considered “most suitable” for development.

## **PROPOSED DEVELOPMENT**

### **Single Family Lots #1-37**

Proposed development in this area is consistent with Teton County Land Use Regulations so long as development does not intrude into setbacks associated with surface hydrological features as planned.

### **Single Family Lots #38-42**

Proposed development in this area is consistent with Teton County Land Use Regulations. Areas considered less suitable for development include the mesic deciduous cottonwood-mature covertype and efforts should be made to reduce impacts to cottonwood trees. Areas deemed unsuitable for development include the areas associated with wetland and surface hydrological setbacks and proposed development will not impact these resources or their setbacks.

### **Single Family Lots # 43-44 and Utility Lot #45**

The majority of this proposed development area is considered less suitable for development due to the presence of a mature cottonwood covertype. However, the presence of only a small amount of potential moose foraging habitat and limited evidence of moose use makes proposed development within this area consistent with Teton County Land Use Regulations.

### **Exaction Parcel Lot #46**

Although the exaction parcel occurs partially within a recommended less suitable development area it is considered unsuitable for development due to its proximity to and its presence within the Gros Ventre River riparian corridor and the Natural Resource Overlay. Therefore, no development is recommended for this area and it is further recommended that the area be restored to its original ecological state.

### **Lot #47 (Snack Shop)**

The current plans call for expansion of the Snack Shop and this development would encroach upon riparian habitat and areas considered “less suitable” for development but not within the NRO. This area also represents a migration route for elk traveling through JHGTC to the Gros Ventre River riparian zone. It is recommended that the Snack Shop not be expanded; current development and human uses do not appear to adversely affect elk migration and should be allowed to continue.

### **Cabin Lots #48-50**

Cabin lot #48 represents a migration route for elk traveling through JHGTC to the Gros Ventre River riparian zone and is therefore considered “less suitable” for development. Proposed development in this area would be consistent with Teton County Land Use Regulations so long as the developer can demonstrate that the development can be located in such a way that it will not detrimentally affect the ability of elk to migrate from their summer ranges to their crucial winter ranges. Additionally, development in all cabin lots must be completed in such a way as to not disturb cottonwoods along irrigation ditches, maintain and enhance woody vegetation, and adhere to all setbacks associated with hydrological features.

### **Affordable Housing Lot #51**

Proposed development in this area considered most suitable for development is consistent with Teton County Land Use Regulations so long as it adheres to hydrological features setbacks and cottonwood trees are not disturbed.

### **Golf Course Lot #52**

Proposed development in this area is consistent with Teton County Land Use Regulations, unless indicated below under the subcategories of Maintenance/Employee Housing Area, Clubhouse and Associated Facilities Area, or County/Public Trail.

#### Maintenance/Employee Housing Area

Proposed development plans call for expansion of the existing maintenance area and development of a new employee housing area within riparian habitat considered “less suitable” for development. It is recommended that additional maintenance and employee needs be accommodated within the area encompassing the maintenance facility, the golf course superintendent’s house, and the area in between. The current development proposal does not appear consistent with Teton County Land Use Regulations where it expands outside of the area described above and into the NRO, crucial moose winter range, and elk movement corridors.

#### Clubhouse and Associated Facilities Area

Proposed redevelopment in this area is consistent with Teton County Land Use Regulations so long as development minimizes disturbances to cottonwood trees.

#### County/Public Trail

Proposed development of a public use trail is consistent with Teton County Land Use Regulations so long as cottonwood trees are not impacted and use is restricted during winter months in crucial moose winter range (December 1-April 30).

### **Road Lot #53**

Proposed development in this area is not within the NRO and is consistent with Teton County Land Use Regulations. Development should make every attempt to avoid disturbing cottonwoods along irrigation ditches, maintain and enhance woody vegetation, and adhere to all hydrological feature setbacks.

## **SUGGESTED MITIGATION/ENHANCEMENT**

### **Elk Migration**

Although elk foraging habitat is believed marginal, the area surrounding the existing tennis courts where cabins and an expanded parking lot are proposed currently provides a the primary route for elk migrating through the project area. By creating a buffer of trees and shrubs between the cabins and proposed (realigned) practice range, elk can be expected to continue following the same route. Expansion of the parking lot on the south side of the practice range could, however, impede movement of elk once they reach the south end of the proposed practice range. However, it appears that elk currently move across the existing parking lot. In order to encourage elk to move across the expanded parking lot during migration, islands of trees and grass should be left intact within the paved areas on the east side of the parking lot. In addition, the parking lot

should be closed during the elk migration season (November-December). Fences or berms in this area should be avoided in order to promote unimpeded elk movement. Once across Spring Gulch Road, elk apparently move through the heavily treed area on either side of the Snack Shop. Therefore, abandoning plans for additional development in the Snack Shop area is an appropriate mitigation measure for elk migration.

Another route that elk may continue to take is along the parallel Buckskin and White irrigation ditches between the proposed residential cabin areas. A “soft” path has been proposed for the vegetated area along these ditches which will have little impact on ungulates during the peak summer season. However, use of this path during the elk migration season should be restricted to day-use only. Lighting along this path should not be installed.

### **Landscaping**

In general landscaping within the elk migration corridor should also take into consideration the behavior of elk during migration by providing short-term targets of protective cover. Landscaping associated with residential areas should be designed to reduce the attractiveness of these areas to ungulates, particularly moose. This equates to planting trees and shrubs not palatable or less palatable to moose.

### **Cottonwood Removal**

Removal of cottonwood trees, live and dead, should be minimized to the maximum extent practicable so that opportunities for cavity nesting birds are protected and provided within the project area. This is particularly true for the 2 residential lots and sewage treatment lot associated with King’s Highway corner. The proposed development will specifically identify building envelopes outside of which vegetation cannot be cleared. This effort is applauded and should be enforced.

### **Habitat Enhancement**

Riparian habitat enhancements on the south side of Spring Gulch Road could prove very beneficial for moose since moose use in winter is concentrated in this area. In particular, establishing willows and other riparian shrubs in appropriate areas would help conserve the integrity of this riparian zone and may help attract moose away from residential landscaped areas.

The Exaction Parcel, adjacent to the Gros Ventre River, would also be an excellent place for riparian habitat mitigation. This area has been severely disturbed and degraded and because of its presence adjacent to the Gros Ventre River would likely benefit wildlife significantly if restored. Human use of this area is discouraged and use for trailhead or a developed area is not recommended.

### **Other General Land Use Recommendations**

Appendix 1 provides a list of general land use recommendations appropriate for the JHGTC property.

## LITERATURE CITED

- Cerovski, A., Gorges, M., Byer, T., Duffy, K., and D. Felley (eds.). 2001 Wyoming Bird Conservation Plan, Version 1.0. Wyoming Partners in Flight. Wyoming Game and Fish Department, Lander, WY.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. FWS/OBS-79/31. U.S. Dept. Interior, Fish & Wildlife Service, Washington, DC. 131 pp.
- Drewien, R. C. 1989. Whooping crane. Pgs. 72-73 in T. W. Clark, A. H. Harvey, R. D. Dorn, D. L. Genter, and C. Groves (eds). Rare, sensitive and threatened species of the Greater Yellowstone Ecosystem. N. Rockies Conserv. Coop., Mont. Nat. Her. Prog., The Nature Conserv., and Mountain West Envir. Serv. 153pp.
- Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1. Department of the Army, Waterways Experiment Station, Vicksburg, MS. 169 pp.
- Fertig, W. 1994. Wyoming Rare Plant Field Guide. Bureau of Land Management, U.S. Fish & Wildlife Service, Forest Service Intermountain Region, Forest Service Rocky Mountain Region, NPS, Wyoming Game and Fish Department, The Nature Conservancy, and Wyoming Natural Diversity Database.
- Greater Yellowstone Ecosystem Bald Eagle Working Team. 1996. Greater Yellowstone bald eagle management plan: 1995 update. Greater Yellowstone Bald Eagle Working Group, WY Game & Fish Dept., Lander WY.
- Jackson-Teton County. 1994. Jackson-Teton County Comprehensive Plan and Land Use Regulations. Unpubl.
- Jimenez, M. 2001. Biologist, USFWS, Lander, WY. Personal Communication.
- May, Robert. 1997. Resident of JHGTC property from 1945 – 1951. Personal communication..
- Minta, S. C. and T. M. Campbell III. 1991. Wildlife-habitat assessment and analysis with reference to human impacts in Jackson Hole, Wyoming. Unpubl. 1st Edition Final Rept. to Teton County Board of County Commissioners, Jackson, WY. 162 pp. + Tables.
- Rudd, W., L. Forrest, F. Lindsey, and S. W. Buskirk. 1986. River otters in Wyoming: distribution, ecology and potential impacts from energy development. Res. Rept. 86-02. WY Coop. Res. Unit. Laramie, WY. 42 pp.
- Ruediger, B. J. Claar, S. Gniadek, B. Holt, L. Lewis, S. Mighton, B. Naney, G. Patton, T. Rinaldi, J. Trick, A. Vandehey, F. Wahl, N. Warren, D. Wenger, and A. Williamson. 2000. Canada lynx conservation assessment and strategy. USDA Forest Service, USDI Fish & Wildl. Serv. USDI BLM, & USDI NPS.
- Smith, B. 2002. Biologist, National Elk Refuge. Jackson, WY. Personal Communication.
- USFWS. 2001. Letter from Michael M. Long, USFWS, to Bob Nestel, Federal Highway Administration, regarding need for *Spiranthes diluvialis* surveys along the Snake River corridor in Teton County, WY. 24 July.
- Wachob, D. 2002. Director of Research, Teton Science School. Kelly, WY. Personal Communication.
- Wachob, D. and B. Smith. 2002. Geographic Information Systems (GIS) data associated with elk migration. Jackson, WY. Unpublished.
- Wyoming Game and Fish Department. 2002. Jackson, WY. Personal Communication.
- Young, J. F. 1982. Soil Survey of Teton County, Wyoming, Grand Teton National Park Area. USDA, Soil Conservation Service. 173 pp + maps.

## APPENDIX 1

### GENERAL LAND USE RECOMMENDATIONS FOR THE JACKSON HOLE GOLF AND TENNIS CLUB, TETON COUNTY, WYOMING

The following recommendations, if implemented, would aid in protecting, preserving, and improving the wildlife and habitat values associated with the Jackson Hole Golf and Tennis Club property.

1. **Agriculture.** The pasturing of livestock on the parcel should be confined to landscaped, grassland or disturbed covertypes. Livestock forage on grasses, browse on both seedling and second-year shrub growth, and use adult shrubs and trees for rubbing and loafing shade. The direct (eating and breaking branches) and indirect affects (trampling of plants and compaction of soils around the plants) of livestock utilization frequently causes significant damage to growth and deterioration in overall health of these plants. Additionally, livestock use of these plants, as well as some grasses is in direct competition with wild ungulates and other wildlife species. Livestock also tend to physically displace wildlife from areas where heavy grazing and long-term use occurs.

