

EXHIBT "A"

(No Subject)

9-28-20 Meeting

From: Christina Brinegar (cbrinegar69@yahoo.com)

To: cbrinegar69@yahoo.com

Date: Tuesday, February 16, 2021, 11:50 AM MST

GARRISH- 3:17 WHAT I AM SPEAKING TO IS PROPER NOTICING AND IF IN THE PAPER IT SAID COMING BEFORE THE PLANNING COMMISSION IS A CHANGE IN LOT SIZE AND RECCOM ON PRELIM PLAT... I WOULD SAY WE ARE ON FIRM GROUND... BUT SINCE NOTICE ONLY SPOKE IN GENERAL ABOUT WHAT IS BEING PROPOSED HERE IN OUR MOTION I'M NOT SURE WE MET THE INTENT OF WHAT OUR CODE SAYS WE SHOULD DO.

**Agenda Summary**  
**GRAND COUNTY PLANNING COMMISSION**  
**September 28, 2020**

|                       |   |
|-----------------------|---|
| <b>TITLE:</b>         | Creekside PUD Amendment                         |
| <b>FISCAL IMPACT:</b> | N/A   |
| <b>PRESENTER(S):</b>  | Mila Dunbar-Irwin, Planning and Zoning Director |

**Prepared By:**  
**MILA DUNBAR-IRWIN**  
**GRAND COUNTY**  
**PLANNING & ZONING**  
**DIRECTOR**

**FOR OFFICE USE ONLY:**

**Attorney Review:**

N/A

**STATED MOTION :**

I move to forward a favorable recommendation to the County Commission to change the minimum lot size for Phase II of the Creekside Planned Unit Development located at 3373 S Creekside Lane, parcel number 02-0CRK-0008 to 0.3 acres.

**STAFF RECOMMENDATION: RECOMMEND FOR APPROVAL**

Creekside Estates PUD allows for 6 lots to be developed in Phase II of the development. Under current PUD rules, these lots can be smaller than the underlying zone allows, as long as there is no increase in underlying density. The applicant has proposed 6 lots on 6.48 acres, which is in keeping with current PUD rules. The original plat from 1997 stipulates minimum lot sizes of 1 acre, which the applicant would like to change, and which was determined without forethought of the plan for Phase II. Staff fully supports this alteration, and supports clustered development in general, and does not see any reason not to allow the applicant to develop according to current PUD standards as a means to further preserve open space and agricultural land in Grand County.

**BACKGROUND:**

Creekside Estates PUD was originally approved for 12 lots in 1997. Six were platted at that time with sizes of 1.0 acres. This amendment changes the minimum lot size for Phase II and does not alter the allowed density or any other dimensional restrictions on the PUD.

**ATTACHMENT(S):**

- Staff Report
- Applicant Statement
- Original Creekside Estates Plat — NOT PROVIDED
- Proposed Preliminary Plat — ? — NOT PROVIDED
- Proposed CCRs — NOT PROVIDED
- Drainage Report



# STAFF REPORT

**DATE:** Monday, September 28, 2020  
**TO:** Grand County Planning Commission  
**SUBJECT:** Creekside Estates PUD Amendment

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**PROPERTY OWNER:** Larry White  
**PROP. OWNER REP:** N/A  
**ENGINEER:** SET  
**PROPERTY ADDRESS:** 3373 Creekside Lane  
**SIZE OF PROPERTY:** 6.48 acres  
**EXISTING ZONE:** PUD  
**EXISTING LAND USE:** Residential  
**ADJACENT ZONING AND LAND USE(S):** Rural Residential, Residential and Agricultural

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**APPLICATION TYPE**  
PUD Amendment

**STAFF RECOMMENDATION:** Approve  
*Comments (optional):*

## APPLICATION PROCEDURE

*Decision Type:* Administrative

*Public Notices:* Public Meeting at:

Planning Commission  
☐ County Council

X Public Hearing at:

X Planning Commission  
X County Council

*Attachments:*

☒ Preliminary Plat  
☒ Original Plat

☒ Drainage Report  
☐ Other: Click or tap here to enter text.

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## SUMMARY OF REQUEST

Applicant would like to change the minimum lot size of Phase II of the Creekside PUD from 1.0 acres to 0.3 acres. Creekside Estates PUD was approved in July of 1997 for a total of 12 lots. The first phase was platted as six, 1 acre lots, and this phase has been left as "Tract A" until this year. The original plat stipulates that the applicant has a minimum lot size of 1 acre, which he states he chose for no real reason other than to have something to put in the table. Current PUD rules allow for a developer to alter the minimum lot size in a PUD as long as the underlying allowed density does not change as a mechanism to cluster development and preserve open space. Staff is supportive of clustered development. The applicant has a DRT-approved Preliminary Plat with 0.3 acre minimum lot sizes, which preserves agricultural land and open space. The allowed density of 6 lots will not change with this amendment. The current zoning is RR, which allows for 1 acre parcels - the current stipulations do not take advantage of the PUD and only allow for lots the size of the underlying zone.

## SITE IMPROVEMENTS / ADDITIONS / CHANGES

None required.

## CONSIDERATIONS FOR APPROVAL, DENIAL, AND/OR POSTPONEMENT

A PUD Amendment is considered a Zoning Map Amendment, therefore, the following respond to Section 9.2, Text and Zoning Map Amendments.

**Yes, the applicant has been through DRT review with the proposed preliminary plat and has addressed all issues.**

***K Does the proposed change constitute "spot zoning"?***

**No, the applicant has an existing PUD applied to the property.**

#### **COMPATABILITY WITH GENERAL PLAN**

**This PUD amendment is in conformance with the General Plan.**

#### **COMPATABILITY WITH LAND USE CODE (ZONING)**

**The subdivision as planned is supported by the Planned Unit Development provisions in the LUC and is a previously approved development.**

#### **LAND USE CODE REFERENCE SECTIONS**

**Article 4.4 PUDs, Article 7, Subdivision Standards, Article 9.4 Preliminary Plats**

#### **PROPERTY HISTORY**

**Creekside Estates was a previously approved 12 lot PUD, approved in 1997. The first six lots were platted at that time, and Tract A was left unplatted with six lots allowed. There is currently a residence and some outbuildings on the property.**



Applicant: Larry White

3373 South Creekside Lane

Moab, Utah 84532

435-260-9563

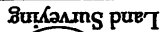
9.17.20

To: Grand County Planning and Zoning

**Applicant Statement:**

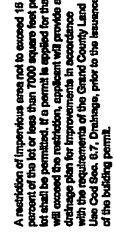
Creekside Manor Phase III of Creekside Estates is zoned RRI. Per plat notes, the one acre minimum was part of Phase I, established in 1996. The new Creekside Manor PUD (Phase II) allows for multiple size lots under the land use code. The revised lot layouts reflect a more efficient use of the land and placement of homes, while creating more open space.

1. To my knowledge, the intent of P&Z in 1996 was not to hold me to the one-acre lot minimum, but was meant to be used as a guide to the RRI zoning.
2. No, the area has remained rural residential.
3. Lots under one-acre are more desirable to today's home owner.
4. Yes, the proposal provides building lots that also support open space.
5. Yes, the proposal conforms with land use code (PUD).
6. N/A
7. Yes, the proposal meets underlying zoning per land use code (PUD).
8. Yes, the proposal is for single-family homes and provides lots that support open space.
9. Yes, the proposed use is for single-family homes.
10. Yes, all utilities and services are available.



DATE: 3/13/13  
JOB NUMBER: 104-13

AMENDING TRACT A, CREEKSIDE ESTATES  
LOCATED IN THE SE QUARTER OF  
SECTION 22, T26S, R22E, SLB&M



## VICINITY MAP

## **SURVEYOR'S CERTIFICATION**

I, Lucas Bidez, certify that I am a Professional Land Surveyor as prescribed under the laws of the State of Utah and that I hold license no. 7540004. I further certify that I have personally supervised the survey of the property described below, and the findings of the survey are as shown.

