MORGAN COUNTY
Planning and Development Services

48 West Young Street
Morgan, UT 84050
(801) 845-4015

STAFF REPORT

October 17, 2013

To: Morgan County Planning Commission
Business Date: November 14, 2013

Prepared By: Ronda Kippen, Planning Technician

Re: **K2 Building Solutions Conditional Use Permit Request**

Application No.:	13.120
Applicant:	Mike Babcock/Cottonwood Commercial Inc. and Sean Dorius/K2 Building Solutions, Inc.
Project Location:	4070 West 5800 North (Cottonwoods Commercial Park Parcel #D)
Zoning:	CB Zone
Acreage:	A portion of 2.90 acres (approximately 0.25 acre)
Request:	Conditional Use Permit for the general contract construction services

SUMMARY

This application is for a commercial use in the CB zone. The proposed business will be in the west end of an existing commercial building located on Parcel C&D in the Cottonwoods Commercial Park. The applicant, Cottonwood Commercial Inc., owned by Mike Babcock, would like to rent/lease a portion of the commercial building to K2 Building Solutions, Inc. owned and operated by Sean Dorius. The scope of work will include metal framing, Styrofoam cutting, and assembly of walls for construction located offsite. The application is to consider the portion of property to be used as "Services: General contract construction services" and "Retail Trade: Lumber and other building material".

The proposed uses in the CB zone are allowed by conditional use permit. Conditional use permits should be approved as long as any harmful impact is mitigated. The County Code already specifies certain standards necessary for mitigation of harmful impact to which the proposal must adhere. The proposed application appears to meet these standards. The following is staff's evaluation of the request.

ANALYSIS

General Plan. The Future Land Use Map identifies this property as "Business Park" which is intended to

> "*provide for areas for the development of uses that provide employment involving light manufacturing, assembling, warehousing, and wholesale activities and associated office space and support uses. Typical uses may also include construction contractors, small, screened storage yards and small warehousing spaces"*. The 2010 General Plan has identified the need to "*support growth of retail and other commercial activity in Morgan County-particularly Mountain Green-in order to provide goods and services to County residents"*.
> *(See 2010 General Plan page 12-13,Future Land Use Map and Land Use Strategic Objectives)*

Zoning. The property is zoned CB (see Exhibit A). The proposed uses are allowed in the CB zone through a conditional use permit. Morgan County Code (MCC) 8-5C-3 identifies this as at least two uses the proposal may be considered under: "Services: General contract construction services" and "Retail trade-lumber and other building material. Both of these uses require a conditional use permit in the CB zone.

8-5C-3: USE REGULATIONS:

No building, structure or land shall be used and no building or structure shall be hereafter erected, structurally altered, enlarged or maintained in the commercial and industrial districts, except as provided in this article. Accessory uses and buildings customarily incidental to uses authorized by conditional use permit in any district are also authorized by issuance of a conditional use permit in any such district. "Temporary uses", as defined in section 8-2-1 of this title, are authorized in any district upon issuance of a conditional use permit for the same.

	Districts						
	CB	C-N	C-S	C-H	C-G	M-D	M-G
COMMERCIAL:							
Services:							
General contract construction services	C	-	-	-	P	P	P
Retail Trade:							
Lumber and other building materials	C	-	P	C	P	C	-

Building Code Requirements. The proposed business will be located in an existing commercial building located on the subject property. Prior to the business license approval the portion of the building with the proposed use will need to be inspected by the Morgan County Building Inspector.

Conditional Use Requirements.

- *Vehicles:* MCC 8-8-4 identifies potential conditions related to safety for persons and property concerning the numbers and types of vehicles per time period associated with the conditional use activities. The applicant indicates that the site has an existing asphalt driveway which should adequately accommodate the increase in traffic. All construction material will be hauled to and from the proposed location with a typical pickup truck and trailer.
- *Off Street Parking:* MCC 8-11-4 identifies the calculations for all off street parking as follows: one space for each employee projected for the highest employment shift is required. K2 Building Solutions, Inc. currently has three employees. The applicant has identified both hard surface parking location and unimproved parking across the access driveway. Staff feels adequate hard surface parking is being proposed and that further conditions at this time are unnecessary.

- *Hours of operation*: MCC 8-8-4 states "time of day and days of week a conditional use may operate". Staff recommends that the proposed business limits hours of operation within the timeframe of 6:00 AM to 10:00 PM.
- *Landscaping:* MCC 8-8-4 and 8-6-27 have specific landscaping standards. Landscaping is encouraged to ensure compatibility with the intended characteristics of the district and to enhance, conserve and stabilize property values by preventing litter and providing an attractive neighborhood. Considering that this is an existing site, requiring new or more landscaping may not be necessary. If the Planning Commission feels more landscaping is needed in order to comply with the provisions of both of these codes, then a Landscape Plan should be submitted and approved by the Zoning Administrator (see Exhibit B).

Property Layout. The existing property is a combination of three commercial lots within the Cottonwood Commercial Park (see Exhibit C). It appears that the portion of the existing building that will be utilized by K2 Building Solutions is located on Parcel D within the Cottonwood Commercial Park. It is surrounded by similar commercial uses (see Exhibit D). It fronts 5800 North with approximately 130 feet of frontage.

Setbacks. The front setback for uses in the CB zone is 25 feet. The side yard is 10 feet and rear setback of 20 feet. The existing building was presumably previously approved by Morgan County with a setback that is now nonconforming. The proposed use does not adversely affect that nonconformity.

Fire Protection. Due to the commercial use of the property, staff recommends a site inspection and approval from the local fire official prior to the issuance of a business license.

STAFF RECOMMENDATION

Staff recommends approval of the K2 Building Solutions, Inc. Conditional Use permit for general contract construction services, file #13.120 subject to the following conditions:

1. That approval is based on the information in the application and Planning Commission staff report dated 10/17/13. Any impactful changes to the business from the information presented therein may require additional future review and approval.
2. That a business license for K2 Building Solutions, Inc. be obtained prior to commencement of onsite operations.
3. That all past due taxes along with all penalties and interest owed to Morgan County for Serial# 03-005-123-BCD are paid current prior to the review of the business license for K2 Building Solutions, Inc. located at 4070 West 5800 North Morgan, UT.
4. That the proposed business limits the hours of operation within the timeframe of 6:00 AM to 10:00 PM.
5. That the building official performs a site inspection to ensure code conformance prior to the issuance of a business license, including address and unit numbering and identification consistent with area addressing methods.
6. That a building permit is required to be issued for any electrical, plumbing, heating, and framing etc. during any renovation period.
7. That the applicant schedules a site inspection with the local fire official and receives approval prior to the issuance of a business license.
8. That the business adheres to all other County, State, and Federal requirements.

This recommendation is based on the following findings:

1. That the request conforms to the 2010 General Plan.
2. That the request conforms to the requirements of the Morgan County Code.
3. That the hours of operation may be a conditional use to operate.
4. That Morgan County Code has specific landscaping standards. If the Planning Commission feels additional landscaping is required in order to comply with code, staff would recommend a landscaping design to be submitted for approval by the Zoning Administrator.

MODEL MOTION

Sample Motion for a *Positive* Recommendation – "I move we forward a positive recommendation to the County Council for the K2 Building Solutions, Inc. Conditional Use permit for general contract construction services, file #13.120 subject to the findings and conditions listed in the October 17, 2013 staff report, and as modified by the conditions and findings below:"

1. List any additional findings and conditions…

Sample Motion for a *Negative* Recommendation – "I move we forward a negative recommendation to the County Council for the K2 Building Solutions, Inc. Conditional Use permit for general contract construction services, file #13.120 subject to the following findings:

1. List any additional findings…

SUPPORTING INFORMATION

Exhibit A: Zoning Map
Exhibit B: Site Photo
Exhibit C: Plat Map
Exhibit D: Property Layout

Exhibit A-Zoning Map

Google earth

feet 500

meters 100

Exhibit B-Site/Street View

NOTE: SEE TAX RECORDS FOR INFORMATION ON OWNERSHIP

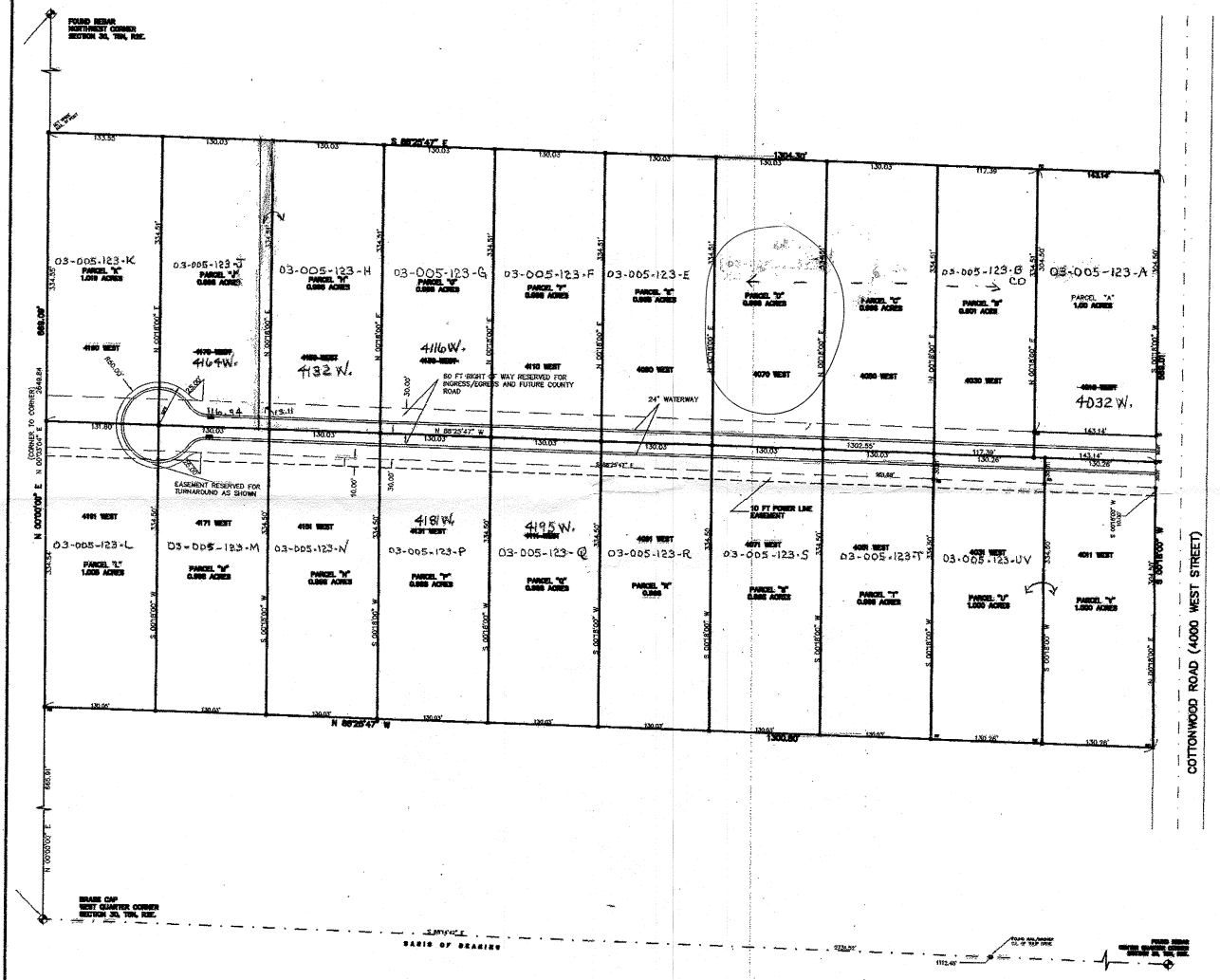
Exhibit C-Plat Map

(UNRECORDED)

COTTONWOOD COMMERCIAL PARK

A PART OF THE NW1/4 OF SECTION 30, T5N, R2E.
SALT LAKE BASE AND MERIDIAN
MORGAN COUNTY, UTAH

SECTION, TOWNSHIP, & RANGE		
30	5N	2E



APPROVED UTAH STATE TAX COMMISSION	REVISIONS: DATE AND INITIAL	IN PENCIL			
DATE BY					

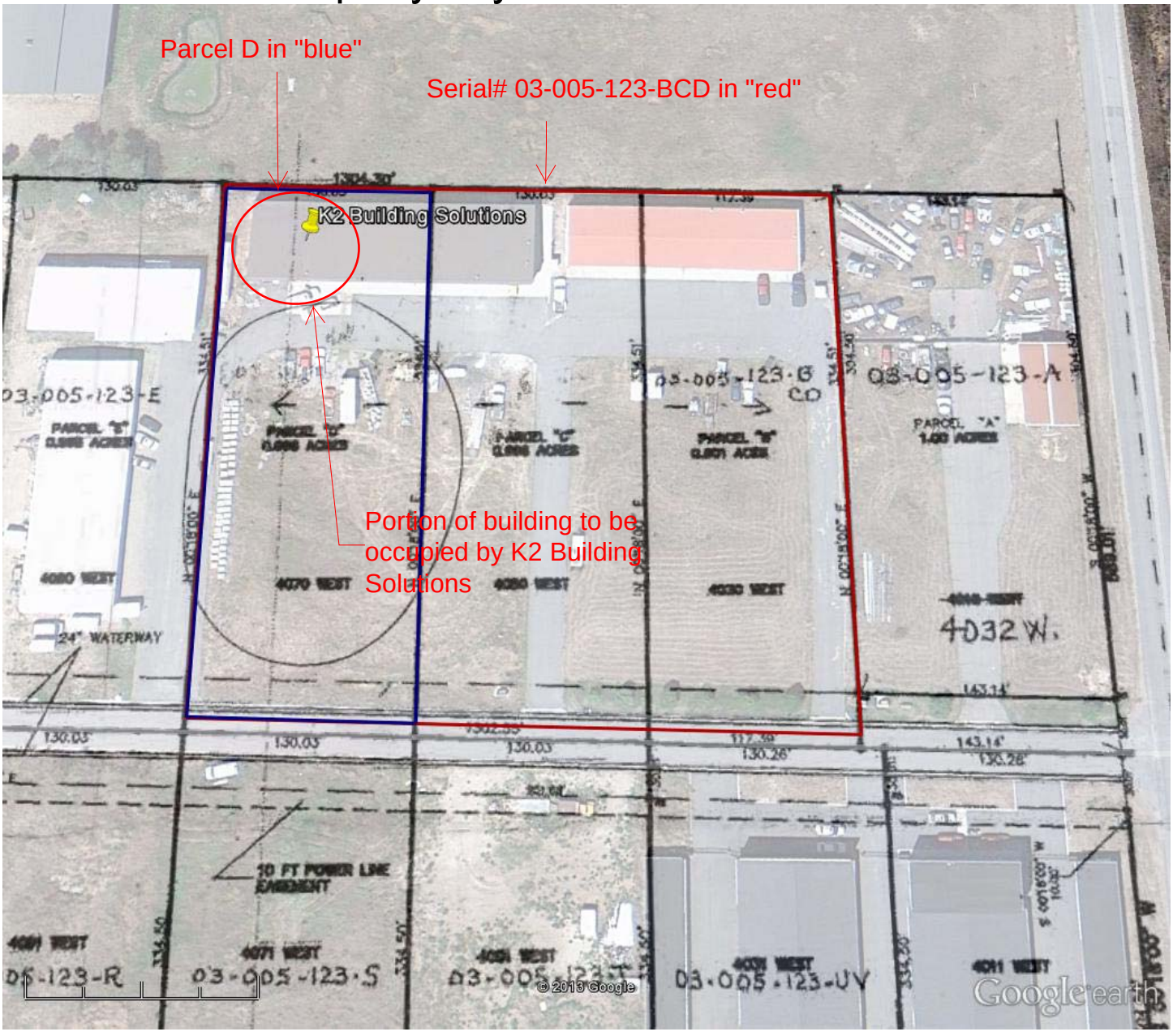
MORGAN COUNTY, UTAH

SCALE 100 FT

COTTONWOOD COMMERCIAL RG 03-005-123-N 2E

MOUNTAIN ENGINEERING

Exhibit D-Property Layout



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48 West Young Street
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STAFF REPORT
November 6, 2013

To: Morgan County Planning Commission
Business Date – November 14, 2013

From: Charles Ewert, Planner

Re: **Earl Acres Subdivision Concept Plan**

Application No.: 13.131
Applicant: Barclay and Denise Earl
Location: Approximately 2940 S. Morgan Valley Drive
Current Zoning: RR-1 and A-20 Zones
Acreage: Approximately 27.01 acres (1,176,682 sq.ft.)
Request: Concept Subdivision Plan and Improvements Exception Approval

SUMMARY & BACKGROUND

The applicant is seeking approval of a two lot subdivision conceptual plan within the RR-1/A-20 zones. The proposal is being reviewed for conceptual design standards as required by County Ordinances. The purpose of a concept plan is to provide the developer an opportunity to consult with the County about ordinance requirements and receive guidance prior to preliminary plat application[1].

With the requested recommendations herein, the application appears to meet the minimum requirements for conceptual subdivision planning of the zoning and subdivision ordinances. It is important to note that because this is a concept plan there may be some compliance issues with certain specifics of the subdivision code. Positive recommendations for Concept approval should not be construed as subdivision approval or vesting in any way[2]. Any noncompliance herein shall be resolved at preliminary plat. Staff's evaluation of the request is as follows.

ANALYSIS

General Plan and Zoning. The subject property is located along South Morgan Valley Drive in an area of unincorporated Morgan County known as Porterville. The 2010 Morgan County General Plan has designated this area as a non-growth area, with no changes from the current zoning. The current designations are Rural Residential and Agriculture. The purpose of the Rural Residential designation[3] is:

> The Rural Residential category designation accommodates semi-rural large lot

[1] MCC 8-12-16
[2] MCC 8-12-19(C)
[3] See 2010 Morgan County General Plan pg. 7, 12

development, with generous distances to streets and between residential dwelling units in a viable semi-rural character setting. Residential density in rural residential areas is a maximum of 1 unit per acre.

The purpose of the Agricultural designation is:

> This designation identifies areas of existing agricultural land uses. The purpose of this land use designation is to support viable agricultural operations in Morgan County, while allowing for incidental large-lot residential and other uses. The residential density in this category is up to 1 unit per 20 acres.

The proposal is in compliance with the General Plan by providing density under this limit.

The current zoning designations on the property are RR-1 and A-20. There are approximately 2.64 acres of the 27.01 acre property in the RR-1 zone. There are approximately 24.37 acres in the A-20 zone.

The purposes of the RR-1 zone[4] are:

> 1. The purposes of providing a rural residential district are:
> a. To promote and preserve in appropriate areas conditions favorable to large lot family life;
> b. Maintaining a rural atmosphere;
> c. The keeping of limited numbers of animals and fowl; and
> d. Reduced requirements for public utilities, services and infrastructure.
> 2. These districts are intended to be primarily residential in character and protected from encroachment by commercial and industrial uses.

The purpose of the A-20 zone[5] are:

> The purposes of providing an agriculture district are to promote and preserve in appropriate areas conditions favorable to agriculture and to maintain greenbelt spaces. These districts are intended to include activities normally and necessarily related to the conduct of agriculture and to protect the district from the intrusion of uses inimical to the continuance of agricultural activity.

The proposal is in compliance with these purpose statements.

The purpose statements in the General Plan and Zoning Ordinance do not provide actual development standards, but present the zoning context for the zone which the proposed subdivision is located. The specific standards found in the adopted County Code govern development of the subject property.

Layout. The Subdivision is two lots that front Morgan Valley Drive[6]. It is currently configured in two separate lots which were not created in accordance with the adopted subdivision code – one of which does not comply with zoning regulations; thus the need for this process to reconfigure and formally subdivide. Lot one is approximately 21.01 acres of land, and lot two is approximately 6.00 acres of land. The proposed lot lines appear to present that the new lot configuration mostly conforms to existing RR-1 standards for lots, including setbacks and coverage; however, the proposed lot two does not appear to conform to the acreage regulations, which require at least one acre within the RR-1 zone[7]. As is currently

[4] MCC §8-5A-1
[5] MCC §8-5A-1
[6] See Exhibit C for the proposed concept plan
[7] MCC §8-5-6

proposed, lot two only has 0.73 acres of land in the RR-1 zone. This area should be expanded to meet the minimum acreage requirements. Staff are confident a minor revision of the plat can be executed prior to preliminary plat submittal to rectify this issue. A condition regarding this is recommended herein.

Roads and Access. Both lots have existing access from Morgan Valley Drive, but neither have sufficient frontage. Exhibit C shows that the access plan is to create a private lane[8]. The private lane is proposed to provide the minimum 200 feet of frontage for both lots, and will be used to establish that the width requirements[9] for lot two can be observed at the setback[10] from the 24 foot wide private lane right of way[11].

Morgan Valley Drive does not meet current adopted standards along the frontage of the subdivision. The applicant has requested an exception from right of way improvement requirements[12], and it appears the request may qualify provided that the existing street is either at least 22 feet wide or improved to be 22' wide. The applicant should clarify the existing street right of way prior to preliminary plat submittal. A condition of approval for the improvements exception has been provided with the recommendations herein.

Grading and land disturbance. Minor site grading can be expected for the creation of the private lane, considering the slopes between the lots. No specific construction/grading plans have been presented, but will be required with the preliminary plat submittal. The private lane is a subdivision improvement and is required as part of subdivision approval.

There may be other minor site preparation necessary prior to building. Any cut or fill that rises to the level of requiring an excavation permit will need a CUP, unless provided for in subdivision grading plans with the preliminary submittal.

Sensitive Areas, Geology, and Geotechnical Considerations. The Salt Lake City Geologic Quadrangle indicates that the majority of the property is within the "Qf" geologic unit[13], which is a known hazard study area[14]. The "Qf" unit is identified as:

> Gravel, sand, and silt; locally bouldery. Crudely bedded to nonbedded and poorly sorted. Maximum thickness probably 10 m[15].

A geologic hazards study is required to be submitted with the preliminary plat with a certification letter from a Geologist and Engineer that indicates that the proposed development plan is free from unreasonable risk of geologic hazards[16]

Utilities. There is an existing irrigation line running through both proposed lots. The proposal provides for the easement previously recorded. Ten foot public utility easements have been shown along the front and rear of both lots, with a seven foot easement along the shared side lot line. These proposed easements comply with County Code[17].

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[8] MCC §8-12-44(P)
[9] MCC §8-5A-5
[10] MCC §8-5A-6
[11] MCC §8-12-44(P)(1)(c)
[12] MCC § 8-12-44(D)(2)
[13] See Utah Geologic Survey interactive map: http://geology.utah.gov/maps/geomap/interactive/viewer/index.html
[14] MCC §8-5I-4
[15] See Salt Lake City Geologic Quadrangle map for unit descriptions.
[16] MCC §8-5I-12
[17] MCC §8-12-46(G)

It appears that the current proposal is to create a shared well on lot two that lot one will have access to. If this remains the approach, then water line easements will need to be provided from the well location across lot two extending to lot one. The applicant will need to obtain approval of this proposal from the Weber-Morgan Health Department prior to preliminary plat submittal. Water right/share information and well log from an immediately adjacent well will be required with preliminary plat submittal for our evaluation. Approval should be conditioned on adequate access to paper and wet water. No specific secondary water plan has been presented. If none is offered, then secondary water requirements will need to be served by the culinary well.

No specific sewage disposal plan has been submitted. Lot two indicates an area where a percolation test was performed, presumably for a septic system. Approval should be conditioned on the approval by Weber Morgan Health Department of a sewer disposal system.

Flood Plain. There is no negative flood plain boundary onsite.

Addressing. Because of the configuration of the lots as they wrap around the existing lot at 2940 S. Morgan Valley Drive, logical addressing of future residences may be dependent on whether the primary access to lot one is provided off of the new private lane, south of 2940 S. or from a separate drive that connects the building pad to Morgan Valley Drive north of 2940 S. Staff recommend that a note is placed on the plat that the address of the lot may be changed prior building permit issuance.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission forward a positive recommendation to the County Council for the Earl Acres Subdivision Concept Plan and associated improvements exception, application 13.131, with the following conditions:

1. That all outsourced consultant fees are paid current prior to final plat recordation.
2. That the plat is revised prior to preliminary plat submittal to provide the minimum acreage requirements for both lots.
3. That a slope analysis is provided for the subdivision clearly identifying areas over 15% and 25% slope with preliminary plat submittal.
4. That a geologic hazards scoping meeting is held prior to preliminary plat submittal in compliance with MCC §8-5I, and that all reports, studies, and certifications related to geologic hazards studies are provided with the preliminary plat submittal. The preliminary plat shall be designed in a manner that addresses the recommendations of the geologist and geotechnical engineer.
5. That an improvements plan for the proposed private lane is provided with sufficient engineering detail with the preliminary plat submittal.
6. That an improvements exception for the project is conditioned on the current width of Morgan Valley Drive being 22 feet wide with adequate shoulders, as verified by the project surveyor or engineer; or that improvement of the existing street is provided to a minimum width of 22 feet with adequate shoulders. Construction drawings, if necessary, illustrating the improvements shall be provided with the preliminary plat submittal, and final plat approval shall be conditioned on the execution of a cash bond and agreement or completion agreement for said improvements.
7. That proof of culinary shares/rights (800 gallons per day) and irrigation shares/rights (3 gallons per minute) are provided for each lot at preliminary plat application.
8. That addresses for both lots are added to the design prior to preliminary plat submittal, with a note that specifies that depending on residential building locations, the address of Lot 1 may need to be changed prior to building permit issuance.
9. That the culinary water proposal is approved by the Weber-Morgan Health Department prior to

preliminary plat submittal.
10. That a sewer disposal mechanism is approved by the Weber-Morgan Health Department prior to preliminary plat submittal.
11. That all red/bluelines on the plat herein are corrected with preliminary plat submittal.
12. That all other local, state, and federal laws are adhered to.

This recommendation is based on the following findings:

1. The nature of the subdivision is in conformance with the current and future land uses of the area.
2. The proposal complies with the Morgan County 2010 General Plan.
3. With the recommended conditions the proposal can be revised to comply with current zoning requirements and subdivision requirements.
4. That additional work is necessary to make the proposal comply with preliminary plat requirements.
5. That with the listed conditions the proposal is found to comply with the findings required for an improvements exception; namely, that requiring the full street infrastructure improvements:
    a. Is not roughly proportional, in nature or extent, to the impact of the development on the community;
    b. Is not beneficial to the county; or may be detrimental to the neighboring property abutting the development;
    c. Is not necessary at this time to protect the public's health, safety, and welfare.
6. That approval of the concept plan and the improvements exception renders the project "routine and uncontested" and as such qualifies for approval by the Zoning Administrator in compliance with adopted laws.
7. That the proposal is not detrimental to the health, safety, and welfare of the public.

