

ITEM #: 8
DATE: 4-1-15

COMMISSION ACTION FORM

REQUEST: **PRELIMINARY PLAT FOR QUARRY ESTATES CONSERVATION
SUBDIVISION**

BACKGROUND:

Quarry Estates LLC owns a 79-acre parcel (plus 6.5 acres of county road right-of-way) north of Ada Hayden Heritage Park and south of 190th Street. (See Location Map Attachment A-1; A-2) The City annexed this land in December, 2013 and approved a rezoning request to FS-RL (Suburban Residential Low Density) and FS-RM (Suburban Residential Medium Density) with a Master Plan on October 14, 2014. (See Zoning Map Attachment B)

Development of this site is the first project to request approval under the Conservation Subdivision standards of Ames *Municipal Code*. Ames Conservation Subdivision standards are part of the Chapter 23 Subdivision Standards of the Municipal Code. **The intent of the standards is to protect the quality of water in Ada Hayden Lake, protect existing surface drainage systems, promote interconnected greenways, provide commonly-owned open space and conservation areas, and protect such areas in perpetuity.**

The proposed Preliminary Plat includes 140 lots for single-family detached homes and a minimum of 20 lots for single-family attached homes within the FS-RL area of the site. Lot sizes for detached single-family homes range from 8,800 square feet to a few lots exceeding 20,000 square feet. The lots for attached single-family homes, located on Quarry Drive, range from 6,000 square feet to 9,500 square feet in size. All lots meet minimum size requirements for the zoning district. The FS-RL portion of the subdivision has a net density of 4.03 units per net acre, exceeding the minimum average net density required for FS-RL zoning of 3.75 units per acre. (For lot layout see Attachment C, entire Preliminary Plat document is part of this packet)

The Preliminary Plat includes Outlot ZZ for the land zoned FS-RM. The FS-RM area is intended for future development of attached residences or apartments. This area is 8.14 acres in size and will have a minimum of 82 dwelling units to meet the minimum average net density required for FS-RM zoning of 10 units per acre. This area may be subdivided in the future or several buildings may be constructed on the same lot. In either case, a major site development plan is required. Approval of either a subdivision or a major site development plan requires a recommendation by the Planning and Zoning Commission to the City Council.

There are also seven outlots proposed for conservation areas and open space, totaling 21 acres. The project includes three points of access, two to 190th Street and one to Grant Avenue.

The rezoning of the site in 2014 included a Master Plan and Zoning Agreement defining the general arrangement of uses and conditions for development of the site. The Preliminary Plat must be found to conform to the Master Plan in addition to the zoning and subdivision standards. The numbers of dwelling units, their general locations, and net density are consistent with the Master Plan approved by City Council. The open spaces and access points generally conform to the Master Plan as well. The Zoning Agreement also required a central transportation spine that is a shared use path along the new Ada Hayden Drive and for sidewalks along 190th Street and Grant Avenue. The final element of the agreement was to require only one connection to Ada Hayden Park, which occurs with a crushed rock trail connection to the Upland Trail east of Lots 20-23. (Master Plan and Zoning Agreement are part of this packet.)

Off-site infrastructure to support development of the site is part of the 2013 annexation agreement for the property. An agreement was approved by owners of this subject property and other developable land parcels west of Ada Hayden Heritage Park abutting Grant Road, which established the timing and responsibility for extension of all of the urban infrastructure necessary to provide city services to the North Growth area as an assessment district (Grant Avenue paving) and connection districts (sewer and water). Utilities will be available to serve development starting by summer of 2015. Grant Road construction is expected to be completed in the fall of 2015. On-site infrastructure improvements are part of the preliminary plat requirements for each development site.

Conservation Areas and Open Space. The applicant completed a natural and cultural resources inventory as required by the Conservation Subdivision standards and no significant native plant communities exist on the site, nor are there any streams, waterways or dry channels on site. (Natural Resources Inventory is available for review at the Planning and Housing Department.) **Therefore, the conservation areas in Quarry Estates will be “naturalized” by establishing native plant communities, which is consistent with the conservation subdivision requirements.** The conservation subdivision ordinance also requires 25% of the property to be interconnected conservation areas and open space distributed throughout the development and abutting 80% of residential lots. The proposed plat shows approximately 26 % of the property with open space use. Open spaces serve as a buffer between proposed residences and existing residences on the east and south of the property.

The landscape plan portrays these naturalized conservation areas. A draft Conservation Area Management Plan has been submitted that describes these areas and how they will be established and maintained. More detail for maintenance operations is required during the final plat process. The developer will have initially responsibility for creating the conservation areas and the future homeowner's association will have long term management responsibilities. (The draft Conservation Area Management Plan is part of this packet.)

Staff has focused review on the outlot along the south boundary of the site and its shared boundary with Ada Hayden Park. The Master Plan illustrates a conservation

area and buffer along this area. The preliminary plat includes an outlot that varies in width from 30 to 50 feet. Stormwater treatment measures are no longer planned for this area as was originally anticipated within the Master Plan. This area will be a native planting area of prairie. Staff supports the dedication of the area as an outlot as the Parks and Recreation Department believes that this will provide better protection against encroachments into the park and to ensure the health of the planting area.

Other major open space features of the plan are outlots A, C, and D. Outlot A is principally for stormwater management. Lot C is design for stormwater management for approximately half of the area and the remainder will be a recreational area available to the residents and maintained by the homeowner's association. Lot D is meant to be a reestablished conservation area open space.

