

Appendix E

Environmental Analysis

ENVIRONMENTAL ANALYSIS
FOR THE
Teton Village Expansion Master Plan



March 1, 2004

Prepared by: Katie Salsbury & Andrew Smith



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TABLE OF CONTENTS

HABITAT INVENTORY	2
SITE CONDITIONS	2
VEGETATIVE COVER TYPES	3
PROTECTED RESOURCES - WATER BODIES, TEN YEAR FLOODPLAINS AND WETLANDS ..	5
HABITATS PROTECTED BY THE NRO.....	5
HABITAT RANKING	6
HABITAT SUMMARY	6
DEVELOPMENT IMPACT ASSESSMENT.....	7
PROPOSED DEVELOPMENT	7
SETBACKS	7
HABITAT IMPACT ASSESSMENT.....	8
PROJECT VICINITY IMPACT STATEMENT	9
ENDANGERED PLANT AND VERTEBRATE SPECIES	10
ALTERNATIVE SITE DESIGN ANALYSIS	10
VISUAL ANALYSIS.....	14
RECOMMENDATIONS RELATED TO HUMAN USES OF THE PROPERTY	14
HABITAT ENHANCEMENT PLAN	15
CONCLUSION.....	17
REFERENCES.....	19
APPENDIX A – PHOTOGRAPHY.....	21
APPENDIX B – HABITAT ENHANCEMENT PLANS.....	22
APPENDIX C – ACOE WETLAND VERIFICATION LETTER, ACOE/FWS/DEQ NW27 AUTHORIZATIONS, WG&FD LETTER OF SUPPORT, FEMA CLOMAR	23
APPENDIX D – STATEMENT OF QUALIFICATIONS	24

HABITAT INVENTORY

SITE CONDITIONS

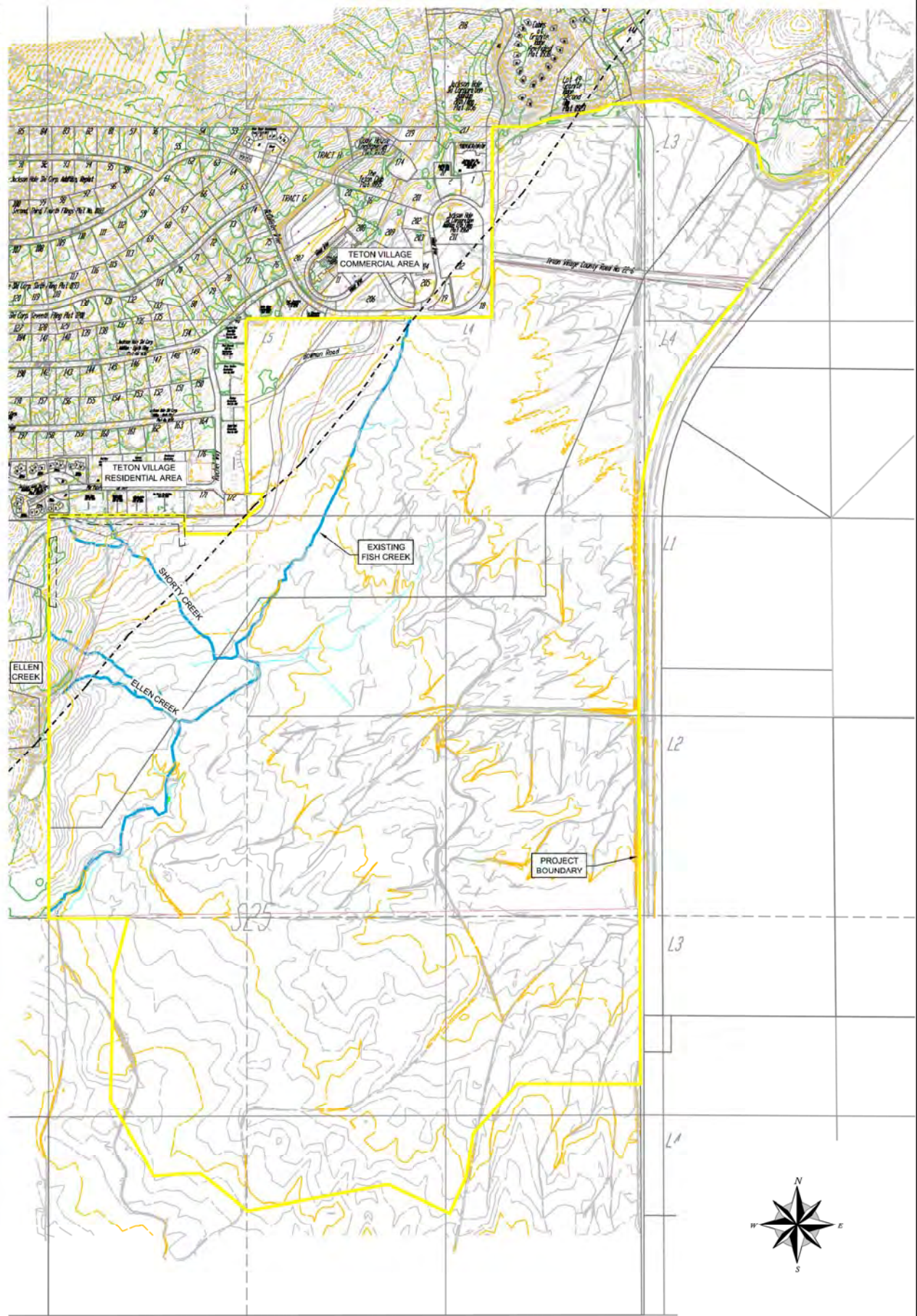
The Teton Village Expansion Master Plan is located to the south and east of the existing development at Teton Village, Wyoming. The development site encompasses approximately 511 acres. The project area is characterized by its historic agricultural use. The project area has been used for cattle and hay production since 1899, when the first water rights were filed. The topography, vegetative cover types and hydrology throughout the project area and adjacent lands were significantly altered to facilitate agricultural operations. The landscape was plowed and leveled to allow for flood irrigation, native vegetation was removed throughout much of the project area and introduced pasture grasses were planted, the hydrology was altered by diverting flows from Granite Creek, the Snake River and Ellen Creek to flood irrigate, and the first ¼ mile of Fish Creek was channeled.

The existing topography to the east of Fish Creek follows historic irrigation ditches used to deliver water to lands adjacent to Fish Creek. The topography to the west of Fish Creek slopes mildly to the south and east and is predominantly flat adjacent to Fish Creek. The flattest and lowest elevation areas on the property are located adjacent to Fish Creek. Immediately to the west of the project area, Rendezvous Mountain rises from 6,400 to 10,450 feet.

Hydrologic features on the site include Fish Creek, Ellen Creek and Shorty Creek. Fish Creek runs north to south through the north and west portion of the development area and is greatly influenced by groundwater recharge created by return flows from lands flood irrigated east of Highway 390. Intermountain Aquatics has been extensively studying the ground and surface water hydrology throughout the project area since the spring of 2000. The natural hydrology in Fish Creek is supported by springs at the base of Teton Village and further downstream (approximately 2.5 linear miles south of the project area) by groundwater from the Snake River and surface water from Lake Creek. The section of Fish Creek located throughout the project area is isolated from groundwater influences from the Snake River flood plain. A consequence of this lack of connectivity is that this section of Fish Creek is intermittent and naturally flows with approximately 3 cubic feet per second (cfs) for 5 - 6 months of the year. However, when the Snake River Ranch irrigates lands east of Highway 390, the base flow in Fish Creek increases dramatically throughout the project area. During a normal irrigation season, the average annual flow of Fish Creek in the upper section is less than 2.45 cfs. Downstream, just below the confluence between Fish Creek and an irrigation return flow outlet, the average annual flow exceeds 3 cfs, with a fluctuation from 0.61 cfs to 70 cfs depending on irrigation activity east of Highway 390. Throughout the project area, Fish Creek runs dry from the end of September to the middle of May. The minimal base flow from the springs at the base of Teton Village is not enough to sustain a perennial flow through the project area.

Ellen Creek and Shorty Creek drain to the east from the Tetons into Fish Creek. Ellen Creek is a perennial spring creek which flows into Fish Creek on the western portion of the development area. Ellen Creek has an average annual flow of 1 cfs. Shorty Creek is an intermittent stream that runs with snowmelt from the adjacent ski area for

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STATE OF WYOMING
SCHOOL SECTION

DRAWING NUMBER: 99-026 EAI	PROJECT TITLE: TETON VILLAGE EXPANSION MASTER PLAN ENVIRONMENTAL ANALYSIS	DRAWING TITLE: EXISTING SITE CONDITIONS	 RENDEZVOUS ENGINEERING, P.C. P.O. BOX 4856 JACKSON, WYOMING 82001 25 SOUTH GROSVENTRE STREET PHONE - 307.733.5252 FAX - 307.733.2334	Prepared By: jrh Date: 03-23-04 Rev. Date:
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approximately 2 weeks per year. Neither Ellen Creek nor Shorty Creek have average annual flows greater than 3 cfs.

Irrigation practices to the east of Highway 390 were also found to significantly influence groundwater levels throughout the development area. From 2000 through 2003, the effect of irrigation practices on groundwater depth has been monitored by Intermountain Aquatics throughout the project area using automated wells, standard wells and staff gauges. The groundwater table has been observed both in the presence and absence of irrigation and it was determined and verified by the U.S. Army Corps of Engineers that irrigation practices north and east of the project area result in a seasonal high groundwater table 30"- 40" above natural levels. It was also concluded that sub-irrigation contributed the majority of the hydrology to the wet meadows on the property, and that in the absence of irrigation, the natural flow coming from Fish Creek, Ellen Creek and Shorty Creek is insufficient to support hydrophytic vegetation beyond the stream channel of Fish Creek throughout the project area.

VEGETATIVE COVER TYPES

Three dominant vegetative cover types are found within the project area: disturbed xeric grassland, disturbed sub-irrigated wet meadow and disturbed xeric shrub. An aspen/conifer forest, which is dominant to the northwest of the property, also extends just into the project boundary. Each of the dominant cover types has been significantly affected by historic agricultural practices.

Disturbed Xeric Grassland

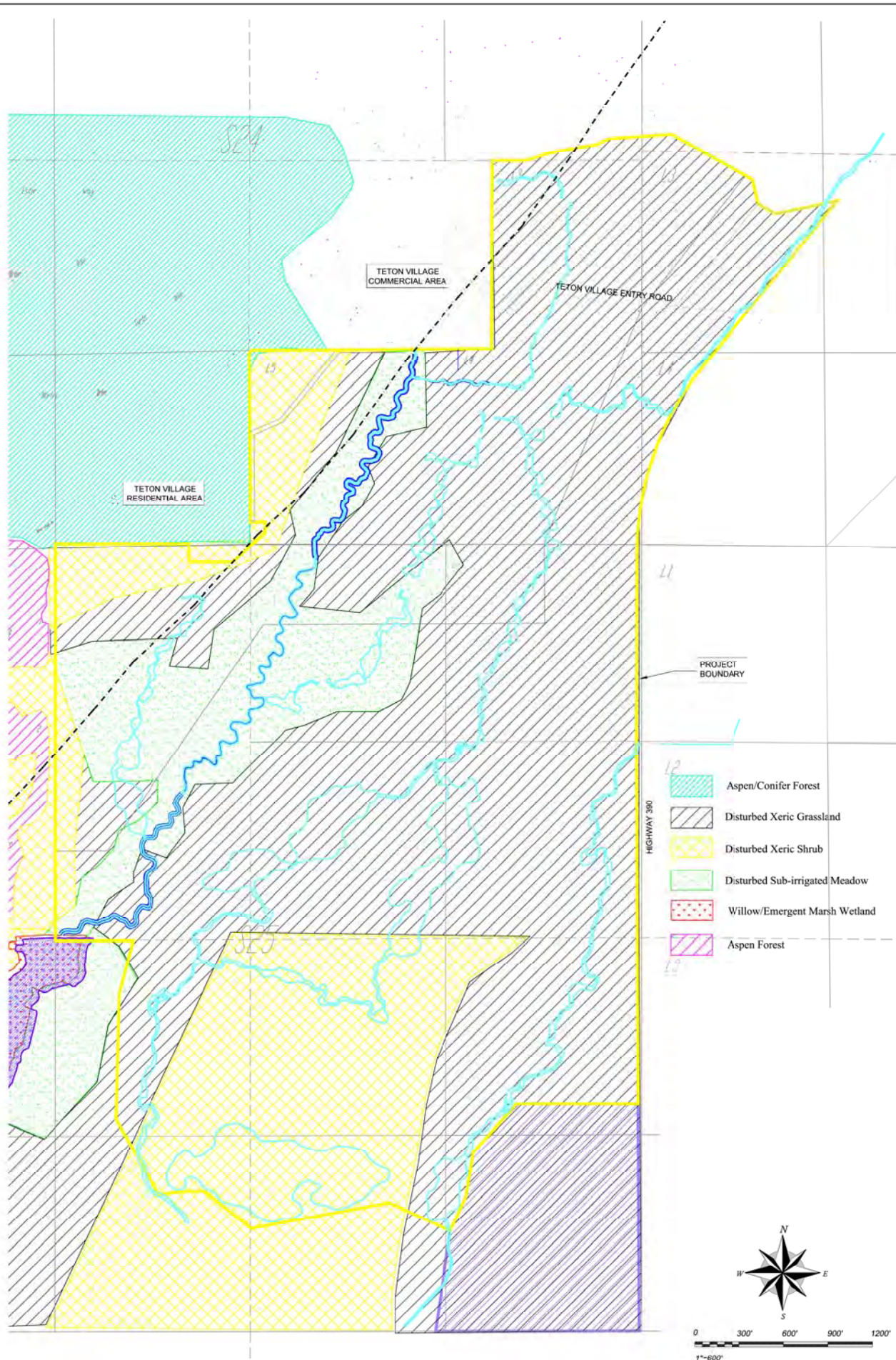
The disturbed xeric grassland is the most dominant cover type and is found on both the east and west sides of Fish Creek within the project area. Introduced pasture grasses, weeds and dry-land forbs dominate this cover type. The disturbed xeric grasslands have not been irrigated since 2000 and are currently very dry and vulnerable to noxious weed invasion. Growth is sparse and ground cover is incomplete and lacking in many places. These areas historically would have supported native rangeland grasses, forbs and sagebrush. A small portion of disturbed xeric grassland in the northwest corner of the development area has reverted back to a sparse sagebrush community with musk thistle dominating the interspaces.