MODEL MOTIONS

Sample Motion for a Positive Recommendation – "I move we forward a positive recommendations for the Earl Acres Subdivision Concept Plan, application 13.131, as listed in the November 14, 2013 staff report, and as modified by the additional recommendations below:"

1. List any additional recommendations…

Sample Motion for a denial – "I move forward a negative recommendation for the Earl Acres Subdivision Concept Plan, application 13.131, with the following findings:"

1. List findings…

SUPPORTING INFORMATION

Exhibit A: Future Land Use Map
Exhibit B: Zoning Map
Exhibit C: Proposed Concept Plan(s) with Staff Redlines

Exhibit A: Future Land Use Map Amendment

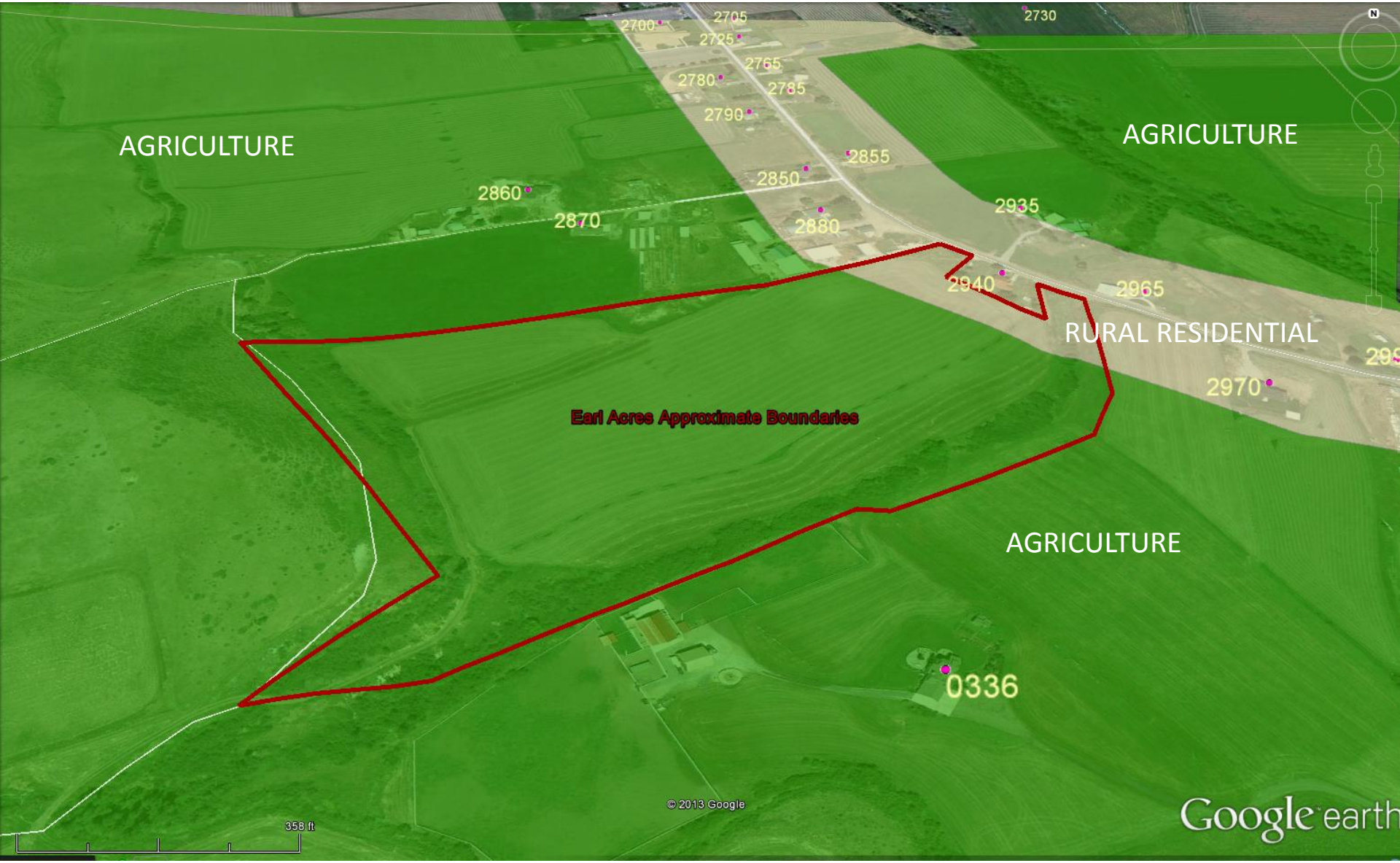


Exhibit B: Current Zoning Map

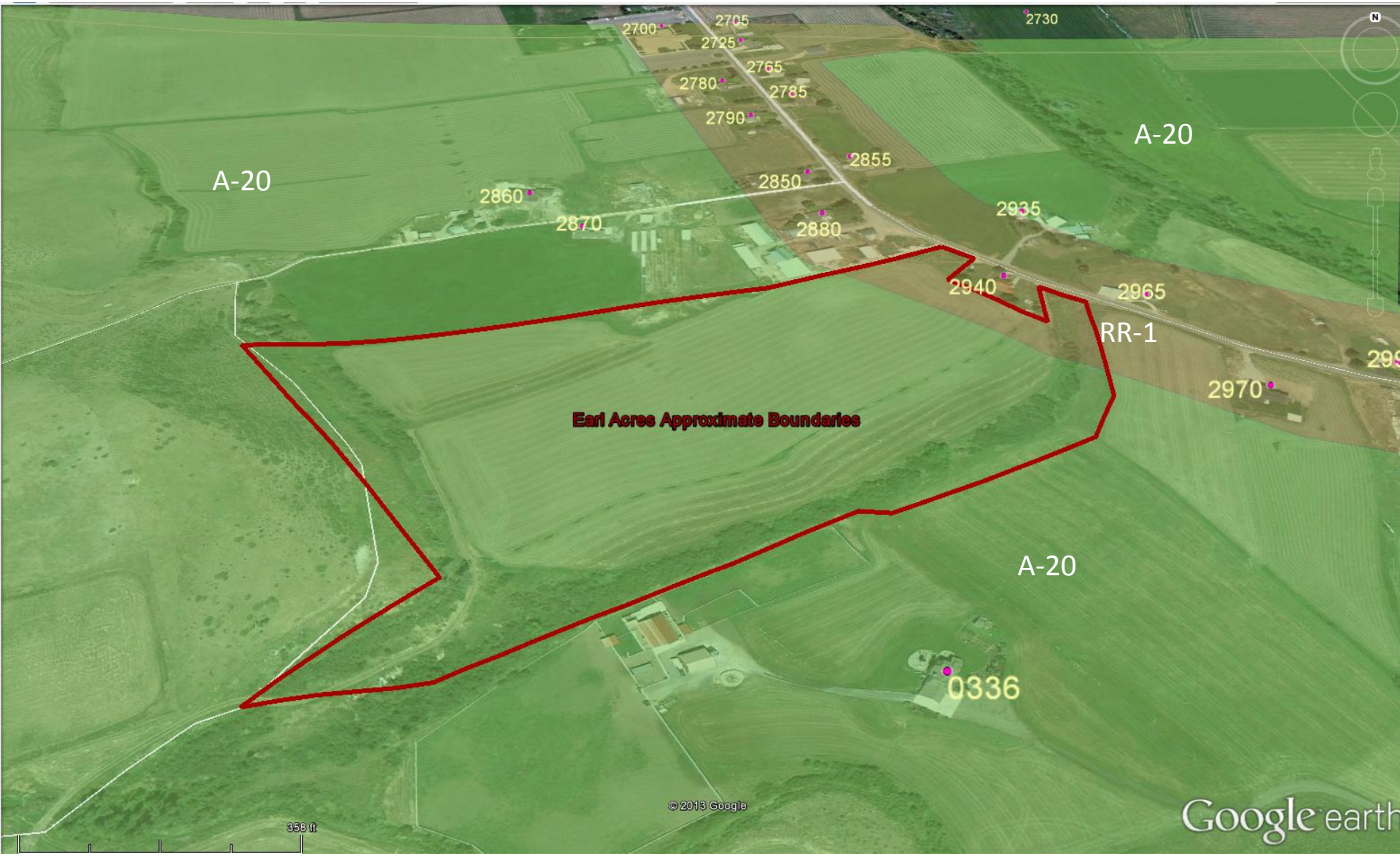


Exhibit C: Proposed Concept Plan(s) with Staff Bluelines

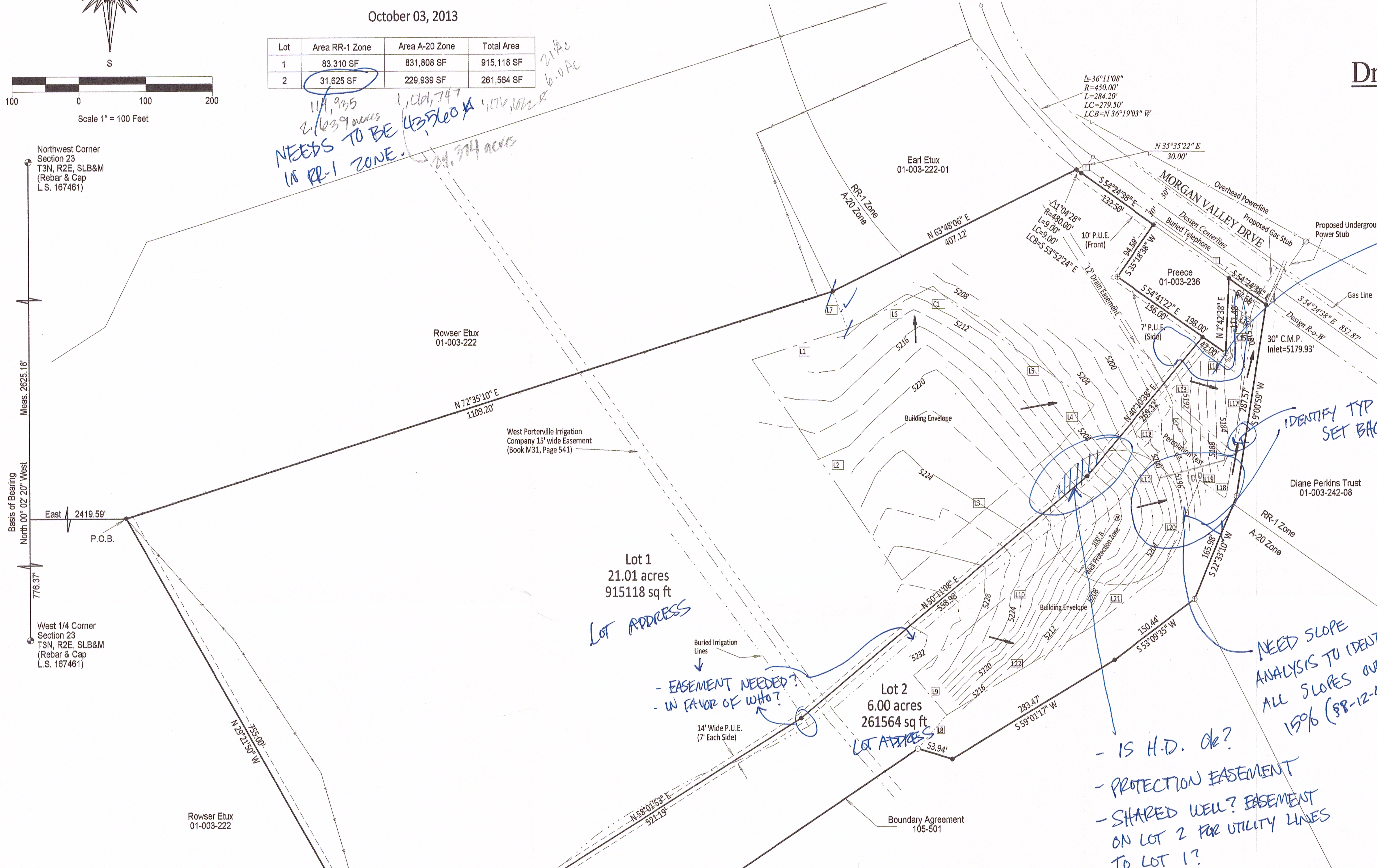
EARL ACRES SUBDIVISION

Located in the NE 1/4 of Section 23, Township 3 North, Range 2 East, Salt Lake Base and Meridian
Porterville, Morgan County Utah

October 03, 2013

Lot	Area RR-1 Zone	Area A-20 Zone	Total Area
1	83,310 SF	831,808 SF	915,118 SF
2	31,625 SF	229,939 SF	261,564 SF

Drainage, Contour and Utility Map



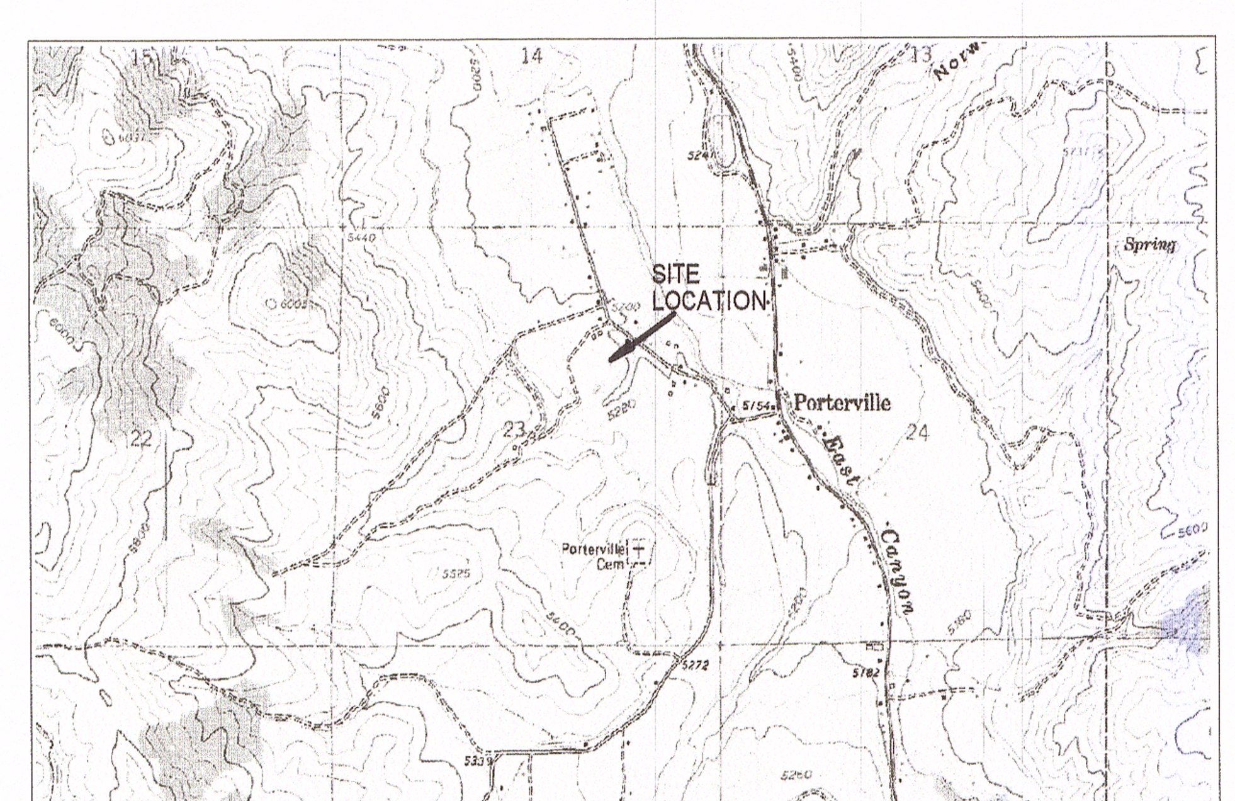
Id	Bearing	Distance
L1	S 72°35'10" W	150.00'
L2	S 34°01'34" E	396.62'
L3	N 50°11'08" E	306.70'
L4	N 40°10'38" E	82.51'
L5	N 54°24'38" W	214.63'
L6	S 63°48'06" W	142.69'
L7	S 21°48'22" E	60.18'
L8	N 41°20'07" E	65.93'
L9	S 39°48'52" E	76.86'
L10	S 50°11'08" W	395.21'
L11	S 40°10'38" W	102.65'
L12	S 54°24'38" E	45.14'
L13	N 40°10'38" E	161.76'
L14	S 54°41'22" E	55.62'
L15	N 2°42'38" E	93.46'
L16	S 54°24'38" E	28.66'
L17	S 9°00'59" W	259.75'
L18	S 22°33'10" W	7.89'
L19	S 54°24'38" E	46.19'
L20	N 22°33'10" E	150.30'
L21	N 53°09'35" E	130.95'
L22	N 59°01'17" E	253.80'

Id	Delta	Radius	Arc Length	Chord	Ch Bear
C1	6°22'41"	750.00'	83.49'	83.45'	N 51°13'18" W

1. Morgan County restricts the occupancy of buildings within developments as outlined in the adopted building and fire codes. It is unlawful to occupy a building located within any development without first having obtained a certificate of occupancy issued by the county.
2. Morgan County recognizes the right to farm and that agriculture operations work hours begin early and run late and that these operations may contribute to noises and odors objectionable to some residents.
3. It is the intent of this plat to dedicate 10 foot Public Utility Easements along the front and rear of the subdivision and a 7 foot wide Public Utility Easement along the common lot line of lot 1 and 2 on each lot for a total width of 14 feet.
4. It is the intent of this plat to dedicate any land owned by the developer which is located within the 60' right of way line of Morgan Valley Drive along the front, or adjacent to this subdivision to the county for a public street.
5. There is an existing drain traversing lots 1 and 2. The location shown hereon is approximate based on a site visit and the developers best knowledge. It is the intent of this plat to dedicate a 12 foot wide easement over the existing pipe location.
6. There are buried irrigation lines located on lots 1 and 2 which facilitate irrigation of the property with a wheel line. It is the intent of this plat to dedicate a 12' maintenance easement over each of these irrigation lines.
7. No Sources of contamination shall be located within the well protection zone, such as the waste treatment system.
8. Drainage is not significantly being altered. Arrows indicate the current drainage according to existing slope per the contour lines. All drainage is directed to the 30 inch C.M.P. either naturally or via the drain pipe shown. The 30" C.M.P. is located at the northeastern corner of lot 2, along Morgan Valley Drive.
9. Utilities will be stubbed underground as shown to provide service to lot 2.
10. Line and Curve Labels are used to dimension the Buidling Envelopes. See the corresponding Table.

EVALUATION OF SITE BUILDABILITY IN TERMS OF SLOPES, GEOHAZ, GEOTECH, FLOOD HAZ, ETC WAS ONLY PROVIDED FOR THE RESIDENTIAL BUILDING ENVELOPES HEREON. ANY FUTURE PLAT AMENDMENT TO EXPAND THE ENVELOPE MAY REQUIRE ADDITIONAL STUDY.

12. ROW DEDICATION: PROVIDE NOTE OR OTHER REFERENCE DESCRIBING THAT AREA WITHIN MUD. ROW IS BEING DEDICATED TO PUBLIC W/ THE "OWNER DEDICATION"



VICINITY MAP

Surveyor Certificate

I, Paul Ferry, do hereby certify that I am a Registered Professional Land Surveyor in the State of Utah and that I hold certificate number 368358 in accordance with Title 58, Chapter 22, Professional Engineers and Land Surveyors Licensing Act, I further certify that I have completed a survey of the property described on this plat in accordance with Section 17-23-17, Utah Code, and have verified measurements shown, and have subdivided said property into lots and streets hereafter to be known as the EARL ACRES SUBDIVISION and that the same has been surveyed and monuments have been placed on the ground as shown hereon.

October 03, 2013

PROFESSIONAL LAND SURVEYOR PAUL C. FERRY No. 368358 LICENSED STATE OF UTAH 10-3-13

Boundary Description

A tract of land being situated in the Northeast 1/4 of Section 23, Township 3 North, Range 2 East, Salt Lake Base and Meridian and having a Basis of Bearing matching the Utah North State Plane Zone (NAD 83) described as follows:

Beginning at a point which is North 00° 02' 20" West 776.37 feet along the Section Line and East 2419.59 feet from the West 1/4 Corner of Section 23, T3N, R2E, SLB&M, said point also being North 38° 50' 26" West 4536.80 feet from a 1 inch pipe marking the Southeast Corner of said Section 23 (said Point of Beginning is at an Existing Fence Corner) and running thence North 72°35'10" East 1109.20 feet along an existing line of fence and projection thereof common to the Earl and Rowser Property; thence North 63°48'06" East 407.12 feet along the boundary line of Parcel 01-003-222-01 more or less to a point of intersection with the designed right of way of Morgan Valley Drive; thence along said right of way line 9 feet following the arc of a 480.00 foot radius curve to the left, (Long Chord Bears South 53°52'24" East, 9.00'); thence South 54°24'38" East 132.50 feet along said right of way to a point of intersection with Parcel 01-003-236; the next (3) courses are along said Parcel, thence South 35°18'38" West 94.59 feet; thence South 54°41'22" East 198.00 feet; thence North 2°42'38" East 111.48 feet more or less to the design right of way line of Morgan Valley Drive; thence South 54°24'38" East 67.68 feet along said right of way line more or less to the common line of Parcel 01-003-242-08; thence South 9°00'59" West 287.57 feet; thence South 22°33'10" West 165.98 feet to an existing Rebar & Cap, a point common to that certain boundary line agreement found in Book 105, Page 501; the next (4) courses are along said boundary line agreement, thence South 53°09'35" West 150.44 feet; thence South 59°01'17" West 283.47 feet; thence North 73°09'29" West 53.94 feet; thence South 56°05'43" West 849.47 feet to an existing rebar at the remnants of an old fence corner; thence South 79°56'45" West 309.69 feet to a point of intersection with Parcel 01-003-222 owned by Rowser; the next (2) courses are along said Parcel owned by Rowser, thence North 42°14'40" East 294.60 feet; thence North 29°21'50" West 755.00 feet to the POINT OF BEGINNING; said described tract containing 27.01 Acres, more or less.

Owner Dedication

Know all men by these presents that we, the undersigned owner(s) of the above described tract of land, having caused said tract to be subdivided into lots and streets to be hereafter known as the Earl Acres Subdivision do hereby dedicate for perpetual use of the public all parcels of land, other utilities, or easements shown on this plat as intended for public use.

In witness whereof _______ have hereunto set _____________ hands this _______ day of __________________ A.D. 20 ______.

Acknowledgement

STATE OF UTAH
COUNTY OF MORGAN

Personally appeared before me this _____ day of _________________, 20 _____ the following:

Who acknowledged to me that ____he____ executed the above OWNERS DEDICATION.

My commission expires: ________________
Residing in: __________________

Notary Public

Consent to Record

STATE OF UTAH
COUNTY OF MORGAN

The undersigned lien holder hereby consents to the recordation of the plat.

By:

The foregoing CONSENT to RECORD was acknowledged before me this _____ day of _________________, 20 _____. By: _________________

My commission expires: _____________
Residing in: __________________

Notary Public

STATE OF UTAH
COUNTY OF MORGAN

The undersigned lien holder hereby consents to the recordation of the plat.

By:

The foregoing CONSENT to RECORD was acknowledged before me this _____ day of _________________, 20 _____. By: _________________

My commission expires: _____________
Residing in: __________________

Notary Public

MORGAN COUNTY SURVEYOR

Approved and accepted this ________, day of _______________, 20 ______.

Morgan County Surveyor

HIGH MOUNTAIN SURVEYING, LLC

P.O. Box 445
1325 South Hoytsville Road
Coalville, Utah 84017
435-336-4210

WEBER - MORGAN HEALTH DISTRICT

The waste disposal system and the culinary water system are hereby approved.

Signed this ______ day of _________________, 20 ______.

District Health Officer

MORGAN COUNTY PLANNING COMMISSION

This is to certify that this subdivision plat was duly recommended for approval by the Morgan County Planning Commission on this ______ day of _________________, 20 _____.

Signed this ______ day of _________________, 20 ______.

Chairman, Morgan County Planning Commission

COUNTY ENGINEER

I hereby certify that the requirements of all applicable statutes and ordinances prerequisite to the approval by the County Engineer of the foregoing plat and dedications have been complied with.

Signed this ______, Day of _________________, 20 _____.

Morgan County Engineer

~~MORGAN COUNTY COUNCIL~~ ZONING ADMINISTRATOR

This is to certify that this subdivision plat and the dedication are hereby accepted by the Council of Morgan County, Utah this _____ day of _________________, 20 _____.

Chariman, Morgan County Council

Attest: Morgan County Clerk

MORGAN COUNTY ATTORNEY

Approved as to form this ______ day of _________________, 20 ______.

Morgan County Attorney

COUNTY RECORDER

STATE of UTAH COUNTY MORGAN

Recorded and filed at the request of ________________

Date: ____________ Time: ____________
Entry # ____________ Fee: ____________

County Recorder

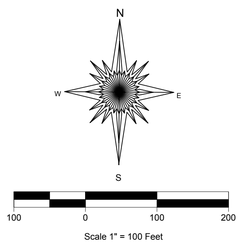
Exhibit C: Proposed Concept Plan(s) with Staff Bluelines

EARL ACRES SUBDIVISION

Located in the NE 1/4 of Section 23, Township 3 North, Range 2 East, Salt Lake Base and Meridian
Porterville, Morgan County Utah

October 03, 2013

Lot	Area RR-1 Zone	Area A-20 Zone	Total Area
1	83,310 SF	831,808 SF	915,118 SF
2	31,625 SF	229,939 SF	261,564 SF



Id	Bearing	Distance
L1	S 72°35'10" W	150.00'
L2	S 34°01'34" E	396.62'
L3	N 50°11'08" E	306.70'
L4	N 40°10'38" E	82.51'
L5	N 54°24'38" W	214.63'
L6	S 63°48'06" W	142.69'
L7	S 21°48'22" E	60.18'
L8	N 41°20'07" E	65.93'
L9	S 39°48'52" E	76.86'
L10	S 50°11'08" W	395.21'
L11	S 40°10'38" W	102.65'
L12	S 54°24'38" E	45.14'
L13	N 40°10'38" E	161.76'
L14	S 54°41'22" E	55.62'
L15	N 2°42'38" E	93.46'
L16	S 54°24'38" E	28.66'
L17	S 9°00'59" W	259.75'
L18	S 22°33'10" W	7.89'
L19	S 54°24'38" E	46.19'
L20	N 22°33'10" E	150.30'
L21	N 53°09'35" E	130.95'
L22	N 59°01'17" E	253.80'

Id	Delta	Radius	Arc Length	Chord	Ch Bear
C1	6°22'41"	750.00'	83.49'	83.45'	N 51°13'18" W

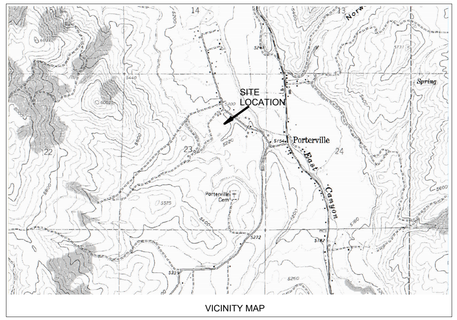
Id	Delta	Radius	Arc Length	Tangent	Chord	Ch Bear
C2	122°36'00"	40.00'	85.59'	73.06'	70.17'	N 64°00'38" E
C3	55°46'16"	15.00'	14.60'	7.94'	14.03'	N 82°34'30" W
C4	291°52'32"	33.00'	167.92'	N/A	37.12'	N 35°18'38" E
C5	55°46'16"	15.00'	14.60'	7.94'	14.03'	S 26°48'14" E

Id	Bearing	Distance
L23	S 2°42'38" W	102.17'
L24	S 54°31'43" E	15.42'
L25	N 54°41'22" W	36.45'
L26	N 54°41'22" W	13.38'

24' Wide Private Lane Detail

LEGEND

- Fence
- Public Utility Easement
- Irrigation Line
- Set Rebar & Cap LS 368358 High Mountain
- Existing Rebar & Cap "Holyoak"
- Existing 5/8" Rebar



1. Morgan County restricts the occupancy of buildings within developments as outlined in the adopted building and fire codes. It is unlawful to occupy a building located within any development without first having obtained a certificate of occupancy issued by the county.

2. Morgan County recognizes the right to farm and that agriculture operations work hours begin early and run late and that these operations may contribute to noises and odors objectionable to some residents.

3. It is the intent of this plat to dedicate 10 foot Public Utility Easements along the front and rear of the subdivision and a 7 foot wide Public Utility Easement along the common lot line of lot 1 and 2 on each lot for a total width of 14 feet.

4. It is the intent of this plat to dedicate any land owned by the developer which is located within the 60' right of way line of Morgan Valley Drive along the front, or adjacent to this subdivision to the county for a public street.

5. There is an existing drain traversing lots 1 and 2. The location shown hereon is approximate based on a site visit and the developers best knowledge. It is the intent of this plat to dedicate a 12 foot wide easement over the existing pipe location.

6. There are buried irrigation lines located on lots 1 and 2 which facilitate irrigation of the property with a wheel line. It is the intent of this plat to dedicate a 12' maintenance easement over each of these irrigation lines.

7. No Sources of contamination shall be located within the well protection zone, such as the waste treatment system.

8. Line and Curve Labels are used to dimension the Buidling Envelopes. See the corresponding Table.

9. The Developer reserves a non exclusive access easement, sufficient in width to accomodate agriculture machinery and other necessary uses over lot 2 which location shall be determined after construction on lot 2 is complete.