Conservation Subdivisions require an interconnected open system with 80% of lots abutting open space. The plan meets this requirements through use of walking trails connecting Ada Hayden Park north/south through the development and intersecting with the central shared use path and trail through the central outlot C open space. Sidewalks are used along the perimeter of the subdivision to provide connectivity in lieu of additional trails. Approximately 87% of lots abut an open space area.

Traffic and Street Connections. Grant Avenue is being rebuilt this summer as a rural collector street, meaning it is designed with two travel lanes, curb and gutter, and street lights. The cost of basic Grant Road improvements is shared by the City and three development interests with the aforementioned Assessment District. The road will be complete in the fall of 2015. Site specific access improvements are part of the individual subdivision review and not incorporated into the basic Grant Road improvements.

City staff anticipates that Grant Avenue will be a significant traffic route in this general area. Story County intends to pave the remaining section of the road north of 190th Street in the next 3-5 years. Grant Avenue will provide access for all residential subdivisions along Grant Avenue as it provides direct access both into Ames and to the schools in Gilbert. The location of the intersection of the new Ada Hayden Road with Grant Avenue will also be the location of an access into the "Rose Prairie" development on the west side of Grant Avenue. Details of the "Rose Prairie" development are not know at this time as they are preparing to submit a rezoning and preliminary plat application this summer.

The developer has provided a traffic study addendum to the original North Growth area traffic study with traffic projections based on full build-out of all developments in this area. (Traffic Memorandum is part of this packet.) This analysis considered intersection improvement needs for Quarry Estates and based on projected roadway volumes, the warrant analysis for left turn lanes was not met and they are not proposed by the applicant for Grant Avenue or 190th Street. **To the contrary, staff has concluded that the nature and volumes of the future traffic justifies requiring left turn lanes at the intersection with Ada Hayden to improve safety and reduce traffic delays.** No turn lanes are recommended for 190th Street.

The applicant's study considered warrant analysis based upon one reference guide of 2001 NCHRP 457 - National Cooperative Highway Research Program reports. Staff has reviewed additional transportation engineering references and guidance and determined that improved safety performance justify the inclusion of the turn lanes. Staff has relied upon NCHRP 745- *Left Turns at Unsignalized Intersections* in its evaluation. **Staff recommends a condition of approval for the plat to have the applicant design and construct turn lane improvements at the time Ada Hayden Road connects to Grant Road.** Staff recognizes that the intersection will also likely serve development to the west in Rose Prairie and in the event that Quarry Estates develops prior to Rose Prairie that the City will seek reimbursement to the developer of Quarry Estates of 50% of the 150 foot left turn lane construction costs. In the event that Rose Prairie was to develop first, Quarry Estates would provide reimbursement of 50% of the cost to Rose Prairie.

Street lights have not been required consistently along perimeter roadways of subdivisions. Note that a separate item on this agenda includes a Subdivision Code amendment that would require streetlights for adjacent roadways to subdivisions rather than only new internal roadways. However, in the event the text amendment does not apply to Quarry Estates, staff has concerns about the intersection visibility along 190th Street. **In order to assure that reasonable lighting occurs for intersections, staff has a condition of development that street lighting plan be submitted prior to final plat approval that places a street light in the 190th Street right-of-way with spacing initiated from north to south into the development.**

The street width for Ada Hayden Road meets the standard for a residential collector street, that is, a 31-foot pavement width as measured from the back of the curb within a 66-foot right-of-way, accommodating parking on one side. This right-of-way will include an 8-foot shared use path on the north side and a 4-foot sidewalk on the other. Other street widths meet the standards for local streets, that is, a 26-foot pavement width as measured from the back of the curb within a 55-foot right-of-way. This width allows for parking on one side of a street. The street layout also includes mid-block crossings for pedestrians as required by FS-RL zoning when a block face exceeds 600 feet.

On Quarry Drive at the east end of the development, most of the lots on both sides will have attached single-family as twin homes. The width of these lots is less than a standard detached single family home lot and each lot contains a two-car garage and driveway. Depending on spacing, a double driveway cut in the curb on each lot can make it difficult to fit street lights, street trees and on-street parking spaces. **To ensure appropriate space is reserved for street trees and off-street parking coordinated with driveway placement, staff recommends a condition for a plan to be provided prior to approval of the final plat that includes Quarry Drive. The Planning and Housing Department would review the plan with the street light locations and street tree planting plan of Quarry Drive to maximizing the number of street trees and parking spaces.**

Stormwater Management. One of the principles of the Conservation Subdivision is to take the approach of Low Impact Development to design the project. This means the

arrangement of lots, street and stormwater management minimizes mass grading of the site, minimize impervious areas, and maximize use of natural stormwater treatment measures. The overall approach to stormwater management provides treatment and control of the peak runoff rate from the entire site by providing multiple opportunities to slow the flow of stormwater on the surface and settle out and filter out sediments, a process called the "treatment train." This system includes surface sheet flow to collecting basins, directing flow by vegetated swales, settlement areas drained by pipes and pipe outlets into vegetated swales to carry water to other basins.

This system follows the existing topography of flow toward the center of the site and then flow to the west in a shallow, wide swale. Stormwater from the east third of the site is directed through this treatment train in the center of the site to swales along the south side of 190th Street flowing to the west. Stormwater from the western two-thirds of the site flows to the center and is carried through this treatment train to Grant Avenue. All of the stormwater runoff from these systems is carried under Grant Avenue to an existing major water way to the south and then to the east into Ada Hayden Park and Lake.

