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

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

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 areas as necessary to minimize maintenance, eliminate the use of nuisance and invasive species, etc.
   - Developer agrees that all plant sizes must adhere to the following size restrictions. (Pre-requisite)
     - **Overstory Trees** – Min. 2” Caliper, Max. 3.5” Caliper
     - **Understory Trees** – Minimum 1.5” Caliper, Max. 2.5” Caliper
     - **Shrubs** – Minimum five (5) Gallon
     - **Ornamental Grasses** – Minimum two (2) Gallon
     - **Prairie Plantings** – Must use at least three (3), but no more than five (5) varieties of short grass prairie species native to Iowa. Can be combined with similar height native wildflowers, but is limited to 10 species per development.
     - **Pollinator Species Planting** – Must use the US Governments’ required species mix for the Conservation Reserve Program - (CP42).
   - All landscape plans must be prepared by a certified professional landscape architect
   - Parking Lots adjacent to residential zones require minimum 5 foot landscape screening area.
   - Minimum Landscaping/Open Space requirement in HOC, CCN, PRC, CCR GI, PI and RI is 20%*
     *(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)

3. **Soil Management Plan** (minimum score - 8 points)
   - Stockpile topsoil on site. 1
   - Verify removal all construction debris 1
   - Verify removal of excess gravel in planting areas 1
   - Protect Drip Line of all existing trees of significance 1
   - Rip sub-surface to 12” depth, prior to re-spread of topsoil 2
   - Restore topsoil to recorded pre-development depth 4
   - Replace the topsoil to a minimum 6” depth (submittal of soils test required) 2
   - Till the soil to a minimum 18” Depth 3
   - Soil must have 3% organic makeup in the top 8” 3

4. **Environmental Design** (minimum score - 8 points)
   - Provide no more than 10% additional parking than necessary beyond base requirements 1
   - Develop a storm water management plan (Pre-Requisite)
     - Minimize hard surface parking lot area
       - Use of permeable paving (minimum of 1000sf) 2
       - 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 ft wide islands.) 1
     - Install Bio-swales to manage water quality and quantity
       - (In areas where Bio-swales 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) 2
   - **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
- **Site Amenities** (minimum score - 8 points to qualify for screening reduction) If 8 points are accomplished: (1 SF of Plaza is = to 1 LF of Screening Requirement reduction) (600 SF of plaza would waive 600LF of screening requirement.) (Maximum reduction of 600LF)
  - 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) 1
  - 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 2
  - Recreational amenity 2

- **Parking Lot Screening** (minimum score - 14 points) *See Plaza requirements for possible reduction in requirements.
  - Minimum 3 of the following must be accomplished.
    - Diversity of species (No more than 25% of any species of plant) 2
    - Leave a 3'-0" zone with no plantings directly in front of all parking stalls 1
    - Provide an average of 1 Overstory tree for every 50LF of street frontage (See note A) 1
    - Provide an average of 2 Understory trees for every 50LF of street frontage (See note A) 1
    - Provide an average of 9 shrubs, for every 100 LF of street frontage (See note A) 2
    - Provide an average of 20 ornamental grasses for every 50LF of frontage (See note A) 1
    - Use of clustered thoughtful plantings (See “B” Below for explanation) 4
    - Provide grasses or shrubs with Bio-Swale in required landscape areas between parking and public 1
    - Provide minimum 10 foot screening area adjacent to residential uses. 2
    - right of way with minimum 10 ft. wide planting area 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
    - OR
      - 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

- “A” The intent of the 100/50LF designation is that is creates a unit of measure than 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.

- **Planting Design** (minimum score - 10 points)
  - Diversity of species (No more than 25% of any species of plant in all categories of plantings) 2
  - Provide an average of .2 Overstory tree for every 1000SF of general landscaped area 1
  - Provide an average of .4 Understory trees for every 1000SF of Open Space 1
  - Provide an average of 6 shrubs for every 1000SF of Open Space 1
  - Provide an average of 10 ornamental grasses for every 1000SF of Open Space 1
  - Provide thoughtful clustering of building foundation plantings 2
  - Undulating large open space 1
  - Provide added visual interest to the open spaces with the creation of berms and hills. (Must be a significant impact on the site to be considered.) Additional submittals will be required.
  - Incorporate existing vegetation
    - 50% of existing vegetation 2
    - 75% of existing vegetation 3
  - Use of clustered thoughtful plantings that include ornamental grasses, shrubs, over story trees and
  - Understory trees covering no less than 70% of the required open space area. (See “B” Below for explanation) 4
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).

- "C" The intent of the 1000SF designation is that it creates a unit of measure than can be repeated and averaged. The City of Ames encourages the use of a combination of plantings to meet the requirements by:
  o 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, and Designer Choice
  o 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
  o 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.

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