Disturbed Sub-Irrigated Wet Meadow

The disturbed, sub-irrigated wet meadow cover type is found adjacent to Fish Creek in the lowest elevation locations within the project area. This cover type has been significantly affected by direct flood irrigation and the irrigation induced groundwater table. The disturbed, historic wet meadow cover type is dominated by meadow foxtail and sedges.

In 2001, a comprehensive wetland delineation was completed by Intermountain Aquatics to determine whether or not these areas were considered jurisdictional by the U.S. Army Corps of Engineers. Thirty-one automated groundwater wells were installed throughout the project area to monitor groundwater hydrology in the absence of irrigation. Wetland hydrologic criteria for the purpose of the delineation was defined by the Wyoming Regulatory Office of the U.S. Army Corps of Engineers and groundwater well data was

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DRAWING NUMBER:
99-026
PROJECT NUMBER:
99-026
PROJECT TITLE:
TETON VILLAGE EXPANSION
MASTER PLAN
ENVIRONMENTAL ANALYSIS

DRAWING TITLE:
VEGETATIVE COVER TYPES



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calibrated using field observations made by U.S. Army Corps of Engineers personnel to account for the depth to saturation. The well data along with trends in elevation, soils and vegetation were used to delineate irrigation-induced wetlands from natural wetlands on the property.

During a site visit with Tom Johnson of the Wyoming Regulatory Office on June 8th, 2001, it was concluded that sub-irrigation water contributed the majority of the hydrology to the wet meadows within the development area of the proposed project. It was also concluded that in the absence of irrigation, the natural flow coming from Fish Creek, Ellen Creek and Shorty Creek was insufficient to support hydrophytic vegetation beyond the Fish Creek channel, until Fish Creek exits the project area. In 2002 and 2003, Intermountain Aquatics observed that the sub-irrigation on the east side of the highway is not sufficient to maintain a healthy wet meadow cover type. In the absence of direct flood irrigation for 3 years, these areas no longer are saturated to the surface, plants are visibly stressed, and xeric weeds and grasses are encroaching.

Disturbed Xeric Shrub

Disturbed xeric shrub habitat is located primarily in the western and southern portions of the project area. Dominant shrub species on the property consist primarily of sagebrush and musk thistle. Like the other habitat types on the property, the xeric shrub habitat has also been disturbed by agricultural activities. Particularly in areas close to the existing development in Teton Village, the xeric shrub habitat is dominated almost exclusively by musk thistle. In several areas along the western project boundary, a small number of mature aspen trees exist. None of these areas comprise forested habitat and regeneration was not observed.

Mature Aspen/Conifer Forest

A mature aspen and conifer forest exists mostly to the west of the proposed development. This habitat type is interspersed with existing development in the McCollister and Bowman Road areas, and a small portion extends into a northwest corner of the project area. It consists of a small cluster of mature, non-regenerating aspen trees, adjacent to the xeric shrub habitat in that portion of the property.

Plant species identified on the property included:

Common name

Orchard grass
Smooth Brome
Timothy
Kentucky bluegrass
Meadow Foxtail
Western Yarrow
Musk Thistle
Dandelion
Woody Sedge
Nebraska sedge
Beaked sedge

Latin name

Dactylis glomerata
Bromus inermis
Phleum pratense
Poa pratensis
Alopecurus pratensis
Achillea millefolium
Cirsium spp.
Taraxacum officinale
Carex lanuginosa
Carex nebraskensis
Carex rostrata

Small-wing sedge
Baltic rush
Sagebrush
Aspen

Carex simulata
Juncus balticus
Artemesia tridentate
Populus tremuloides

PROTECTED RESOURCES - WATER BODIES, TEN YEAR FLOODPLAINS AND WETLANDS
Fish Creek is the only protected resource found within the project area. Fish Creek is in a degraded condition throughout the property and is limited by straightened channel features, a lack of pool habitat, and a lack of native bank vegetation and overhead cover. In the fall of 2003, FEMA provided a Conditional Letter of Map Revision (CLOMR) for the Fish Creek flood plain based on the proposed realignment of the channel. The CLOMR becomes official once the new alignment has been constructed. No part of the development will be located within the 10-year, 100-year or 500-year flood plains, except those approved activities associated with the enhancement and realignment of Fish Creek.

Other natural water features on the property include Ellen and Shorty Creeks. Both creeks drain western portions of the project area and are tributaries to Fish Creek. Neither of these creeks have an average annual flow over three cubic feet per second, and therefore they are not considered by Teton County to be a protected resource. There are no jurisdictional wetlands found within the project area.

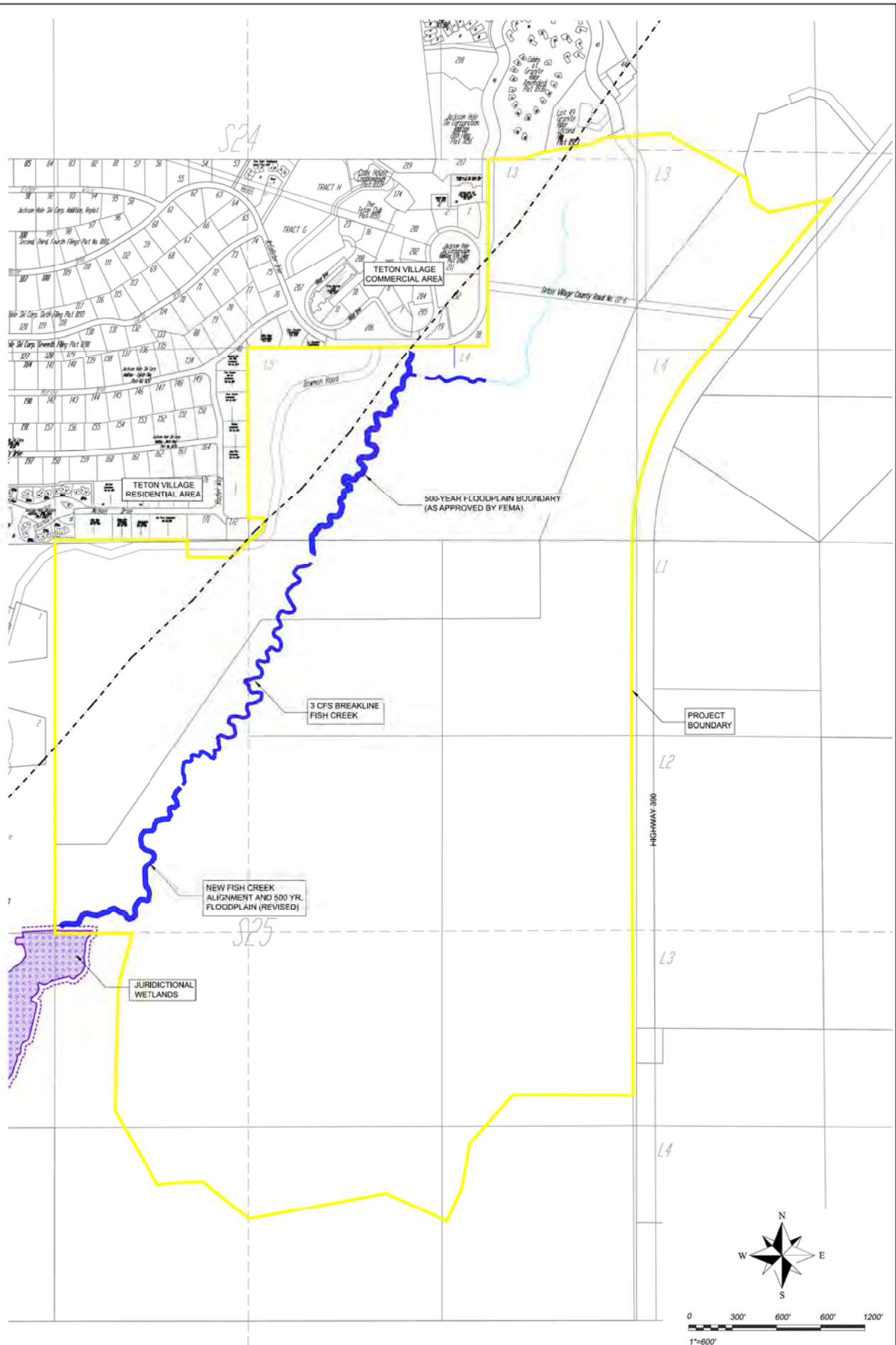
HABITATS PROTECTED BY THE NRO

No wildlife habitat types protected by the NRO are available within the project area. An occasional moose is spotted passing through the western portion of the property moving to and from more desirable habitat types located north and west of the project area. However, the lack of cover and suitable aquatic features throughout the project area makes it unsuitable for those species whose habitats are protected by the NRO. The lack of diversity in vegetation limits the wildlife usage to primarily small mammals, coyotes and raptors.

TABLE 1. WILDLIFE HABITATS PROTECTED BY THE NRO

HABITAT TYPE	PRESENCE W/IN THE TETON VILLAGE EXPANSION PROJECT
Elk Migration Corridors	NO
Crucial Elk Winter Range	NO
Mule Deer Migration Corridors	NO
Crucial Moose Winter Habitat	NO
Trumpeter Swan Nesting Habitat	NO
Crucial Trumpeter Swan Winter Habitat	NO
Snake River Cutthroat Trout Spawning Habitat	NO
Bald Eagle Nesting Habitat	NO
Crucial Bald Eagle Winter Habitat	NO

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PROJECT TITLE:
**TETON VILLAGE EXPANSION
 MASTER PLAN
 ENVIRONMENTAL ANALYSIS**

PROJECT NUMBER:
99-026

DRAWING NUMBER:
EA3

DRAWING TITLE:
PROTECTED RESOURCES

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HABITAT RANKING

Habitats were ranked according to the ordinal ranking system in the Mesic and Non-mesic Habitats Appendix. Within this appendix there are no classifications for disturbed xeric shrub or disturbed sub-irrigated wet meadow. We gave the disturbed xeric shrub habitat on the property a value of 2 because even though it shows signs of historic agricultural use, it provides additional diversity in vertical structure compared to the other habitat types. We gave the disturbed sub-irrigated wet meadow habitat on the property a value of 1 because, due to a lack of irrigation, the plants are visibly stressed and it is reverting back to xeric grassland species.