The steeper slopes in Ada Hayden Park are protected from increased runoff from streets, driveways, rooftops and other hard surfaces by directing as much of this flow as possible toward the north into the central treatment train system. Lots along the south side of Ada Hayden Drive (Lots 72 -85) will have the front half of the home direct runoff to the center of the development. All of the remaining flow of these lots will be to the south as sheet flow across land; none of the flow is collected in pipes and discharged at points. Additionally, the conservation area along the south buffer will help with erosion control.

Vital to all of these stormwater management systems is the native prairie vegetation to be established that will help slow the rate of runoff and facilitate the percolation of water into the soil for natural filtration and treatment. The proposed open spaces include substantial areas of native prairie planting.

Public Notice. Notice was mailed to property owners within 200 feet of the subject site and a sign was posted on the subject property. As of this writing, no comments have been received.

ALTERNATIVES:

1. The Planning and Zoning Commission can recommend that City Council approve the Preliminary Plat for Quarry Estates at 904 W. 190th Street with the following conditions
 - A. Provide a north bound turn lane and also a south bound turn lane with minimum storage of 150 linear feet where Ada Hayden Road intersects Grant Avenue. Developer will be eligible for reimbursement of 50% of the initial construction cost of the turn lanes from the development west of the site. Alternatively, the developer shall be responsible for reimbursement of 50% of the cost of

construction if the development to the west is built prior to the connection of Ada Hayden Road.

- B. Prior to final plat, include in the street lighting plan a light at each intersection of Ada Hayden Road and McFarland Avenue with 190th Street and continue the regular spacing between lights from there into the subdivision.
 - C. To ensure appropriate space is reserved for street trees and off-street parking coordinated with driveway placement, before approval of the final plat that includes Quarry Drive, provide to the Planning and Housing Department a plan with the placement of street lights, street trees, and hydrants, and driveways for Quarry Drive.
- 2. The Planning and Zoning Commission can recommend that City Council approve the Preliminary Plat for Quarry Estates at 904 W. 190th Street with modified conditions.
 - 3. The Planning and Zoning Commission can recommend that the City Council deny the Preliminary Plat for Quarry Estates at 904 W. 190th Street, by finding that the preliminary plat does not meet the requirements of Section 23.302(3)(b) or Section 23.603 of the Ames Municipal Code and by setting forth its reasons to disprove or modify the proposed preliminary plat as required by Section 23.302(4) of the Ames Municipal Code. Code sections are found in Attachment E.
 - 4. The Planning and Zoning Commission can defer action on this request to no later than April 30, 2015 and refer it back to City staff and/or the applicant for additional information.

RECOMMENDED ACTION:

The Quarry Estates subdivision is the first of several residential developments on the north and west sides of Ada Hayden Park. It is also the first Conservation Subdivision within the Ada Hayden watershed. The Quarry Estates preliminary plat demonstrates how the project will carry out the low-impact policies and techniques required by the Conservation Subdivision and will thus protect the quality of surface water flowing into Ada Hayden Lake, as was envisioned when the park land was acquired.

The Quarry Estates development will carry the native landscaping characteristic of the park into the residential area up to more than 80% of the lots. It will include an integrated pedestrian and bicycle path system through and connected to the park's system. It will also provide sites for 160 much-needed new homes and for more than 80 additional multi-family dwelling units in the future.

The Preliminary Plat for Quarry Estates is consistent with the approved master plan and zoning agreement in many respects in terms of general distribution of homes and the density of development. The access points and circulation system are also consistent

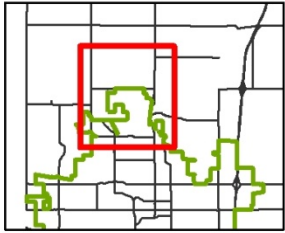
with the Master Plan. The conservation areas and outlots were adjusted as more detail was available for the stormwater design of the site.

It is the recommendation of the Department of Planning and Housing that the Planning and Zoning Commission act in accordance with Alternative #1 recommending approval to the City Council with conditions A, B, and C.

