

ITEM #: 33
DATE: 01-14-25
DEPT: P&H

COUNCIL ACTION FORM

**SUBJECT: TEXT AMENDMENTS TO CHAPTER 23 CONSERVATION SUBDIVISION
ORDINANCE**

BACKGROUND:

On November 12, 2024, the Ames City Council initiated a text amendment to the City's Conservation Subdivision standards, which apply to new residential subdivision development in the Ada Hayden Watershed north of Bloomington Road (see attached map). Council took action after extensive review, including input from development interests, the Friends of Ada Hayden, and the results of a study investigating the potential amendments to development standards and their potential effect on the Ada Hayden Lake.

Council directed staff to: 1) eliminate from the Conservation Subdivision standards the requirement for 80% of lots to abut open space, and 2) reduce the required open space set aside to 10% from 25%. As a result of these changes, the ordinance was to be modified to establish an expectation of integrated conservation areas and open spaces within the development, without the mandatory percent set-asides, and to focus on enhanced water quality Best Management Practice (BMP) requirements to offset potential impacts of increased development. The ordinance changes also incorporate other issues raised by the AEDC Short Term Housing Taskforce regarding jurisdictional wetlands, street lengths and design, mass grading, and useable open space.

The proposed ordinance includes amendments to Chapter 23, Subdivisions, which contains the Conservation Subdivision standards. A forthcoming ordinance will also include amendments to the Chapter 29 Floating Suburban Development Standard (Table 29.1202(6)) related to block lengths and mid-block connections to align with the intent of Council's changes to the Subdivision Code.

PROPOSED ORDINANCE:

With the significant changes to the standards, the overall ordinance standards have been mostly rewritten. The title of the ordinance has also been modified to Low Impact Development and Conservation Subdivision Ordinance to reflect the type of features expected within subdivisions that differ from a traditional conservation subdivision approach. All subdivisions will need to incorporate these features to achieve the stated requirements without stating minimum open space and conservation area percentages.

The proposed ordinance includes updated requirement sections focused on conservation set-asides, conservation and open space design, residential lot layout, connectivity for roads and trails, and stormwater treatment measures. Below are highlights of the changes. The full draft ordinance is attached.

Elimination of the 80% of Lots Abutting Open Space Requirement and Reduction of the Open Space Set-Aside to 10% from 25%

The original intent of the 80% requirement was to promote interconnected greenways and environmental corridors. It also intended to create a certain character in Conservation Subdivisions, as

lots appeared larger if they abutted conservation areas. In reality this did not occur as small strips of open spaces were commonly kept adjacent to standard lot sizes. The conservation subdivision ordinance also intended to create at least 25% open space in subdivisions, which was to be interconnected and include conservation areas containing natural resources identified through a site inventory. These areas were also meant for stormwater conveyance and treatment.

With the elimination of the 25% open space standard, the FS-RL and FS-RM base zone requirement that 10% of a subdivision be dedicated as common open space will continue to apply. Existing provisions for inventorying natural features and protecting conservation areas will be maintained without the numeric minimum of 25%. A new provision to incorporate open spaces, without a set-aside percentage, throughout a subdivision and provide connectivity to conservation areas is introduced in place of the requirement that all conservation areas must connect.

The resource inventory process was also amended to clarify that the areas identified in the Natural Resources Inventory to be included as Conservation Areas must be acceptable to the Public Works Director and submitted with the first application submitted to the City.

Stormwater Best Management Practices

The consultant's study identified specific stormwater BMPs and combinations of measures that should be priorities related to Ada Hayden's water quality. Through the amendments, the stormwater management plans for developments would be required to demonstrate in-series BMPs that address nitrogen, phosphorous, E. Coli, and Total Suspended Solids (TSS). Use of these practices in a series, known as a treatment train, is recommended as different practices have different efficacy levels and may be better at targeting a certain pollutant. Relying on multiple practices also eliminates the uncertainty of if a single practice is achieving the desired pollutant reductions due to ongoing maintenance.

Staff proposes adding the following additional standards regarding stormwater treatment techniques:

- *Select a variety of targeted stormwater management best practices and facilities to use in a series to reduce off-site discharge of pollutants including Total Suspended Solids (TSS), phosphorous, nitrogen, E. coli, and metals. A singular stormwater treatment measure of a detention pond will not meet this standard.*
- *Provide pre-treatment for stormwater runoff through practices such as swales, bioretention cells, and vegetative buffers. Forebays may be required.*
- *Include a total pollution reduction summary table for Total Suspended Solids (TSS), phosphorous, nitrogen, E. coli, and metals showing reductions achieved for review by the Public Works Director.*

The consultant also identified that one of the peak times for pollution is during construction when grading work is occurring and soils are exposed. This can lead to erosion and sedimentation. To address this issue, staff has added a requirement for the use of sediment basins until final site stabilization for extended times of buildout. This will be a component of a stormwater management plan approval.

