

October 6, 2023

Mayor Buist and City Council
Cc: Planning and Zoning Committee
Mendon City Corporation
15 North Main Street
Mendon, Utah 84325

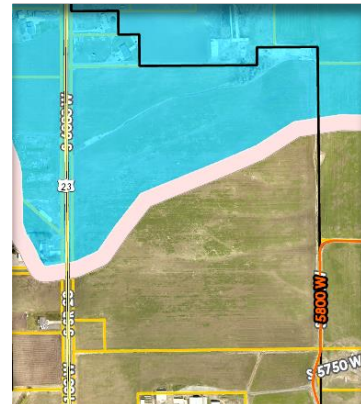
**RE: Blueberry Springs Subdivision Preliminary Plat Submittal
Initial Engineering Review and Comments
*Revised for Clarification on Findings of Fact and Conditions***

Dear Mayor Buist, City Council, and Planning and Zoning Committee,

As requested, I have completed an initial review of the Blueberry Springs Subdivision Preliminary Plat and appurtenant documents submitted on August 30, 2023, for compliance with city ordinances, standards, and specifications and have the following comments and recommendations.

Findings of Fact:

1. This development consists of 79 lots with two access points from SR-23 (100 West) and one access point from 100 East through the Taylor Subdivision.
2. Reference Subdivision Code Section 3.12.B.12: The preliminary plat shall include the location of severely constraining elements such as...wetlands, watercourses, intermittent streams, one hundred (100) year floodplains, etc. The 100-year floodplain and its 100-foot buffer zone shown at right (<https://gis.cachecounty.org/>) was not identified, discussed, or addressed in the preliminary plat submittal. Nearly half of the subdivision parcel lies within the 100-year floodplain. The subdivision of land in or near floodplains involves the potential creation of tomorrow's flood risks. FEMA requires that all new subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, must include within such proposals, Base Flood Elevation data. The lowest floor of a residential building including basement must be above the Base Flood Elevation (BFE).



The applicant responded hereto and provided a Letter of Map Amendment which had been filed with FEMA in July of 2021 for the parcel which removed the property from the Special Flood Hazard Area with respect to the NFIP map. However, the applicant must file a floodplain development permit for construction of the stormwater pond and appurtenant conveyance systems which lie in Flood Zone A.

3. Reference Subdivision Code Section 3.12.C.2: The preliminary construction plans shall include the... proposed extension(s) of water and/or sanitary sewer service to the property. A proposed 8-inch water main in 100 East is shown as extending north to the parcel boundary. No water main in SR-23 or in 1030 North was shown on the plat.
4. Reference Subdivision Code Section 3.12.C.5: The preliminary plat shall include a plan and profile of proposed sanitary, storm water, or other sanitary facilities to comply with regulations established by Mendon City, with grades and pipe size indicated. A “plan and profile” of the proposed stormwater system was not provided in the preliminary plat submittal package.
5. Reference Subdivision Code Section 3.12.C.10 & 11: Drainage plan(s) showing water flow direction, inlets, outlets, catch basins, waterways, culverts, detention basins, outlets to off-site facilities, and off-site drainage facilities planned to accommodate the project drainage located and sized along with necessary drainage easements; and, include any written agreements with adjacent property owners, irrigation companies, Cache County, etc., regarding conveyance systems or other matters pertinent to approval. The stormwater retention/detention basin discharge receiving body, or such conveyance systems downstream of the stormwater retention/detention basin, and property owners, were not identified nor addressed in the drainage plan and supporting documentation.
6. Reference Subdivision Code Section 3.12.C.13: The preliminary construction plans shall include the...Preliminary Evaluation of Impact Report. The Preliminary Evaluation of Impact Report was not included in the preliminary plat submittal package. The Preliminary Evaluation of Impact Report (PEIR) addresses the impacts the proposed development will have on the existing and future infrastructure including water, storm drainage, roadways, power, and telecom. The report should also address impacts to traffic, emergency assistance, schools, etc.