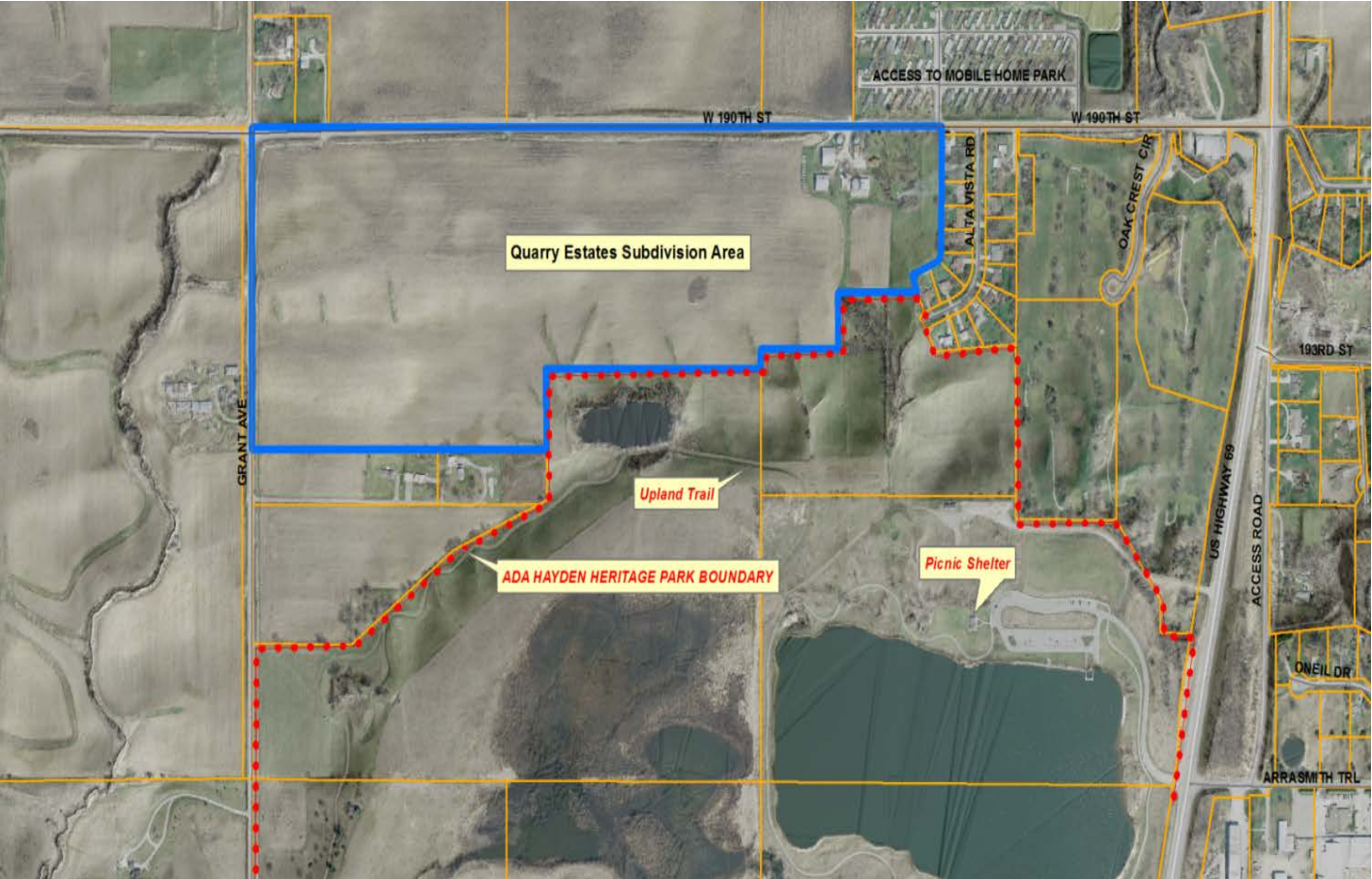
Attachment A: Location Map-1



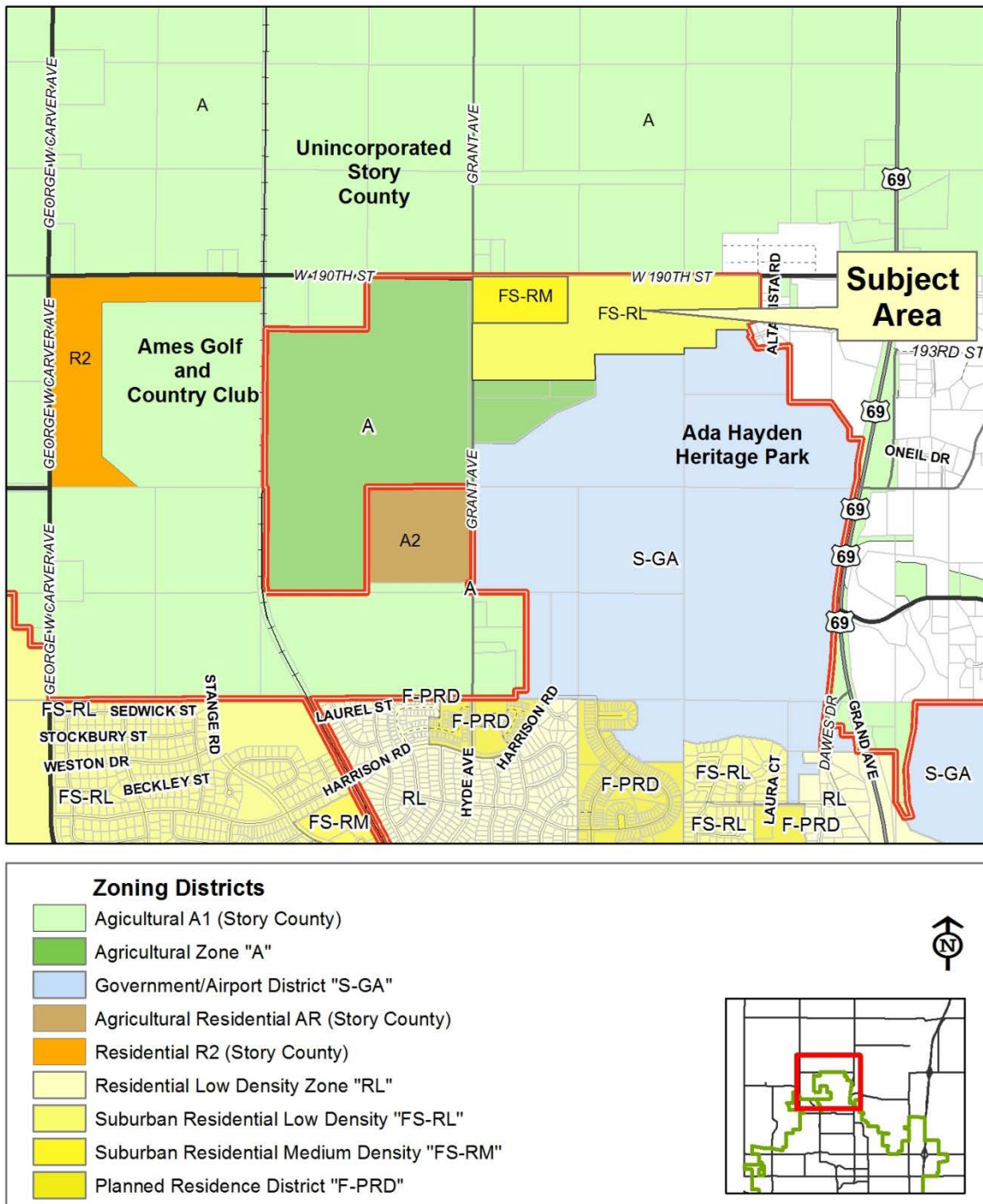
Location Map
Quarry Estates Property
904 W 190th Street



