



ALPINE CITY COUNCIL MEETING AGENDA

NOTICE is hereby given that the **CITY COUNCIL** of Alpine City, Utah will hold a public hearing and meeting on **Tuesday, July 28, 2015 at 7:00 pm** at Alpine City Hall, 20 North Main, Alpine, Utah as follows:

I. CALL MEETING TO ORDER*

- A. **Roll Call:** Troy Stout - Mayor pro tem
- B. **Prayer:** Troy Stout
- C. **Pledge of Allegiance:** By Invitation

II. **PUBLIC COMMENT:** The public may comment on items that are not on the agenda.

III. CONSENT CALENDAR

- A. **Approve the Minutes of July 14, 2015**

IV. REPORTS AND PRESENTATIONS

V. ACTION/DISCUSSION ITEMS

- A. **Lambert Park Motorized Vehicles Park Usage Plan.** The Council will continue its discussion on motorized vehicles in Lambert Park, including costs for enforcement of rules in the Park.
- B. **Box Elder South Annexation.** The Council will consider annexing Box Elder South, a 59-lot subdivision approved by Utah County, and located south of Box Elder subdivision.
- C. **National Forest Service/Patterson Construction Land Trade.** The Council will hear a presentation on the proposed National Forest Service/Patterson Construction Land Trade.
- D. **Resolution No. R2015-09 Alpine City Council Rules of Procedure for the Public Meetings of the City Amendment.** The City Council will continue its discussion on amending the Council Rules of Procedure for the Public Meetings of the City.
- E. **Ordinance No. 2015-10 Condominium Ordinance Amendment Request.** The City Council will continue its discussion on approving a proposed amendment to the Condominium Ordinance.
- F. **Ordinance No. 2015-12, PRD Amendment (Retaining Walls).** The Council will consider approving an amendment to the PRD Ordinance to make is consistent with the recently adopted ordinance on retaining walls.
- G. **Art Exhibit Agreement.** The Council will consider approving an agreement whereby artist(s) may exhibit their work at City Hall.
- H. **Accessory Apartment Enforcement.** The Council will discuss way of enforcing the Accessory Apartment Ordinance.

VI. COUNCIL COMMUNICATIONS

VII. STAFF REPORTS

VIII. **EXECUTIVE SESSION:** Discuss litigation, property acquisition or the professional character, conduct or competency of personnel.

ADJOURN

*Council Members may participate electronically by phone.

Don Watkins, Mayor
July 23, 2015

THE PUBLIC IS INVITED TO PARTICIPATE IN ALL CITY COUNCIL MEETINGS. If you need a special accommodation to participate, please call the City Recorder's Office at (801) 756-6241.
CERTIFICATE OF POSTING. The undersigned duly appointed recorder does hereby certify that the above agenda notice was on the bulletin board located inside City Hall at 20 North Main and sent by e-mail to The Daily Herald located in Provo, UT, a local newspaper circulated in Alpine, UT. This agenda is also available on our web site at www.alpinecity.org and on the Utah Public Meeting Notices website at www.utah.gov/pmm/index.html

PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

Please remember all public meetings and public hearings are now recorded.

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

Public Hearing v. Public Meeting

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

ALPINE CITY COUNCIL MEETING & PUBLIC HEARING
Alpine City Hall, 20 North Main, Alpine, UT
July 14, 2015

I. CALL MEETING TO ORDER: The meeting was called to order at 7:00 pm by Mayor Don Watkins.

A. Roll Call: The following were present and constituted a quorum.

Mayor Don Watkins

Council Members: Lon Lott, Kimberly Bryant, Roger Bennett, Will Jones, Troy Stout

Staff: Rich Nelson, Charmayne Warnock, David Church, Shane Sorensen, Jason Bond, Sgt. Dave Boerner

Others: Dallin Fyffe, Bonn Turkington, Ron Mika, Mark Allen, Marianna Richardson, David Lynton, Karen McCoy, Bob Antrim, Janis Trinnaman, Maureen Burnett, Linda Warnick, Brent Lind, Paul Kroff, Daniel Hyer, Patricia Hyer, Fred Fuller, Ken Berg, Robert Shelley, Derek Langford, John Langford, Kathy Whiting, Rhett Andersen, Scott Woodward, Clyde Roper, Ron Wilson, Trevor Hanson, Jonathan Hanson, David Hanson, Phil Bennett, MaryLee Bennett, Craig Skidmore, Alice Cosper, Jane Griener, Mike Kennedy, Jonas Staker, Clay Lindford, Penny Linford, Mara Ambuehl, John Magnusson, Kristi Burrows, Steven Burrows, Greg Smith

Mayor Watkins introduced Mark Allen who was the founder of afcvision.com and the Facebook page "ProtectAmericanForkCanyon." He also welcomed Ramon Beck, Marianna Richardson, Kimberly Bryant, and Lon Lott who were candidates for City Council.

B. Prayer: Lon Lott

C. Pledge of Allegiance: Luke Anderson

II. PUBLIC COMMENT

Marianna Richardson said she noticed the meeting was being taped that evening. In the spirit of transparency, she suggested that the Council consider videotaping the City Council and Planning Commission meetings, and put them on Youtube. There were people who were unable to attend the meetings, but would like to know what was going on. Mayor Watkins said he thought that was a great idea and the Council would discuss it.

Bonn Turkington and Dallin Fyffe said they lived on 600 East just off 100 South. They wanted to discuss the speeding and traffic problems on their street, which they felt was unique because it had become a direct route for people coming from Orem and other places. It used to be a dead-end street and was not intended to carry that much traffic. It was at the southeast corner of Creekside Park and people traveling or walking to the park came along their street. There were no sidewalks and there were lots of young children and pets. They proposed several solutions. First, the City should install speed bumps. Second, they should reduce the speed limit to 20 mph. Third, the City should install a digital speed limit sign like the one on 100 South. Fourth, they should install a sidewalk. People drove upwards of 50 mph on the street and it would be safer for everyone if they had sidewalks. Mr. Turkington said a combination of those suggestions would be best.

Mayor Watkins said the Council would discuss the issue. He noted that there were a number of neighborhoods with similar issues. If the City did it for one neighborhood, all the residents would want the same thing. He suggested the neighbors consider get together and discuss funding a digital speed limit sign.

1
2 Shane Sorensen said the public works department had looked at that street but a sidewalk would be
3 challenging because of the homes and landscaping that were built close to the road.

4 5 **III. CONSENT CALENDAR**

6 7 **A. Approve the minutes of June 23, 2015**

8 **B. Bond Release - Heritage Hills, Plat C- Downing Akin - \$113,221.58**

9
10 Lon Lott had a correction to the minutes that he wanted to discuss so approval of the minutes was
11 postponed until later in the meeting.