Regarding the preliminary plat in general:

7. Reference Subdivision Code Section 3.22, “Water and Sewage, Domestic water supply and sewage disposal shall be in accordance with the City Council requirements and be in compliance with the laws and rules of the Utah Department of Environmental Quality and/or Bear River Health Department. Mendon City’s potable water system has the capacity to provide culinary water service to the subdivision. Mendon City has the water rights available to service the subdivision. Therefore, no water right exactions will be required of the applicant as the city has sufficient water rights under the projected growth rates to accommodate the subdivision.
8. Reference Subdivision Code Section 7.24. “Stormwater Design and Management”. It is the responsibility of the Subdivider/Developer to install at his own expense a stormwater system to collect, manage and control runoff caused by a Minor or Major Subdivision and/or the redevelopment of three or more contiguous lots within the City of Mendon. The stormwater collection system outside the floodplain appears to be sized to adequately convey stormwater to the proposed retention/detention basin. Additionally, the proposed stormwater management system consists of no swales fronting the residential lots as the applicant was informed that a curb and gutter system leads to a more “predictable” function for septic-leach fields.
9. Reference Subdivision Code Section 7.18, “Secondary Water Supply”. All secondary water must be delivered to the subdivision, and it is the responsibility of the Subdivider to install, at their own expense, secondary water mains and metered service laterals to each lot within the

subdivision. Additionally, the Subdivider will install the necessary additional pipelines from the subdivision to the nearest existing secondary water line in accordance with Mendon City Standards and Specifications, where required by Mendon City. The applicant is working with the city in this regard.

10. Reference Subdivision Code Section 5.02, "Streets". Streets shall bear a logical relationship to topography and to location of existing, or platted, streets on adjacent properties. Proposed accesses from SR-23 to the subdivision via 900 North and 1030 North have been reviewed by UDOT but clarification of the same with UDOT's Dave Alger, Region One Permit Engineer regarding Mendon City's block-grid layout and intersection spacing is still pending. Mr. Alger has indicated that "it appears the intersection of 1030 North would likely warrant a left turn lane", and that, "it is debatable if the 1030 North intersection will be granted or not until conversations are held with Mendon City to help determine their future General Plan as that roadway is not listed on their plan at this time." It is understood that UDOT is not likely to give definitive direction on the access(es) until the city has approved a preliminary plat and the applicant has submitted a formal request with the preliminarily approved plat.

11. Reference Section 11.10.A of the Zoning Code, "Single Family Residential Zone R-1". Minimum lot size of five-eighths ($5/8 = .625$) acres. Mendon City does allow a modification to the...block system by allowing a minimum lot size of five-eighths ($5/8 = .625$ acres) with a minimum lot width of one hundred and ten (110) feet with the longitudinal axis still running East to West. Therefore, the proposed subdivision lots meet the 5/8-acre minimum lot size and 110-foot front footage requirements. The "knuckles" at the north and south ends of 75 West are not in conflict with the city code.

12. Section 11.10.A of the Zoning Code, "Single Family Residential Zone R-1". To the extent possible, all future development under this zoning designation conform to the original block/grid system on which Mendon was originally surveyed, laid out and established with residential lots being a standard size of one and one-quarter (1.25) acres (165 feet by 330 feet) with the longitudinal axis running East to West and eight (8) lots on a ten (10) acre block. Much discussion has been had regarding the overall subdivision layout. Section 5.06 of the Subdivision Code indicates that, "Blocks for residential use shall be in accordance with the Mendon City General Plan and are subject to review by the Mendon P&Z Commission. Mendon City does allow a modification to the block-grid system by allowing a minimum lot size of five-eighths ($5/8 = .625$ acres) with a minimum lot width of one hundred and ten (110) feet with the longitudinal axis still running East to West and no more than fourteen (14) lots/dwellings per ten (10) acre block. Section 11.10 also states that, "in order to maintain the residential density of Mendon proper, the Mendon City street grid, and to promote a mixture of lot sizes, no more than fourteen (14) dwellings are allowed per any given ten (10) contiguous acres in the R-1 zone, less roads, regardless of minimum lot size." Currently, the application shows four blocks having a dwelling density greater than fourteen (14) dwellings per ten (10) contiguous acres, less roads.

