

AGENDA ITEM SUMMARY

DATE: January 9, 2017 **DEPARTMENT:** CDD **DEPT. HEAD SIGNATURE:** LH

SUBJECT: Continued review of Quigley Farm Subdivision and PUD proposal to Blaine County pursuant to Area of City Impact Agreement

AUTHORITY: IAR _____ City Ordinance/Code Zoning Ordinance No. 532
(IFAPPLICABLE)

ATTACHMENTS

- 1) Hailey Comprehensive Plan Land Use Map
- 2) Site Plan, Quigley Farms Subdivision and PUD (current proposal is shown with a dashed black line)
- 3) Subdivision staff report excerpt related to water and wastewater standards

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

The Council conducted their first public hearing in October 17, 2016 on the Quigley Farm Subdivision and PUD proposal to Blaine County pursuant to Area of City Impact Agreement. At that meeting, the applicant presented the project overview, the Mayor and Council asked questions, and public comment was taken. The Council identified the following items as priorities for more detailed discussion:

- Land Uses/Comprehensive Plan compatibility
- Public Access
- Circulation
- Water and Wastewater service

The November 7, 2016 meeting addressed the first two items, Land uses/Comprehensive Plan compatibility and Public Access. The December 5th meeting addressed Circulation, and completed the public access discussion of Parks and Open Space. Circulation will be addressed again in February, with additional analysis of off-site impacts.

Tonight’s meeting will focus on wastewater and water issues.

Notice and P & Z Recommendation

Notice for the public hearing was published in the Idaho Mountain Express on July 13, 2016; the notice was mailed to property owners within 300 feet on July 13, 2016, for the August 1 P & Z meeting. The item was continued on the record to the September 12, 2016 Commission meeting, at which time the “concept” review was completed. The Planning and Zoning Commission recommendations were included in the October 17, 2016 Council packet (letter to Hailey City Council dated September 23, 2016).

Notice for the October 17, 2016 City Council public hearing was published in the Idaho Mountain Express September 21, 2016. Notice of the November 7, 2016 City Council Public hearing was sent to adjacent property owners on October 21, 2016. A display ad regarding the meeting was published in the Idaho Mountain Express on October 26, 2016. Additional notice was sent to adjacent property owners on November 10, 2016.

Tonight's Meeting

1) Discussion of wastewater issues

The Waste Water System consists of three components:

- Collection System
- Treatment System
- Disposal System

Staff will describe the wastewater alternatives in terms of these three components in a Power Point presentation in the meeting.

The current submitted Quigley wastewater proposal consists of a private "decentralized" onsite community sewer system. This staff report analyzes that alternative, as well as a "hybrid" alternative of conveying effluent into the City collection system during winter months. Both alternatives are described in the attached 'excerpted" staff report.

2) Discussion of water issues

Water provision issues are outlined in the attached "excerpted" staff report.

3) Continuation to a subsequent meeting for review of transportation off-site impacts and other subdivision standards (no decision is expected of the Council tonight).

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS:

None

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IF APPLICABLE)

<input checked="" type="checkbox"/> City Administrator	<input type="checkbox"/> Library	<input type="checkbox"/> Benefits Committee
<input checked="" type="checkbox"/> City Attorney	<input type="checkbox"/> Mayor	<input type="checkbox"/> Streets
<input type="checkbox"/> City Clerk	<input checked="" type="checkbox"/> Planning	<input type="checkbox"/> Treasurer
<input checked="" type="checkbox"/> Building	<input type="checkbox"/> Police	<input checked="" type="checkbox"/> Sustainability
<input type="checkbox"/> Engineer	<input type="checkbox"/> Public Works, Parks	<input type="checkbox"/> _____
<input type="checkbox"/> Fire Dept.	<input checked="" type="checkbox"/> P & Z Commission	<input type="checkbox"/> _____

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

- 1) Discussion by the Council as to the topics discussed; feedback to applicant/staff;
- 2) Determine a date certain for the continuation of the Public Hearing on Quigley Farms Subdivision and PUD within the Hailey Area of City Impact.