Surveyor Certificate

I, Paul Ferry, do hereby certify that I am a Registered Professional Land Surveyor in the State of Utah and that I hold certificate number 368358 in accordance with Title 58, Chapter 22, Professional Engineers and Land Surveyors Licensing Act, I further certify that I have completed a survey of the property described on this plat in accordance with Section 17-23-17, Utah Code, and have verified measurements shown, and have subdivided said property into lots and streets hereafter to be known as the EARL ACRES SUBDIVISION and that the same has been surveyed and monuments have been placed on the ground as shown hereon.

October 03, 2013

PROFESSIONAL LAND SURVEYOR
PAUL C. FERRY
No. 368358
(Agency)
STATE OF UTAH

Boundary Description

A tract of land being situated in the Northeast 1/4 of Section 23, Township 3 North, Range 2 East, Salt Lake Base and Meridian and having a Basis of Bearing matching the Utah North State Plane Zone (NAD 83) described as follows:

Beginning at a point which is North 00° 02' 20" West 776.37 feet along the Section Line and East 2419.59 feet from the West 1/4 Corner of Section 23, T3N, R2E, SLB&M, said point also being North 38° 50' 26" West 4536.80 feet from a 1 inch pipe marking the Southeast Corner of said Section 23 (said Point of Beginning is at an Existing Fence Corner) and running thence North 72°35'10" East 1109.20 feet along an existing line of fence and projection thereof common to the Earl and Rowser Property; thence North 63°48'06" East 407.12 feet along the boundary line of Parcel 01-003-222-01 more or less to a point of intersection with the designed right of way of Morgan Valley Drive; thence along said right of way line 9 feet following the arc of a 480.00 foot radius curve to the left, (Long Chord Bears South 53°52'24" East, 9.00'); thence South 54°24'38" East 132.50 feet along said right of way to a point of intersection with Parcel 01-003-236; the next (3) courses are along said Parcel, thence South 35°18'38" West 94.59 feet; thence South 54°41'22" East 198.00 feet; thence North 2°42'38" East 111.48 feet more or less to the design right of way line of Morgan Valley Drive; thence South 54°24'38" East 67.68 feet along said right of way line more or less to the common line of Parcel 01-003-242-08; thence South 9°00'59" West 287.57 feet; thence South 22°33'10" West 165.98 feet to an existing Rebar & Cap, a point common to that certain boundary line agreement found in Book 105, Page 501; the next (4) courses are along said boundary line agreement, thence South 53°09'35" West 150.44 feet; thence South 59°01'17" West 283.47 feet; thence North 73°09'29" West 53.94 feet; thence South 56°05'43" West 849.47 feet to an existing rebar at the remnants of an old fence corner; thence South 79°56'45" West 309.69 feet to a point of intersection with Parcel 01-003-222 owned by Rowser; the next (2) courses are along said Parcel owned by Rowser, thence North 42°14'40" East 294.60 feet; thence North 29°21'50" West 755.00 feet to the POINT OF BEGINNING; said described tract containing 27.01 Acres, more or less.

Owner Dedication

Know all men by these presents that we, the undersigned owner(s) of the above described tract of land, having caused said tract to be sudivided into lots and streets to be hereafter known as the Earl Acres Subdivision do hereby dedicate for perpetual use of the public all parcels of land, other utilities, or easements shown on this plat as intended for public use.

In witness whereof _____ have hereunto set _____ hands this _____ day of _____ A.D. 20 _____.

Acknowledgement

STATE OF UTAH
COUNTY OF MORGAN

Personally appeared before me this _____ day of _____, 20 _____ the following:

Who acknowledged to me that _____he_____ executed the above OWNERS DEDICATION.

My commission expires: _____
Residing in: _____

Notary Public

Consent to Record

STATE OF UTAH
COUNTY OF MORGAN

The undersigned lien holder hereby consents to the recordation of the plat.

By:

The foregoing CONSENT to RECORD was acknowledged before me this _____ day of _____, 20 _____. By: _____

My commission expires: _____
Residing in: _____

Notary Public

STATE OF UTAH
COUNTY OF MORGAN

The undersigned lien holder hereby consents to the recordation of the plat.

By:

The foregoing CONSENT to RECORD was acknowledged before me this _____ day of _____, 20 _____. By: _____

My commission expires: _____
Residing in: _____

Notary Public

MORGAN COUNTY SURVEYOR

Approved and accepted this _____, day of _____, 20 _____.

Morgan County Surveyor

High Mountain
Surveying, LLC
P.O. Box 445
1325 South Hoytsville Road
Coalville, Utah 84017
435-336-4210

WEBER - MORGAN HEALTH DISTRICT

The waste disposal system and the culinary water system are hereby approved.

Signed this _____ day of _____, 20 _____.

District Health Officer

MORGAN COUNTY PLANNING COMMISSION

This is to certify that this subdivision plat was duly recommended for approval by the Morgan County Planning Commission on this _____ day of _____, 20 _____.

Signed this _____ day of _____, 20 _____.

Chairman, Morgan County Planning Commission

COUNTY ENGINEER

I hereby certify that the requirements of all applicable statutes and ordinances prerequisite to the approval by the County Engineer of the foregoing plat and dedications have been complied with.

Signed this _____, Day of _____, 20 _____.

Morgan County Engineer

MORGAN COUNTY COUNCIL

This is to certify that this subdivision plat and the dedication are hereby accepted by the Council of Morgan County, Utah this _____ day of _____, 20 _____.

Chairman, Morgan County Council

Attest: Morgan County Clerk

MORGAN COUNTY ATTORNEY

Approved as to form this _____ day of _____, 20 _____.

Morgan County Attorney

COUNTY RECORDER

STATE of UTAH COUNTY MORGAN

Recorded and filed at the request of _____

Date: _____ Time: _____
Entry # _____ Fee: _____

County Recorder

MORGAN COUNTY
Planning and Development Services

48 West Young Street
Morgan, UT 84050
(801) 845-4015

STAFF REPORT

November 6, 2013

To: Morgan County Planning Commission
Business Date: November 14, 2013

Prepared By: Ronda Kippen, Planning Technician

Re: **Sauer Conditional Use Permit Request**

Application No.:	13.012
Applicant:	Randy Sauer
Project Location:	6502 & 6522 N Highland Drive
Zoning:	R1-20
Acreage:	1.28 Acres; Limits of Disturbance: 0.27 Acres
Request:	Conditional Use Permit for excavation for a residential building pad located at 6502 N Highland Drive.

SUMMARY

The proposed project is a combination of imported and native material to retain soils for a residential building pad on Lot 50 in the Highlands Addition No. 1 Subdivision. The proposed grading exceeds the permitted threshold allowed under Title 8 in the Morgan County Code (MCC) prompting the conditional use permit process. The conditional use process will ensure adequate site engineering to mitigate harmful impact for the property owner as well as the public infrastructure. The proposed project is being reviewed as a "Land Excavation" which is allowed in the R1-20 zone by a conditional use permit.

Conditional Use Permits are administrative actions and as such should be approved as long as harmful impact as provided for in adopted ordinances can be mitigated. The County Code already specifies certain standards necessary for mitigation of harmful impact to which the proposal must adhere. With the recommended conditions, the proposal appears to meet these standards. The following is staff's evaluation of the request.

BACKGROUND

The Highlands Addition No. 1Subdivision was approved by Morgan County in 1964. It appears geologic issues within Morgan County did not become a concern until the mid-1980s. On May 16, 2006, the County Council adopted a temporary zoning ordinance which enacted a moratorium on the issuance of building permits within the Highlands West, Woodland Heights, and Highlands Additions 1-6 Subdivisions due to significant landslides and slope stability issues. The County Council passed two ordinances in 2006 which created a regulatory framework for review of building permit and development applications in sensitive geologic hazard areas. The County Council initiated a code re-write in 2009 to address the County's sensitive lands and geologic hazard needs. The County Council adopted CO-10-02 that repealed CO-06-022 and enacted the Geologic Hazard Chapter of the Morgan County Land Use Regulations Code.

ANALYSIS

Zoning
The property falls within the R1-20 zone (see Exhibit A). In the R1-20 zone, land excavations that exceed the identified thresholds in MCC §8-8-7 (5)(3) are conditional allowed.

> **Residential District R1-20:** To provide areas for very low density, single-family residential neighborhoods of spacious and uncrowded character.

> **8-5B-3: USE REGULATIONS:**
> No building, structure or land shall be used and no building or structure shall be hereafter erected, structurally altered, enlarged or maintained in the rural residential district, single-family residential district or multiple residential district, except as provided in this article.

	Districts				
	R1-20	R1-12	R1-8	RM-7	RM-15
Dwellings:					
Single-family dwelling	P	P	P	P	P
Land excavations	C	C	C	C	C

> **8-8-7: LANDFILLS AND LAND EXCAVATIONS:**
> B. Permit Required; Exceptions:
> 3. A conditional use permit shall be required in all cases where development comes under any one or more of the following provisions, unless such work is otherwise exempted elsewhere in this chapter:
> a. Excavation, fill or any combination thereof exceeding one thousand (1,000) cubic yards.
> b. Fill exceeding five feet (5') in vertical depth at its deepest point measured from the adjacent undisturbed ground surface.
> c. An excavation exceeding five feet (5') in vertical depth at its deepest point.

Ordinance Evaluation.
MCC §8-8-7(F) outlines the standards and specific requirements for the proposed improvements that shall be complied with. Staff feels that the conditions outlined in MCC §8-8-7(F) are necessary in order to mitigate harmful impact.

Property Layout. Lot 50 in the Highlands Addition No. 1 Subdivision lies north of the Sierra Drive/Highland Drive intersection and runs along the east side of Highland Drive. The proposed improvements will be confined to approximately 100' from Highland Drive on Lot 50 of the Highlands Addition No. 1 Subdivision with a portion of the access running along the front property line of Lot 51 of said Subdivision. The proposed improvements will cover approximately 0.27 acres of the 1.28 acre parcel (see Exhibit B). According to the reports provided as part of the application, it appears that the

proposal may be affected by known geologic hazard study areas (see Exhibit C). Staff recommends that the applicant adheres to MCC §8-5I-12 to ensure that the public right of way will not be negatively impacted due to the proposed improvements.

Setbacks. The setbacks for the R1-20 zone are 30' Front Setback, 30' Rear Setback, 10'/14' Side Setback. It appears that the proposed improvements will conform to the required setbacks.

Roads and Access. The applicant is proposing to utilize a portion of Lot 51 of the Highlands Addition No. 1 Subdivision to access Lot 50 from Highland Drive. Staff feels that an access easement should be executed and recorded on Lot 51 of the Highlands Addition No. 1 Subdivision in order to ensure adequate access for Lot 50.

Grading and Land Disturbance. The land proposed to be disturbed is approximately 0.27 acres or roughly 11,747 square feet. The applicant anticipates importing approximately 48 cubic yards in addition to the onsite material to create a residential building pad.

Landscaping. The applicant has not proposed a revegetation and reseeding plan in accordance with MCC §8-8-7(F)(7) and MCC §8-8-7(F)(10)which states that:

> 7. Finished Cuts And Slopes: The exposed or finished cuts or slopes of any fill or excavation shall be smoothly graded. All exposed slopes of any cut or fill shall be protected by approved planting, crib walls or walls and planting, terracing, or combination thereof.
>
> 10. Erosion Control And Landscaping: All cut and fill surfaces created by grading, except for firebreak purposes, shall be planted with a ground cover that is compatible with the natural ground covers in the county. Topsoil is to be stockpiled during rough grading and used on cut and fill slopes…

Staff feels that a revegetation and reseeding plan for the disturbed areas will assist in the required erosion control as per the County Engineer (Exhibit D).

Bonding. To ensure that sufficient revegetation and reseeding is installed, the Planning Commission should consider requiring a completion bond as a condition of approval of this required site improvement, pursuant to MCC §8-8-5(H). The bond amount should be for 100% of the total cost of the revegetation/reseeding plans as verified in an Engineer's Cost Estimate.

County Engineer's Review. The County Engineer has completed a review of the proposal and is recommending approval once the applicant can provide acceptable erosion control designs (See Exhibit D). The County Engineer has determined that all final comments/corrections can be accomplished administratively prior to a preconstruction meeting with the applicant.

NOTICING

Pursuant to MCC§ 8-3-13(I), a conditional use permit is a public comment item and requires certain noticing within 10 calendar days of the first public meeting. Further, pursuant to MCC §8-3-13(C) the following noticing requirements have been met for this application:

> C. Notice To Third Parties: For site specific land use applications which require a public hearing or public comment, the county shall mail notice to the record owner of each parcel within a one thousand foot (1,000') radius of the subject property, and the applicant shall post a sign on the property according to the following regulations:

1. Post a county provided sign along each street on which the subject property has frontage. If the subject property does not abut a street, then the sign should be posted on a nearby street as determined by the zoning administrator. Sign shall be of sufficient size, durability, print quality and location that it is reasonably calculated to give notice to those passing by. It shall be the responsibility of the applicant to remove and dispose of the sign(s) within five (5) calendar days after the final hearing or meeting regarding the application. Third party property owners who live within the one thousand foot (1,000') radius but outside of Morgan County boundaries shall be sent notice equivalent to that sent to property owners within Morgan County.
2. The applicant shall submit a signed affidavit of public posting.
3. The affidavit shall include a photograph verifying that the sign has been installed, at least ten (10) days prior to the required public hearing or meeting.
4. Failure to post the public notice sign and provide the required verification at least ten (10) days prior to the required public hearing will cause a delay in the processing of the application, to allow for the required public hearing notice.
5. If the sign is destroyed or damaged the applicant shall replace the sign within twelve (12) hours upon being notified.

STAFF RECOMMENDATION

Staff recommends approval of the Sauer Conditional Use Permit for the excavation for a residential building pad located at 6502 N Highland Drive, application 13.012, with the following conditions:

1. That all work shall be conducted in compliance with the approved Engineering plans.
2. That the applicant will hold a preconstruction meeting with the County Engineer, Zoning Administrator and contractor prior to commencement of any on site work.
3. That all final administrative comments/corrections from the County Engineer are complied with prior to any on site improvements.
4. That an access easement is executed and recorded on Lot 51 of the Highlands Addition No. 1Subdivision for the proposed driveway access to Lot 50 of the Highlands Addition No. 1Subdivision prior to beginning on site improvements.
5. That an erosion control and revegetation/reseeding plan be submitted to the Morgan County Planning Department for review and approval by the County Engineer and Zoning Administrator.
6. That a cash bond for the erosion control and revegetation/reseeding plan is submitted to the County with a Cash Escrow agreement and Engineer's Cost Estimate in an amount and on forms as are acceptable by the County Engineer, County Attorney, and County Zoning Administrator.
7. That all graded or disturbed surfaces of excavations, and all equipment materials and driveways on the site shall be dampened or suitably treated, managed or contained to prevent the deposit of debris, dust or dirt on neighboring streets and properties; all materials transported to or from the site shall be so contained during transportation as to prevent spillage on streets or other property outside of the site, and all vehicles going to or from the site shall be clean and free from dirt or debris that may track into the public right of way.
8. That all County outsourced review costs are paid current prior to commencement of construction.
9. That enforcement of these conditions may be attained by the issuance of a stop work order until infractions are corrected, among any other legal means.
10. That the applicant will adhere to MCC§ 8-5I-12 "submittal and certification of geologic hazards reports" prior to any work commencing on site.
11. That the applicant will provide a letter from a structural engineering certifying that the proposed residence on Lot 50 of the Highlands Addition No.1Subdivision has been designed based on the recommendations and conditions of the Geotechnical Engineer and Geologist.
12. That the project adheres to all other local, state, and federal requirements.

This recommendation is based on the following findings:

1. That the request conforms to the requirements of the Morgan County Code.
2. That the requested uses are conditionally allowed in the R1-20 zone.
3. That with the proposed conditions, the proposal will mitigate potential detrimental effects it may cause to the public, particularly with respect to the dust and debris control.
4. That an erosion control and revegetation/reseeding plan is essential to mitigating the harmful effects of erosion, slope instability, and will mitigate the negative aesthetic effects of the hillside excavation.

MODEL MOTION

Sample Motion for a *Positive* Recommendation – "I move we forward a positive recommendation to the County Council for the Sauer Conditional Use Permit for excavation for a residential building pad located at 6502 N Highland Drive, application 13.012, subject to the findings and conditions listed in the November 6, 2013 staff report, and as modified by the conditions and findings below:"

1. List any additional findings and conditions…

Sample Motion for a *Negative* Recommendation – "I move we forward a negative recommendation to the County Council for the Sauer Conditional Use Permit for excavation for a residential building pad located at 6502 N Highland Drive, application 13.012, subject to the following findings:

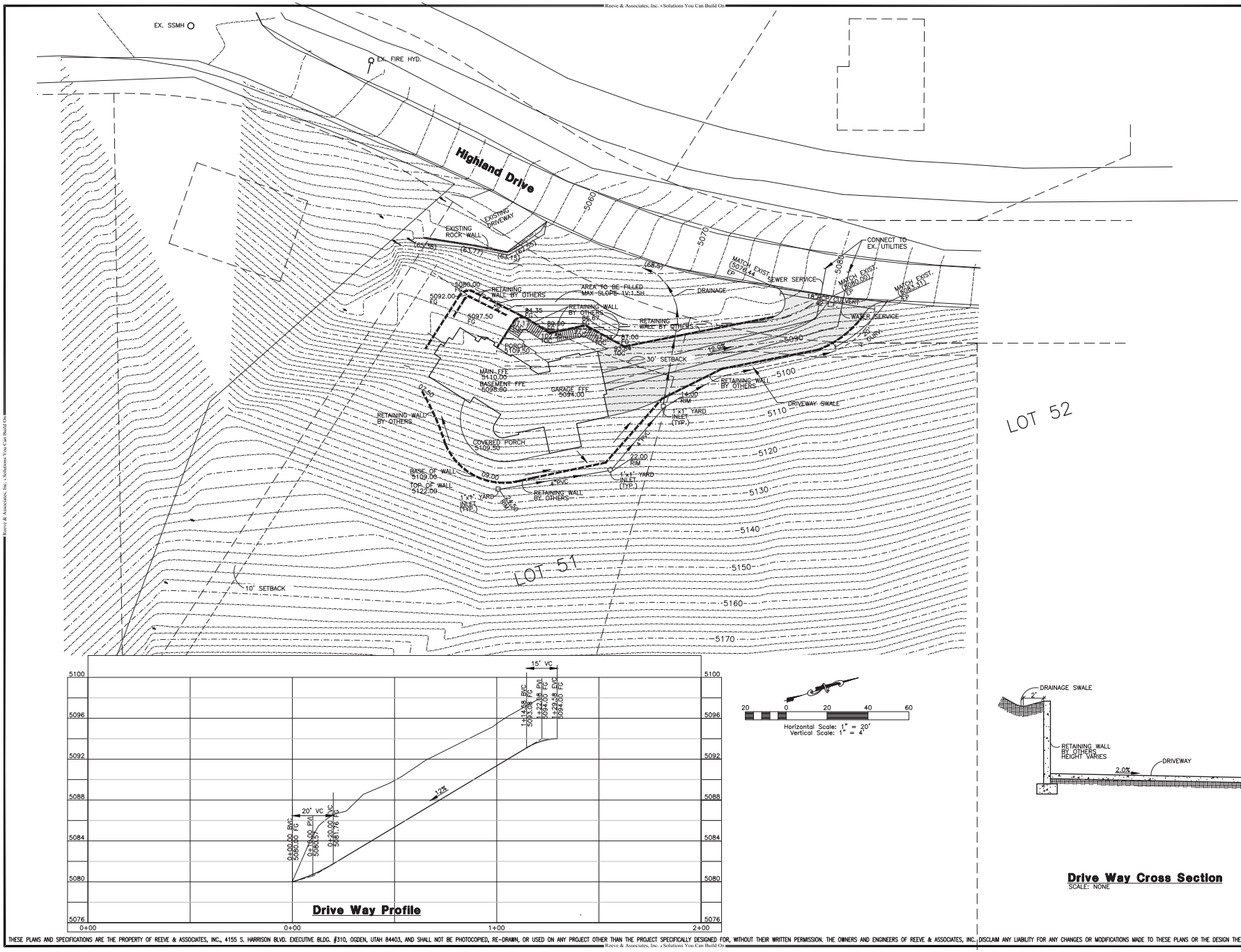
1. List any additional findings…

SUPPORTING INFORMATION

Exhibit A: Zoning
Exhibit B: Engineered Site Plan & Site Photos
Exhibit C: Geotechnical Reports
Exhibit D: Wasatch Civil Memo

Exhibit A: R1-20 Zoning

Exhibit B- Engineered Site Plans



Reeve & Associates, Inc.
4155 S. HARRISON BLVD., SUITE 310, OGDEN, UTAH 84403
TEL: (801) 621-3100 FAX: (801) 621-2666 www.reeve-assoc.com

REVISIONS
DATE | DESCRIPTION

Randy Sauer Property
Lot 50, Highlands Addition #1 Subd.
MOUNTAIN GREEN CITY, MORGAN COUNTY, UTAH

Site Plan

REGISTERED PROFESSIONAL ENGINEER
375338
J. NATE REEVE
STATE OF UTAH

Project Info.
Engineer: NATE REEVE, P.E.
Drafter: R. HANSEN
Begin Date: JULY 2, 2009
Name: RANDY SAUER SITE PLAN
Number: 5762-01

Sheet 1 of 1 Sheets

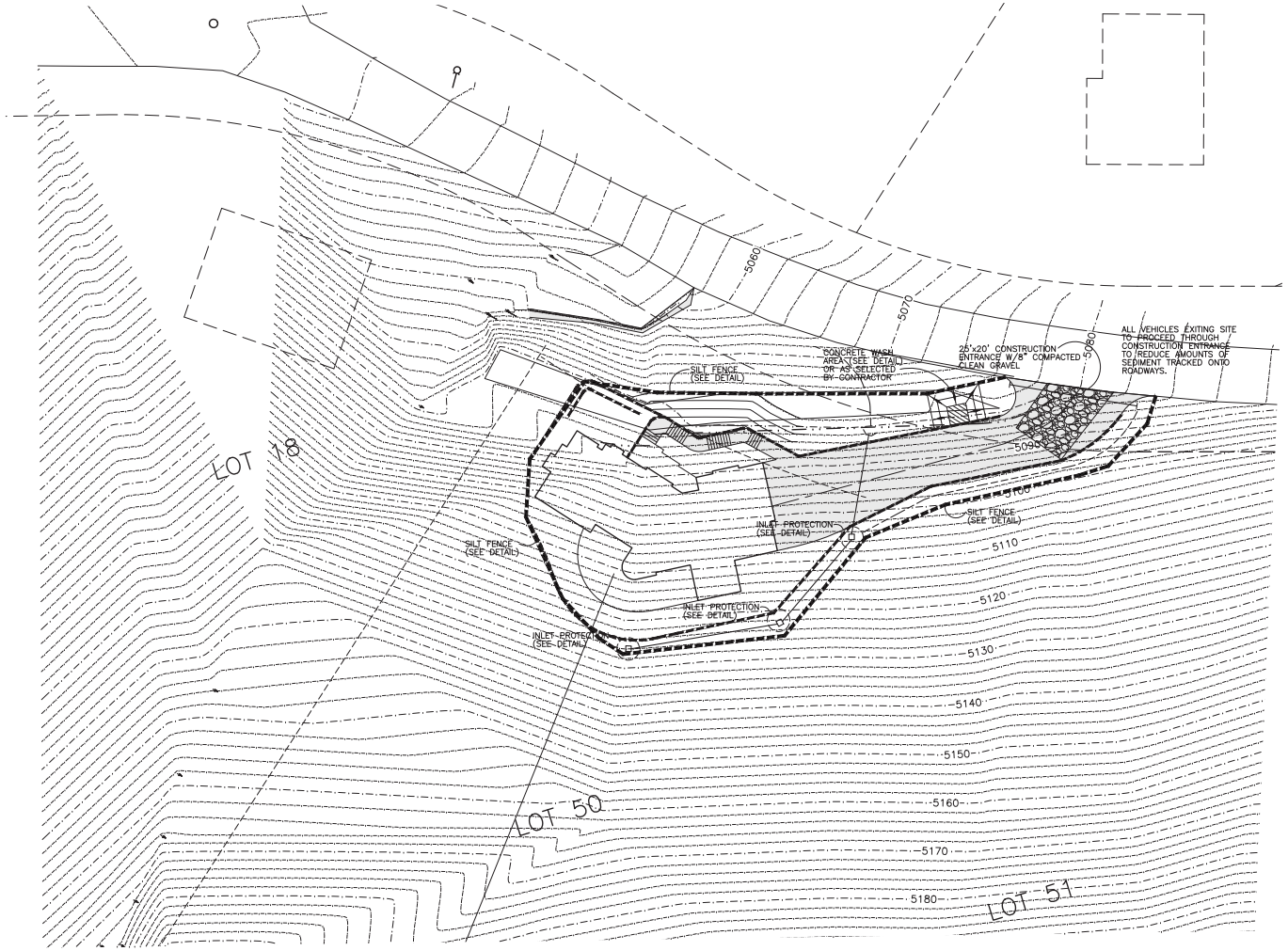
Exhibit B- Engineered Site Plans

Reeve & Associates, Inc. - Solutions You Can Build On

RANDY SAUER RESIDENCE

Storm Water Pollution Prevention Exhibit

CITY OF MOUNTAIN GREEN, MORGAN COUNTY, UTAH
OCTOBER, 2013



Reeve & Associates, Inc. - Solutions You Can Build On

Reeve & Associates, Inc.
4155 S. HARRISON BLVD., SUITE 310, OGDEN, UTAH 84403
TEL: (801) 621-3100 FAX: (801) 621-2666 www.reeve-assoc.com

REVISIONS
DATE | DESCRIPTION

Randy Sauer Property
Lot 50, Highlands Addition #1 Subd.
MOUNTAIN GREEN CITY, MORGAN COUNTY, UTAH

Storm Water Pollution Prevention Plan

REGISTERED PROFESSIONAL ENGINEER
375338
J. NATE REEVE
STATE OF UTAH

Project Info.
Engineer: NATE REEVE, P.E.
Drafter: R. HANSEN
Begin Date: JULY 2, 2009
Name: RANDY SAUER SITE PLAN
Number: 5762-01

Sheet 1 of 1 Sheets

Reeve & Associates, Inc. - Solutions You Can Build On

Exhibit B- Site View

Exhibit B-Site View

Exhibit B- Site View

GeoStrata Engineering & Geosciences
14425 S. Center Point Way, Bluffdale, Utah 84065 ~ T: (801) 501-0583 ~ F: (801) 501-0584

September 24, 2013

Randy Sauer

Subject: **Retaining Wall Analysis and Design**
Highland Addition #1 Subdivision – Lot 50
Mountain Green, Utah
GeoStrata Project No. 894-001

Mr. Sauer

As requested, GeoStrata has evaluated a proposed geotextile reinforced retaining wall as well as two rockery retaining walls to be constructed to the north and east of the proposed residence to be constructed to on Lot 50 of the Highland Addition #1 subdivision located in Mountain Green, Utah. Information concerning the location and geometry of the proposed retaining walls was provided by the client in a drawing dated July 2, 2009 and entitled "Randy Sauer Property, Lot 50, Highlands Addition #1 Subd" prepared by Reeve and Associates. Based on this drawing, we understand that the following retaining walls are to be constructed at the subject site;

Wall Type	Height (ft)	General Location	Segment
Geotextile Reinforced	32	West of residence	C
Rockery	10	North of residence	A
Rockery	8	East of residence	B

The geotextile reinforced retaining wall will consist of two 16 foot tiers separated by an 8 foot wide horizontal bench. The rockeries will each consist of single tiers. Locations of the proposed retaining walls are shown on the Site Plan, Plate 1. A cross section of the geotextile reinforced retaining wall can be found on Plate 2. Cross sections of the proposed rockery retaining walls can be found on Plates 3 and 4. General recommendations for the construction of the rockery retaining walls can be found on Plate 5.

The retaining wall analysis included in this report was completed in accordance with the accepted industry standards of care including global stability and internal stability. The retaining wall design was based on discussions with the Client as well as through the drawing discussed above, our understanding of the project site geometry as observed during site visits, and laboratory testing of a sample of on-site soils. A geotechnical investigation was previously completed for the subject property by Bruce N Kaliser Consultant, the results of which are summarized in a report dated October 21, 1997. A landslide hazards reconnaissance was completed for the subject property by Western Geologic, the results of which are summarized in a letter dated March 12, 2006. Information

obtained from these reports was also utilized in the design of the proposed retaining walls. The following paragraphs further describe the analysis and design procedures.

