

December 15, 2003

**HABITAT CONSERVATION PLAN
FOR A PORTION
OF THE MEADOWS PROPERTY
DOUGLAS COUNTY, COLORADO**

Prepared for:

**United States Fish and Wildlife Service
Colorado Field Office
755 Parfet Street, Suite 361
Lakewood, Colorado 80215**

Submitted by: Castle Rock Development Company

Prepared by:

**Athabasca Consulting, Inc.
Kaplan Kirsch & Rockwell L.L.P.**

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6.0 HABITAT CONSERVATION PLAN

This section contains CRDC's proposed HCP related to the development of the portion of The Meadows community (Figure 1) that lies within and adjacent to Preble's habitat and is identified in Figure 2 (the "EA/HCP Property"). The goals of this HCP are to avoid and minimize impacts to Preble's habitat for the purposes of maintaining a viable Preble's habitat corridor. When Preble's habitat impacts were unavoidable, the mitigation strategy was designed to offset those disturbances and continue to maintain the viability of the Preble's habitat corridor. The proposed mitigation measures would actually improve the viability of the Preble's habitat corridor compared to existing conditions.

6.1 Methodology

Three methods were analyzed to determine the best way to delineate Preble's habitat, assess take, and establish avoidance, minimization, and mitigation strategies. The three methods were: (1) the initial draft Section 4(d) rule regarding impacts to Preble's habitat; (2) the current unofficial policy utilized by the Service to determine Preble's habitat protection zones; and (3) a method similar to the one proposed by Douglas County in its draft sub-area regional habitat conservation plan to determine Preble's habitat protection zones.

The three methods delineate three different zones of habitat protection for Preble's. First, the initial proposed 4(d) rule for Preble's, issued by the Service on December 4, 1998, attempted to establish Preble's habitat being located 300 feet beyond the outside edge of the contiguous wetlands corridor in areas presumed to be occupied or probable habitat for Preble's. That protection zone, as it applies to The Meadows, is identified in Figure 4. Second, the current, unofficial Service protocol for Preble's establishes potential Preble's habitat as 300 feet beyond the outside edge of the 100-year floodplain. That protection zone, as it applies to The Meadows, is identified in Figure 5. Third, Douglas County has proposed in its sub-area regional habitat conservation plan, that Preble's habitat would be

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up to 100 feet beyond the outside edge of the contiguous riparian corridor. That Protection Zone, as it applies to The Meadows, is identified in Figure 6.

In analyzing these three methods, CRDC sought to choose the method that would delineate habitat and assess take in a manner that protects the highest quality habitat in the most contiguous and complete fashion possible. Accordingly, use of the draft Section 4(d) rule was rejected because it would allow significant destruction of riparian vegetation on the EA/HCP Property and would reduce the width of habitat and impair the viability of Preble's along this stretch of East Plum Creek corridor.

The two other methods—the 100-year floodplain (plus 300 feet) method and the riparian corridor (plus 100 feet) method—were compared to determine which one had the highest potential to protect viable Preble's habitat. The Protection Zone will protect more potentially high quality riparian Preble's habitat (174.73 acres in the 100-year floodplain (plus 300 feet) methodology versus 188.12 acres in the riparian corridor (plus 100 feet) method), because riparian corridor vegetation sometimes extends outside of the 100-year floodplain protection zone and could be destroyed. Conversely, the areas not protected by the riparian corridor (plus 100 feet) method would be in open, grassy areas and usually separated from the riparian corridors by steep slopes. These areas are of lower potential value to the Preble's. Therefore, the riparian corridor (plus 100 feet) method was chosen as the method to delineate habitat and assess take because it was determined to protect higher quality vegetation in a more contiguous and complete fashion.

6.2 Description of Project Activities

Selection of the riparian corridor (plus 100 feet) method caused CRDC to alter the development plans approved for the EA/HCP Property by the Town of Castle Rock to avoid and minimize impacts to habitat to the maximum extent possible. Accordingly, development of the EA/HCP Property would involve four types of uses as shown on Figure 3-B and Figure 7. First, the COI Parcels shown on Exhibit 3-B would be developed with office, commercial and industrial uses. Second, a total of twenty water

wells (including well construction, pipe installation and operation and maintenance) would be drilled over a period of twenty years to serve the entire Meadows community, with only two to three wells being developed at any one time. Sixteen of the twenty wells would be located within the riparian corridor, each permanently occupying 40 ft. x 40 ft. The location and pumping rates for the wells are dictated by a water decree that was approved by the Colorado District Court, Water Division No. 1 (Case No. 85CW480, filed 1985). Third, a proposed trail system approximately two miles long would be built within the riparian corridor of the EA/HCP Property to serve as an upstream and downstream extension of the existing Town of Castle Rock Trail System. The permanent trail would be approximately eight feet wide and would be improved with concrete. Finally, an underground sanitary sewer line would be constructed within the Easterly portions of the COI Parcels located on the Southwesterly bank of East Plum Creek, consisting of an 8" underground main, an above ground lift station, and a 24" underground main in Parcel IV-1. Portions of these sewer facilities would be located in the uplands portion of the Protection Zone. See Figure 7. With the exception of the water well development and trail development, virtually all proposed development will occur outside the riparian zone.

6.3 Preble's Habitat Requirements

Riparian areas are considered to be the main component of Preble's habitat with the presence of upland habitat being dependent on available adjacent riparian areas. For the purpose of this EA/HCP, riparian areas are defined as wetlands and non-wetlands with vegetation typically depending on stream or pond-influenced surface or groundwater for growth and reproduction (Phreatophytic vegetation). Upland areas include less significant potential Preble's habitat than the riparian and ecotone areas but may be beneficial to Preble's foraging and hibernation (SWCA, 1999).

Preble's habitat is primarily composed of broad, well-vegetated areas. Higher quality habitat is typically found in broad, extensive drainage systems (riparian area extends at least 75 feet from the waters edge) that contain wetland herbaceous and shrub vegetation

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with very little bare ground. Higher quality habitat is found near open water and associated with wet meadows. Soils range from mesic to hydric. This habitat usually supports thickets of 4 to 7-foot tall coyote willow interspersed with other woody species such as peachleaf willow (*Salix amygdaloides*), western snowberry, alder, narrowleaf cottonwood (*Populus angustifolia*), and plains cottonwood (*Populus deltoides*). Adjacent slopes may contain dense interspersions of shrubby thickets, herbaceous patches, and grassy areas. Adjacent upland shrubs can include western snowberry, chokecherry, and Gambel oak, but species composition is variable throughout the range of the mouse. It is likely that Preble's habitat is not driven by the diversity of plant species, but by the density of riparian vegetation.

Moderate to lower quality habitat consists of densities of herbaceous vegetation and shrubs below approximately 75% cover. Bare ground may be between 25% and 50% with mesic soil conditions. Open water typically consists of a narrow creek with a narrow riparian area. Adjacent upland slopes may be more open with very little shrub cover and some areas of dense grasses interspersed with patches of bare ground.

Sixty-percent of the riparian corridor within the EA/HCP Property consists of lower to moderate quality habitat. The discontinuation of cattle grazing on the EA/HCP Property could greatly improve these areas of lesser quality Preble's habitat. This improved habitat quality within the riparian zone would provide increased viability and contiguity of the riparian corridor, potentially beyond pre-development conditions.

Adjacent upland sites are described by the presence of western wheatgrass, blue grama, smooth brome, yucca, and prickly pear cactus. Non-native plant species, such as cheat grass and Russian knapweed, have invaded much of Douglas County and are significant components to the upland vegetation bordering East Plum Creek. Virtually no shrubs or trees exist in the upland areas. The potential for suitable Preble's habitat within the uplands (beyond the 100-foot setback) is low to non-existent.

6.4 Determination of Incidental Take

Preble's presence has been established through state, federal and private trapping efforts upstream and downstream from the EA/HCP Property. In the areas along the East Plum Creek (the approximate east boundary of The Meadows), biologists have trapped Preble's approximately one mile south of The Meadows, and approximately 3.25 miles north of The Meadows at the confluence of East and West Plum Creeks. Habitat types, including vegetation and cover, found at the general locations of the above-mentioned trapping sites, also are present at The Meadows.

Construction activities will occur primarily in the daytime, when Preble's generally is not engaged in foraging and other activities that might bring it to the sites at The Meadows. Therefore, no direct take of individual Preble's by pursuit, hunting, shooting, wounding, killing, trapping, capturing, or collecting is anticipated as a result of the office, commercial, industrial or other development. Nevertheless, areas disturbed by development of the EA/HCP Property may constitute Preble's habitat. Thus, some modification or degradation of Preble's habitat may occur as a result of activity associated with completion of office, commercial, industrial or other development of the EA/HCP Property. Although not the intended purpose of the project, such potential harm of Preble's is prohibited as an unlawful take under section 9 of the Act and 50 CFR §17.3. The incidental take permit will allow for the destruction or degradation of any Preble's habitat included within the property disturbed as a result of completion of the project.

Almost all development would be located outside of the Protection Zone, thereby avoiding take of potential Preble's habitat to the greatest extent possible. However, a few activities would occur within the Protection Zone, resulting in a total of 8.63 acres of permanent habitat disturbance and an additional 24.87 acres of temporary habitat disturbance (Figure 7). First, Parcels A and B as described on Exhibit 3-B would be developed in the uplands area but within the 100-foot setback of the Protection Zone. Development of Parcels A & B would permanently disturb a total of 5.59 acres of habitat

and would temporarily disturb an additional 2.15 acres of habitat. However, development of Parcels A & B would not remove any riparian vegetation, except for a small trickle channel that would control the rate of stormwater runoff. The remaining development of Parcels A and B will be outside of the Protection Zone. Second, development of water wells, water delivery system and trail would occur within the riparian vegetation and result in 3.04 acres of permanent disturbance to Preble's habitat and an additional 22.72 acres of temporary disturbance. Initially, construction of each water well will disturb 200 ft. x 200 ft. within the riparian zone. Upon completion of each water well, 40 ft. x 40 ft. of permanent disturbance will remain.

6.5 Mitigation Plan

This section identifies the steps that CRDC would undertake to minimize any impacts on Preble's habitat, restore all areas of temporary disturbance and offset permanent impacts to habitat. As stated above, take would result from development of Parcels A and B (and associated wastewater and drainage improvements) on the upland areas but within the Protection Zone and development of a water delivery system and extension of the existing trail system within the riparian area. A total of 8.63 acres of permanent and an additional 24.87 acres of temporary disturbance of Preble's habitat would result from development of the EA/HCP Property. Development of the Parcels A and B and associated infrastructure would result in 5.59 acres of permanent and an additional 2.15 acres of temporary take. Development of the water system and trail system would result in 3.04 acres of permanent and an additional 22.72 acres of temporary take.

The following mitigation strategy has been developed to ensure that the take identified above will be incidental and that a viable Preble's habitat corridor will be maintained along East Plum Creek. To mitigate for the areas of temporary and permanent disturbance, 24.87 acres would be restored, and 52.85 acres will be set aside as mitigation (42.85 acres of additional open space plus an additional 10 acres of enhancement). Also, the discontinuation of cattle grazing on the EA/HCP Property will improve the quality of existing vegetation. This mitigation strategy, to the maximum extent practicable, will

minimize and mitigate the impacts of any incidental taking associated with development of the EA/HCP Property and will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. Mitigation planning to offset take would be reviewed and authorized by the Service before implementing.

