General Resource Protection Standards

for
Easements or Rights of Way
on
City of Fort Collins
Natural Areas and Open Lands

Introduction

This document lists the various resource protection standards that may be required to protect or restore natural resource values on City-owned Natural Areas. These measures are consistent with the requirements in the City Land Use Code for Ecological Characterization Studies and for Resource Protection associated with development projects. The measures will be evaluated for each easement request and applied as needed, depending on the site location, characteristics of the site, and on the nature of the easement.

The applicable resource protection standards will be specifically included in the terms of the easement agreement. They must also be included as notes on the approved construction plans for the easement request.

These resource protection standards are current as of February 2001. They may be updated from time to time by the Natural Resources Department based on new information about the resources of the City's natural areas or on new information about best management practices. Applicants must contact the Natural Resources Department for a current list of standards.

Plans and Permits

1. Have the final plans approved and signed by the Natural Resources Department and the permanent and temporary easements approved by City Council and recorded at the County Clerks Office prior to starting any construction. Plans must include: 1'-2' contours; property lines with adjoining property ownership shown; all wetlands; streams; ditches; riparian areas; prairie dog colonies; all existing and proposed man made structures; all existing utilities; all needed easements for access, construction staging areas, and construction (limits of disturbance); construction plans and profiles; restoration plans; and general notes stating all construction and restoration requirements.

2. Obtain Excavation Permit from the City Engineering Department prior to starting construction. They will provide the construction inspection for Natural Resources.

3. Perform field investigations and surveys to determine the presence and location of sensitive plants or animal species and geological or archeological features.

4. Develop an erosion control plan. The erosion control plan shall comply with the City's *Storm Drainage Design Criteria and Construction Standards*, and shall be approved and signed by the City prior to construction.

5. Contact the Corps of Engineers to obtain a 404 permit and/or the project shall be cleared by the Corps of Engineers. Copies of the permit, or the letter of clearance from the Corps, shall be submitted to the Natural Resources Department and the Utilities prior to any construction start.

6. Conduct a Preble's meadow jumping mouse survey according to U.S. Fish and Wildlife Service guidelines. Copies of the report and letter of clearance from the U.S. Fish and Wildlife Service shall be submitted to the Natural Resources Department and the Utilities prior to any construction start.

7. Conduct a Ute ladies' tresses orchid survey according to U.S. Fish and Wildlife Service guidelines. Copies of the report and letter of clearance from the U.S. Fish and Wildlife Service shall be submitted to the Natural Resources Department and to the Utilities prior to any construction start.

8. The City shall attach these requirements for the utility easement as an addendum to the Development Agreement for [development's name].

Construction Coordination and Project Acceptance

9. Natural Resources representative must be in attendance at the pre-construction meeting to meet the contractors, discuss the importance of the resource protection requirements, discuss and approve the construction schedule and establish lines of communication to be used during construction.

10. Maintain ongoing communication with the Natural Resources representative during construction to communicate progress, changes in schedule, problems, and periodic inspections.

11. Once the project has been completed the Natural Resources representative must inspect the project site to verify that the project was completed and the site restored according to the plans and agreements. Once accepted, Natural Resources will take over the vegetation maintenance.

12. Provide Natural Resources with Drawings of Record within sixty (60) days after the completion of the improvements.

Wildlife

13. This site is used as a winter feeding area by large birds of prey. To avoid disturbing feeding eagles and large hawks, construction must take place outside of the normal period when these birds are using the site. Thus, construction cannot take place from October 15 through March 15.

14. A bald eagle [and/or ferruginous hawk] winter night roost is located within [xxx] feet of the proposed easement. To avoid disturbing night-roosting eagles [and/or hawks], construction must take place outside of the normal period when these birds are present on the night roost. Thus, construction cannot take place from October 15 through March 15.

15. A Swainson's hawk nest is located within [xxx] feet of the proposed easement. To avoid disrupting the nesting cycle of the hawk, construction must take place outside of the normal nesting and brood-rearing season. Thus, construction cannot take place from April 1 to July 15.

16. A red-tailed hawk nest is located within [xxx] feet of the proposed easement. To avoid disrupting the nesting cycle of the hawk, construction must take place outside of the normal nesting and brood-rearing season. Thus, construction cannot take place from March 1 to July 15.

17. Construction will be taking place through an area that contains [or may contain] prairie dogs. Either relocate the prairie dogs or fumigate the burrows immediately prior to any grading. Prairie dogs cannot be relocated between February 1 and August 1.

18. The following wildlife surveys need to be performed within 30 days of the start of construction. Notify Natural Resources representative of the survey results for approval of construction schedule prior to starting construction.

19. This site may contain nesting burrowing owls, a Colorado Threatened Species. Conduct surveys to determine if any owls are nesting within 330 feet of the limits of development. If owls are found to be nesting within 330 feet, then construction cannot take place during the nesting and brood-rearing season (April 1 through August 1).

20. This site may contain den sites for red foxes. Conduct surveys to determine if any foxes are denning within 100 feet of the limits of development. If fox are found to be denning within 100 feet, then construction cannot take place during the normal denning and pup-rearing season (February 1 through October 1).

21. This site may contain den sites for coyotes. Conduct surveys to determine if any coyotes are denning within 300 feet of the limits of development. If coyotes are found to be denning within 300 feet, then construction cannot take place during the normal denning and pup-rearing season (February 1 through October 1).