Field Investigation and Laboratory Testing

To assist in our analysis a test pit was excavated near the northwest corner of the proposed house. The test pit was excavated to a depth of about 12 feet below existing site grade with a tracked excavator. Subsurface soil conditions as encountered in the exploration was logged at the time of our investigation by a qualified geotechnical engineer and are presented on the enclosed Test Pit Log, Plate 6 in Appendix B. A Key to USCS Soil Symbols and Terminology is presented on Plate 7.

Soils encountered in the test pit consisted of Approximately 1½ feet of clayey topsoil overlying Sandy Fat CLAY (CH) to a depth of 8 feet. At 8 feet Tuffaceous Sandstone was encountered through the depth explored. Groundwater was not encountered in our test pit at the time of excavation.

Relatively undisturbed block samples of the native soil was retrieved from the test pit and transported to our laboratory for testing. Laboratory testing consisted of a direct shear test. The direct shear test indicated that the native soil has a angle of internal friction of 29 degrees and cohesion of 200 psf.

Soil Parameters

As indicated above, strength testing completed as part of our investigation consisted of a direct shear test completed on a relatively undisturbed sample obtained from the test pit. Results of our direct shear testing indicate that the near-surface soils have an angle of internal friction (ϕ) of 29 degrees and a cohesion of 200 psf. Results of the direct shear test may be found on Plate 8.

The retained soils within the reinforced zone are to consist of excavated bedrock, which was observed to consist of tuffaceous sandstone. Due to the anticipated coarse-grained nature of these soils, laboratory testing was not feasible. Strength parameters consisting of an angle of internal friction (ϕ) of 36 degrees and a cohesion of 0 psf were assumed for this material.

Strength testing on the in-place bedrock was also not feasible. As such, strength parameters consisting of an angle of internal friction (ϕ) of 1 degree and a cohesion of 2,000 psf.

Evidence of shallow groundwater, such as seeps, springs, or wetlands were not observed at the subject property, and based on past projects within the vicinity of the site groundwater is assumed to be relatively deep. As such, groundwater was not included as part of our stability modeling.

Horizontal Ground Acceleration

Seismic screening was completed using one-half of the deterministic median (50^{th} percentile) peak ground acceleration (PGA) for the area resulting from a *characteristic* earthquake on the Weber segment of the Wasatch fault These values typically correspond to a two percent probability of exceedance in 50 years (for non-critical structures). A PGA of 0.42g was calculated for the subject site when site soil conditions (site class C) are accounted for.

Global Stability Analysis

The global stability analysis included both static and pseudo-static (seismic) analysis of the maximum sections of the proposed retaining walls. The stability analyses were completed using the geometric conditions, soil strengths and assumed retaining wall construction as observed on site and described in previous paragraphs. The investigated sections of the proposed retaining walls were typically the critical sections. Minimum factors of safety of 1.5 and 1.0 for static and seismic conditions, respectively, were considered acceptable.

Global stability of the slopes were modeled using SLIDE, a computer program incorporating (among others) Bishop's Simplified Method of Slices analysis. Calculations for stability were developed by searching for the minimum factor of safety for a circular-type failure. Homogeneous earth materials (Clay and weathered bedrock) and arcuate failure surfaces were assumed. Stability analyses were conducted on the cross-sections shown on Plates 9 through 14.

Geotextile Reinforced Retaining Wall Construction Specifications

Based on the analysis and the constraints presented in this report and in accordance with the manufacture's recommendations, the attached drawing and specifications presented in the Appendix (Plate 2) were developed. For design of the geotextile reinforced retaining wall, our analysis assumed a geotextile with a long term wide width of at least 2,277 lbs/ft (such as Mirafi HS 400) and that the native and retained soils have strength values described above. Our analysis assumed a batter on the order of 1H:4V (horizontal to vertical). Based on our analysis we recommend the following;

1. The geotextile should extend laterally into the slope a minimum of 20 feet behind the wall facing.
2. The geotextile should be spaced every 2 feet.
3. The geotextile should have a top lap length at the top of at least 3 feet.
4. Backfill for the retaining wall should consist of excavated bedrock material, which should consist of angular gravel. Fill should be placed in maximum 12-inch loose lifts. Due to the granular nature of this material, it may not be feasible to complete density testing during placement. Visual observations should be made by a qualified geotechnical engineer of the compactive effort to ensure that a firm, unyielding surface is achieved during fill placement.
5. To prevent the accumulation of water behind the retaining wall, a perforated pipe and a continuously placed prefabricated drainage composite has been included in the section drawings and should be installed as shown.

6. Facing should be placed in front of the geotextile retaining wall to provide UV protection.

Our analysis indicates that the proposed geotextile reinforced retaining wall described above has adequate safety factors against failure.

Rockery Construction Specifications

Based on the analysis and the constraints presented in this report and in accordance with the Associated Rockery Contractors (ARC) *Rock Wall Construction Guidelines*, the attached drawings and specifications presented in the Appendix were developed. The following paragraphs further describe design elements that should be incorporated into the rockery construction.

Test pits excavate by Bruce Kaliser and GeoStrata indicate that bedrock is 6 to 8 feet below existing grade at the site. Based on this information, excavations made for the rockeries at the site will extend down into the tuffaceous sandstone bedrock. Give the fracturing orientation observed it is our opinion tha the bedrock excavations will stand nearly vertical; however, the exposed bedrock should be battered on the order of 0.25 to1 (horizontal to vertical) and some raveling should be anticipated. The planned rockeries should be constructed above the bedrock to retain the exposed soils above. A horizontal shelf should be excavated at the top of the bedrock and the rockeries should be placed at least 2 feet back from the exposed bedrock face.

Section drawings of the proposed rockeries are included in the Appendix as Plates 3 and 4. Based on our design analyses, the rock facing should not be placed steeper than 0.5 to 1 (horizontal to vertical) and the bottom rocks of the rockeries should be keyed into the ground a minimum of 12 inches. Rock facing should be placed in general accordance with the ARC *Rockery Construction Guidelines* as summarized in the attached Construction Specifications, Plate 5. The guidelines state:

- Rocks should be placed so that there are no continuous joint planes in either the vertical or lateral direction.
- Rocks should be staggered such that each rock bears on the two rocks below it.
- The upper plane of each rock between courses (the top surface of rock), should slope back towards the slope face and away from the face of the rock wall.

A channel lined with a minimum of 6 inches of low permeability soil should be constructed above the top course of rock and should slope away from the top of the rockeries. The purpose of the channel is to prevent surface water such as precipitation or irrigation from flowing over the top of the rockery or infiltrating the soil above and behind the rockery.

A perforated drainage pipe and a 1.0-foot partition of gravel wrapped in geotextile fabric or alternatively a continuously placed prefabricated drainage composite has been included in the section drawings to provide some drainage behind the walls.

Our analysis indicates that the proposed rockery retaining walls described above has adequate safety factors against failure.

Conclusions and Limitations

The retaining walls should be constructed as shown in the attached drawings.

It should be noted that conditions such as leaky or broken irrigation lines, cracked gutters, leaking storm drains, and ponding of precipitation or runoff can lead to saturation of the soil behind the retaining walls, which can lead to slope failure. Erosion and scouring of soils at the toe of the retaining wall can undermine the retaining wall which may also eventually lead to slope failure. The Owner/Client should be aware of the risks if these or other conditions occur that could jeopardize the stability of the retaining wall.

Inspection Scheduling

In order to facilitate inspection of the retaining wall during construction and observe compliance with our design documents, we propose the following schedule:

1. Inspect the first course of rocks for size, embedment, and back drain construction.
2. Inspect the second or third course of rocks for size, position and placement, and drainage.
3. Inspect finished rockeries for conformance to design requirements such as maximum heights, batter, front and back slope geometries, and rock sizing, positioning and placement.
4. Compaction testing (or visual observation) of all structural fill should be completed on a regular basis. All soils should be compacted in accordance with the recommendations of the original geotechnical report (if applicable).

The contractor, owner or developer is responsible for informing GeoStrata of the construction schedule to facilitate the inspections. The reviewing engineer also reserves the right to increase the frequency of inspections if conditions warrant.

The design recommendations contained in this report are based on our previous field exploration, laboratory testing, and our understanding of the proposed construction. It is possible that variations in subsurface conditions could exist beyond the point explored. The nature and extent of variations may not be evident until construction occurs. If any conditions are encountered at this site that are different from those described in this report, we should be immediately notified so that we may make any necessary revisions to the recommendations contained in this report. In addition, if the scope of the proposed construction changes from that described in this report, we should be notified.

Exhibit C- Geotechnical/Geological Reports

This report was prepared in accordance with the generally accepted standard of practice at the time the report was written. No warranty, expressed or implied, is made.

It is the Client's responsibility to see that all parties to the project including the Designer, Contractor, Subcontractors, etc. are made aware of this report in its entirety. The use of information contained in this report for bidding purposes should be done at the Contractor's option and risk.

We appreciate the opportunity to provide you with our services. If you have any questions please don't hesitate to contact us at your convenience.

Respectfully,
GeoStrata

J. Scott Seal, E.I.T.
Staff Engineer

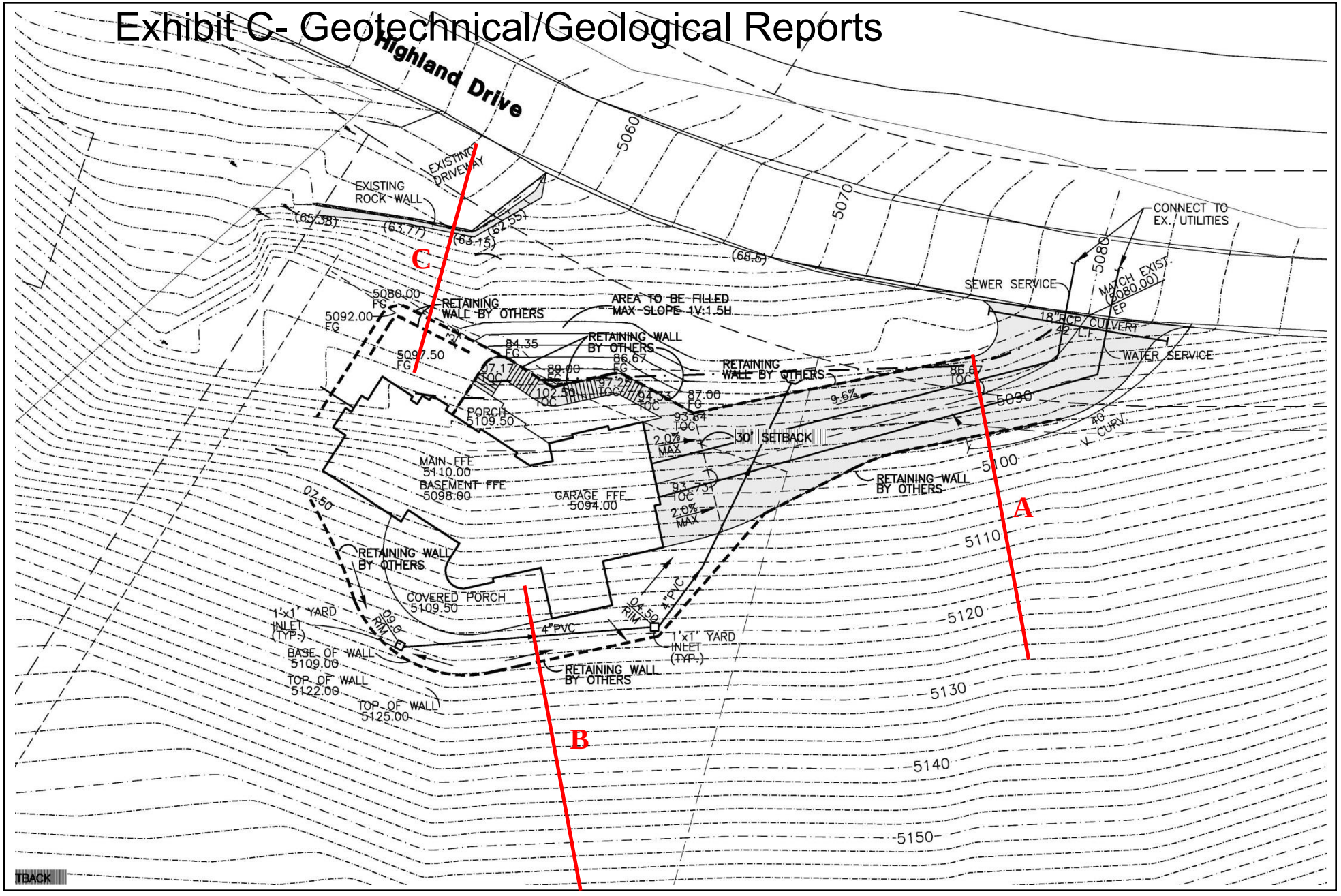
Reviewed by

9/25/13

LICENSED PROFESSIONAL ENGINEER
MARK I CHRISTENSEN
No. 188039
LICENSED
STATE OF UTAH

Mark I. Christensen, P.E.
Senior Engineer

Exhibit C- Geotechnical/Geological Reports



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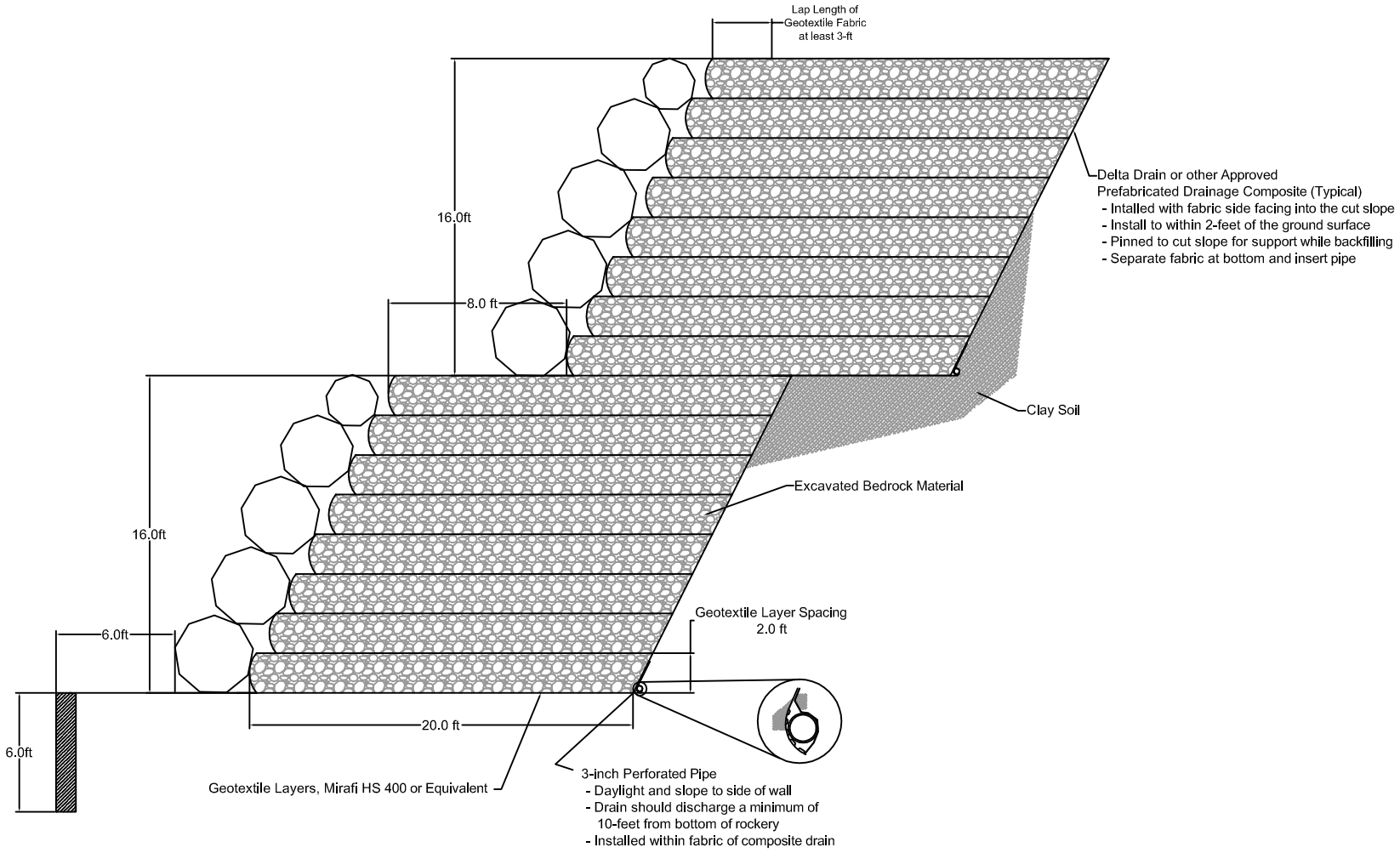
Site Map

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 1

Exhibit C- Geotechnical/Geological Reports



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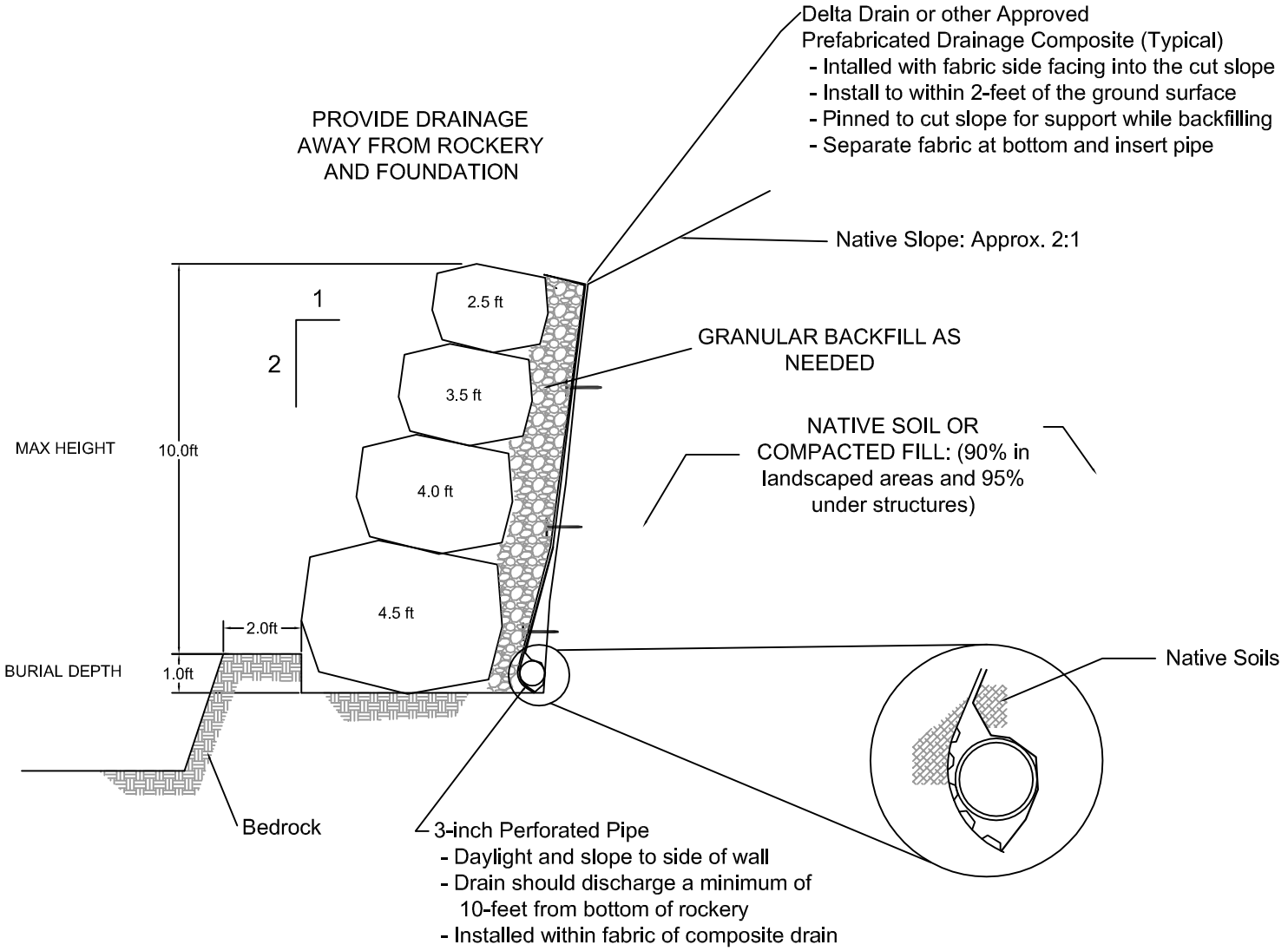
Randy Sauer - Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate
2

Exhibit C- Geotechnical/Geological Reports



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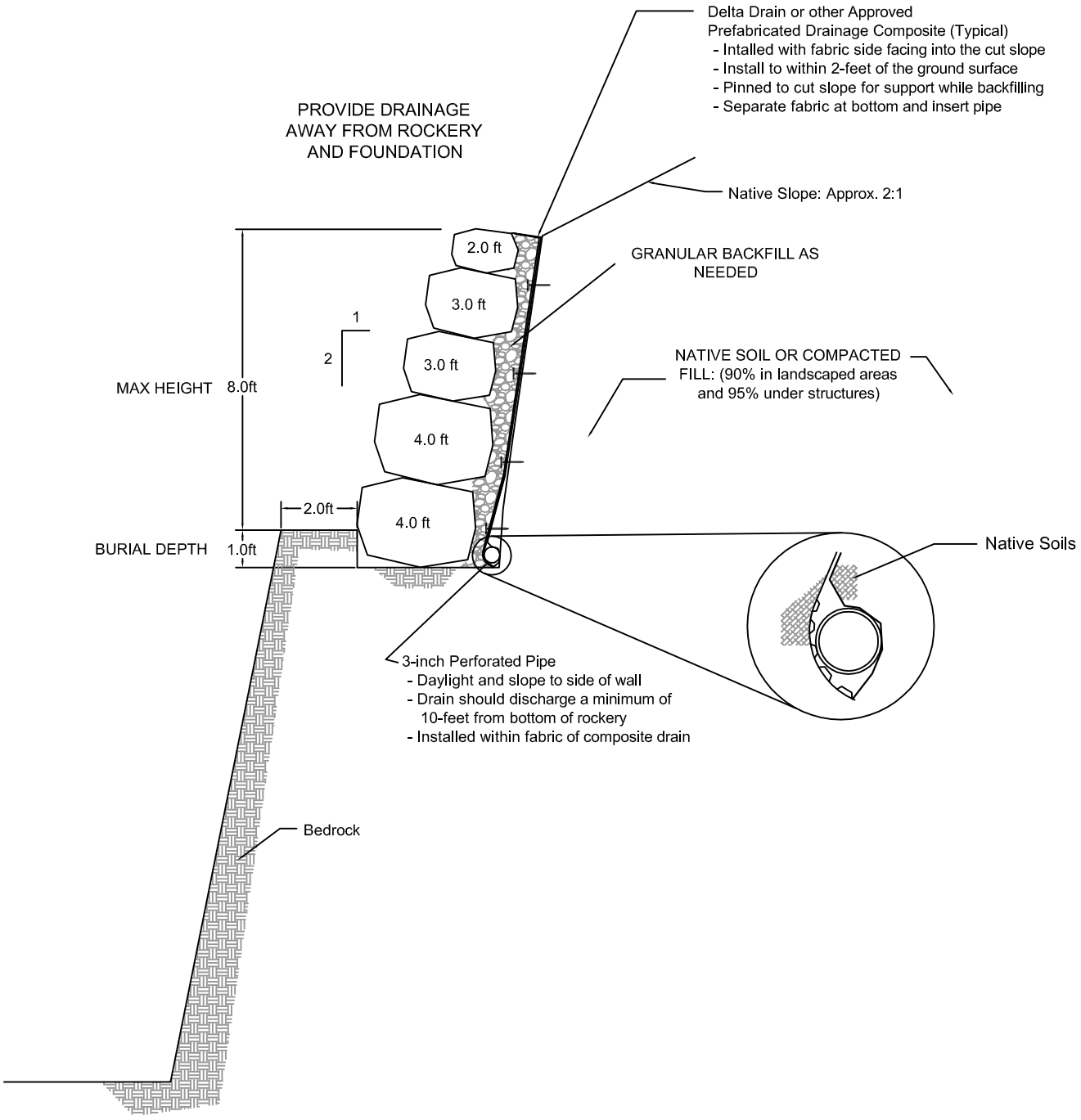
Randy Sauer - Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate
3

Exhibit C- Geotechnical/Geological Reports



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Randy Sauer - Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate
4

Rock Stacking Construction Specifications:

The rock stacking guidelines provided include installation of the rock facing, drain and backfill material. Design and construction information is based on empirical correlations, site geometry and the engineering analysis performed as part of the scope of work for this project.

MATERIALS

- Retained soils are to consist of native cut soils. If granular fill is required the material should consist of 4-inch minus granular soils compacted to a minimum of 90 percent ASTM D-1557 in landscape areas and 95 percent underneath structures. Any backfill material should be approved by the Geotechnical Engineer prior to importing.
- Rock Boulders to be used as facing should be durable angular particles with a minimum nominal diameter of 1½-feet. Rock sizes should be in accordance with design drawings.

INSTALLATION

- Rocks should be stacked in general accordance with the Associated Rockery Contractors (ARC) Rockery Construction Guidelines, summarized as follows:
    - Rocks should be placed so that there are no continuous joint planes in either the vertical or lateral direction.
    - Wherever possible, each rock should bear on at least two rocks below it.
    - The upper plane of each rock between courses (the top surface of rock), should slope back towards the slope face and away from the face of the rock wall.

- Rock facing should be stacked at a maximum steepness of ½ horizontal to 1 vertical for all rock slopes greater than 6-feet in height. Rock faced slopes less than 6-feet may be stacked steeper upon approval from the Geotechnical Engineer and if ARC guidelines are followed. Bottom row of rocks should be buried (keyed in) a minimum depth of 1 foot.

- Rock wall should be inspected at regular intervals by Geotechnical Engineer to accommodate final inspection and acceptance letter.