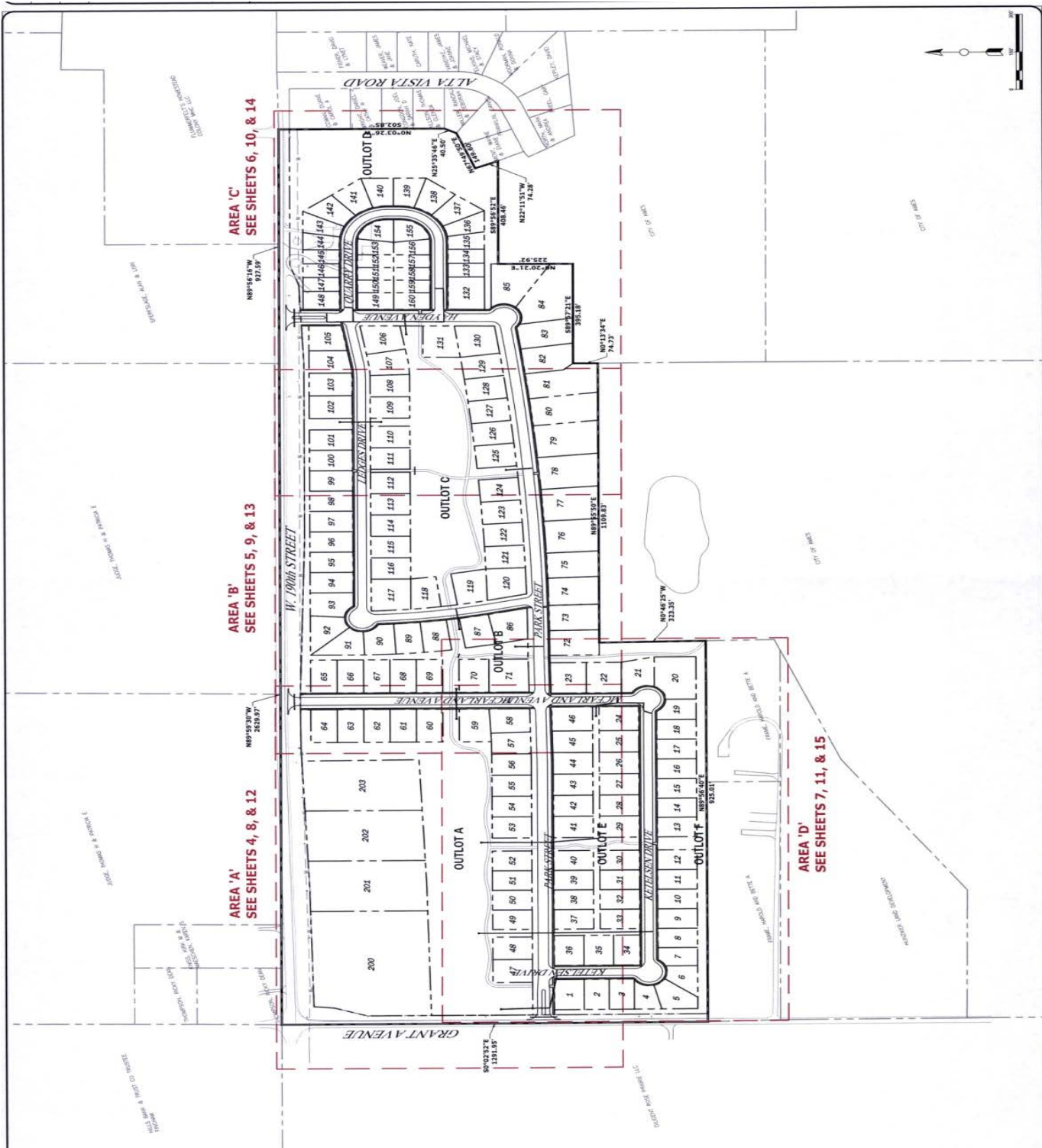
Attachment A: Location Map-2



Attachment B: Zoning Map



Attachment C: Lot Layout



Attachment D: Applicable Subdivision Law

The laws applicable to this Preliminary Plat Subdivision include, but are not limited to, the following: (verbatim language is shown in *italics*, other references are paraphrased):

Code of Iowa Chapter 354, Section 8 requires that the governing body shall determine whether the subdivision conforms to its Land Use Policy Plan.