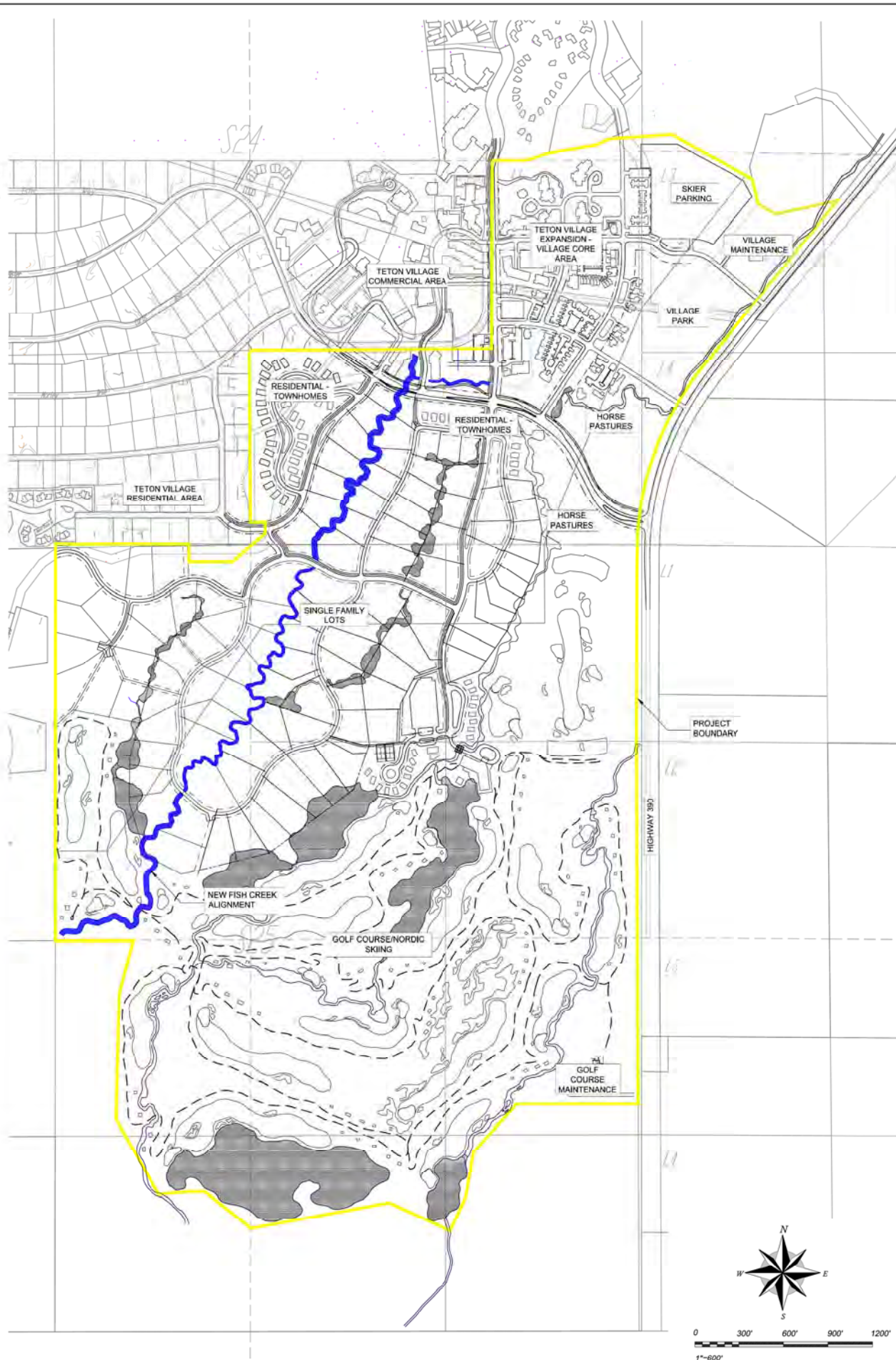
TABLE 2. MESIC AND NON-MESIC HABITAT TYPE RANKING

Vegetative Cover Type	Acreage	% Cover	Ordinal Ranking
Disturbed Xeric Grassland	335	65.56%	1
Disturbed Sub-Irrigated Wet Meadow	71.9	14.06%	1
Disturbed Xeric Shrub	104	20.35%	2
Aspen/Conifer Forest	0.1	0.03	6

HABITAT SUMMARY

The proposed Teton Village Expansion Master Plan project area consists of disturbed vegetative cover types that do not support wildlife habitats protected by the NRO. Fish Creek is the only protected feature found on the property and it is currently in a degraded condition due to years of historic agricultural use. The overall condition of the habitats found in the project area is a direct result of historic land uses including: leveling and tillage to produce the maximum amount of forage area, removal of native vegetation, grazing and flood irrigation. In summary, the current condition of the natural resources found within the project area limits the availability of wildlife habitat for species protected under Section 3240 of the LDRs.

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DRAWING TITLE:
PROPOSED DEVELOPMENT



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EA4

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99-026

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DEVELOPMENT IMPACT ASSESSMENT

PROPOSED DEVELOPMENT

The Teton Village Expansion Master Plan consists of four primary components:

1. A core area ("Village Core") containing public spaces, local and visitor services, lodging units, affordable housing and attainable housing
 2. A residential development south of the re-aligned McCollister Drive
 3. An 18-hole championship golf course/Nordic ski area with associated amenities
 4. Perimeter open lands defining an edge to the east of the Resort
- 1) The "Village Core" covers 56 acres, of which 10 will be set aside for skier parking, and six include road right-of-ways. The remaining 41 acres will be designed to accommodate commercial and residential facilities, including affordable and employee housing, roads and pathways.
- 2) The residential portion of the development is 162 acres in size. Single family lots will comprise 139 of the 162 acres, while the remaining 23 acres will consist of residential townhouses and cabins.
- 3) The golf course and Nordic ski center totals 254 acres, with 10 of those acres being set aside for the clubhouse and maintenance facilities.
- 4) The perimeter open lands are located just east of the "Village Core", separating it from the Moose-Wilson Road. It consists of 19 acres of horse pasture, a 14-acre park, and 7 acres set aside for maintenance operations, for a total of 40 acres.

The current single entrance layout of Teton Village will also be changed under the proposed plan. McCollister Road will be realigned to the south and will connect with Moose-Wilson Road, the Teton Village Entrance Road will be reclaimed, and two additional roads will be constructed so that there will be three separate access roads for all residential and commercial activity in Teton Village. The three access roads discussed above will transect the perimeter open lands, and the northern two roads will continue into the village core. After passing through the horse pasture in the perimeter lands, the realigned McCollister Drive will form the boundary between the village core to the north and the residential tract to the south.

The proposed development also includes: the restoration of Fish Creek and the creation of the Ellen Creek Wildlife Ponds, Edmiston Wildlife Ponds, Trumpeter Ponds, Golf Course Ponds, Granite Ditch Cottonwood Corridor, Last Chance Ditch Cottonwood Corridor, Aspen/Spruce Landforms and Sage/Xeric Grassland Landforms.

SETBACKS

Fish Creek is the only protected resource found on the project site and setbacks from the stream vary throughout the development. As the stream runs from north to south through

the project area it gains significant volume from irrigation return flow, and does not mandate a setback, based on flow and/or habitat considerations, until more than halfway through the project area. However, from where Fish Creek will cross the realigned location of McCollister Drive south to the proposed second road crossing, the proposed development has committed to a 33-foot stream setback. Because wetlands will be planted along this section of the creek in a strip extending three feet out from the top of the bank, this buffer will provide a 30-foot setback from these wetlands. Although Fish Creek does not achieve an average annual flow of 3 cubic feet per second until approximately 900 linear feet south of the proposed second road crossing, the developers have committed to a 50-foot setback for the remaining portion of Fish Creek south of this road crossing. These setbacks are depicted in relation to the proposed new alignment of Fish Creek. These setbacks, when combined with the water quality provisions of the NRMP, are expected to provide ample protection for Fish Creek.

HABITAT IMPACT ASSESSMENT

- 1) Areas rendered unusable by the proposed development for species protected under Section 3200 of the LDRs.*

No areas will be rendered unusable by the proposed development for species protected under Division 3200 including elk, mule deer, moose, bald eagles, trumpeter swans and cutthroat trout. Due to the historic land uses and the current condition of the project area, none of the habitat types described in Section 3240 for these species are available within the project area.

- 2) Areas impacted, degraded, or fragmented to the extent that they will no longer support long-term utilization by protected species.*

Due to the existing impacted and degraded state of the project area and the lack of current utilization by protected species, the proposed project is not expected to result in impacts that would effect long-term utilization by protected species.

- 3) Areas that will be unaffected by the development so that the current quality of the wildlife habitat is maintained.*

The proposed development includes a variety of components throughout the 511 acre project boundary. Collectively these components do not contain any habitat for NRO protected species.

- 4) Areas that will be enhanced as wildlife habitat relative to current conditions.*

The entire section of Fish Creek including the 33-foot and 50-foot setback corridors will be restored to a functional meander pattern with a diverse, native plant community and a natural distribution of in stream habitat types. In addition the applicant is proposing a variety of wildlife habitat enhancement features throughout the project area that will result in improved quality of available wildlife habitats. Specific descriptions and

wildlife values for these enhancements are included in the Habitat Enhancement section of this report.

- 5) *Areas where the proposed development poses a threat to the water quality of any rivers, streams, water bodies, or wetlands protected by Teton County.*

The Fish Creek setbacks, the management of these setbacks for native wetland and upland vegetation, the stormwater management plan and a grading and erosion plan (to be submitted with the FDP) will minimize threats to water quality in Fish Creek. The proposed restoration plan of Fish Creek outlined in the Habitat Enhancement Plan section of this report and the cessation of historic agricultural uses should result in improvements to the water quality in Fish Creek. Additionally, the residential development will be held to the same standard as the golf course per the NRMP as well as Wyoming DEQ standards. The water quality monitoring program outlined in the NRMP will help to ensure this, and protect the water quality of Fish Creek. A unified lawn care system is also planned, thereby making management of water quality concerns, and mitigation of potential problems much more efficient. Adherence to the stormwater management plan will provide for a significant improvement in comparison to the current system, which allows large amounts of overland flow, particularly from the current skier parking area, impervious surfaces and snow storage areas, to directly enter Fish Creek.

- 6) *Locations where protected species may be displaced to by the proposed development and the suitability of those areas for continued survival of the affected species.*

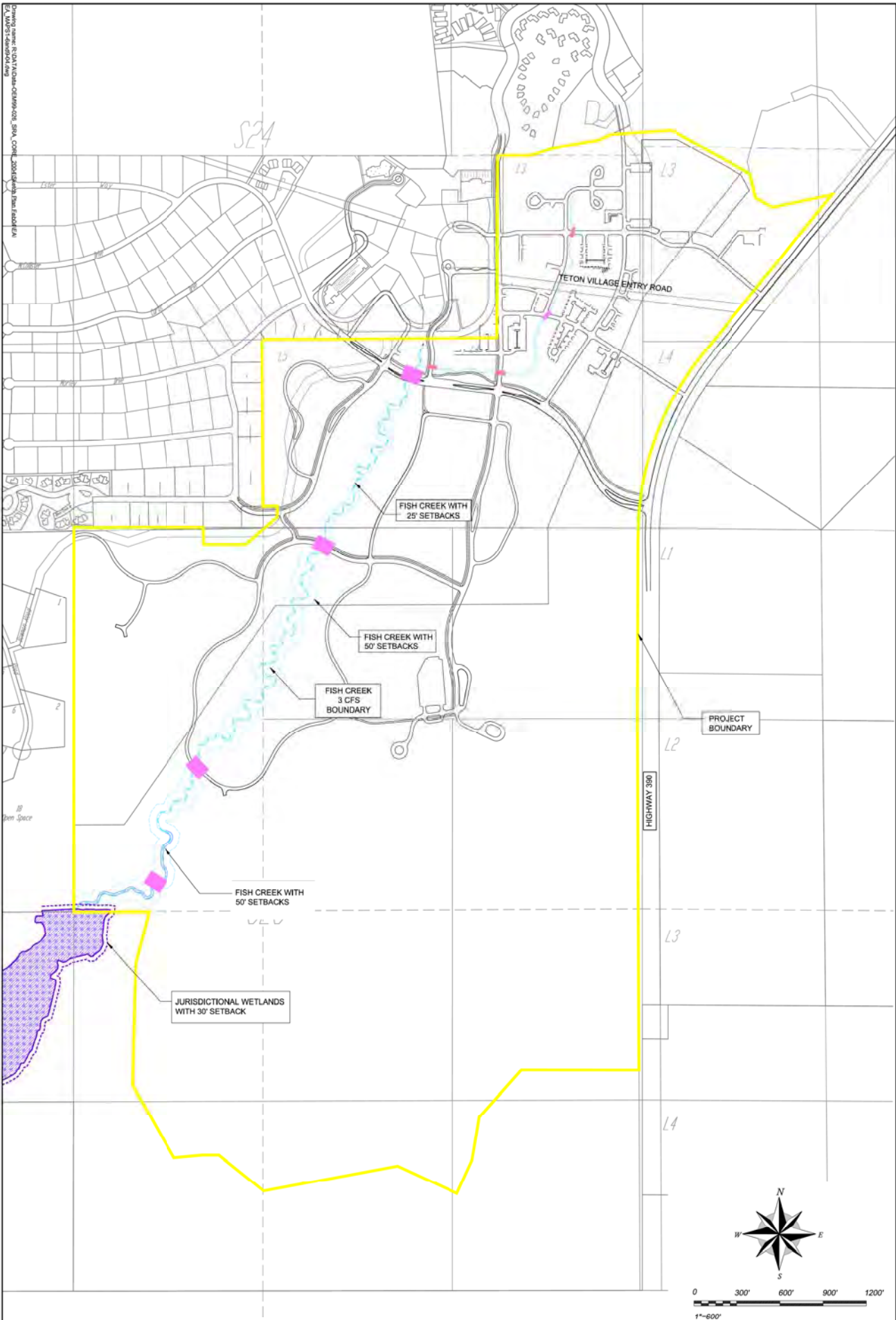
There are no current habitat types for species protected by the NRO found within the project area. Therefore, there is no anticipated displacement of protected species. The implementation of the habitat enhancement plan will most likely result in an increase in available wildlife habitat and will most likely attract rather than displace species to the project area.