If livestock pasturing occurs on the property it should only be at levels that would not cause overgrazing, soil compaction, and erosion. A general rule of thumb is available forage should not be reduced below 50 percent by pastured livestock. At a minimum, livestock grazing within the forest and shrub covertypes is not recommended since these areas are very important to wildlife in general and used by elk, mule deer, and moose. Wintering livestock on the property is not recommended; to do so would require the storage of hay or other alfalfa or grass product on-site. Careless hay storage or feeding livestock will probably attract deer, elk, and/or moose and increase the likelihood of problems resulting from this attraction.

2. **Fences.** An assessment of site-specific fencing needs should be made for the property. Fences frequently disrupt or discourage normal movement and use patterns of wildlife or actually present hazards to wildlife and their use should be avoided or minimized. In situations where fences are necessary, they should be constructed in such a way so as to reduce their potential negative impacts to wildlife. Fence construction should closely adhere to the recommendations provided below for wildlife-compatible fences. If the control of livestock is not necessary, perimeter fences around the parcel should be removed.

Recommendations for any fences internal to or around the parcel are provided below:

- 1) The preferred fence design is a combination of posts, wire strands, and a top pole. This design effectively controls livestock while promoting wildlife movements.
- 2) The spacing of fence posts should be 13-16 feet.
- 3) The overall height of the fence should not exceed 42 inches; the preferred height is 38 inches in most situations and 40 inches if problems develop.
- 4) Installed fence posts should have sufficient extra height to allow raising or lowering the top pole between 38 and 42 inches above the ground.
- 4) The bottom wire should be smooth twisted wire and located 16-17 inches above the ground. This will allow smaller animals and immature ungulates (moose and elk calves and deer fawns) to crawl under the fence.
- 5) The second and third wire strands can be barbed wire and spaced evenly over the 26-27 inch distance between the bottom strand and the top of fence (e.g., the second strand is at 25 inches and the third strand is at 34 ins). It may be that only one strand of wire is actually needed and could be placed at about 29 ins.
- 6) The top pole nailed to the side of the fence posts will facilitate animals attempting to jump the fence and protect them from injuries resulting from rubbing or becoming entangled in a top strand of wire. The top pole should be set at a maximum height of 42 inches above the ground; the preferred height is 38 inches.
- 7) Gates should be constructed of wire (both barbed and smooth-twisted wire) with an optimal height of 38 inches. The gates should be installed at least every 450 feet of continuous fence. The spacing of the wires should be the same as that on the fence (i.e., bottom at 16-17 inches above ground, top at no more than 42 inches, and either one or two strands spaced evenly between). The top and bottom strands should be of smooth-twisted wire and the middle strand(s) of barbed wire.

Gates will allow wildlife access to the property during periods when livestock control is unnecessary. At these times the gates should be opened and left opened until livestock control is again necessary.

8) No fences which span rivers or creeks should be erected or allowed to persist.

These recommendations generally follow guidelines developed by the Wyoming Game and Fish Department and the Bureau of Land Management. If adhered to, the fences resulting from these recommendations will be "wildlife friendly" and promote the continued use of the important wildlife habitat found on the parcel. In particular, crucial wildlife winter habitats will be easily accessible to animals, especially if efforts are taken to lower fence gates when livestock are not present.

3. **Non-native Plants.** The introduction of any non-native plants which might compete with or harm native species and result in their decline is discouraged. Exceptions to this would be the introduction of a non-native species which would improve or prevent undue damage to the natural environment (e.g., stream bank stabilization) or plants within the immediate confines of the building envelope. However, planting certain ornamental (non-native) woody or shrubby vegetation for landscaping purposes is discouraged in order to reduce the likelihood of human-wildlife encounters. Wildlife damage to landscaping efforts may occur and should be accepted when the property is located within an area used by moose, mule deer, and elk. A list of native plant species recommended for screening and revegetation efforts, based on palatability to wildlife, should be generated once goals and objectives have been identified.
4. **Non-native Fauna.** The introduction into the wild of any non-native or domesticated animal species which might compete with or harm native species and result in a decline in their use is strongly discouraged.
5. **Vegetation Alteration.** The destruction, removal or alteration of living or dead vegetation is discouraged except when absolutely necessary. This is particularly important for properties which have wildlife use occurring within stands of woody overstory and shrubby understory vegetation. Standing dead trees and dead and down vegetation provide important habitat to a variety of smaller wildlife species and greatly diversifies a piece of land. Woodpeckers forage for insects in standing dead trees and create nesting cavities for themselves and numerous other bird species. Fallen, rotten plant material creates shelter used by many small mammals while simultaneously returning nutrients to the soil.
6. **Roads.** The construction of roads should be minimized.
7. **Habitat Enhancement.** Wildlife habitat enhancements are acceptable physical alterations to the property. A plan describing enhancements and delineating affected areas should be developed by a qualified, county-approved consultant. This plan should consider negative impacts to non-target species.
8. **Herbicides.** The use of chemical herbicides and pesticides are discouraged except for controlling noxious terrestrial weeds. Application of state-approved herbicides should be done responsibly by persons appropriately licensed and trained. The Teton County Weed and Pest representative should be consulted before applying chemicals in sensitive areas.
9. **Burning.** The burning of any materials or vegetation is discouraged except in accordance with government regulations, and in the case of vegetation, where burning is shown to be beneficial to wildlife.
10. **Off-road Vehicle Use.** Control the use of any off-road vehicles such as all-wheel drives, motorcycles, all-terrain vehicles, and snowmobiles, except when necessary for specified activities on existing roads. This is very important so wildlife can adapt to predictable patterns of human use.
11. **Topographic Alterations.** The filling, excavating, dredging, mining, drilling, or removing of topsoil, sand, gravel, rock, minerals, or other materials, or other changes of the topography of the property is discouraged, except where absolutely necessary or associated with approved development and enhancement plans.
12. **Domestic Pets.** Free-roaming, unrestrained domestic pets should be prohibited. Unrestrained pets can easily disrupt wildlife use on parcels and must be controlled. Dogs will readily chase, harass, and even kill both small and large mammals, as well as birds. Although less conspicuous than dogs, free-roaming cats can be as damaging to wildlife as dogs. Cats are effective predators of small birds and mammals and free-roaming cats have a high potential (both short- and long-term) for disturbing many wildlife species.
13. **Wildlife Feeding.** Artificial feeding of moose, deer, and elk anywhere on the property is strongly discouraged. Artificial feeding tends to "short-stop" wildlife in route to natural winter ranges and causes them to rely on humans when unnecessary. Concentrating these animals around feed sites for long periods of time can cause irreparable harm to native vegetation due to over utilization as well as contribute to the spread of diseases. Artificial feeding of wildlife by private individuals is an activity that Wyoming Game and Fish opposes.

14. **Wildlife Harassment.** Mule deer, elk, and moose will be present on the JHGTC property at various times of the year but most likely during the winter. This is because important habitats for these ungulates are found on or in the vicinity of the parcel. The presence of these and other wildlife species should be expected and tolerated. People residing or owning property within JHGTC should be both respectful of and sensitive to wintering wildlife and not purposefully harass these animals as they struggle to survive harsh Jackson Hole winters. Moose, in particular, can be expected to browse upon landscaped vegetation and this activity can sometimes cause significant damage to this vegetation.

Project proponents should make a concerted effort to educate property owners and renters, landscape architects and landscapers, and JHGTC employees on how to minimize wildlife harassment. The local non-profit Jackson Hole Wildlife Foundation can help the project achieve a compatible and responsible co-existence with native wildlife species.

# **ATTACHMENT B**

Below is a summary of the major issues raised by each County Department representative; in italics following the comments are responses made by the project owner's representatives.

**FIRE DEPARTMENT'S ISSUES OF CONCERN AND COMMENTS:**

1. Lot and Road Design

- Instead of the single proposed access from Spring Gulch Road, the Fire Department would prefer redundant access to the proposed single-family lots and townhouse pods. County regulations do not, however, require, redundant access. A golf cart path can be used, as emergency access if it can handle a minimum load of 100,000 lbs., is 14'-20' wide and kept open year round. - *the project owner is not contemplating road access design changes*
- Cul-de-sac surface widths are required to have a 90' minimum diameter - *roads will be designed to this standard*
- An access is considered a driveway if it serves not more than 2 lots; fire code requires driveways to have minimum surface widths of 15' - *driveways will be designed to this standard*
- If a road serves three or more lots there must be a road segment within 150' of each of the lots with a minimum surface width of 20' - *roads will be designed to this standard*

2. Water Supply

- The project water supply is required to provide a fire fighting source of 1000 G.P.M. for 2 hrs - *the project is currently served by 2 wells; 2 new wells will be drilled; the wells will be capable of delivering the required flow and additional demand for clubhouse fire sprinklers*
- Though there is no requirement to treat water, it is prudent to design for the possible future need for a treatment system; the fire department discourages the use of chlorine gas as a disinfectant - *the water system design will provide for future water treatment needs; chlorine solution (not chlorine gas) would be used if needed*

3. Fire Station

- Establishing a fire station in the general project area is a long term goal of the Fire Department
- The optimum size for a fire station site is 2 acres, but sites as small as 0.5 acres have been used in Teton County
- A full service station requires a minimum of 2500 SF including an office, bathroom, and truck bays; a 5000 SF building would be required if sleeping quarters are included
- The proposed Exaction Site is not an acceptable site for a fire station
- *The owner is confident and the Fire Department concurs that either an acceptable on-site fire station site can be found, or an agreement can be reached regarding a contribution to development of an off-site location*

# **ATTACHMENT C**

**JACKSON HOLE GOLF AND TENNIS CLUB  
PLANNED UNIT DEVELOPMENT DISTRICT FOR PLANNED RESORT  
LAND USE SUMMARY**

**PROJECT AREA SUMMARY**

TOTAL AREA OF PROPERTY GENERALLY REFERRED TO AS JACKSON HOLE GOLF AND TENNIS CLUB:	451.38 ACRES
AREAS WITHIN EXISTING SUBDIVISIONS TO REMAIN OUTSIDE OF PUD DISTRICT FOR PLANNED RESORT (INCLUDING SAGEBRUSH DRIVE EASEMENT):	100.44 ACRES
GROSS SITE AREA PROPOSED FOR PUD DISTRICT FOR PLANNED RESORT:	350.94 ACRES
BASE SITE AREA OF PUD DISTRICT FOR PLANNED RESORT:	
GROSS SITE AREA:	300.94 ACRES
SPRING GULCH RD. R.O.W. (EXISTING):	- 8.27 ACRES
SPRING GULCH RD. R.O.W. (TO BE DEDICATED):	- 2.98 ACRES
AREA WITHIN BANKS OF GROS MONTRE RIVER:	- 44.39 ACRES
	294.30 ACRES BASE SITE AREA

**PROPOSED LAND USE WITHIN AREA TO BE ZONED PUD DISTRICT FOR PLANNED RESORT**

	NO.	Area Impacted (Acres)
SINGLE-FAMILY RESIDENTIAL LOTS	43 Lots	45.44
ROAD LOT	1 Lot	6.78
CABIN (TOWNHOME) LOTS	3 LOTS (40 Units)	12.72
AFFORDABLE HOUSING LOT	1 Lot (22 Units)	2.71
UTILITY LOT	1 Lot	1.21
EXACTION LOT	2 Lots	4.02
GOLF COURSE LOT (ENCOMPASSING CLUBHOUSE SITE, EMPLOYEE HOUSING, MAINTENANCE ADMINISTRATION BUILDING SITES, SPRING GULCH COUNTY ROAD EASEMENT AND UNDEVELOPED AREAS) LOT	1 Lot	278.06