6.5.1 Minimization and Restoration

The CRDC will take the following steps to minimize the impacts from temporary and permanent disturbance to the Protection Zone and restore all temporary disturbances:

(1) Development of Parcels A and B (identified on Figure 7)

- (a) CRDC will revegetate areas that would be disturbed temporarily as a result of development of the trickle channel to provide drainage for Parcel B, as shown in Figure 7. Such revegetation will be accomplished consistent with the Restoration Plan provisions of Section 6.5.1(6).
- (b) CRDC will segregate the buildings within Parcels A and B from the riparian areas with barriers (which may include landscaping, fencing or berms) along the perimeter of the areas of permanent disturbance identified in Figure 7 and will revegetate any areas of temporary disturbance with native vegetation (i.e. grasses and shrubs) to minimize any indirect impacts from building within the Protection Zone. Such revegetation will be accomplished consistent with the Restoration Plan provisions of Section 6.5.1(6).
- (c) CRDC will cause all construction to be initiated between October 15 and April 30 of any year to minimize and avoid impacts to the Preble's.

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(2) Development of Water Wells, Water Delivery System and Sewer System within the Protection Zone.

- (a) CRDC will only develop a maximum of three water wells at any time.
- (b) CRDC will insure that access to the well sites would be from existing concrete trails wherever possible. Where existing concrete trails are not available, access would be limited to essential vehicles.
- (c) CRDC will not pave any new well site access roads.
- (d) CRDC will maintain two-track vehicle access to the wells to allow essential operation and maintenance of the wells. CRDC will minimize the use of permanent fill for access roads to the extent possible, but may use fill when necessary to maintain year-round access and minimize erosion.
- (e) Wherever possible, CRDC will insure that access routes and water pipe installation would avoid highest densities of Preble's habitat.
- (f) CRDC will revegetate all areas of temporary disturbance. Such revegetation will be accomplished pursuant to the Restoration Plan provisions of Section 6.5.1(6).
- (g) CRDC will insure that all water system development occurs between October 15 and April 30 of any year. Development outside of this season may occur only when necessary to protect human health and safety.

(h) Development of no well site will result in the permanent removal or displacement of more than 1/10 acre of woody riparian vegetation or wetlands.

(i) Redrills of wells originally drilled under this HCP are a permitted activity under the HCP so long as all minimization and mitigation measures required in this HCP are undertaken and are completed before the ITP expires.

(3) Operation and Maintenance of Well System

(a) Following installation of the well system, CRDC will assign responsibility for operation and maintenance of the well system to the Town of Castle Rock.

(b) CRDC will comply with the provisions of the Findings of Fact, Conclusions of Law, Judgment and Decree entered by the Colorado District Court in Case No.85CW480 on April 13, 1993, requiring that any withdrawals of groundwater from the East Plum Creek watershed associated with the proposed action must be replaced by water of similar quality from reusable sources, including irrigation runoff, direct discharge of non-tributary groundwater, and non-potable return flows.

(4) Construction and Maintenance of Trail Facilities within the Protection Zone

(a) CRDC will insure that all trail development activities occur between October 15 and April 30 to minimize impacts to the Preble's.

(b) The temporary and permanent loss of woody riparian vegetation will be minimized by utilizing existing trail routes for maintenance and by

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designing trail extensions in efforts to avoid woody riparian vegetation.

- (c) Trail alignment will be designed to have minimal impact on the riparian zone. The alignment will be submitted to the Service for review and approval.
 - (d) Trail heads, parking areas, restrooms and other associated trail facilities will not occur within the Protection Zone.
 - (e) Trail width will not exceed 10 feet within the Protection Zone.
 - (f) CRDC will provide conspicuous signs at all trailheads indicating that recreational trail use must be limited to daylight hours.
 - (g) CRDC will provide conspicuous signs at all trailheads indicating that pets must be confined to trails and required to be on a leash of 8 feet or less at all times.
 - (h) Trails will be maintained to avoid erosion, sedimentation or other threats to habitat.
- (5) EA/HCP Property Development Outside Protection Zone.

CRDC will install barriers, which may include landscaping, fencing or berms, between Preble's habitat and development outside of the Protection Zone to segregate anthropogenic activities from Preble's habitat.

(6) Revegetation Requirements

At least 30 days prior to undertaking any development within the Protection Zone that will involve temporary disturbances to vegetation, CRDC will submit a plan for revegetation of such disturbances (the "Restoration Plan") to the Service. The Restoration Plan(s) will contain a complete description of the steps CRDC will take to revegetate areas of temporary disturbance. The Restoration Plan(s) will meet the criteria and objectives for mitigation in Appendix A to the HCP, including species mix.

(7) Additional Best Management Practices for Activities in the EA/HCP Property

- (a) All disturbance associated with construction will be the minimum necessary.
- (b) All temporarily disturbed areas will be returned to preconstruction grades as much as reasonably possible.
- (c) Disturbance to woody riparian vegetation within the riparian zone will be minimized.
- (d) Any excess material brought on to any maintenance or construction site will be removed from the site following completion of construction or repair.
- (e) Use of temporary access roads will not exceed 200 days per calendar year. Temporary access roads may be reused for subsequent repairs, maintenance, and rehabilitation. The 200 day limit shall not apply to emergency access necessitated by threats to human health, safety, or the environment (e.g., sewer line leaks,

fires, injury, water main breaks, gas line leaks, or hazardous material spills).

- (f) All construction and maintenance personnel operating within the Permit Area will be provided with written and oral instructions on minimization and avoidance strategies to protect the Preble's, including relevant requirements of the Conservation Plan by a biologist or CRDC representative familiar with this EA/HCP and Preble's habitat within the EA/HCP Property. A biologist familiar with this EA/HCP and knowledgeable on Preble's ecology will monitor construction activities.

6.5.2 Habitat Enhancement

Because avoidance, minimization and restoration will not eliminate all impacts to habitat within the EA/HCP Property, CRDC will take the following steps to offset any permanent impacts and enhance the overall Preble's habitat within the EA/HCP Property. These steps will significantly improve Preble's habitat from existing conditions by improving the quality of and connections among Preble's habitat.

(1) Elimination of Cattle Grazing

Prior to development in the Protection Zone, CRDC will eliminate all cattle grazing in the Protection Zone (188.12 acres), as well as in the 42.85 acres of additional mitigation area identified in Figure 9.

(2) Dedication of Land for Open Space

CRDC will dedicate as permanent open space the property designated as open space in the Meadows Third Amendment PD Plan. See Figure 3-A. CRDC will further dedicate as permanent open space approximately 42.85 acres of open

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space and developable uplands adjacent to the Protection Zone, identified on Figure 9, to minimize impacts from the development and enhance the viability of Preble's habitat in East Plum Creek by enlarging the width of undeveloped land along the drainage. Prior to development of the EA/HCP Property after issuance of the ITP, CRDC will execute a deed restriction or conservation easement, with the Service as a third-party beneficiary to ensure that this property will remain open space.

(3) Enhancement of Vegetation

Prior to commencing construction activities within Parcels A and B, or for new trail development or water well development within the Protection Zone, CRDC will initiate enhancement of approximately 10 acres of vegetation near Parcels A and B adjacent to the Meadows Parkway bridge to offset any direct or indirect permanent impacts resulting from the development of Parcels A and B, trail development or water well development within the Protection Zone. The 10-acre area for enhancement is shown in Figure 10. CRDC will submit a plan for vegetation enhancement of these 10 acres (the "Vegetation Enhancement Plan") to the Service for review and approval at least 60 days prior to commencing construction activities within Parcels A and B, or for new trail development or water well development within the Protection Zone. The Vegetation Enhancement Plan will contain a complete description of the steps proposed to be taken to enhance vegetation for the benefit of the Preble's. The Vegetation Enhancement Plan will meet the criteria and objectives for mitigation included in Appendix A to the HCP, including species mix. Revegetation and vegetation recovery resulting from elimination of cattle grazing shall be creditable towards meeting vegetation enhancement criteria and objectives. The Service will make all reasonable efforts to approve or deny the Vegetation Enhancement Plan within 30 days of receipt, and include detailed reasons for any denial. CRDC may submit drafts of the Vegetation Enhancement Plan to the Service prior to formal submittal.

6.6 Biological Goals and Objectives – Achieving Mitigation Plan Success

The biological goals and objectives of the mitigation plan and this EA/HCP for both restoration and enhancement activities are: (1) to avoid and minimize disturbance to Preble's habitat wherever possible; (2) to mitigate as much or more habitat for Preble's as the amount of potential habitat disturbed; and (3) to ensure population viability by maintaining habitat contiguity. The mitigation plan outlined in Section 6.5 above should be sufficient to achieve these biological goals and objectives. The mitigation plan is designed to ensure an adequate number of acres of habitat in a certain configuration, so that a viable corridor is maintained. Criteria for mitigation success are identified in Appendix A to this HCP and will be specifically defined in the Vegetation Enhancement Plan and Restoration Plan(s).

Revegetation required by this mitigation plan would follow commencement of construction in Parcels A and B, or of the water wells or trails, whichever comes first. CRDC would revegetate 100% of the area available for such revegetation in the restoration and enhancements areas to reestablish habitat. The revegetation will be such that if 70% or more of the vegetation planted survives and becomes established, sufficient habitat will have been restored and enhanced to meet the goals and objectives of this EA/HCP. Thus, the mitigation plan will have achieved success when 70% of the revegetated area is established with a mixture of the species listed in Appendix A.

6.6.1 Monitoring and Adaptive Management

6.6.1.1 Success Monitoring

Success will be monitored annually in the summer by CRDC for the first five-year period following implementation of mitigation described in any Vegetation Enhancement Plan or Restoration Plan. CRDC will be responsible for reseeding in order to achieve success, if success is not achieved by the end of the first five-year period. Monitoring will

continue for five years or until success is achieved, whichever is longer. Success will be measured by the use of photo point analysis and vegetation plots using statistically significant sample areas of each of the mitigation areas. The same sample areas will be used for all monitoring analysis. In conjunction with annual success monitoring, CRDC will submit simple, annual compliance reports to the Service regarding the implementation and success of this EA/HCP. Such reports also will detail any new disturbance of areas covered by the ITP during the preceding year. The Service shall have the right to visit and inspect the EA/HCP Property to insure compliance of this EA/HCP pursuant to 50 CFR § 13.21 (e)(1).

6.6.1.2 Adaptive Management

Because of its dependence on biological, climatic and other variable processes, the precise degree of vegetation enhancement attained through the mitigation plan involves some uncertainty. Accordingly, if success, as defined in each Vegetation Enhancement Plan or Restoration Plan, has not been achieved by the end of the monitoring period, CRDC will use alternative measures as part of a process of adaptive management to achieve success. Such alternative methods may include:

- i. Planted herbaceous vegetation may be replaced with material of the same species obtained from a nursery;
- ii. In the event that a second attempt of herbaceous planting does not succeed, plug transplants of adjacent native vegetation cover may be removed from any natural area and seeded with a native seed mix of the same species. A maximum of 10% of the vegetation cover may be removed from any natural area and seeded with a native seed mix of the same species;
- iii. If necessary, seeded areas may be reseeded to the standards indicated in the relevant Vegetation Enhancement and/or Restoration Plan(s); and
- iv. If necessary due to climatic conditions, supplemental watering would be undertaken.

6.6.1.3 Compliance Monitoring

All management, maintenance, and monitoring activities of the proposed mitigation procedures during the first five-year period (or until success as defined above is achieved) would be conducted by CRDC or its successor owners. Once the five-year period expires and success as defined above has been achieved, CRDC would retain the option of managing and maintaining the enhancement activities on all mitigated areas. However, CRDC would likely convey long term management of the areas to the Town of Castle Rock or another entity approved by the Service or utilize a conservation easement for the permanent maintenance, management, and monitoring of the areas. Proposed beneficiaries of the easement include: Douglas County Board of County Commissioners, Town of Castle Rock, and Douglas County Land Board. The Service will expressly allow CRDC to assign responsibility for any necessary monitoring, management, and maintenance activities to one or more of the above listed proposed beneficiaries.