12
13 **MOTION:** Will Jones moved to approve the bond release for Heritage Hills, Plat C in the amount of
14 \$113,221.58. Roger Bennett seconded Ayes: 5 Nays: 0. Will Jones, Roger Bennett, Troy Stout, Lon
15 Lott, Kimberly Bryant voted aye. Motion passed.

16 17 **IV. REPORTS AND PRESENTATIONS:** None

18 19 **V. ACTION/DISCUSSION ITEMS**

20 21 **PUBLIC HEARING – BANNING MOTORIZED VEHICLES IN LAMBERT PARK**

22
23 At the City Council meeting of June 23, 2015, the City Council discussed banning motorized vehicles in
24 Lambert Park due to safety issues, potential fires, damage to the terrain, and nuisances, and made a
25 motion to schedule a public hearing to receive citizen input on the subject.

26
27 *Background:* Originally Lambert Park was closed to use of motorized vehicles except for vehicles
28 performing trail maintenance, emergency vehicles, and motorized wheelchairs on ADA accessible trails.
29 In 1996, Ordinance No. 96-07 was adopted imposing a fine of up to \$500 for the unlawful use of
30 motorized vehicles in the park and on trails. In March of 2004, the City Council adopted a Master Trail
31 Plan which designated certain trails in Lambert Park as multiuse trails including recreational motorized
32 vehicles. On July 13, 2004 the Council adopted Ordinance No. 2004-11 amending the Trail Ordinance to
33 include a Trail Safety and Etiquette Policy which stated that bikers were to yield to hikers. Both would
34 yield to horses. Motorized vehicles would yield to all.

35
36 A map of the Master Trail Plan was projected on the wall where everyone could see it showing the trails
37 open to motorized vehicles in blue.

38
39 Mayor Watkins opened the meeting to public comment.

40
41 John Magnusson said he liked to take his sons up behind the water tank in Lambert Park and shoot 22s on
42 forest service ground. They tried to keep it nice and picked up more brass than they hauled in. He said it
43 was one of the few places in the forest service where you could drive in close and shoot. He liked having
44 that flexibility.

45
46 Robert Shelley said he'd lived in Alpine for 20 years. He said that in the Pledge of Allegiance it talked
47 about liberty and justice for all. Lambert Park had been used by 4-wheelers for years. People who recently
48 moved to that area should have known that motorized vehicles were used up there. It was not a park
49 where you went to picnic and relax. He said he loved it when his grandkids came and he could take them
50 up there on a motorcycle ride. He would be very opposed to restricting motorized vehicles in Lambert
51 Park. It shouldn't be exclusively for mountain biking. There was no conflict with mountains bikers

1 because they had their own trails. Troy Stout they weren't trying to make it exclusive. They were trying to
2 curb the abuses.

3
4 Craig Skidmore said the trails marked in blue (multiuse and motorized use trails) were adopted as part of
5 the Master Trail Plan. He said people didn't know what trails they could ride on and which ones they
6 couldn't. The main thing he wanted to identify were the activities that damaged Lambert Park. First were
7 ATVs, especially during muddy weather. Next were dirt bikes and the razor ATVs. Those far outweighed
8 any damage done by other uses. Then a great distance behind that were mountain bikes and horses. He
9 said he saw as many hikers and joggers up there as other uses. The biggest issue was speed and riding
10 during muddy conditions. He said the park was in better shape than it used to be after Ron Devey went in
11 and blocked some of the trails to the mountains in order to keep the use on the approved trails.

12
13 David Lynton said he wouldn't ban motorized vehicles in Lambert Park. If safety was the problem, they
14 could make a rules that no one under 16 should be operating a vehicle.

15
16 Ron Mika said he lived on Sunbrook Circle which bordered the park and he had a front row view of the
17 drama. People asked why they should let a few speeders ruin for everyone else, but he said 90% of the
18 vehicles were speeding. so it wasn't just a few people who were ruining it for the many. There were
19 reasons for the 15 mph speed limit. The roads were dirt and gravel and had blind corners. It was multiuse
20 trail for pedestrians and pets and horses. He said he didn't have a problem with people in trucks going up
21 there to shoot. The problem was the high speed vehicles. Going 15 mph on a straight road was not fun.
22 The sand dunes were a fun place to ride ATVS because they had jumps and bowls. Single track roads
23 with blind corners were a recipe for disaster. The Council talked about enforcement but he didn't see how
24 that would happen. He said he was in favor of banning motorized vehicles.

25
26 Steve Richardson said he owned a licensed, street legal ATV which he rode in Lambert Park and he
27 would like to continue to do that. He asked the age of the speeders and who they were. He suggested they
28 required a vehicle to be licensed and insured so if there was an accident they would have coverage. They
29 could have an officer go up there occasionally and that would put a damper on it. He said there were high
30 tech GPS devices that you could plug into a vehicle to monitor it. He said he would be willing to look into
31 the possibility of such a device and require people to buy it. He said he would be willing to be monitored.

32
33 Craig Paul said ditto to the person who spoke before Steve Richardson. He had 4 wheelers but he didn't
34 drive them anymore because he didn't like to haul them. When he looked at the blue trails in Lambert
35 Park, they were not fun trails. The only way you could have fun, even as an adult, was to go fast. There
36 were plenty of bikers crisscrossing those trails that could be torpedoed.

37
38 Rhett Anderson said ditto to the first gentleman who spoke. A liberty lost was hard to regain. When did
39 they think Draper would open up their area again? When could he light fireworks? He said his kid rode
40 with him in Lambert Park. It was a good training ground to go on the more challenging rides up American
41 Fork Canyon. He said that was why he moved to Alpine from Lindon. He suggested they set up some
42 road blocks and scare the kids. Let the word get out that they would be busted. Then relax awhile and do
43 it again.

44
45 Julie Westman said she had lived in Alpine for six months. She suggested they let motorized vehicles use
46 the trails on certain days and hours and other users on other days, and restrict use during the winter.

47
48 Ron Wilson said he'd lived off and on in Alpine for a long time. He'd moved from Huntington Beach in
49 the late 70s and hadn't known what it meant to have free rein until he came to Alpine. His children were
50 8, 11, and 13 and all had their state licenses and wore helmets and protective gear when they rode. He
51 would hate to see Lambert Park changed. The opportunity to ride there with your children was one he

1 didn't want to lose. They had friends that came up from Arizona and went riding. They said it was
2 amazing. They didn't know there were places like that left in the world. He said his son was in an accident
3 lately but it was just that, an accident. The last thing he wanted to see was for him to lose his freedom to
4 ride in the park.

5
6 Penny Linford said she lived on Bald Mountain right next to Lambert Park. There were kids constantly
7 going up and down the road, many without supervision, without mufflers, doing donuts and stirring up the
8 dust so bad the residents by the park couldn't go outside. Sometimes the noise was so bad you couldn't
9 have a conversation. She said she understood the idea of liberty, but liberty needed to be extended to
10 everyone. She would like to go for a walk without worrying about being hit. She loved the outdoors and
11 appreciated the quiet so she could hear the birds and enjoy the fresh air. She'd like to go for a walk
12 without having to jump off the road every time a motorcycle went by.