**LAND USE DISTRICTS WITHIN AREA PROPOSED FOR INCLUSION WITHIN PUD DISTRICT FOR PLANNED RESORT:**  
(SEE MAP 3 FOR DETAILS)

RURAL (R)  
PLANNED UNIT DEVELOPMENT (PUD) FOR PLANNED RESORT

**ENVIRONMENTAL PROTECTION DISTRICTS:**

NATURAL RESOURCE OVERLAY (NRO)  
(of areas within the NRO are south of the Spring Gulch County Road)

**GENERAL NOTES:**

**PROPOSED MINIMUM SETBACK REQUIREMENTS:**

SINGLE FAMILY RESIDENTIAL LOTS: EACH LOT WILL BE SUBJECT TO A BUILDING ENVELOPE THAT WILL MEET OR EXCEED THE FOLLOWING MINIMUM SETBACKS:	
IRRIGATION DITCH BANK	15'
FRONT OR ROAD R-O-W	25'
REAR	25'
SIDE	20'
LOTS RESERVED FOR CABIN (TOWNHOME):	
IRRIGATION DITCH BANK	15'
FRONT OR ROAD R-O-W	20'
REAR AND SIDE	10'
EXACTION, UTILITY, AND AFFORDABLE HOUSING LOTS, AND OTHER DEVELOPMENT AREAS - TO BE DETERMINED AT FINAL DEVELOPMENT PLAN.	

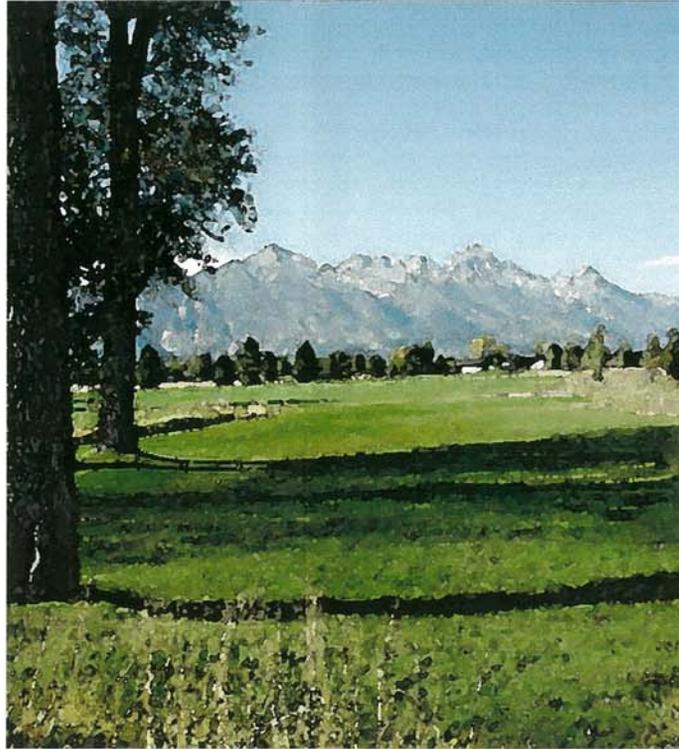
THE PROPOSED DEVELOPMENT IS LOCATED IN THE IMMEDIATE PROXIMITY OF AN EXISTING AIRPORT. NO PUBLIC MAINTENANCE OF STREETS OR ROADS, EXCEPT SPRING GULCH COUNTY ROAD NO. 22-4, THE BOARD OF COUNTY COMMISSIONERS OF TETON COUNTY WILL BE UNDER NO OBLIGATION TO CONSTRUCT, REPAIR OR MAINTAIN ANY ROADS BUILT TO SERVE THIS DEVELOPMENT.

COMMUNITY WATER SUPPLY  
THE PROPOSED DEVELOPMENT WILL BE CONNECTED TO THE TOWN OF JACKSON WASTEWATER TREATMENT FACILITY. HOWEVER, THE OWNERSHIP AND MAINTENANCE RESPONSIBILITY WILL REST WITH THE DEVELOPMENT HOMEOWNERS' ASSOCIATION. THE TOWN OF JACKSON WILL HAVE NO RESPONSIBILITY FOR SANITATION COLLECTION SYSTEM.

THE CURRENT BUILDING CODE RESOLUTION REQUIRES THAT STRUCTURES 5000 SQUARE FEET OR LARGER, NOT SEPARATED BY APPROVED FIRE WALLS, BE PROTECTED BY AN APPROVED INTERIOR SPRINKLER SYSTEM.

**SOURCE OF DATA:**

SURVEY DATA COLLECTED IN 1999 AND 2001 BY JORGENSEN ASSOCIATES, P.C.  
GROUND FEATURES AND TOPOGRAPHY FROM AERIAL PHOTOGRAPHY TAKEN ON OCTOBER 17, 1997 AND COMPILED BY HORIZONS, INC. OF RAPID CITY, SOUTH DAKOTA, WITH UPDATES FROM 1999 TETON COUNTY GIS PHOTOGRAPHS.  
ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 56039C053 B, EFFECTIVE DATE: MAY 4, 1989 THERE ARE AREAS OF THIS DEVELOPMENT (SOUTH OF SPRING GULCH COUNTY ROAD NO. 22-4) WITHIN THE FLOODWAY AND FLOOD PLAN OF THE GROS MONTRE RIVER. SEE SHEET 3 FOR DETAILS.



**TABLE OF CONTENTS:**

1. VICINITY MAP AND NOTES
- 2a. EXISTING SITE CONDITIONS (Physical Features and Lot Boundaries - North)
- 2b. EXISTING SITE CONDITIONS (Physical Features and Lot Boundaries - South)
3. EXISTING LAND DIVISION, ZONE DISTRICT BOUNDARIES, & FLOOD HAZARD ZONES
4. APPROVED MASTER SITE PLAN
5. PROPOSED MASTER SITE PLAN (OVERVIEW)
- 6a. PROPOSED LOT DETAIL (NORTH) WITH EXISTING TOPOGRAPHY
- 6b. PROPOSED LOT DETAIL (SOUTH) WITH EXISTING TOPOGRAPHY
- 7a. PROPOSED CABIN AND CLUBHOUSE AREA DETAIL
- 7b. PROPOSED CABIN FLOOR PLAN AND ELEVATIONS
8. PROPOSED CLUBHOUSE FLOOR PLAN AND ELEVATIONS
- 9a. PROPOSED UTILITY LAYOUT - PLAN VIEW (NORTH)
- 9b. PROPOSED UTILITY LAYOUT - PLAN VIEW (SOUTH)

**APPLICANT:**

Volf Resorts Development Company  
P.O. Box 859  
Artes, CO 81620-859  
(970) 845-2952

**OWNER:**

Jackson Hole Golf and Tennis Club, Inc.  
P.O. Box 7  
SHE, CO 81658  
(970) 845-2852

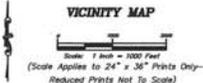
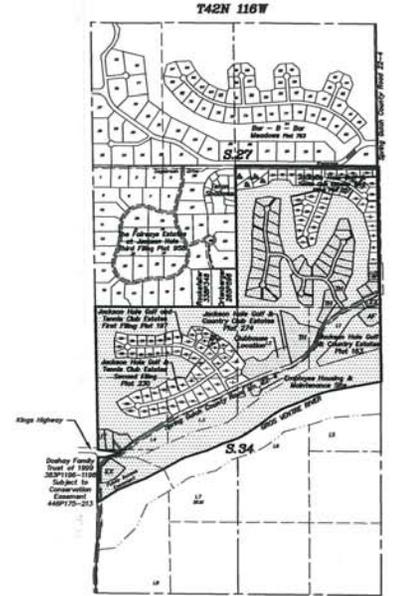
**LAND PLANNING & DESIGN CONSULTANT:**

Hart/Hawerton  
10 East 40th Street 30th Floor  
New York, NY 10016

**SURVEYOR & ENGINEER:**

Jorgensen Associates, P.C.  
P.O. Box 8250  
Jackson, WY 83002  
(307) 733-5150

SUBMITTAL DATE: March 29, 2002  
REVISED: August 9, 2002

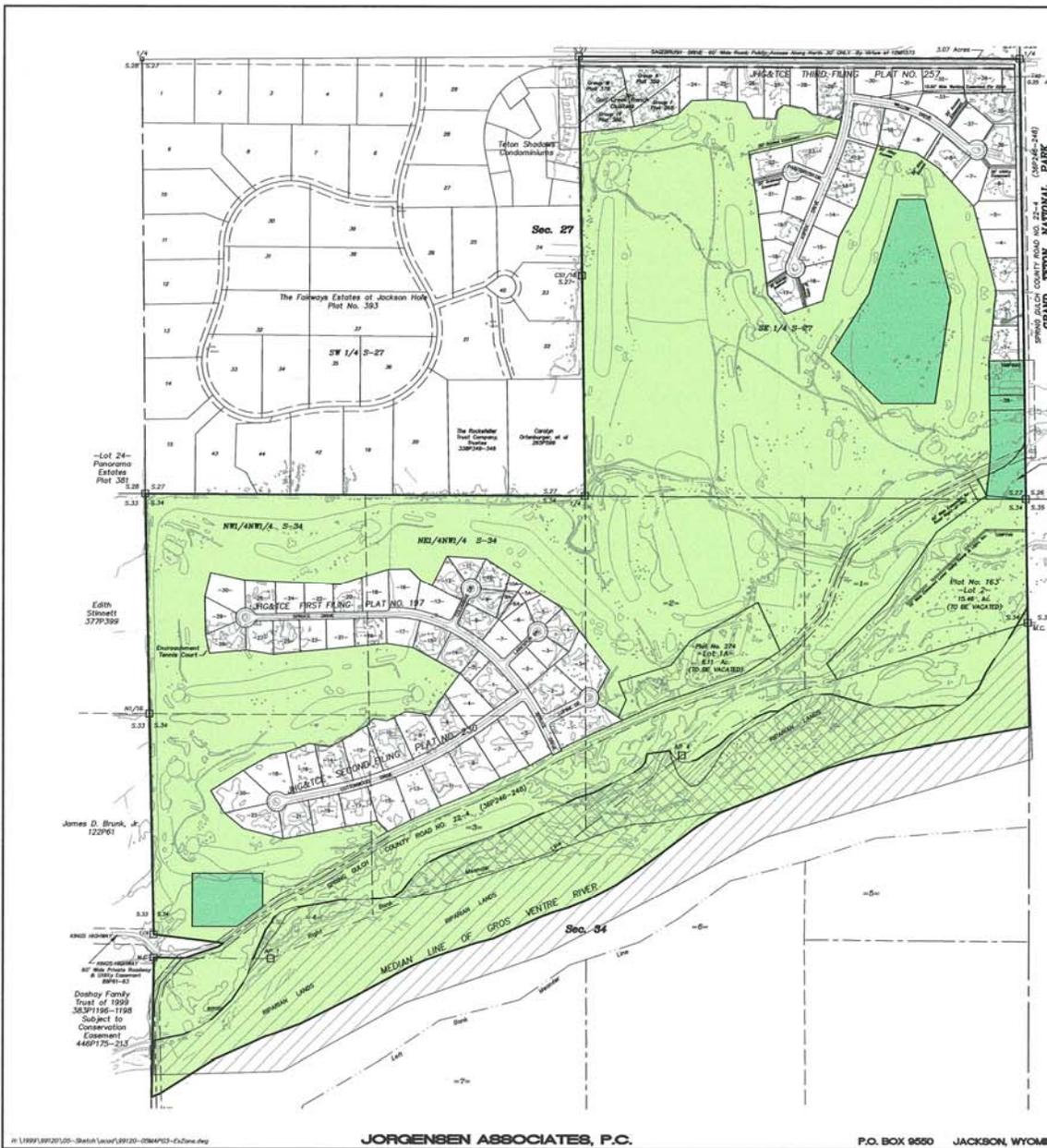


Boundary area generally referred to as the Jackson Hole Golf & Tennis Club  
Area proposed for Planned Unit Development (PUD) for Planned Resort District  
Proposed lots or Areas of Use within the PUD District for Planned Resort: Single Family Residential Lots except where Designated as AF (Affordable Housing); EX (Exaction Lot); TH (Reserved for Development of Cabins); UT (Utility Lot), or as otherwise noted.

