

UDC Text Amendment – Irrigation Requirement for Industrial Zoning Districts

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Proposal

The proposal is to make automatic irrigation optional for seeded drought tolerant grass landscape areas in the Light Industrial (LI) and Heavy Industrial (HI) Zoning Districts. The proposal would keep in place the requirement for automatic drip irrigation of trees, shrubs, ornamental grasses and perennials. The amendment would also require proposals for the non irrigated seed to utilize specifications for best practices which are already identified in code for items such as soil preparation and amendments.

This amendment was brought forward through the 2014 Development Code Annual Review process by Jean Vetter and was recommended for consideration by the Planning Commission.

A legal advertisement was placed in the newspaper on May 31, 2014 to advertise a June 16th Public Hearing at Planning Commission.

Policy Considerations

In general, staff is supportive of the proposal to make automatic irrigation optional for seeded drought tolerant grass landscape areas in the Light Industrial (LI) and Heavy Industrial (HI) Zoning Districts. The proposal would keep in place the requirement for automatic drip irrigation of trees, shrubs, ornamental grasses and perennials. The amendment would also require proposals for the non irrigated seed to utilize specifications for best practices which are already identified in code for items such as soil preparation and amendments. In the HI zoning districts, attempting this approach makes sense with the very large parcels, lower intensity of uses and generally more rural context where they are found. The situations in

HI districts lend themselves to the non irrigated seeded grasses surviving in a minimal care environment. In the LI district there is a greater variety of circumstances. Parcels are usually much smaller and uses tend to be more commercial and customer oriented. Most of the undeveloped areas currently zoned LI are located in the north part of Swan Ranch and the adjacent Overland Trails area developing south of Flying J. The Overland Trails Development contains 2-5 acre lots developed with sidewalk, curb and gutter. The Swan Ranch parcels are bigger and mostly are along barrow ditch sections of streets that may eventually have curb and gutter on some sections.

Large acre industrial areas typically have less pressure on the landscaped areas which are typically large and adjacent to rural street sections (barrow ditches rather than curb and gutter). These areas typically have less pressure on the landscape areas and should have a better chance of surviving without supplemental water and with minimal care. By contrast, commercial areas have many more pressures on landscaped areas increasing the necessity of supplemental water. Pressures on landscaping in more commercial areas include; smaller landscaped areas, higher foot traffic, increase exposure to contaminants and exposure to heat retaining surfaces such as sidewalks and other asphalt and concrete elements.

A "natural" appearance to landscaping generally is occurring in larger industrial properties and if this code change is successful would have little impact on the appearance of large commercial properties provided the non irrigated landscaping is able to take hold. Smaller light industrial properties typically have a more formalized approach in landscaping appearance. This may be due to the smaller size and more commercial activities that occur in the Light Industrial zone district. Allowing non irrigated development in these areas may create less consistency within districts.

The biggest question with the non irrigated approach is whether the seeded natural grass will take hold and if it does not, the owner will accept responsibility for getting the grass to take hold or pursue an alternative approach. Currently with irrigation being a requirement, getting seeded areas to take hold is a relative certainty. With non irrigated situations there will be failed attempts if natural moisture does not happen for the seeds to germinate.

Benefits

- The potential for less water usage and yielding similar results for large industrial area appears to be an option to pursue.

Expectations

- Proposals choosing not to irrigate seeded drought tolerant grass areas in the industrial zoning districts will need to follow G-8 Turf Seeding Standards (except D.5),G-9 Fine Grading and Soil Preparation Standards as well as G-10 Streetscape Maintenance Standards and G-11 Establishment Maintenance for Newly Planted Trees. These are specifications and best practices needed so that non irrigated seeded areas have a reasonable expectation of fully taking hold.
- Where non irrigated seeded areas are proposed, the expectation is the grass will survive. If initial efforts to seed are not successful the expectation is that additional effort be made or alternative approaches be taken that may include automatic irrigation.
- The point allocation for living grass associated with the non-irrigated drought tolerant seed will be the points associated with the lowest water usage grass on Table 6-9, which is currently 1.5 points per 500 square feet. Note: an upcoming landscape amendment, also submitted by Mrs.

