City of Ames: Landscape Ordinance - Ranking System (Draft Proposal)

1. Pre Design Site Assessment: (Pre-Requisite)
   - Storm Water Analysis of pre-developed site.
     o Discharge points
     o Swale locations
     o Existing wetlands
     o Calculate pre-development runoff
   - Document existing topsoil depths
   - Documentation of existing ‘trees of significance’

2. Project Design:
   - Developer agrees to submit written and photographic verification that they completed the tasks agrees upon prior to construction. (Pre-requisite)
   - It is understood that designers will use best planting and design practices. Plant spacing to allow for growth, mulch additional construction. (Pre-
   - Developer agrees to submit written and photographic verification that they completed the tasks agrees upon prior to
   - documentation of existing ‘trees of significance’
   - Storm Water Analysis of pre-
     o Overstory Trees – Min. 2" Caliper, Max. 3.5” Caliper
     o Understory Trees – Minimum 1.5” Caliper, Max. 2.5” Caliper
     o Evergreen Trees – Min. 6’ Height
     o Shrubs – Minimum three (3) Gallon
     o Ornamental Grasses – Minimum one (1) Gallon
     o Prairie Plantings – Must use at least three (3), but no more than five (5) varieties of native short grass prairie species. Must reach a minimum 3 feet in height. Can be combined with similar height native wildflowers, but is limited to 10 species per development. ‘Small sites’ only required to provide 2 types of prairie plantings
     o Pollinator Species Planting – Must use the US Governments’ required species mix for the Conservation Reserve Program - (CP42)
     o Commercial uses abutting a residential or commercial use must provide a combination of grasses, high shrubs and trees to screen. Evergreen trees required when abutting residential. Fencing can be no higher than 8 feet
     o Industrial uses abutting a residential or commercial use must provide a combination of grasses, high shrubs and trees to screen. Evergreen trees required when abutting residential. Fencing can be no higher than 8 feet
     o Apartment Building foundation plantings required utilizing a tree with shrub and/or grass mixture
     o Identify which landscape ordinance criteria are being used on site plan and total generated points
     o Parking Lots adjacent to residential zones require minimum 5 foot landscape screening area
     o Minimum Landscaping/Open Space requirement by percentage of lot area in commercial and industrial zones. FS-RM, V-R, RM, RH require 5% of lot area as usable open in addition to required landscape and yard areas.
       *(Note that Open Space and Landscaped area terminology may include storm water treatment facilities, Usable Open Space would likely not allow for storm water facilities to meet its definition)*
     o ‘Large Site’ is defined as being at or over 25,000 square feet. ‘Small site’ is defined as being under 25,000 square feet
     o Rock mulch is prohibited in required landscape areas
     o Re-construct of existing sites must include a functional equivalent replacement of existing landscaping with
       regard to diversity, totals, etc.

   - Soil Management Plan (minimum score - 8 points all size sites) (Self Certification of soil prep by contractor required)
     o Stockpile topsoil on site 1
     o Verify removal all construction debris 1
     o Verify removal of excess gravel in planting areas 1
     o Protect Drip Line of all existing trees of significance 1
     o Rip sub-surface to 8” depth, prior to re-spread of topsoil 2
     o Restore topsoil to recorded pre-development depth 4
     o Replace the topsoil to a minimum 6” depth (submittal of soils test required) 2
     o Till the soil to a minimum 8” Depth 3
     o Soil must have minimum organic makeup in the top 8”
       - 3% organic makeup in the top 8” 1
       - 5% organic makeup in the top 8” 3

