WRB Consulting Services PO Box 1117 Salem City, Utah 84653 bruceward007@live.com

Memo:

Date: 4-26-2019
To: Weber County

Subject: Halcyon Lakes Estates Subdivision - Response to Review Comments

Each of the review comments is contained herein. The response to each comment is listed below the reviewer's comment, indicated with an "a" and is in blue text.

Project: Halcyon Lake Estates Subdivision

User: Gary Myers

Department: Weber County Engineering Division

Created: 2019-04-17 17:40:04 Modified:2019-04-17 17:40:04

Notes

I have had a chance to review the plan(s) and have the following comment(s): **Written responses to the following comments are required.**

- 1) Provide documentation from the irrigation companies that the ditches shown to be abandoned can actually be abandoned and filled in as shown in the plans.
 - a) Hooper Irrigation is finalizing agreements with developer on offsite improvements and will provide documentation on ditches once that is finalized.
- 2) Provide additional detail on both the inlet and outlet boxes for the lake.
 - a) This information will be provided with the final construction drawings. Final design of inlet and outlet structures have not been completed. Once we have the geotechnical report, and the developer has given a notice to proceed with Phase 2, final design will begin.
- 3) Provide additional elevation information on the lake and the surrounding impoundments on it.
 - a) The lake is planned to be fully below natural grade with over 3 to 4 feet of freeboard. With this in mind, the lake will not have to meet the same Dam Safety Regulations generally associated with an above ground impoundments. The Lake will also be designed with an overflow and level control. Final lake design will be completed with final construction drawings. Once we have the geotechnical report, and the developer has given a notice to proceed with Phase 2, final design will begin.
- 4) Show a PUE on each of the lots for the utilities to be installed in.
 - a) A typical lot PUE/setback detail has been added. See Sheet 1.
- 5) Identify which roads are intended to be public roads and which roads will be private.
 - a) 1600 South has been removed. This is now shown as a 35' PUE, See Sheet 1 & 2.
- 6) Show the utilities that will be installed closer to the edge of the asphalt rather than in the middle of the road, with associated offsets as per county standards. Try to not install them in the middle of the roadway.
 - a) See Street Cross-sections on Sheet 2. The utilities have been added.
- 7) Provide information on how the storm drain runoff will be collected, and dealt with. The plans showed a retention pond, please provide information and storm drain calcs to show that this will function properly.
 - a) The Developer intends to implement LID storm drainage features to minimize or eliminate any off-site drainage. The retention basin will provide additional on-site retention. The basin will also be designed with an overflow to the existing ditch on 1800 south. Storm Drainage calculations will be provided with Final Construction Drawings.
- 8) Provide a will serve letter from the secondary irrigation provider. Also provide documentation that they have seen and approved the plans as they are shown.

- a) Hooper Irrigation is finalizing agreements with developer on offsite improvements and will provide will server letter once agreement has been finalized.
- 9) Show the roadway tapers on 1800 South.
 - a) See sheet 1. Road Transitions have been added. Additional design & construction information will be provided on the final construction drawings.
- 10) A gravel road will be sufficient for 1600 South, but we will need to see a roadway design to determine the correct thickness of untreated base course.
 - a) 1600 South is no longer an access road. The developer will be providing a 35' PUE for the sewer and water line. The geotechnical report will also contain a pavement design for all proposed and improved roads.
- 11) On public roads, we allow 32-36' of asphalt depending on the ROW width.
 - a) 4075 West, 4065 West, and 1700 South are shown to be 36 feet of asphalt. Ski Lake Drive is proposed to be a private road and will have 36 foot asphalt section. 1800 South is shown to be 49 feet of asphalt. See cross-sections on Sheet 2.
- 12) Indicate a direction that the roadway sections are shown so that we know what side of the road the curb and gutter is on.
 - a) Cross-section has been labeled. See Sheet 2.
- 13) There is no roadway section for 1700 South. Either provide one or add it to one of the existing roadway sections that is applicable.
 - a) The Cross-section shown for 4075 West will be the same for 1700 South. The label now shows both street names. See Sheet 2.
- 14) There will need to be some discussion about accommodating future development to the north and east of this development. A roadway stub may be necessary to allow for this.
 - a) The developer is having these discussions with the county. If the decision is made to add the road it will be added.

I have tried to address all items of concern from the Engineering Department. However, this review does not forego other items of concern that may come to this department's attention during additional reviews or during construction of improvements. If you have any comments or questions concerning this review, feel free to contact me.