13
14 Jane Griener asked how the kids were getting to Lambert Park to ride? She'd observed that they were on
15 the city streets on their ATVs as well and that was a safety problem.

16
17 Robert Hansen on Ridge Lane said he felt they needed more information about what was happening in
18 Lambert Park. Maybe they needed to conduct a survey and see how much use was in the park including
19 walking and horses and biking. Speeding was a safety problem but it also caused damage. They needed to
20 know how much illegal traffic was going to that location. How many youth were riding in an unprotected
21 manner, and how were they behaving? Could they measure the speed they were going? Were they getting
22 people from outside Alpine who came to ride in Lambert Park? If they were then they had a different
23 problem since Lambert Park was one of the few places people could go to ride their motorized vehicles.

24
25 Mayor Watkins thanked the people for their comments and closed the public hearing.

26
27 **B. Ban on Motorized Vehicles in Lambert Park:** Mayor Watkins said the Council had been
28 discussing this issue for many years. He had publicized the issue and reached out for comments from the
29 public. The Council had also been gathering information on the issue.

30
31 Troy Stout said he could see the arguments on both sides and they both made sense. Lambert Park was
32 really a gem. Not many cities had the same kind of wild open space. The residents who lived around the
33 park were affected, and while it was true they knew it was there when they moved there, they still needed
34 to be considered. It was the city's responsibility to manage the park in a way that made it palatable for
35 everyone. Enforcement was going to be key whether they ruled motorized vehicles out or allowed them.
36 He asked what resources the city could commit to enforcement. If they continued to allow them, they
37 would need to manage mufflers, age limits, equipment they wore and used, hours, street access to the
38 park. Those were just a few things.

39
40 Lon Lott agreed that enforcement was the key whether they maintained the same rules or changed them.
41 Speed limit signs in the park had been torn down. There was an emergency access road issue that needed
42 to be discussed. Laws were abused which were designed to protect everyone. Dust and noise needed to be
43 kept down. As a landscaper he knew about dust and it was a nuisance that needed to be watered down.
44 Regarding access, he asked how they were getting there from Bald Mountain? They would have to go
45 through private property to get there. A possible development was already under discussion that could at
46 some point be accessed from Bald Mountain Drive if the intervening ground was developed. The Council
47 had talked about having a parking lot in Lambert Park so people could park to begin hiking or biking. If
48 motorized vehicles were banned, where would they park to begin biking or hiking? Access was one of the
49 critical issues, and where would they make that available? They had also talked about fencing to
50 delineating what was park and what was private land. That boundary needed to be respected.

51

1 Kimberly Bryant said there was a barrier at the Bald Mountain access.
2

3 Will Jones said there had been a barrier. The issue was that the ground was privately owned. There was
4 also a problem with dumping and dust. The night he was up there he saw six motorcycles. They stopped
5 them and only two of them were legal. The motorcyclists were driving down Bald Mountain, past the
6 Jersey barrier and off to the west.
7

8 Penny Lindford said going along the dirt road used to be a fun way to get to the church but with the
9 population growth in Alpine, they needed to get rid of it.
10

11 Troy Stout asked about the 10-year lease the City had signed with Patterson, and what had happened to it.
12

13 David Church said they had talked about leasing the Patterson property as a BMX park, but that hadn't
14 happened and Patterson was looking at another possibility. He said the land between the end of Bald
15 Mountain Drive and Patterson's ground belonged to someone else.
16

17 Kimberly Bryant said they had talked about this issue several times. She'd grown up riding motorcycles
18 and horses and hiking in Lambert Park, but she could no longer hike because of health issues. Nor could
19 many older people. She hated to see the use of motorized vehicles taken away. She'd would like to be
20 creative and discuss a way to share the park. Maybe different days or different times as had been
21 mentioned. Enforcement was hard because they didn't have the money to fund extra officers. Would they
22 want to take the officer from downtown and put him in Lambert Park? They needed a serious fine or
23 impounding the vehicle so kids would talk and get the word out that they were enforcing rules.
24

25 Roger Bennett said that he was afraid that if they continued they way there were going, they were going
26 to have a dust bowl in Lambert Park. When he was on the Council years ago he would have voted against
27 restrictions on motorized vehicles but as Alpine had grown, he changed his position. Did they want a
28 dust bowl or did they want a park?
29

30 Will Jones said he loved the park. He was riding his bike up there the other day when some come up from
31 Moyle Drive on a 4-wheeler on the second access road. This was the issue: Whether they said they were
32 or weren't going to allow motorized vehicles, they had to enforce the law. He felt they should go in and
33 enforce what they had on the books. He didn't think the Mikas should have to put up the nonsense of
34 people on motorized vehicles in the park at night. Some of them have headlights and keep going late at
35 night. He said today another motorcycle came past him and went right up through the sagebrush. He
36 wasn't even on a trail. He said they needed to decide if they wanted a complete ban or work with the
37 community to enforce the rules, otherwise they would be right back here again. They'd had this same
38 discussion a year ago and the year before that. He said that personally he would like make the rules
39 known and if they couldn't enforce them, they would ban the motorized vehicles.
40

41 Mayor Watkins said they should do an enforcement blitz before they went to an automatic ban. He asked
42 the City Attorney if they could ask citizens to help with enforcement.
43

44 David Church said citizens could take down information and take a picture of violators but for their own
45 safety it wouldn't be a good idea for them to forcefully try to stop someone. They didn't want it to turn
46 into a physical altercation.
47

48 Troy Stout asked what kind of budget they had to put on officer in Lambert Park on random days for
49 three hours, three times a week. Rich Nelson they could take it out of the unappropriated fund balance.
50

1 Sergeant Dave Boerner said they would need to consider the availability of officers to work a three-hour,
2 overtime shift which really turned into the a five or six hour shift when you considered travel and
3 preparation.

4
5 Troy Stout said that if they did continue to allow vehicles, maybe they should limit the trails where
6 motorized vehicles could go. It would make it more enforceable.

7
8 Lon Lott said it was important to understand that the park was an investment and like any investment, it
9 had expenses. If they wanted it to be accessible to everyone, there would need to be mentors and parents
10 teaching obedience to the laws.

11
12 Roger Bennett said that if the motorized vehicle people wanted to keep the park open, they needed to get
13 together and decide they were going to live by the rules or the park would be closed. If they wanted to
14 keep it open to motorized vehicles, they needed to do what they had to do to maintain those freedoms. If
15 you abused your freedoms, they would be lost.

16
17 This issue was returned to later in the meeting and the following motion was made and passed.