   - Environmental Design (minimum score - 8 points) (Small sites- minimum score 6 points)
     o Provide no more than 10% additional parking than necessary beyond base requirements (Shopping Centers not to exceed 5 per 1000) 1
     o Develop a storm water management plan (Pre-Requisite)
- **Planting Design**
  - Minimize hard surface parking lot area (In addition to the required Storm Water Management Plan)
    - Maximize green space (over 25% of the site) Outside of Floodway 2
    - Parking Islands at the end of all parking rows 1
    - No more than 10 continuous parking stalls in any row (7 X16 islands.) 1
  - Install Bio-retention to manage water quality and quantity
    (In areas where Bio-retention are proposed, landscape requirements will be waved.) 3
  - Reduce and/or eliminate the use of storm water intakes and piping.
    (Encourage designers to use overland flow) (Narrative required)
    - Elimination of piping 2
    - Design and construct a Green Roof 1
  - **Heat Island Effect**
    - Islands not designated as bio-swales: plant a minimum of 1 Overstory tree in each. 3
    - Parking Lot Shading
      - 35% within 15 years 2
      - 50% within 15 years 4

- **Front Yard Landscaping & Parking Lot Screening** (minimum score - 10 points) (Small sites- 8 points) *See amenity option requirements for possible reduction in requirements.*
  - **Diversity of genus** (No more than 25% of any genus of plant) 2
  - Leave a 3'-0" zone of planter area with no plantings directly in front of all parking stalls 1
  - Provide 1 Overstory tree for every 50LF of street frontage in front setback (See note A) 1
  - Provide 2 Understory trees for every 50LF of street frontage in front setback (See note A) 1
  - 9 shrubs per 50 LF of drive isle outside of parking lot areas. 2
  - Provide 9 shrubs, for every 100 LF of front setback street frontage (See note A) 2
  - Provide 20 ornamental grasses for every 50LF of frontage in front setback (See note A) 1
  - Use of clustered thoughtful plantings (layering of colors and textures with variety of plants) 4
  - Provide grasses or shrubs with Bio-Swale in required landscape areas between parking and ROW 3
  - Provide minimum 10 foot screening area adjacent to residential uses utilizing the criteria listed above. 2
  - Parking separation from lot line with minimum 10 ft. wide planting area (excluding alleys) 2
  - Provide landscape berming between the parking area and the street (Must be a minimum of 30" high and cover 75% of parking lot frontage.) 2
  - Provide landscape berming between the parking area and the street (Must be a minimum of 30" high and cover 95% of parking lot frontage.) 3

- **Planting Design** (minimum score - 8 points)(Small sites- 4 points)
  - Diversity of genus (No more than 25% of any genus of plant in all categories of plantings) 2
  - Provide .2 Overstory tree for every 1000SF of Open Space 1
  - Provide .4 Understory trees for every 1000SF of Open Space 1
  - Provide 6 shrubs for every 1000SF of Open Space 1
  - Provide 10 ornamental grasses for every 1000SF of Open Space 1
  - Provide 10 shrubs or 3 grasses per 50 LF of building foundation 1
  - Undulating large open space 1
  - Provide added visual interest to the open spaces with the creation of berms and hills. (large sites) 2
    (Must be a significant impact on the site to be considered.) Additional submittals will be required.
  - Incorporate existing significant vegetation (Trees must be at least 12 inches in diameter)
    - 50% of existing vegetation 2
    - Planning may authorize for high value wetland, riparian and native areas 2
  - Use of clustered thoughtful plantings that include ornamental grasses, shrubs and over story trees 2
  - Designer Choice: Thoughtful planting plan that generally meets the intent of the items listed above, but goes beyond the basic requirements. It would include signature green spaces, outdoor gardens, rain gardens, seating areas, etc. Note- All items listed above need to be incorporated in some capacity to achieve this (See Note D) (Developments with more than Four (4) Acres of open space will want to use this method as it will likely decrease the number of required plantings)
    - 15% of open area must contain either an outdoor garden or rain garden 2
    - At least 2 seating areas required in front or side yards 2
    - Must provide a summary of vegetation and its significance to the planting plan 8
    - Must contain at least 2 signature green spaces 2
- Must be designed and certified by a professional landscape architect