Project: Halcyon Lake Estates Subdivision

User: Steve Burton

Department: Weber County Planning Division

Created: 2019-04-17 16:59:39 Modified:2019-04-17 16:59:39

Notes

I have made the following comments after reviewing the preliminary plan. The comments below must be addressed before the application will be considered for final approval. Please also see the attached redline comments for additional clarification on my comments.

1. The streets in this subdivision must be public. See below:

Streets in year round subdivisions shall be dedicated to the county as public streets except that private streets improved to county public street standards may be permitted in planned residential unit developments or condominiums. Mountain land subdivisions in high mountain areas of the county for seasonal recreation and summer homes shall have private streets built to county private street standards for such subdivisions except that the county may require public dedication for major or loop road access purposes. LUC 106-2-2(a).

- a) The developer is asking the County to consider allowing Ski Lake Drive to be private, based on the nature of the subdivision and the fact that there will be a private lake. We will make the revisions as directed.
- 2. This cul-de-sac will need to be a continuation of a road. See below:

Minor terminal streets (cul-de-sacs) proposed in the subdivision of flat land where topography presents no barriers to development, shall have a maximum length of **650** feet to the beginning of the turnaround and may serve a maximum of 14 lots. Minor terminal streets (cul-de-sacs) proposed in the subdivision of foothill or mountainous lands where topography dictates or limits the options in road design to a considerable extent, the planning commission will establish a maximum length based upon each individual situation. As a guide for design, a maximum length of 2,000 feet to the beginning of the turnaround is established. Each cul-de-sac shall be terminated by a turnaround of not less than 100 feet diameter in subdivisions below elevation 4,900 feet and of not less than 110 feet diameter in subdivisions above elevation 4,900 feet. If surface water drainage is into the turnaround, due to the grade of the street, if necessary, catch basins and drainage easements shall be provided. LUC 106-2-2(d).

- a) The developer is asking the County to consider allowing Ski Lake Drive to be private and have a longer Cul-de-sac length, based on the nature of the subdivision and the fact that there will be a private lake. We will make the revisions as directed.
- 3. What is left of the remainder parcel?

When a division of property leaves a remaining area of 5.00 acres or greater, the remaining parcel boundary and area, using record or measured information will be shown, on the subdivision plat with the note: "Remaining Agricultural Parcel, Not Approved For Development." The remaining parcel boundary need not be labeled with bearings or distances nor is a description of the remainder parcel required. Remaining parcels are not part of the subdivision. LUC 106-1-8(c)(3).

- a) When recorded all remaining parcels will be 5 or more acres. The note will be included on the final plat.
- 4. What can be done to make more road connectivity to these adjacent properties? Here is what the subdivision ordinance requires for connectivity.

LUC106-2-1(a). The arrangement of streets in new subdivisions shall make provision for the continuation of the existing streets in adjoining areas (or their proper protection where adjoining land is not subdivided) insofar as such may be deemed necessary by the planning commission for public requirements. The street arrangement must be such as to cause no unnecessary hardship to owners of adjoining property when they plat their own land and seek to provide for convenient access to it.

a) The developer is asking the County to consider allowing Ski Lake Drive to be private and not require roads to be extended to neighboring parcels other than as shown. We will make revisions as directed.

- 5. Please provide a table on the subdivision plat showing the area and width of each lot within the overall subdivision boundary, the average area and width of all lots within the overall subdivision boundary, and the average area and width of all lots within each zone in the subdivision. LUC 106-2-4(b)(5)e.
 - a) The table has been added. See Sheet 1.
- 6. Please include a subtitle on the plat that reads "A Lot-Averaged Subdivision" LUC LUC 106-2-4(b)(5)f.
 - a) This has been added. See Title on Sheet 1.
- 7. A note shall be placed on the final subdivision plat that reads "for each zone in this subdivision, the average area and average width of lots within the zone equal or exceed the minimum area and minimum width allowed in the zone. An amendment to any part of this subdivision shall comply with Section 106-2-4(b) of the Weber County Code." 106-2-4(b)(5)g.
 - a) This note will be included on the final plat.
- 8. Prior to final subdivision approval, this plat will need to meet all of the requirements listed in LUC 106-1-8 (final plat requirements).
 - a) The requirements of LUC 106-1-8 will be met with the Final Plat Submittal.

Please call or email me with any questions about this review.