**Lucas Blake**  
**License No. 7540504**

**DECLASSIFIED AUTHORITY:**

beginning at the South 1/16 corner of Section 22 and 23, Township 26 South, Range 22 East, also known as the line and proceeding thence with the section line South 200 feet; then West 200 feet to the southeast corner of the Greenleaf Estate; thence with the Greenleaf Estate line S 1/4 E 1/4 Sec. 22, T. 26 S., R. 22 E., 174 feet to the corner of the Greenleaf Estate; then S 1/4 E 1/4 Sec. 22, T. 26 S., R. 22 E., 639 feet to the corner of the Greenleaf Estate; then S 1/4 E 1/4 Sec. 22, T. 26 S., R. 22 E., 245 feet to the corner of the Greenleaf Estate; then S 1/4 E 1/4 Sec. 22, T. 26 S., R. 22 E., 631 feet South 07°20'00" West 24.5 feet to the point of beginning.

| AREA (AC)    | LAND USE      | UNITS    |
|--------------|---------------|----------|
| 1.79 ACRES   | ROADWAY       |          |
| 4.89 ACRES   | SINGLE FAMILY | 6        |
| <b>TOTAL</b> |               | <b>6</b> |

**PROPOSED SETBACKS AS SHOWN:**

RESIDENTIAL - FRONT 20'. SIDE 10'. REAR 15'.

**EASEMENTS:**

**10' UTILITY EASEMENT ALONG RIGHTS-OF-WAY AND LOT LINES**

NEEDLEMAN M. 00,70.00 \$

THE BASIS OF BEARING IS S 00°04'00" W BETWEEN THE SE CORNER AND THE  
S1/4 E CORNER OF SECTION 22, TOWNSHIP 28 SOUTH, RANGE 22 EAST, SAL  
LAKE BASE AND MERIDIAN.

COORDINATE SYSTEM: UTAH STATE PLANE CENTRAL (NAD83, US SURVEY FEET)

THE INTENT OF THE SURVEY IS TO SUBDIVIDE LAND.

LOCATED IN THE SE QUARTER OF  
SECTION 22, T26S, R22E, SLB&M



2/28

E 441942 B 0506 P 498-  
Date 25-JUL-1997 15:45pm 304  
Fees 27.00 Charge  
MERLENE MOSHER, Recorder  
Filed By MH  
For ATTORNEYS TITLE GUARANTY FUND  
GRAND COUNTY CORPORATION

**RESTRICTIVE COVENANTS**

**FOR**

**CREEKSIDE ESTATES SUBDIVISION**

**THE WITHIN INDENTURE OF RESTRICTIVE COVENANTS** dated as of the 22 day of July, 1997, is made by CREEKSIDE DEVELOPERS, LLC., a Utah limited liability company (the "Declarant"), sole owner of the hereinafter referred to real property and for the benefit and protection of itself and all future owners of said real property, or any part thereof.

**WHEREAS**, a certain tract of land in Grand County, State of Utah, has been subdivided into six (6) residential lots ("Lots") and streets by Declarant, and is known and designated as CREEKSIDE ESTATES SUBDIVISION, Lot 1 through 6 (the "Subdivision"), according to the official plat thereof on file in the office of the Grand Clerk and Recorder, State of Utah, as Entry No. 441940 in Book 506 at Page 495; and

**WHEREAS**, the Subdivision contains private streets (hereinafter "Common Facilities") that are shown on the official plat and that are to be held in common for the welfare of the Subdivision, which are not or cannot be satisfactorily maintained by Grand County or another public agency; and

**WHEREAS**, Grand County requires the establishment and creation of a mandatory homeowners' association to assume and be responsible for the continuous and perpetual operation, maintenance and supervision of such Common Facilities. The Association (as herein defined) shall be responsible for the continuous and perpetual operation, maintenance and/or supervision of the Common Facilities.

**WITNESSETH, THEREFORE**, that in consideration of the premises and for the purpose of restricting the use of each of the Lots in the Creekside Estates Subdivision, for the protection and benefit of all of the of the other Lots in the said Subdivision and the owners of Lots therein, it is declared, understood and agreed as follows:

1. **Association.** Creekside Estates Homeowners Association, a Utah non-profit corporation (the "Association") has been established and created to assume and be responsible for the continuous and perpetual operation, maintenance and supervision of the Common Facilities. The Association shall adopt bylaws to ensure the continuous and perpetual use, operation, maintenance, and/or supervision of all Common Facilities that are the responsibility of the Association and shall establish a reserve fund for such purposes. The owners of the Lots automatically become Members of the Association.

2. **Architectural Design Review Board.** The Architectural Design Review Board (the "ARDB"), made up initially of the Declarant, shall have the voting power to approve or not approve architectural design issues until four (4) Lots in the Subdivision shall have been sold and conveyed by Declarant. Thereafter the ARDB shall consist of three (3) Members and be elected by the Members of the Association, except that Declarant shall constitute one (1) of the three (3) Members of the ARDB so long as it shall own any Lot in the Subdivision.
3. **Limitations on Development.** Each and every Lot platted and designated as such in the plat of said Subdivision shall be held, owned and considered as a separated residential tract and no structure shall be erected, altered, placed or permitted to remain on any such Lot other than one (1) detached single-family dwelling and an attached garage.
4. **Size Limitations.** Every detached single-family dwelling erected on any Lot, included in the Subdivision, shall have interior floor area of not less than fifteen hundred (1500) square feet, nor more than forty-five hundred (4500) square feet, excluding porches or a garage. Upper floor decks or porches must have ARDB approval.
5. **Application of Land Use Regulations.** All buildings placed and used upon any Lot in the said Subdivision shall be so placed and used in accordance with the provisions of the Land Use Ordinances and Building Codes of Grand County, State of Utah, unless the provisions hereof are more restrictive, in which case the more restrictive provision shall apply.
6. **Exterior Architectural Control Procedures.** A home with Southwestern style design, constructed with materials such as stucco, brick, or stucco and brick; or stucco and masonry (rock, etc.) exteriors with wood accents are encouraged. Approval shall be based on natural/neutral color schemes that blend with and/or complement the desert and red rock landscape. The following guidelines shall apply to all Lots:
  - a. **Exteriors.** Exterior surfaces shall be limited to brick, stone, stucco, and natural wood siding. Siding of aluminum, vinyl, pressed wood, or other embossed materials shall not be permitted. All construction shall be comprised of new materials, except that used brick may be used with prior written approval of the ARDB. The use of aluminum, plastic or copper for gutters, down spouts, soffits, and fascia is permitted.
  - b. **Roof Design.** Pitched roofs shall be limited to a minimum pitch of 3/12 and a maximum pitch of 9/12. Roof pitches in excess of 9/12 must be approved in writing by the ARDB. Pitched roofs shall be covered with clay tile, wood shake, or architectural grade or better asphalt shingles. Standing ribbed metal

roofing may be utilized if a neutral, flat or non- reflective finish is utilized and same is approved by the ARDB .

Flat roofs are permitted if constructed with a perimeter parapet wall having a minimum height of eight (8) inches and a maximum height of forty-eight (48) inches.

- c. **Garages.** Each residence shall have attached thereto an enclosed garage for not fewer than two (2) cars and not more than three (3) cars.
- d. **Fences.** Fences shall be constructed to coordinate with the general architectural character of the Subdivision. The materials used shall be the same as or similar to those utilized in the construction of the residence and should complement the architectural style of the home. The height of any fence shall be in conformity with Grand County ordinances. Chain link or other varieties of wire fences shall not be permitted within the Subdivision. The ARDB must approve any fence prior to construction.
- e. **Air Conditioning.** Air conditioning may be central refrigerated or evaporative in nature. Evaporative cooling units are to be mounted on the rear roof areas of pitched roofs as far below the ridge of the roof as possible. The use of low profile cooling units is encouraged.
- f. **Landscaping.** Landscaping, including xeriscaping is encouraged. Use of non-indigenous landscaping materials requires written approval of the ARDB.
- g. **Architectural Control.** No building or structure, including swimming pool or spa tub, shall be erected, placed, or altered on any Lot until [two (2) sets of construction plans and specifications (1/4 inch: 1-foot scale) with an attached plot plan (1/8 inch: 1 foot scale), showing the location of the residence and other improvements, including proposed landscaping, shall be submitted and considered by the ARDB as to quality of workmanship and materials, harmony of exterior design with the intent of these Covenants, existing structures, and location with respect to topography and finished grade elevation. An approval letter shall be issued to the Lot owner together with one set of the construction plans signed by the ARDB. the second set of construction plans shall be held by the ARDB until completion of construction and occupancy, at which time the plans shall be returned to the Lot owner.
- h. **Board.** The ARDB's approval or disapproval required in this Restrictive Covenants shall be in writing. In the event that the ARDB fails to approve

or disapprove plans and specifications within 30 days after plans and specifications have been submitted to it, approval shall not be required and related covenants shall be deemed to have been fully met.

