General Landscape Specifications for Greater Cheyenne Greenway

Grading and Soil Preparation Standards for All Landscape Types

1. Grading: Grade shall be set to allow for proper drainage away from all structures and shall maintain smooth, flowing landforms, free of vegetation, surface debris, bumps or depressions. Use only clean, good quality topsoil for fill and berm areas.
2. Soil Prep: Prepare soil with well-aged, weed free and screened compost. Apply 3 cubic yards per 1,000 SF throughout all areas to receive sod, seed and/or trees and shrubs.
3. Amendments shall be tilled a minimum of six inches deep forming a uniform mix. Any sticks, stones or other debris brought to the surface during tilling that is one inch or more in any dimension shall be removed.
4. For rock and mulch areas trim finish grade elevations adjacent to paved areas, back of curb or edging to 2-3 inch below finished grade. For sod or seed areas trim finish grade elevations adjacent to paved areas, back of curb or edging to ½-1 inch below finish grade.

Dryland Seeding Standards

1. All proposed seeded areas are to be specifically approved by the City and shall be of the latest crop.
2. Seeding shall occur in spring from Mid-March thru end of April or in fall from October thru November.
3. Seed shall be Pre-approved Dryland Mix (or equivalent) and have been tested for purity, germination rate and freedom from weeds within 6 months of the date of contract. All seed shall be free of noxious weeds and shall not exceed 0.1% crop seed.
4. Refer to the following Schedule of Seed Mixture and calculate all seeding rates by *Pounds Pure Live Seed.*

Pre-Approved Dryland Grass Seed Mix:

Common Name	Species Name	% of mix	#PLS/Acre
Side Oats Grama	Bouteloua curtipendula	10	1.82
Blue Grama	Bouteloua gracilis	15	0.63
Slender Wheatgrass	Elymus trachycaulus	15	3.00
Canada Wild Rye	Elymus canadensis	15	3.00
Western Wheatgrass	Pascopyrum smithii	10	3.17
Switchgrass	Panicum virgatum	7	0.63
Little Bluestem	Schizachyrium scoparium	8	1.07
Buffalograss	Bouteloua dactyloides	10	5.40

Big Bluestem	Andropogon gerardii	10	2.30

Optional Pre-Approved Native Wildflower Seed Mix:

Common Name	Species Name
Partridge Pea	Chamaecrista fasciculata
Rocky Mountain Beeplant	Cleome serrulate
Plains Coreopsis	Coreopsis tinctoria
White Prairie Clover	Dalea candida
Purple Prairie Clover	Dalea purpurea
Illinois Bundleflower	Desmanthus illinoensis
Narrow Leaf Purple Coneflower	Echinacea angustifolia
Indian Blanket	Gaillardia pulchella
Prairie Sunflower	Helianthus petiolaris
Dotted Gayfeather	Liatrus punctata
Prairie Aster	Machaeranthera tanacetifolia
Narrow Leaf Penstemon	Penstemon angustifolius
Prairie Coneflower	Ratibida columifera
Scarlet Globemallow	Sphaeralcea coccinea
Greenthread	Thelesperma filifolium
Prairie Spiderwort	Tradescantia occidentalis
Hoary Vervain	Verbena stricta
Golden Crownbeard	Verbesina encelioides

6. Finish grade and trim where needed to obtain finish grades of one half to one inch below adjacent pavements. Verify positive drainage away from all structures. Remove rock and debris larger than one inch from all areas to be seeded.
7. Seed shall be spread evenly at the rate of a minimum 1 pound/1000 SF for Dryland Grass Seed Mix and 9 oz/1,000 SF for Optional Native Wildflower Seed Mix. Spread seed when winds are calm, using a Brillion type seeder or approved equivalent. Depth bands should be adjusted for different soil conditions and seed sizes to accommodate accurate planting depth control. Drill into the soil about 1/4 to 3/8 inches deep on medium to fine textured soils. For sandy soils, plant at 1/2 to 3/4 inches deep. Provide separate seed boxes to facilitate both large and small seed planting and equip with agitators to keep fluffy seed flowing smoothly from boxes.
8. **HYDRO-SEEDING IS NOT ALLOWED;** proper seed germination requires good seed to soil contact and hydroseeding keeps seed suspended above the soil in many instances.
8. Seeding: Seeding shall follow as closely behind tilling as possible to avoid special seed bed preparation. Seed all slopes 2:1 and flatter by mechanical grass drill followed by a packer or drag chains. Do not perform seeding if winds cause blowing of seed and/or disturb soil.
9. For areas inaccessible to seeding machines, spread seed by hand or mechanically with hand-held or vehicle mounted spreader. Rake, drag or roll to

cover as much seed as possible with approximately ¼ to 3/8 inch of soil to achieve good seed to soil contact. Some seed will remain visible and will not germinate. In these cases double the specified rate for seeding.

10. Verify that all seeding work is complete prior to application of mulch.
11. Mulch seeded areas within 24 hours after seeding.
12. Apply straw mulch at the rate of 2.0 tons per acre.
13. Straw mulch shall consist of new straw of oats, barley, wheat or rye and not be in an advanced stage of decomposition nor contain seeds of noxious weeds. Old, dry straw which breaks in the crimping process will not be acceptable. Anchor straw mulch by roller or crimper punching.
14. **Option for Hydraulic mulching**: Wood cellulose fibers must become evenly dispersed when agitated in water. When sprayed uniformly on the soil surface, the fibers shall form a blotter like ground cover which readily absorbs water and allows infiltration to the underlying soil. Cellulose fiber mulch shall be added with the proportionate quantities of water and other approved materials in the slurry tank. All ingredients shall be mixed to form homogenous slurry. Using the color of the mulch as a metering agent, spray-apply the slurry mixture uniformly over the seeded area. Apply with tackafier used at a rate of 120 pounds per acre. Unless otherwise ordered for specific areas, fiber mulch shall be applied at the rate of 2,000 pounds per acre. Hydraulic mulching shall not be performed in the presence of free surface water resulting from rains, melting snow or other causes.
15. Protect seeded slopes (greater than 2 horizontal to 1 vertical) against erosion with erosion control fabric or other methods acceptable to the City Representative. Secure netting with staples.
16. Erosion Control Fabric: 100% agricultural straw blanket with photodegradable netting both sides.
17. Clean Up: Remove all hydraulic mulch and other mulch materials from all plant materials, fences, concrete and other areas except for seed bed.
18. Protection*:* Provide and install barriers as required to protect seeded areas from pedestrian and vehicular damage. Provide signage if needed.
19. Guarantee/Warranty: Warrant seeded areas for consistency and completion of coverage. Re-seed as needed to ensure a successful stand of grass that is acceptable to the City. Once a vigorously growing stand of grass is achieved with a minimal amount of weeds, the request for Construction Acceptance may be made.