Vetter, will propose to reduce the point allotment for grasses which is supported by staff. This upcoming amendment is not integral to consideration of the amendment considered in this report.

Concerns

- Developers and installers will need to use the specifications (G-8 through G-11).
 - *Development applications that propose non irrigated seeded grass will need to identify the specifications they will use for the installers they hire; however there is no guarantee that specifications used in the application process will be used when a project is put out to bid.*
- If grass does not take hold on the first try the property owner will need to take additional steps such as reseeding. This process may encompass multiple growing seasons.
 - *Getting property owners to follow through if initial landscape attempts fail could be a concern. Once a business is open there is less incentive to establish the seeded areas. To address this issue, staff has the ability to use surety and the zoning violation process tools to address this potential issue.*
 - *Surety is a performance bond, letter of credit or cash deposit that is held by the City until an obligation is met and in this case would be establishment of seeded areas. Typically surety is only needed for a few months such as when a building is occupied in the winter, surety is held until landscaping is installed in the spring. With non irrigated seeding multiple growing seasons may be needed, which would be a longer time to hold surety. The relatively low cost associated with seeding and associated seeded area puts into question whether the surety being held is of sufficient value to incentivize the owner to follow through.*
 - *The other tool is a zoning violation.*
- With smaller light industrial areas that are more commercially oriented it is not clear what the ramification of the policy would be. The commercial uses and smaller areas in the Light Industrial zones may result in a more hodgepodge appearance in a district with could be less conducive to more commercially oriented businesses in the light industrial district.
 - *The property owner has a responsibility to maintain proposed landscaping in a healthy condition. The Zoning Violation process would be the tool to address this issue. However the zoning violation process is not set up to handle pervasive problems if they should develop.*

General Background

Cheyenne Landscape Standards Design Objectives (ref. UDC 6.3.1)

- Integrate common landscape and design approaches...improving the character of districts and neighborhoods;
- Screen and mitigate visual impacts of delivery and service areas...focusing on the impact on public streetscapes and adjacent property;
- Reduce air, noise, and water pollution;
- Reduce visual harshness and summer heat gain of large expanses of blank walls and large parking areas;
- Improve the relationship and transitions from private development sites to public streetscapes;
- Provide flexibility in landscape design while promoting wise and efficient water use and viable long-term landscapes;
- Upgrade existing developments, governmental facilities, multifamily residential and street areas...

Landscape requirements are a design standard. Cheyenne's current standards have been in place since 2007. The automatic irrigation requirement has been in place since 2002. For grass, automatic irrigation is typically a spray system. For tree and non grass landscaping such as shrubs, perennials and ornamental grasses a drip system is typical.

Landscape Code History in Cheyenne

- 1992 - First landscape code adopted.
- 1999 – Laramie County adopted same code.
- 2002 – Automatic irrigation requirement added.
- 2005 – Cash-in-lieu requirement for tree reductions by Board of Adjustment or administrative reductions.
 - 2007 – The current regulations took effect. The point system instituted, reduced internal trees by approximately 20%, reduced street trees by up to 50% and created more water wise options and a more predictable framework.
 - 2012 – UDC adopted. The majority of landscape requirements were carried forward along with reductions in landscape requirements for more compact development and additional flexibility for existing sites.

Added a plat material requirement of zoning buffers.

Industrial Zoning Districts

This amendment impacts primarily new development in LI-Light Industrial and HI-Heavy Industrial Zoning Districts. Industrial zoning is found in a variety of parts of town and accommodates a variety of uses. PlanCheyenne identified 196 acres of vacant land zoned LI and 529 acres of vacant land currently zoned for heavy industry. Much of the vacant LI land is located in the north end of the Swan Ranch area and the Overland Trail area south of Flying J. Much of the undeveloped heavy industrial areas are in the east Business Park and parts of Swan Ranch.