- **Groundcover** (minimum score - 10 points) [Small sites- 7 points]
  - No turf/lawn in areas less than 5-0’ in width. 1
  - Eco-lawn mixture 1
  - Use of hardwood Mulch beneath all trees, shrubs and decorative grasses 2
  - Clustering of shrubs and grasses so that maintenance can operate around them easily 2
  - 6’ diameter mulch bed around all Ovstory Trees, 4’ on Understory 1
  - Turf Grass / Lawn to cover less than 50% of the Open Space provided 2
    - OR
  - Turf Grass / Lawn to cover less than 25% of the Open Space provided 3
  - Combination of Shortgrass Prairie grasses and ornamental grasses to cover 60% or more of the open space provided 4
    - OR
  - Use of Shortgrass Prairie grasses to cover 25% of the open space provided 1
  - Addition of plantings to attract pollinator species in select areas 3
  - Provide no more than 10% additional parking than necessary beyond base requirements 1

- **Site Amenities “Bonus Category”** (no required minimum score) If 8 points are accomplished:
  - Provide a public hardscape plaza (minimum of 200SF) 2
  - Provide public seating opportunities (Bench or Cut Stone) (1 point for every 3 benches) (2 pt Max) 2
  - Irrigation installed in required landscape areas 1
  - Use of an alternate paving material for 80% of the designated plaza space (DG pavers, stamped concrete, etc.) 2
  - Incorporation of publically visible Art Piece (must be approved by City Staff) 2
  - Addition of Publicly accessible bike parking 2
  - Use of Decorative pedestrian scale lighting (Must be in addition to standard parking lot lighting) 2
  - Recreational or private amenity 2
  - Perennial flower beds 1
  - Edible Landscaping 1
- “A” The intent of the 100/50LF designation is that it creates a unit of measure that can be repeated and averaged. The City of Ames encourages the use of a combination of plantings to meet the requirements.
  - Example: A site with 1000LF of frontage could meet the requirements by:
    - Diversity, 3’ Zone, Clustered Plantings, 10 Overstory trees, 60 Shrubs, and 200 Ornamental Grasses
    - Diversity, 3’ Zone, Clustered Plantings, 20 Understory trees, 60 Shrubs, and 200 Ornamental Grasses
    - Diversity, 3’ Zone, Clustered Plantings, 10 Overstory trees, 20 Understory Trees, and 60 Shrubs

- “B” The intent of this portion of the plantings is to provide the developer and their consultants the necessary flexibility, to be creative with the design of these spaces. The City does not want trees placed on 50’ centers, shrubs in a line, or random single ornamental grasses. These points will be rewarded to those that do not create repetitive planting zones, create planting clusters of appropriate species, and generally make an effort to design the space provided.

- “C” The intent of the 1000SF designation is that it creates a unit of measure that can be repeated and averaged. The City of Ames encourages the use of a combination of plantings to meet the requirements by:
  - Example: A site with 80,000SF of open space:
    - Diversity, Clustered Plantings, 16 Overstory trees, 480 Shrubs, and 800 Ornamental Grasses
    - Diversity, Clustered Plantings, 32 Understory trees, 480 Shrubs, and 800 Ornamental Grasses
    - Diversity, Clustered Plantings, 16 Overstory trees, 32 Understory Trees, and 480 Shrubs
    - Diversity, Clustered Plantings, 16 Overstory trees, 32 Understory Trees, and 480 Shrubs
    - Diversity, and Designer Choice
  - Example: B site with 8,000SF of open space:
    - Diversity, Clustered Plantings, 2 Overstory trees, 48 Shrubs, and 80 Ornamental Grasses
    - Diversity, Clustered Plantings, 4 Understory trees, 48 Shrubs, and 80 Ornamental Grasses
    - Diversity, Clustered Plantings, 2 Understory trees, 4 Understory Trees, and 48 Shrubs
    - Diversity, and Designer Choice
  - Example: C site with 200,000SF of open space:
    - Diversity, Clustered Plantings, 40 Overstory trees, 1200 Shrubs, and 2000 Ornamental Grasses
    - Diversity, Clustered Plantings, 80 Understory trees, 1200 Shrubs, and 2000 Ornamental Grasses
    - Diversity, Clustered Plantings, 40 Overstory trees, 80 Understory Trees, and 1200 Shrubs
    - Diversity, and Designer Choice

- “D” This item will require additional submittal and documentation than the previous items, but will allow for design flexibility. Plantings plans, perspectives, and details will be required during submittal to get these points approved.