Wetland protections:

Staff notes that while the current ordinance refers to wetlands in general, in practice the protections were only applied to jurisdictional wetlands. Jurisdictional wetlands are those that have a continuous surface connection to Waters of the United States (WOTUS). WOTUS are under the jurisdiction of the

U.S. Army Corps of Engineers (USACE) and require permits from the USACE for activities such as filling and dredging or discharging pollutants. Some wetlands, such as prairie potholes, may not have a connection to WOTUS and are not considered jurisdictional. The ordinance requires retention of actual jurisdictional wetlands; a fill permit eliminating the wetland is not allowed even if issued by the USACE. It will be rare for a jurisdictional wetland to be part of a project, but it will be based upon determination by the USACE.

The proposed ordinance clarifies that only jurisdiction wetlands are required to be located in conservation areas. It also introduces a buffer requirement that must be provided around the wetland depending on its size and quality. Other wetlands are encouraged to be retained but are not required as a mandatory conservation area.

Variations to street lengths and more cul-de-sacs/dead ends to minimize impacts to natural resources and reduce impervious area

The City's Subdivision Design and Improvement standards require that all subdivisions:

- Minimize overall lengths of public ways and infrastructure facilities while limiting the use of dead-end streets and cul-de-sacs
- Achieve a preferred block length that does not exceed 600 feet and in no case be longer than 1,320 feet or shorter than 280 feet between center lines of public ways unless topography or other conditions justify variation

These requirements may be in conflict with Conservation Subdivision standards for open space and natural resource preservation. A clustered design for residential lots may better preserve resources and ensure a high percentage of lots about open space. This design may be better accomplished through the use of cul-de-sacs or other limited connectivity streets.

An allowance for the use of limited connectivity street networks such as loop streets and cul-de-sacs is proposed in order to reduce impervious areas and create larger conservation areas. **Pedestrian connections are required at the end of dead-ends to maintain connectivity.** The prior ordinance required a trail network within each subdivision, the proposed language would reduce that expectation to focus on access and connectivity.

The original ordinance suggested sidewalks would not be necessarily required on both sides of a street. This allowance has now been changed to be only for a short block with no more than four houses on the block face without a sidewalk and that the houses have direct access to a trail.

Mass Grading Limitations

The current ordinance states that “mass grading of sites shall be minimized in order to preserve the natural features of the site.” This requirement was unclear if mass grading was allowed site-wide and what level of disturbance was considered mass grading (e.g. a certain size of area disturbed or a certain amount of cut and fill work). Staff has drafted several amendments to the ordinance to clarify this provision.

First, grading and other disturbance of natural resources contained in conservation areas is not permitted unless allowed by the Public Works Director for restoration of a feature or for essential infrastructure. All conservation areas shall be minimally disturbed. This clarifies the priority for minimizing mass grading and the retention of existing soils in these areas.

Grading is permitted on other portions of the site; however, staff proposes amendments to help clarify how grading can be minimized and to limit erosion when grading does occur. New provisions to site

lots and roadways to work with existing topography are introduced. This demonstrates an intent to fit a development to the site, but it does not outright prohibit grading.

Usable Open Space Requirements

The FS-RL and FS-RM base zones require that 10% of a subdivision be dedicated as common open space. This space is to be available for passive or active recreation. In Conservation Subdivisions, that means that if over 10% of a subdivision is common open space, only 10% must be usable. Usable open space is defined within the Zoning Ordinance.

Staff has added the following standard for conservation areas to clarify this issue since the original ordinance seemed to require that all conservation areas be available as open space:

Conservation areas are not required to serve as passive or active recreation areas in addition to the required percentage of common open space to be set-aside by Zoning Ordinance standards.

Other Amendments

- Clarified applicability that Conservation Subdivision standards may apply to other areas outside of the Ada Hayden Watershed at the discretion of City Council, including those areas within the City's two-mile extraterritorial review area for subdivisions. Additionally, the standards may also apply to commercial development lots within a subdivision.
- Clarified trees are not required to be individually inventoried if part of a larger wooded area to be protected. Additionally, staff reduced the caliper size of trees required to be inventoried to 12 inches measured four feet off the ground from 24 inches. A 24-inch caliper size tree is very large—significant trees typically may be as small as a 12-inch caliper.
- Added a provision that residential lots shall not contain large stormwater flowage easements. This is not typically permitted in subdivisions due to maintenance and encroachment issues. Given enhanced stormwater management requirements, staff felt it necessary to introduce this requirement and see these types of features as common open space meeting the intent of the ordinance.
- Landscaping design and vegetation will primarily utilize native plants and trees.