**MAPS TO ACCOMPANY APPLICATIONS**  
FOR  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
**AMENDMENT TO MASTER PLAN FOR PUD DISTRICT FOR PLANNED RESORT**  
**(SKETCH PLAN FOR PUD DISTRICT FOR PLANNED RESORT)**  
AND  
**AMENDMENT TO OFFICIAL ZONING DISTRICT MAP**  
LOCATED WITHIN THE  
SE1/4 SECTION 27  
AND THE  
N1/2 AND N1/2SW1/4 SECTION 34  
T42N, R116W, 6th P.M.  
TETON COUNTY, WYOMING

**MAP 1 OF 9**  
VICINITY MAP AND NOTES

Last Revised: August 9, 2002  
Map Prepared: February 5, 2002  
Project No.: 89120.05.12



**LEGEND**

- Boundary area generally referred to as the Jackson Hole Golf & Tennis Club
  - - - Easement for Spring Gulch County Road No. 22-A
  - - - Other record easements
  - - - Sectional subdivision line
  - - - Meander Line of the Gros Ventre River
  - - - Floodway hazard boundary
  - Corner Record filed and corner found this survey
  - 2- Government lot number
  - 7- Existing subdivision lot number
  - Building outline from 1977 aerial photography
- ZONING DISTRICT BOUNDARIES (AS BEST DETERMINED FROM CONFLICTING COUNTY RECORDS)**
- Neighborhood Conservation—Single Family (NCSF); all lots within Plots 197, 230, 257, 359, 368, 376, and 386
  - Planned Unit Development (PUD) District for Planned Resort
  - Rural (R) - Area boundaries approximated from approved Master Plan Site Plan by Worth Design Associates dated May 1995. These boundaries represent minor revisions to those boundaries shown in the Land Development Regulations Section 21603.02.e.(5)

Flood Hazard Area According to the FEMA Flood Insurance Rate Map No. 56039C05306, Effective Date: May 4, 1989

- ▨ Floodway Area
- ▨ Zone AE, Base Flood Elevation Determined
- ▨ Zone X, Areas of 500-year Flood; Areas of 100-year Flood with Average Depths of less than 1 Foot or with Drainage Area less than 1 square mile; and Areas Protected by Levees from 100-year Flood

NOTE: Zone X, Areas Determined to be Outside 500-year Flood Plain (All areas not within Zone AE or Zone X, Areas of 500-year Flood)

**GENERAL NOTES:**

Ground features and topography are from aerial photography taken October 17, 1997 and compiled by Horizons, Inc. of Rapid City, South Dakota.  
See separate wetland determination maps by BRD in text submittal packet. All jurisdictional wetlands are located south of Spring Gulch County Road.



**MAPS TO ACCOMPANY APPLICATIONS**  
FOR  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
**AMENDMENT TO MASTER PLAN FOR PUD DISTRICT FOR PLANNED RESORT**  
**(SKETCH PLAN FOR PUD DISTRICT FOR PLANNED RESORT)**  
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T42N, R10W, G01 P.M.  
TETON COUNTY, WYOMING

**MAP 3 OF 9**  
EXISTING LAND DIVISION  
ZONE DISTRICT BOUNDARIES  
AND  
FLOOD HAZARD ZONES

### Proposed Lot Summary

- |  |                   |
|--|-------------------|
| 43 Single Family Lots                                    | Lots 1-43         |
| Reserved for Development-<br>40 Cabin Lots               | Lot 48, 49 and 50 |
| Utility Lot  | Lot 44            |
| Exaction Parcel/Recreation                               | Lot 45            |
| Fire Station Lot   | Lot 46            |
| Reserved for Development-<br>22 Affordable Housing Units | Lot 47            |
| Road Lot   | Lot 51            |
| Golf Course Lot  | Lot 52            |

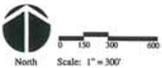
The Fairways Estates at Jackson Hole  
Plat No. 393