13. Section 11.24.D of the Zoning Code, "Responsibility for Construction". It is the responsibility of the person developing any parcel of land that does not have direct access to a paved city street to extend a new street the full length and width to the new development for a minor or major subdivision and two thirds the width for a single lot or double lot development. This policy is in place for residential, commercial, or light industrial development within Mendon City. Additionally, Additionally, Section 11.24 states that, "it is the general intent of Mendon City that all new street rights-of-way shall be a minimum width of ninety-nine (99) feet with a twenty-four (24) feet wide asphalt drive strip to allow for future utilities and infrastructure including

stormwater, sewer, irrigation improvements.” The width of 100 East Street is proposed at less than 24 feet of asphalt pavement.

14. Zoning Code Section 3.22, “Water and Sewage”: A sewer stub-out shall be installed at the street-facing side of all new structures or as required by the City official. Sewer stubs were not shown or addressed on the preliminary plat.
15. Subdivision Code Section 3.12.F.1, “Standards for Approval of Preliminary Plats.” All areas of the proposed subdivision which may involve soil or topographical conditions presenting hazards, or required special precautions, have been identified by the Subdivider. The West Cache fault line traverses the northeast corner of the property.
16. All other requirements appear to be met.

Conclusions:

Based upon the foregoing findings of fact, the application could be approved and would meet all applicable requirements if the following conditions are required for approval:

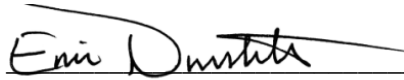
Conditions of Approval:

1. The applicant must file a floodplain development permit for construction of the stormwater pond and appurtenant conveyance systems which lie in Flood Zone A. (See FOF #2)
2. An 8-inch water main in SR-23 (100 West) extending to the north line of the property boundary and a waterline connection therefrom into the subdivision in 1030 North Street must be shown on the preliminary construction plans. (See FOF #3)
3. The preliminary plat “plan and profile” of the proposed stormwater system must be submitted later, in conjunction with the construction plans, following approval of the preliminary plat. (See FOF #4)
4. The stormwater retention/detention basin discharge receiving body, or such conveyance systems downstream of the stormwater retention/detention basin, and property must be identified and addressed in the drainage plan in conjunction with its supporting documentation. Written agreements regarding the downstream stormwater conveyance system must be negotiated, secured, and included with the preliminary plat submittal. (See FOF #5)
5. The applicant must submit a Preliminary Evaluation of Impact Report to address the impacts identified above and include and address the concerns expressed by Matt Phillips, Cache County Engineer, regarding 100 East, and the concerns and limitations expressed by Joanie Iverson, Postmaster, during the September 14, 2023, public hearing. (See FOF #6)
6. As a portion of the stormwater collection system is in the 100-year floodplain as well as the retention/detention basin, the stormwater management system design must be planned, designed, and permitted accordingly. (See FOF #8)
7. Pressurized irrigation water must be provided to each lot and water shares for irrigation are being provided and/or secured for the same by the applicant. (See FOF #9)

8. The applicant must comply with any direction or requirements of UDOT related to the access to SR-23. (See FOF #10)
9. The preliminary plat must be configured to show no more than fourteen (14) dwellings per ten (10) contiguous acres, less roads. (See FOF #12)
10. 100 East Street must be constructed with 24-feet of asphalt pavement (full width). (See FOF #13)
11. Sewer stubs or their requirement must be added to the preliminary plat's notes and specifications section. (See FOF #14)
12. For reference, the West Cache fault line should be shown and identified on the preliminary plat. (See FOF #15)

If you have any questions or require additional information, please contact me at (435) 227-0333 or via email at edursteler@forsgren.com.

Sincerely,
Forsgren Associates, Inc.



Eric E. Dursteler, P.E., C.F.M.
Contract City Engineer

CC: Kirk Taylor, Public Works Director
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