7. **Time to Complete Construction.** All construction upon any Lot in the said Subdivision shall be completed within a period of twelve months from date the work is first started.
8. **Animals.** No persons shall keep, maintain or permit at any place within the limits of the said Subdivision any animals except two (2) dogs, cats or small non-exotic household pets, provided they are not kept for breeding, or maintained for any commercial purpose and are restricted to the Owner's Lot, or on leash under the handler's control.
9. **Nuisances: Parking.** No noxious or offensive activity shall be carried on upon any Lot, nor shall anything be done thereon which may be or may become an annoyance or nuisance to the neighborhood. No clothes drying or storage of any articles which are unsightly in the opinion of the ARDB will be permitted on property, unless in enclosed or screened areas designated for such purpose. No automobiles, trailers, boats, or other vehicles are to be stored on streets or on the front or side of Lots unless they are in running condition, properly licensed and are being regularly used. See Section 12 for additional restrictions on parking and storage.
10. **Prohibition Against Modular and Mobile Homes.** No modular homes or mobile homes are permitted to be placed on any Lot.
11. **Signs.** No signs, billboards, or advertising structures may be erected or displayed on any Lots in the Subdivision, or parts or portions of the Lots, except that a single sign, not more than three feet by five feet in size, advertising a specific Lot or house for sale or rent, may be displayed on the Lot affected.
12. **Prohibition Against Dumping: Commercial Vehicles.** No trash, ashes or any other refuse may be thrown or dumped on any Lot hereinbefore described, or any part or portion thereof, and no person shall keep or maintain any commercial truck over one ton in size or other large vehicle or implement of heavy equipment in the Subdivision. Exception is made for one (1) currently licensed motor home or camper, provided the same shall be screened from view from other Lots in the Subdivision and parked behind the residential structure on the Lot. No such camper or motor home shall be occupied while on a Lot except for the purpose of parking the same.
13. **Binding Effect: Amendment.** All covenants and restrictions herein stated and set forth shall run with the land and shall be binding on all of the parties and persons

claiming any interest in the Lots, or any part thereof, until twenty years from the date hereof, and then shall be automatically extended for successive periods of ten (10) years, unless, by written approval of 66 2/3% of the Members of the Association, it is agreed at any time to change these Covenants, in whole or in part; provided, however amendment of any portion of the Protective Covenants pertaining to the use, operation, maintenance and/or supervision of any Common Facilities that are the responsibility of the Association shall be prohibited without the prior written consent of the Grand County, Utah.

14. **Setbacks.** No building or appurtenant site improvement shall be located on any Lot nearer than twenty (20) feet to any side or rear property line of a Lot and not nearer than thirty (30) feet from front property line of a Lot.
15. **Prohibition Against Further Subdivision.** No Lot can be further subdivided, and no more than one (1) residence shall be allowed on any Lot.
16. **Limitation on Fences, Etc.** No fence, wall, hedge, tree or shrub planting which obstructs sight lines at elevations between two and six feet above the roadways shall be placed or permitted to remain on any Lot.
17. **Lighting.** No sodium vapor lights, floodlights or similar intrusive shall be permitted. All lighting shall be indirect.
18. **Road Maintenance.** Each of the Lots shall be responsible for a one-seventh (1/7) share of the maintenance and repair of private roads servicing the Subdivision. The owner of Tract B, Larry White Estates shall be responsible for the remaining one-seventh (1/7). In the event Tract B, Larry White Estates shall be subdivided in the future, responsibility shall be reallocated pro-rata based on the total number of properties utilizing the road.
19. **Maintenance of Native Trees.** No native tree situate on any Lot shall be removed without the approval of the ARDB being first obtained. The foregoing shall not be construed to prohibit the removal of dead or pruning of live trees as dictated by good arborist practices.
20. **Drainage.** No alteration shall be made to the drainage ditch situated on Lots 2, 3, 4 and 5. The same shall be cleaned and maintained by the Owners of those respective Lots so as to permit the unobstructed flow of natural drainage water therein.
21. **Default and Remedies.** If the parties now claiming any interest in the Lots, or any of them, or their heirs, successors, grantees, personal representatives, or assigns, shall violate or attempt to violate any of the covenants and restrictions herein contained, it shall be lawful for the Association or any other person or persons owning any other

Lot in the Subdivision to prosecute proceedings at law or in equity against the person, persons, or entities so violating or attempting to violate any such covenants or covenant and/or restrictions or restriction, and to prevent the violating owner from so doing and to recover damages for such violation or violations. Attorney fees shall be awarded to the prevailing party in any such proceeding.

22. Indemnity. The Declarant, the Association, owner(s) of any Lot or Lots within Creekside Estates and any successive buyer(s) shall hold Grand County harmless from any and all costs, expenses, suits, demands, liabilities or damages, including attorney's fees and costs of suit, incurred or resulting from Grand County's performance of the aforementioned operation, maintenance or supervision responsibilities of the Association due to the Association's failure to perform said responsibilities.
23. East Bench Road Public Right-Of-Way Dedication. That portion of East Bench Road that is internal to Creekside Estates may be dedicated as a "public" right-of-way at such time as each of the following conditions are met:
- a. East Bench Road reaches the subject property from the north;
  - b. "Tract A" shall be further subdivided;
  - c. Grand County Council accepts the dedication of that portion of East Bench Road that is internal to Creekside Estates as a "public" right-of-way.

Unless and until each of the above conditions are satisfied, that portion of East Bench Road that is internal to Creekside Estates shall be dedicated as a "private" right-of-way.

IN WITNESS WHEREOF, the Declarant caused these presents to be executed the day and year first above written.

CREEKSIDE DEVELOPERS, LLC.

By   
Thomas W. Griffiths, Member

By   
Heidi H. Hoffmann, Member

By   
Anne Cooke, Member

*Utah*  
STATE OF COLORADO  
*Grand* } ss.  
COUNTY OF PEEKEE

The foregoing instrument was acknowledged before me this 22 day of July, 1997, by Thomas W. Griffiths, as Member of Creekside Developers, LLC., a Utah limited liability company.

WITNESS my hand and official seal.  
My commission expires:

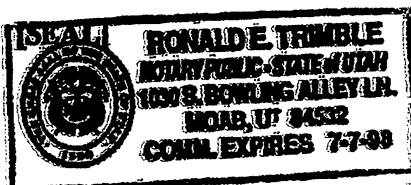


*Ronald E. Trimble*  
\_\_\_\_\_  
Notary Public

*Utah*  
STATE OF COLORADO  
*Grand* } ss.  
COUNTY OF PEEKEE

The foregoing instrument was acknowledged before me this 22 day of July, 1997, by Heidi H. Hoffmann, as Member of Creekside Developers, LLC., a Utah limited liability company.

WITNESS my hand and official seal.  
My commission expires:

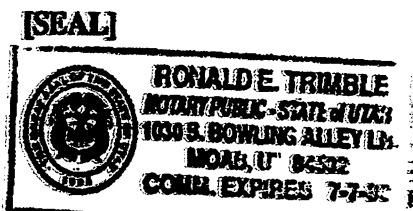


*Ronald E. Trimble*  
\_\_\_\_\_  
Notary Public

*Utah*  
STATE OF COLORADO  
*Grand* } ss.  
COUNTY OF PEEKEE

The foregoing instrument was acknowledged before me this 22 day of July, 1997, by Anne Cooke, as Member of Creekside Developers, LLC., a Utah limited liability company.