PROJECT VICINITY IMPACT STATEMENT

The proposed Teton Village Expansion Master Plan is bordered to the south and east by agricultural lands of similar cover types to those found within the project area. Existing development in Teton Village is found adjacent to the northern boundary. The western boundary borders the Teton Village condominiums and the Ellen Creek Subdivision. Protected open space comprised of potential crucial moose winter habitat also borders on the west. This moose habitat is located in shrubs and aspens to the east and south of developed lands in the Ellen Creek Subdivision and will not be developed under the current or future development proposed within the project area.

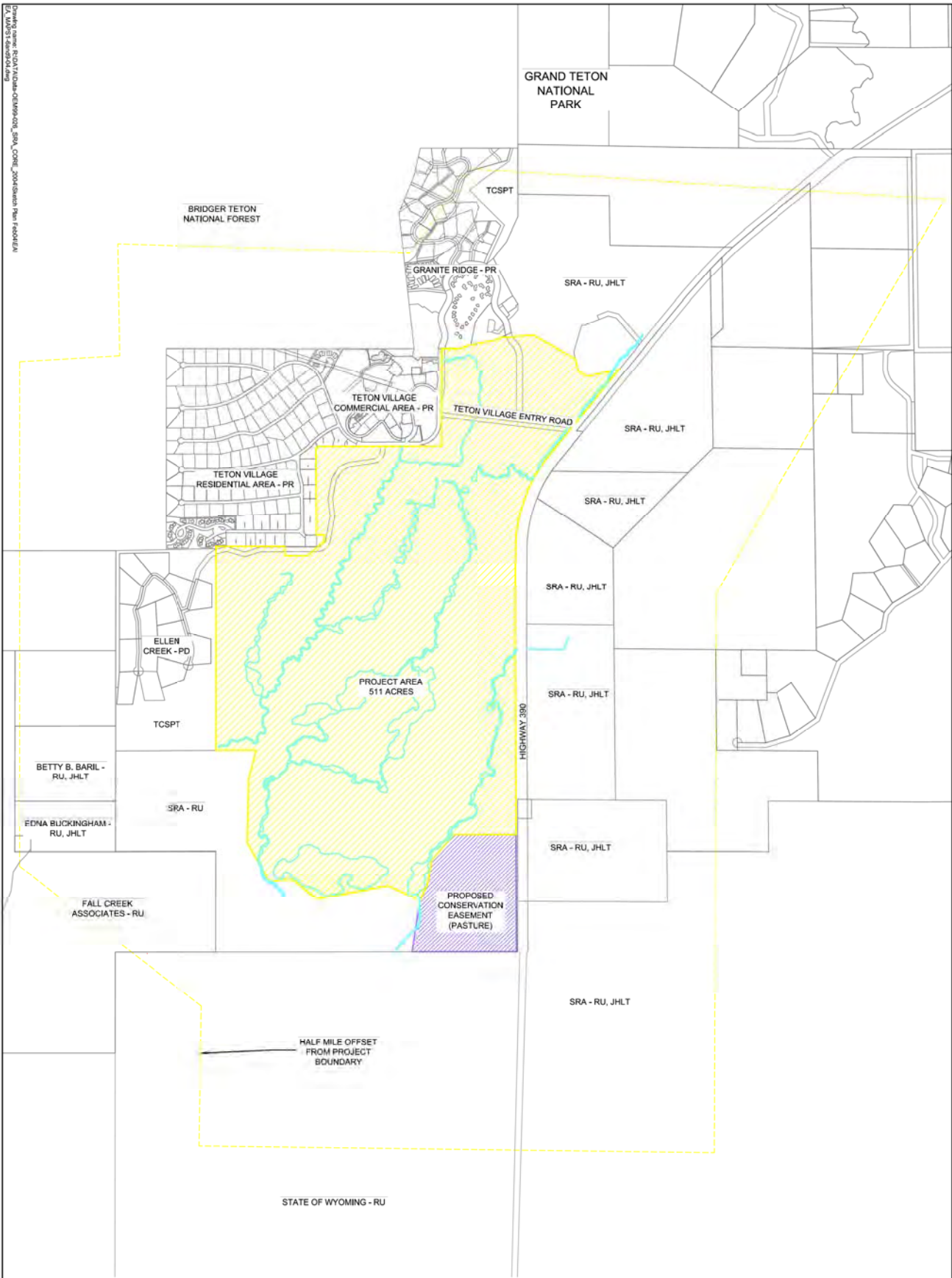
Much of the land surrounding the proposed development is protected by conservation easements, ensuring the maintenance of the existing natural, agricultural and scenic resources in the vicinity. With the exception of some easements held by the Teton County Scenic Preserve Trust in the Ellen Creek and Granite Ridge Subdivisions, all of these easements are held by the Jackson Hole Land Trust (JHLT). Of these JHLT easements that are adjacent to the project area, the state-owned parcel to the south and the

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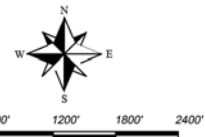
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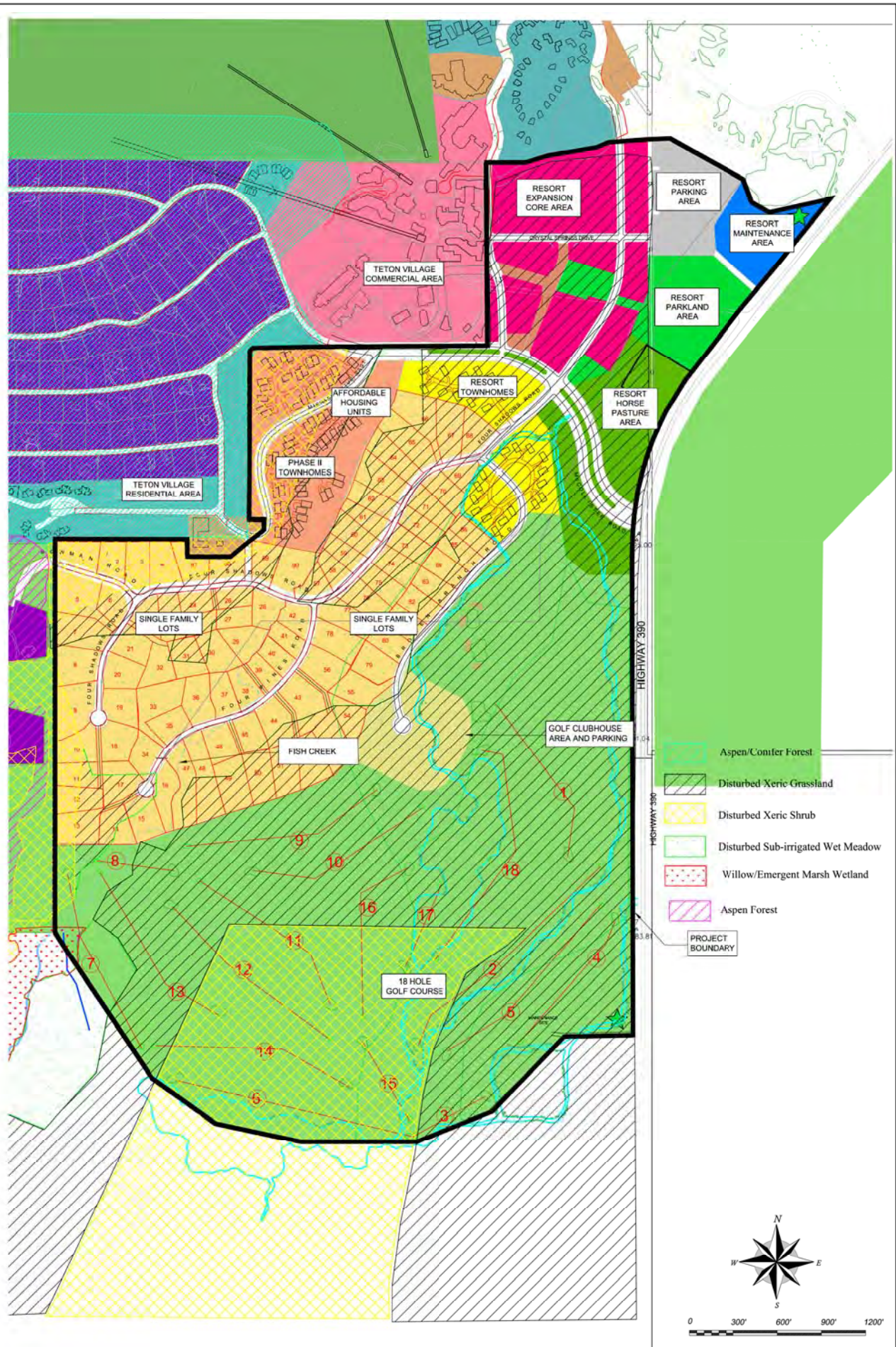
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 PD - NC PLANNED UNIT DEVELOPMENT
 PR - PLANNED UNIT DEVELOPMENT FOR PLANNED RESORT

CONSERVATION EASEMENTS
 JHLT - JACKSON HOLE LAND TRUST
 TCSPT - TETON COUNTY SCENIC PRESERVE TRUST



DRAWING NUMBER 99-026 DRAWING NUMBER EA6	PROJECT TITLE: TETON VILLAGE EXPANSION MASTER PLAN ENVIRONMENTAL ANALYSIS	DRAWING TITLE: PROJECT VICINITY	 RENDEZVOUS ENGINEERING, P.C. P.O. BOX 8001 JACKSON, WYOMING 83001 25 SOUTH GROSVENTRE STREET PHONE - 307.733.5252 FAX - 307.733.0334	Prepared By: AMF/MSB Date: 03-24-04 Rev. Date:
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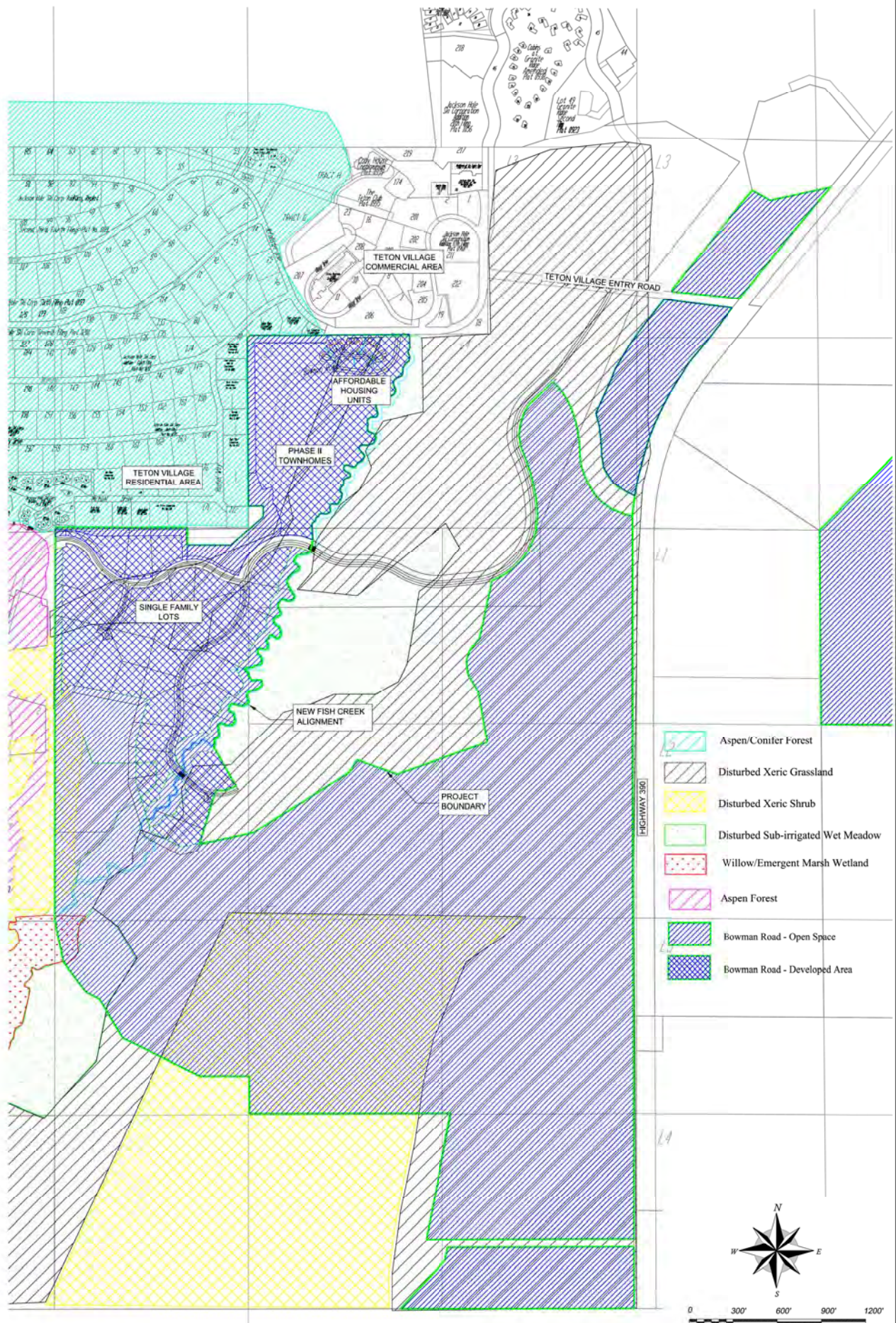
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PROJECT TITLE:
 TETON VILLAGE EXPANSION
 MASTER PLAN
 ENVIRONMENTAL ANALYSIS