Exhibit C- Geotechnical/Geological Reports

DATE	
STARTED:	9/7/13
COMPLETED:	9/7/13
BACKFILLED:	9/7/13

Randy Sauer - Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number 894-001

GeoStrata Rep: M. Christensen
Rig Type: Trackhoe

TEST PIT NO: **TP-1**
Sheet 1 of 1

LOCATION
NORTHING EASTING ELEVATION

DEPTH METERS	DEPTH FEET	SAMPLES	WATER LEVEL	GRAPHICAL LOG	UNIFIED SOIL CLASSIFICATION	MATERIAL DESCRIPTION	Dry Density(pcf)	Moisture Content %	Percent minus 200	Liquid Limit	Plasticity Index	Moisture Content and Atterberg Limits (Plastic Limit / Moisture Content / Liquid Limit)
0	0					TOPSOIL; Lean CLAY with sand - moist, dark brown						
					CH	Sandy Fat CLAY - brown, slightly moist, very stiff						
1												
	5											
2												
						BEDROCK; Toffaceous Sandstone - light brown, moderately strong, weathered						
3	10											
						Bottom of Test Pit @ 12 Feet						
4												

10 20 30 40 50 60 70 80 90

LOG OF TEST PITS (B) TEST PIT LOGS.GPJ GEOSTRATA.GDT 9/25/13

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SAMPLE TYPE
- GRAB SAMPLE
- 2.5" O.D. THIN-WALLED HAND SAMPLER

WATER LEVEL
- MEASURED
- ESTIMATED

NOTES:

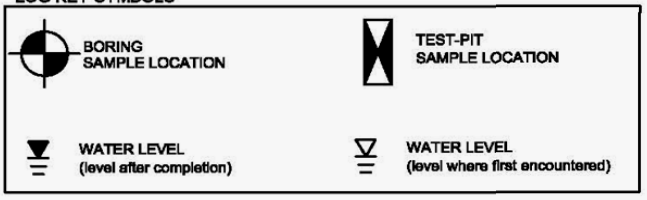
Plate 6

Exhibit C- Geotechnical/Geological Reports

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			USCS SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS (More than half of material is larger than the #200 sieve)	GRAVELS (More than half of coarse fraction is larger than the #4 sieve)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES
			SC	CLAYEY SANDS SAND-GRAVEL-CLAY MIXTURES
FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)	SILTS AND CLAYS (Liquid limit less than 50)		ML	INORGANIC SILTS & VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (Liquid limit greater than 50)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

LOG KEY SYMBOLS



CEMENTATION

DESCRIPTION	DESCRIPTION
WEAKELY	CRUMBLES OR BREAKS WITH HANDLING OR SLIGHT FINGER PRESSURE
MODERATELY	CRUMBLES OR BREAKS WITH CONSIDERABLE FINGER PRESSURE
STRONGLY	WILL NOT CRUMBLE OR BREAK WITH FINGER PRESSURE

OTHER TESTS KEY

C	CONSOLIDATION	SA	SIEVE ANALYSIS
AL	ATTERBERG LIMITS	DS	DIRECT SHEAR
UC	UNCONFINED COMPRESSION	T	TRIAXIAL
S	SOLUBILITY	R	RESISTIVITY
O	ORGANIC CONTENT	RV	R-VALUE
CBR	CALIFORNIA BEARING RATIO	SU	SOLUBLE SULFATES
COMP	MOISTURE/DENSITY RELATIONSHIP	PM	PERMEABILITY
CI	CALIFORNIA IMPACT	-200	% FINER THAN #200
COL	COLLAPSE POTENTIAL	Gs	SPECIFIC GRAVITY
SS	SHRINK SWELL	SL	SWELL LOAD

MODIFIERS

DESCRIPTION	%
TRACE	<5
SOME	5 - 12
WITH	>12

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
DRY	ABSENCE OF MOISTURE, DUSTY, DRY TO THE TOUCH
MOIST	DAMP BUT NO VISIBLE WATER
WET	VISIBLE FREE WATER, USUALLY SOIL BELOW WATER TABLE

STRATIFICATION

DESCRIPTION	THICKNESS	DESCRIPTION	THICKNESS
SEAM	1/16 - 1/2"	OCCASIONAL	ONE OR LESS PER FOOT OF THICKNESS
LAYER	1/2 - 12"	FREQUENT	MORE THAN ONE PER FOOT OF THICKNESS

GENERAL NOTES

1. Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual.
2. No warranty is provided as to the continuity of soil conditions between individual sample locations.
3. Logs represent general soil conditions observed at the point of exploration on the date indicated.
4. In general, Unified Soil Classification designations presented on the logs were evaluated by visual methods only. Therefore, actual designations (based on laboratory tests) may vary.

APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPT (blows/ft)	MODIFIED CA. SAMPLER (blows/ft)	CALIFORNIA SAMPLER (blows/ft)	RELATIVE DENSITY (%)	FIELD TEST
VERY LOOSE	<4	<4	<5	0 - 15	EASILY PENETRATED WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND
LOOSE	4 - 10	5 - 12	5 - 15	15 - 35	DIFFICULT TO PENETRATE WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND
MEDIUM DENSE	10 - 30	12 - 35	15 - 40	35 - 65	EASILY PENETRATED A FOOT WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER
DENSE	30 - 50	35 - 60	40 - 70	65 - 85	DIFFICULT TO PENETRATED A FOOT WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER
VERY DENSE	>50	>60	>70	85 - 100	PENETRATED ONLY A FEW INCHES WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER

CONSISTENCY - FINE-GRAINED SOIL		TORVANE	POCKET PENETROMETER	FIELD TEST
CONSISTENCY	SPT (blows/ft)	UNTRAINED SHEAR STRENGTH (tsf)	UNCONFINED COMPRESSIVE STRENGTH (tsf)	
VERY SOFT	<2	<0.125	<0.25	EASILY PENETRATED SEVERAL INCHES BY THUMB. EXUDES BETWEEN THUMB AND FINGERS WHEN SQUEEZED BY HAND.
SOFT	2 - 4	0.125 - 0.25	0.25 - 0.5	EASILY PENETRATED ONE INCH BY THUMB. MOLDED BY LIGHT FINGER PRESSURE.
MEDIUM STIFF	4 - 8	0.25 - 0.5	0.5 - 1.0	PENETRATED OVER 1/2 INCH BY THUMB WITH MODERATE EFFORT. MOLDED BY STRONG FINGER PRESSURE.
STIFF	8 - 15	0.5 - 1.0	1.0 - 2.0	INDENTED ABOUT 1/2 INCH BY THUMB BUT PENETRATED ONLY WITH GREAT EFFORT.
VERY STIFF	15 - 30	1.0 - 2.0	2.0 - 4.0	READILY INDENTED BY THUMBNAIL.
HARD	>30	>2.0	>4.0	INDENTED WITH DIFFICULTY BY THUMBNAIL.

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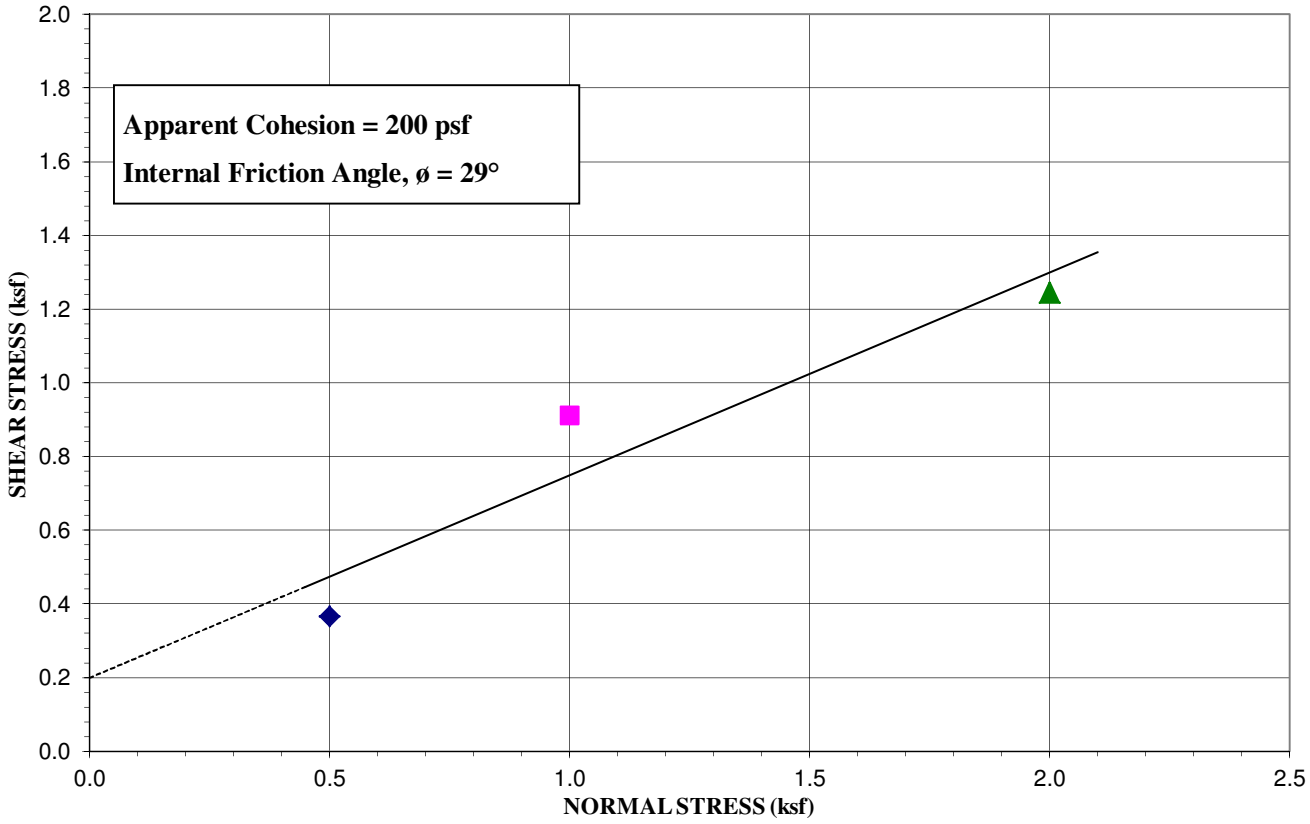
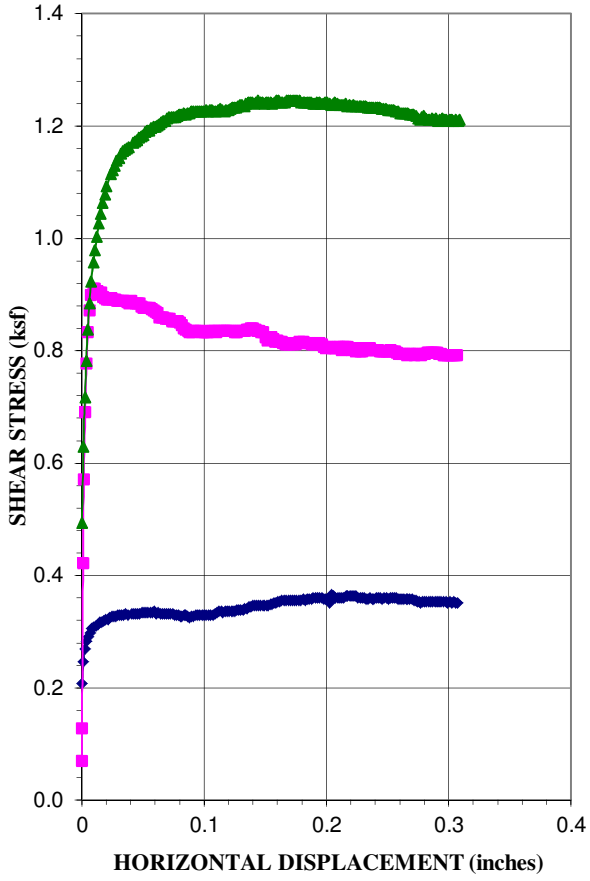
Soil Symbols Description Key

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 7

DIRECT SHEAR TEST





Source:	Lot 50 - Highlands Addition #1 Subdivision
Type of Test:	Consolidated Drained/Saturated

Test No. (Symbol)	**1 (◆)**	**2 (■)**	**3 (▲)**
Sample Type	Undisturbed		
Initial Height, in.	1	1	1
Diameter, in.	2.5	2.5	2.5
Dry Density Before, pcf	95.9	96.6	95.3
Dry Density After, pcf	97.8	98.6	97.1
Moisture % Before	10.9	12.4	14.3
Moisture % After	27.9	26.9	28.9
Normal Load, ksf	0.5	1.0	2.0
Shear Stress, ksf	0.37	0.91	1.25
Strain Rate	0.0033 IN/MIN		

Sample Properties	
Cohesion, psf	200
Friction Angle, ϕ	29
Liquid Limit, %	---
Plasticity Index, %	---
Percent Gravel	---
Percent Sand	---
Percent Passing No. 200 sieve	---
Classification	CH

PROJECT: Randy Sauer - Rockery Design

PROJECT NO.: **894-001**

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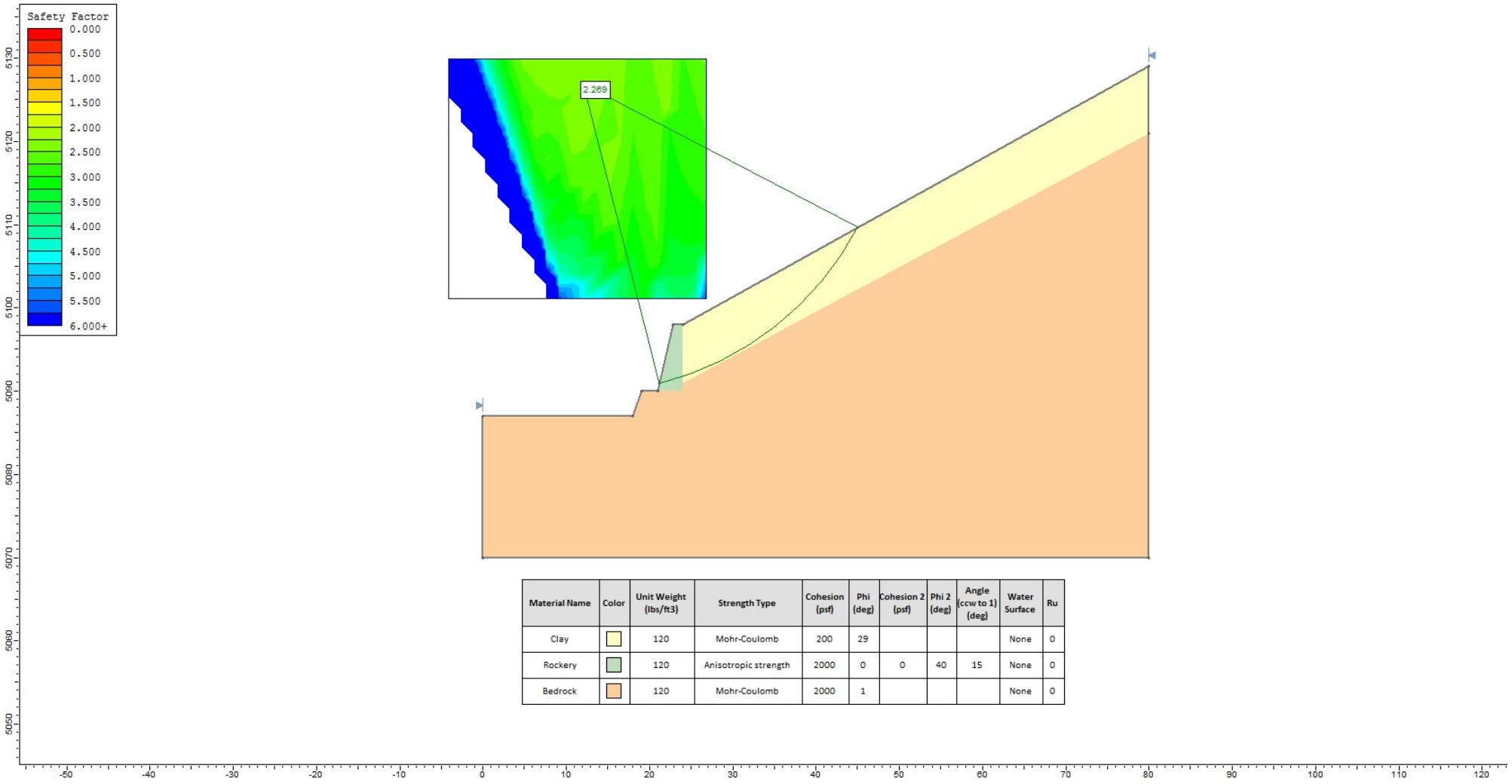
Plate 8

Exhibit C- Geotechnical/Geological Reports



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Rockery		120	Anisotropic strength	2000	0	0	40	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0

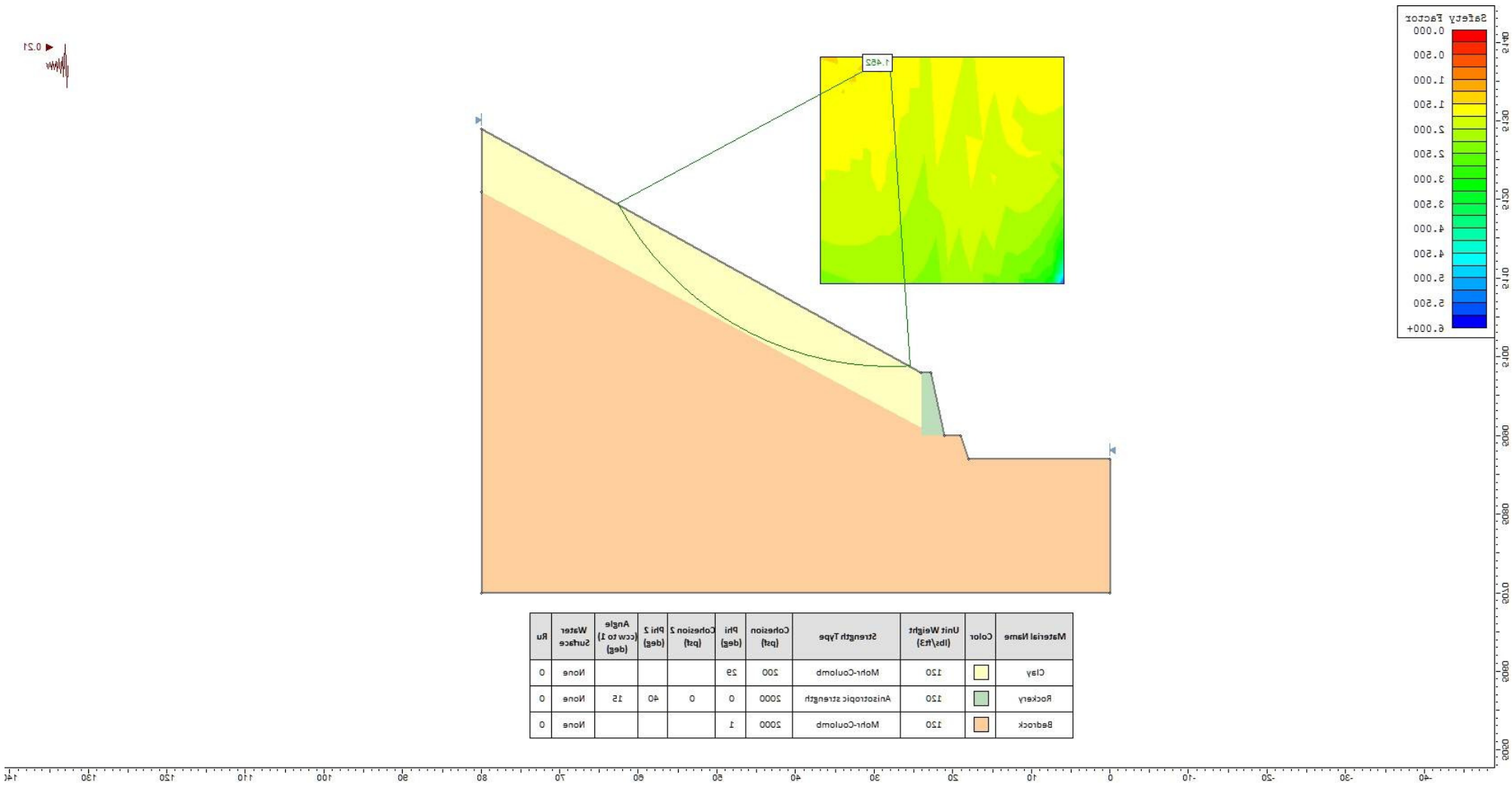
GeoStrata

Slope Stability Profile A – Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 9

Exhibit C- Geotechnical/Geological Reports



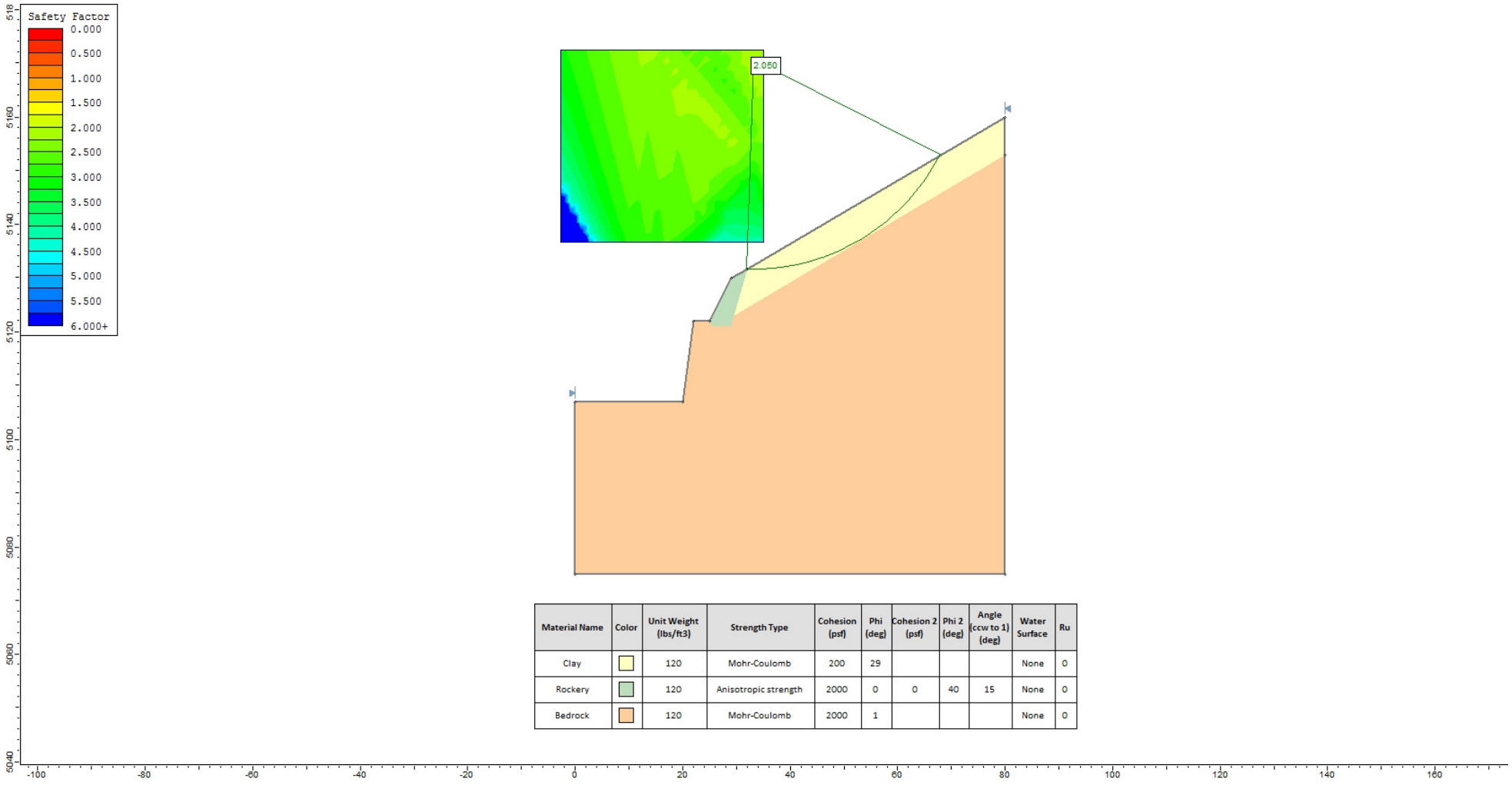
Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Rockery		120	Anisotropic strength	2000	0	0	40	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0

Slope Stability Profile A – Pseudo Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 10

Exhibit C- Geotechnical/Geological Reports



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Rockery		120	Anisotropic strength	2000	0	0	40	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0

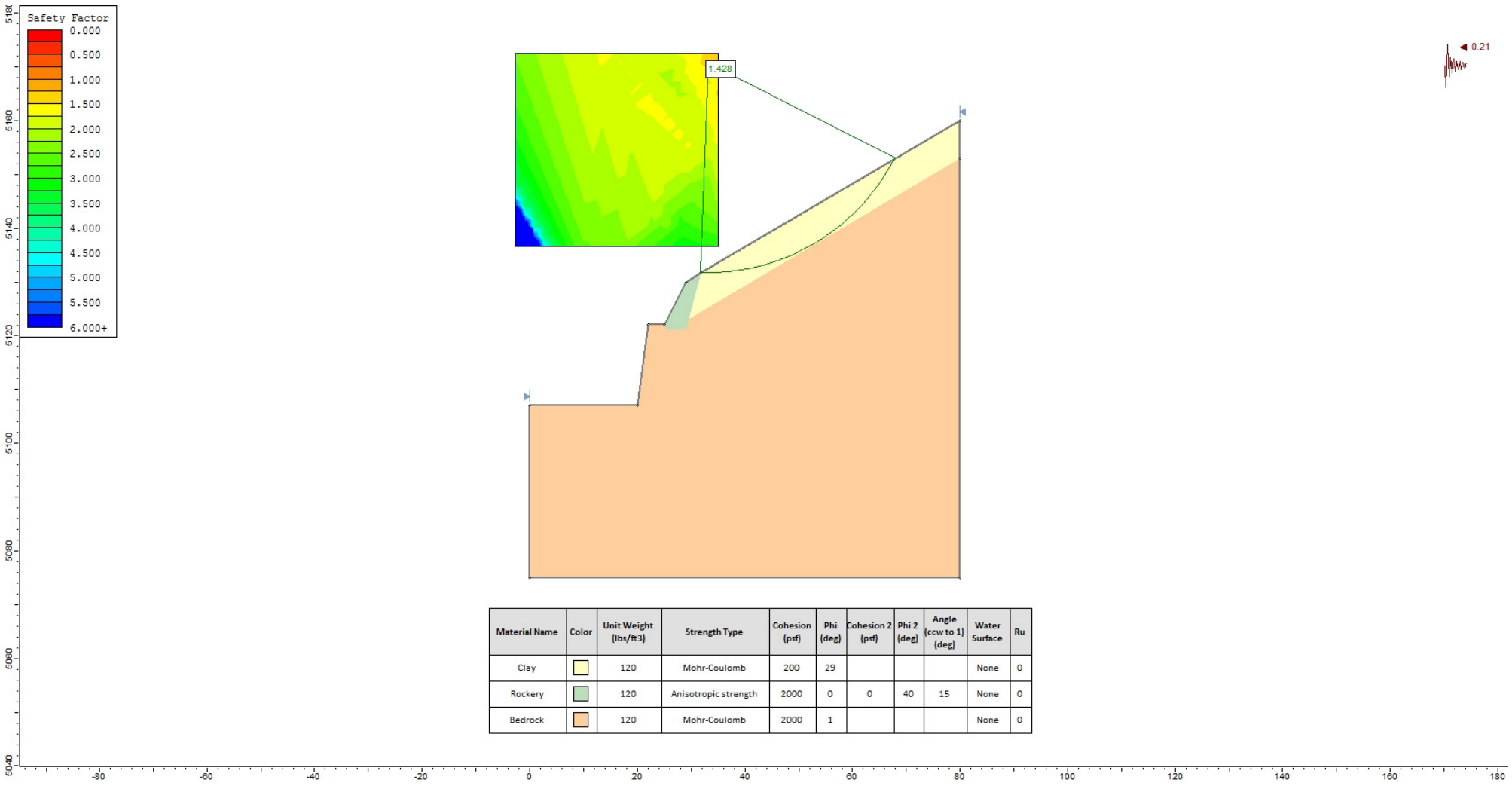
GeoStrata

Slope Stability Profile B – Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 11

Exhibit C- Geotechnical/Geological Reports



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Rockery		120	Anisotropic strength	2000	0	0	40	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0