22. This site may contain den sites for badgers. Conduct surveys to determine if any badgers are denning within 300 feet of the limits of development. If badgers are found to be denning within 300 feet, then construction cannot take place during the normal denning and young-rearing season (January 1 through August 1).

Plants

23. This site contains [species name], a Colorado rare plant. Remove all [species name] within the limits of disturbance prior to construction. [applicant's name] must keep plants alive and replant after construction is completed.

24. Notify City one month prior to construction, so that the Natural Areas Crews will have time to salvage existing plants and shrubs for transplanting to other sites.

25. This site contains native shrubs and/or trees that the City has planted for [purpose--habitat enhancement, prairie dog barrier] [and/or are naturally occurring native shrubs/trees] that are within the limits of development. The native shrubs/trees removed to allow construction or damaged during construction must be replaced on a two-for-one/same species basis. All replacement shrubs shall be 1-gallon container size and must be warranteed to survive for 2 complete growing seasons.

Structures

26. Remove, store, protect and replace any natural areas man-made structures (e.g., kiosks, raptor perch poles, prairie dog barriers and fencing) within the limits of disturbance.

27. Repair any damage to concrete bike trails, fences, parking lots, or any other improvements caused directly or indirectly by the construction. Repair/replace improvements immediately to current City standards, including matching the color of the concrete.

Field Demarcation

28. Install orange construction fencing to mark the easement limits (limits of disturbance) on the site. A Natural Areas representative must approve fence location prior to any construction.

29. Post temporary signs informing the public that this is a [applicant's name] project and indicating the purpose of the project and the [applicant's name] phone number. Signs shall be posted at the following locations: [list locations].

Erosion Control

30. Have erosion control measures in place and approved by a Natural Areas representative prior to any construction.

Grading/Construction

31. For areas with native vegetation. Strip topsoil in all areas of excavation to a depth of 8 inches and stockpile separately. Wetland and upland soils shall be stockpiled separately from each other. The topsoil shall be placed in an 8-inch layer on top of the subsoil in the corresponding zone immediately following the completion of construction.

32. For areas with non-native vegetation. Strip the top 2 inches of topsoil from the entire construction easement and remove the topsoil from the site to remove the non-native vegetation seed source. Then strip 8 inches of topsoil from the area to be excavated and stockpile separately. Wetland and upland soils shall be stockpiled separately from each other. The topsoil shall be placed in an 8-inch layer on top of the subsoil in the corresponding zone immediately following the completion of construction.

33. Construction shall comply with the [District] specifications. In addition, any trench left open at the end of a workday shall be fenced to provide public safety.

34. Compact backfill in trenches to 95% Standard Proctor Density. Test the compacted soils at 100' intervals vertically and 2' intervals horizontally within the area of excavation to ensure that this requirement has been met. The City shall receive all laboratory Proctor density results, and a copy of all field compaction tests. After compaction to final subgrade (8" below finished grade), the top 6 inches of subsoil shall be ripped, and the previously stripped and stockpiled topsoil materials spread evenly over the excavated areas. Soils in backfilled, compacted, topsoiled trenches shall match the grade of the surrounding undisturbed areas.

35. Set all manhole covers, valve lids, vaults, etc. below or flush with the finished topsoil surface.

36. Remove the upper sections of all existing manholes to be abandoned and fill the holes with soil. This soil shall be compacted to 95% Standard Proctor Density to prevent settlement.

37. Remove the upper sections of all existing manholes to be retained, but are not flush with the finished topsoil surface, and rebuild to be flush with the topsoil surface.

38. Repair any settlement that occurs over the new pipelines after completion and acceptance of the project by the City. Any necessary repairs shall be conducted in

a manner and at a time directed by the City. Repaired areas shall be restored as per restoration requirements outlined in this document.

39. Bring to grade (match surrounding topography) all settled and eroded areas along the existing pipeline to be abandoned during construction of the new pipeline. Repair any settlement that occurs over the existing pipeline after completion and acceptance of the project by the City. Any necessary repairs shall be conducted in a manner and at a time directed by the City. Repaired areas shall be restored as per restoration requirements outlined in this document.

40. Areas with in the limits of disturbance that have been driven over, compacted or rutted by equipment shall be scarified to a depth of 8" and regraded to original grade and contours.

41. Meet with a Natural Resources representative to discuss and get approval of the final grading and the seeding/mulching process prior to reseeding. Seed all disturbed and topsoiled areas with a seed mix of native species specified by the City. The seed shall be drilled into the soil an appropriate depth for the species in the mix and existing conditions, using a range drill (not a Brillion). Immediately following seeding roll the seeded areas with a goats foot roller to lightly compact and imprint the soil. This removes air voids, provides better seed-soil contact and provides indention's in the soil that will capture moisture. All seeded areas shall then be hydromulched in accordance with the City's *Storm Drainage Design Criteria and Construction Standards*. Following final grading and initial seeding of the Construction Easement Area and acceptance by the City, the City shall be responsible for ongoing vegetation management, including weed control, mowing, and reseeding, as needed, in areas disturbed and seeded in accordance with this paragraph. The cost for the City to perform the vegetation management over the next five to ten years is calculated to be two thousand four hundred and fifty dollars ($2,450.00) per acre of disturbance.

42. Any requirements listed above that are not completed in a timely manner will be corrected by the City and the expense of the correction plus management costs will be billed to [applicant's name].