WITNESS my hand and official seal.  
My commission expires:



*Ronald E. Trimble*  
\_\_\_\_\_  
Notary Public

Grand County  
125 East Center Street  
Moab UT 84532 435-259-1321

Receipt No: 3/001372 Jul 17, 2020

Preliminary Plat App/Larry White

|   |         |
|---|---------|
| Previous Balance:                       | .00     |
| Licenses & Permits - Planning & Z. Fees | \$75.00 |
| 10-3220-000-000 PLANNING & Z REES       |         |
| <hr/>                                   |         |
| Total:                                  | \$75.00 |
| <hr/>                                   |         |
| Cash                                    | \$75.00 |
| Total Applied:                          | \$75.00 |
| <hr/>                                   |         |
| Change Tendered:                        | .00     |
| <hr/>                                   |         |

Duplicate Copy

07/17/2020 9:44 AM





**ENGINEERING**

**PRELIMINARY PLAT  
DRAINAGE STUDY  
CREEKSIDE MANOR SUBDIVISION**

**PRELIMINARY PLAT APPLICATION  
GRAND COUNTY, UTAH  
March 3, 2020**

**SET Engineering**

**Larry White Subdivision – Preliminary Drainage Study**  
**Preliminary Plat Application**



ENGINEERING

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# Creekside Manor Subdivision – Preliminary Drainage Report

## Preliminary Plat Application

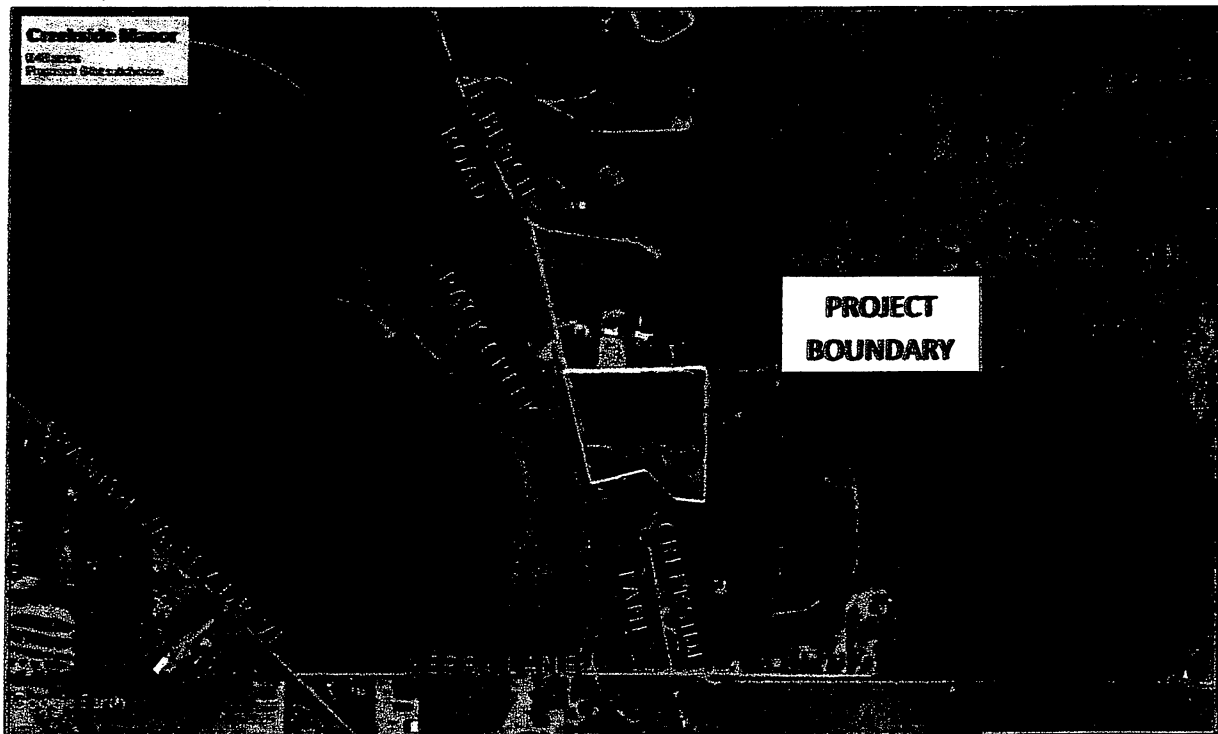


ENGINEERING

### BACKGROUND

This drainage report has been developed to satisfy the Grand County Preliminary Plat Application Requirements and is consistent with the methodology and recommendations outlined in the Grand County Design Criteria for Drainage Studies within Spanish Valley. The intent of this report is to compare the post-development runoff parameters from the proposed development to the historic stormwater runoff patterns, analyze the impact, and to develop appropriate mitigation measures to meet County requirements.

The Creekside Manor project (total project area is 6.48 acres) is located at 3373 S Creekside Ln/E Bench Rd. (private roads) approximately 6.3 miles southeast of the City of Moab Utah's center within the Spanish Valley area. The Creekside Manor Subdivision will subdivide two existing parcels (ID 02CRK0007 and 02CRK0008) into 6 lots; the subdivision will place each existing residence on its own land and create 4 additional lots for future residential development. The project is in Grand County Rural Residential (RR) Zone. The image below shows the project boundary and the vicinity.



*Aerial image of the site and existing surroundings*

### EXISTING CONDITIONS

The site has 2 existing residences and various structures that will remain. The property is surrounded by single-family developments to the north, south, and east, along with farmlands to the west. Creekside Ln borders the property along the west and E Bench Rd along the north; both are graded dirt roads (private).

The topography and drainage patterns of the site generally flow to the from east to west at 2 to 8 percent average slopes. The native soils consist of fine sandy loam that are considered well-draining Type A Soils per the NRCS. A **NRCS Soils Report can be found in the Appendix**. Runoff generally flows via sheet flow into a drainage swale along the westerly border of the property, which flows north. Runoff then enters a 24-inch corrugated steel pipe cross

# Creskide Manor Subdivision – Preliminary Drainage Report

## Preliminary Plat Application



culvert at the northwestern corner of the site and crosses Creskide Ln to Pack Creek. No other storm drain systems exist. The table below shows existing land use for the property.

**Creskide Manor Subdivision  
Land Use Table  
Win TR-55 Land Use Categories  
Existing Conditions**

| Land Use                                | ROW           | Lot 1         | Lot 2         | Lot 3         | Lot 4         | Lot 5         | Lot 6         | Total          | Total       |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------|
|   | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)           | (Ac)        |
| Desert Shrub (good)                     | 52,619        | 23,001        | 59,990        | 14,014        | 14,804        | 14,593        | 94,270        | 273,290        | 6.27        |
| Paved Parking Lots,<br>Roofs, Driveways | 0             | 2,355         | 6,666         | 0             | 0             | 0             | 0             | 9,021          | 0.21        |
| <b>Total</b>                            | <b>52,619</b> | <b>25,356</b> | <b>66,655</b> | <b>14,014</b> | <b>14,804</b> | <b>14,593</b> | <b>94,270</b> | <b>282,311</b> | <b>6.48</b> |
| % BMP                                   | 0%            | 9%            | 10%           | 0%            | 0%            | 0%            | 0%            | 3%             |             |

Portions of the project are located within the Grand County SDMP Basin 31B, which can be found in the **Grand County Storm Drain Master Plan – Figure 2-21**. The remainder of the site generally drains into the Pack Creek floodplain. The site is not currently within a FEMA designated floodplain or within a floodplain as defined by the Grand County Preliminary Floodplain Map.

## PROPOSED CONDITIONS

The project subdivision site plan incorporates a drainage plan which maintains historic drainage patterns and limits grading improvements while meeting Grand County requirements. Proposed improvements are limited to the future residences on Lots 3, 4, and 5. The existing residences and outbuildings will remain as is. Additional impervious area is not planned as part of the subdivision level improvements. Runoff from the East Bench Rd. corridor generally infiltrates into the existing roadside swales. There is no evidence of any drainage issues requiring mitigation along the E Bench Rd corridor adjacent the project. **See Appendix for the subdivision and drainage patterns.**

### ***Hydrology and Drainage Basin Summary:***

The property was analyzed as a single drainage basin to compare historic and proposed runoff parameters. **See drainage basin map in the Appendix for a layout of the proposed basin described below.** As stated previously, the project is in a portion of Grand County SDMP Basin 31B. There is no evidence of run-on at the east end of the project from the hillside above from Basin 31B. Minor flows from Basin 31B, the adjacent private roads, and private residences appear to infiltrate prior to impacting the Creskide Manor subdivision.

Basin P-1 – this basin includes the flows (offsite and onsite) tributary to the site design point at the inlet of the CSP culvert that crosses under Creskide Ln at the northwest corner of the property. **The drainage basin map and hydrology calculations for the basin can be found in the Appendix.**

### ***Hydraulic Calculation Summary:***

Hydraulic calculations were not made for this analysis as there was no runoff for the design storm event.

## Creskide Manor Subdivision – Preliminary Drainage Report

### Preliminary Plat Application



ENGINEERING

The design and construction of the residences will be completed under separate permit. For the purpose of this analysis, it was assumed that Lots 3, 4, and 5 will include up to 7,000 square feet of impervious area. The table below shows the assumed proposed conditions land use for Creskide Manor subdivision.