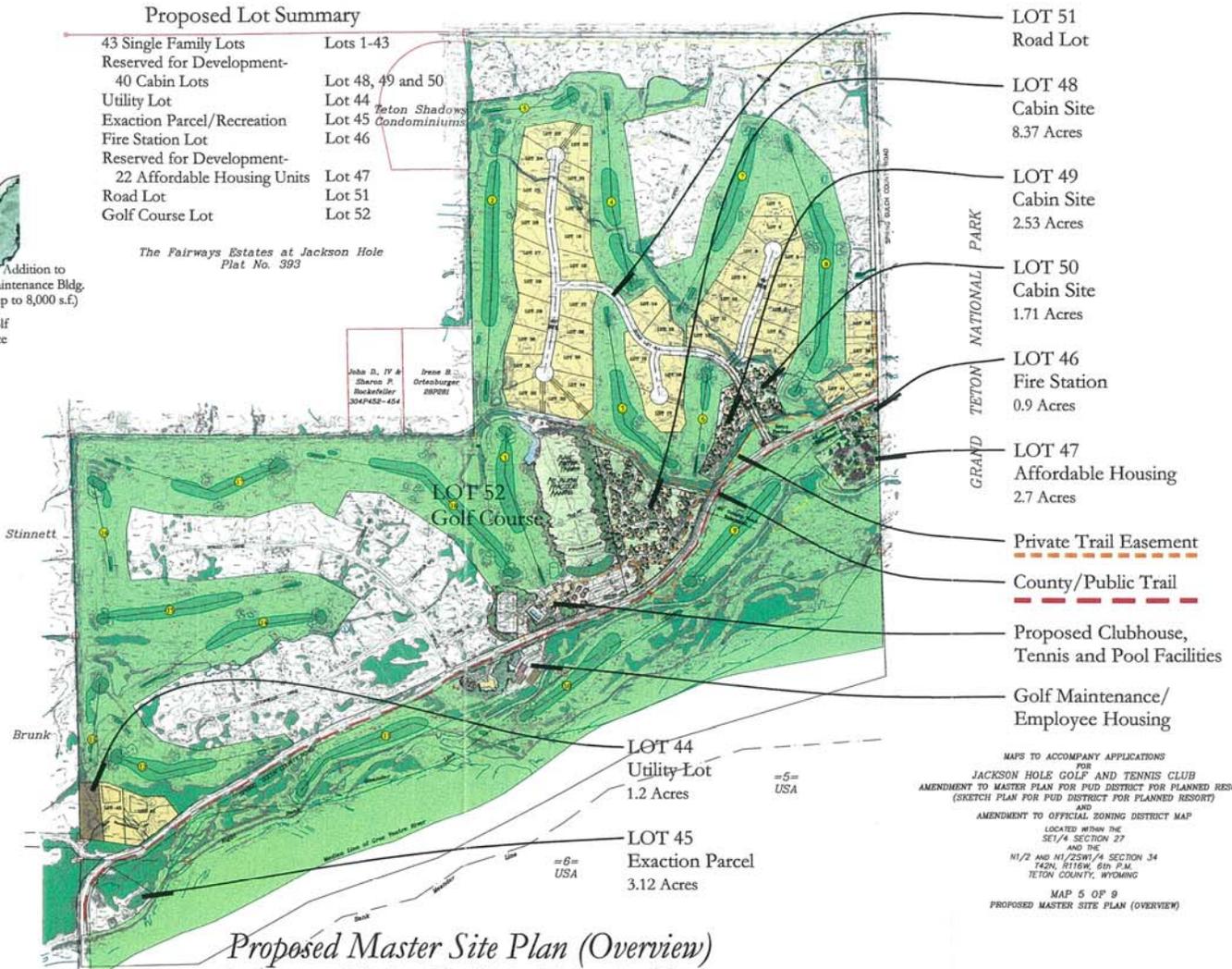
Golf Maintenance/  
Employee Housing



LOT 46 and 47  
Fire Station and  
Affordable Housing Lots



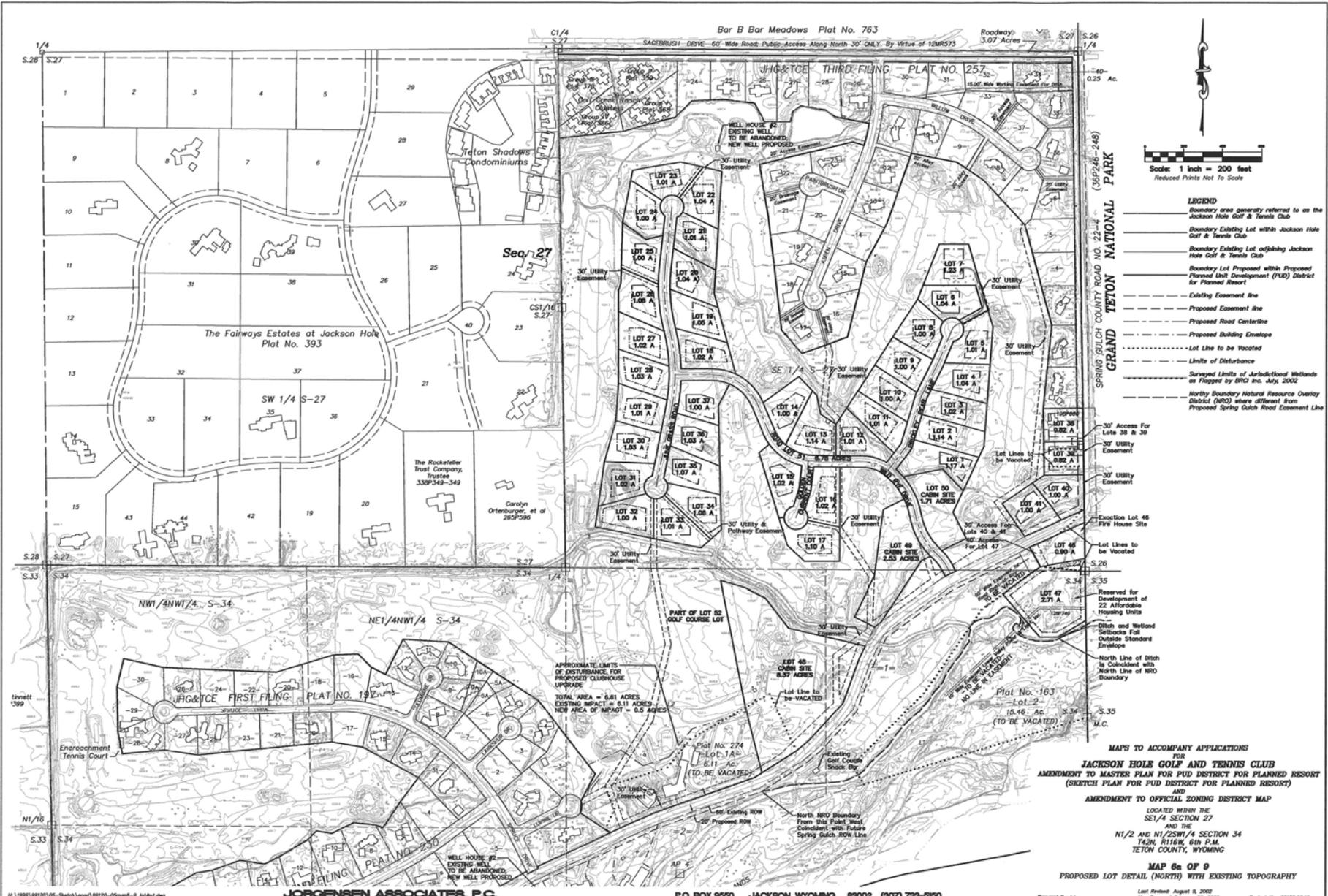
Jackson Hole



## Proposed Master Site Plan (Overview) Jackson Hole Golf & Tennis Club

Vail Resorts Development Company - Avon, Colorado  
Hart|Howerton - Planning, Architecture and Landscape Architecture - New York, San Francisco  
August 9, 2002

Wyoming



- LEGEND**
- Boundary area generally referred to as the Jackson Hole Golf & Tennis Club
  - Boundary Existing Lot within Jackson Hole Golf & Tennis Club
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  - Boundary Lot Proposed within Proposed Planned Unit Development (PUD) District for Planned Resort
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  - Proposed Easement line
  - Proposed Road Centerline
  - Proposed Building Envelope
  - Lot Line to be Vacated
  - Limits of Disturbance
  - Surveyed Limits of Archaedolical Wetlands as Mapped by GHZ Inc. July, 2002
  - Northern Boundary Natural Resource Overlay District (NRO) where different from Proposed Spring Gulch Road Easement Line

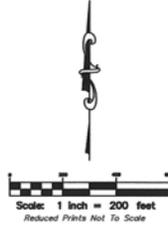
**MAPS TO ACCOMPANY APPLICATIONS**

**JACKSON HOLE GOLF AND TENNIS CLUB**  
**701**  
**AMENDMENT TO MASTER PLAN FOR PUD DISTRICT FOR PLANNED RESORT**  
**(SKETCH PLAN FOR PUD DISTRICT FOR PLANNED RESORT)**

**AND**

**AMENDMENT TO OFFICIAL ZONING DISTRICT MAP**  
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 TETON COUNTY, WYOMING

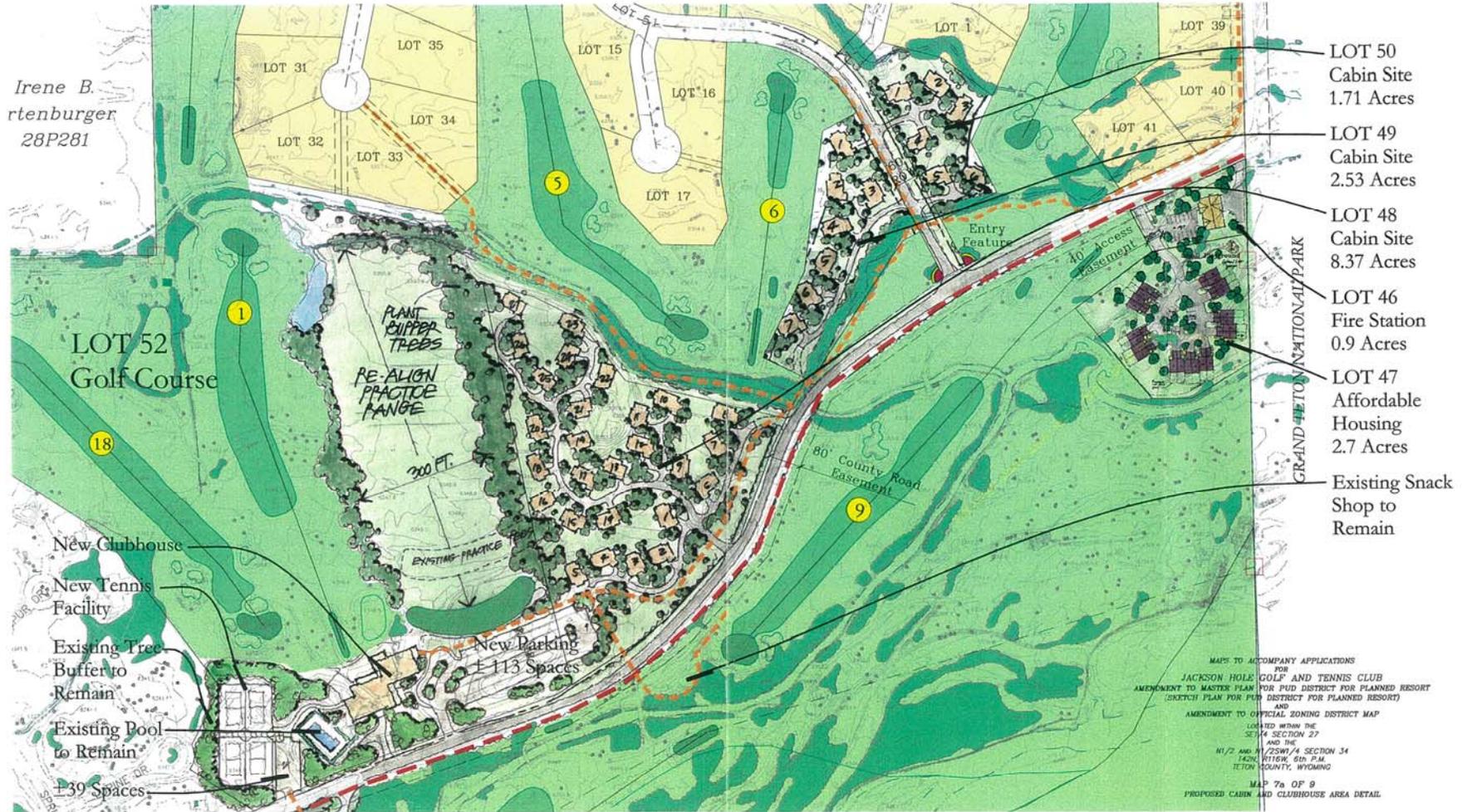
**MAP 6a OF 9**  
**PROPOSED LOT DETAIL (NORTH) WITH EXISTING TOPOGRAPHY**



- LEGEND**
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MAPS TO ACCOMPANY APPLICATIONS  
 FOR  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
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 (SKETCH PLAN FOR PUD DISTRICT FOR PLANNED RESORT)  
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 T42N, R116W, 6th P.M.  
 TETON COUNTY, WYOMING

**MAP 6b OF 9**  
 PROPOSED LOT DETAIL (SOUTH) WITH EXISTING TOPOGRAPHY



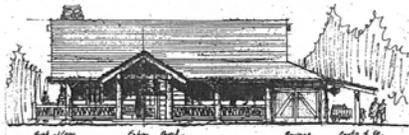
*Proposed Cabin and Clubhouse Area Detail*  
**Jackson Hole Golf & Tennis Club**



Jackson Hole

Vail Resorts Development Company - Avon, Colorado  
 Hart|Howerton - Planning, Architecture and Landscape Architecture - New York, San Francisco  
 August 9, 2002

Wyoming



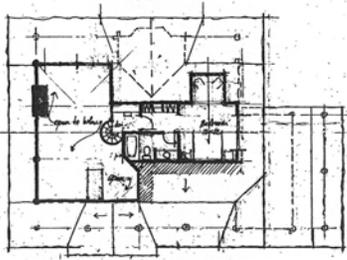
Front Elevation Alt. A



Rear Elevation (Alt. A)



Rear Elevation Alt. B



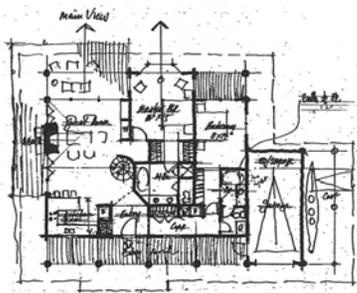
Second Floor



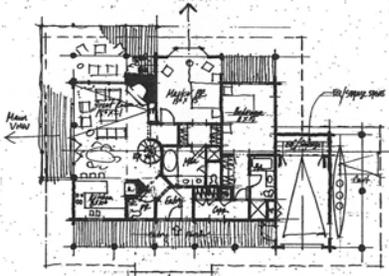
Side Elevation



Side Elevation Alt. B



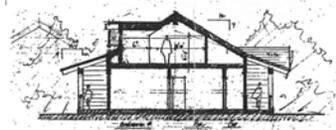
First Floor



First Floor



Section @ Great Room, Kitchen & Loft

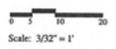


Section @ Bedroom & Ba

3BR/3Bath Alt. A  
1st Floor 1485 SF  
2nd Floor 515 SF + garage  
Total - 1810 SF

3BR/3 1/2 Bath Alt. B (2nd Floor, Inc.)  
1st Floor 1485 SF  
2nd Floor 315 SF + garage  
Total - 1810 SF

MAPS TO ACCOMPANY APPLICATIONS  
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JACKSON HOLE GOLF AND TENNIS CLUB  
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N 1/2 AND N 1/2 SW 1/4 SECTION 34  
T42N, R10E, S10, P14  
TETON COUNTY, WYOMING  
MAP 7b OF 9  
PROPOSED CABIN FLOOR PLAN AND  
ELEVATIONS