6.6.2 Funding

Conservation planning requires sufficient funding be made available to implement the EA/HCP. CRDC will provide such funds as may be necessary to carry out its obligations under the EA/HCP. CRDC should notify the Service if CRDC's funding resources have materially changed, including a discussion of the nature of the change.

CRDC will further ensure that funding is available to meet its obligations under the Permit and the EA/HCP through accounts sufficient for this purpose. The account may be a trust account, irrevocable letter of credit, insurance or surety bond. Such accounts will contain provisions naming FWS as a beneficiary and allowing FWS to draw upon the account, if CRDC fails to undertake any of its mitigation obligations under this HCP, to the extent necessary to ensure that mitigation identified in this HCP is provided. Prior to disturbing any area in the Protection Zone for office, water well, water delivery system or trail development, CRDC will place or secure funds in an account sufficient to cover all

anticipated costs of monitoring and ensuring success of the Vegetation Enhancement Plan, as defined in Section 6.5.2(3). Such account will contain provisions to ensure that sufficient funds are available to ensure mitigation success as defined in the Vegetation Enhancement Plan. Such an account may also serve as security for other public entities, such as the Town of Castle Rock, so long as there are provisions sufficient to ensure adequate funding for the monitoring and mitigation success of the Vegetation Enhancement Plan. Such funding mechanisms will be maintained by CRDC for five years from the initiation of the mitigation under the Vegetation Enhancement Plan or until success is achieved as defined in the Vegetation Enhancement Plan.

Prior to causing any temporary disturbance in any area within the Protection Zone, CRDC will place or secure funds in an account sufficient to cover anticipated costs of implementing the relevant Restoration Plan pursuant to Section 6.5.1(6). Such account(s) will contain provisions to ensure that sufficient funds are available to ensure mitigation success as defined in the Restoration Plan(s). Such account(s) may also serve as security for other public entities, such as the Town of Castle Rock, so long as there are provisions sufficient to ensure adequate funding for mitigation success of the Restoration Plan. Each such funding mechanism will be maintained by CRDC for five years from the initiation of the mitigation activities under the Restoration Plan or until success is achieved as defined in the Restoration Plan(s).

6.6.3 Foreseeable Events

No significant impact to success of the mitigation plan is likely from foreseeable events such as a 500-year flood. Wildlife browsing on new plantings, particularly by mule deer and beaver will be prevented, if necessary, by putting wire cylinders and fencing around the susceptible vegetation. Additionally, revegetation will be biased towards plants unaffected by wildlife browsing. With respect to a 500-year flood, the types of planting contemplated by this mitigation plan, once established, should survive such a flood. If such a flood occurs prior to the conclusion of the first five-year period and destroys

significant portions of the plantings, success would be as defined in Section 6.6.1.1 above.

Owners of property surrounding the area covered by the EA/HCP, including both riparian and upland, are subject to all the requirements of the Act, which should adequately protect the biological integrity of the area that is revegetated.

6.6.4 Unforeseen Events

Reserves for future activities established as part of the account described in Section 6.6.2 above should be sufficient to provide for any necessary replanting in the event of any unforeseen circumstances. In the event of any unforeseen circumstances that interfere with success, CRDC will submit to the Service a supplemental Vegetation Enhancement Plan or Restoration Plan. Upon approval by the Service, the unforeseen circumstances will be remedied to the extent practicable by the means identified in the relevant Restoration Plan or Vegetation Enhancement Plan. In the event of unforeseen events, the Service shall not require the commitment of additional land or financial compensation beyond the level of mitigation otherwise provided in this EA/HCP, recognizing that the mitigation provided herein is adequate to provide for the conservation of Preble's. If additional mitigation measures are subsequently deemed by the Service to be necessary to provide for the conservation of Preble's, the obligation for such measures shall not rest with CRDC, unless CRDC consents to such measures.

The EA/HCP Property is not proposed for critical habitat designation. No additional requirements will be imposed on CRDC or the EA/HCP Property as a result of any such designation.

6.7 Amendment Procedure

It is necessary to establish a procedure whereby the Section 10(a)(1)(B) permit can be amended. However, it is important that the cumulative effect of the amendments will not

jeopardize any endangered species or other species of concern. Amendments must be evaluated based on their effect on the habitat as a whole. The Service must be consulted and agree on all proposed amendments.

6.7.1 Amendments to Development Plans

It is acknowledged that upon written request of CRDC, the local agency having land use regulatory jurisdiction over the EA/HCP Property is authorized in accordance with applicable law to approve amendments to development plans for the Property which do not result in the disturbance, degradation, destruction or take of any Preble's or other federally-listed threatened or endangered species habitat that is not contemplated to be taken as a consequence of the issuance of the ITP and the development of the Property and which do not alter the conditions set forth in this EA/HCP.

6.7.2 Minor Amendments to EA/HCP

Minor amendments involve routine administrative revisions or changes to the operation and management program and do not diminish the level or means of mitigation. Such minor amendments include corrections in land ownership, minor revisions to surveys, property descriptions, monitoring or reporting protocols, and minor changes in the boundaries of mitigation areas that result in no net loss of mitigation and do not otherwise alter the effectiveness of the EA/HCP. Such minor amendments do not alter the terms of the ITP. Upon the written request of CRDC, the Service is authorized to approve minor amendments to this EA/HCP, if the amendments do not conflict with the primary purpose of the EA/HCP as stated in Section 6.6 above.

6.7.3 All Other Amendments

All other amendments will be considered an amendment to the section 10(a)(1)(B) permit, subject to any other procedural requirements of federal law or regulation which may be applicable to the amendments of such a permit.

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References:

Note: All referenced documents are available for review at the United States Fish and Wildlife Service, Ecological Services Field Office, 755 Parfet Street, Suite 361, Lakewood, CO.

Spackman, S. June 29, 2001. Personal Communication. Colorado Natural Heritage Program.

Chase, G.H. and McConaghy, J.A. 1972. USGS Publication I-731.

Environmental Resources Management. 2002. Limited Class II Archeological Reconnaissance Survey Habitat Conservation Plan Area.

Environmental Resources Management. 2002a. Wetlands Delineation within the Habitat Conservation Plan Area, The Meadows, Castle Rock, Colorado.

Nesler, D. July 9, 2001. Personal Communication. Colorado Division of Wildlife.

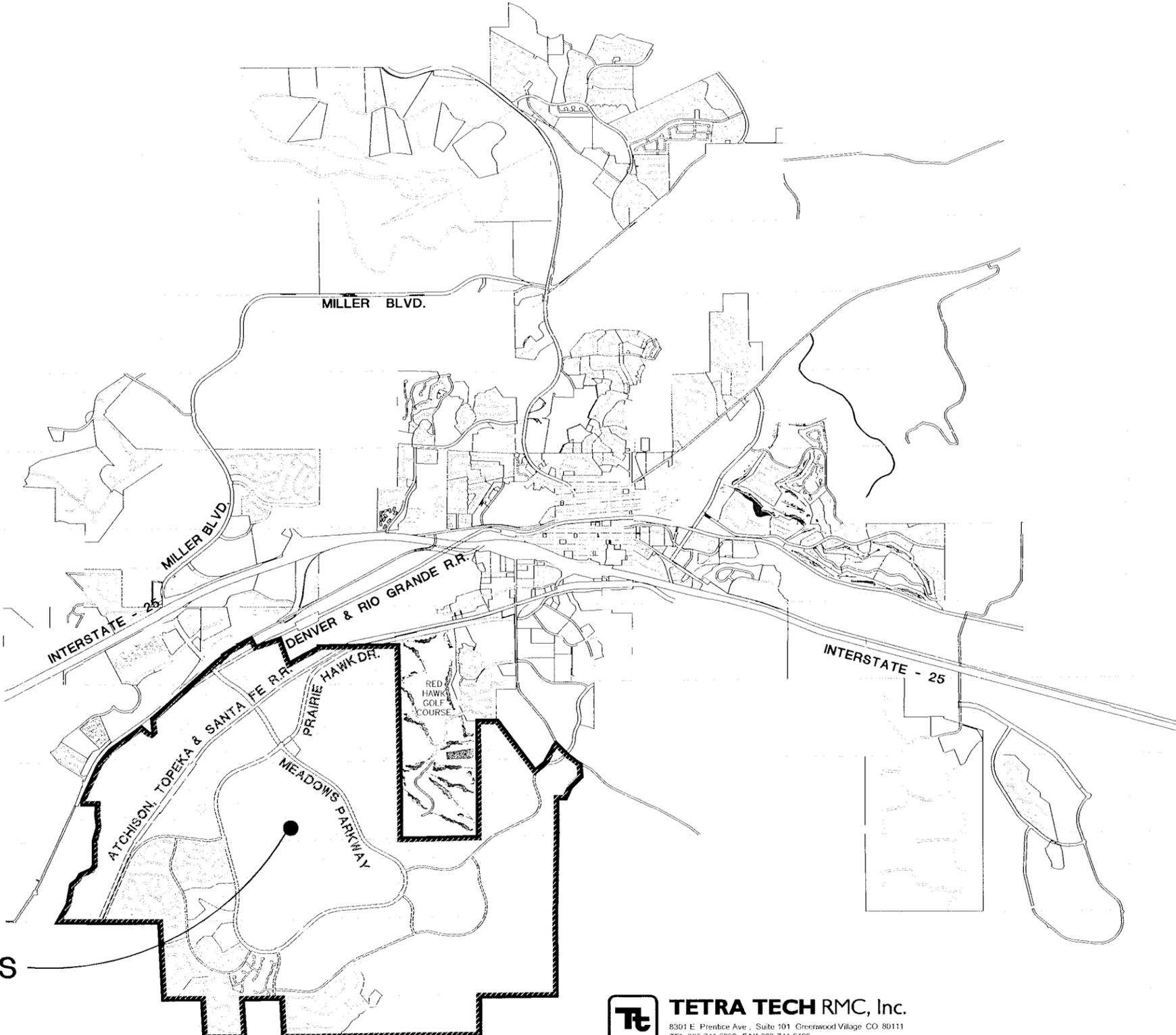
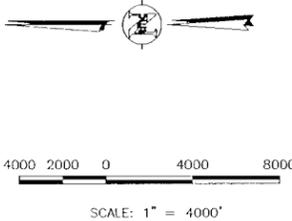
SWCA, Inc. Environmental Consultants and Stoecker, R. December 1999. Preble's Meadow Jumping Mouse Habitat Rating System.

Town of Castle Rock Public Works Regulations (effective Oct. 1998, reprinted Feb. 1999).

U.S. Soil Conservation Service. 1977. Soil Survey of the Castle Rock Area, Colorado.