**Creskide Manor Subdivision**  
**Land Use Table**  
**Win TR-55 Land Use Categories**

**Proposed Conditions\***

| Land Use                             | ROW           | Lot 1         | Lot 2         | Lot 3         | Lot 4         | Lot 5         | Lot 6         | Total          | Total       |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------|
|                                      | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)          | (sf)           | (Ac)        |
| Desert Shrub (good)                  | 52,619        | 23,001        | 59,989        | 7,014         | 7,804         | 7,593         | 94,270        | 252,290        | 5.79        |
| Paved Parking Lots, Roofs, Driveways | 0             | 2,355         | 6,666         | 7,000         | 7,000         | 7,000         | 0             | 30,021         | 0.69        |
| <b>Total</b>                         | <b>52,619</b> | <b>25,356</b> | <b>66,655</b> | <b>14,014</b> | <b>14,804</b> | <b>14,593</b> | <b>94,270</b> | <b>282,311</b> | <b>6.48</b> |

% IMP      0%      9%      10%      50%      47%      48%      0%      11%

\* Proposed Conditions assumes Lots 3, 4, and 5 will include less than 7,000 sf of impervious area.

Zone: Rural Residential (RR);

Max Allowable Density: 1 DU/acre

The table below shows a summary of historic and proposed drainage basin sizes and estimated runoff quantities.

**Creskide Manor Subdivision**  
**Drainage Summary Table – NRCS TR-55 Method**

**Existing Conditions**

| Basin ID     | Basin Size |           |             |                |                 |
|--------------|------------|-----------|-------------|----------------|-----------------|
|              | (Ac)       | CN        | $Q_2$ (cfs) | $Q_{10}$ (cfs) | $Q_{100}$ (cfs) |
| H-1          | 100        | 42        | 0.00        | 0.00           | 0.00            |
| <b>Total</b> | <b>100</b> | <b>42</b> | <b>0.00</b> | <b>0.00</b>    | <b>0.00</b>     |

**Proposed Conditions**

| Basin ID     | Basin Size |           |             |                |                 |
|--------------|------------|-----------|-------------|----------------|-----------------|
|              | (Ac)       | CN        | $Q_2$ (cfs) | $Q_{10}$ (cfs) | $Q_{100}$ (cfs) |
| P-1          | 100        | 42        | 0.00        | 0.00           | 0.00            |
| <b>Total</b> | <b>100</b> | <b>42</b> | <b>0.00</b> | <b>0.00</b>    | <b>0.00</b>     |

It is worth noting that the historic and proposed conditions did not produce runoff for the 2-, 10-, or 100-year 24 hour storm, as the soils in the vicinity of the project location have a very high  $K_{sat}$  value and can infiltrate water at a rate of 2 to 6 inches/hour, per NRCS soils.

## ONSITE DETENTION AND WATER QUALITY

Per Grand County Land Use Code Article 6, Section 7 – Drainage, “Where drainage detention basin(s) are not provided by or as part of subdivision approval, all developers of multi-family and non-residential structures proposing the installation of more than 7,000 square feet of impervious surface shall mitigate the drainage impacts of such development.

# **Creekside Manor Subdivision – Preliminary Drainage Report**

## **Preliminary Plat Application**



### **WATER QUALITY**

Impervious areas are generally disconnected. Sediment from the areas will settle out into the native well-draining soils prior to discharging to Pack Creek.

### **OPERATIONS AND MAINTENANCE**

The following are recommendations to implement within the site to provide for a functioning drainage system after installation and stabilization:

- Mow or “weed whack” drainage swale ditches annually and prior to rainy season.
- Inspect condition of drainage swales, make repairs to continue to provide runoff conveyance as shown in the drainage plan.
- Inspect condition of drainage swales annually, make repairs as required to provide for adequate detention as shown in the drainage plan. This may require minor grading to remove sediment and maintain shape of facilities.

### **EROSION CONTROL**

Construction activities that disturb one or more acres of land must be authorized under the Utah Pollutant Discharge Elimination System (UPDES). Owners and general contractors are required to obtain a Storm Water Permit. This permit covers infrastructure construction for the project. Residential construction for each lot is not covered by this permit and erosion control during the residential construction phase will be the responsibility of the lot owner or builder.

The owner and contractor shall complete a SWPPP if is more than one acre is disturbed. As general guidance, the following strategy shall generally be implemented. A more detailed plan shall be developed upon submittal for State permit but shall, at a minimum, meet City requirements.

#### ***EROSION CONTROL PHASING OUTLINE STRATEGY:***

##### ***1. PHASE 1 - MOBILIZATION***

- 1.1. ESTABLISH VEHICLE TRACKING CONTROL (VTC), STAGING AND STORAGE AREAS (SSA), AND CONCRET WASHOUT (CWA) AREAS FOR INFRASTRUCTURE CONSTRUCTION
- 1.2. INSTALL ROCK CHECK DAMS ALONG EXISTING ROADSIDE DITCHES AS NEEDED.
- 1.3. INSTALL SANITARY FACILITIES AND ANCHOR APPROPRIATELY.
- 1.4. INSTALL SILT FENCE AND PERIMETER CONTROLS
- 1.5. INSTALL SEDIMENT BASINS

##### ***2. PHASE 2 - INFRASTRUCTURE CONSTRUCTION***

- 2.1. INSTALL CIP AT INLET OF EACH CULVERT AS CONSTRUCTED
- 2.2. REPLACE AND REPAIR ROCK CHECK DAMS
- 2.3. PROVIDE STREET SWEEPING AS NECESSARY INSTALL ROCK CHECK DAMS ALONG EXISTING ROADSIDE DITCH
- 2.4. MAINTAIN SSA, VTC, AND CWA DURING CONSTRUCTION ACTIVITIES
- 2.5. INSTALL SEEDING OR OTHER REVEGETATION TECHNIQUES ON DISTURBED AREAS.

##### ***3. PHASE 3 - ESTABLISHMENT***

## **Creekside Manor Subdivision – Preliminary Drainage Report Preliminary Plat Application**



**3.1.REMOVE VTC, SSA, AND CWA AREAS**

**3.2.INSTALL PS IN ALL DISTURBED AREAS PER MANUFACTURES RECOMMENDATION**

**3.3.RCD AND CIP SHALL REMAIN IN PLACE UNTIL REVEGETATION IS 70% ESTABLISHED**

**3.4.BUILDING CONSTRUCTION SHALL BE COMPLETED UNDER SEPARATE PERMIT**

### **METHODOLOGY**

In order to be consistent with the Grand County drainage policies, the NRCS Technical Release No. 55 or Technical Release No. 20 was used for determining the quantity of storm runoff for the project.

### **APPENDICES**

**Appendix A: DR01 – Drainage Map**


**Appendix B: Soil Type Location and Information (NRCS)**

**Appendix C: Hydrologic Calculations – Win TR-55 Input and Results**

**Appendix D: Open Channel Velocity Calculation**

**Appendix E: Spanish Valley Storm Drain Master Plan Update Basin 31b Map – Figure 2-21**

$h = 300$  ft  
 $g = 4.5$   
 $n = 6.34$   
 $t_{\text{flow}} = 11$  min

- LEGEND**
- PROJECT DRAINAGE  
BASIN BOUNDARY
- FLOW ARROW
- BASIN DESIGN  
POINT
- 

| Evaluating Conditions |            |              |                  |                   |
|-----------------------|------------|--------------|------------------|-------------------|
| Basin ID #            | Basin Size |              |                  |                   |
| AE                    | CV         | $Q_1 (ft/s)$ | $Q_{1.2} (ft/s)$ | $Q_{1.25} (ft/s)$ |
| H-1                   | 100        | 0.02         | 0.00             | 0.00              |
| Total                 | 100        | 0.02         | 0.00             | 0.00              |

| Prepared Conditions |            |              |                  |                   |
|---------------------|------------|--------------|------------------|-------------------|
| Basin ID #          | Basin Size |              |                  |                   |
| AE                  | CV         | $Q_1 (ft/s)$ | $Q_{1.2} (ft/s)$ | $Q_{1.25} (ft/s)$ |
| P-1                 | 100        | 0.00         | 0.00             | 0.00              |
| Total               | 100        | 0.00         | 0.00             | 0.00              |