Zone District Descriptions for LI and HI

The LI district is intended for environmentally controlled manufacturing or intensive employment uses that may have accessory commercial, service or office uses, but which can not readily fit into other general business or mixed-use areas due to the nature or intensity of operations. The uses and building and site designs associated with uses in this district produce little or no impacts beyond the property lines. (ref. UDC 5.5.1.a)

The HI district is intended for uses of very high intensity which should be isolated and buffered in order to protect the community and to ensure unimpeded operation of the use. These uses do not fit into other general business or mixed-use areas due to the nature or intensity of operations. The uses and building and site designs associated with uses in this district can produce impacts beyond the property lines, and the district should be remote from other differing and incompatible land uses. (ref. UDC 5.5.2.a)

LI – Allowed Uses

- Civic Uses (CUP)
- Very few Service Uses
- Office Uses
- Auto Service Type uses
- Most commercial uses, except restaurants (intended as support)
- Limited Industrial
- Moderate Industrial
- General Industrial (CUP)

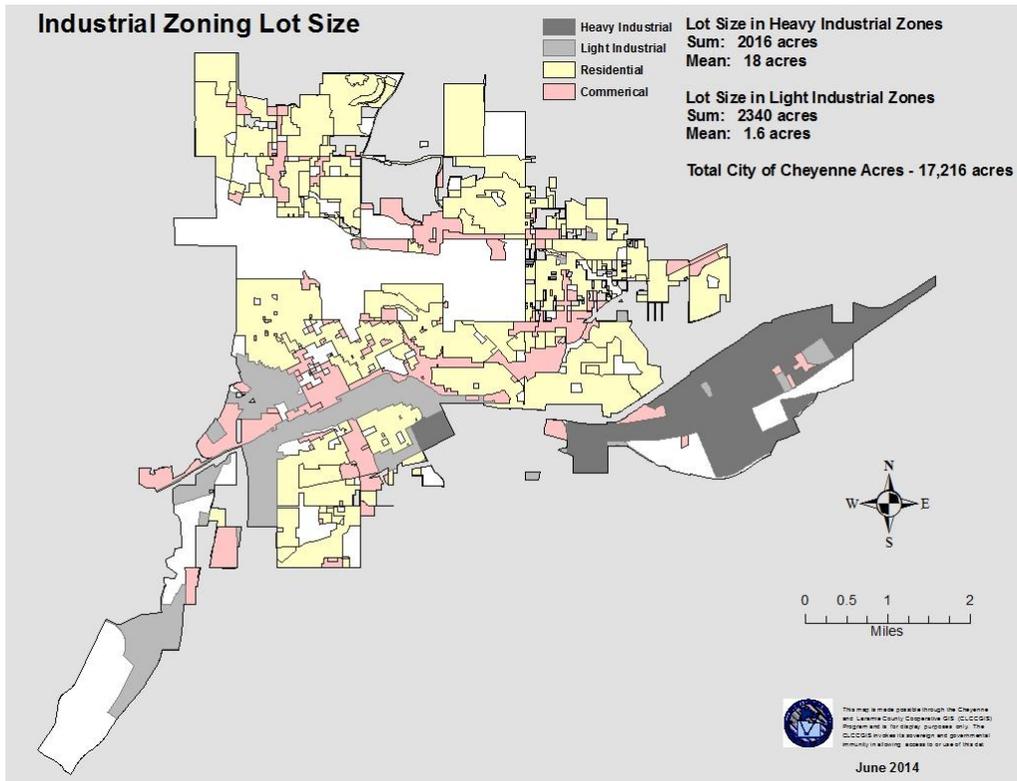
HI – Allowed Uses

- Very few Service Uses
- Office Uses
- Auto Service Type uses
- Limited Industrial
- Moderate Industrial
- General Industrial
- Industrial by CUP (very heavy)

Descriptions of these uses are in UDC section 1.4.4

The biggest difference between uses is that LI allows most commercial uses compared to HI that only allows commercial uses such as service stations. The other main difference is the Heavy Industrial gets into most intrusive uses as the name would imply, meaning those uses that have negative impacts beyond their property boundaries.