Ames Municipal Code Chapter 23, Subdivisions, Division I, outlines the general provisions for subdivisions within the City limits and within two miles of the City limits of Ames.

Ames Municipal Code Section 23.302(3):

(3) Planning and Zoning Commission Review:

- (a) The Planning and Zoning Commission shall examine the Preliminary Plat, any comments, recommendations or reports assembled or made by the Department of Planning and Housing, and such other information as it deems necessary or desirable to consider.*
- (b) Based upon such examination, the Planning and Zoning Commission shall ascertain whether the Preliminary Plat conforms to relevant and applicable design and improvement standards in these Regulations, to other City ordinances and standards, to the City's Land Use Policy Plan, and to the City's other duly adopted Plans.*

Ames Municipal Code Section 23.302(4):

- (4) Planning and Zoning Commission Recommendation: Following such examination and within 30 days of the regular meeting of the Planning and Zoning Commission at which a complete Application is first formally received for consideration, the Planning and Zoning Commission shall forward a report including its recommendation to the City Council. The Planning and Zoning Commission shall set forth its reasons for any recommendation to disapprove or to modify any Preliminary Plat in its report to the City Council and shall provide a written copy of such reasons to the developer.*

DIVISION VI CONSERVATION SUBDIVISIONS

23.600. CONSERVATION DEVELOPMENT FOR SUBDIVISIONS

23.601. APPLICABILITY.

Conservation Design Development is an alternative set of design objectives and standards for residential subdivision development. These objectives and standards can be used as an alternative to common residential subdivision development in Ames. However, they shall apply to all residential subdivision development in the undeveloped areas of Ada Hayden Watershed north of Bloomington Road.

(Ord No. 4042, 8-10-10)

23.602. INTENT.

The intent of Conservation Design Development is to preserve the existing natural features of the site, to preserve the natural drainage features and hydrologic characteristics of the landscape, and to reduce the impacts of development on the landscape; and

- (1) To maintain and protect in perpetuity Ames area natural character by preserving these important landscape elements including but not limited to those areas containing unique and environmentally sensitive natural features as prairie, woodlands, stream buffers and corridors, drainageways, wetlands, floodplains, ridgetops, steep slopes, critical species habitat, and by setting them aside from development;
- (2) To promote interconnected greenways and environmental corridors throughout Ames;
- (3) To provide commonly-owned open space and conservation areas for passive and/or active recreational use by residents of the development and, where specified, the larger community;
- (4) To permit various means for owning conservation areas, preserved landscape elements, and to protect such areas from development in perpetuity;
- (5) To provide greater flexibility in site dwellings and other development features than would be permitted by the application of standard use regulations in order to minimize the disturbance of natural landscape elements and sensitive areas, scenic quality, and overall aesthetic value of the landscape;
- (6) To protect and restore environmentally sensitive areas and biological diversity, minimize disturbance to existing soils, vegetation, and maintain environmental corridors, and
- (7) To preserve significant archaeological sites, historic buildings and their settings.

(Ord No. 4042, 8-10-10)

23.603. GENERAL REQUIREMENTS.

- (1) Design and Standards for Residential Lot Layout
 - (a) All residential units should be in cluster groups unless the site has been designed to preserve sensitive areas and maintain a stormwater treatment train.
 - (b) All lots shall take access from interior roads.
 - (c) All separation areas for residential lots along existing roads shall be landscaped in accordance with the conservation area landscaping requirements in Section 23.603(2)(f).
 - (d) Eighty percent (80%) of residential lots shall abut a conservation area or open space to the front or rear. Open space and conservation area across a road shall qualify for this requirement.
 - (e) Cluster groups shall be located to avoid or mitigate directly disturbing existing native prairie, woodlands, wetlands and other natural features identified in the site inventory of natural resources.
- (2) Site Requirements
 - (a) Open water areas - A 50-foot native vegetative buffer shall be maintained around open water areas such as ponds and lakes unless a specific common use area is identified.
 - (b) Stream buffers - Stream buffers with native vegetation shall be maintained along stream areas using the following requirements based on stream order:
 - (i) Streams exceeding 3rd order and above, the City requires sketches, maps, studies, engineering reports, tests, profiles, cross-sections, construction plans and specifications to determine adequate buffer widths.
 - (ii) Perennial streams (1st and 2nd order). The total required stream buffer width is one hundred (100) feet on each side perpendicular to the waterway measured from the outer wet edge of the channel during base flows.
 - (iii) Intermittent streams. The total required stream buffer width is fifty (50) feet on each side perpendicular to the water way measured from the centerline of the channel.
 - (iv) Waterways and/or dry channels that have a contributing drainage area of fifty (50) acres or greater. The total required stream buffer width is thirty (30) feet on each side perpendicular to the waterway measured from the centerline of the waterway.
 - (v) Waterways and/or dry channels with a contributing drainage area of less than 50 acres. The total required stream buffer width is twenty (20) feet on each side perpendicular to the waterway measured from the centerline of the waterway.
 - (c) Stormwater management
 - (i) Minimize the use of storm sewer piping and maximize the use of swales.
 - (ii) Use curb cuts in lieu of storm sewer intakes when appropriate to divert street water to a stormwater conveyance or treatment system.
 - (iii) Sump pump discharge can be discharged into a stormwater conveyance or treatment system.
 - (iv) On-site treatment and storage of stormwater generated by the development shall occur in conservation area if it is consistent with the environmental functions of the conservation area. Individual lot on-site stormwater management may also be used in conservation subdivisions in conjunction with open space and conservation area management of stormwater.
 - (v) Include detailed design information for the stormwater management practices following the design information provided in the Iowa Stormwater Management Manual. The stormwater treatment train approach shall be used where appropriate to capture, treat and release stormwater.
 - (d) Shared use paths, sidewalks, and driveways
 - (i) An accessible and interconnected shared use path system shall be developed to connect residential areas with open space/conservation areas within or adjacent to the site.
 - (ii) Sidewalks shall only be required on one side of streets; however, all lots shall have direct access to sidewalks or the pathway system.
 - (iii) Typical driveway approach sections, Chapter 7 of SUDAS specifications, shall be used.
 - (e) Conservation Area Requirements
 - (i) The conservation area shall be designated as a Conservation Easement as detailed in the definition section of this ordinance.
 - (ii) Applicants must provide an explanation of the conservation area objectives