ACTION OF THE CITY COUNCIL:

Date : _____

City Clerk _____

FOLLOW-UP:

*Ord./Res./Agrmt./Order Originals: Record *Additional/Exceptional Originals to: _____
 Copies (all info.): _____ Copies (AIS only)
 Instrument # _____

		<p><i>must comply with City subdivision standards. Staff believes that is safer, and better protects the public to have the fire suppression system served by the City's potable water system not an irrigation line for the following reasons: 1) An irrigation line must be charged all winter long to keep the fire hydrants active and ready for fire suppression; 2) The City's potable water system has greatly superior system storage capacity and flow for fire suppression without the need of a backup generator and pump.</i></p> <p><i>To be served by the municipal system, the system should be a looped system served of by the Quigley water main, and connected to the Buckhorn water main. The irrigation system would continue to be a separate system operated by the development's HOA. The project would need to contribute a proportionate share to impacts to the City's water system, if connected.</i></p>
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Dingley Staff Report Excerpt

Compliant			City Standards and Staff Comments
Yes	No	N/A	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Minimum Improvements Required: It shall be a requirement of the Developer to construct the minimum infrastructure improvements set forth herein and any required infrastructure improvements for the subdivision, all to City Standards and procedures, set forth in Title 18 of the Hailey Municipal Code and adopted by ordinance in accordance with the notice and hearing procedures provided in Idaho Code §67-6509. Alternatives to the minimum improvement standards may be recommended for approval by the City Engineer and approved by the City Council at its sole discretion only upon showing that the alternative is clearly superior in design and effectiveness and will promote the public health, safety and general welfare.</p> <p><i>Despite the fact that the applicant is not currently proposing annexation, the Area of City Impact anticipates, over the long-term, that lands will annex to the City. Per the ACI Agreement, subdivisions in the ACI area must comply with City subdivision standards.</i></p> <p><i>This project does not propose to meet minimum infrastructure improvements, in that it does not propose to connect to municipal water or sewer. Analysis of wastewater issues and whether the proposal meets this standard of review are found under Sewer Connections, Standard 16.05.030 of this report. Analysis of water issues and whether the proposal meets this standard of review are found under Water Connections, Standard 16.05.040 of this report.</i></p> <p><i>Section 16.11.010 also allows for exceptions to strict application of City requirements:</i></p> <p style="text-align: center;">Whenever the tract to be subdivided is, in the opinion of the Commission and the Council, of such unusual shape or size, or is surrounded by such development or unusual conditions that the strict application of the requirements contained herein would result in real difficulties and substantial hardships or injustices, the Council may vary or modify such requirements by making findings for their decision so that the Developer is allowed to develop his property in a reasonable manner, while ensuring that the public welfare and interests of the City and surrounding area are protected and the general intent and spirit of this Ordinance are preserved. As used in this Section the phrase "real difficulties and substantial hardships or injustices" shall apply only to situations where strict application of the requirements of this Ordinance will deny to the Developer the reasonable and beneficial use of the property in question, and not in situations where the Developer establishes only that exceptions will allow a more financially feasible or profitable subdivision.</p>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Sewer Connections: The developer shall construct a municipal sanitary sewer connection for each and every developable lot within the development. The developer shall provide sewer mains of adequate size and configuration in accordance with City standards, and all federal, state, and local regulations. Such mains shall provide wastewater flow throughout the development. All sewer plans shall be submitted to the city engineer for review and approval. At the city engineer's discretion, plans may be required to be submitted to the Idaho Department of Environmental Quality (DEQ) for review and comments.</p> <p><i>The Waste Water System consists of three components:</i></p> <ul style="list-style-type: none"> ▪ Collection System ▪ Treatment System ▪ Disposal System <p><i>Staff will describe the wastewater alternatives in terms of these three components in a Power Point presentation in the meeting.</i></p> <p><i>The current submitted proposal consists of a private "decentralized" onsite community sewer system. This staff report analyzes that alternative, as well as the alternative of conveying effluent into the City collection system.</i></p> <p><u>Summary of Proposed On-Site Treatment System:</u> <i>The onsite system will generally consist of individual structures or houses connected to a septic tank/effluent pump chamber. Effluent is then transmitted via a small diameter collection system to an onsite treatment facility consisting of a pre-filter followed by a constructed wetland and then subsurface infiltration. This</i></p>

system will service properties within development Phases 1 & 2. Future phase 3 will be served by one of three cluster wastewater treatment systems. The infiltration system for Phases 1 & 2 was previously located on Parcel A Block 1. The applicant has verbally indicated that this infiltration system would be moved up canyon, farther away from Hailey City limits and municipal potable water wells.