**LARRY WHITE SUBDIVISION  
DRAINAGE MAP  
GRAND COUNTY, UTAH**

**FOR REVIEW ONLY  
NOT FOR  
CONSTRUCTION**

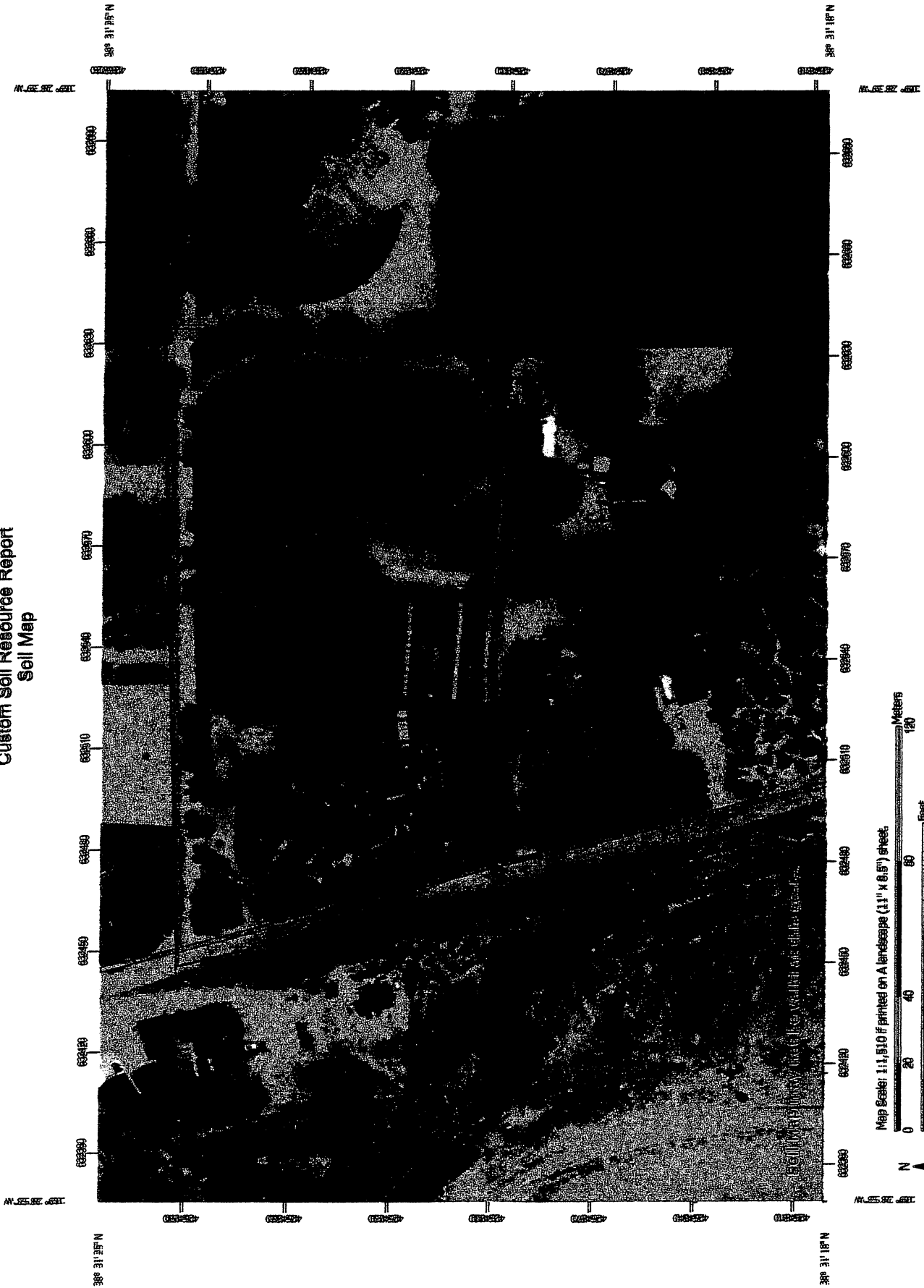


# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:1,510 if printed on A landscape (11" x 8.5") sheet

Map projection: Web Mercator Corner coordinates: WGS84 Edge: UTM Zone 12N WGS84

## MAP LEGEND

|                        |                        |                       |
|------------------------|------------------------|-----------------------|
| Area of Interest (AOI) | Area of Interest (AOI) | Soil Area             |
| □                      | □                      | □                     |
| Soils                  | Soil Map Unit Polygons | Stony Spot            |
| □                      | Soil Map Unit Lines    | Very Stony Spot       |
| □                      | Soil Map Unit Points   | Wet Spot              |
| □                      | Special Point Features | Other                 |
| □                      | Blowout                | Special Line Features |
| □                      | Borrow Pit             | Water Features        |
| □                      | Clay Spot              | Streams and Canals    |
| □                      | Closed Depression      | Transportation        |
| □                      | Gravel Pit             | Rails                 |
| □                      | Gravelly Spot          | Interstate Highways   |
| □                      | Landfill               | US Routes             |
| □                      | Lava Flow              | Major Roads           |
| □                      | Marsh or swamp         | Local Roads           |
| □                      | Mine or Quarry         | Background            |
| □                      | Miscellaneous Water    | ■                     |
| □                      | Perennial Water        | ■                     |
| □                      | Rock Outcrop           | ■                     |
| □                      | Saline Spot            | ■                     |
| □                      | Sandy Spot             | ■                     |
| □                      | Severely Eroded Spot   | ■                     |
| □                      | Sinkhole               | ■                     |
| □                      | Slide or Slip          | ■                     |
| □                      | Sodic Spot             | ■                     |

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Canyonlands Area, Utah - Parts of Grand and San Juan Counties  
Survey Area Data: Version 14, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:80,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Jun 2, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

## Custom Soil Resource Report

### MAP LEGEND

### MAP INFORMATION

Imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Map Unit Symbol             | Map Unit Name  | Acres in AOI | Percent of AOI |
|-----------------------------|--|--------------|----------------|
| 88                          | Thoroughfare fine sandy loam, 2 to 8 percent slopes  | 6.1          | 94.8%          |
| 97                          | Ustic Torrifluvents-Ustic Torrifluvents, sodic-Typic Ustifluvents complex, 0 to 6 percent slopes | 0.3          | 5.2%           |
| Totals for Area of Interest |  | 6.5          | 100.0%         |

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

## Custom Soil Resource Report

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Canyonlands Area, Utah - Parts of Grand and San Juan Counties

### 88—Thoroughfare fine sandy loam, 2 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1vnj  
*Elevation:* 4,100 to 5,200 feet  
*Mean annual precipitation:* 7 to 9 inches  
*Mean annual air temperature:* 52 to 54 degrees F  
*Frost-free period:* 150 to 170 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Thoroughfare and similar soils:* 83 percent  
*Minor components:* 17 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Thoroughfare

##### Setting

*Landform:* Alluvial flats, stream terraces  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Parent material:* Alluvium derived from sandstone and shale

##### Typical profile

*A - 0 to 2 inches:* fine sandy loam  
*C - 2 to 60 inches:* stratified gravelly loamy sand to fine sandy loam

##### Properties and qualities

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Occasional  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 7.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* Desert Sandy Loam (Fourwing Saltbush) (R035XY118UT)  
*Hydric soil rating:* No

#### Minor Components

##### Trail

*Percent of map unit:* 10 percent

## Custom Soil Resource Report

### Bluechief

*Percent of map unit: 7 percent*

## 97—Ustic Torrifluvents-Ustic Torrifluvents,sodic-Typic Ustifluvents complex, 0 to 6 percent slopes

### Map Unit Setting

*National map unit symbol: 1vnv*

*Elevation: 3,900 to 4,400 feet*

*Mean annual precipitation: 6 to 12 inches*

*Mean annual air temperature: 53 to 56 degrees F*

*Frost-free period: 140 to 180 days*

*Farmland classification: Not prime farmland*

### Map Unit Composition

*Ustic torrifluvents and similar soils: 35 percent*

*Ustic torrifluvents and similar soils: 30 percent*

*Typic ustifluvents and similar soils: 25 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ustic Torrifluvents

#### Setting

*Landform: Stream terraces*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from sandstone and shale*

#### Typical profile

*C1 - 0 to 13 inches: loamy very fine sand*

*C2 - 13 to 60 inches: stratified gravelly sandy loam to silt loam*

#### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Moderately well drained*

*Runoff class: Very low*

*Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: Occasional*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 15 percent*

*Salinity, maximum in profile: Slightly saline to strongly saline (4.0 to 32.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 30.0*

*Available water storage in profile: Moderate (about 6.9 inches)*



## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* 4w

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Ecological site:* Loamy Bottom (Basin Big Sagebrush) (R035XY011UT)

*Other vegetative classification:* Loamy Bottom (Basin Big Sagebrush)  
(035XY011UT\_2)

*Hydric soil rating:* No

### Description of Ustic Torrifluvents

#### Setting

*Landform:* Stream terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from sandstone and shale

#### Typical profile

*C1 - 0 to 3 inches:* loamy very fine sand

*C2 - 3 to 60 inches:* stratified gravelly sandy loam to silt loam

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 32.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4w