Scale/Context

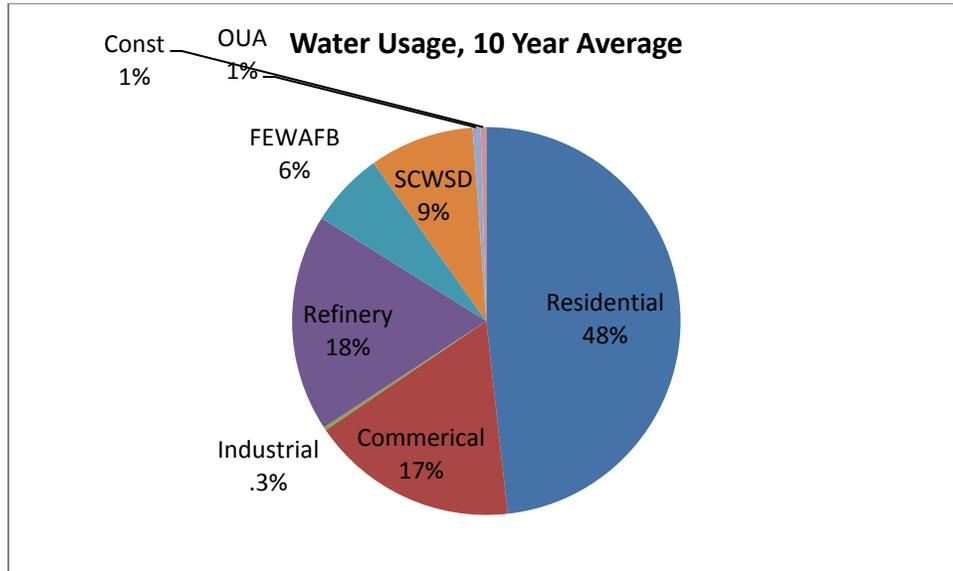


Industrial zoning occupies about 26% of the City, about 12% LI and 14% HI. HI is primarily located in the East Business Park areas. LI is primarily located west of downtown, along 1st and 2nd Streets, along the railroads, along Parsley and some of the areas in and around Swan Ranch as well as other small areas sprinkled throughout the community.

PlanCheyenne identified 196 acres of vacant land zoned LI and 529 acres of vacant land currently zoned for Heavy Industry ref. PlanCheyenne, Snapshot: Land Use). Much of the vacant LI land is located in the north end of the Swan Ranch and Overland Trails area developing south of Flying J. Note: PlanCheyenne correctly identified the Swan PUD as Heavy Industrial which would not be impacted by this ordinance because it is regulated by PUD zoning not the HI zoning.

Properties in these districts are very different in size. The average size of HI properties is ten times larger than LI properties. The average size of a Heavy Industrial property is 18 acres compared to 1.6 acres in the Light Industrial zone district.

Water Usage Comparisons



Industrial properties occupy over 25% of the City area. These properties use about 0.26% of the water used in the City based on the average water use in the last ten years. By comparison, the top three users of water are residential uses 48%, Holly-Frontier Refinery 18% and commercial uses at 17% over the last ten years. The water usage for industrial properties has remained generally stable with a slight downward trend over the last ten years. Irrigation generally makes up about 1/3 of water usage in the City. This varies between uses, with residential and commercial using about 39% of their water for irrigation, and industrial using under 30% of their water for irrigation. (derived from BOPU Monthly Averages for last ten fiscal years and total usage for the last ten fiscal years as identified in the 050714 Month BOPU Reports)

Review Criteria:

1. The amendment is in accordance with the general goals and policies of the Comprehensive Plan.

The Following Principles and Policies were identified as being relevant to this policy consideration.