THE MEADOWS COMMUNITY

MAP LOCATOR



THE MEADOWS
COMMUNITY

Tt **TETRA TECH RMC, Inc.**
8301 E. Prentice Ave., Suite 101 Greenwood Village CO 80111
TEL 303 741 6000 FAX 303 741 6106

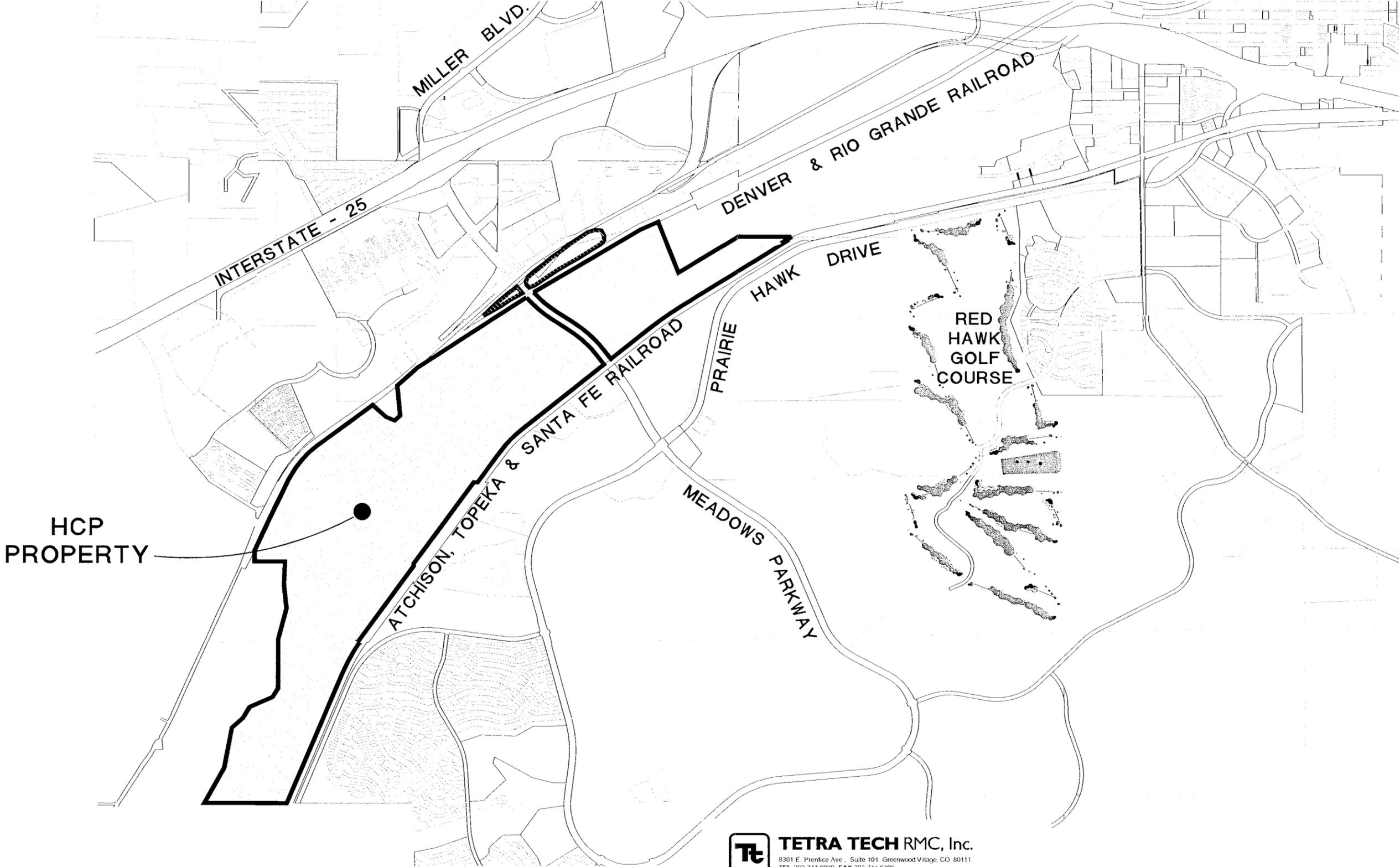
Date: 7/9/03 Job No. 3572 005 01

FIGURE 1

HCP PROPERTY

VICINITY MAP

1600 800 0 1600 3200
SCALE: 1" = 1600'



HCP
PROPERTY



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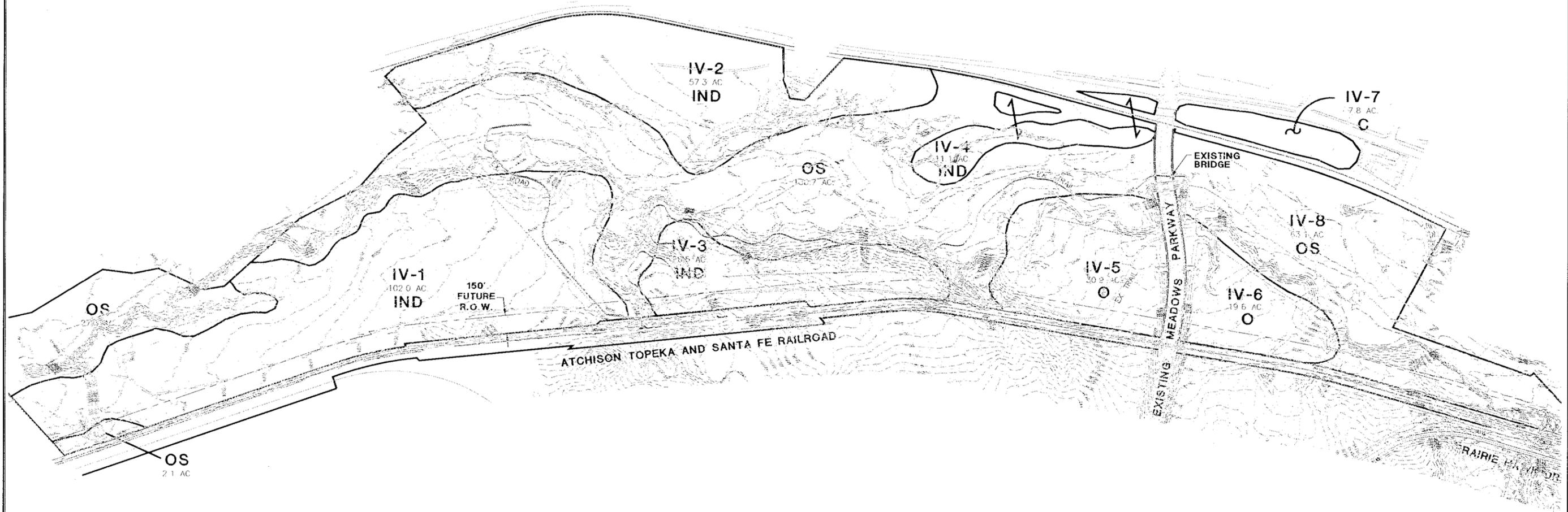
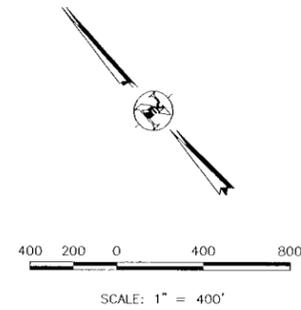
Date: 7/9/03

Job No 3572 005.01

FIGURE 2

HCP PROPERTY

MEADOWS 3rd AMENDMENT P.D. ZONING



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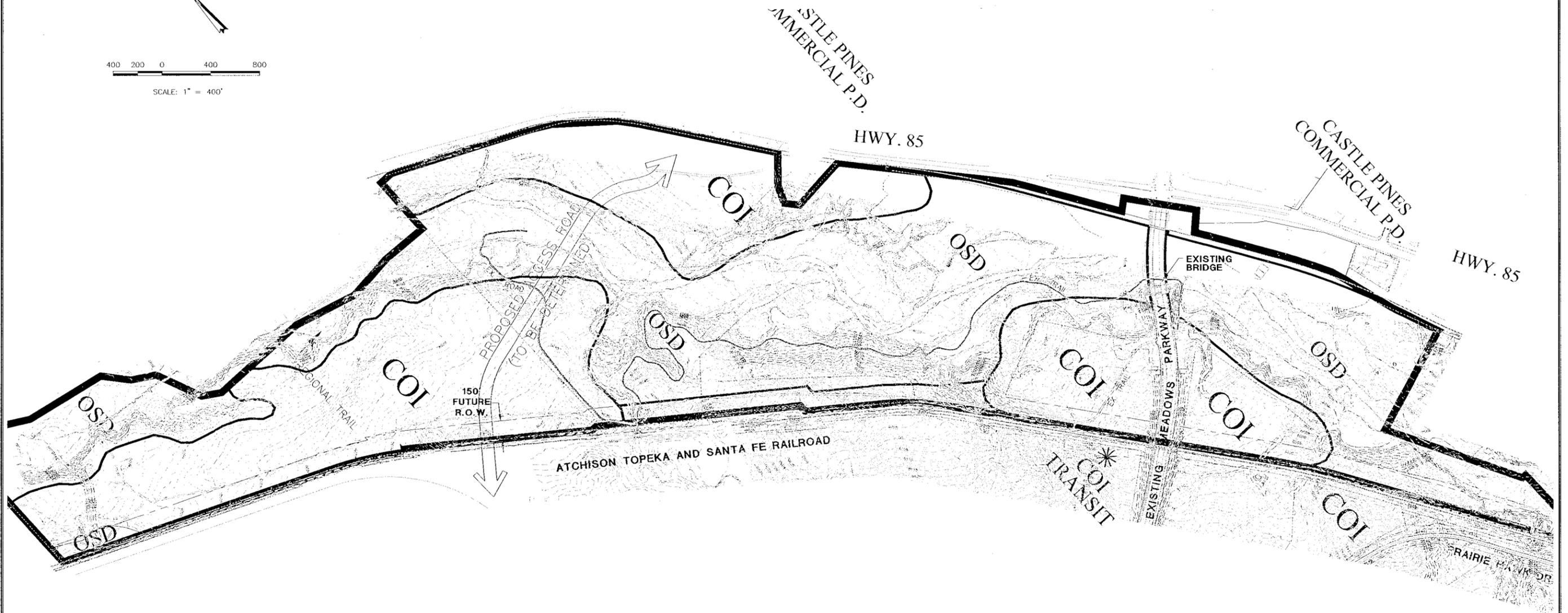
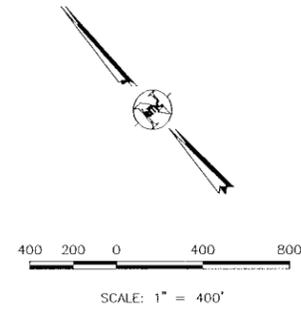
Date: 7/9/03

Job No. 3572.005.01

FIGURE 3-A

HCP PROPERTY

MEADOWS 4th AMENDMENT P.D. ZONING




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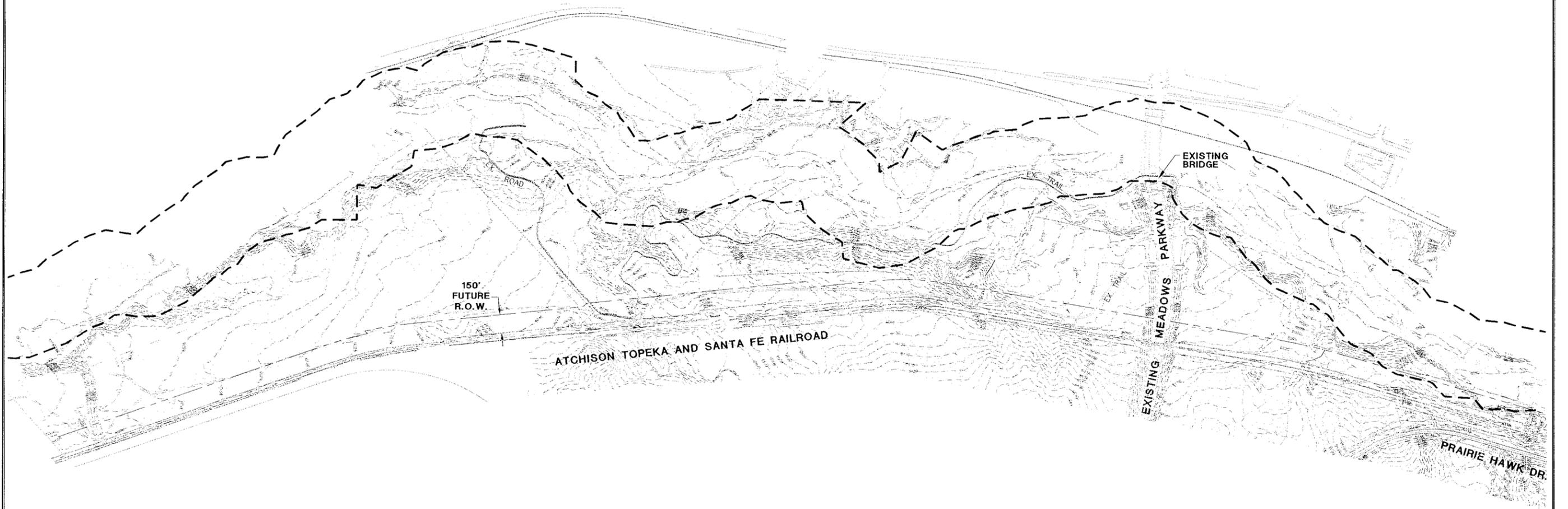
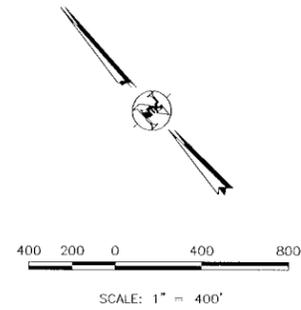
Date: 7/9/03 Job No. 3572 005 01