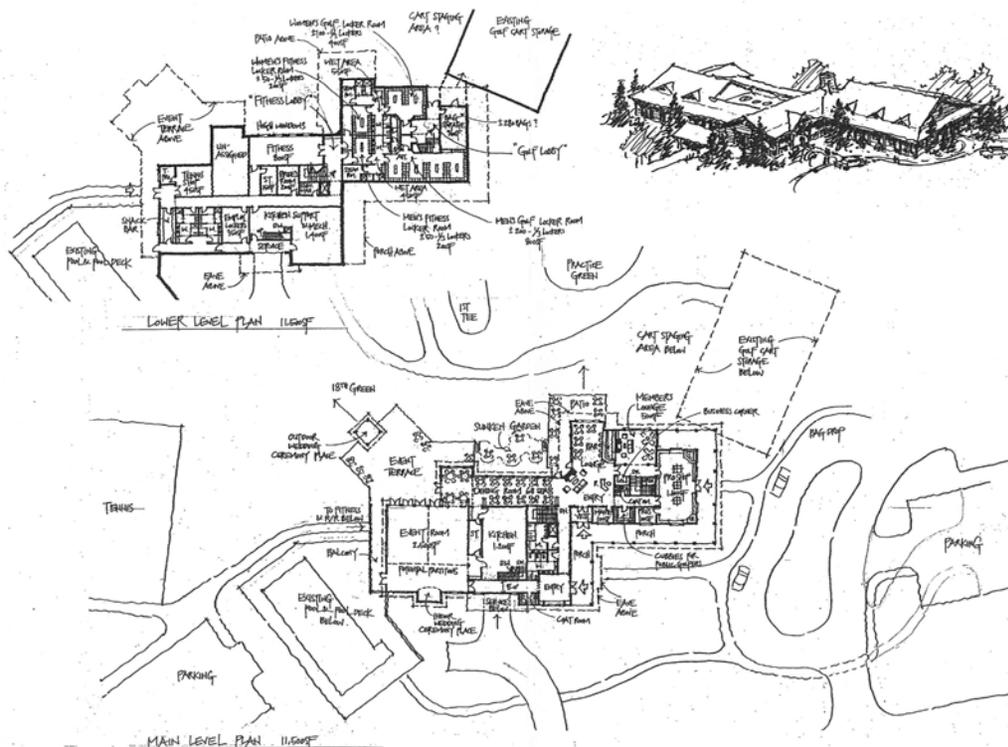


Jackson Hole

## Proposed Cabin Floor Plan and Elevations Jackson Hole Golf & Tennis Club

Vail Resorts Development Company - Avon, Colorado  
Hart|Howerton - Planning, Architecture and Landscape Architecture - New York, San Francisco  
March 26, 2002

Wyoming



MAPS TO ACCOMPANY APPLICATIONS  
 FOR  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
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 AND THE  
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 T29N, R17E, 6th P.M.  
 TETON COUNTY, WYOMING

MAP 8 OF 9  
 PROPOSED CLUBHOUSE FLOOR PLAN AND  
 CONCEPT SKETCH

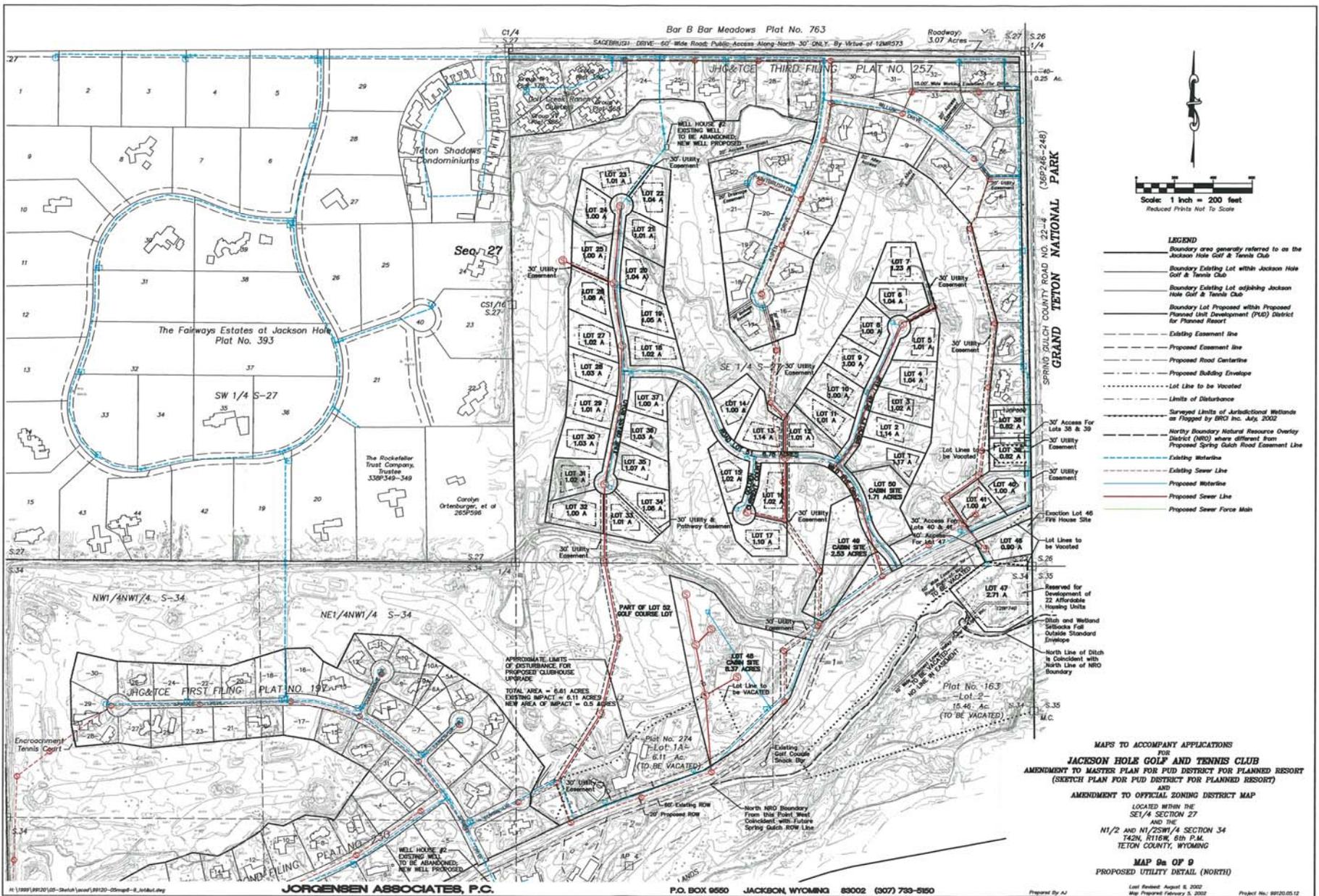


Jackson

## Proposed Clubhouse Floor Plan and Concept Sketch Jackson Hole Golf & Tennis Club

Vail Resorts Development Company - Avon, Colorado  
 Hart|Howerton - Planning, Architecture and Landscape Architecture - New York, San Francisco  
 March 26, 2002

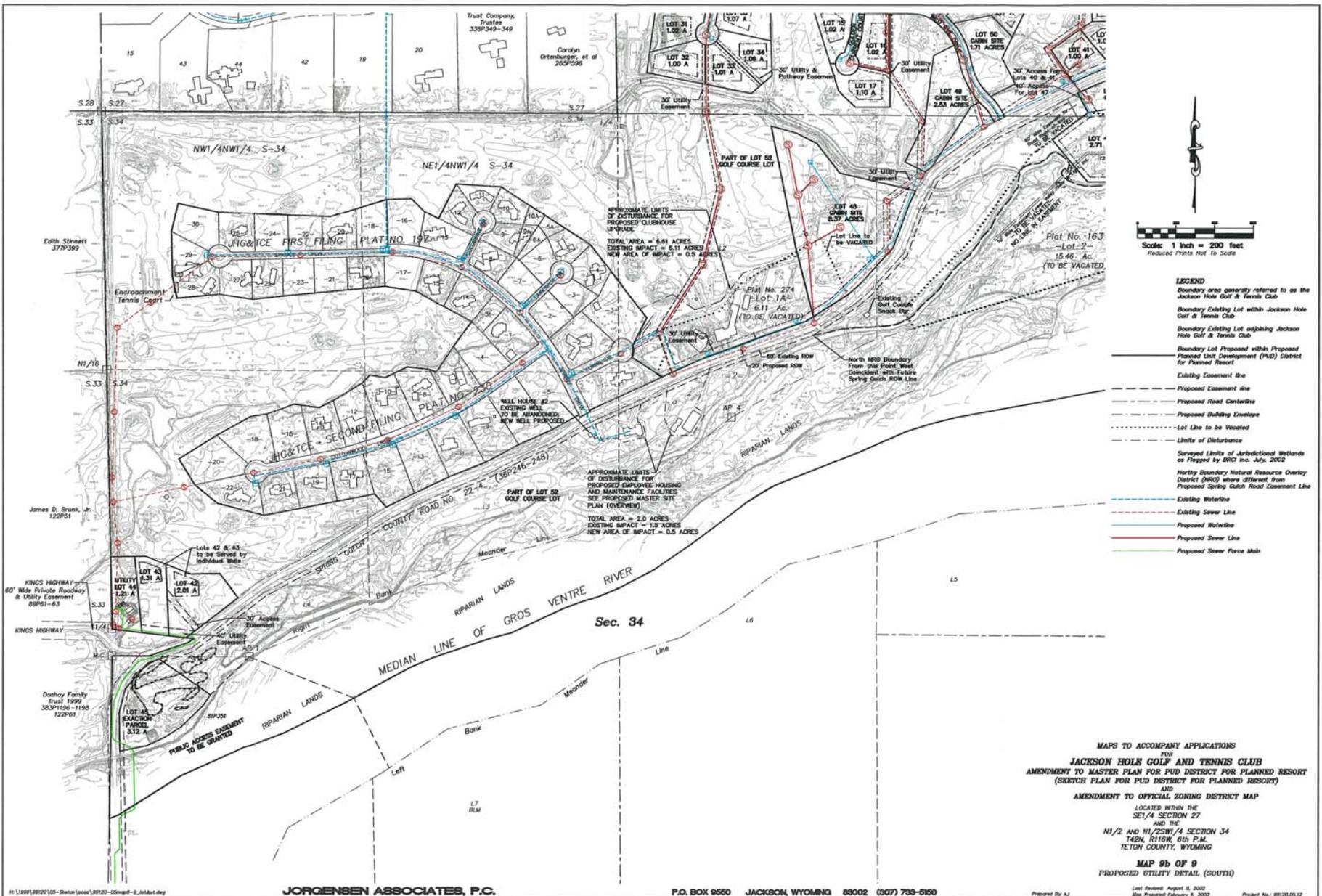
Wyoming



- LEGEND**
- Boundary area generally referred to as the Jackson Hole Golf & Tennis Club
  - Boundary Existing Lot within Jackson Hole Golf & Tennis Club
  - Boundary Existing Lot adjoining Jackson Hole Golf & Tennis Club
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  - Proposed Road Centerline
  - Proposed Building Envelope
  - Lot Lines to be Vacated
  - Limits of Disturbance
  - Surveyed Limits of Jurisdictional Wetlands as Flagged by BRG Inc. July, 2002
  - Northern Boundary Natural Resource Overlay District (NRO) where different from Proposed Spring Gulch Road Easement Line
  - Existing Waterline
  - Existing Sewer Line
  - Proposed Waterline
  - Proposed Sewer Line
  - Proposed Sewer Force Main

MAPS TO ACCOMPANY APPLICATIONS  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
 AMENDMENT TO MASTER PLAN FOR PUD DISTRICT FOR PLANNED RESORT  
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 T42N, R116W, 6th P.M.  
 TETON COUNTY, WYOMING