POLICY 3.3.B: MIXED-USE EMPLOYMENT CAMPUSES

Support the continued development of major mixed-use employment campuses as designated on the Future Land Use Plan. Place a particular emphasis on the design quality of employment and industrial development to create vital and lasting centers and attractive places. *(See also Shape: Land Use Categories and Shape: Design Principles)*

[Principle 3.5: Provide opportunities for a range of industrial employment uses.](#)

POLICY 3.5.A: LOCATIONS FOR HEAVY INDUSTRIAL USES

Continue to leverage the Cheyenne Area's unique location and physical assets, such as heavy rail and interstate access, by designating and maintaining areas for heavy industrial uses that may not be suitable within designated activity centers due to design and/or traffic impacts. Such uses may

include trucking and distribution facilities, oil and gas support services, and warehousing among others.

POLICY 3.5.B: BUFFERING AND SCREENING

Establish buffering and screening requirements for industrial uses located along Interstate or Major Vehicular Corridors or within designated Regional or Community Gateways to minimize visual impacts. (See also, Design Principles for New Development.)

Principle 5.4: Our community will manage its natural resources, which are part of our heritage, legacy and economic sustainability, for use by current and future generations.

POLICY 5.4.A: WATER CONSERVATION

Work cooperatively with partners in the community to encourage water conservation and reduce water use through the use of drought-tolerant vegetation, efficient watering techniques, and the use of non-potable water for landscape irrigation.

POLICY 5.4.B: WATER QUALITY

Protect water quality by protecting well fields, streams, and other significant infiltration points.

POLICY 7.4.B: LONG-TERM WATER SUPPLY

Continue to coordinate with the Board of Public Utilities to plan for a long-term water supply, including conservation measures.

See Also Attached

Industrial, Land Use Category

Light Industrial Design Principles

2. The amendment is consistent with the Wyoming Statutes, and specifically the Municipal Planning and Zoning Statutes.
 - a. The proposed amendment if successfully implemented is in accordance with the Comprehensive Plan and is consistent with the referenced statutes.
3. The amendment promotes the general health, safety and public welfare.
 - a. The amendment increases opportunities for water conservation and if successfully implemented would have minimal impact on the appearance of the City.

Text Changes

Page 6-17 (2/24/14)

6.3.7 Landscape Material Specifications

f. Irrigation Systems

4. Exception: Areas, including those in the public right-of-way, landscaped with seeded drought tolerant grass ground covers in the LI-Light Industrial and HI-Heavy Industrial Zoning Districts may be excepted from requiring an automatic irrigation system. An automatic drip or other appropriate automatic irrigation system shall be provided to regularly irrigate all other required landscaping including trees, shrubs, ornamental grasses and perennials according to their watering requirements. Non-irrigated areas landscaped with drought tolerant grass ground covers shall be seeded according to G-8 Turf Seeding Standards (except for D.5 Watering), G-9 Fine Grading and Soil Preparation Standards, G-10 Streetscape Maintenance Standards and G-11 Establishment Maintenance for Newly Planted Trees.

Appendix G Streetscape Design, Planning and Maintenance Guidelines

G-4 Tree Lawn

B. Tree Lawn Planting Design Options

3. The tree lawn ground plane planting design shall consist of turf grass and automatic irrigation system unless otherwise specified in these regulations. Xeriscape design principles should be incorporated whenever appropriate. Within the tree lawn, the ground plane should be attractive but not dominant, uniform, uncluttered, and low in height and growth.

G-6 Planting Standards

B. Specific Standards

3. Automatic irrigation shall be provided to all trees, shrubs, and turf ~~per City standards~~ unless otherwise specified in these regulations.

Staff recommends approval of the ordinance.

Recommended Motion: Move to approve UDC Annual Review text amendment allowing automatic irrigation to be optional for drought tolerant seeded grass ground cover in the Light and Heavy Industrial Zoning Districts.

Planning Commission Recommendation June 16, 2014

On June 16, 2014 the Cheyenne Planning Commission recommended approval by a vote of 5-0 of the proposed UDC amendment relating to option.