18
19 **MOTION:** Troy Stout moved to continue to allowing motorized vehicles in Lambert Park for a trial
20 period of six months ending in January under the following terms:

- 21
22 1. Speed limits and access will be strictly enforced by dedicating a police officer to Lambert
23 Park. Staff will return with a recommendation at the next meeting with possible time for
24 enforcement and will include penalties which will be enhanced and defined.
25 2. Road closures for routes deemed unnecessary such as the south end of the poppy loop.
26 3. Seasonal closures (rain and snow) subject to the judgment of city staff.
27 4. Signage to specify motorized vs non-motorized trails.
28 5. Continual assessment of compliance will drive the decision in January regarding future
29 use and take into to account the following:
30 a. citation counts
31 b. public input
32 c. condition of the park
33 6. City will evaluate the cost and feasibility of park cameras on trails, access and signage to
34 enforce signage vandalism.

35
36 Will Jones seconded. Ayes: 4 Nays: 1. Troy Stout, Will Jones, Lon Lott, Kimberly Bryant voted aye.
37 Roger Bennett voted nay. Motion passed.

38
39 The following item was moved up on the agenda to accommodate the large number of people who were
40 present for this particular issue.

41
42 **C. Preserve and Protect American Fork Canyon:** Mayor Watkins said that after he came into
43 office he was invited to a meeting at Thanksgiving Pointe with about 20 other people. There was a
44 discussion where the Forest Service representative said that there was more and more traffic traveling up
45 American Fork Canyon and they needed to make sure they got input from the citizens. The discussion
46 then switched to a Snowbird discussion about trains and other things. He said he spoke up and said he
47 thought it was an open discussion and it sounded like there was already a discussion going on. He was
48 told that there would be an open meeting and they would come to our community and discuss it with the
49 citizens, but he'd never heard anymore from them since that meeting. Later he met with Mark Allen with
50 Preserve American Fork Canyon who enlightened him on what was going on. He opened the meeting the
51 for public comment.

1
2 Karen McCoy said she was a citizen of American Fork but used to ride horses around Alpine when she
3 was growing up. On April 16th she went to a meeting in Cedar Hills. The parking lot was full of cars with
4 ski racks and she realized it was about Snowbird taking their canyon. She knew they had purchased land
5 in the canyon a couple of years ago and had talked about putting ski lifts in American Fork Canyon. Back
6 then Snowbird told people they could still have access and ride ATVs, and they were only going to put up
7 a few ski lifts. Now there were "No Trespassing" signs and gates in the canyon. She said she went home
8 and researched Mountain Accord and found out other counties had gotten together to solve some of their
9 issues transportation and watershed issues, and they also wanted 416 acres in American Fork Canyon.
10 However, there was no representation on Mountain Accord from Utah County. She talked to a reporter
11 who wrote an article. Mark Allen who saw the article and started a Facebook page.

12
13 Mark Allen said that eight weeks ago his life was more peaceful. He paid tribute to Mayor Watkins and
14 other mayors for their hard work in this matter. He said he read the article Ms. McCoy mentioned and saw
15 that due process was not taking place so he started a Facebook group. They had 8,500 households as
16 followers in eight weeks. They were trying to protect pristine watersheds that should not be developed.
17 He said he was not opposed to development but there were some areas that should not be developed, and
18 referred to a statement from Governor Mike Leavitt when he asked why Utah was building homes on the
19 best farming ground and bringing in produce from outside the state.

20
21 Mr. Allen asked why they should allow this development on their watershed areas. It was one of the few
22 places left that was quiet and pristine. Several weeks ago he had contacted the mayor of American Fork
23 and Brad Frost who passed a resolution which was strong. American Fork Canyon and the Alpine Loop
24 were sacred places for the people who lived in Utah Valley. He said that since he had formed Protect
25 American Fork Canyon and people had become aware of what was going on, the Mountain Accord group
26 in Salt Lake County had agreed to take the 416 acres in American Fork Canyon off the proposal. He said
27 he had never heard of Mountain Accord until recently, but it had been around for a while, operating under
28 the radar. He said it was not a legal entity but it was very powerful. Snowbird had been buying up water
29 shares in Utah County. He said Bob Bohner had talked about building houses on Miller Hill but they
30 didn't want gated communities in Mineral Basin. Snowbird was willing to give up 1100 acres for 416
31 acres American Fork Canyon in order to have contiguous ground all the way down to the road. He said
32 contiguous property opened the door to a gated community, and he was opposed to that. He invited
33 everyone to be active participants in the process. Already he had 8500 people involved in Protect
34 American Fork Canyon. Of those people, he had four people who said they thought it would be a great
35 idea if Snowbird put in a five-mile gondola and housing. He asked Alpine City to make their resolution
36 strong. For more information people could Google Protect American Fork Canyon. Mark Allen also
37 passed out his card.

38
39 Mayor Watkins invited the audience to respond.

40
41 Rhett Anderson said he'd been a snowmobiler for several years. American Fork Canyon was one of the
42 last places you could ride a snowmobile, although Mineral Basin and Mary Ellen's Gulch were gone. No
43 Trespassing signs were up because it was now private land. He said he'd listened to a radio program
44 where the spokeswoman for Mountain Accord had said American Fork Canyon was not under
45 consideration at that time. That meant it was merely on the back burner. He supported what Mark Allen
46 had said.

47
48 Scott Woodward said he was interested in Lambert Park and the effort made to inform the citizens about
49 what was going on up. It was quite different from what happened in meetings on American Fork Canyon,
50 which were conducted without seeking public input. He said American Fork Canyon was one of the last
51 jewels in the whole mountain range. He was saddened by the gates and the signs that said No Trespassing.

1 He was very much afraid that the 416 acres in the canyon would be kept on the backburner until it was
2 forgotten about. He wanted Alpine to make a strong statement stating they wanted the process to be open
3 and they wanted to be involved, and they wanted the citizens to be involved.
4

5 Brent Lind said there had been quiet speculation by people skilled in politics with deep pockets. The
6 whole thing was about the 416 acres in American Fork Canyon. There was a lot of money to be made if
7 Snowbird got hold of it. The Forest Service was the citizen's employees, and if they couldn't manage the
8 canyon, they needed better employees. The solution to the management problem was not to make
9 American Fork Canyon private.
10

11 Jonas Staker said he was a former ski racer and coach, and had skied at Snowbird for years. But he was
12 totally not in favor of turning the canyon over to Snowbird. He hung up his skies and started
13 snowmobiling, and it was an awesome canyon. He would hate to see that go away. He'd gotten stopped
14 last winter when he was up there and told he couldn't be there. He suggested they get together with
15 Snowbird and clarify what land belonged to them and what could be done and what couldn't.
16

17 Mark Allen said they also needed to keep an eye on a group called Save Our Canyons. They had been
18 crafting language to make the mountains a national monument from Little Cottonwood Canyon down to
19 Provo Canyon. The rumor was they were trying to fast-track it.
20