FIGURE 3-B

HCP PROPERTY

DISTURBANCE ANALYSIS LINE

PROPOSED 4-D RULE LINE



----- PROPOSED 4-D RULE LINE



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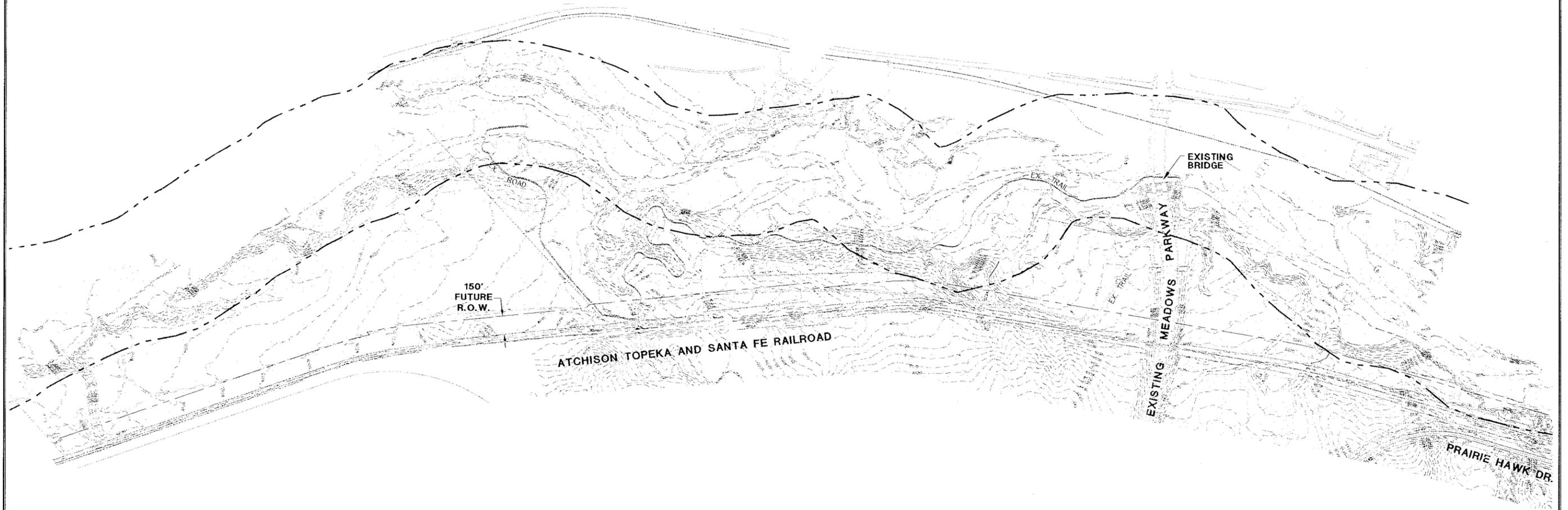
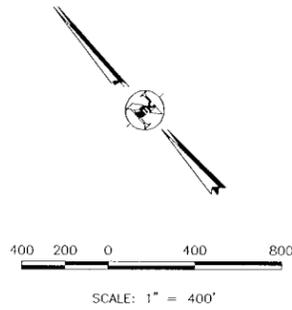
Date: 7/9/03

Job No. 3572 005 01

FIGURE 4

HCP PROPERTY

DISTURBANCE ANALYSIS LINE 300' OFFSET FROM 100 YR. FLOODPLAIN



----- 300' OFFSET FROM 100 YR. FLOODPLAIN

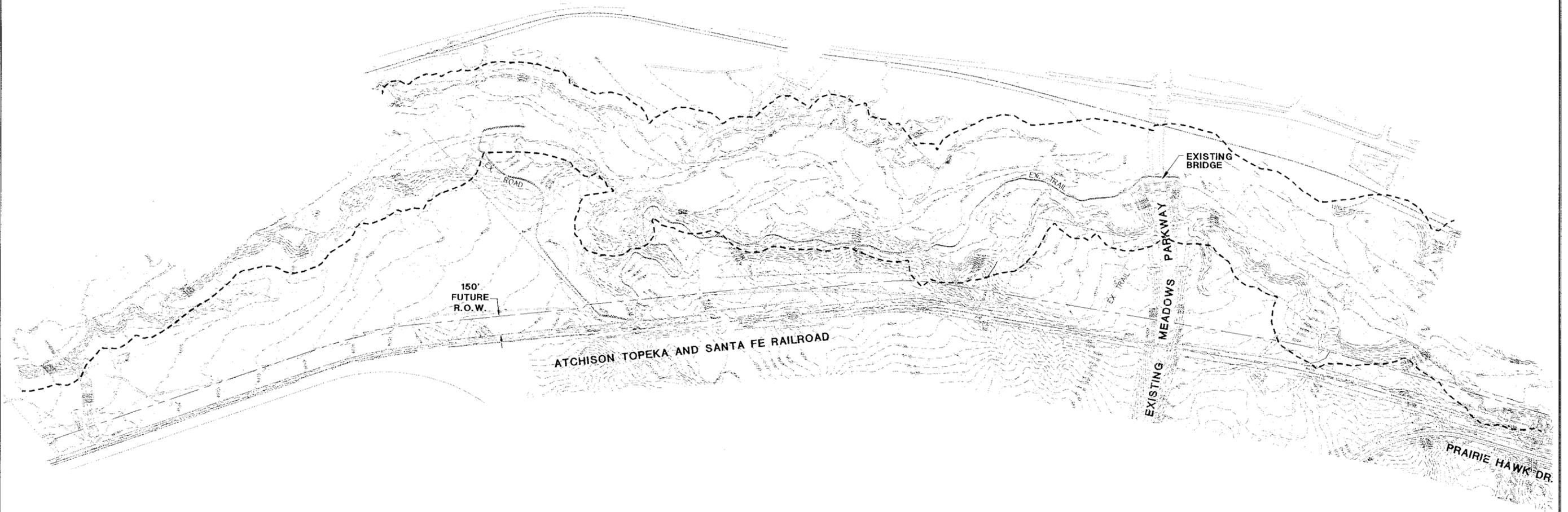
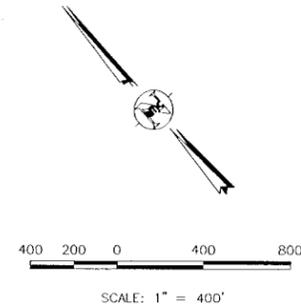
Tt **TETRA TECH RMC, Inc.**
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Date: 7/9/03 Job No: 3572.005.01

FIGURE 5

HCP PROPERTY

DISTURBANCE ANALYSIS LINE 100' OFFSET FROM RIPARIAN CORRIDOR



----- 100' OFFSET FROM RIPARIAN CORRIDOR

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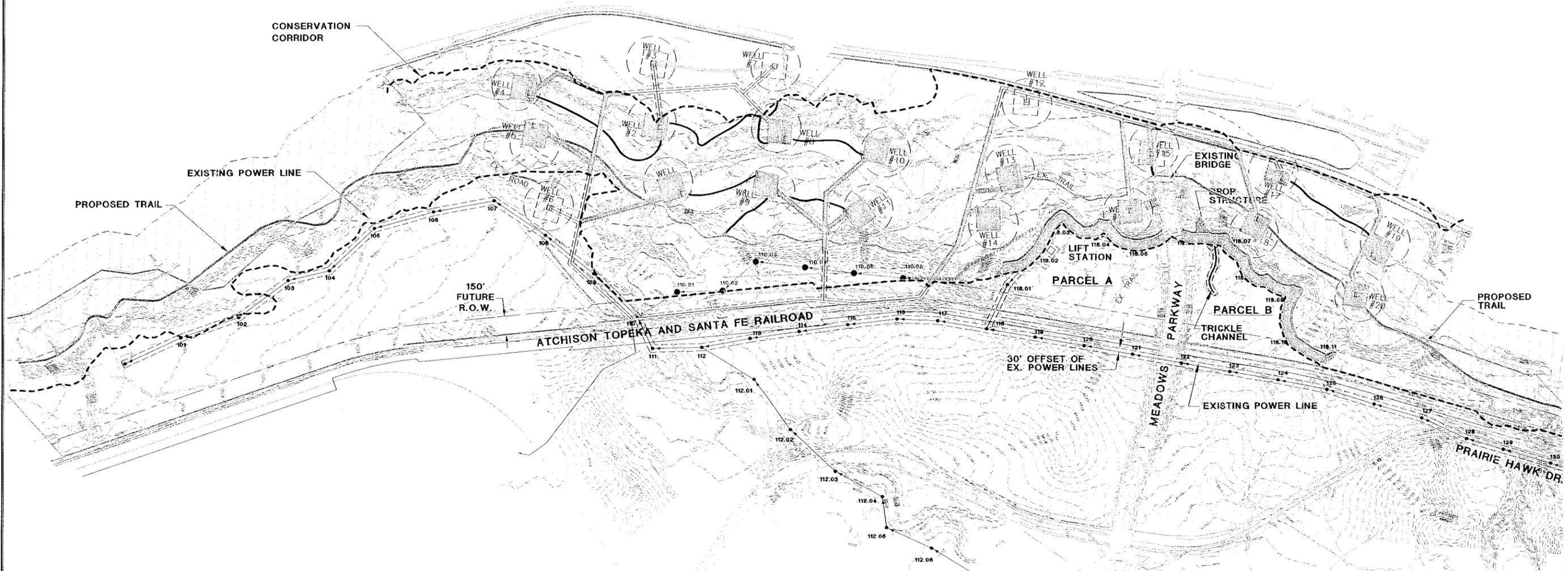
FIGURE 6

HCP PROPERTY - ALTERNATIVE I PREFERRED ALTERNATIVE

TEMPORARY AND PERMANENT DISTURBANCE BASED ON RIPARIAN CORRIDOR (PLUS 100 FEET) METHOD



400 200 0 400 800
SCALE: 1" = 400'