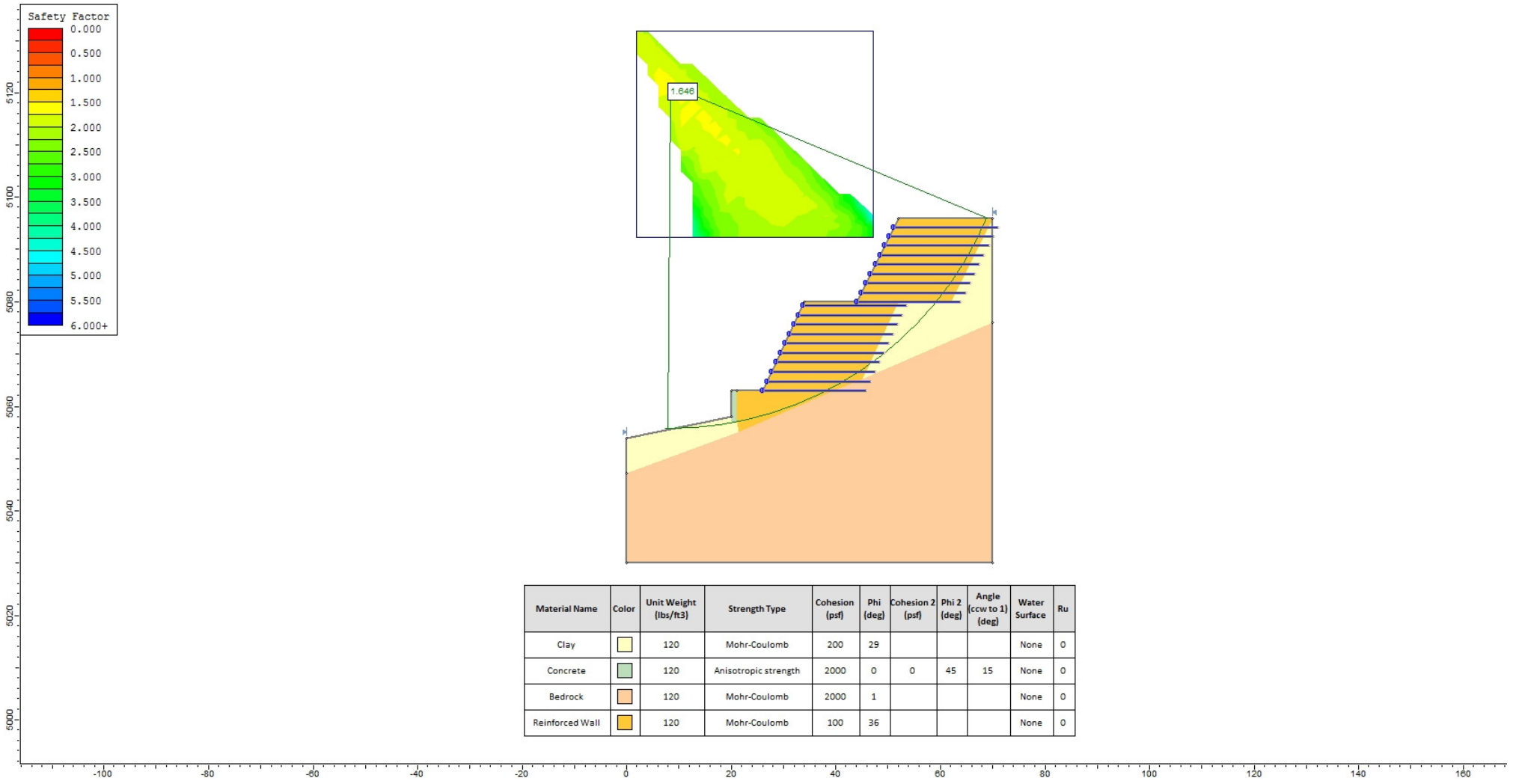
GeoStrata

Slope Stability Profile B – Pseudo Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 12

Exhibit C- Geotechnical/Geological Reports



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Concrete		120	Anisotropic strength	2000	0	0	45	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0
Reinforced Wall		120	Mohr-Coulomb	100	36				None	0

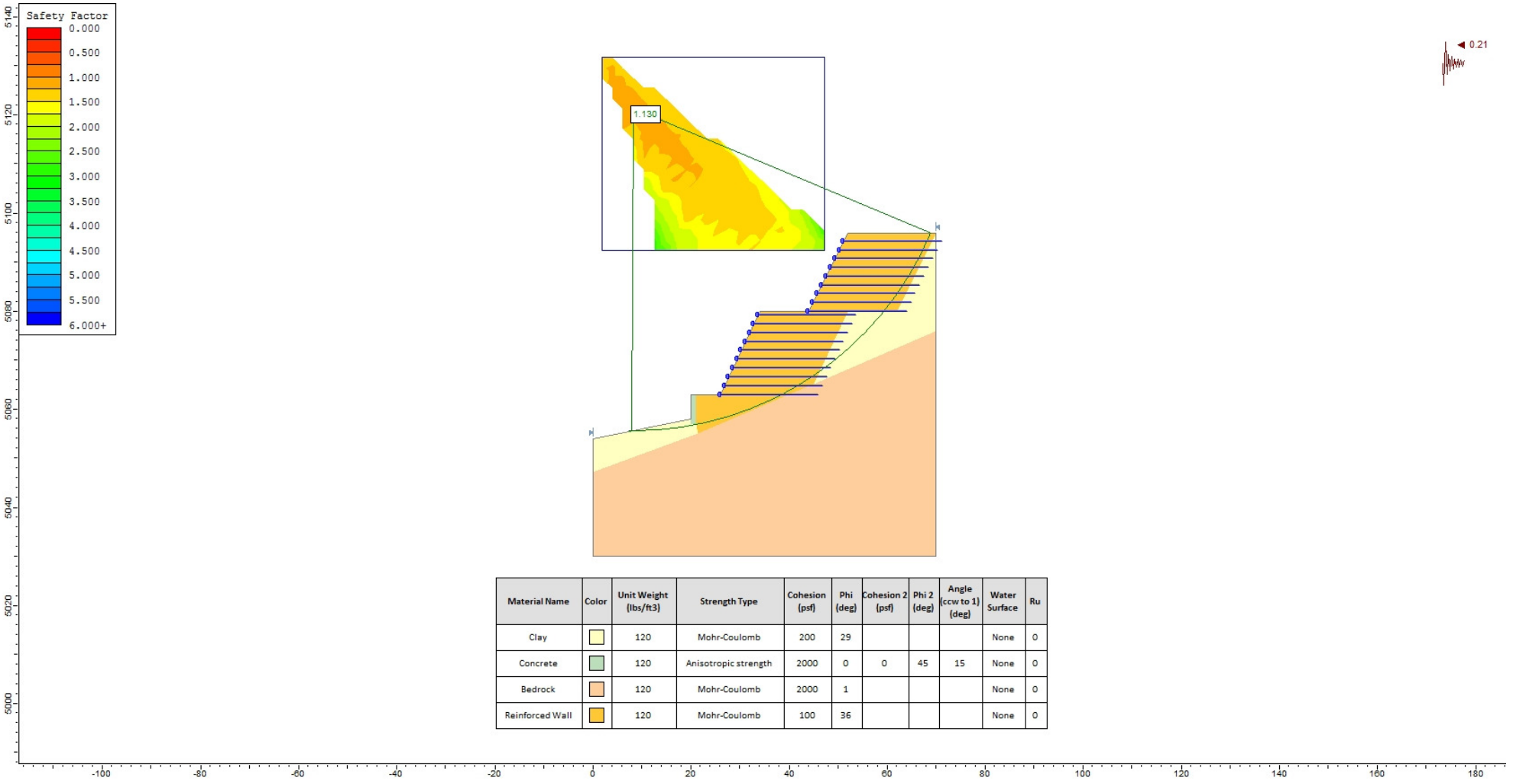
GeoStrata

Slope Stability Profile C – Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 13

Exhibit C- Geotechnical/Geological Reports



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Cohesion 2 (psf)	Phi 2 (deg)	Angle (ccw to 1) (deg)	Water Surface	Ru
Clay		120	Mohr-Coulomb	200	29				None	0
Concrete		120	Anisotropic strength	2000	0	0	45	15	None	0
Bedrock		120	Mohr-Coulomb	2000	1				None	0
Reinforced Wall		120	Mohr-Coulomb	100	36				None	0

GeoStrata

Slope Stability Profile C – Pseudo Static

Randy Sauer – Rockery Design
Lot 50 Highlands Addition #1 Subdivision
Mountain Green, UT
Project Number: 894-001

Plate 14

WESTERN GEOLOGIC, LLC
74 NORTH N STREET
SALT LAKE CITY, UTAH 84103 USA

Phone: 801.359.7222 Fax: 801.359.2730 Email: craig_nelson@western-geologic.com

March 12, 2006

Mr. Mark I. Christensen, P.E.
Earthtec Testing and Engineering, P.C.
1596 West 2650 South
Suite 108
Ogden, Utah 84401

SUBJECT: Landslide Hazards Reconnaissance
Highland Addition No. 1
Mountain Green, Morgan County, Utah

Dear Mr. Christensen:

At your request, Western GeoLogic, LLC (western GeoLogic) conducted a reconnaissance-level landslide hazards evaluation and review for the roughly 5.7 acre Highland Addition No. 1 development (lots 50-54) in Mountain Green, Morgan County, Utah (Figure 1 – Project Location). The site is on generally west-facing slopes at the north end of Morgan Valley, in the W½ Section 23, Township 5 North, Range 1 East (Salt Lake Base Line and Meridian). Elevation of the site is about 5,120 to 5,300 feet above sea level.

PURPOSE AND SCOPE

The purpose of the investigation was to identify and map potential landslide hazards to the project. The following services were performed in accordance with that purpose:

- A site reconnaissance conducted by an experienced certified engineering geologist to assess the site setting and look for evidence of adverse geologic conditions;
- Review of available geologic maps and reports; and
- Evaluation of available data and preparation of this report, which presents the results of our study.

SITE RECONNAISSANCE

On March 10, 2006 Mr. Bill D. Black of Western GeoLogic conducted a brief reconnaissance of the property and surrounding area. Weather at the time of the reconnaissance was clear and sunny, with temperatures in the 30's (°F). Vegetation at the site consists mainly of sage brush, oak brush, grasses, and scattered pine trees. Approximately 6 to 12 inches of snow covered the ground surface at the time of our investigation. Gordon Creek, which was flowing at the time of the investigation, flows to the south about 350 feet west of the property. No springs, seeps, or marshes could be observed at the site due to the snow cover.

Slopes at the property overlook the Gordon Creek floodplain to the west, and have an overall gradient of about 2.5:1 to 3:1 (horizontal:vertical). The western edge of the site is bounded by Highland Drive and a roughly 10- to 20-foot high 2:1 cut slope. North of the property, competent tuffaceous sandstone bedrock of the Tertiary Norwood Tuff is exposed in the cut slope with a strike-dip of N15°W 35° NE. A roughly N5°W trending bedrock outcrop also crosses the central part of the site.

DISCUSSION

Figure 2 is a photogeologic map of the site and vicinity at a scale of 1 inch equals 200 feet, based on digital orthophoto aerial photography (National Aerial Photography Program; frames NAPP 10103 18 and NAPP 10103 81; October, 1997) and unpublished geologic mapping used in compilation of Coogan and King (2001). The site is underlain by bedrock of the Tertiary Norwood Tuff (unit Tn, Figure 2). Two Holocene landslides (unit Qms1) are north and south of the property, but do not underlie the site (Figure 2).

Both of the landslides in the site vicinity appear to source within west-facing slopes underlain by the Tertiary Norwood Tuff (Figure 2). The landslides source in higher slopes above the site and extend to the floodplain of the creek. Weathered bedrock in the Norwood Tuff is a significant source for slope instability in the Mountain Green area. However, measured dip of the bedrock (about 35 degrees to the east-northeast) would be roughly normal (perpendicular) to the slopes at the site and therefore prone to less instability. Although bedrock at the site appears to be tuffaceous sandstone, claystone beds may be found at higher elevations east of the site that could be responsible for the slope failures. Water is also typically a significant contributor to slope instability, and the landslides may have been triggered in clayey weathered bedrock by saturated conditions from snowmelt or other sources.

CONCLUSIONS AND RECOMMENDATIONS

The site is underlain by competent bedrock of the Tertiary Norwood Tuff, which dips to the east-northeast roughly normal to the slopes at the property. Two Holocene landslides are north and south of the site in the west-facing slopes overlooking Gordon Creek, but do not underlie the site. No evidence of recent or ongoing landslide movement was observed at the site. Although slopes at the site may be currently stable, stability of higher slopes above the site is unknown may be marginal. Based on the above, we recommend the following:

- As a conservative measure, stability of slopes at the site and to the east should be evaluated in a geotechnical engineering evaluation prior to the subdivision approval process and recommendations for reducing the risk from landsliding provided if the factor of safety is determined to be unsuitable. Stability of the weathered bedrock should be considered in the evaluation. Care should also be taken that site grading does not destabilize the slope without prior geotechnical analysis and grading plans, and that the site is adequately drained and no water is allowed to pond on the property.

Availability of Report

The report should be made available to architects, building contractors, and in the event of a future property sale, real estate agents and potential buyers. This report should be referenced for information on technical data only as interpreted from observations and not as a warranty of conditions throughout the site.

LIMITATIONS

This investigation was performed at the request of the Client using the methods and procedures consistent with good commercial and customary practice designed to conform to acceptable industry standards. The analysis and recommendations submitted in this report are based upon the data obtained from compilation of known geologic information. This information and the conclusions of this report should not be interpolated to adjacent properties without additional site-specific information. In the event that any changes are later made in the location of the proposed site, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or approved in writing by the engineering geologist.

This report has been prepared by the staff of Western GeoLogic for the Client under the professional supervision of the principal and/or senior staff whose seal(s) and signatures appear hereon. Neither Western GeoLogic, nor any staff member assigned to this investigation has any interest or contemplated interest, financial or otherwise, in the subject or surrounding properties, or in any entity which owns, leases, or occupies the subject or surrounding properties or which may be responsible for environmental issues identified during the course of this investigation, and has no personal bias with respect to the parties involved.

The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgment and are founded upon the findings of the investigations identified in the report and the interpretation of such data based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either expressed or implied.

The investigation was prepared in accordance with the approved scope of work outlined in our proposal for the use and benefit of the Client; its successors, and assignees. It is based, in part, upon documents, writings, and information owned, possessed, or secured by the Client. Neither this report, nor any information contained herein shall be used or relied upon for any purpose by any other person or entity without the express written permission of the Client. This report is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Western GeoLogic.

In expressing the opinions stated in this report, Western GeoLogic has exercised the degree of skill and care ordinarily exercised by a reasonable prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances.

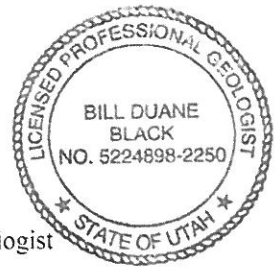
Documentation and data provided by the Client, designated representatives of the Client or other interested third parties, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that Western GeoLogic assumes no responsibility or liability for their accuracy.

The independent conclusions represent our professional judgment based on information and data available to us during the course of this assignment. Factual information regarding operations, conditions, and test data provided by the Client or their representative has been assumed to be correct and complete. The conclusions presented are based on the data provided, observations, and conditions that existed at the time of the field exploration.

It has been a pleasure working with you on this project. Should you have any questions please call.

Sincerely,

Western GeoLogic, LLC



Bill D. Black, P.G.
Associate Engineering Geologist

Reviewed by:

Craig V Nelson, P.G., R.G., C.E.G.
Principal Engineering Geologist

ATTACHMENTS

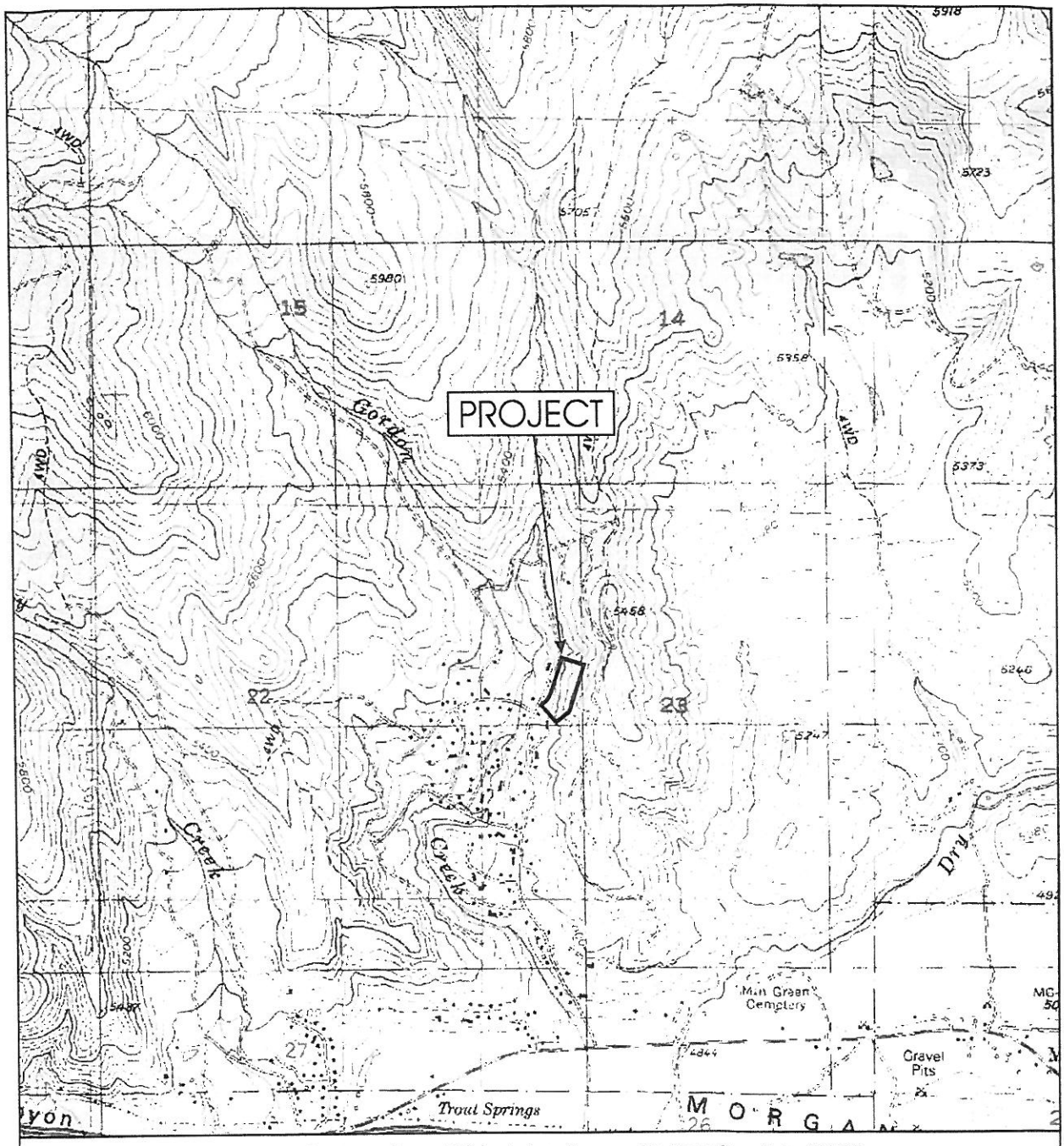
Figure 1. Location Map
Figure 2. Photogeologic map

E:\Western GeoLogic\PROJECTS\Earthtec Ogden\Highland Addition No. 1 Landslide Hazards Recon - Earthtec - Ogden\Highland Addition No. 1 Landslide Hazards Recon - letter report.doc

REFERENCES

Coogan, J.C., and King, J.K.: King, J.K., compiler, 2001, Progress report—Geologic map of the Ogden 30'x60' quadrangle, Utah and Wyoming, year 3 of 3: Utah Geological Survey Open-File Report 380, 20 p., scale 1:100,000.

Exhibit C- Geotechnical/Geological Reports



Source: U.S. Geological Survey 7.5 Minute Series Topographic Maps: Snow Basin, UT, 1992.

WESTERN GEOLOGIC

N
W E
S

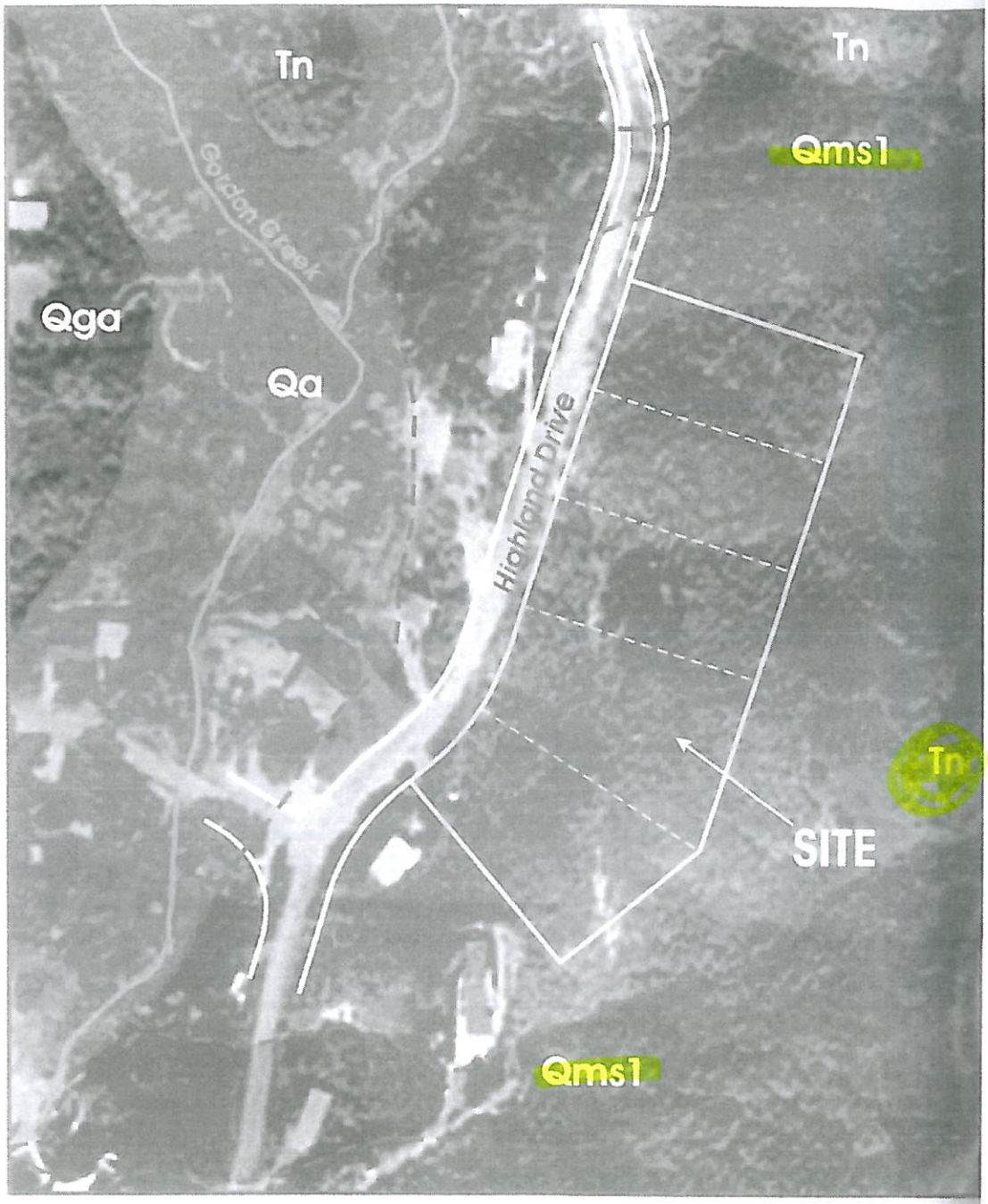
Scale 1:24,000
(1 inch = 2000 feet)

LOCATION MAP

LANDSLIDE HAZARDS RECONNAISSANCE
Highland Addition No. 1
Mountain Green, Morgan County, Utah

FIGURE 1

Exhibit C- Geotechnical/Geological Reports



Scale 1 inch equals 200 feet

WESTERN GEOLOGIC

EXPLANATION

Qa

Qms1

Qga

Tn

PHOTOGEOLOGIC MAP

LANDSLIDE HAZARDS RECONNAISSANCE

FIGURE 2

Exhibit C- Geotechnical/Geological Reports

Earthtec Testing & Engineering, P.C.

133 North 1330 West
Orem, Utah - 84057
Phone (801) 225-5711
Fax (801) 225-3363

1596 W. 2650 S. #108
Ogden, Utah - 84401
Phone (801) 399-9516
Fax (801) 399-9842

April 7, 2006

David Macallister
2699 East Oak Lane
Layton, Utah 84040

Subject: Slope Stability Analysis
Highlands Subdivision Addition No. 1, Lots 50 - 54
Mountain Green, UT
ETE Job No. 06-0868

Dear Mr. Macallister:

Based on conversations with you, we understand that Morgan County has requested a stability analysis for the above referenced lots. At your request, we have performed the requested stability analysis. To assist us in our analysis, Western Geologic performed a landslide hazard reconnaissance. A report presenting there findings is attached. In addition, we reviewed a letter presenting our geotechnical consultation for the subject lots dated October, 24, 1997. Western Geologic's report does not identify any existing landslides which pose a risk to the subject lots; however ,an existing landslide was identified at the location where the access road it planned to meet Highland Drive. The geotechnical consultation for the lots indicates that subsurface conditions at the site consist of 2 to 6 feet of clay soils overlying bedrock. Based on the test pits excavated for this consultation, the bedrock outcrops at the site, and a road cut on Highland Drive north of the subdivision, the bedrock at this site is a moderately strong to strong sandstone.

To evaluate the slope stability we estimated a slope profile through lot 52 using the site plan provided to us. A second profile was used in our analysis to evaluate the effects of cut slopes for the proposed homes. The soil strength used in our analysis was based on a direct shear test performed for the Highland Drive slope failure just north and west of the subject site. The bedrock strength is an assumed conservative value.

To analyze the slope stability we used the XSTABLE computer program and the Modified Bishop's method of slices. The slope profiles were analyzed under both static and pseudo-static conditions. The pseudo-static condition is used to evaluate the stability of the slope during a seismic event. The expected maximum bedrock acceleration from large earthquakes at this site with a 10 percent probability of exceedance in 50 years is 0.2g[1]. One half of the peak acceleration is commonly used in pseudo-static analyses and this value was used in our analysis.

---

[1] USGS, Earthquake Hazards Program, National Seismic Hazard Mapping Project, 2002.

Slopes with safety factors of 1.5 and 1.0 or greater for static and pseudo-static conditions, respectively, are typically considered stable. Our analysis indicates a factor of safety greater than 1.5 and 1.0 for static and pseudo static conditions, respectively (Figures 1 through 4). Based on this analysis, we recommend that cuts and fills be no more than 15 feet in height. All cuts in the clay soils more than 5 feet in height should be retained with an engineered retainage system. Cuts within the bedrock should be no steeper that ½ to 1 (horizontal to vertical). Cuts and fills with the clay soils should be graded no more than a 3 to 1. All excavations over 5 feet in height should be observed by the Geotechnical engineer to verify bedrock composition.

This analysis applies to the areas of lots 50 through 54 and not to the existing landslide area identified by Western Geologic. It should be understood that this slide could adversely affect the proposed access road requiring periodic regrading.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please call.

Respectfully;
EARTHTEC ENGINEERING, P.C.