21 Robert Shelley said American Fork Canyon was a unique place because you could do so many things up
22 there. He'd traveled every inch of every trail in different manners. There were 2.2 million people that
23 went up there and it was a benefit to live in Alpine. If it became commercialized, the local people would
24 be pushed aside. They would widen the road and it would be full of out-of-staters and foreigners. If they
25 took this away, there would be no places like this left. Fewer than 1% of Utah County residents thought it
26 was a good idea to commercialize the canyon.
27

28 Evert Williams said there was a connection between what they did in Lambert park and how they trained
29 people to respect the environment. It was critical that they trained the youth and the citizens. Ask people
30 why they're driving an ATV through the tall grass. When this Council and the residents were gone, the
31 legacy they left would be how they trained people to respect the resources they had. There were groups
32 who volunteered weekly in American Fork Canyon because the Forest Service didn't have the manpower
33 to do all that needed to be done up there.
34

35 Greg Smith said he enjoyed skiing at Snowbird, including in Mineral Basin, but he didn't want to see
36 them expand any further into American Fork Canyon. In enjoyed other activities in AF Canyon including
37 mountain biking and hiking. He didn't want to look across from Timpanogos and see a huge development.
38 If anything, there shouldn't be landswaps for development. They should be going the other way. They
39 should be getting more wilderness. Lots of people from Salt Lake County came down here to recreate
40 because they couldn't have that experience in Salt Lake. The worst disaster would be if they developed up
41 there and we had to build a road. When going up the canyon he passed hundreds of people on bikes. What
42 would they do if they had to service houses built up there? Who would provide the services? Would they
43 end up subsidizing it. The canyon would lose the pristine condition they enjoyed. It was wrong to take
44 something that belonged to everyone and give it to a few people.
45

46 John Magnusson said he thought they all agreed they wanted to protect the canyon. They should be
47 asking, "What can I do?" They needed to get the word out and have people standing in the halls trying to
48 get a seat. Tell your neighbors and friends. The more they showed up, the more the others would give up.
49

1 Jane Griener said open space was one of the great equalizers of economic differences in our world. It
2 didn't matter what someone's economic status was. Many couldn't enjoy Snowbird because they couldn't
3 afford it. Everyone should have an equal opportunity to enjoy the wilderness.
4

5 Scott Westman said that when it came to these kinds of decisions there was the mode of capitalism versus
6 environmentalism. But in looking at this, the choice to keep these lands pristine lands was an economic
7 decision because it gave them a wealth that surpassed jobs and development. When they were at a
8 population of ten or twenty million people, those pristine areas would be worth far more. They saw that in
9 National Parks. It would be a destination place. If they cared about long-term economic health, they
10 should be investing in pristine lands. He said he came from Atlanta, Georgia and came back to Alpine
11 specifically to have access to undeveloped areas. When it came to large areas, they only had one shot at
12 preservation. If they gave it up, it was pretty much impossible to get it back.
13

14 Trevor Hanson said they moved to Alpine from Denver specifically because he liked to hike daily. He
15 was a big supporter of what they had in the canyon. He skied also but he didn't support what Snowbird
16 was doing. He asked if this would be put to a vote or if it was controlled by the Forest Service? Where
17 would the final decision be made?
18

19 Mark Allen said he had the same question. Mountain Accord was a group with big money involved,
20 although it was not a legal entity. Meetings were held behind closed doors. He said he wanted to know
21 who had the ultimate decision making ability and learned the Forest Service supervisor could sign on this
22 deal himself. John Stansfield was the local superintendent of American Fork Canyon.
23

24 Trevor Hanson asked why the Forest Service would care what people in Utah County wanted. They were
25 not voted into position. Mayor Watkins said it was his thought that the Forest Service would do what the
26 County Commissioners said they wanted to see. If the city councils all got together and made a statement
27 it would carry weight.
28

29 Karen McCoy said she had wanted to know who made up the Mountain Accord and where it came from.
30 There had been little documentation for the group. She read a statement from Mountain Accord which
31 cited their long-term plans for the Wasatch Mountains. It was supposed to be public process. These were
32 public lands. The public needed to be heard and represented.
33

34 Dan Hyer said the only reason they didn't have people lined up to speak was because they didn't know
35 about it. He asked if it would be appropriate to use the city's phone system let people know. Mayor
36 Watkins said the City Council would have to approve it. He said Mr. Hyer could be part of JoinIn which
37 would publicize meetings. But it would be biased because it was his opinion.
38

39 Janet Williams said she had lived in Alpine for 13 years. She was also a representative for Back County
40 Horsemen. Their purpose was to maintain trails and build support for the wilderness areas. Every week
41 they were out trimming places because the Forest Service couldn't afford to maintain all of it. They were
42 very interested in preserving American Fork Canyon. She said she appreciated Jane Griener's comment. It
43 was essential that AF Canyon remain public land. Think about the corridor and how it would be affected
44 by traffic if it became commercial.
45

46 Mayor Watkins said he was thrilled about the responses from the public on both the Lambert Park issue
47 and the American Fork Canyon issue. They'd heard views on both sides of the issue. Although most of
48 the view points on AF Canyon were in agreement. He said he'd heard from one other person in town that
49 he was excited to have a gondola up the canyon. He said he'd seen numbers that 85% of the people who
50 used the Snowbird resort were from out-of-state. Did they really want to turn the canyon over to out-of-
51 state users? Overwhelmingly, people wanted the canyon to be multi-use.

1
2 Kimberly Bryant said the she'd been in the canyon a few months ago and had the best memories up there.
3 The cities of Alpine, Highland and Cedar Hills were most affected by that canyon and should have the
4 strongest resolution.

5
6 Troy Stout said that on Sunday he took a motorcycle ride up the canyon and sat by the river, and talked
7 about how fortunate they were to have this. While they were there a family jumped out of a van and
8 started setting up their camp. The family said it was their Sunday ritual and they came there every week.
9 There were many people who did that. That last thing they needed was to compete with the commercial
10 use of the canyon. They needed to make a bold statement.

11
12 Will Jones said he loved the canyon and had been up their twice in the last week. The only thing that
13 interrupted the beauty was a motorcycle. He said that when they looked at it they needed to consider the
14 facts on the other side. It would be wrong to make a decision without inviting Snowbird to make a
15 presentation. He said the thing that scared him was that sometimes they got running down a road and
16 didn't see what was on either side of them. He was 100% in support of the public process, which meant
17 both parties got an opportunity to speak. He said they should bring in who ever had authority to speak in
18 behalf of other points of view.