TEMPORARY DISTURBANCE



PERMANENT DISTURBANCE



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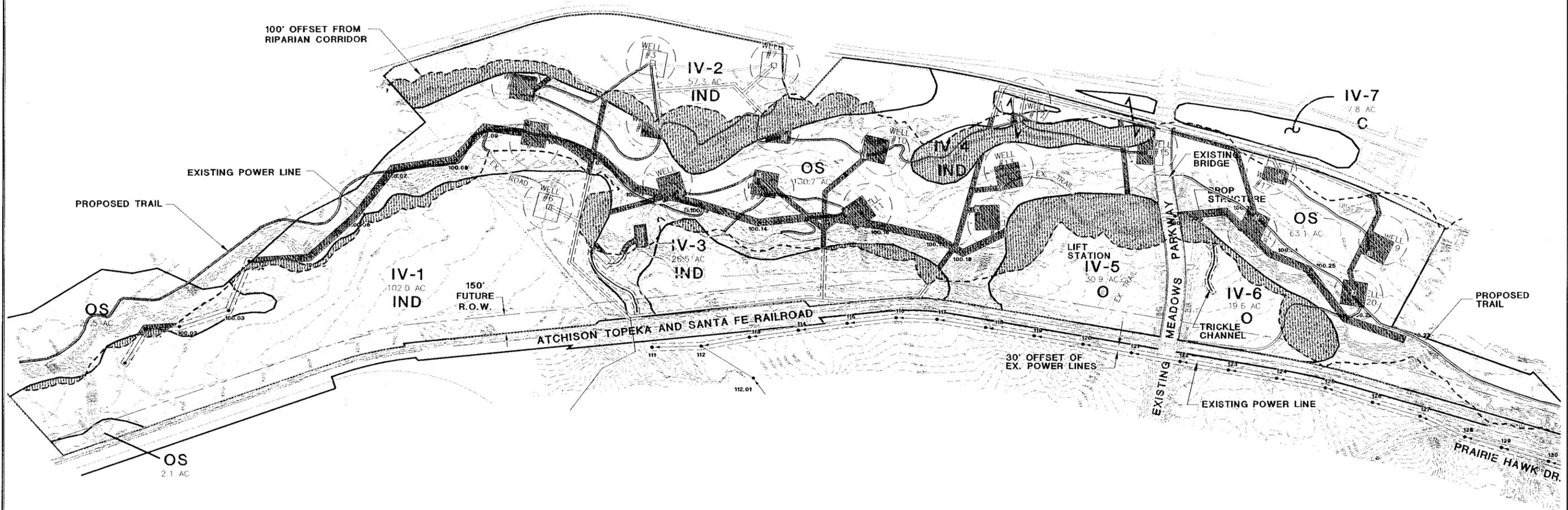
Date: 7/9/03

Job No. 35/2.005.01

FIGURE 7

HCP PROPERTY - ALTERNATIVE II

TEMPORARY AND PERMANENT DISTURBANCE BASED ON RIPARIAN CORRIDOR (PLUS 100 FEET) METHOD



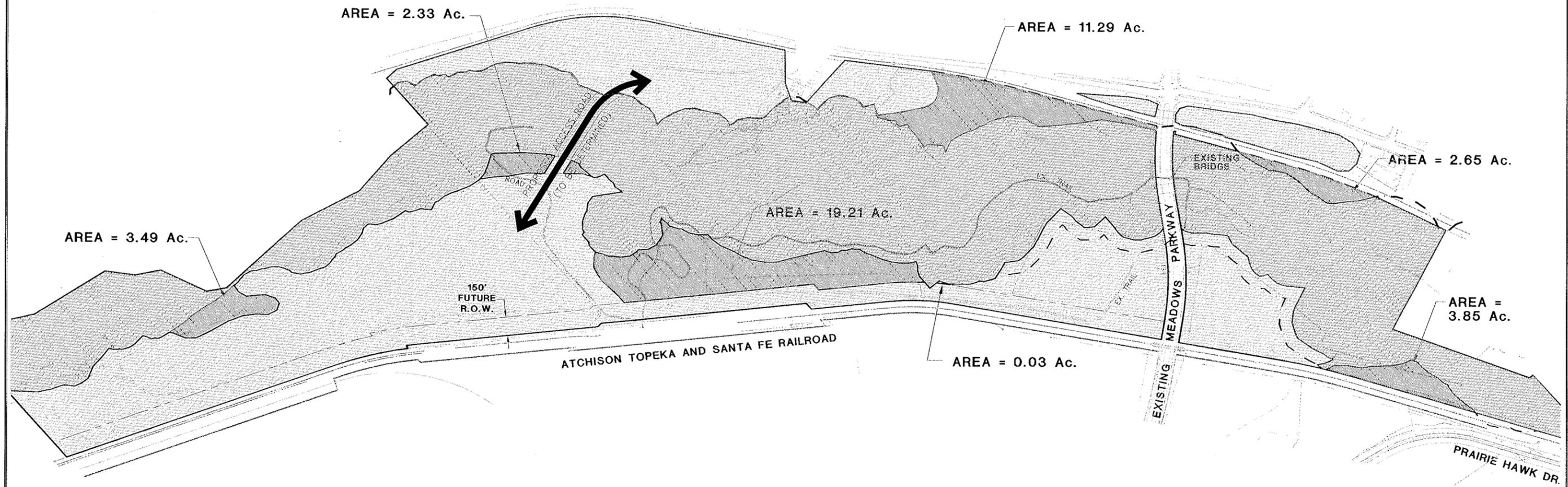
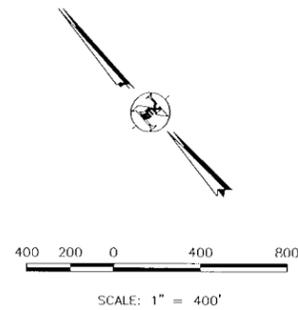
- TEMPORARY DISTURBANCE
- PERMANENT DISTURBANCE

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 TEL 303 741 6000 FAX 303 741 6106

Date: 7/9/03 Job No. 3572 005.01

FIGURE 8

HCP PROPERTY CONSERVATION AREAS



-  DEVELOPABLE AREAS
AREA = 199.25 Ac.
-  OPEN SPACE
AREA = 237.49 Ac.
-  ADDITIONAL MITIGATION AREAS
AREA = 42.85 Ac.

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 8301 E Prentice Ave., Suite 101, Greenwood Village, CO 80111
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 Date: 7/9/03 Job No. 3572 005 01

FIGURE 9

APPENDIX A

Mitigation Plan Requirements, Criteria and Objectives

This appendix identifies the requirements, criteria and objectives of the mitigation plan for The Meadows pursuant to the Habitat Conservation Plan (“HCP”). The HCP proposes mitigation measures as compensation for unavoidable direct and indirect disturbances to Preble's habitat that will result from development of the site. The HCP would require that CRDC develop and initiate a Vegetation Enhancement Plan to mitigate permanent impacts associated with proposed development in the Protection Zone by enhancing vegetation on 10 acres of the HCP Property (“Enhancement Area”) identified in Figure 10. The HCP also would require CRDC to develop and implement Restoration Plans to mitigate temporary impacts associated with development in the Protection Zone, including water well development, trail development, and office parcel development. CRDC will initiate the Restoration Plans associated with development of the water wells and associated utilities at the time each water well or group of water wells is installed.

The mitigation plan proposes to improve Preble’s habitat in the Enhancement Area by removing livestock grazing, enhancing low-quality habitat, and conserving the existing high quality habitat within the East Plum Creek floodplain meadow and adjacent upland habitat. The areas that will be temporarily disturbed will be restored to the preexisting quality of habitat or better. Within the Protection Zone, 43.3 acres of developable uplands will be set aside as open space to mitigate for these temporary impacts. This open space is in addition to the 237.49 acres of existing open space already included in the Amended PD Plan. Because the wells will be installed as needed (maximum of three in any one given year over a period of several years), areas temporarily impacted by this activity will be restored as each individual well or group of wells is drilled. The ultimate goals of the proposed measures are to avoid, minimize, and mitigate any effects caused by the proposed Project.

1. Enhancement

The goal of the Vegetation Enhancement Plan will be to create a continuous and contiguous area of Preble’s habitat connecting existing areas of non-contiguous Preble’s habitat of high quality. See Section 6.3 of the EA/HCP. Habitat is defined for purposes of this mitigation plan as: (1) a continuous area along the riparian corridor; (2) with ground cover provided by grasses, forbs, and shrubs; and (3) providing sources of food for the Preble’s.

Enhancement activities will involve improving areas that are currently low- or moderate-quality Preble’s habitat that would either benefit directly from improved habitat or in the expansion of dispersal routes and travel corridors. Enhancement opportunities exist within riparian/upland transition zones to benefit Preble’s habitat, water quality, and other wildlife by providing important ecotone habitat.

The Vegetation Enhancement Plan will increase Preble's habitat by utilizing native plant species management practices to control weeds and enhance plant community health. Exclusion of cattle will be used to improve Preble's habitat in the Enhancement Area. Minor grading and slope stabilization will be conducted within the stream corridor.

Disturbed, barren, or poorly diverse areas will be revegetated utilizing native seed mix and vegetation planting. The Vegetation Enhancement Plan will include a complete description of the revegetation plan based on the species found in Table 1. The goal of the Vegetation Enhancement Plan is to establish at least 75 percent ground cover (i.e. high quality Preble's habitat) utilizing native grasses, forbs, and shrubs. As indicated in the proposed designation of critical habitat, Preble's abundance is likely driven by the density of riparian vegetation rather than species diversity. Therefore, seeding and planting efforts will be designed to create a dense combination of native grasses, forbs, and shrubs in order to provide high quality Preble's habitat. If vegetation of the same species identified in Table 1 exists within the Enhancement Area at the time of the submission of the Vegetation Enhancement Plan, for example due to exclusion of cattle, CRDC may reduce the planting and seeding to reflect the extent of vegetation already in place.

Within 30 days of completion of the mitigation, as-built plans will be submitted to the Service. The as-built plans shall include final updated plans and specifications, photographs of completed work, number of each species planted, fertilizer used and dosage rates, dates planted and fertilized, and orientation of planting rows or description of plant groupings and spacing. Locations of photographs must be documented and plotted for replication during monitoring sessions.

2. Livestock Exclusion

Cattle are attracted to, and tend to loaf in, riparian areas, regardless of the availability or abundance of upland forage. Overgrazing of riparian vegetation makes stream banks more vulnerable to the destabilizing effects of livestock trampling and the erosive force of water, exposes soils to drying out by wind and sunlight, reduces water storage capacity of the riparian area, reduces shade and thereby increases stream water temperature, encourages invasion of undesirable plants, speeds up runoff, and reduces filtration of sediment necessary for building stream banks, wet meadows, and floodplains (EPA, 1993).

Over time, the presence of cattle within the riparian corridor of East Plum Creek has constricted the growth of vegetation and limited the quality and quantity of Preble's habitat. Within the Enhancement Area, CRDC will remove livestock as the initial stage of mitigation and will not reintroduce grazing activities. Exclusion of cattle will likely result in a significant improvement to the vegetative communities at the site. It is anticipated that these efforts will eventually lead to a successive state of healthy Preble's habitat within the East Plum Creek corridor.

Significant mitigation value can be achieved through the removal of cattle from the East Plum Creek riparian corridor. The benefits of cattle removal shall be considered in the Vegetation Enhancement Plan to be submitted by CRDC prior to any office parcel, new trail or water well development. To document the increase in mitigation value, the Vegetation Enhancement Plan, with input from the Service, shall identify the quantity and quality of Preble's habitat anticipated after a five-year period without livestock grazing on the site and account for such improvements in determining the extent of necessary supplemental plantings and seeding. The mitigation value would be documented before initiation of construction. Early removal of cattle from the mitigation areas, if applicable, shall also be considered in determining the extent of plantings and seeding necessary to meet the biological objectives of the Vegetation Enhancement Plan. An inventory of the habitat characteristics will be conducted to identify the percentages of ground cover and canopy, soil quality and composition, and the hydrology of the defined areas.