Steve Burton 801-399-8766 sburton@webercountyutah.gov Project: Halcyon Lake Estates Subdivision

User: David Reed

Department: Fire Impact Review Team, Special Events Reviewing Team, Weber Fire District

Created: 2019-04-11 09:46:55 Modified: 2019-04-17 11:19:15

Approved: Yes

Notes

Date: April 17, 2019

Project Name: Halcyon Lake Estates Subdivision Project Address: 4100 W 1800 S, Taylor, Ut 84401

Contractor/Contact: Tylor Brenchley, (801) 644-3148, tylorbrenchley@gmail.com

Fee(s): \$50.00 plan review, \$328.15 for each house

Fee Notice:

Weber Fire District has various fees associated with plan reviews, and inspections. Please be prepared to make payments at the time when you pick up your approved plans. Impact Fees are due prior to taking out a building permit. Contact our offices at 801-782-3580 to arrange payments.

Status: APPROVED WITH CONDITIONS

A Written Response Is Required. Please address each item.

Items HIGHLIGHTED in yellow are items that must be specifically addressed by the responsible design professional.

BOTH SPECIFIC AND GENERAL COMMENTS MUST BE READ AND ADHEARED TO.

Specific Comments:

Water Supply:

- S1. Water Supply Analysis Required: Prior to any construction being done, a water supply analysis shall be completed and submitted by an engineering firm or a fire protection engineer. This water supply analysis must include:
- a. Building Construction Type
- b. Available Water for fire-fighting purposes
- i. Static Flow Rates
- ii. Residual Flow Rates
- iii. Flowing GPM
- iv. Duration of flowing GPM available.
- c. Statement of conformance/non-conformance to 2012 International Fire Code section 507 and Appendix B as adopted by Weber Fire District (See Resolution 04-2014 at http://weberfiredistrict.com/services/fire-prevention).
- d. If deficiency exists, proposed method to obtain conformance with adopted codes and Resolution 04-2014.
- S2. Fire Flow: Fire flow for the residential subdivision shall be 1000 GPM.
- S3. Fire Hydrant(s): Fire hydrants must be provided as approved on plans. (see IFC 507.5.1). The maximum spacing between hydrants in a residential area is 500 ft.
- S4. All required fire hydrants and water systems shall be installed, approved and fully functional and on, prior to any combustible construction (IFC section 507.1 and 3312).

Fire Detection and Suppression Systems:

S5. Fire Suppression Systems: As per the Utah Fire Code Act, "R" occupancies built in accordance with the International Residential Code may require fire suppression systems if any of the following apply:

R Occupancy Built Under IRC Requirements

Structure is in Urban-Wildland Interface Area May Require Fire Suppression

Public Water Distribution System with Hydrants Does Not Exist May Require Fire Suppression

Single Access Road with Grade Greater Than 10% For More Than 500 Linear Feet May Require Fire Suppression Structure Is Larger Than 10,000 Square Feet (Total Floor Area of All Floor Levels Within Exterior Walls of Dwelling Unit) May Require Fire Suppression

Structure Is Larger Than Double the Average Size of the non-sprinklered Homes in The Subdivision (Total Floor Area of All Floor Levels Within Exterior Walls of Dwelling Unit). May Require Fire Suppression

Fire flow less than 1000 GPM from nearest hydrant. Will Require Fire Suppression

Single access into a subdivision Will Require Fire Suppression

Weber Fire District strongly encourages the builder/owner to provide a fire suppression system to protect the lives and property of the occupants. These systems have been proven to provide effective lifesaving functions. For more information, please contact the Fire Prevention Division at 801-782-3580.

- S6. SEPERATE SUBMITAL NOTICE: Fire suppression systems and fire alarm systems require a separate submittal. A permit shall be applied for before any installation of either fire suppression system or fire alarm system. The permit shall be on the job site and be available for review by any inspector. The APPROVED STAMPED set of plans shall also be on the job site and available for review by any inspector. If there is no permit and/or approved stamped plans on the job site, there will be a Stop Work Order issued until both are on the job site. Submit plans at Weber Fire District, 2023 W. 1300 N. Farr West. (See IFC section 901.2 and 907.1.1).
- S7. Electronic Supervision and Alarms: A flow alarm switch which activates local horn strobes must be provided. At least one interior notification device shall be installed in an approved location.
- S8. Exterior Notification Device: There shall be a weather proof horn/strobe device located on the street side of the building as approved by the Fire Prevention Division (coordinate with fire inspector regarding location). Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. (See IFC 903.4.2)
- S9. The fire protection system shall be tested and working properly before final is scheduled with Fire Marshal's office.
- S10. Sprinkler pipes on exposed walls and ceilings will need to be properly tented with insulation. If there is concern on installation if should be reviewed prior to insulating.