DRAWING TITLE:
 ALTERNATIVE I
 TETON VILLAGE EXPANSION
 RESORT MASTER PLAN - 1/30/02

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PROJECT TITLE:
TETON VILLAGE EXPANSION
MASTER PLAN
ENVIRONMENTAL ANALYSIS

DRAWING TITLE:
ALTERNATIVE II
BOWMAN ROAD
FINAL DEVELOPMENT PLAN - 5/23/03

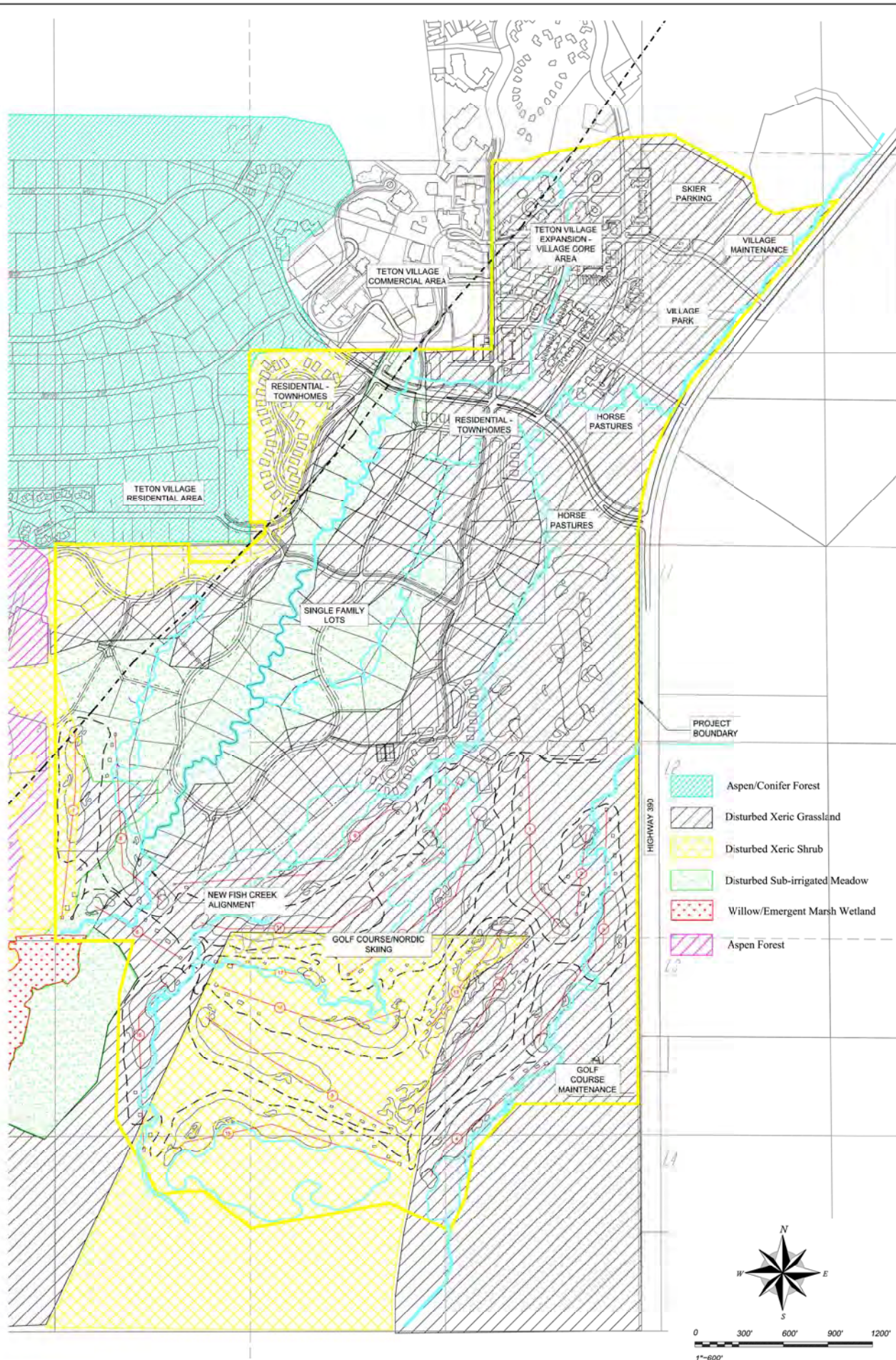


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Rev. Date:

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 EA9

PROJECT NUMBER:
 99-026

PROJECT TITLE:
 TETON VILLAGE EXPANSION
 MASTER PLAN
 ENVIRONMENTAL ANALYSIS

DRAWING TITLE:
 ALTERNATIVE III
 PROPOSED DEVELOPMENT



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Date: 02/02/04
Rev. Date:

Granite Ridge Subdivision to the north, more than 85% of the total acreage is owned by the applicant (Snake River Associates) or its family members. The potential for future expansion of any type is seriously limited by current development, conservation easements, US Forest Service land, and Grand Teton National Park. The only major exception is to the south, where additional development could occur on private and state-owned land.

ENDANGERED PLANT AND VERTEBRATE SPECIES

A thorough survey of plants and animals within the project area was conducted during the 2-year comprehensive wetland delineation. No endangered plant or vertebrate species were observed within the project area or on adjacent lands surveyed. Canada lynx habitat has been identified at higher elevations at the Jackson Hole Mountain Resort however, the impacts of the existing base area development has precluded the suitability of the lower mountain area for Lynx utilization (Spencer *pers. comm.* 2003). The USFS is currently finalizing the Lynx Analysis Unit Maps for the Bridger-Teton National Forest at the Jackson Hole Mountain Resort. These maps will clearly identify suitable lynx habitat on the forest and major projects that require tree removal will most likely not be allowed within the lynx habitat. In other ski area communities (Vail, Beaver Creek and Aspen), the USFWS has determined, in the Biological Assessment phase, that base area development is not considered to cumulatively impact lynx habitat on the adjacent National Forest because the existing development has already rendered those areas unsuitable (Ozawa *pers. comm.* 2003). Both the USFWS and the USFS are concentrating on those areas that have thick stands of spruce and fir and support sustainable snowshoe hare populations for protection for the Canada lynx. Neither the Bridger-Teton National Forest nor the USFWS have identified growth at the base of the ski area as having a cumulative impact or "takings" on lynx utilization at the Jackson Hole Mountain Resort (Spencer *pers. comm.* 2003).

ALTERNATIVE SITE DESIGN ANALYSIS

An alternative site design analysis based solely on "habitat-based considerations" that result in the selection of alternatives that "avoid and minimize negative impacts to protected resources" did not seem appropriate considering the complete avoidance and minimization of negative impacts to protected species presented in all three alternatives. The analysis of alternatives will discuss habitat-based considerations, including vegetative covertypes and habitat enhancements. The three alternatives discussed in this section were chosen in agreement with Teton County Planning Department personnel during a February 25, 2004 EA meeting.

These alternatives are as follows:

- Alternative I- Teton Village Expansion Master Plan (TVEMP) submitted on January 30, 2002
- Alternative II- Bowman Road PRD submitted on May 23, 2003
- Alternative III- Teton Village Expansion Master Plan (TVEMP) submitted March 1, 2004

The following tables compare the differences between the alternatives in terms of the size of each component (Table 3), the impacts relative to vegetative cover types (Tables 4-8),

and proposed enhancements (Table 9). Note: All numbers listed in the following tables were provided by Rendezvous Engineering.

TABLE 3. TOTAL ACRES PER DEVELOPMENT COMPONENT

*A 42-acre Conservation Easement is proposed adjacent to and southeast of the project boundary. Because this proposal is not part of the development submittal, the acreage is not included in the acreage or percent cover comparisons. The

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Component						
Village Core (w/ Skier Parking)	51	10	0	0	56	11
Residential	157	33	60.7	14	162	32
Golf Course/Nordic Center	238	50	0	0	254	49
Perimeter Lands	34	7	0	0	39	8
Open Space	0	0	367.6	86	42*	*
Total	480+	100	428.3	100	511+	100

applicant understands that this land is not considered "Open Space" by Teton County definitions.

TABLE 4. VILLAGE CORE VEGETATIVE COVERTYPE COMPARISON

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Vegetative Type						
Disturbed Xeric Grassland	51	100	0	0	53.7	96
Disturbed Sub- Irrigated Wet Meadow	0	0	0	0	2.1	3.7
Disturbed Xeric Shrub	0	0	0	0	0.2	0.3
Aspen/Conifer Forest	0	0	0	0	0	0
Willow/Emergent Marsh Wetland	0	0	0	0	0	0
Total	51	100	0	N/A	56	100

TABLE 5. RESIDENTIAL TRACT VEGETATIVE COVERTYPE COMPARISON

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Vegetative Type						
Disturbed Xeric Grassland	70	45	15.5	25.5	80	49
Disturbed Sub- Irrigated Wet Meadow	64	41	29.7	49.0	60	37
Disturbed Xeric Shrub	23	14	15.5	25.5	22	14
Aspen/Conifer Forest	0	0	0	0	0	0
Willow/Emergent Marsh Wetland	0	0	0	0	0	0
Total	157	100	60.7	100	162	100

TABLE 6. GOLF COURSE/NORDIC CENTER VEGETATIVE COVERTYPE COMPARISON

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Vegetative Type						
Disturbed Xeric Grassland	167	70	0	0	163	64
Disturbed Sub- Irrigated Wet Meadow	8	3.3	0	0	8.7	3.5
Disturbed Xeric Shrub	62.4	26.5	0	0	82.3	32.5
Aspen/Conifer Forest	0	0	0	0	0	0
Willow/Emergent Marsh Wetland	0.6	0.2	0	0	0	0
Total	238	100	0	N/A	254	100

TABLE 7. PERIMETER LANDS VEGETATIVE COVERTYPE COMPARISON

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Vegetative Type						
Disturbed Xeric Grassland	34	100	0	0	39	100
Disturbed Sub-Irrigated Wet Meadow	0	0	0	0	0	0
Disturbed Xeric Shrub	0	0	0	0	0	0
Aspen/Conifer Forest	0	0	0	0	0	0
Willow/Emergent Marsh Wetland	0	0	0	0	0	0
Total	34	100	0	N/A	39	100

TABLE 8. OPEN SPACE VEGETATIVE COVERTYPE COMPARISON

Alternative	Alternative I TVEMP Submitted 1/30/02		Alternative II Bowman Road Submitted 5/23/03		Alternative III TVEMP Proposed	
	Acres	% Cover	Acres	% Cover	Acres	% Cover
Vegetative Type						
Disturbed Xeric Grassland	0	0	287.1	78.2	42	100
Disturbed Sub-Irrigated Wet Meadow	0	0	17.3	4.7	0	0
Disturbed Xeric Shrub	0	0	62.3	16.8	0	0
Aspen/Conifer Forest	0	0	0	0	0	0
Willow/Emergent Marsh Wetland	0	0	0.9	0.3	0	0
Total	0	N/A	367.6	100	42*	100*

*A 42-acre Conservation Easement is proposed adjacent (southeast) to the project boundary. Because this proposal is not part of the development submittal, the acreage is not included in the acreage or percent cover comparisons. The applicant understands that this land is not considered "Open Space" by Teton County definitions.