3. Restoration

Restoration will occur within areas that are temporarily disturbed due to the installation of alluvial wells, water lines, access roads, and extension of the existing trail system. After initial installation of the water wells, access roads will be used for maintenance. Access roads will undergo re-growth of native grasses, except to the extent that permanent fill may be required in some locations to provide year-round access and prevent erosion. The overall footprint required for the installation of each well is not to exceed 200 ft. x 200 ft. However, Restoration Plans will identify the precise area required for the trucks and machinery necessary to install each well within the footprint to avoid and minimize destruction of Preble's habitat to the maximum extent practicable. The permanent impact of each well is 40 ft. x 40 ft. The permanent impacts for the sixteen wells proposed within the Protection Zone total 0.59 acres, which will be mitigated by the 10 acres of enhancement.

An inventory of Preble's habitat characteristics will be conducted prior to any disturbance to identify the percentage of ground and canopy cover, soil quality and composition, and the hydrology of defined area. The inventory will include photographic documentation and be utilized as baseline data for restoration.

The temporarily disturbed areas due to the installation of the water lines, office development and the trail system will be restored. The Restoration Plan(s) shall include a depiction of the expected areas of disturbance, the inventory of habitat characteristics and specific plans for restoration (including planting and seeding plans). Restoration of the temporarily disturbed areas will involve the replanting of disturbed vegetation on the site and reconnection of any upstream or downstream connector routes that may have been interrupted. The replanting of disturbed vegetation will be equivalent to the preexisting species composition and densities. Restoration will be such that if 70 percent of the revegetation survive and become established, the temporarily disturbed areas will be restored to their preexisting vegetative composition and densities. Survival rates higher than 70 percent will yield a greater density of vegetation than previously existed. In

addition, areas that were bare ground previous to temporary disturbances will also be seeded with native grasses and forbs. The Restoration Plans shall include plantings and seeding of the species identified in Table 1 for riparian areas and Table 2 for upland areas.

Within 30 days of completion of the mitigation, as-built plans will be submitted to the Service. The as-built plans shall include final updated plans and specifications, photographs of completed work, number of each species planted, fertilizer used and dosage rates, dates planted and fertilized, and orientation of planting rows or description of plant groupings and spacing. Locations of photographs must be documented and plotted for replication during monitoring sessions.

4. Operation and Maintenance

The Vegetation Enhancement Plan and Restoration Plan(s) shall contain detailed provisions for operation and maintenance of the mitigation area until success is achieved. Maintenance will include: watering, weed control, use of pesticides if necessary, pruning, and installation of exclosures to prevent wildlife depredation (when necessary).

Watering

All plant material located in the mitigation areas shall be watered during the first growing season (growing season is approximately May through October). Watering is recommended no less than twice weekly throughout the growing season. After the first watering during installation, each watering of tree and shrub plant basins shall provide 5 gallons per square yard. Thereafter, all plant material should be watered once a week until final acceptance or the end of the monitoring period, whichever comes first. CRDC or its contractor will reshape plant saucers, repair washouts and gullies, and replace lost wood mulch.

Weed Control

During the establishment and monitoring period, all weeds and noxious plants shall be removed and controlled before they have grown more than four inches. Weeds and noxious plants are defined as those plants that have been determined to be aggressive and potentially detrimental to the establishment and long-term growth of the native planted species. Weeds and noxious plants may be manually or mechanically removed, or controlled with herbicides. Use of herbicide materials, means of application, and application rates shall be in accordance with any local, county, state or federal regulations and will be strictly adhered to according to the manufacturer's recommendations. Prescribed burns will not be used unless authorized by the Service and under the supervision of a burn specialist.

Pesticide Use

Application of pesticides (including herbicides) to control noxious plants, etc., may be necessary. Various inorganic insecticides with controlled application rates may be effective in controlling these plants without causing significant harm to other flora and fauna. Any use of these types of pesticides (including herbicides) will be conducted in coordination with the Service and other applicable agencies.

Pruning

All containerized and transplanted trees and shrubs will be cultivated and pruned as needed to remove dead or degraded plant material. Pruning will take place before or immediately after planting and as necessary (as identified during subsequent monitoring sessions) to maintain the health of the plant.

Wildlife Exclosures

Upon signs of wildlife depredation (presence of waterfowl, beaver activity or grazed vegetation) wildlife exclosure fencing or other measures shall be implemented immediately to protect the vegetation.

5. Achieving and Determining Success

Success criteria are intended to allow for the inherent variability of native habitat restoration and creation projects, provided that the end result is the creation of habitat that supports the life requisites of Preble's.

The techniques that will be utilized to achieve success will include a watering schedule, a pruning methodology to maintain health and habitat of the plants, control of weed and noxious plants, and the implementation of exclosures or other methods to protect from wildlife depredation.

Vegetation Enhancement Plan

The goal of the Vegetation Enhancement Plan will be to create a continuous and contiguous area of Preble's habitat connecting existing areas of non-contiguous Preble's habitat of high quality. See Section 6.3 of the EA/HCP. Habitat is defined for purposes of this mitigation plan as: (1) a continuous area along the riparian corridor; (2) with ground cover of more than 75 percent provided by grasses, forbs, and shrubs; and (3) providing sources of food for the Preble's. The dominant herbaceous species shall consist of species specified in the Table 1, and the planted areas shall be relatively free of weeds and exotic, invasive species (i.e., less than 5 %).

Restoration Plans

If 70 percent of the revegetation specified in the Restoration Plan(s) survives and becomes established, sufficient habitat would have been restored and enhanced to meet the stated biological goals and objectives. Thus, the mitigation plan will have achieved success when 70 percent of the revegetated area is established, the dominant herbaceous species consist of species specified in the planting plan, and the planted areas are relatively free of weeds and exotic, invasive species (i.e., less than 5 percent). If a survival rate of 70 percent is not achieved, additional plantings will be conducted.

Table 1: Riparian Zone Species List

Scientific Name	Common Name	Indicator Status
Herbaceous Species		
Grasses		
<i>Achnatherum hymenoides</i>	Indian ricegrass	FACU
<i>Andropogon gerardii</i>	big bluestem	FACU
<i>Andropogon halii</i> var. Hack	sand bluestem	UPL
<i>Boutelous curtipendula</i>	side-oats grama	N/A
<i>Botelous gracilis</i>	blue grama	N/A
<i>Calamovilfa longifolia</i>	prairie sandreed	FACU
<i>Elymus canadensis</i>	Canada wildrye	FACU
<i>Elymus lanceolatus</i> <i>dasystachyum</i>	thickspike wheatgrass	N/A
<i>Elymus elymoides</i>	bottlebrush squireltail	N/A
<i>Festuca arizonica</i>	pinegrass	N/A
<i>Festuca longifolia</i>	hard fescue	FACU
<i>Koeleria macrantha</i>	prairie junegrass	N/A
<i>Panicum virgatum</i>	switchgrass	FAC
<i>Pascopyrum smithii</i>	western wheatgrass	N/A
<i>Poa secunda</i> (sandbergii)	Sandberg bluegrass	N/A
<i>Schizachyrium scoparium</i>	little bluegrass	UPL
<i>Sorghastrum nutans</i>	yellow Indian grass	N/A
<i>Sporobolus cryptandrus</i>	sand dropseed	N/A
<i>Stipa comata</i>	needle and thread	N/A
<i>Stipa viridula</i>	green needlegrass	N/A
Forbs		
<i>Achillea lanulosa</i>	yestern yarrow	FACU
<i>Liatrix punctata</i>	dotted gayfeather	FACU
<i>Linum lewisii</i>	blue flax	UPL
<i>Oenothera pallida</i>	white evening primrose	N/A
<i>Ratibida columnifera</i>	prarie coneflower	N/A
<i>Rudbeckia hirta</i>	black-eyed susan	FACU
Riparian/Wetland Species		
<i>Carex atrata</i>	black sedge	FACW
<i>Carex lanuginose</i>	wooly sedge	OBL
<i>Carex nebrascensis</i>	Nebraska sedge	OBL
<i>Carex vulinoidea</i>	fox sedge	FACW
<i>Carex hystericina</i>	porcupine sedge	OBL
<i>Distichlis spicata</i>	inland saltgrass	OBL
<i>Glyceria striata</i>	mannagrass	OBL
<i>Elymus elymoides</i>	bottlebush squirreltail	FACU
<i>Juncus balticus</i>	Baltic rush	FACW
<i>Juncus confuses</i>	Colorado rush	FAC+
<i>Panicum virgatum</i>	switchgrass	FAC

Sporobolus airoides	alkali sacaton	FAC
Triglochin maritimum	Arrowgrass	OBL
<u>Woody Species</u>		
Trees		
Acer negundo	boxelder	FAC/FACW
Alnus incana	thinleaf alder	FACW
Betula occidentalis	water birch	FACW
Juniperus scopulorum	Rocky Mountain Juniper	UPL
Pinus ponderosa	ponderosa pine	UPL
Populus angustifolia	narrowleaf cottonwood	FACU
Populus deltoides	plains cottonwood	FAC
Populus tremuloides	aspen	FAC
Shrubs		
Prunus americana	American Plum	FACU
Prunus virginiana	chokecherry	FACU
Quercus gambelii	Gambel Oak	UPL
Rhus trilobata	oakleaf sumac	UPL
Ribes aureum	golden currant	FACW
Ribes cereum	wax currant	UPL
Rosa woodsii	Wood's Rose	FACU
Salix amygdaloides	peachleaf willow	OBL
Salix exigua	coyote willow	OBL
Salix monitcola	mountain willow	OBL
Symphoricarpos occidentalis	common snowberry	UPL

Table 2: Upland Zone Species

<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator Status</u>
<u>Herbaceous Species</u>		
Grasses		
<i>Achnatherum hymenoides</i>	Indian ricegrass	FACU
<i>Andropogon gerardii</i>	big bluestem	FACU
<i>Andropogon halii</i> var. Hack	sand bluestem	UPL
<i>Boutelous curtipendula</i>	side-oats grama	N/A
<i>Botelous gracilis</i>	blue grama	N/A
<i>Calamovilfa longifolia</i>	prairie sandreed	FACU
<i>Elymus canadensis</i>	Canada wildrye	FACU
<i>Elymus lanceolatus</i> <i>dasystachyum</i>	thickspike wheatgrass	N/A
<i>Elymus elymoides</i>	bottlebrush squireltail	N/A
<i>Festuca arizonica</i>	pinegrass	N/A
<i>Festuca longifolia</i>	hard fescue	FACU
<i>Koeleria macrantha</i>	prairie junegrass	N/A
<i>Panicum virgatum</i>	switchgrass	FAC
<i>Pascopyrum smithii</i>	western wheatgrass	N/A
<i>Poa secunda</i> (<i>sandbergii</i>)	Sandberg bluegrass	N/A
<i>Schizachryrium scoparium</i>	little bluegrass	UPL
<i>Sorghastrum nutans</i>	yellow Indian grass	N/A
<i>Sporobolus cryptandrus</i>	sand dropseed	N/A
<i>Stipa comata</i>	needle and thread	N/A
<i>Stipa viridula</i>	green needlegrass	N/A
Forbs		
<i>Achillea lanulosa</i>	yestern yarrow	FACU
<i>Liatris punctata</i>	dotted gayfeather	FACU
<i>Linum lewisii</i>	blue flax	UPL
<i>Oenothera pallida</i>	white evening primrose	N/A
<i>Ratibida columnifera</i>	prarie coneflower	N/A
<i>Rudbeckia hirta</i>	black-eyed susan	FACU
<u>Woody Species</u>		
Trees		
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper	UPL
<i>Pinus ponderosa</i>	ponderosa pine	UPL
<i>Populus angustifolia</i>	narrowleaf cottonwood	FACU
<i>Populus deltoides</i>	plains cottonwood	FAC
<i>Populus tremuloides</i>	aspen	FAC
Shrubs		
<i>Prunus americana</i>	American Plum	FACU
<i>Prunus virginiana</i>	chokecherry	FACU

December 15, 2003

<i>Quercus gambelii</i>	Gambel Oak	UPL
<i>Rhus trilobata</i>	oakleaf sumac	UPL
<i>Ribes cereum</i>	wax currant	UPL
<i>Rosa woodsii</i>	Wood's Rose	FACU
<i>Symphoricarpos occidentalis</i>	common snowberry	UPL

DECLARATION OF USE RESTRICTIONS

THIS DECLARATION OF USE RESTRICTIONS (this "Declaration") is made as the date set forth below next to the signature of Declarant, as hereinafter defined, by and between **CASTLE ROCK LAND CO., LLC**, a Colorado limited liability company, whose address is 3033 East First Avenue, Suite 410, Denver, Colorado 80206, (hereinafter referred to as "Declarant") for the benefit of the **UNITED STATES FISH AND WILDLIFE SERVICE** (hereinafter referred to as "Service").