19
20 Lon Lott said there was a representative from Snowbird at the MAG (Mountainland Association of
21 Governments) meeting and good questions had been asked. They need to have answers to the questions to
22 direct them to the truth. Transparency was important. If something was happening on their land, they
23 should know about it. Millions of people used the canyon, and even without it being commercial, that use
24 was going to increase. They needed to plan for the future. Would they need a shuttle for people who were
25 just going to the cave? All aspects needed to be considered. He noted that the Resolution had just been
26 received that evening and he hadn't been able to study the American Fork Resolution.

27
28 David Church said the Resolution was simple and straightforward. The recitals were similar to the
29 American Fork Resolution. It said that the Alpine City Council supported the Utah County and the
30 American Fork Resolutions. It urged a transparent process and stated that cities and residents of Utah
31 County should all be involved in the process, not just the landowners in the canyon.

32
33 Since the American Fork Resolution hadn't been available for review, it was discussed and decided that
34 language pertaining to their resolution be deleted.

35
36 **MOTION:** Will Jones moved to approve Resolution No. R2015-10, regarding American Fork Canyon
37 and change the sentence to state that the Alpine City Council supported the Utah County Resolution
38 regarding American Fork Canyon and strike the part that referred to the American Fork Resolution. Lon
39 Lott seconded. Ayes: 5 Nays: 0. Will Jones, Lon Lott, Kimberly Bryant, Roger Bennett, Troy Stout voted
40 aye. Motion passed

41
42 The Council briefly returned to the agenda item A. dealing with banning motorized vehicles in Lambert
43 Park. They made a motion which is included earlier in the minutes at the end of the discussion on
44 Lambert Park.

45
46 **D. Resolution No. R2015-08 Sales Tax:** Rich Nelson said the State Legislature passed a bill
47 that would enable cities and counties to increase sales tax by 0.25% with the additional revenue dedicated
48 to transportation needs. Individual counties would have to vote for it. The Utah League of Cities and
49 Towns were urging counties to put it on the ballot. Mr. Nelson said that if it passed, Alpine City would
50 get about \$62,000 more to use for roads and transportation. Passing the proposed resolution would
51 indicate that Alpine City supported putting the sale tax issue on the ballot.

1
2 **MOTION:** Will Jones moved to approve Resolution No. R2015-08 supporting HB362 to authorize the
3 0.25% local option general sales tax dedicated to transportation and encourage Utah County to put it on
4 the November ballot. Kimberly Bryant seconded. Ayes: 5 Nays: 0. Will Jones Kimberly Bryant, Roger
5 Bennett, Lon Lott, Troy Stout voted aye. Motion passed.
6

7 **E. Resolution No. 2015-09, Amending Alpine City Council Rules of Procedure for Public**
8 **Meetings.** Rich Nelson said Councilman Will Jones and Roger Bennett requested a reconsideration of
9 rule #9 in the Rules of Procedure. Rule # 9 dealt with reconsideration of an agenda item that had already
10 been voted on. It currently stated: *A motion to reconsider must be made at the meeting where the item*
11 *was first voted upon or at the very next meeting of the City Council if the item is properly on the agenda.*
12 It further stated that: *A motion to reconsider can only be made by a member who voted in the majority*
13 *on the original motion.*
14

15 It was proposed that the wording be changed to reflect the state law which was: *A motion to reconsider*
16 *cannot be made at a special meeting of the council unless the number of members of the council present*
17 *at the special meeting equals or exceeds the number present at the meeting when the action was*
18 *approved.*
19

20 Lon Lott ask how it would apply if the Council voted to ban vehicles. Would that mean they couldn't
21 reconsider it unless it was done at the same meeting or the next meeting. He asked how that would affect
22 the Council considering something that had been previously passed.
23

24 David Church offered some background on how the issue came about. The Utah Legislature passed an
25 amendment five or six years earlier that required city councils and planning commission to adopt rules of
26 procedure. At the request of Councilman Kent Hastings, he drew up the rules and procedures that
27 basically followed Robert's Rules of Order with some changes. He said the purpose of Rule #9 was to
28 prevent someone in the minority from continually bringing up an issue that had already been voted on. It
29 also prevented an issue from being reconsidered unless it was brought forward by someone who voted in
30 the majority. It did not anticipate an ordinance that was adopted back in the 90s when Councilman Tom
31 Anderson was accused of voting on a state conflict of interest. The Council voted that a councilman could
32 not vote on an issue in which he had a conflict of interest.
33

34 Mr. Church recommended that if they continued with the same ordinance, they should define what it
35 meant to reconsider the same motion. Would it be an identical motion or the same issue? He said the
36 proposed amendment to Rule #9 was not more restrictive than the state code. The challenge was for the
37 Council to give themselves enough flexibility without having to keep coming back to an issue.
38

39 Troy Stout suggested they evaluate the proposed change before they decided.
40

41 Will Jones said he didn't want to limit the Council's ability to reconsider an issue when there was new
42 information available.
43

44 David Church said to consider the current dispute in light of the current Rule #9. A previous Council had
45 passed a motion regarding the usage of motorized vehicles in Lambert Park. If Rule #9 was strictly
46 adhered to, the current Council wouldn't be able to bring the issue back for a vote because none of them
47 were on the Council when it was first adopted.
48

49 Don Watkins said he would like to see the best practices of what other cities did.
50

1 **MOTION:** Will Jones moved to table the Rules of Procedure for two weeks for further review and
2 consideration. Troy Stout seconded. Ayes: 5 Nays: 0. Motion passed.
3

4 **F. Wadsworth Meadow Variance Request - Patterson Construction:** Jason Bond said the
5 proposed 11-lot subdivision was previously submitted to the City as East Bench Estates and was located
6 just south of Lambert Park. It had a little more land than the previous submittal. The main issue was the
7 second access for the development. It was in sensitive lands. The ordinance required two accesses for
8 developments which were located in the urban wildland interface area. Patterson was requesting an
9 exception to the requirement for a second access. The ordinance allowed for an exception if it was
10 recommended by the Fire Marshal and the Planning Commission. The letter from the Fire Marshal
11 recommended against the exception. The Planning Commission also recommended against it. The vote
12 from the Planning Commission was unanimous with one member absent.
13

14 Ken Berg represented Patterson Construction. He said the Code was clear about the requirement for a
15 second access but it also allowed for an exception under certain conditions. He said the proposed
16 Wadsworth Meadows would have one access through Bennett Farms subdivision, but there was no
17 second access currently available. Wadsworth Meadows was bordered on the north by Lambert Park
18 which did not allow access. On the east lay the forest service's wilderness area which would not allow
19 access. The only other possible access point was through the private property on the south where it could
20 eventually connect with Bald Mountain Drive. The property to the south was not owned by Patterson
21 Construction and was outside Alpine City limits. Mr. Berg said that if the land to the south was
22 developed, there could be a road connecting to Bald Mountain Drive because a future road was shown on
23 Alpine City's Master Road Plan.
24