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Ecological site:* Alkali Flat (Greasewood) (R035XY009UT)

*Hydric soil rating:* No

### Description of Typic Ustifluvents

#### Setting

*Landform:* Flood plains

*Landform position (three-dimensional):* Tail

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Alluvium derived from sandstone and shale

#### Typical profile

*C1 - 0 to 1 inches:* loam

*C2 - 1 to 60 inches:* stratified very gravelly sand to silt loam

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 0 to 6 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 2.00 in/hr)

*Depth to water table:* About 48 to 72 inches

*Frequency of flooding:* Frequent

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 32.0 mmhos/cm)

*Available water storage in profile:* Low (about 4.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4w

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* B

*Ecological site:* Semiwet Saline Streambank (Fremont Cottonwood)  
(R035XY012UT)

*Hydric soil rating:* No

### Minor Components

#### Riverwash

*Percent of map unit:* 7 percent

*Landform:* Flood plains

*Landform position (three-dimensional):* Tall

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### Rock outcrop

*Percent of map unit:* 3 percent

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## Custom Soil Resource Report

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# WinTR-55 Current Data Description

## --- Identification Data ---

User: Shew Date: 3/2/2020  
 Project: Creekside Manor Subdivision Units: English  
 SubTitle: Historic Areal Units: Acres  
 State: Utah  
 County: Grand  
 Filename: C:\Users\SETLAPTOP2\Dropbox (SET Engineering, LLC)\\_SET Business\\_SET Projects current

## --- Sub-Area Data ---

| Name | Description | Reach  | Area (ac) | RON | Tc |
|------|-------------|--------|-----------|-----|----|
| E-1  |             | Outlet | 100       | 42  | .5 |
| P-1  |             | Outlet | 100       | 42  | .5 |

Total area: 200 (ac)

## --- Storm Data ---

### Rainfall Depth by Rainfall Return Period

| 1-Yr<br>(in) | 2-Yr<br>(in) | 5-Yr<br>(in) | 10-Yr<br>(in) | 25-Yr<br>(in) | 50-Yr<br>(in) | 100-Yr<br>(in) |
|--------------|--------------|--------------|---------------|---------------|---------------|----------------|
| .93          | 1.17         | 1.47         | 1.74          | 2.13          | 2.45          | 2.82           |

Storm Data Source: User-provided custom storm data  
 Rainfall Distribution Type: Type II  
 Dimensionless Unit Hydrograph: <standard>

Shew

Creekside Manor Subdivision  
Historic  
Grand County, Utah

Storm Data

Rainfall Depth by Rainfall Return Period

| 1-Yr<br>(in) | 2-Yr<br>(in) | 5-Yr<br>(in) | 10-Yr<br>(in) | 25-Yr<br>(in) | 50-Yr<br>(in) | 100-Yr<br>(in) |
|--------------|--------------|--------------|---------------|---------------|---------------|----------------|
| .93          | 1.17         | 1.47         | 1.74          | 2.13          | 2.45          | 2.82           |

Storm Data Source:

User-provided custom storm data

Rainfall Distribution Type:

Type II

Dimensionless Unit Hydrograph:

<standard>

Show

Creekside Manor Subdivision  
Historic  
Grand County, Utah

Watershed Peak Table

| Sub-Area<br>or Reach<br>Identifier | Peak Flow by Rainfall Return Period |                |                 |
|------------------------------------|-------------------------------------|----------------|-----------------|
|                                    | 2-Yr<br>(cfs)                       | 10-Yr<br>(cfs) | 100-Yr<br>(cfs) |
| <b>SUBAREAS</b>                    |                                     |                |                 |
| H-1                                | .00                                 | .00            | .00             |
| P-1                                | .00                                 | .00            | .00             |
| <b>REACHES</b>                     |                                     |                |                 |
| OUTLET                             | .00                                 | .00            | .00             |

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Creckside Manor Subdivision  
Historic  
Grand County, Utah

Hydrograph Peak/Peak Time Table

| Sub-Area<br>or Reach<br>Identifier | Peak Flow and Peak Time (hr) by Rainfall Return Period | 2-Yr<br>(cfs)<br>(hr) | 10-Yr<br>(cfs)<br>(hr) | 100-Yr<br>(cfs)<br>(hr) |
|------------------------------------|--|-----------------------|------------------------|-------------------------|
|------------------------------------|--|-----------------------|------------------------|-------------------------|

SUBAREAS

|     |  |     |     |     |
|-----|--|-----|-----|-----|
| H-1 |  | n/a | n/a | n/a |
|-----|--|-----|-----|-----|

|     |  |     |     |     |
|-----|--|-----|-----|-----|
| F-1 |  | n/a | n/a | n/a |
|-----|--|-----|-----|-----|

REACHES

|        |  |  |  |  |
|--------|--|--|--|--|
| OUTLET |  |  |  |  |
|--------|--|--|--|--|



Shew

Creekside Manor Subdivision  
Historic  
Grand County, Utah

Sub-Area Summary Table

| Sub-Area<br>Identifier | Drainage<br>Area<br>(ac) | Time of<br>Concentration<br>(hr) | Curve<br>Number | Receiving<br>Reach | Sub-Area<br>Description |
|------------------------|--------------------------|----------------------------------|-----------------|--------------------|-------------------------|
| B-1                    | 100.00                   | 0.500                            | 42              | Outlet             |                         |
| P-1                    | 100.00                   | 0.500                            | 42              | Outlet             |                         |
| Total Area::           | 200 (ac)                 |                                  |                 |                    |                         |

Show

Creekside Manor Subdivision  
Historic  
Grand County, Utah

Sub-Area Time of Concentration Details

| Sub-Area<br>Identifier/ | Flow<br>Length<br>(ft) | Slope<br>(ft/ft) | Mannings's<br>n | End<br>Area<br>(sq ft) | Wetted<br>Perimeter<br>(ft) | Velocity<br>(ft/sec)  | Travel<br>Time<br>(hr) |
|-------------------------|------------------------|------------------|-----------------|------------------------|-----------------------------|-----------------------|------------------------|
| <hr/>                   |                        |                  |                 |                        |                             |                       |                        |
| H-1                     |                        |                  |                 |                        |                             |                       |                        |
| SHEET                   | 100                    | 0.0400           | 0.130           |                        |                             |                       | 0.183                  |
| SHALLOW                 | 3150                   | 0.0400           | 0.050           |                        |                             |                       | 0.271                  |
| CHANNEL                 | 450                    | 0.0150           | 0.050           | 6.50                   | 10.00                       | 2.717                 | 0.046                  |
|                         |                        |                  |                 |                        |                             | Time of Concentration | <u>.5</u>              |
| <br>                    |                        |                  |                 |                        |                             |                       |                        |
| P-1                     |                        |                  |                 |                        |                             |                       |                        |
| SHEET                   | 100                    | 0.0400           | 0.130           |                        |                             |                       | 0.183                  |
| SHALLOW                 | 3150                   | 0.0400           | 0.050           |                        |                             |                       | 0.271                  |
| CHANNEL                 | 450                    | 0.0150           | 0.050           | 6.50                   | 10.00                       | 2.717                 | 0.046                  |
|                         |                        |                  |                 |                        |                             | Time of Concentration | <u>.5</u>              |

Shew

Creekside Manor Subdivision  
Historic  
Grand County, Utah

Sub-Area Land Use and Curve Number Details

| Sub-Area Identifier | Land Use                            |        | Hydrologic Soil Group | Sub-Area Area (ac) | Curve Number |
|---------------------|-------------------------------------|--------|-----------------------|--------------------|--------------|
| H-1                 | Pasture, grassland or range         | (good) | A                     | 76.52              | 39           |
|                     | Farmsteads                          |        | A                     | 6.48               | 59           |
|                     | Desert shrub                        | (good) | A                     | 17                 | 49           |
|                     | Total Area // Weighted Curve Number |        |                       | 100                | 42           |
|                     |                                     |        |                       | ==                 | ==           |
| P-1                 | Residential districts (1/3 acre)    |        | A                     | 3                  | 57           |
|                     | Pasture, grassland or range         | (good) | A                     | 76.52              | 39           |
|                     | Farmsteads                          |        | A                     | 3.48               | 59           |
|                     | Desert shrub                        | (good) | A                     | 17                 | 49           |
|                     | Total Area // Weighted Curve Number |        |                       | 100                | 42           |
|                     |                                     |        |                       | ==                 | ==           |