RECITALS

This Declaration is made with respect to the following facts:

WHEREAS, Declarant is the owner of certain real property located within the Town of Castle Rock, County of Douglas, State of Colorado (the "Property"); and

WHEREAS, the Preble's meadow jumping mouse ("PMJM") is listed as a threatened species under the United States Endangered Species Act ("ESA"). The ESA prohibits the unlawful take of PMJM; and

WHEREAS, Declarant anticipates that it will undertake certain activities on the Property which may impact PMJM habitat. As a result, Declarant has applied for and received from the Service an Incidental Take Permit under Section 10 of the ESA (the "Incidental Take Permit"); and

WHEREAS, the Habitat Conservation Plan approved by the Service in granting the Incidental Take Permit (the "HCP") requires that the temporary and permanent impacts of Declarant's activities within the Property be mitigated by (a) maintaining that portion of the Property which is more particularly described in Exhibit A, attached hereto and incorporated herein (the "Open Space Property") as open space; and (b) by adhering to the mitigation measures which are more particularly described in the HCP; and

WHEREAS, the HCP requires Declarant, prior to the development of any portion of the Property, to execute a deed restriction or conservation easement, with the Service as a beneficiary, to ensure that the Open Space Property shall remain as open space consistent with the terms and conditions of the HCP; and

WHEREAS, Declarant desires to establish the Restrictions, as hereinafter defined, on the Open Space Property, consistent with and in accordance with the terms and provisions of the

Incidental Take Permit and the HCP, as hereinafter set forth.

DECLARATION

NOW, THEREFORE, Declarant hereby declares that from and after the date of this Declaration, the Open Space property shall be owned, held, transferred, conveyed, sold, leased, rented, hypothecated, encumbered, used, occupied, maintained, altered and improved at all times subject to the Restrictions set forth in this Declaration, which are declared to be a part of, pursuant to, and in furtherance of a common and general plan for the improvement and development of the Open Space Property. The provisions of this Declaration are imposed as equitable servitudes upon the Open Space Property, and are intended to and shall run with the land and shall bind, be charged upon, and inure to the benefit of the Service, its successors and assigns.

RESTRICTIONS

I. Use Limitations.

Subject to the conditions and limitations set forth below, the Open Space Property shall be perpetually maintained in a scenic, natural or open condition, and shall be used only for purposes consistent with such limitation, including but not limited to the Permitted Uses and Practices set forth below. The Service shall have the right from time to time, upon reasonable prior written notice to Declarant and in a manner that will not unreasonably interfere with Declarant's use of the Open Space Property in a manner that is consistent with this Declaration, to enter upon the Open Space Property to inspect the Open Space Property and to enforce its rights under this Declaration.

II. Permitted Uses and Practices. Declarant shall have the right to use the Open Space Property for any use that is consistent with the foregoing obligation to maintain the Open Space Property in a scenic, natural or open condition. Without limiting the generality of the foregoing, Declarant shall further have the following specific retained rights with respect to the use of the Open Space Property:

2.1 Any and all uses of the Open Space Property permitted under the HCP, as amended from time to time, or as otherwise approved by the Service.

2.2 Maintenance, repair, replacement, removal and use of all fences, roads, trails and structures existing on the Open Space Property as of the date of this Declaration, substantially in their present condition and not to exceed their existing permanent footprint.

2.3 Installation, maintenance, repair, removal, relocation, and replacement of existing

drainage facilities and underground utility mains, lines and facilities for the purpose of providing utility services and drainage to or through the Open Space Property.

2.4 Weed control through the application of agrochemicals, including but not limited to fertilizers and biocides, but only in those amounts and with the frequency of application necessary to accomplish suppression of noxious weeds and maintenance or enhancement of PMJM habitat. Declarant shall have the right to control all noxious weeds on the Open Space Property according to the provisions of Title 35 of the Colorado Revised Statutes and/or any rules and regulations promulgated by the Commissioner of Agriculture of the State of Colorado, by the Board of County Commissioners of Douglas County, Colorado, or the Town Council of the Town of Castle Rock Colorado, or any other governmental agency having jurisdiction over the Open Space Property.

2.5 Control of predatory and problem animals by the use of techniques that will control specific animals or species which have caused or are likely to cause damage to the Open Space Property, provided that any such control techniques shall have no material adverse effect on the biological integrity of the Open Space Property as habitat for the PMJM.

2.6 Passive recreation, other than that permitted within the conditions identified within the Section 10(a) Incidental Take Permit, shall be permitted as long as those activities will have no material adverse effect on the biological integrity of Open Space Property as PMJM habitat.

2.7 Any use approved by the Town Council of the Town of Castle Rock and Service.

III. Prohibited Uses.

3.1 Except as otherwise provided in the HCP or the Incidental Take Permit, no alterations will occur in the Open Space Property that would have a material adverse impact on the biological integrity of the Open Space Property as PMJM habitat, including, but not limited to: (a) dumping or placing of soil, or other material, such as trash, on the Open Space Property; (b) mowing, removal or destruction of vegetation, except as otherwise set forth in Section 2.4, above; (c) excavation of soil; and (d) activities detrimental to flood control, water conservation or erosion control.

3.2 Free roaming pets, including but not limited to domestic cats and dogs, are prohibited on the Open Space Property.

IV. Enforcement.

4.1 The Service shall have the right to enforce the Restrictions set forth in this Declaration. The right of enforcement shall include only the right to bring an action for equitable

relief, including, without limitation, any action to enjoin any violation or specifically enforce the Restriction or other provision of this Declaration.

V. TERM

5.1 This Declaration shall be perpetual in duration.

VI. MISCELLANEOUS

6.1 This Declaration shall be binding upon Declarant and its successors in interest to the Open Space Property. The terms "Declarant" and "Service", whenever used herein, and any pronouns used in place thereof, shall mean and include the above-named Declarant and Declarant's successors, assigns and lessees, and the above-named Service and its successors and assigns, respectively.

6.2 If any provision of this Declaration or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Declaration and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

6.3 This Declaration may be modified only by an instrument in writing, duly executed by the Service and the then current owner or owners of the entirety of the Open Space Property.

IN WITNESS WHEREOF, the Declarant has caused this Declaration to be duly executed this __ day of _____, 200__.

CASTLE ROCK LAND CO., LLC
a Colorado limited liability company

By: _____
Title: _____

STATE OF COLORADO

)

Attachment A
December 15, 2003

_____) ss.
_____ COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 200__, by _____ as _____ of Castle Rock Land Co., LLC, a Colorado limited liability company.

Witness my hand and official seal.

(S E A L)

Notary Public

My Commission Expires:

Attachment A
December 15, 2003

EXHIBIT A
Description of Open Space Property

(This form of LC is provided to the US Fish and Wildlife Service for informational purposes only. The funding mechanism to be provided by applicant at the time of construction may vary from this form of LC. Applicant's obligations to provide funding in the event that it should fail to undertake any of its mitigation obligations under the EA/HCP are more specifically addressed in Section 6.6.2 of the EA/HCP)

Proposed Letter of Credit Form
Environmental Assessment/Habitat Conservation Plan for a Portion of the
Meadows Property, Douglas County, Colorado

Standby Credit: _____

Date: _____

Beneficiaries:

United States Fish and Wildlife Service

Town of Castle Rock
100 North Wilcox St
Castle Rock, Colorado 80104

Applicant:
Castle Rock Development Company
3033 East First Avenue, Suite 410
Denver, Colorado 80206

Gentlemen:

We hereby issue our irrevocable credit no. _____ in your favor for the account of Castle Rock Development Company for an amount or amounts not to exceed _____ (\$_____.00) available by your drafts at sight on _____, effective _____ and expiring at our counters on _____.

Funds under this credit are available against drafts mentioning our credit number.

The below mentioned documents must be presented at sight on or before the expiry date on this instrument in accordance with the terms and conditions of this letter of credit.

Attachment B
December 15, 2003

Your signed and dated statement, reading as follows: "Castle Rock Development Company is in default of its mitigation obligations under the Environmental Assessment/Habitat Conservation Plan for a Portion of the Meadows Property, Douglas County, Colorado (the "EA/HCP")."

We engage with you that drafts drawn under and in conformity with the terms of this credit will be duly honored on presentation if presented on or before the expiry date. The original letter of credit must accompany the documents required under this credit.

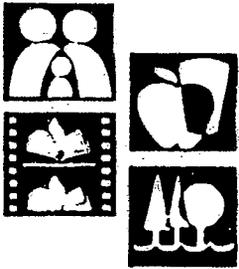
It is a condition to this credit that it shall be automatically renewed for additional periods of one (1) year from the present or any future expiration date unless at least sixty days prior to such expiration period we notify you, in writing, that we elect to not renew this letter of credit for such additional periods. Upon receipt of that notice you have the right to draw against the amount available under this credit by presentation of your clean sight draft, without any accompanying statement.

This credit is subject to the Uniform Customs and Practices for Documentary Credits (1993 revision), International Chamber of Commerce Publication 500.

Please address all correspondence regarding this letter of credit to the attention of our letter of credit unit, trade service group, mentioning our reference number as it appears above.

Very truly yours,
Name of Bank

Authorized Signer



Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

Chris J. Wiant, M.P.H., Ph.D.
Executive Director

October 2, 1998

SWCA Inc., Environmental Consultants
Attn: Trent A. Miller
1155 Sherman Street, Suite 215
Denver, CO 80203

RE: Prairie Dog Die-Off
Meadows Subdivision

Dear Mr. Miller:

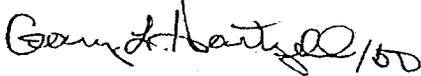
On August 10, 1998, this department received a complaint concerning a possible prairie dog die-off in the Meadows Subdivision in Douglas County. An investigation was conducted that same day, thus confirming the complaint. Staff members did not see any activity at any prairie dog burrows throughout the community.

Fleas were collected at selected burrow entrances and submitted to CDC for plague testing. On August 21, we were notified that the flea pool was positive for plague.

During the interim between investigation and confirmation, representatives of this department notified residents, posted the sites as possible plague presence, and dusted the burrows.

I hope this letter will assist you. If I can be of further assistance, please call this office.

Sincerely,



Gary L. Hartzell
Environmental Health Field Supervisor

GLH/bd

enc: CDC confirmation

Fifty years of working to

50

improve the public's health