25 Troy Stout said the Fire Marshal had recommended against allowing an exception for the second access
26 road due to degradation of the area from forest fire. The Planning Commission recommended against it as
27 well.
28

29 Lon Lott said that they had talked about providing a right-of-way to the Beck property when Three Falls
30 was under consideration. He asked how that related to this situation if the Fitzgeralds came in with a plan
31 that didn't provide access to the next property?
32

33 David Church said that under the current ordinance, a developer would be required to stub a road to the
34 adjoining property. The Master Road Plan showed a road to through the Fitzgerald land. When Fitzgerald
35 developed, it may not be a straight road, but there needed to be a connection.
36

37 Troy Stout said that at some point that road would be available. Until that time he was not willing to go
38 against the recommendation of the Planning Commission and the Fire Marshal.
39

40 Roger Bennett asked if it would be fair to hold Fitzgerald up if he had come in with a development plan
41 before the Pattersons?
42

43 Mayor Watkins asked if the Council had given other exceptions. Roger Bennett said Heritage Hills was
44 given an exception.
45

46 Will Jones said they were approved simultaneously and the roads were designed at the same time. It was
47 anticipated that they would come in at the same time, but then the economy fell apart and only one phase
48 was done. They were similar but not the same.
49

50 Roger Bennett said there were parts on Bald Mountain that were given exceptions.
51

1 Carla Merrill said she understood that this proposed development was in the wildland interface area and
 2 that was why it was critical the second access was crucial. Was Heritage Hills in the wildland interface
 3 area? Mayor Watkins said it was.

4
 5 **MOTION:** Troy Stout moved to deny the request for an exception to the requirement for a secondary
 6 access road in Wadsworth Meadows subdivision based on the recommendations from the Fire Marshal
 7 and the Planning Commission. Kimberly Bryant seconded. Ayes: 2 Nays: 3 Troy Stout and Kimberly
 8 Bryant voted aye. Roger Bennett, Will Jones, Lon Lott voted nay. Motion failed.

9
 10 Troy Stout asked about precedent in this situation. He'd heard Mr. Church say that precedent meant
 11 nothing.

12
 13 David Church said that precedent was an excuse to allow bodies to do whatever they wanted to do. There
 14 was a precedent for everything. There were situations where they had allowed exceptions and situations
 15 where they didn't. He said the Council needed to evaluate an application on its own merits. They couldn't
 16 say that because they did something somewhere else, it was okay to do it here. Every application had to
 17 stand on its own.

18
 19 Don Watkins said since he'd been in politics in Alpine he'd begged that they not give exceptions because
 20 he felt it would save them from lawsuits.

21
 22 Troy Stout said the Fire Marshal said granting the exception was not a good idea. The Planning
 23 Commission said it was not a good idea. The road could eventually go in and open it up. But he didn't
 24 think they should be putting the cart before the horse.

25
 26 Roger Bennett said Bald Mountain Drive was the same situation and it was in the urban wildland
 27 interface area. There was more discussion on the urban wildland interface area.

28
 29 Lon Lott clarified that Troy Stout's motion denied the exception, and indicated he'd voted nay thinking he
 30 was voting against the exception. He asked if this was a situation where a motion could be reconsidered.
 31 David Church said yes.

32
 33 Troy Stout restated the motion.

34
 35 **MOTION:** Troy Stout moved to deny the request for an exception to the requirement for a secondary
 36 access road in Wadsworth Meadows subdivision based on the recommendations from the Fire Marshal
 37 and the Planning Commission. Kimberly Bryant seconded. Ayes: 3 Nays: 2 Troy Stout, Kimberly Bryant,
 38 Lon Lott voted aye. Roger Bennett, Will Jones voted nay. Motion passed.

39
 40 **G. River Meadows Senior Living Phase 4 - Revised Site Plan - Patterson Construction:** The
 41 developers of River Meadows Senior Living Center requested approval of a revised site plan in which
 42 they modified some of the building pad locations. The proposed revision complied with setback
 43 requirements and matched the existing units. The Planning Commission had recommended approval.

44
 45 **MOTION:** Will Jones moved to approve the revised site plan for River Meadows Senior Living Phase
 46 4. Lon Lott seconded. Ayes: 5 Nays: 0. Will Jones, Roger Bennett, Troy Stout, Lon Lott, Kimberly
 47 Bryant voted aye. Motion passed.

48
 49 **H. River Meadows PRDS Plat Amendment - Patterson Construction:** The River Meadows
 50 PRD consisted of 24 senior housing units. During the foundation staking of the last four units to be built,

1 it was noted that two of the units fell within the flood plain. The developer adjusted the lots lines out of
 2 the flood plain and was seeking approval for a plan amendment.

3
 4 **MOTION:** Will Jones moved to approve the River Meadows PRD plat amendment. Kimberly Bryant
 5 seconded. Ayes: 5 Nays: 0 Will Jones, Roger Bennett, Troy Stout, Lon Lott, Kimberly Bryant voted aye.
 6 Motion passed.

7
 8 **I. Ordinance No. 2015-10 Condominium Conversion Ordinance.** Jason Bond explained that
 9 Larry Hilton was building an office building in the Olde Towne Centre planned commercial development
 10 and was considering make it a condominium. Alpine City's current ordinance required a two-hour fire
 11 wall between units. However, the current IBC (international building code), which Alpine City had
 12 adopted, only required a one-hour fire wall. Mr. Hilton requested that Alpine's ordinance be amended to
 13 be consistent with the IBC and require a one-hour firewall. The building inspector from Sunrise Engineer
 14 had agreed via email with the proposed amendment.

15
 16 Will Jones said he would also like to see a recommendation from the city engineer and fire department
 17 regarding this amendment.

18
 19 **MOTION:** Will Jones moved to deny Ordinance No. 2015-10 until such time as the City Engineer and
 20 the Fire Department made written recommendations. Kimberly Bryant seconded Ayes: 5 Nays: 0 Will
 21 Jones, Roger Bennett, Troy Stout, Lon Lott, Kimberly Bryant voted aye. Motion passed.

22
 23 Corrections to the minutes of June 23, 2015 were discussed and a motion was made.

24
 25 **MOTION:** Will Jones moved to approve the minutes of June 23, 2015 as corrected. Lon Lott seconded.
 26 Ayes: 5 Nays: 0. Will Jones, Roger Bennett, Troy Stout, Lon Lott, Kimberly Bryant voted aye. Motion
 27 passed.

28 29 **VI. COUNCIL COMMUNICATION**

30
 31 Troy Stout asked if anything had happened with the Covey Riding Center. Will Jones said they had gotten
 32 their funding and were moving forward.