Mark I. Christensen, P.E.
Project Engineer

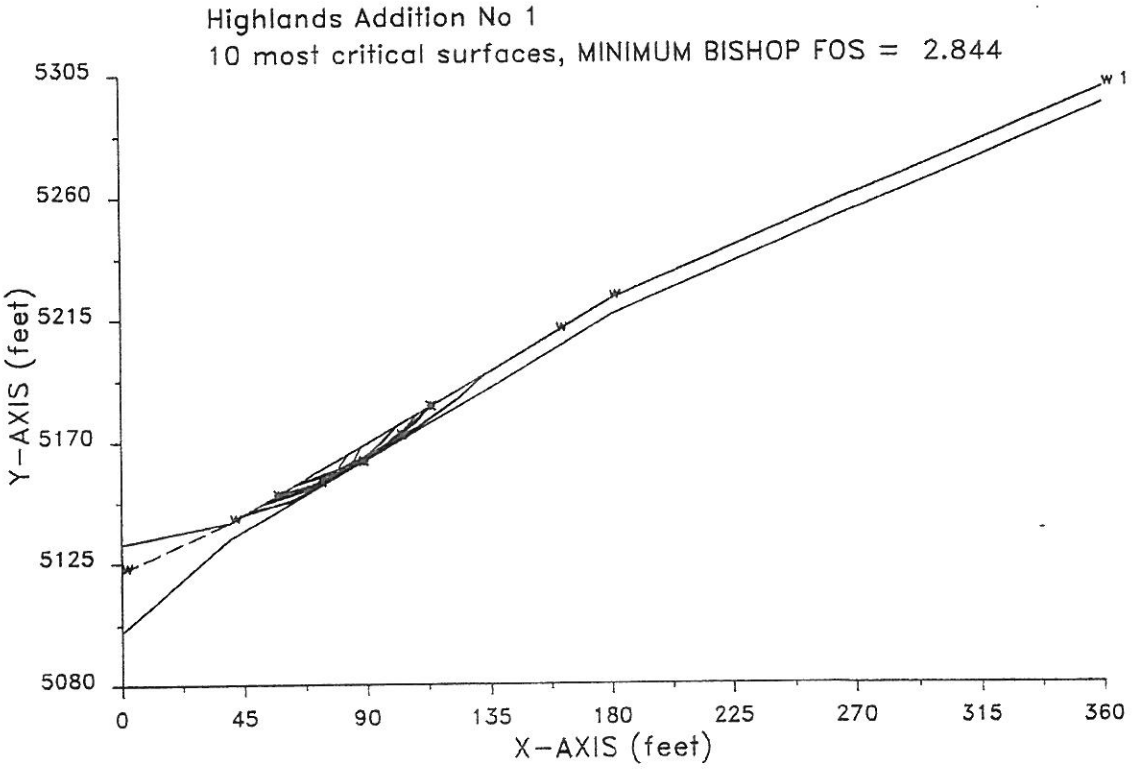
2 copies sent

Attachments: Figures 1 through 4 - Stability Analyses
Landslide Hazard Reconnaissance

EARTHTEC ENGINEERING

Soil Layer	*Soil Type*	*Moist Unit Wt. (pcf)*	*Sat. Unit Wt. (pcf)*	*Cohesion (psf)*	*Friction Angle (degrees)*
1	*CLAY*	*115*	*125*	*480*	*23*
2	*BEDROCK*	*150*	*150*	*2000*	*0*

HIGHADD1 4-06-** 18:02



GLOBAL STABILITY

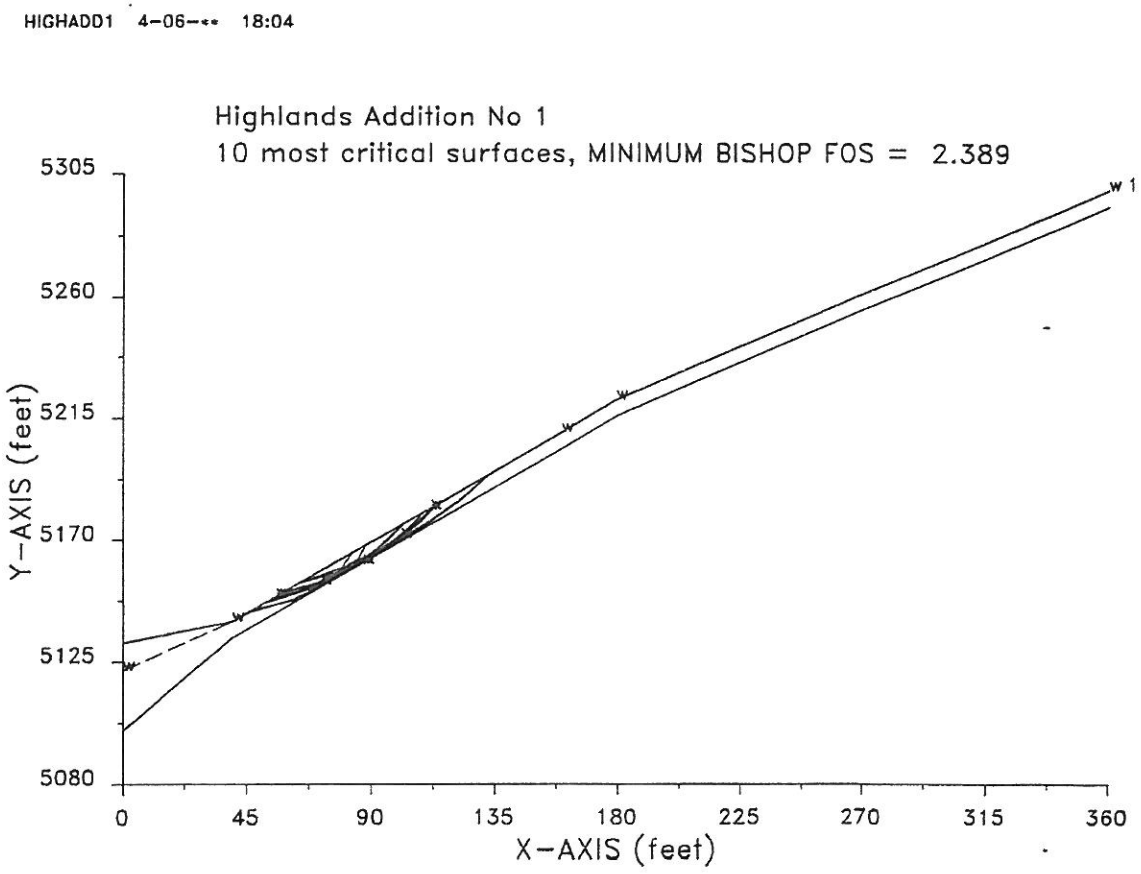
ETE JOB NO. 06-0868

FIGURE 1

EARTHTEC ENGINEERING

Soil Layer	*Soil Type*	*Moist Unit Wt. (pcf)*	*Sat. Unit Wt. (pcf)*	*Cohesion (psf)*	*Friction Angle (degrees)*
1	*CLAY*	*115*	*125*	*480*	*23*
2	*BEDROCK*	*150*	*150*	*2000*	*0*

Horizontal Acceleration of 0.10 G



GLOBAL STABILITY - PSEUDO STATIC

ETE JOB NO. 06-0868 **FIGURE 2**

EARTHTEC ENGINEERING

Soil Layer	*Soil Type*	*Moist Unit Wt. (pcf)*	*Sat. Unit Wt. (pcf)*	*Cohesion (psf)*	*Friction Angle (degrees)*
1	*CLAY*	*115*	*125*	*480*	*23*
2	*BEDROCK*	*150*	*150*	*2000*	*0*

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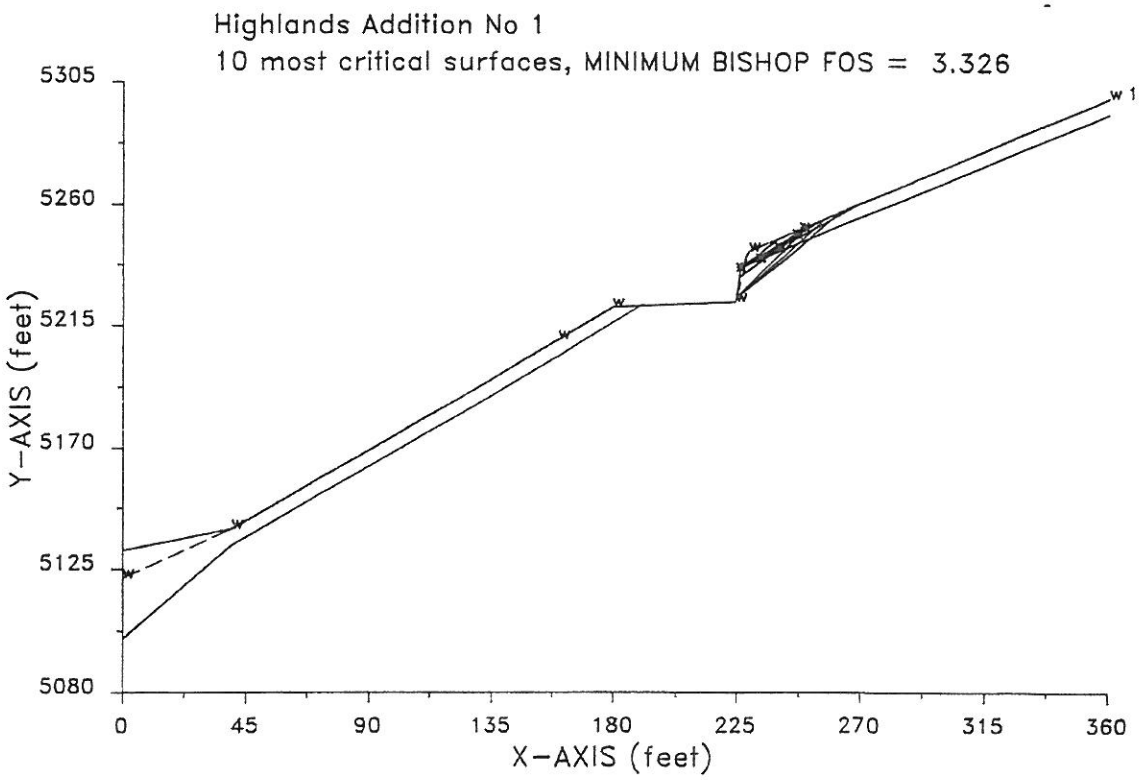


LOCAL STABILITY

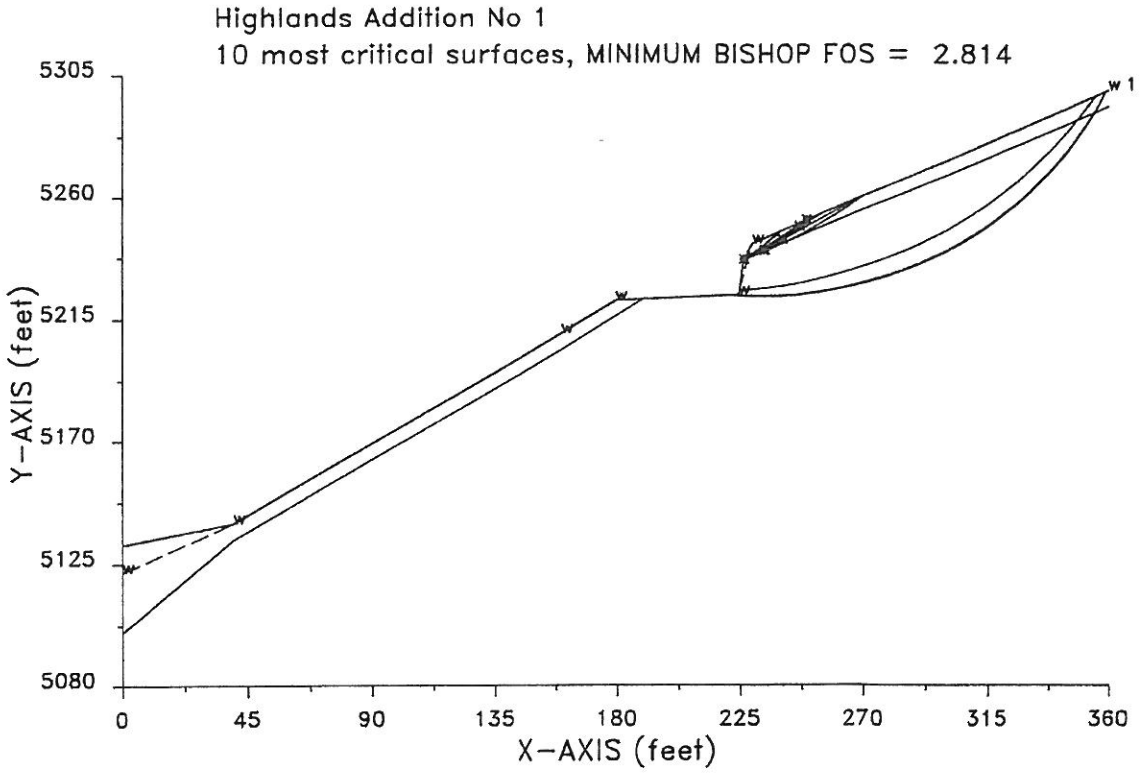
ETE JOB NO. 06-0868 **FIGURE 3**

EARTHTEC ENGINEERING

Soil Layer	*Soil Type*	*Moist Unit Wt. (pcf)*	*Sat. Unit Wt. (pcf)*	*Cohesion (psf)*	*Friction Angle (degrees)*
1	*CLAY*	*115*	*125*	*480*	*23*
2	*BEDROCK*	*150*	*150*	*2000*	*0*

Horizontal Acceleration of 0.10 G

HIGHADD2 4-06-** 18:34



LOCAL STABILITY - PSEUDO STATIC

ETE JOB NO. 06-0868 **FIGURE 4**

Exhibit C- Geotechnical/Geological Reports

PUBLIC & PRIVATE FACILITY SITING, TERRAIN ANALYSIS, PIPELINE CORRIDOR SELECTION, THEMATIC MAPPING, GROUNDWATER STUDIES, LANDFILL & WASTE FACILITY SITES, GEOSEISMIC, GEOLOGIC HAZARDS, MATERIAL SOURCES, ENVIRONMENTAL, INDUSTRIAL, COMMERCIAL, RESIDENTIAL, MUNICIPAL & RECREATIONAL LAND ANALYSIS

ENGINEERING GEOLOGY BRUCE N. KALISER HYDROGEOLOGY

CONSULTANT

October 21, 1997

Attn: David Macallister
2699 E. Oak Lane
Layton, UT 84040

Re: Highland Addition No. 1, Lots 50-54, Morgan Co., Utah

Introduction:

All five lots are on a west facing slope at the north end of the Highlands Subdivision, in the west half of Section 23, T.5 N., R. 1 E.. Vegetative cover is mostly heavy scrub oak. Current access is provided by a road which borders the property on the west and another dirt road off-site, to the east. Lots are intended for single family dwellings. Home sites have been tentatively sited based largely upon local topography (fig. 1).

Initial foot reconnaissance of the property and vicinity was performed on August 14, 1997. Test holes were excavated on October 3, 1997, following completion of the survey to mark the location of the proposed road and five Home sites.

Participating in this investigation was Mr. Robert Barton, senior geotechnical engineer with Earthtec Engineering. His report is found in Appendix II, herewith.

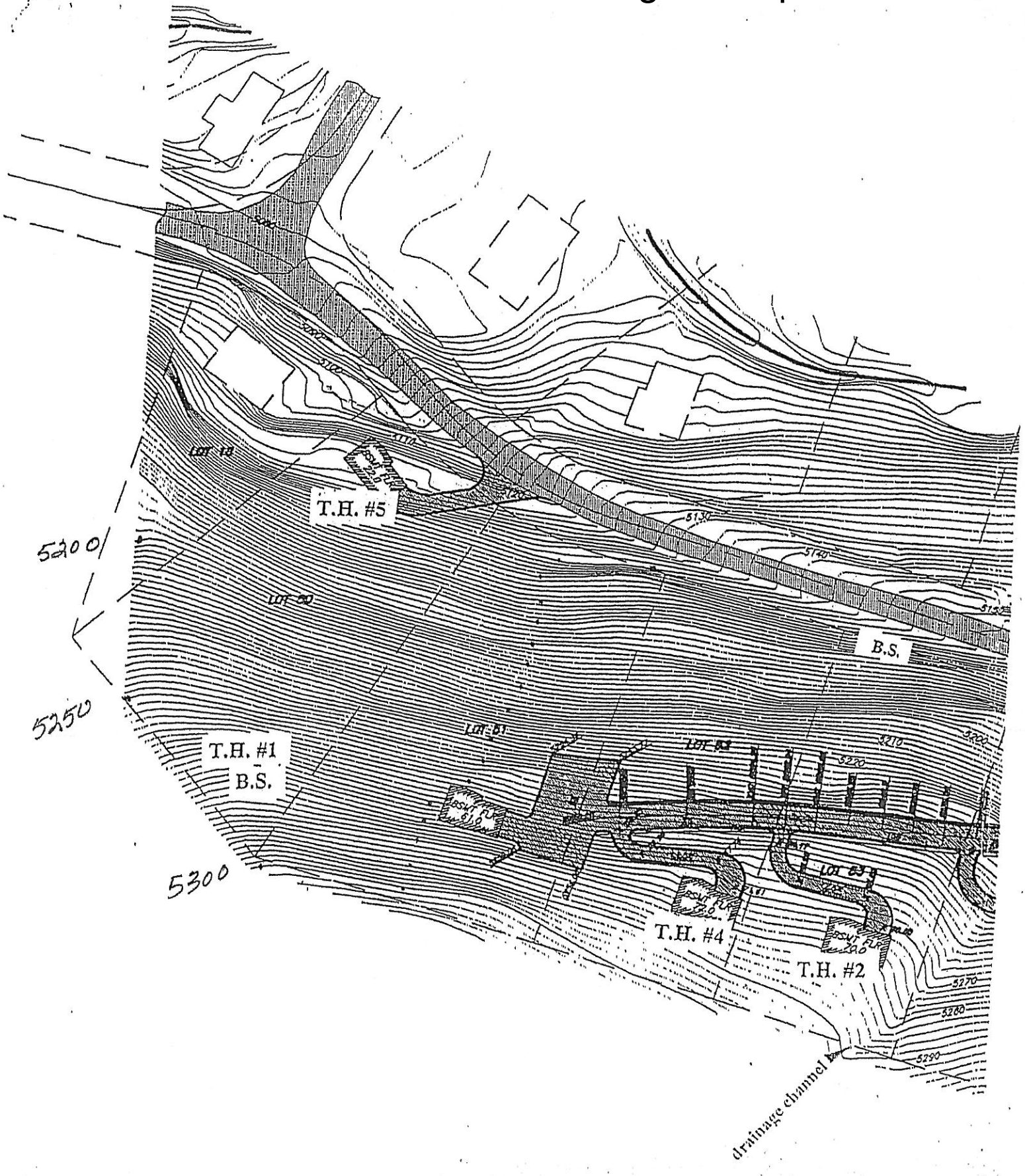
Geology & Soils

The slope at this site is underlain at shallow depth with claystone, siltstone and sandstone of the Tertiary Norwood Tuff formation. The slope is everywhere convex, steeper to the west and shows no evidence of mass movement. The slope is controlled by the strike of the rock which is north-south. Local changes in slope morphology result from the different lithologies of individual rock strata and their relative differences in hardness and thickness of soil cover. The strata dips into the slope (to the east) at an angle of from 30° to 38°.

Overlying soils are both residual weathering products and colluvial soils and are mostly clays with greater or lesser silt and sand content.

Bedrock outcrops occur on-site generally along the west side of each lot and parallel to the slope, at midslope elevations.

Exhibit C- Geotechnical/Geological Reports



ITY WITH A TWO FOOT INTERVAL.

B.S. = Bedrock Structural Measurements (see text).

Structural attitudes (dip and strike of both bedding and jointing) of the rock were taken on-site and immediately off-site, to the north.

Drainage

The most significant drainage potentially impacting the property occurs off-site, immediately to the north. The culvert that currently exists beneath the road appears to be undersized. Approximately 100 feet east of the road a sandstone ledge intercepts the drainage. An ephemeral spring occurs at this location (dry on 10/3/97).

The drainage crossing lots 53 (NE corner) and 54 is far less significant and shows no evidence of historical incisement. No culvert is in evidence where it crosses the road at the lower end of lot 54.

Groundwater

No evidence exists for the presence of springs or seeps anywhere on the property. Evidence looked for included: (1) geomorphologic, (2) anomalous vegetation, (3) erosion. There is evidence, however, for one ephemeral spring in the drainage to the north of lot 54. This spring emits from Norwood formation sandstone.

The permanent water table is likely to be in excess of 100 feet in depth at this site. Ephemeral, perched groundwater, though not in evidence, is possible in either the soils and/or the bedrock on the site, particularly at times of high spring runoff.

Subsurface Exploration

Six test holes were excavated with a 160 Sumitomo Trackhoe (580 equivalent; 7 ton). Two test holes were sited on lot 50 and one each on lots 52, 53 and 54; the sixth was north of lot 54 along the proposed access road (fig. 2).

Depth of test holes ranged from 4.8' to 9.5' (Appendix I). Bedrock exists at shallow depth beneath a veneer of clay soil which is seen to be quite stiff. Consistency of the clays resembles that of the Norwood claystone. Generally, the clay is found to be from 4.2' to 6.3' in thickness. At the upper end of lot 50 no clay veneer exists over the hard sandstone. At the lower end of the same lot (about 90' lower in elevation) bedrock occurs at greater depth than 9.5'.

Bedrock Structure

Immediately north of the site on the same slope the Norwood formation strata were measured to strike 352° with a 30° east dip (into the slope). Two joint systems were observed at this location:

1. Strike 102°; 64° SSW dip.
2. Strike 20°; 52° WNW dip.

Near the base of the slope, on-site, bedrock displays a prominent joint system with:

1. Strike 3°; 62° west dip.

T.H. #1, on the upper portion of lot 50, revealed a joint system with:

1. Strike 342°; 61° WSW dip.

The bedding at this location strikes 1°; 38° E. dip.

An exposure on the upper portion of lot 54 revealed a joint system with:

1. Strike 82°, vertical dip.

Discussion

Careful examination of the terrain slope and its geologic structure reveals no problem for the safe siting of an access road and five single family dwellings. No slide susceptible soils or bedrock were encountered.

Geologic structure of the rock is such that the most significant plane of weakness (bedding) is dipping moderately steeply into the slope.

The joint systems are not uniform across the slope but all dip at angles considerably greater than the slope.

The new access road has been sited with an alignment immediately below a sandstone caused break-in-slope. It is anticipated that resistant sandstone will comprise the cutwall for most of this road.

It is not always easily determined whether rock exposed in a cut face is in-place Norwood formation or whether a detached angular slab has been incorporated in colluvium. Likewise, clay may not always be easily distinguished from Norwood claystone, especially if in a weathered state.

Conclusions

1. No evidence exists to indicate that there is instability of any portion of the slope on the subject property.

2. The geologic conditions existent across the entire property will permit siting, design and construction of homes and infrastructure on the west facing slope.

Recommendations

1. Drainage should be provided for in the shallow subsurface to assure that the presence of any ephemeral, perched groundwater is rendered harmless.
2. Vegetation should be left undisturbed to the maximum extent possible.

3. All cuts, whether in soil or rock, should be inspected by the project engineering geologist and/or geotechnical engineer to assure proper design. The same is true for structural foundations.

4. Design and construction of all structures should comply with current Uniform Building code seismic requirements for Zone 3, as a minimal standard.

5. Adequately sized culverts should be provided for both aforementioned drainages.

Please see the additional recommendations provided by the project geotechnical engineer in Appendix II.

Respectfully submitted,

Bruce N. Kaliser
Engineering Geologist

PHOTO 10: Looking SSE. Potential upper Lot 50 Homesite. Foreground - test hole #1. Slope 14° requiring 8-10 ft cut into hillside. Very fine sandstone.

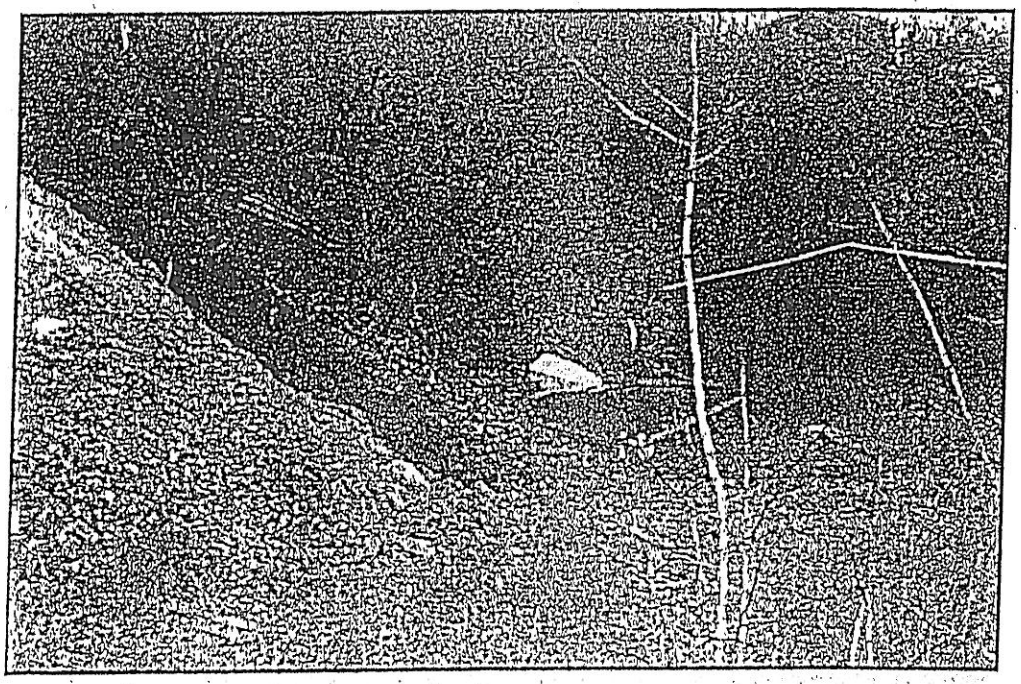


PHOTO 11: Looking SSE. Proposed lower Lot 50 Homesite. Photo left - test hole #5. Photo background - neighbor's metal/proposed homesite. Proposed home will require cut into hillside comparable to recently completed Highland Subdivision homes. Driveway to be placed on present access road to shed.

Earthtec Engineering, P.C.
133 North 1330 West
Orem, Utah 84057
225-5711

3534 Eccles Av
Ogden, Utah 8440
399-951

October 24, 1997

Bruce N. Kaliser
Engineering Geologist
2951 Nila Way
Salt Lake City, UT 84124

Subject: Geotechnical Consultation
Highland Subdivision No. 1, Lots 50-54
Farmington, Utah
EE Job No. 97E-416

Dear Mr. Kaliser;

As requested, we have conducted a geotechnical investigation in conjunction with a geologic study on the subject development. The scope of our study was to observe test pit excavations on the property, determine the engineering characteristics of the soils and provide our recommendations for geotechnical aspects of the development. This letter should be considered as an addendum to the geologic report which describes the site conditions, defines the test pit locations and presents logs of the soil stratigraphy.

PLANNED CONSTRUCTION

The planned development will consist of single family homes which will likely be one to two story, wood frame structures, with basements set into the west facing slope. An asphalt access road and exterior concrete flatwork will also be part of the development.

SITE CONDITIONS

The property to be developed is described in detail in the geologic report. In general the site is situated on a west facing slope with grades estimated at between 20 and 35 percent. The site is covered with thick oak brush. Lots have been developed to the south and west of the site. Some of the older homes in the immediate vicinity have significant building distress which, in our opinion, is generally due to inadequate structural design for the horizontal soil pressures imposed on below grade walls.

SUBSURFACE CONDITIONS

The soil conditions were evaluated from 6 test pits excavated at selected locations across the subject site. Below 4 to 12 inches of organic topsoil we encountered a covering layer of 2 to 4 feet of silty, sandy clay (CL) with some cobbles and boulders underlain by medium hard to hard sandstone and claystone bedrock extending beyond the maximum depth investigated. No groundwater was found in any of the pits excavated for this project. See the geologic report for the location of the test pits and descriptions of the soils encountered in each test.pit.

SITE GRADING

The property is covered by vegetation and varying depths of organic topsoil. The vegetation, topsoil, manmade fill (if encountered) and soils loosened by construction activities should be removed (stripped) from below buildings, the access road, driveways, walkways, and areas to receive fills. Following stripping the exposed subgrade should be proof-rolled to a firm, non-yielding condition. If soft areas are encountered during the proof-rolling then the soft soils should be removed and a stabilization fill consisting of coarse gravel and cobbles placed up to design grades. Prior to placing the stabilization fill the area should be observed by the geotechnical engineer to determine if a stabilization fabric, such as Mirafi 600X, will be required between the native soils and the fill.

Structural fill placed under the buildings should consist of imported sands and gravels with a maximum particle size of three inches and less than 15 percent fines (materials passing the #200 sieve). The liquid limit of the fines should not exceed 35 and the plasticity index should be below 15. The structural fill should be placed in maximum 8-inch thick, loose horizontal lifts at a moisture content within 2 percent of optimum and compacted to at least 95 percent of the maximum density, as determined by ASTM D 1557.

It is our understanding that the access road pavement will be supported on native soils exposed in cuts for the road; however, fill will likely be placed on the downhill side to provide a shoulder and in low areas as needed for grading. Within 18 inches of the design subgrade level below the asphalt we recommend that imported structural fill be placed. Outside of the pavement area and for deeper grading the native soils may be used as fill, providing it is placed in accordance with structural fill specifications. Final fill and cut slopes should be no steeper than 2:1 (horizontal to vertical). The fill lifts should be keyed into the hillside by stepping each lift into the native soils.