TABLE 9. PRESENCE OF ENHANCED FEATURES WITHIN EACH ALTERNATIVE

Alternative	Alternative I TVEMP Submitted 1/30/02	Alternative II Bowman Road Submitted 5/23/03	Alternative III TVEMP Proposed
Restoration of Fish Creek	Y*	Y	Y
Ellen Creek Wildlife Ponds	Y	Y	Y
Edmiston Wildlife Ponds	N	N	Y
Trumpeter Swan Ponds	N	N	Y
Golf Course Ponds	Y	N	Y
Granite Ditch Cottonwood Corridor	Y	N	Y
Last Chance Ditch Cottonwood Corridor	Y	N	Y
Aspen and Spruce Landforms	N	N	Y
Sage and Xeric Grassland Landforms	N	N	Y

* Restoration of Fish Creek was planned in conjunction with Alternative I. This plan was only conceptual at the time of submittal, however, and therefore does not appear on the Alternative I figure (Figure EA7).

VISUAL ANALYSIS

The visual analysis for the Teton Village Expansion Master Plan is included as a separate document within the March 1, 2004 submittal. This document was prepared by Rendezvous Enigneering and CIVITAS.

RECOMMENDATIONS RELATED TO HUMAN USES OF THE PROPERTY

- Native plant species should be used within the Fish Creek setbacks.
- Native plant species should be used in additional landscaping of open areas however, non-native species adjacent to human structures is encouraged to deter wildlife from these areas and reduce negative human and wildlife interactions.
- Trash should be stored in bear-proof areas.
- All human and pet wildlife contact should be kept to a minimum. Dogs should be kept under control around wildlife particularly during winter months. Over-exertion of large mammals in the winter can be fatal and should be prevented.

HABITAT ENHANCEMENT PLAN

Proposed habitat enhancements within the Teton Village Expansion Master Plan include:

1. Restoration of Fish Creek
2. Ellen Creek Wildlife Ponds
3. Edmiston Wildlife Ponds
4. Trumpeter Ponds
5. Golf Course Ponds
6. Granite Ditch Cottonwood Corridor
7. Last Chance Ditch Cottonwood Corridor
8. Aspen/Spruce Landforms
9. Sage/Xeric Grassland Landforms

The general location and layouts of each of these features is depicted in Figure EA10. Descriptions of each of these features including design components, revegetation species and expected enhanced habitat values are listed below. The formal, permitted design for the restoration of Fish Creek is located in Appendix B of this report.

To fully understand the positive impacts of the proposed habitat enhancements, one must first evaluate the existing site conditions and habitat values of the proposed project area. As stated throughout this EA, the Teton Village Expansion Master Plan Project Area is characterized by its historic agricultural use. The project area has been used for cattle and hay production since 1899, when the first water rights were filed. The topography, vegetative cover types and hydrology throughout the project area and adjacent lands were significantly altered to facilitate agricultural operations. The landscape was plowed and leveled to allow for flood irrigation, native vegetation was removed throughout much of the project area and introduced pasture grasses were planted, the hydrology was altered by diverting flows from Granite Creek, the Snake River and Ellen Creek to flood irrigate, and the first ¼ mile of Fish Creek was channeled.

Fish Creek is the only protected resource found within the project area. Fish Creek is in a degraded condition throughout the property and is limited by straightened channel features, a lack of pool habitat, and a lack of native bank vegetation and overhead cover. No wildlife habitat types protected by the NRO are available within the project area. The lack of cover and suitable aquatic features throughout the project area make it unsuitable for those species whose habitats are protected by the NRO. The lack of diversity in vegetation limits the wildlife usage to primarily small mammals, coyotes and raptors.

1. *Fish Creek Restoration*

The restoration of Fish Creek includes restoration of a natural meander pattern to decrease stream velocities, eliminate down cutting and increase habitat diversity; excavation of pools and construction riffles to provide feeding and resting habitat for Snake River cutthroat trout; and revegetation of the constructed channel and buffer strips with:

- 2,200 native willows (*Salix bebbiana*, *Salix geyeriana*, *Salix Boothii*) grown from seed collected on downstream reaches of Fish Creek

- 67,931 ft² (1.56 acres) of Wetland Sod pre-grown with sedges, rushes and grasses (*Carex nebrascensis*, *Carex utriculata*, *Juncus balticus*, *Deschampsia cespitosa*, *Calamagrostis Canadensis*, *Juncus ensifolius*) to provide immediate water quality protection, long-term bank stability, cover and habitat diversity
- 653,400 ft² (15 acres) of native grass seeding (*Agrostis scabra*, *Beckmania syzigachne*, *Deschampsia caespitosa*, *Juncus balticus*, *Poa palustris*, *Puccinellia airoides*, *Bromus marginatus*, *Calamagrostis canadensis*, *Hordeum brachyantherum*, *Pascopyrum smithii*, *Elymus canadensis*)

The restoration design is based on stream geomorphological characteristics measured at downstream reference sections located just south of the project area. Design components were analyzed using a HEC-RAS model. A hydrologic analysis conducted by Rendezvous Engineering and conditionally approved by FEMA concluded that the proposed cross-sections and setbacks encompass the 10-year, 100-year and 500-year floodplains of Fish Creek. The revegetation plan includes: fencing of willows for 2 years to protect them from ungulate herbivory through establishment; weed control throughout the construction and revegetated areas for 3 years to prevent the establishment of noxious weeds; and protective construction/silt fencing along the 50-foot and 33-foot setbacks to protect the restoration area from ongoing construction activities. Channel construction will take place in April when this section of Fish Creek is dry and impacts to downstream water quality are preventable. The restoration of Fish Creek has been reviewed extensively by the U.S. Army Corps of Engineers, Wyoming Game & Fish Department, FEMA and the Teton Conservation District. Each of these agencies are very supportive of the restoration plan and have identified enhanced habitat values for Snake River cutthroat trout and other native species as a primary benefit.

2. & 3. Ellen Creek and Edmiston Wildlife Ponds

The Ellen Creek and Edmiston wildlife ponds are located within the single-family lots. The ponds are proposed to be a series of productive wetlands with variable, vegetated shorelines. Open water areas will be fragmented by sinuous shorelines and peninsulas to maximize available habitat for waterfowl, shorebirds and songbirds. The proposed revegetation plans include many of the same species as proposed for Fish Creek and are intended to promote the ecological function of the ponds within the surrounding natural landscapes to the south. Wildlife species expected to utilize these ponds include moose, waterfowl, shorebirds, songbirds, small mammals and raptors. Detailed designs will be included with the Final Development Plan.

4. Trumpeter Ponds

The trumpeter ponds are located at the southern most end of the development. These ponds are a primary source of material for the proposed project and due to their large size and location away from roads and buildings have been identified as ideal locations for seasonal trumpeter swan habitat. As the planning process moves forward, the applicant plans to work closely with Susan Patla and Bill Long of the Wyoming Game & Fish Department to design the perimeter shorelines and revegetation plans to benefit trumpeter

swans. These ponds will not be open during the winter months and therefore, will provide spring, summer and fall habitat for the resident population.

5. *Golf Course Ponds*

Although the primary goal of the golf course ponds is aesthetics, like all of the other water features, they will be designed to meet the grading and revegetation standards in the Land Development Regulations. They will have 5:1 side slopes for at least fifty percent of the shoreline length and have sufficient, vegetated shallows to promote their function as wildlife habitat. Only native species will be used around the perimeter of the ponds.

6. & 7. *Granite Ditch and Last Chance Ditch Cottonwood Corridors*

The Granite Ditch and Last Chance Ditch Cottonwood Corridors are proposed to promote the scenic and wildlife values of the historic irrigation systems through the property. Each of these ditches will be lined with native cottonwoods grown from seed collected in Teton County at a spacing interval of one tree per ten feet. They will also be planted with *Salix exigua* and adjacent lands will be planted with native grasses. These cottonwood corridors will provide perching habitat for raptors and an abundance of habitat for migratory songbirds. In addition these corridors will provide valuable scenic, screening benefits and are designed to mimic historic agricultural features found on lands to the north in Grand Teton National Park.

8. *Aspen/Spruce Landforms*

The aspen/spruce landforms are located within the single family lots. As with the cottonwoods and willows on the site, the aspens are being grown from seed collected in Teton County. The landforms are designed to mimic moraine features found to the north and will be planted with native species including: *Populus tremuloides*, *Picea engelmannii*, *Prunus virginiana*, *Rosa woodsii*, *Shepherdia Canadensis*, *Symphoricarpos oreophilus* var. *utahensis*, *Balsamorhiza sagittata*, *Lupinus sericeus*, *Eriogonum subalpinum*, *Castilleja miniata*, *Geum triflorum*, *Pascopyrom smithii*, *Elymus cinereus*, *Pseudoroegneria spicata*, *Festuca idahoensis*, *Koeleria macrantha* and *Achillea millefolium*.

9. *Sage/Xeric Grassland Landforms*

The sage/xeric grassland landforms are located within the golf course/Nordic skiing area. These landforms are also designed to mimic moraine features found to the north and will be planted with native species including *Artemesia tridentate*, *Purshia tridentate*, *Balsamorhiza sagittata*, *Lupinus sericeus*, *Eriogonum subalpinum*, *Geum triflorum*, *Pascopyrom smithii*, *Elymus cinereus*, *Pseudoroegneria spicata*, *Festuca idahoensis*, *Koeleria macrantha*, *Stipa hymenoides*, *Stipa comata* and *Achillea millefolium*.

CONCLUSION

The existing site conditions of the natural resources found within the Teton Village Expansion Master Plan limits the availability of wildlife habitat for species protected under Section 3240 of the LDRs. The location of the project is unique in that it is not located in the NRO and it consists of disturbed agricultural habitat types that are not considered valuable for those species protected in the NRO. The conclusion of this EA is

that the proposed project will have no negative impacts on wildlife habitat for species protected in the NRO because these habitat types do not currently exist on the property. Restoration and enhancement plans will have a positive impact on the aquatic and upland resources found on the site and will most likely result in an increase in wildlife utilization.

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APPENDIX A – PHOTOGRAPHY

List of Photographs

Photo # 1 – Existing Conditions on Fish Creek.

Photo # 2 – Disturbed, Agricultural Meadow Cover Type.

Photo # 3 – Fish Creek (headwaters).

Photo # 4 – Disturbed, Agricultural Meadow Cover Type.

Photo # 5 – Disturbed, Xeric Shrub Cover Type in the Proposed Open Space Area.

Photo # 1 – Existing Conditions on Fish Creek.



Photo # 2 – Disturbed, Agricultural Meadow Cover Type.



Photo # 3 – Fish Creek (headwaters).



Photo # 4 – Disturbed, Agricultural Meadow Cover Type.



Photo # 5 – Disturbed, Xeric Shrub Cover Type in the Proposed Open Space Area.