Fire Department Access:

- S11. Provide a temporary address marker at the building site during construction. The address numbers, whether on the building or the sign, shall be legible font. (See IFC 505.1) (See IFC 505.1).
- S12. Fire access roads for this project shall be completed and approved prior to any combustible construction. Temporary roads shall meet the same requirements for height, width, and imposed loads as permanent roads (See IFC section 503.2.3; 3310; and D102.1).
- S13. Fire Access to buildings and facilities: Fire access roads are required for all facilities, buildings, or portions of buildings. Access roads shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route. (See IFC 503.1)
- S14. Flag Lot Access and hydrant(s): Flag lots pose difficulties for the fire department for both access and water supply. As such they shall comply with:
- a. Access: Flag lots must meet the access requirements for "Fire Access via Driveways".
- b. Hydrant(s): Hydrants shall be provided within 600 feet of the home (measured as the fire vehicle would drive- IFC 507.5.1- Exception 1).
- i. Where waterlines capable of supporting a hydrant are available to connect to, a hydrant shall be provided within 600 feet of the building (measured as the fire vehicle would drive).
- ii. In cases where a hydrant cannot be provided due to a lack of supporting waterlines, the owner/developer may propose to provide the home with a residential fire suppression system. The owner/developer shall request this exception in writing. The request is subject to review and approval by the Fire Marshal. (See IFC 507.5.1- Exception $1\ \&\ 2$).
- S15. Fire Access via Driveways: Driveways serving no more than 5 residences shall have a minimum clear width of 16 feet with a minimum of 12 feet of drive-able surface (measured from face of curb to face of curb) and a vertical clearance of 13 foot 6 inches and shall support a 75,000-pound load. Driveways more than 150 feet shall be provided with turn-arounds. Driveways exceeding 200 feet in length and less than 20 feet in width shall be provided with turnouts in addition to turnarounds. (See driveways- 2006 Wildland Urban Interface Code used as a reference for residential driveway requirements exceeding 150 feet in length). Roads and driveways shall also comply with City/County standards as applicable. In cases of differing requirements, contact the Fire Marshal for clarification.

Building Comments:

- S16. There shall be an address on the building or on a sign visible from the street. If the address is on a sign-monument the sign-monument shall meets the requirements of the appropriate city/county planning department. The address numbers, whether on the building or the sign, shall be Arabic font with a minimum of 4" (four inches) in height with a .5" (half inch) stroke and be in contrasting colors from the background. All suites shall have number/letter designation on the doors meeting the same size requirements and contrasting color. (See IFC 505.1) General Comments:
- G1. Fire Access roads to any property shall have a minimum clear width of 20 feet (face of curb to face of curb) and a vertical clearance of 13 foot 6 inches and shall be capable of supporting a 75,000-pound load. Roads that are less than 26 feet in width shall be posted with "NO PARKING FIRE LANE" on both sides of the roadway. Roads more than

26 but less than 32 feet in width shall be posted on one side of the roadway. (Roadways and signage shall comply with appendix D of the 2015 International Fire Code as adopted by Weber Fire District).

G2. Roads shall have a maximum grade of 10% unless specifically approved. Approval requires both the Fire Marshal's approval and Weber County Engineering approval (See IFC section 503.2.7; D103.2; and Weber County ordinances).

G3. Radius on all corners shall be a minimum of 28'-0". Roads and driveways shall also comply with City/County standards as applicable. In cases of differing requirements, contact the Fire Marshal for clarification.

G4. Roads and bridges shall be designed, constructed, and maintained to support an imposed load of 75,000 lbs. (See IFC section D102.1)

G5. All roads shall be designed, constructed, surfaced, and maintained to provide an all-weather driving surface. All weather surface may include road-base material however, the roadway must be maintained open and accessible year-round (See IFC section 503.2.3 and D102.1).

This review was completed using the currently adopted Utah State Fire Code (International Fire Code) and any applicable local resolutions or ordinances.

Every effort has been made to provide a complete and thorough review of these plans. This review DOES NOT relieve the owner, contractor and/or developer from compliance with all applicable codes, and standards.

Any change or revision of this plan will render this review void and will require submittal of the new, or revised, layout for fire department review. If you have any questions, please contact me at 801-782-3580.

Reviewed By: David Reed, Fire Marshal Weber Fire District 801-782-3580

a) The comments contained in the Fire Marshals review will be met. Some of the conditions will be met by the Project Engineer when final design is completed, while others apply to the building of the homes and structures. These will each be addressed appropriately.

MEMO END