Utility trenches may be backfilled with the native soils, provided they have a suitable moisture content, are placed in appropriate lift heights for the compaction equipment used, and compacted

to at least 95 percent of the maximum density (ASTM D 1557). In pavement areas the upper 18 inches of backfill should meet structural fill requirements, as defined above. We also recommend that a minimum 6-inch thick layer of sand and gravel fill with a maximum rock size of 2 inches and less than 7 percent fines (material passing the #200 sieve) be placed around pipelines for a distance of at least 6 inches to provide proper bedding and cover conditions.

In this area it always possible that springs may be encountered during excavation. If springs are found they should be collected in a perforated pipe surrounded by gravels and piped away from the construction. If springs are encountered an experienced geotechnical engineer or engineering geologist should be contacted to help develop the collection system.

As indicated above no cut or fill slopes should be steeper than 2:1 (h:v). If steeper slopes are needed then retainage systems will be required. Retainage may consist of (1) large rock with a 1:1 or flatter slope up to a maximum height of 6 feet; (2) standard concrete retaining walls; or (3) soil reinforced/segmented block walls such as keystone walls. These options should be designed to retain the lateral soil loads as discussed below.

Disturbed slopes should be seeded and erosion damage repaired until a vegetated slope is established.

BUILDING FOUNDATIONS

The upper clays have low strengths and are relatively compressible under light loading; therefore, they are not suitable for foundation support. The structures may be supported with spread footings founded on the underlying bedrock or structural fill replacing the upper clays. The following guidelines can be used in structural designs:

1. Spread footings founded on the bedrock should be designed for a maximum allowable soil bearing pressure of 1800 psf. A one-third increase is allowed for short term transient loads such as wind and seismic events. Footings should be uniformly loaded.

2. Continuous footings and spot footings should have minimum widths of 24 and 30 inches, respectively.

3. Exterior footings should be placed at least 36 inches below final exterior grades to provide sufficient cover for frost protection.

4. The bottom of all footings should extend at least 18 inches below the lowest adjacent final grade.

5. Foundation walls on continuous footings should be well reinforced both top and bottom. We suggest a minimum amount of steel equivalent to that required for a simply supported span of 12 feet.

6. Footings should be kept horizontal and stepped down where necessary to meet slope grade changes.

7. Footings should not be placed closer than 20 feet from any slope measured horizontally from the footing to the slope face.

8. Because of the potential for water percolating through the upper soils during periods of rapid snow melt or following heavy storms, we recommend foundation drains be installed around the structures. For more details see the subsurface drainage information below.

9. The buildings should be designed in accordance with the Zone 3 requirements of the UBC using an "S_1" seismic site coefficient of 1.0.

10. Floor slabs can be founded on the native soils which have been proof rolled and soft areas stabilized as discussed above. The floors should be underlain by at least 4 inches of free draining gravel and designed for a subgrade reaction modulus of K=150 psi/in. To reduce cracking inherent in the floor slabs, they should be well reinforced, contain frequent crack control joints and not be rigidly attached to foundation or bearing walls.

11. Since it is important that the footings be extended to the bedrock we recommend that all building excavations be inspected by an experienced geotechnical engineer or engineering geologist before footings are placed.

SURFACE DRAINAGE

Wetting of the foundation soils may cause some degree of volume change within the soil and should be prevented both during and after construction. We recommend the following precautions be taken:

1. The ground surface should be graded to slope away from the structures in all directions. A minimum fall of 6 inches in the first 10 feet is recommended.

2. Roof runoff should be collected in rain gutters with the downspouts designed to discharge well outside of the backfill limits.

3. Sprinkler heads should be kept at least 12 inches out and aimed away from foundation walls.

4. Provide adequate compaction of foundation backfill, i.e. a minimum of 90 percent of ASTM D 1557. Water consolidation techniques should not be used.

5. Keep runoff water from concentrating except in rock or concrete lined channels and vegetate any disturbed slopes.

6. Other precautions which may become evident during design and construction should be taken.

SUBSURFACE DRAINAGE

Because of the potential for water percolating through the upper soils which can become trapped adjacent to the foundations, we recommend that all buildings have foundation drains installed. The foundation drains should consist of a minimum 4 inch diameter, slotted pipe encased in at least 12 inches of free-draining gravel which is covered by a filter fabric such as Mirafi 140N, or equivalent. The gravel should be extended up the foundation wall to within 18 inches of the final ground surface. The pipe should placed such that it is lower than the basement floor and graded to drain to a free gravity outfall. Drain gravel should consist of a 2 inch minus gravel with a maximum of 5 percent fines (materials passing the #200 sieve).

ACCESS ROAD

It is our understanding that the access road will be placed on undisturbed native soils exposed in cuts in the slope. Fill will be necessary for grading and to provide a widened shoulder on the downhill side of the road. The native subgrade will likely consist of both clays and bedrock depending on the location and depth of the cut. The pavement designs presented below are based on the weaker clay soils.

The access road will be used only for access to the homes in the development and therefore will have minimal traffic loads. We have assumed an 18k daily equivalent single axle load of 3 in our designs. Using AASHTO pavement design procedures we recommend a pavement section consisting of 2.5 inches of asphalt and 8 inches of aggregate base. As discussed above we recommend structural fill be used for road grading below the paved section while compacted native soils may be used outside the pavement. Final slopes of both the downslope fill and the upslope cuts should be no steeper than 2:1(h:v) unless retainage systems are incorporated as discussed above.

Our analysis assumes the following:

1. Subgrade soils are proof rolled after excavation to verify a firm, non-yielding condition. Soft areas identified during the rolling operations should be stabilized prior to base or fill placement. Stabilization requirements are discussed above under the site grading section. If prepared in accordance with these recommendations the subgrade should provide a subgrade reaction modulus of 130 psi/inch (CBR of 4).

2. Asphalt and aggregate base meet UDOT specification requirements.

3. Aggregate base will be compacted to at least 95 percent of the maximum dry density (ASTM D 1557).

4. Asphalt will be compacted to at least 95 percent of the laboratory Marshall mix design density (ASTM D 1559).

5. Pavement design life of 20 years.

It should be recognized that the pavement section recommended above is designed to support only the light traffic to the homes and not for support of heavy construction vehicles such as loaded concrete and lumber trucks. If the road is paved prior to completion of the construction some pavement distress may occur.

As discussed above cut and fill slopes on the road should be no steeper that 2:1 (h:v) unless retainage systems are incorporated. We have discussed lateral loads to be used in retainage design below. The slopes below the road will be susceptible to erosion therefore we recommend a curb or other runoff control be incorporated in the design.

LATERAL EARTH PRESSURES

Because of the grades at this site it is likely that most buildings will be set into the hillside and that retaining walls may be needed for the access road and site landscaping. Basement and retaining walls should be designed to resist the lateral pressures exerted by the retained soil, which can be approximated using a triangular stress distribution known as equivalent fluid pressure. Walls which are restricted from movement, such as basement walls, should be designed for "at rest" lateral earth loading conditions. Walls which can have some movement, such as retaining walls used for road construction or landscaping, should be designed for "active" earth pressures. If native soils are used for backfill we recommend assuming lateral earth pressure coefficients of 0.5 for "at rest" conditions and 0.38 for "active" conditions in wall designs. With an estimated moist soil weight of 140 pounds per cubic foot this results in design equivalent fluid unit weights of 70 pcf for "at rest" conditions and 53 pcf for "active" conditions. These lateral loading conditions assume horizontal backfill behind the retaining walls. If sloping backfill is required higher coefficients will be needed. For instance if a sloping backfill of 30 percent is planned then the design loads should be increased by 70 percent above the values given above. We would be happy to work with your structural engineer on developing soil loads for specific wall conditions at the time of design.

Water collecting against foundation walls from storm runoff and snow melt will cause additional hydrostatic loading as well as become a moisture source for subgrade saturation and basement seepage. Therefore, it is important that foundation drains be installed around the buildings as discussed above. If desired, retaining walls for the access road or landscaping purposes may use a gravel drain without collection pipe providing weep holes are installed with a spacing of no more than 10 feet on center.

If segmented walls are used for road or landscaping walls the manufacturer's recommended designs should be followed. If you wish to use rock retained slopes we would be happy to provide design parameters upon request.

LATERAL EARTH RESISTANCE

Lateral loads on the structures will be resisted by "passive" pressure developed by backfill against the walls and by friction developed between the footings and the bearing soils. If the native soils are used as backfill, we recommend using a moist unit weight of 115 pcf and an ultimate "passive" coefficient of lateral earth pressure of 2.5 (equivalent fluid unit weight of 288 pcf). These design parameters assume building movements of up to 1 inch may be required to fully mobilize the

passive resistance. To restrict lateral movements to less than 0.5 inch the coefficient should be reduced to 1.5 (equivalent fluid unit weight 180 pcf). The top 1 foot of the backfill soils should be neglected in calculation of the lateral resistance. A coefficient of 0.35 should be used in estimating frictional resistance of the footings to lateral loads. Segmented walls use tie back resistance to resist lateral loads.

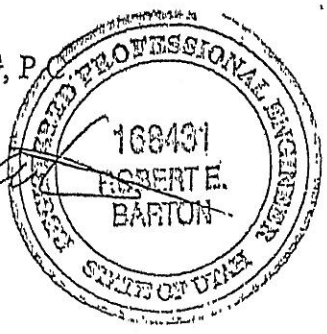
GENERAL CONDITIONS

The exploratory data presented in this report were collected to provide geotechnical design recommendations for this project. The test pits were widely spaced and may not be indicative of subsurface conditions between test pits or outside the study area and thus have limited value in depicting subsurface conditions for contractor bidding. Variations from the conditions portrayed in the test pits often occur which are sometimes sufficient to require modifications in the design. If during construction, conditions are different than those presented in this report, please advise us so that the appropriate modifications can be made. An experienced geotechnical engineer or engineering technician should observe proof rolling operations, foundation excavations and fill placement. He may conduct testing as required to confirm the use of proper structural fill materials and placement procedures.

The geotechnical study as presented in this letter was conducted within the limits prescribed by our client, with the usual thoroughness and competence of the engineering profession in the area. No other warranty or representation, either expressed or implied, is intended in our proposals, contracts or reports.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please call.

Respectfully;
EARTHTEC ENGINEERING, P.C.



Robert E. Barton, P.E.
Geotechnical Engineer

2 copies sent

Exhibit D- Wasatch Civil Memo

WASATCH CIVIL
Consulting Engineering

M e m o r a n d u m

To: Charles Ewert - Planner
Morgan County

From: Mark T. Miller, P.E.
Wasatch Civil Consulting Engineering

Date: November 5, 2013

Subject: **Sauer Site Plan**

We have reviewed the revised information for the Sauer Site Plan. Items 2, 3 and 4 were adequately addressed. Reeve & Associates did not address Item 1, which states "…runoff from the driveway and from the yard drain need to be considered in pipes, side swales or boxes to prevent erosion on the westerly side and to keep water from running out into Highland Drive."

Water from the house and driveway will flow directly onto and across Highland Drive with significant velocity which will create a safety concern. The connection of the side swale on the easterly side of the driveway to the newly proposed culvert (at Highland Drive) needs to be detailed. The culvert is in the right-of-way, so it needs County review and approval. No details (type of pipe, slope, end sections, trench detail, etc.) were provided. The drainage design from the yard drain as it crosses the drive is not detailed enough to answer the erosion control issue mentioned above.

Once these items have been addressed, the plan should be acceptable. Please call if you have any questions.

PLANNING COMMISSION AGENDA
Thursday, November 14, 2013
Morgan County Council Room
6:30 PM

PUBLIC NOTICE is hereby given that the Morgan County Planning Commission will meet at the above time and date at the Morgan County Courthouse, Council Chambers, 48 West Young St, Morgan, Utah. The agenda is as follows:

1. Call to order – prayer
2. Approval of agenda
3. Declaration of conflicts of interest
4. Public Comment

Administrative Items

5. Discussion/Decision**:** Sauer CUP: Requesting a Conditional Use Permit for excavation for a residential building pad located at 6502 N Highland Drive.
6. Discussion/Decision: Babcock/K2 Building Solutions CUP: Requesting a Conditional Use Permit for assembling construction material to be utilized off site located at 4070 West 5800 North in the Cottonwood Industrial Park.
7. Discussion/Decision: Earl Acres Subdivision Concept Plan: Conceptual review of a 2 lot subdivision located in the RR-1/A-20 zones on property located at approximately 2880 Morgan Valley Drive. The applicant is also seeking an exception from improvement requirements.

8. Staff Report
9. Approval of minutes from October 24, 2013
10. Adjourn

PLANNING COMMISSION AGENDA
Thursday, October 24, 2013
Morgan County Council Room
6:30 PM

PUBLIC NOTICE is hereby given that the Morgan County Planning Commission will meet at the above time and date at the Morgan County Courthouse, Council Chambers, 48 West Young St, Morgan, Utah. The agenda is as follows:

1. Call to order – prayer
2. Approval of agenda
3. Declaration of conflicts of interest
4. Public Comment

Administrative Items

5. Discussion/Decision**:** Cobble Creek Conditional Use Permit; A permit request for the utility use of a reservoir located east of Park Meadow Drive in the Cottonwoods Development.
6. Discussion/Decision: Rocking M Concept Subdivision; a two lot subdivision on Island Road in the RR-1/A-20. Applicant seeking exception from improvement requirements.
7. Discussion/Decision: Paul Heiner Concept Subdivision; A conceptual review of a 3 lot subdivision located in the RR-1/A-20 zones on property located at 459 South Morgan Valley Drive. Application seeking exception from improvement requirements.
8. Discussion/Decision: Whisper Ridge at Stone Canyon Plat Amendment #1; Combining lots 130 & 131 to create one lot at approximately 6240 W Oakridge Lane.

9. Staff Report
10. Approval of minutes from October 10, 2013
11. Adjourn

Members present	Others present
David Sawyer	Tina Kelley
Debbie Sessions	Kathy Collins
Roland Haslam	Mark Wilkinson
Darrell Erickson	Lisa Montoya
Michael Newton	Dale Harding
Steve Wilson	David Potter
	Bryce Heiner
	Benson Whitney

Meeting Minutes

1.Call to order—prayer. Chairman Haslam welcomed everyone to the meeting tonight. Member Sawyer offered prayer.

2. Approval of agenda.
Member Newton moved to approve the agenda. Second by Member Sessions. The vote was unanimous. The motion carried.

3. Declaration of conflicts of interest.
Chairman Haslam had a conflict of interest for item #5 and will abstain from discussion.

4. Public comment.
Member Sawyer moved to go into public comment. Second by Member Newton. The vote was unanimous. The motion carried.

There was no public comment.

Member Erickson moved to go out of public comment. Second by Member Sessions. The vote was unanimous. The motion carried.

Administrative Items

5. Discussion/Decision**:** Cobble Creek Conditional Use Permit; A permit request for the utility use of a reservoir located east of Park Meadow Drive in the Cottonwoods Development.

Mr. David Potter, representing the Gardner/CottonWood Creek LLC, deferred to Charlie to present. Charlie explained that the proposed reservoir use is allowed under the F-1 and RR-1 zone.
Charlie referred to the conditions for approval and stated that this is a high-hazard dam. There is also a requirement for a traffic mitigation plan and private easements to ensure they are protecting

the existing roads and residences.
Member Sawyer wanted clarification on why it's a high-hazard dam. Charlie responded that an engineer would be able to clarify better, but his understanding is the state has several categories of dams and a classified high-hazard dam is one that has less support or a higher probability of a breach. There was a hydrologic study required which revealed that the most likely place to breach was toward lots 21 and 22.
Member Sawyer wondered about having a bond and Charlie replied that they can certainly put a bond in place. Charlie confirmed that the county engineer is okay with the listed conditions for approval.
Member Sessions asked for clarification on the seven proposed conditions from the state engineer.
Member Newton pointed out that the lots referenced in the seven conditions are different from what is addressed in the current packet.
Charlie consulted a more recent letter dated April 15, 2013 from the state engineer from when the reservoir was re-evaluated. There are seven conditions listed there that were added to the current packet. Charlie indicated the drainage line on the added exhibit image.

Mr. Potter: Clarified the proposed location of the reservoir. He mentioned one thing the report didn't clarify is the easement hasn't been signed, as it is a condition upon closing between the Gardner's development and the Wilkinson family. He stated that the proposed site is preferred because of the location from the Wilkinson Farm Pipeline and spring runoff. More wells and drilling will be needed to access the secondary water source, but it will be basically unobservable from the surrounding residences. They do need the right of way cleared up from Rulon Gardner.
Member Sessions asked Mr. Potter to clarify what he means by the term "we".
Mr. Potter responded Morgan Secondary Water Company. All the surrounding homeowners, in the Cottonwood subdivision development, are water share holders. Secondary and culinary waters are separate. There is a manager with a board of directors, with the biggest shareholder being Rulon Gardner. The liability insurance should cover when the dam is finished.
Member Sawyer asked about the anticipated finish date for the dam. Mr. Potter responded that they'd like to get it through as soon as possible so to catch the spring runoff.
Member Sawyer wondered about any other people living downstream who may be affected and if there are any objections to easements.
Mr. Potter stated that Browning expressed concerns for their wells.
Member Erickson asked about requiring fencing. Charlie responded that if they would like to make a condition to add fencing, a condition needs to be made tonight. Mr. Potter commented that they would like to add a chain-link fence and post signs.
Charlie recommended increasing the cost of the bond to cover the cost of the fencing.

Mark Wilkinson stated that he has no idea who came up with the idea for the reservoir. Says the better place for it is downstream from where it's proposed. He voiced concern that water is going to seep down through the rocks and gravel into basements.

Member Sessions moved to forward a positive recommendation to the County Council for the conditional use permit for a utility use and excavation for the Cobble Creek Reservoir to store water for the Mountain Green Secondary Water Company, application 10.050, subject to the findings and conditions listed in the October 15, 2013 staff report, and as modified by the conditions and findings below:

1. The permissions from all landowners on which the reservoir structures, access to the reservoir, drainage from the reservoir and utility lines from the reservoir are proposed to be located must be provided prior to the required preconstruction meeting.
2. Legal descriptions for all easements for the proposed reservoir structures, access road and utility lines and drainage must be prepared, documented and recorded provided prior to the required preconstruction meeting.
3. Documentation of the State Engineer's "No Build Easements", identified in Exhibit G for relevant lots in the Northside Creek P.R.U.D. Subdivision be recorded before construction begins.
4. All work and use shall be conducted in compliance with the approved Engineering Plans, the recommendations at Section 5.6 of the February 28, 2013 Geotechnical Study, and the conditions of approval of the State Engineer's April 15, 2013 Order.
5. Information regarding number, sizes, loaded weight and frequency of construction traffic will be submitted to the County's Engineer for review and determination of appropriate construction traffic management and road maintenance program, which would address dust management, hours of operation, current roadway conditions and the potential need for repairs to County roads due to construction traffic.
6. The final engineered plans are submitted for the County's Engineer's approval signature. Final plans should include maps showing all easement locations and boundaries.
7. All final administrative comments/corrections from the County's Engineer are complied with prior to the beginning of construction.
8. Submittal of a re-vegetation and re-seeding plan with specific seed mixes, planting dates and irrigation methods.
9. Submittal of a cash completion bond and Cash Escrow agreement and Engineer's Cost Estimate for the approved re-vegetation and reseeding plan, and fencing in an amount and on forms as are acceptable by the County's Engineer, County Attorney, and County Zoning Administrator.
10. That no work or construction shall commence prior to a preconstruction meeting with the County Engineer, and that the submittal of mylars shall be provided prior to this meeting.
11. That all County outsourced review costs are paid current prior to commencement of construction.
12. That enforcement of these conditions may be attained by the issuance of a stop work order until infractions are corrected, among any other legal means.
13. That the project adheres to all other local, state, and federal requirements.
14. That the reservoir will be fenced with a chain-link fence with No Trespass notification.

This recommendation is based on the following findings:
1. That the request conforms to the requirements of the Morgan County Code.
2. That the requested uses are allowed in the RR-1 zone.
3. That with the proposed conditions, the proposal will mitigate potential detrimental effects it may cause to the public, particularly with respect to public safety and dust and debris control.
4. That a re-vegetation and seeding plan is essential to mitigating the harmful effects of erosion and slope instability, and will mitigate the negative aesthetic effects of the hillside excavation.
5.That the fencing requirement is reasonable to protect public safety and mitigates a harmful impact.

Second by Member Sawyer. The vote was unanimous. The motion carried.

6. Discussion/Decision: Rocking M Concept Subdivision; a two lot subdivision on Island Road in the RR-1/A-20. Applicant seeking exception from improvement requirements.

Member Sawyer asked for clarification about the width being 22 feet. Is the requirement for the part being built, or elsewhere also. Charlie clarified that it is for the width of the entire subdivision. The engineer has proposed modifying the right of way to find out where the property line should actually be.
Member Sessions wondered why there was 200 feet of frontage with Jess Holyoak. Member Sessions also brought attention to the shed that sits 7' from the property line, but there is a10' utility easement required. Charlie replied that he will talk with the applicant about addressing this problem.

Member Sawyer moved to forward a positive recommendation for the Rocking M Subdivision Concept Plan, application 13.113, as listed in the October 18, 2013 staff report, and as modified by the additional recommendations below:
1. That all outsourced consultant fees are paid current prior to final plat recordation.
2. That the plat is revised prior to preliminary plat submittal to provide 200 feet of frontage for both resulting residential lots.
3. That a record of survey of the remaining agricultural land is filed in the office of the County Recorder and recorded, together with a letter of approval of the division from the Zoning Administrator, pursuant to MCC §8-12-9.
4. That an improvements exception for the project is conditioned on the improvement of the existing street to a minimum width of 22 feet with adequate shoulders. Construction drawings illustrating the improvements shall be provided with the preliminary plat submittal, and final plat approval shall be conditioned on the execution of a cash bond and agreement for said improvements.
5. The all utility easements intended to be dedicated as public utilities are either called "public utility easements" or "PUE's."
6. That easements shall be placed on the plat in favor of any ditch owner/company, as may be applicable.
7. That proof of culinary shares (800 gallons per day) and irrigation shares (3 gallons per minute)

are provided for each lot at preliminary plat application.
8. That the creation and readdressing of the adjacent homesite off of the "Rocking M Drive" is executed simultaneous with final plat recordation and that documentation of the homesite owner's consent is provided with preliminary plat submittal. The applicant shall be responsible for erecting a blue street sign at the intersection of the drive and Island Road.
9. That a residential building envelope is provided both lots.
10. That all redlines on the plat herein are corrected with preliminary plat submittal.
11. That all other local, state, and federal laws are adhered to.

This recommendation is based on the following findings:
1. The nature of the subdivision is in conformance with the current and future land uses of the area.
2. The proposal complies with the Morgan County 2010 General Plan.
3. With the recommended conditions the proposal can be made to comply with current zoning requirements.
4. That additional work is necessary to make the proposal comply with preliminary plat requirements.
5. That with the listed conditions the proposal is found to comply with the findings required for an improvements exception; namely, that requiring the full street infrastructure improvements:
a. Is not roughly proportional, in nature or extent, to the impact of the development on the community;
b. Is not beneficial to the county; or may be detrimental to the neighboring property abutting the development;
c. Is not necessary at this time to protect the public's health, safety, and welfare.
6. That approval of the concept plan and the improvements exception renders the project "routine and uncontested" and as such qualifies for approval by the Zoning Administrator in compliance with adopted laws.
7. That the proposal is not detrimental to the health, safety, and welfare of the public.

Chairman Haslam called for a discussion.
There was no discussion.

Second by Member Newton. The vote was unanimous. The motion carried.

7. Discussion/Decision: Paul Heiner Concept Subdivision; A conceptual review of a 3 lot subdivision located in the RR-1/A-20 zones on property located at 459 South Morgan Valley Drive. Application seeking exception from improvement requirements.

Chairman Haslam called for a motion.

Member Newton moved to forward a positive recommendation for the Paul Heiner Concept Plan, application 13.110, as listed in the October 18, 2013 staff report, and as modified by the additional recommendations below:

1. That all consultant fees are paid prior to final plat recordation.

2. That a geologic hazards scoping meeting is scheduled with the County prior to preliminary plat submittal, and that a geologic hazards report is submitted with the preliminary proposal in compliance with adopted laws.
3. The all utility easements intended to be dedicated to public utilities are either called "public utility easements" or "PUE's."
4. That easements shall be placed on the plat in favor of any ditch owner/company, as may be applicable.
5. That proof of culinary shares (800 gallons per day) and irrigation shares (3 gallons per minute) are provided for each lot at preliminary plat application.
6. That a residential building envelope is provided on all lots.
7. That all redlines on the plat herein are corrected with preliminary plat submittal.
8. That all other local, state, and federal laws are adhered to.

This recommendation is based on the following findings:
1. The nature of the subdivision is in conformance with the current and future land uses of the area.
2. The proposal complies with the Morgan County 2010 General Plan.
3. The proposal complies generally with relevant requirements of the County's zoning and Subdivision regulations.
4. That additional work is necessary to make the proposal comply with preliminary plat requirements.
5. That with the listed conditions the proposal is found to comply with the findings required for an improvements exception; namely, that requiring the full street infrastructure improvements:
a. Is not roughly proportional, in nature or extent, to the impact of the development on the community;
b. Is not beneficial to the county; or may be detrimental to the neighboring property abutting the development;
c. Is not necessary at this time to protect the public's health, safety, and welfare.
6. That approval of the concept plan and improvements exception renders the proposal routine and uncontested, and as such final plat approval may be provided by the Zoning Administrator in compliance with adopted laws.
7. That the proposal is not detrimental to the health, safety, and welfare of the public.

Second by Member Erickson. The vote was unanimous. The motion carried.

8. Discussion/Decision: Whisper Ridge at Stone Canyon Plat Amendment #1; Combining lots 130 & 131 to create one lot at approximately 6240 W Oakridge Lane.

Benson Whitney, representing Henry Walker Homes, stated that they are just combining two lots.
Member Sessions asked if the building envelope is outside of the setbacks.
Ronda said they are managed by a development agreement and they all have their utility envelope. They were held at the 25% slope line. On the plat, E stands for Expansive Soil (clay).
Chairman Haslam clarified that by combining the lots, there will still be an E and an R (Restriction) on the plat.
Ronda pointed out that it is on a private lane and a P.R.U.D. allowed for flexible frontage. This made it less non-conforming with 31 feet.

Chairman Haslam called for a motion.

Member Sessions moved to forward a positive recommendation to the County Council for the Whisper Ridge at Stone Canyon Phase 1 Subdivision PRUD Amendment# 1, file# 13.090, subject to the conditions and based on the findings presented in the staff report dated October 17, 2013, and as modified by the conditions below:

1. That an updated title report is submitted with the final Mylar.
2. That staff can make a positive finding that all administrative plat corrections and other information have been provided to the satisfaction of respective reviewers, and that all conditions have been satisfied prior to plat recordation.
3. That all outstanding fees for outside reviews are paid in full prior to recording the final Mylar.
4. That all local, State and federal laws are upheld.

This recommendation is based on the following findings:

1. The nature of the subdivision is in conformance with the current and future land uses of the area.
2. The proposal complies with the Morgan County 2010 General Plan.
3. The proposal complies with current Development Agreement for the Whisper Ridge at Stone Canyon Subdivision PRUD.
4. That sufficient proof of culinary & irrigation water flow has been provided to the Planning and Development Services Department.
5. Those certain conditions herein are necessary to ensure compliance with adopted laws prior to subdivision plat recording.
6. The additional infrastructure improvements are not necessary at this time to protect the public's health, safety, and welfare.
7. That the proposal is not detrimental to the health, safety, and welfare of the public.

Second by Member Erickson. The vote was unanimous. The motion carried.

9. Staff Report

Charlie reported that three of the items on tonight's agenda have been in the process for about a month. He also explained how he prioritizes applications. Charlie also stated that items are not generally removed from the agenda unless specifically requested by the applicant. Member Sessions expressed interest in obtaining a copy of the engineer's report for further clarification if needed in upcoming meetings.

10. Approval of minutes from October 10, 2013

Member Newton moved to accept the minutes. Second by Member Sessions. The vote was unanimous. The motion carried. Member Erickson abstained as he was absent last week.

11. Adjourn

Member Newton moved to adjourn. Second by Member Erickson. The vote was unanimous. The motion carried.

Approved: _____ Date: _____
Chairman

ATTEST: _____ Date: _____
Mickaela Moser, Transcriptionist
Planning and Development Services