achieved with their proposed development and identify the percentage of the total development area that this area occupies.

(iii) All conservation areas shall be part of a larger continuous and integrated system except for conservation areas that are naturally isolated from other conservation areas on or near the site. For the purposes of this section, continuous shall be defined as either physically touching or located across a public right-of-way, for example, on opposite sides of an internal road.

(iv) Conservation areas, in accordance with the Conservation Area Management and Ownership outlined in Section 23.605, shall protect site features identified in the site natural resources inventory Section 23.604 (1) and analysis as having particular value in preserving and/or restoring the natural character and conserving natural resources in compliance with the intent of this ordinance and consistent with the goals and objectives of this ordinance.

(v) Healthy natural features such as woodlands, prairie, wetlands, and streambanks shall generally be maintained in their natural condition. If recommended by a professional with pertinent qualifications, the Municipal Engineer may authorize a modification to improve the natural features' appearance or restore the overall condition and natural processes, in compliance with an approved management plan, as described in Section 23.605.

(vi) All wetlands, floodways, and/or identified wildlife habitat areas shall be contained in conservation areas.

(vii) Conservation areas and open space shall be distributed throughout the development and combined shall comprise at least twenty-five (25) percent of the total area of the subdivision. An area comprised of conservation areas and open space greater than twenty-five percent of the total area of the subdivision may be required if necessary to maintain health features such as woodlands, prairie, wetlands and streambanks in their natural condition as provided in 23.603(2)(v).

(viii) Safe and convenient pedestrian access and access easements sufficient for maintenance vehicles shall be provided to conservation areas.

(f) Landscaping for Conservation Subdivisions - A landscaping plan shall be prepared that identifies all proposed landscaping and conforms to the following:

(i) The preservation of existing native, non-invasive vegetation as identified in the natural resources inventory Section 23.604(1) as being in good condition and of good quality shall generally be preferred to the installation of new plant material.

(ii) Mass grading of sites shall be minimized in order to preserve the natural features of the site.

(iii) Within all required separation areas between residential lots and external roads and site boundaries, existing woodlands with desirable tree species shall be retained.

(iv) All new landscaping in conservation areas to be installed and existing native vegetation to be preserved shall be protected through conservation easement. Native landscaping shall be installed according to the guidelines provided in the Iowa Stormwater Management Manual Section 2E-6.

(v) Trees of native species as indicated by the Iowa Department of Natural Resources and approved by the City shall be planted along internal roads within cluster groups in a total amount equivalent to the standard subdivision requirements. Trees may be planted, but are not required, along internal roads passing through conservation areas.

(vi) Informal, irregular, or natural arrangement is required for newly planted trees to avoid the urban appearance that regular spacing may evoke.

(vii) Trees shall be located so as not to interfere with the installation and maintenance of utilities, shared use paths, or sidewalks that may parallel the road.

(viii) Within all conservation areas, separation between external roads and residential lots, a vegetated buffer area at least 25 feet in width shall be maintained or established. Where no natural trees and/or shrubs exist, native plant materials shall be planted.

(ix) Conservation areas required to meet Section 23.603(1)(d), shall be planted using native species to enhance privacy and a natural appearance.

(x) Required buffers around wetlands, all water bodies and drainageways must be naturally vegetated or planted with native plant species appropriate to the surrounding landscape.

(xi) Buffers consisting of an informal, irregular or natural arrangement of native plant species, combined with infrequent or prescriptive mowing are required to create a low-maintenance, naturalized landscape.

(xii) In addition to the above, land management practices minimizing the impact of

nutrients shall be used and demonstrated in Ada Hayden Watershed; minimal fertilization of lawns including the use of phosphorus-free fertilizers is recommended.

(Ord No. 4042, 8-10-10)

23.604. APPLICATION PROCEDURE.

In addition to the standard subdivision application requirements, an inventory and mapping of natural resources shall be conducted prior to the initial submittal.