APPENDIX B – HABITAT ENHANCEMENT PLANS

NOTE: CATCHPOINT REPRESENTS THE POINT WHERE THE CHANNEL EXCAVATION INTERSECTS THE ADJACENT GROUND SURFACE

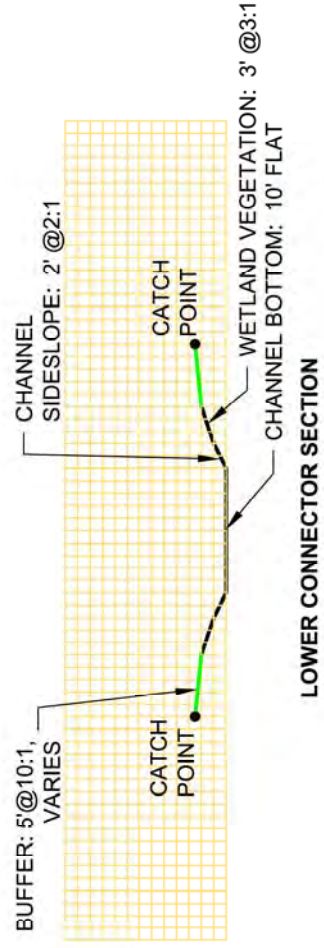
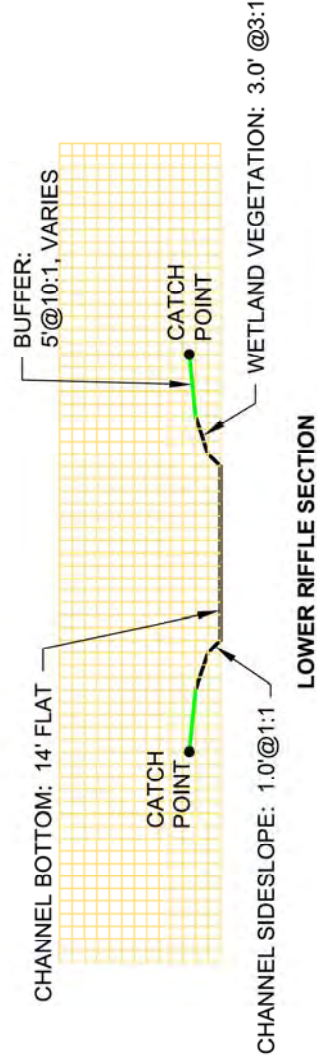
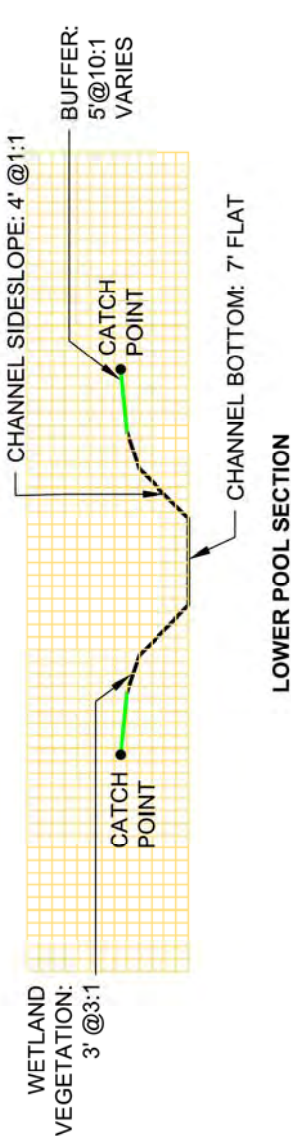


EXHIBIT 1A LOWER REACH TYPICAL CHANNEL CROSS-SECTIONS FISH CREEK RESTORATION

SCALE: 1" = 10'

NOTE: CATCHPOINT REPRESENTS
THE POINT WHERE THE CHANNEL
EXCAVATION INTERSECTS THE
ADJACENT GROUND SURFACE

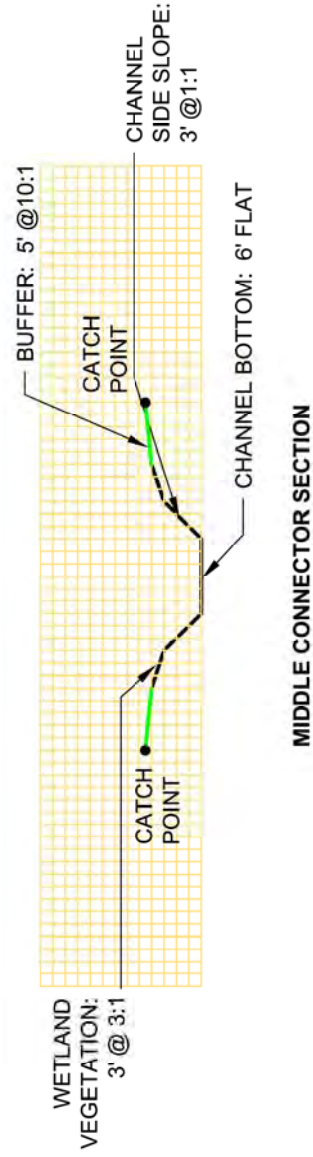
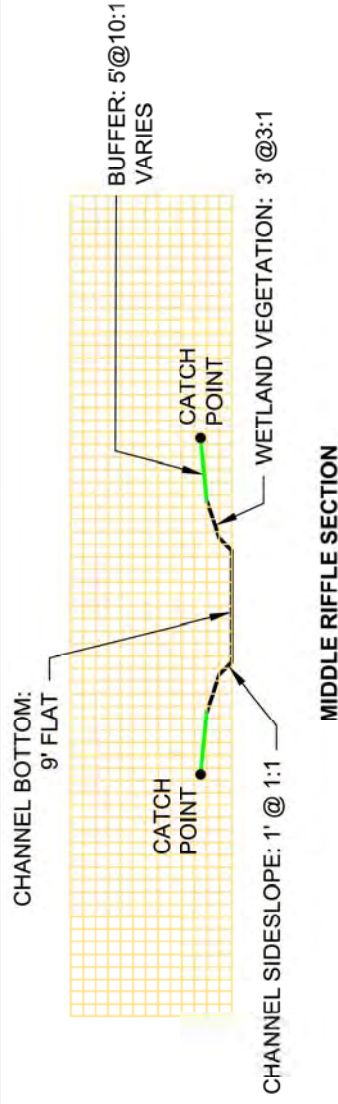
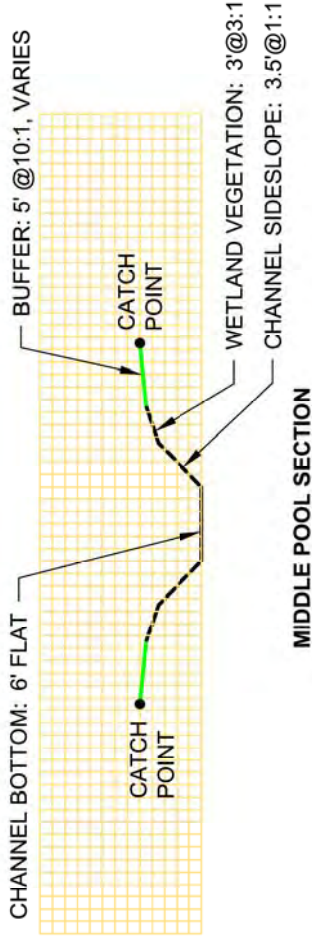
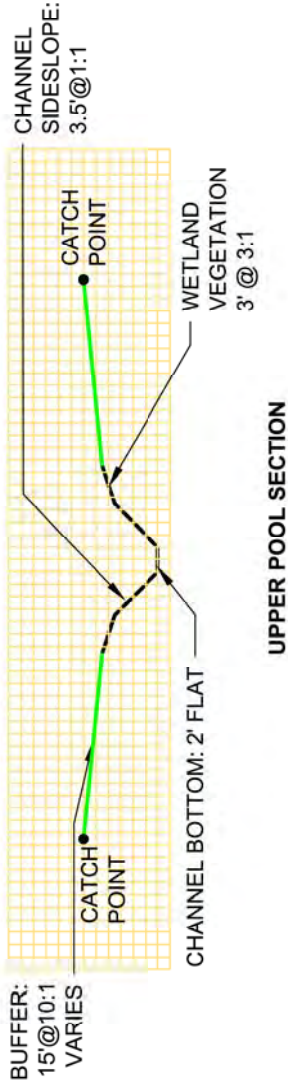


EXHIBIT 1B MIDDLE REACH TYPICAL CHANNEL CROSS-SECTIONS FISH CREEK RESTORATION

SCALE: 1" = 10'

RENDEZVOUS ENGINEERING, P.C.
P.O. BOX 488 JACKSON, WYOMING 83001
25 SOUTH GROSS VENTURE STREET
PHONE - 307.733.6262 FAX - 307.733.2334



NOTE: CATCHPOINT REPRESENTS THE POINT WHERE THE CHANNEL EXCAVATION INTERSECTS THE ADJACENT GROUND SURFACE

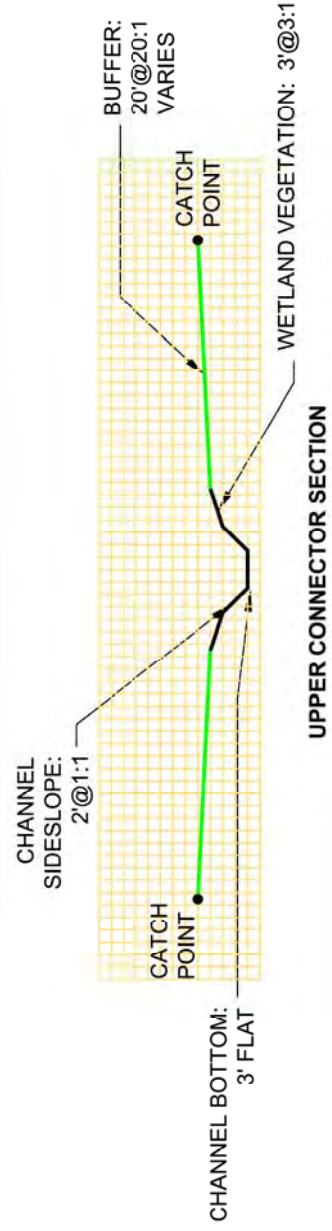
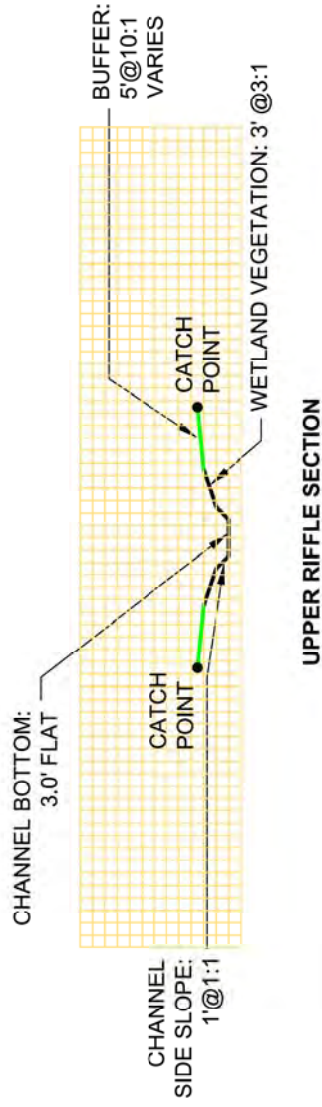


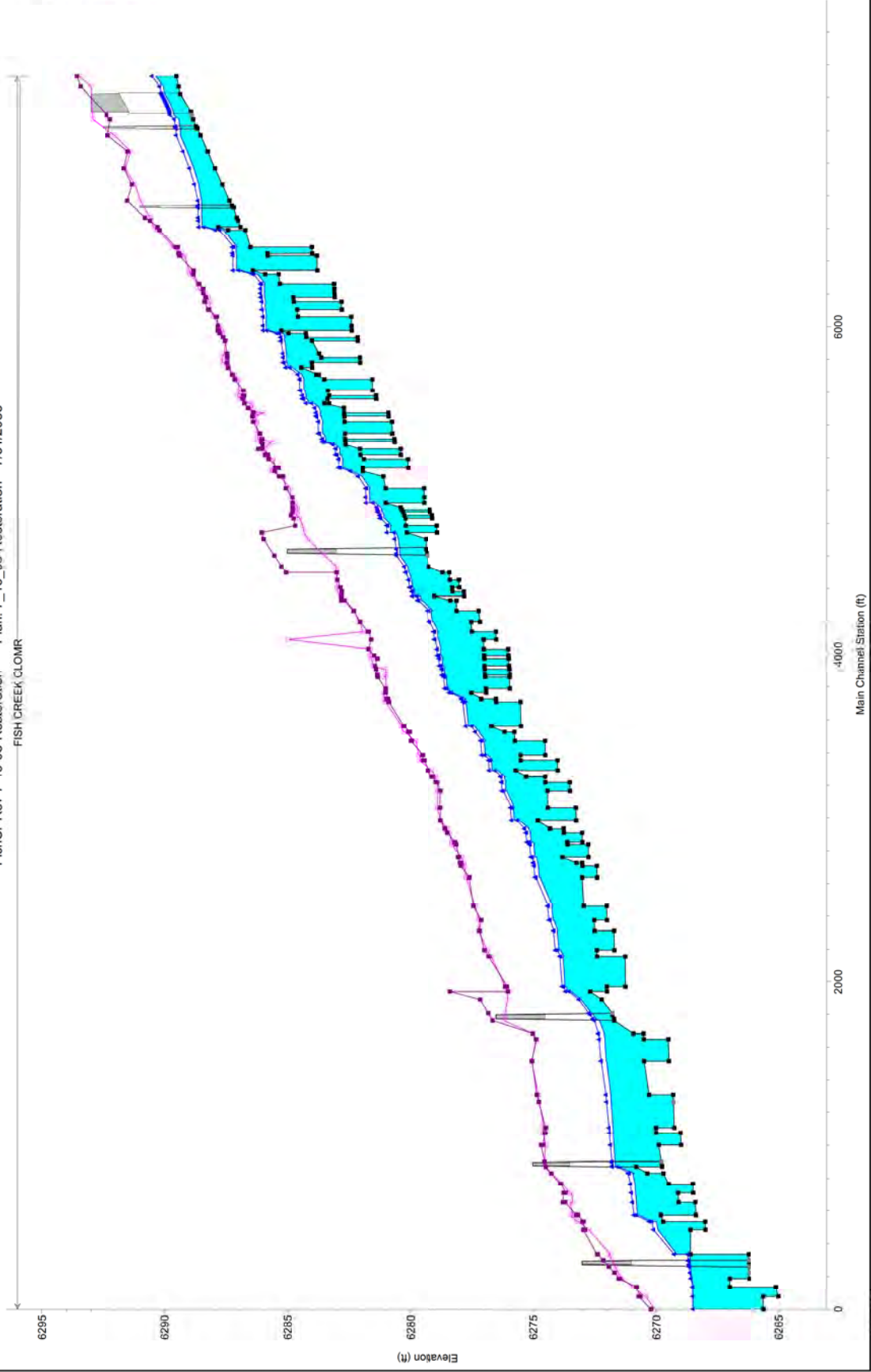
EXHIBIT 1C UPPER REACH TYPICAL CHANNEL CROSS-SECTIONS FISH CREEK RESTORATION

SCALE: 1" = 10'

FishCr-Rev-7-15-03-Restoration Plan: 7_15_03-Restoration 7/31/2003

FISH CREEK CLOMR

Legend	
WS Low Range	
WS High Range	
Ground	
Left Catchpoint	
Right Catchpoint	



1 in Horiz. = 600 ft 1 in Vert. = 4 ft

**APPENDIX C – ACOE WETLAND VERIFICATION LETTER, ACOE/FWS/DEQ NW27
AUTHORIZATIONS, WG&FD LETTER OF SUPPORT, FEMA CLOMAR**

APPENDIX D – STATEMENT OF QUALIFICATIONS

Statement of Qualifications

KATHERINE M. SALSBURY
Co-President, Intermountain Aquatics, Inc.