Issues identified with the proposed Treatment System:

- The previous submittal showed the infiltration located **WITHIN the Wellhead Protection Zone** (upstream of a City well). The applicant has verbally indicated that this infiltration system would be moved up canyon.
- May not have a staff of full time operators constantly monitoring the treatment process
- May not be able to generate the funding necessary for immediate repairs or responses to catastrophic failures
- Uses equipment and technology inconsistent with current City infrastructure, resulting in additional training, acquisitions, and effort if the City is to become involved in the operation of the facility
- If adopted, the concept of decentralized treatment could result in dissimilar systems within or adjacent to the City
- Relies on a constructed wetland process not typically used in the Wood River Valley
- Is located immediately adjacent to the City boundary and disposes of effluent with no opportunity for additional groundwater dilution before migration into City borders

The system was previously proposed to be located immediately adjacent to the City boundary. While a DEQ Level 1 Nutrient Pathogen Study has received preliminary review by DEQ, additional study is necessary if this location were to be utilized. The Level 1 spreadsheet does not directly identify groundwater nitrate plumes, and due to the location of the proposed system it is likely this plume will migrate into the City Limits. A DEQ Level 2 Nutrient Pathogen study would need to be performed to demonstrate the plume will not encroach into City boundaries.

The existing municipal sewer treatment system appears to have sufficient treatment capacity. The current "FIRM" capacity is 0.7 mgd, max capacity is 1.2 mgd, operating around 0.6 mgd currently.

The city is in the process of evaluating future infill growth within the existing City limits in addition to the proposed development. Capital Improvement Plans from 2013 and earlier identified issues with the collection system such as a potential bottleneck through a 6 inch "high school" mainline and an 8" mainline in Fox Acres south to the Countryside mainline. A viable option to the potential bottleneck in the 8" mainline is the construction of a new bypass parallel to the Wood River Trail at Fox Acres, or a connection to the pressurized line in south Woodside. Cost estimates are being developed regarding these options.

The biggest issue relative to standard 16.05.010 is the ability of the Homeowners Association or other entity to adequately maintain the private sewer system as currently proposed. While staff recognizes the proposed treatment system is a viable, attractive, and an environmentally sensitive alternative to conventional treatment, the focus of discussion should be:

Is this alternative system "clearly superior" to the City system? If so, then:

Are these alternative systems what the City wants to operate in addition to the current treatment plant?

If so, how many of these systems around the perimeter of the City does the City want to operate?

Is this system appropriate for areas immediately adjacent to the City, or is it more appropriate for remote areas?

Staff is concerned that City operation of this alternative system, (and therefore setting the precedent for possibly many other future systems), will become a drain on City resources (training, equipment, monitoring, maintenance, additional staff, etc.) if the City takes over operations in the future.

		<p>Staff is concerned that this system is not common in the local area and could be susceptible to unique climate or operational conditions not realized in other communities which could impact its effectiveness. The applicant has provided other cold area examples, but operation of the proposed system remains a concern. This would be the first operational system in Idaho according to conversations with DEQ.</p> <p>Staff is concerned about operation of this system by a future home owner organization, and their ability to fund prompt repairs when needed.</p> <p>Staff does not support this wastewater design in a location close to City limits, and that design would not meet the standard of review established in 16.05.010, showing that "the alternative is clearly superior in design and effectiveness and will promote the public health, safety and general welfare".</p> <p><u>Additional Comments:</u></p> <ol style="list-style-type: none"> 1. Sewer service locations, system materials, locations, etc., would need to be in conformance with City standards. 2. Woodside pump house: <ol style="list-style-type: none"> a. The proximity of proposed drain fields to Woodside pump house shown in the drawings on file with the City is of concern for the City's well head protection plan. b. Woodside and 3rd wells are routinely measuring at highest Nitrate levels every year. It is not known if this is a direct correlation with the farm fields out Quigley, and if homes and drain fields are introduced, what the impacts will be on nitrate levels for these two wells. 3. If served by the City, all sewer lines should be gravity fed into the City's collection system without the use of lift stations. Sewer mains shall be 8" gravity mains in conformance with City standards. 4. If not served by the City, test wells should be installed downstream of the drain fields to monitor water quality before occupancy to establish a baseline, then continuously monitored after occupancy to ensure no contamination. 5. All construction shall have DEQ approval. <p><u>Summary of Proposed Off-Site Treatment/Disposal System:</u></p> <p>A hybrid alternative would alleviate the majority of the staff concerns identified above. This hybrid would allow for on-site treatment and re-use during the summer months. In the winter, project effluent could be collected at the low end of the development then conveyed into the City collection system via a conventional gravity sewer main. The effluent will then travel to the treatment plant via the primary Woodside sewer collection main.</p> <p>Regarding the existing collection system, the Woodside collection main was identified in the 2009 Facility Planning Study as a concern and possible expansion alternatives were identified. As a result, the City's long term Capital Improvement Plan (CIP) includes a new gravity sewer main from Fox Acres to the treatment plant that falls along the western edge of Woodside Subdivisions.</p> <p>Recently, a more detailed analysis of potential infill within the City together with flow/capacity projections has been performed by Galena Engineering. Capacity restrictions on the Woodside main have been identified that will require a bypass. When constructed, this bypass main and the remaining Woodside collection mains would contain enough capacity to convey potential infill development possible within the current City limits plus wastewater flows associated with Phases 1 and 2 of the Quigley development.</p> <p>Quigley flows conveyed into the City system would not need any pre-treatment.</p>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Requirements: The developer shall construct a municipal potable water connection, water meter and water meter vault in accordance with City Standards, or other equipment as may be approved by the city engineer, for each and every developable lot within the development. The developer shall provide water mains and services of adequate size and configuration in accordance with City Standards, and all federal, state, and local regulations. Such water connection shall provide all necessary appurtenances for fire protection, including fire hydrants, which shall be located in accordance with the IFC and under the approval of the Hailey Fire Chief. All water plans shall be submitted to the city engineer for review and</p>