PUBLIC OUTREACH:

The amendment language was shared with the general development interest group email list and the two developers involved with projects in the watershed and the Friends of Ada Hayden prior to the Planning and Zoning Commission meeting. Development representatives provided no additional comments. Representatives of Auburn Trail again indicated they were supportive of the changes. Staff met with a representative of the Friends of Ada Hayden and they were also still receptive to the amendments.

PLANNING AND ZONING COMMISSION RECOMMENDATION:

The Planning and Zoning Commission reviewed the proposed amendment at its December 18, 2024, meeting. The Commission's discussion focused on the impacts of the changes to Ada Hayden Lake. One Commissioner asked for more information on how Ada Hayden Lake serves as the City's emergency water supply. Staff clarified that water from Ada Hayden was not directly used as a water supply in case of drought, but rather able to be used to replenish South Skunk River levels that then recharge the aquifer where the City's wells are located.

The Commission asked for assurance that the consultant found the changes to the ordinance would be offset by enhanced stormwater management practices. Staff stated that individual stormwater practices for water quality could attain up to an 80% reduction in Total Suspended Solids. When multiple practices are used in a series, reductions would be anticipated to be greater. While a treatment train approach is not common in existing residential subdivisions, the use of swales, part of a treatment train approach, is and staff believes that they are relatively effective and easy to maintain.

Staff also noted that the existing stormwater management ordinance in Chapter 5B ensures runoff rates post-development do not exceed pre-development site conditions. In terms of general maintenance, stormwater practices for residential subdivisions are maintained by a homeowners or other association. The City would use stormwater funds for long-term maintenance for capacity issues such as dredging of basins that are beyond general maintenance obligations. Chapter 5B also includes enforcement mechanisms for maintenance and other issues.

The Commission also asked if increased open space would be required for Low Impact Development and enhanced stormwater management BMPs. Staff stated that the developments impacted by the amendments are already incorporating these practices. With increases in the number of lots, additional volume for detention may be required, but it would not significantly offset increased development intensities possible through the amendments. If the acreage of natural resources on a site exceeded the common open space requirement of the base zoning, additional land would be required beyond the minimum to be set aside in a conservation area to preserve all resources.

No members of the public spoke at the meeting. The Commission voted (5-0) to recommend the City Council amend the Conservation Subdivision standards as recommended by the City staff.

ALTERNATIVES:

1. Approve the first reading of an ordinance amending the Conservation Subdivision Standards of Chapter 23 of the Ames Municipal Code as shown in the attached ordinance.
2. Approve the first reading of an ordinance with modified language suggested by the City Council.
3. Do not approve the proposed text amendment.
4. Request additional information from staff.

CITY MANAGER'S RECOMMENDED ACTION:

The Conservation Subdivision standards were adopted in 2010 to protect Ada Hayden's water quality prior to the City's adoption of the current stormwater management requirements. In 2014, the City introduced specific numeric water quality standards for developments meeting certain thresholds. These standards now apply to Conservation Subdivisions in addition to Conservation Subdivision standards.

The two main changes to the ordinance remove numeric requirements related to open space (total percentage set aside and percentage of adjacent lots) while preserving the intent of the standards for natural resource preservation and connectivity of conservation areas with residential lots. The amendments also include enhanced stormwater management practices recommended by the consultant to offset any impacts of more intense development on the Ada Hayden Watershed.

Similarly, while more flexibility in standards regarding roadway design, mass grading, and wetlands is proposed through the amendments; staff has also proposed amendments that ensure this flexibility is not at odds with resource protection by guiding development to be designed around natural topography and drainage patterns.

Staff believes appropriately designed development following the proposed standards of the amended ordinance will provide water quality benefits in terms of reducing pollutant loads and resource preservation compared to current unmitigated farmland conditions of the future development sites in the Ada Hayden Watershed. The outcome of these changes will likely result in modest development intensity gains for lot layout and focus the design on retaining the highest value conservation and open spaces areas as part of the subdivision design. Therefore, it is the recommendation of the City Manager to adopt Alternative #1.

ATTACHMENT(S):

[Watershed Map.pdf](#)

[Ordinance Conservation Subdivisions.pdf](#)