**MAP 9a OF 9**  
 PROPOSED UTILITY DETAIL (NORTH)



- LEGEND**
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  - Boundary Existing Lot with Jackson Hole Golf & Tennis Club
  - Boundary Existing Lot adjoining Jackson Hole Golf & Tennis Club
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  - Lot Line to be Vacated
  - Limits of Disturbance
  - Surveyed Limits of Jurisdictional Wetlands as Flagged by BRD Inc. July, 2002
  - North Boundary Natural Resource Overlay District (NRO) where different from Proposed Survey Guide Road Easement Line
  - Existing Waterline
  - Existing Sewer Line
  - Proposed Waterline
  - Proposed Sewer Line
  - Proposed Sewer Force Main

MAPS TO ACCOMPANY APPLICATIONS  
 FOR  
**JACKSON HOLE GOLF AND TENNIS CLUB**  
 AMENDMENT TO MASTER PLAN FOR PUD DISTRICT FOR PLANNED RESORT  
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 T42N, R116W, 6th P.M.  
 TETON COUNTY, WYOMING

**MAP 9b OF 9**  
 PROPOSED UTILITY DETAIL (SOUTH)



No Scale

*Exhibit of Proposed Clubhouse Elevation  
Illustrating Lower Level Walk-Out  
for  
Jackson Hole Golf and Tennis Club  
Resort Master Plan Amendment*

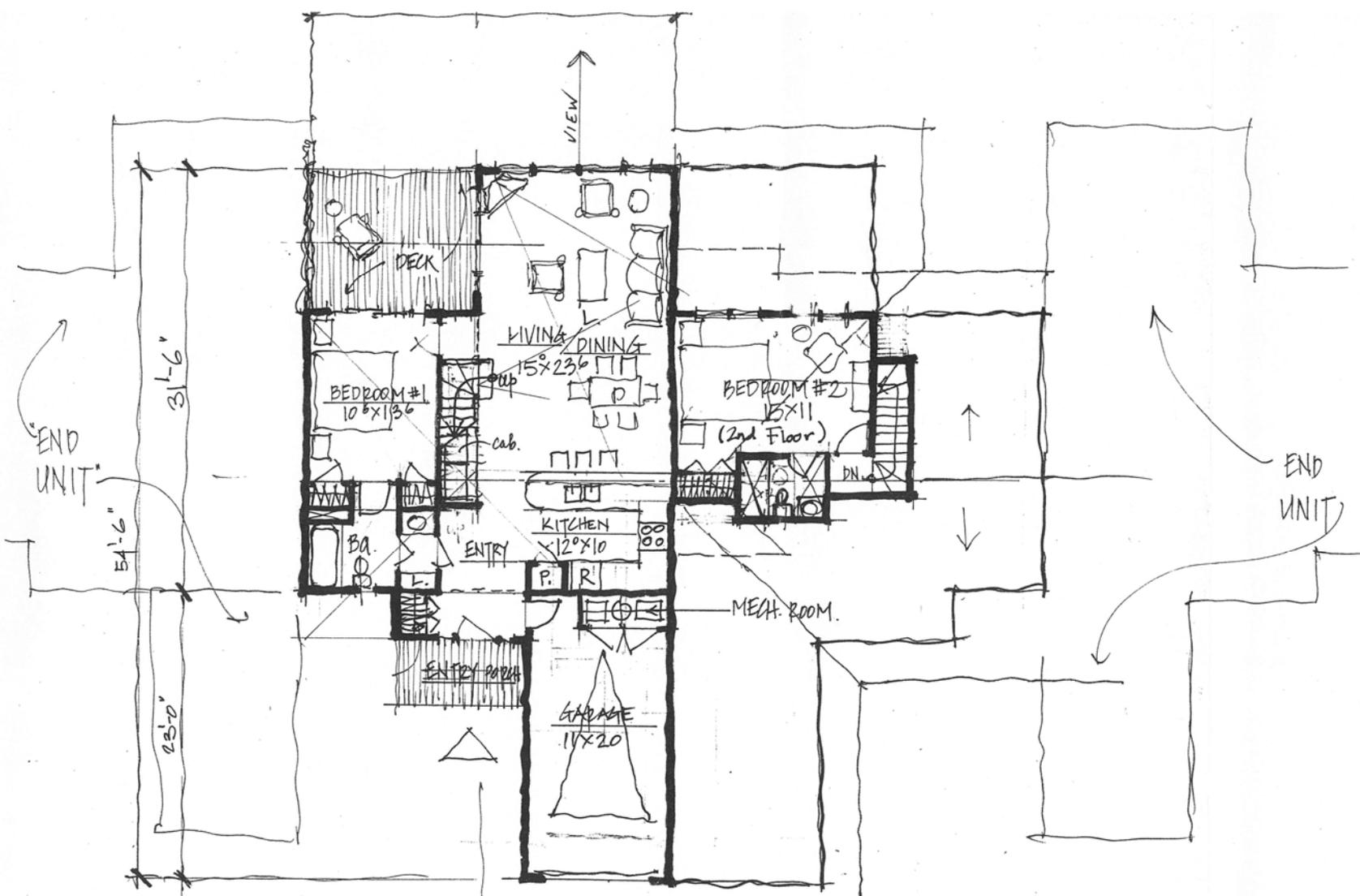
II:\1999\99120\FROM OTIERS\Hartlowerton-Misc\Images\99120-00Proposed Clubhouse Elevation- 8-9-2002.psd

August 9, 2002

JA Project 99120.05.12



*Exhibit Showing Preliminary Clubhouse Parking Lot Detail  
for  
Jackson Hole Golf and Tennis Club  
Resort Master Plan Amendment*



0 AFFORDABLE HOUSING UNITS STUDY @ JACKSON HOLE

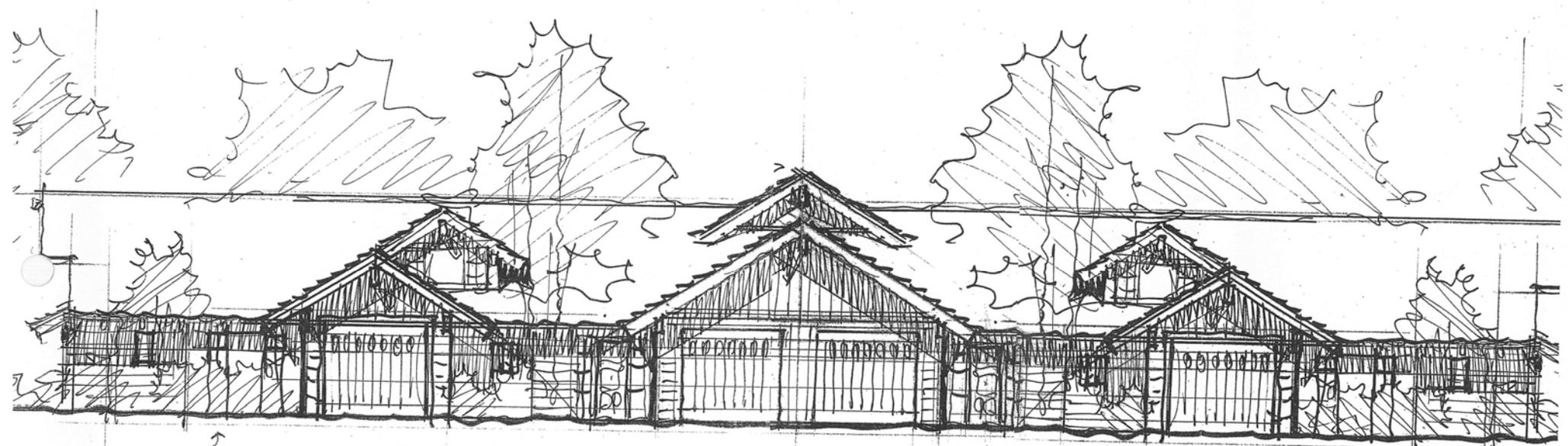
2 BR / 2 BATH      860 SF 1ST FLOOR

1/8" = 1'-0"    H# 8/7/02      265 SF 2ND FLOOR

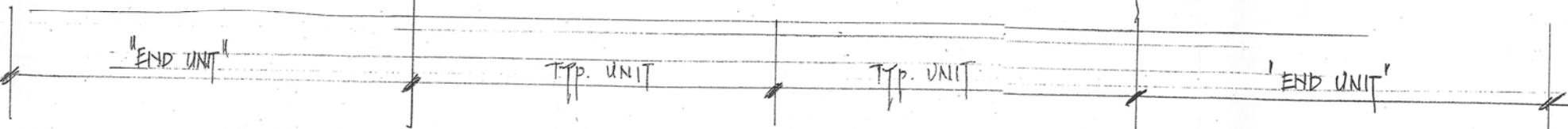
1125 SF. TOTAL + 1 CAR GARAGE

Sketch Plan  
Jackson Hole  
Golf and Tennis Club

August 9, 2002



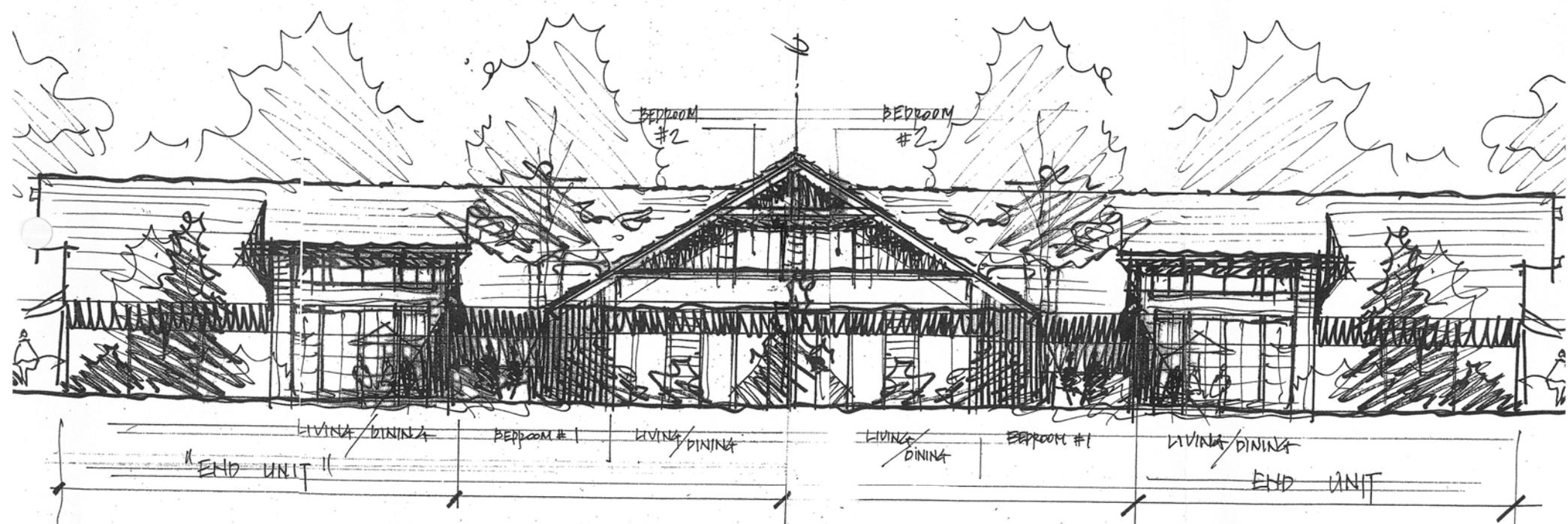
ENTRY → GARAGE BATH ENTRY GARAGE GARAGE ENTRY BATH GARAGE ENTRY



**FOUR TOWNHOMES - FRONT ELEVATION**  
AFFORDABLE HOUSING UNITS STUDY

SKETCH PLAN  
JACKSON HOLE GOLF  
AND TENNIS CLUB  
August 9, 2002

SCALE 1/8" = 1'-0"



# FOUR TOWNHOMES - REAR ELEVATION

##  
AFFORDABLE HOUSING UNITS STUDY - SKETCH PLAN  
JACKSON HOLE GOLF AND TENNIS CLUB  
August 9, 2002

SCALE 1/8" = 1'0"

# **ATTACHMENT D**

COUNTY COMMISSIONERS' MINUTES  
Tuesday, August 18, 1998

Pamela Rankin is also concerned about the sewage treatment plant. She wondered if perhaps the septic systems in that area might already be endangering the groundwater quality. Pamela even thought the ranchers might be willing to help with costs involved in obtaining sewer line hookup.