**From:** Christina Brinegar <cbrinegar69@yahoo.com>  
**Subject:** Fw: Crrrekside UD Amendment  
**Date:** February 16, 2021 at 8:22 AM  
**To:** Geoff Brinegar <geoff.brinegar@gmail.com>



— Forwarded Message —

**From:** Mila Dunbar-Irwin <mdunbarirwin@grandcountyutah.net>  
**To:** Christina Brinegar <cbrinegar69@yahoo.com>  
**Cc:** planning@grandcountyutah.net <planning@grandcountyutah.net>; Rick Davidson <rick.davidson57@gmail.com>; Geoff Brinegar <geoff.brinegar@gmail.com>  
**Sent:** Tuesday, September 29, 2020, 06:45:55 PM MST  
**Subject:** Re: Crrrekside UD Amendment

Hi Christina,

You've got it right! The final plat for Phase I includes the table specifying that Phase II has 6 lots - this is the allowed (and applied for) density for Tract A. This table is what Mr. White is applying to amend with the application heard last night at Planning Commission. Currently, the Preliminary Plat you've seen for Tract A, which is proposed and NOT approved, would only be possible were the PUD amendment to be approved and the table on the original final plat amended through this action to state the minimum lot size may be 0.3 acres. At that point, were the table to be approved and amended, Mr White would be able to bring his Preliminary Plat before the Planning Commission for approval. At this point, he may not.

Our public hearing was only for the PUD amendment to allow the proposed layout to come before Planning Commission. The amendment is a pre-requisite for the proposed Preliminary Plat, so, we will go through the amendment process first, including a public hearing at Planning Commission and another one at County Commission (formerly County Council) before a final decision is made by the County Commission to grant the amendment or not.

The decision last night was made to forward a favorable recommendation to County Commission regarding ONLY the proposed layout, and not any other possible layouts. They would only be interested in an approval were the development to look exactly as it does in the Preliminary Plat you've seen. This is how the PUD process works now, though it didn't in 1997, which is why there's no record of a plan for the subdivision of Tract A. A modern PUD must record a "master plan" to guide development, and it is not just the dimensional standards which are approved, but the actual layout, so there may not be any changes without going back before County Commission again. This is what the Planning Commission recommended last night - that the lot size amendment be approved ONLY if it is for the proposed Preliminary Plat layout and not for any other.

Were this to be a new PUD, Mr White would have been able to come forward with any proposed lot sizes so long as the density did not change; there are other PUDs in the valley which use this tool to vary lot sizes without varying density so as to allow for an improved subdivision layout for any of the reasons listed in our code. However, this is an existing PUD, so he must instead amend the original stipulations to proceed.

I hope this helps, and again, apologies for any confusion.

Take care,  
Mila

On Tue, Sep 29, 2020 at 7:16 PM Christina Brinegar <cbrinegar69@yahoo.com> wrote:  
Thank you Mila for your response.

I do have a few questions and will have more after reviewing the PUD form you provided.

print  
GAMSH's  
response.

4) The property in question, Tract A, is zoned for one unit / acre density. There are 6.48 acres, this allows for 6 units. A Planned Unit Development (see letter D) is a tool in our land use code that allows an applicant to change lot dimensional standards to cluster their allowed density on smaller lots and leave one (or more) bigger lots. Larry is proposing 6 units on his 6+ acres just in a different distribution than 1 acre lots. There is no more density being proposed.

**QUESTION:**

Can you provide supporting documents that state Larry's subject property is zoned for one unit/acre density as you mention above. I currently have the Final Plat of Creekside Estates which states both Phase I and Phase II are allowed 6 units on one acre lots. The Grant of Reciprocal Easements does state 6 lots and does not mention acreage, but is this not pertaining to easements only? The Final Plat signed by Larry White is what he should have and should now be following? Phase I followed the zoning ordinances and how I see it to date Phase II did not. Please correct me if I am wrong.

5) Larry has followed all required zoning rules. He's applying for an amendment to his existing Planned Unit Development (PUD), which is something he's perfectly within his rights to do.

**QUESTION:**

I understand he can apply and that is his right BUT until he has approval of the proposed PUD amendment, he does have to follow current zoning ordinances. That is the question we all have and have not been provided with any documents that state otherwise. You are referring to a PUD which this entire tract is currently in... Why is it that he needs to apply for a PUD amendment if the current PUD allows him to do his 6 on any acreage? My understanding is it does NOT allow him to do this and that is why he is applying for a PUD amendment so that he can change his current zoning from one acre per lot into 0.3 acres per lot. If it were not the case, then why the public hearing and why the change in acreage? This is truly the confusion and if you can clarify and also provide documents that state this would be tremendous and may reduce emails to you, calls etc.

Best Regards,  
Christina Brinegar, Trusor  
Owner of Lot 6

On Tuesday, September 29, 2020, 09:34:21 AM MST, Mila Dunbar-Irwin  
<[mdunbarirwin@grandcountyutah.net](mailto:mdunbarirwin@grandcountyutah.net)> wrote:

Hi Christina,

I'm so sorry you didn't feel heard last night; we try our best to make public meetings available to everyone, and sometimes it can fall short of the goal. I wanted to respond to your e-mail to improve communication and continue to clear up some of the misunderstandings I'm hearing from the neighborhood.

1) I was out of the office Friday and Monday and was not able to return your call prior to the meeting; I'm sorry my timing didn't line up well for you

2) There are no setbacks contemplated as part of this application. The preliminary plat that Larry sent to you was for context only. The PUD Amendment proposed only contemplates a change in minimum lot size.

3) The road is private; I misspoke in the original e-mail to one of your neighbors, and corrected it a day later, yet that has spread like wildfire rather than the correction. Simple mistake and there's no change to the road.

4) The property in question, Tract A, is zoned for one unit / acre density. There are 6.48 acres, this allows for 6 units. A Planned Unit Development (see letter D) is a tool in our land use code that allows an applicant to change lot dimensional standards to cluster their allowed density on smaller lots and leave one (or more) bigger lots. Larry is proposing 6 units on his 6+ acres just in a different distribution than 1 acre lots. There is no more density being proposed.

5) Larry has followed all required zoning rules. He's applying for an amendment to his existing Planned Unit Development (PUD), which is something he's perfectly within his rights to do.

Let me know if you have any other questions.

Thanks,  
Mila

On Tue, Sep 29, 2020 at 9:48 AM Olivia Holmes <oholmes@grandcountyutah.net> wrote:

----- Forwarded message -----

From: Christina Brinegar <chrinegar69@yahoo.com>

Date: Tuesday, September 29, 2020 at 3:13:13 AM UTC-6

Subject: Correkside UD Amendment

To: planning@grandcountyutah.net <planning@grandcountyutah.net>

Cc: Geoff Brinegar <geoff.brinegar@gmail.com>

Dear Planning & Zoning:

My apologies but I am sending this email because I was under the impression that the people would have one more time to comment before the "White Agenda" was pushed through the next stage.

I feel we were not heard last night so here it goes....

The community will be the ones that are affected by this proposed PUD amendment if it goes through (not planning & zoning but the community). All of us who spoke at the hearing requested that you hold off so we had more time to do our due diligence since several of us did NOT receive our letter as was supposed to be delivered, calls not returned or the ones who were able to reach Mila were misinformed in addition signs not displayed visibly so ALL can see. I informed Mr. White that we had not received the letter at which point he could of hand delivered but did not? I wonder how many more did not receive their letter that were not on the call last night? In addition, I had called Mila's office several times and never received a call back by Mila.

Sadly, it seemed as if Mila was more concerned about pushing Larry White's project through to the next stage vs. pausing so we are able to address our concerns since they are so many "unknowns" and much misinformed information that still is not addressed! There were many things said by Mila that just did not line up i.e., Mila stating there were not set back issues then come to find out there were. Mila stated the road was not private come to find out it is. Mila said it was not zoned for one lot per acre but then come to find out it is. It seems as if the people who spoke had more knowledge of zoning than what was stated by Mila. Like one person said last night, this is NOT to poke Mila but it does seem that none of us were provided with correct information or many questions left unanswered. Therefore, the project should have been paused!

If Larry White had followed the original zoning codes when building his lots years ago but chose not to should not be our BURDEN. And with all due respect, at what point is Planning & Zoning held responsible for following or enforcing that the codes established are met in lieu of

**change/rezoning or however you want to word it for someone who did not follow the zoning codes and the people who have followed the zoning codes are left holding the bag?**

**Respectfully,**

**Christina Brinegar, Trustor  
Lot owner of 6**