Education:

M.S. in Rangeland Ecology and Watershed Management, University of Wyoming-
Laramie, Wyoming
May, 1999.

B.S. in Environmental, Population and Organismic Biology, University of Colorado-
Boulder, Colorado
May, 1996.

Related Experience:

Co-owner and Principal, Intermountain Aquatics, Inc. Driggs, ID. 1998-present

Sample of Projects Completed:

Silver Creek Trout Habitat Restoration and Enhancement Project

Three Channel Spring Creek Trout Habitat Restoration and Enhancement Project

Price Spring Creek Trout Habitat Restoration and Enhancement Project

Spring Creek Trout Habitat Restoration and Enhancement Project

Comprehensive Wetland Delineation and Hydrologic Groundwater Study to Delineate
the Extent of Irrigation Induced Wetlands on 640 acres

Wetland Delineations

Baseline Inventories for the Jackson Hole Land Trust

Environmental Analyses for Teton County Land Owners

Graduate Research Assistant, University of Wyoming, Laramie, Wyoming 1996-1998

Conducted an evaluation of a trout habitat restoration project

Designed a trout habitat restoration plan for 4 ½ miles of a creek in south central
Wyoming

Applied for and received a Riparian Habitat Improvement grant from the Wyoming
Game and Fish Department

Developed design criteria for instream restoration structures

Developed guidelines for completing successful instream restoration projects

Related Coursework:

Field Biology, Field Ecology, Field Ornithology, Mammalogy, Botany, Limnology,
Comparative Environmental Physiology, Fisheries Management, Watershed
Management, Stream Habitat Management, Hydrology, Range Survey and Utilization,
Wetlands Delineation Training

Awards and scholarships:

Award for the "Best Graduate Student Paper and Presentation" at the Wyoming Chapter of the American Water Resources Association annual meeting, December, 1997.
Recipient of the Vern Bressler Fisheries Scholarship, September, 1997.
Recipient of a grant from the Wyoming Council of Trout Unlimited for research conducted on instream restoration projects in south central Wyoming, August, 1997.
Recipient of an Undergraduate Research Opportunities grant to study the calls of the two flycatcher species from the University of Colorado, August, 1994.

Activities and Organizations:

President, University of Wyoming Student Chapter of the American Water Resources Association. 1996-1997.

Professional Affiliations: National Society of Consulting Soil Scientists, American Fisheries Society, American Water Resources Association, Wyoming Riparian Association, Society for Range Management

Publications:

"Development and Application for Instream Restoration Structures in a Rocky Mountain Stream." Laramie, WY, December, 1999.

OUTLINE OF TERMS AND CONDITIONS

I. General Prefatory Information (Affidavit Affecting Title)

This section includes the Affidavit Controlling Title and related materials. It will affirm approval of the PUD District approval for the Resort Master Plan, approval of the Master Plan, and approval of the Terms and Conditions. It will express that the Terms and Conditions serve as the development standards and regulations for the Resort Master Plan.

II. Rules of Construction and Definitions

This section will establish the rules of construction and definitions that control the Terms and Conditions. For example, the definitions section will define each of the general category of uses allowed in the Resort Master Plan (residential uses, commercial uses, institutional uses, lodging uses and resort support uses), as well as other terms that are important to establishing the terms and conditions for the development (e.g., property, Snake River Associates, Teton Village Association, average peak occupancy, etc.). Finally, this section will establish who has the authority to make interpretations of the Terms and Conditions, and establish a formal procedure by which the property owner can seek an interpretation.

III. Standards and Conditions

This third section consists of the Terms and Conditions. The Terms and Conditions are divided into a number of different subsections.

A. Purpose and Objectives

This subsection spells out the general purpose and objectives of the Resort Master Plan:

- To establish a comprehensive development plan for the Resort Master Plan that allows the village, as a whole, to grow into a coherent resort community within a permanent boundary framed by open lands;
- To develop Terms and Conditions that allows the County, the property owner and the Teton Districts to regulate and control the Resort Master Plan as an integrated part of Teton Village.

B. Subject Property

This subsection will identify the property that is subject to the Resort Master Plan. This will be done through a map and by a general textual description of the property.

C. Boundaries of PUD District

This subsection will identify the boundaries of the PUD District for the Resort Master Plan. It will be done in map form. These boundaries will be co-terminus with the property boundaries described above.

D. Master Plan

This subsection will include the Master Plan developed for the Resort Master Plan. It will be done in both graphic and tabular form. The Master Plan will identify the different development tracts:

- Village Core
- Residential
- Horse Pasture North
- Horse Pasture South
- Golf Course
- Village Park
- Skier Parking
- Village Maintenance

It will also establish the general development parameters for the Resort Master Plan (gross acres, different land uses, open lands, civic and community facilities, etc.).

E. Development Parameters for the Master Plan

This subsection will establish in detail the development parameters for the Master Plan.

1. Land Uses

- a. **Land Uses (General).** This subsection will spell out the land uses and their densities/intensities for the entire Master Plan. This will be done in both graphic and tabular form.
- b. **Land Uses by Development Tract.** This subsection will spell out the land uses and their densities/intensities for each of the individual development tracts in the Master Plan.
- c. **Phasing of the Land Uses.** This subsection will establish the phasing schedule for the Master Plan. The phasing schedule will allow for the phasing of land uses in different development tracts over time. While this phasing schedule will provide a general framework of phasing for the project, the intent is to allow the property owner flexibility to respond to market conditions, as well as coordinate development activities with the Teton Village development to ensure for an integrated Teton Village development.

ENVIRONMENTAL ANALYSIS - *ADDENDUM*
FOR THE
Teton Village Expansion Master Plan



May 28, 2004

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The purpose of this addendum is to specifically address points raised in the April 1, 2004 memo from Amy Shea to Randy Bosch regarding the EA and Conceptual NRMP Review for Teton Village Expansion Master Plan.

1. “Perimeter Lands” are described on page 7 of the EA as **“The perimeter open lands are located just east of the “Village Core”, separating it from the Moose-Wilson Road. It consists of 19 acres of horse pasture, a 14-acre park, and 7 acres set aside for maintenance operations, for a total of 40 acres.”**
2. The Teton Fault line runs through the project area from north to south. According to the Geologic Map of Grand Teton National Park, throughout the project area the fault is concealed beneath unfaulted, younger deposits. Please refer to the attached Figure EA1b. Existing Site Conditions with Fault Line for a depiction of this line within the project boundary.
3. An agreement was made between the U.S. Army Corps of Engineers (ACOE), who requested the comments from the U.S. Fish and Wildlife Service (USFW), and the applicant to maintain a 50-foot setback from Fish Creek where it has an average annual flow that exceeds 3 cfs and a 33-foot setback from Fish Creek where it has an average annual flow that does not exceed 3 cfs. These setbacks will be made permanent using a deed restriction that has been approved by the ACOE. Please refer to the attached letter from the ACOE accepting the draft deed restriction language supplied by the applicant.
4. Figure EA1 depicts what is known as Fish Creek from the current McCollister drive south. At this point Fish Creek originates at a culvert and is supplied by waters from Crystal Spring, which is located within the existing village core, and a ditch that runs parallel to the existing village boundary to the east. The applicant plans to re-route this ditch through the proposed village core. This section of ditch is not recognized as Fish Creek or a water of the U.S. by the Army Corps of Engineers. The applicant plans to re-route this ditch through the new village core however, this design is currently at a conceptual stage. A complete plan for this section will be submitted at the Final Development Plan stage.
5. The natural resources addressed in the September 4, 2003 Memo were addressed in a response letter to Nancy Arkin on September 10, 2003. **“During the comprehensive wetland delineation process with ACOE, we had to identify all wetlands and waters of the U.S. on the site. Crystal Springs is located to the north of the project boundary and flows into the “headwaters” of Fish Creek at the culvert located under Mc Collister Drive. It was not addressed in the EA because it is not within the project boundary. The two unnamed creeks that Amy refers to are actually threads of Ellen Creek, which has since been channelized. The depiction of the water features on the property on the USGS Quad is no longer accurate. The depiction of the water features in the Teton County GIS is accurate and shows Fish Creek, Shorty Creek**

and Ellen Creek as the only water courses on the property. To my knowledge we did not leave out any protected resources.”

6. Figure EA10 depicts two irrigation ditches, not streams, the Granite Ditch cottonwood corridor and the Last Chance Ditch cottonwood corridor. These are irrigation ditches that carry surface flow water rights to the property and the adjacent lands to the south. A more detailed description of these ditches is outlined on page 17 of the EA, **“The Granite Ditch and Last Chance Ditch Cottonwood Corridors are proposed to promote the scenic and wildlife values of the historic irrigation systems through the property. Each of these ditches will be lined with native cottonwoods grown from seed collected in Teton County at a spacing interval of one tree per ten feet. They will also be planted with *Salix exigua* and adjacent lands will be planted with native grasses. These cottonwood corridors will provide perching habitat for raptors and an abundance of habitat for migratory songbirds. In addition these corridors will provide valuable scenic, screening benefits and are designed to mimic historic agricultural features found on lands to the north in Grand Teton National Park.”** These ditches flow through the property and connect with historic irrigation ditches that flow to the School Section to the south.
7. The Edmiston and Ellen Creek ponds were designated as “wildlife” ponds because they maximize the length of sinuous shoreline and have extensive vegetated shallows. These features will also be protected by a proposed 16-foot setback. Specific human use recommendations regarding activities permitted within this setback will be outlined within the Final Development Plan.
8. A comprehensive list of Human Use Recommendations will be included in the Final Development Plan. This list will address the following topics:
 - Native (Habitat Enhancement Areas, Setbacks and Landforms) and Non-native Planting Areas.
 - Fencing
 - Restrictions in Habitat Enhancement Areas
 - Livestock Pasturing (if applicable)
 - Vegetation Alteration
 - Use of Herbicides and Pesticides
 - Wildlife Feeding
 - Pet Control
 - Wildlife Harassment
9. Please see the attached Figure EA 10b which includes the layout of the lots and the proposed landforms. Any conflicts between the home sites, landforms and/or setbacks will be resolved within the Final Development Plan.

10. Detailed habitat enhancement plans for all of the proposed habitat enhancement features will be included in the Final Development Plan. The applicant recognizes that county, state and federal permits will most likely be required for this work.
11. The impacts of the bridge crossings on Fish Creek was analyzed by Rendezvous Engineering and submitted to the U.S. Army Corps of Engineers and FEMA for their professional review. Each agency determined that the crossings would not impact the hydrologic regime of Fish Creek and subsequently issued authorizations for the restored channel of Fish Creek with the proposed crossings in the form of a Nationwide 27 Permit and a Conditional Letter of Map Revision. These permits are included in Appendix C of the EA.

APPENDIX A – REVISED FIGURES

APPENDIX B – ACOE SETBACK AGREEMENT

APPENDIX C – PLANNING DEPARMENT MEMOS