(1) **Inventory and Mapping of Natural Resources.** An inventory of natural resources of the proposed development site shall be conducted by experts in the field such as biologists, ecologists, soil scientists, hydrologists, geologists or those credentialed in a manner acceptable to the Municipal Engineer and must be submitted with the conservation subdivision application. The inventory must include, but is not limited to the following information mapped at a scale of no less than one inch equals 50 feet:

- (a) Topographic contours at 2-foot intervals.
- (b) United States Department of Agriculture, Natural Resource Conservation Service soil type locations and identification of soil type characteristics such as percolation rates, suitability for infiltration-based stormwater management practices, hydric soils, depth to water table, and suitability for wastewater disposal systems if applicable.
- (c) Hydrologic characteristics, including surface water bodies, floodplains, groundwater recharge and discharge areas, wetlands, natural swales, drainage ways, and slopes 10% or greater.
- (d) Land cover on the site including but not limited to prairie, woodland, forest, wetland and general cover type (pasture, woodland, etc.), and stand-alone trees with a caliper of more than [24] inches measured four feet off the ground. The inventory shall include comments on the health and condition of the natural resources.
- (e) Known critical habitat areas for rare, threatened or endangered species using existing documented inventories.
- (f) Cultural resources shall be identified by a brief description of historic character of buildings and structures, historically important landscapes, and archeological features using a review of existing, documented inventories.

(2) **Education and Outreach Plan for the Development.** An educational plan shall be developed and distributed to all perspective lot owners that describes the characteristics of the conservation subdivision including the development concept, conservation areas management practices that will be used to manage these areas, and benefits of the natural features. They shall also include information on lawn care strategies that reduce nutrient and pesticide inputs and pollution to local water bodies. Lot owners shall be made aware of the wildlife aspects of a conservation subdivision. Deer, birds, and other animals and insects will be attracted to the natural areas.

(Ord. No. 4042, 8-10-10)

23.605. CONSERVATION AREA MANAGEMENT AND OWNERSHIP.

(1) **Conservation Area Management Plan.** Every conservation subdivision must include a plan that provides evidence of a means to properly manage the conservation areas and open space areas in perpetuity through a conservation easement for conservation areas or common ownership for open space areas and evidence of the long-term means to properly manage and maintain all common facilities, including any stormwater facilities. The plan shall be approved by the Municipal Engineer prior to plat approval.

(a) A conservation area management plan shall be submitted with the following components during the following approval stages:

(2) **Preliminary Plat:**

(a) Include a conservation area management plan specifically focusing on the long-term management of conservation areas. The conservation area management plan shall include a narrative, based on the site analysis required in Section 23.604(1), describing:

- (i) Existing conditions including all natural, cultural, historic, and scenic elements in the landscape.
- (ii) The proposed completed condition for each conservation area; and the measures proposed for achieving the end state.
- (iii) Proposed restoration measures, including: measures for correcting increasingly destructive conditions, such as erosion, and measures for restoring habitats, ecosystems, and historic features.

- (3) Final Plat:
- (a) The conservation area management plan shall include the following items for final plat approval:
- (i) Provide a copy of the conservation easement.
 - (ii) Designate the ownership of the conservation area and common facilities.
 - (iii) Establish necessary regular and periodic operation and maintenance responsibilities.
 - (iv) Estimate staffing needs, insurance requirements, and other associated costs and define the means for funding the same on an on-going basis.
 - (v) The operations needed for maintaining the stability of the resources, including: mowing schedules; native vegetation burns; weed control; planting schedules; clearing and cleanup; the applicant shall be required to provide financial security in a form acceptable to the city for the maintenance and operation costs of conservation areas for a two-year period of time at time of the plat.
- (b) In the event that the organization established to own and maintain the conservation areas, or any successor organization, fails to maintain all or any portion of the conservation areas in reasonable order and condition, such notice shall set forth by the Municipal Engineer listing the nature of corrections required and the time within which the corrections shall be made. Upon failure to comply within the time specified, the organization, or any successor organization, shall be considered in violation of this ordinance. In such case the security, if any, may be forfeited, and any permits may be revoked or suspended. The city may enter the premises and take corrective action.
- (i) The costs of corrective action by the City that exceeds the security shall be assessed against the properties that have the right of benefit of the conservation areas and shall become a lien on said properties.
- (c) Management plans can be amended by the owner identified under Section 23.605(6) with the approval of the Municipal Engineer.
- (4) Ownership Alternatives. The designated conservation areas shall be placed in Conservation Easement and may be owned and managed by one or a combination of the following:
- (a) A homeowners association shall be established if the conservation area is proposed to be owned by a homeowners association. Membership in the association is mandatory for all purchasers of homes in the development and their successors.
 - (b) A non-profit or for-profit conservation organization that specializes in Iowa native plant management.
 - (c) Other entity as approved by City Council.
- (5) Ownership & Maintenance Responsibilities. The bylaws, guaranteeing continuing maintenance of the conservation area and the declaration of covenants, conditions and restrictions of the homeowners association shall be submitted for approval to the City of Ames as part of the information required for the final plat. The bylaws or the declaration of covenants, conditions and restrictions of the homeowner's association shall contain the following information:
- (a) The legal description of the conservation area;
 - (b) The restrictions placed upon the use and enjoyment of the conservation areas or facilities;
 - (c) The homeowners association or third party assigned by the homeowners association entitled to enforce the restrictions;
 - (d) A mechanism to assess and enforce the common expenses for the land or facilities including upkeep and maintenance;
 - (e) The conditions and timing of the transfer of ownership and control of land facilities to the association.
- (6) A For-Profit or Non-profit Conservation Organization. If the conservation area is to be held by a for-profit or non-profit conservation organization, the organization must be acceptable to the City. The conveyance to the non-profit or for-profit conservation organization must contain appropriate provisions for reversion in the event that the organization becomes unwilling or unable to uphold the terms of the conveyance.
- (Ord No. 4042, 8-10-10)*