Corinne Borshell of East Zenith Subdivision asked a question about procedure. Mike Gierau explained that the Commissioners usually wait until the motion is made and then discuss the points of the motion.

Diane Hazen said she feels sewage treatment plants need to be operated properly. She expressed concern that the sewage line is the weakest link in the development chain. A sewer line going through Spring Gulch is a timing issue. She is concerned about an enforceable contract, which all 3 parties would have to agree before any other parties could hook on to the system. It should be a tightly enforceable contract. First there was the Spring Creek line and now new engineering makes possible addition of JH Golf & Tennis. Diane is concerned about a minor NRO impact and hopes it really is that minor. Cumulative impacts of development are a problem for wildlife.

Pam Lichtman of the JH Conservation Alliance said they do not feel that the option of a package plant has been sufficiently explored. The other concerns echo what Diane just stated. A sewer line will encourage growth. The Alliance does not agree with a sewer line as a solution for development along Spring Gulch. Respecting the NRO their concern is about cumulative impacts to wildlife. The NRO was to identify general locations where there was crucial wildlife activity. The Alliance is also concerned about development in the flood plain of the Gros Ventre River. If old channels become active, this could be a future flooding problem.

Dave Larson responded to some of the public comments. He said they recognize the problems with the sewage plant. It is not primarily a function of a non-professional operator, the plant is 30 years old. The very best and soundest approach would be for a sewer line to go down Spring Gulch Road.

Jeff Hermansky from DEQ is the water quality engineer responsible for water systems in Teton County. He said he had written a letter to Teton County about the position of DEQ on sewage treatment plants. Jeff said DEQ discourages them and feels they should be the last alternative. A sewage line to the Town of Jackson system would be preferred by DEQ. Most surrounding states already have really stringent restrictions on sewage package plants. They are not allowed if there is any viable option available. There seem to be some misconceptions about the Spring Creek sewer line. It was built to meet minimum standards.

Mike asked about the sizing of sewer lines. Since the sewer line for Spring Creek was designed for a certain capacity and they are not developing anywhere near that capacity, the line should be of sufficient size. What can we do to limit the size of those lines? Should they be limited in size? Jeff Hermansky said that whenever a development is proposed the infrastructure is required to be constructed of a size that can handle the project being proposed, not to anticipate future growth.

Bill Collins asked Jeff Hermansky about a groundwater injection discharge system vs. a surface discharge system. Jeff explained that the Teton Pines and the Teton Village plants both have the groundwater injection discharge systems. DEQ still prefers a hookup to the Jackson sewer line system.

Bob Shervin announced for the public that due to the length of time being spent on this application, the Aman Villa applications will not be considered until 1:30 p.m. today after lunch break.

Mike Gierau moved to APPROVE the Sketch Plan proposal for Jackson Hole Golf & Tennis PUD for Planned Resort with the 23 conditions on the Staff report dated August 10, 1998 by Mr. McMullen with the 9 findings for approval also as set out in the Staff report on pages 2-11 & 2-12. Bill Paddleford seconded the motion. Sandy proposed amendments to Conditions #12, #16, #17 & #18. Mike and Bill both agreed to the amendments. The vote was unanimously in favor of the motion. The 23 Conditions for Approval (as amended) are as follows:

1. The realigned section of Spring Gulch Road shall be upgraded to a status as specified in the Teton County Transportation Study presently being undertaken.
2. At Final Development the design team will consider the feasibility of connecting the interior cross country ski trails to the County Pathway and allowing these trails to be open for public use.
3. Accurate Perspective sketches and/or three dimensional computer models of the proposed lodge shall be submitted to the Planning Department for review at the time of building permit approval.

Sketches should document the views from the Spring Gulch Road and the surrounding residential areas and be indicative of the structure's compatibility with neighboring structures and the natural environment.

4. The alignment of the Teton County Pathway shall be examined in greater detail at the Final Development Phase.
5. The sewer line connection to Town should be considered the preferred alternative as the means for treating wastewater at Golf and Tennis. The feasibility of this option should be explored in depth at the final development phase. The Planning Department will continue to work with the applicant in examining this alternative. The proposal of an on site Package Plant is accepted as part of the Sketch Plan submittal. The Package Plant will need to meet current DEQ regulations and 50% of the structure, as viewed from Spring Gulch Road and adjacent residential properties with plant material in full leaf, will be screened at the time of installation. This does not preclude the 80% screening at five years as specified in the sketch plan submittal.
6. The applicant is responsible for obtaining, or furnishing proof of having, all the necessary development permits, from either the Town or County, for the construction of all employee housing. Approval of all Final Development Plans for any development shall be contingent on approval of any necessary development permits to construct required employee housing.
7. All information received July 17, 1998 in the document entitled "Addendum to the Master Plan Document" shall supercede information contained in the Sketch Plan Application PUD 98-0001 where deemed appropriate by the County.
8. Cottonwood trees and willow shrubs occurring along ditches ponds and other water features should be preserved wherever possible.
9. Methods of speed control, for the portion of Spring Gulch Road relocated adjacent to or encroaching into the NRO, should be outlined at the Final Development phase and implemented at the Road Construction phase.
10. The realignment of Spring Gulch Road shall be laid out in a manner that minimizes tree damage and removal.
11. The use for the Public /Semi Public site shall be determined at Final Development and does not preclude the inclusion of a local convenience node.
12. The Transportation Demand Management (TDM) techniques outlined in the "Response to Planning Commissioners and Staff" shall be implemented to achieve benchmarks that will be further specified at Final Development.
13. Fencing should be kept to a minimum or ideally eliminated. If control of livestock is not necessary, perimeter fences around the parcel should be removed. Fencing shall adhere to the recommendations given in the Environmental Assessment prepared by Biota Feb. 3, 1998.
14. Non-native plants should not be used within project limits, see land use recommendation #3 in Biota's EA prepared Feb. 3, 1998.
15. Free-roaming, unrestrained domestic pets are prohibited, see land use recommendation #12 in Biota's EA prepared Feb. 3, 1998.
16. Artificial feeding of moose, deer, and elk anywhere on the property is prohibited.
17. Garbage collection and disposal rules that minimize wildlife conflicts shall be formulated and enforced.
18. If proposed, bird Feeders and pet food dispensers shall be kept out of reach of bears.
19. Bentonite instead of plastic liners should be used in the pond construction.
20. Due to their importance as bioindicators, if reptiles or amphibians are observed in the project area Wyoming Game and Fish should be contacted with the location and the species name if possible.
21. The applicant should re-examine the conceptual design proposed for the SE corner of the site. Spring Gulch Road may be realigned as proposed but no development shall be located south of the realigned road. The Public/Semi-Public site will need to be relocated north of Spring Gulch Road.
22. Approval of this sketch plan does not in any way indicate approval of any subsequent subdivision application.
23. As per County Regulations mitigation of areas within the NRO impacted by construction shall be accomplished by providing mitigation and habitat enhancement on a basis of two (2) acres of mitigation/habitat enhancement for every (1) one acre of land within the NRO impacted. The disturbed area located in the SW of the property shall also be reclaimed. Reclamation shall consist of cleaning up stockpiled materials, top dressing with adequate topsoil and planting with native trees, shrubs and grasses as per an approved landscape plan submitted at final development."

*ATTACHMENT E*

**LEGAL DESCRIPTION OF THE  
JACKSON HOLE GOLF AND TENNIS CLUB  
PLANNED UNIT DEVELOPMENT  
FOR  
PLANNED RESORT**

TO WIT:

**Lands** located within the SE¼ of Section 27, and the N½ and N½SW¼ of Section 34, T42N, R116W, 6<sup>th</sup> P.M., Teton County, Wyoming, being **identical with the lands contained within the boundary of The Resort at Jackson Hole Golf and Tennis Club**, a subdivision of record in the Office of the Clerk of Teton County, Wyoming as Plat No. 1086, of which certain lots have been replatted;

**a more particular description of said lands is as follows:**

Lots 1 through 37 (Single Family Residential Lots); Lots 41 and 48 (Road Lots); Lots 39 and 45 (Exaction Lots); and Lot 46 (Utility Lot) of said Plat No. 1086, The Resort at Jackson Hole Golf and Tennis Club;

Lot 49 (Golf Course Lot) of The Resort at Jackson Hole Golf and Tennis Club Second Filing, a subdivision of record in said Office as Plat No. 1176;

Lots 51 through 54 (Single Family Residential Lots) of The Resort at Jackson Hole Golf and Tennis Club Third Filing, a subdivision of record in said Office as Plat No. 1205;

Lots 1 through 12 (Townhouse Lots) and Lots A and B (Common Area Lots) of The Cabins at Jackson Hole Golf and Tennis Club First Filing, a subdivision of record in said Office as Plat No. 1146;

Lots 13 through 23 (Townhouse Lots) and Lot C (Common Area Lot) of The Cabins at Jackson Hole Golf and Tennis Club Second Filing, a subdivision of record in said Office as Plat No. 1152;

Lots 24 through 35 (Townhouse Lots) and Lot D (Common Area Lot) of The Cabins at Jackson Hole Golf and Tennis Club Third Filing, a subdivision of record in said Office as Plat No. 1177; AND

Units 1 through 22 and the Common Elements of Jackson Hole Golf and Tennis Club Condominiums, a subdivision of record in said Office as Plat No. 1284.

said lands encompass an area of 351.80 acres, more or less.

JORGENSEN ASSOCIATES, P.C.

Prepared: February 4, 2010; Revised December 21, 2010 Ex Ref

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Reviewed: KM; FPR

*ATTACHMENT E*

**LEGAL DESCRIPTION OF THE  
JACKSON HOLE GOLF AND TENNIS CLUB  
PLANNED UNIT DEVELOPMENT  
FOR  
PLANNED RESORT**