approval. At the City Engineer's discretion, plans may be required to be submitted to the Idaho Department of Environmental Quality (DEQ) for review and comments.

A private onsite community potable water system is proposed rather than a connection to the City of Hailey municipal system. The proposed potable water system consists of two wells and the associated distribution system. The development also proposes a separate irrigation/fire protection system supplied by a third well. A reuse system is also proposed that will distribute treated effluent for use as irrigation water via a separate small diameter pressure pipe.

Per the report prepared by Brockway Engineering:

"water rights on the project are adequate for irrigation and mitigation for a new water right for potable supply. . . The development has existing water rights to irrigate 276.5 acres of land. . . The project will develop 43 acres of the 276.5 acres, and approximately 12 acres will be retired. . . The available water supply for the project is adequate and reliable to meet all demands for irrigation, potable, and fire suppression requirements." pages 16 & 17.

1. *Well Impacts per the report prepared by Brockway Engineering:*

Drawdown associated with operational maximum day demand has an insignificant (< 0.5 feet) effect beyond 500 feet from the well site. Hydraulic conductivities used for the Brockway analysis are from 11 to 150 ft/day. However, staff notes the hydraulic conductivity used for the Nutrient Pathogen Study submitted by the developer is 3000 ft/day. This discrepancy should be explained by the applicant.

2. *The required fire flow is 1500 gpm for two hours, based upon review by the Wood River Fire District. Fire flows will be provided by the non-potable irrigation water system.*
3. *All construction and operations shall have DEQ and City approval.*
4. *The development should install City compliant water vaults at time of development, but meters are not necessary unless connected to the City system.*
5. *Road typical sections show a "geothermal" line but no resources are present.*
6. *An inspector shall be selected by the City and paid for by the applicant for City inspection of all water, sewer, and roadway infrastructure during construction.*
7. *Quigley Tank*
 - a. *Quigley Canyon will be more accessible as a result of this project. A fence and other security measures around the tank will be needed.*
 - b. *The drain and over flow for the tank flow down the canyon and under the existing dirt road into the canal. A modified easement for water drainage may be needed.*
 - c. *The City will need to maintain access to the tank though out the construction of the development.*
8. *Distribution system*
 - a. *Plans should show main line valves and sizes of mains (most likely 8")*
 - b. *If served by municipal water, the developer will need to install individual services lines for each lot.*
 - c. *Separation of irrigation lines from potable water is a desirable component of the proposed design. These lines need to maintain all the same separation requirements as WW. If irrigation systems use potable water, backflow assemblies, per the City Standards, shall be installed and inspected.*
 - d. *The fire hydrants off of the non-potable water line will need to be painted purple (represents non-potable water)*
 - e. *The water services should not go through parcels J and K.*
9. *There should not be a dead end main line to feed one service.*

The City standard above requires the project to connect to municipal water but no connection is proposed. Despite the fact that the applicant is not currently proposing annexation, the Area of City Impact anticipates, over the long-term, that lands will annex to the City. Per the ACI Agreement, subdivisions in the ACI area