33
 34 Will Jones reported on the following:

- 35 • He appreciated the work Shane Sorensen had done in Lambert Park. They had mowed the weeds
- 36 by the Bowery.
- 37 • He would like to send a thank you note to EMC who came and rebuilt the bridge in Lambert
- 38 Park. It was a computer company who paid their employees to come and do the work. They said
- 39 they enjoyed doing it and would like to do something like that every year.
- 40 • He asked when they would hear from the Forest Service regarding American Fork Canyon. Don
- 41 Watkins said he had invited John Stansfield to come and was told they had turned it over to
- 42 MAG.

43 44 **VII. STAFF REPORTS**

45
 46 Shane Sorensen reported on the following:

- 47 • The pickle ball courts had been poured last week.
- 48 • He reported that Questar was finished working on Canyon Crest Road and were moving along in
- 49 Burgess Park.
- 50 • The sewer work was done on 100 West.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

Rich Nelson said he was going to bring a resolution to the Council to review regarding resting the fields on Sunday. He also wanted to look at increasing the reservation fee for Creekside Park to \$100 for nonresidents.

Don Watkins said they had dealt with some controversial issues in town but something had happened recently that altered the perspective on what things really mattered in life. A man on a scooter was seriously mangled in a collision with a truck. He was not breathing and had no pulse. Councilman Lott was working nearby and had tended to the man in a religious capacity. Mayor Watkins said the man was now alive and walking and had visited him at his home to say thank you.

VIII. EXECUTIVE SESSION: None held.

MOTION: Will Jones moved to adjourn. Troy Stout seconded. Ayes: 5 Nays: 0 Will Jones, Roger Bennett, Troy Stout, Lon Lott, Kimberly Bryant voted aye. Motion passed.

The meeting was adjourned at 10:30 pm.

ALPINE CITY COUNCIL AGENDA

SUBJECT: Lambert Park Motorized Vehicles Park Usage Plan

FOR CONSIDERATION ON: July 28, 2015

PETITIONER: Council Member Troy Stout

ACTION REQUESTED BY PETITIONER: At the July 14th Council meeting, Council Member Troy Stout made the following motion:

MOTION: Troy Stout moved to continue to allow motorized vehicles in Lambert Park for a trial period of six months ending in January under the following terms:

1. Speed limits and access will be strictly enforced by dedicating a police officer to Lambert Park. Staff will return with a recommendation at the next meeting with possible time for enforcement and will include penalties which will be enhanced and defined.
2. Road closures for routes deemed unnecessary such as the south end of the poppy loop.
3. Seasonal closures (rain and snow) subject to the judgment of city staff.
4. Signage to specify motorized vs non-motorized trails.
5. Continual assessment of compliance will drive the decision in January regarding future use and take into account the following:
 - a. citation counts
 - b. public input
 - c. condition of the park
6. City will evaluate the cost and feasibility of park cameras on trails, access and signage to enforce signage vandalism.

Will Jones seconded. Ayes: 4 Nays: 1. Troy Stout, Will Jones, Lon Lott, Kimberly Bryant voted aye. Roger Bennett voted nay. Motion passed.

INFORMATION: The Mayor, City staff, Chief Gwilliam and Evertt Williams met to develop a response back to the Council based on Council Member Stout's motion. The response is a proposed "Lambert Park Motorized Vehicles Park Usage Plan". The Plan is attached.

RECOMMENDED ACTION: *That the City Council review the proposed plan, make what changes are deemed needed, and approve the plan and budget associated with it.*

LAMBERT PARK MOTORIZED VEHICLES PARK USAGE PLAN

July 20, 2015

Purpose: The purpose of the Lambert Park Motorized Vehicles Park Usage Plan (Lambert Park MV) is to enable motorized vehicle users, bike riders and walkers to be able to peacefully coexist in Lambert Park and make the park usage opportunity enjoyable for all. This plan is based on the premise that a “Friends of Lambert Park” group would be organized and play a meaningful part in the Park. Evertt Williams would be asked to head the Friends of Lambert Park group.

The plan is organized into four (4) parts:

1. Information.
 - A. Handouts that would specify park rules for motorized vehicles will be created. These would address the speed limit, park access points, legal vehicles and legal drivers, among other things.
 - B. These handouts would be distributed in the Park by the Friends of Lambert Park.
 - C. The information on these handouts would be placed on the City web page, Facebook page and JoinIn.
 - D. The Youth Council would be asked to door hanger campaign through the area most likely to have ATV users of the Park.
 - E. The Friends of Lambert Park would be asked to create a web site about Lambert Park, its rules, usage and other items.
 - F. State law on ATV usage and drivers would be followed.
2. Signage. It is important that Lambert Park have signage indicating the entrances to the Park, speed limit, motorized vehicle roads and non-motorized vehicle roads, yield and stop signs, etc.
 - A. The trail markers would be Carsonite dual side trail markers.
 - B. The City would hire a worker to put up the trail markers.
 - C. The City has already purchased a number of trail markers. These markers are ready to be installed.
3. Traffic reduction in key areas.
 - A. The City has already put up no motorized vehicle signs for the road from Moyle Drive to start of the Box Elder South subdivision. At the top and bottom this road will be narrowed through the use of boulders to discourage unauthorized use of the road by motorized vehicles.
 - B. The southern portion of the loop road to the Lambert ruin will be taken out of service.
 - C. The southern portion of the loop road to the Lambert tank will be taken out of service.
4. Police enforcement.
 - A. Alpine City will budget \$12,000 for Lone Peak Police to provide enforcement of traffic and usage rules in the Park.
 - B. This will be a year around enforcement program.
 - C. The Lone Peak Police will provide enforcement on Saturdays and at random times during the week.

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: Box Elder South Annexation

FOR CONSIDERATION ON: 21 July 2015

PETITIONER: City Council

ACTION REQUESTED BY PETITIONER: Discuss Potential Annexation and make a Recommendation to the City Council

APPLICABLE STATUTE OR ORDINANCE: Chapter 5 (Annexation)

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

BACKGROUND INFORMATION:

At the June 23rd City Council meeting, the following motion was made:

MOTION: Lon Lott moved to send the Box Elder South annexation question to the Planning Commission to have it vetted out and have them make a recommendation.

Roger Bennett seconded. Ayes: 3 Nays: 2. Lon Lott, Roger Bennett, Will Jones voted aye. Kimberly Bryant and Troy Stout voted nay. Motion passed.

Box Elder South is an approved subdivision in Utah County. The development will happen whether Alpine City annexes it or not. If the annexation policy plan were to be amended, it might appear as follows:

Land Use:	<u>Potential Amendment</u>	<u>As Currently Appears</u>
a. Current County Zoning	TR-5	TR-5
b. Proposed Land Use	CR-40,000	Park
c. Number of Lots	59	0

STAFF RECOMMENDATION:

That the Planning Commission discuss annexation of this area and make a recommendation to the City Council.

Box Elder South Annexation Projections

(59 Lots)

All projections as based on a comparison to homes in Heritage Hills.

One Time Revenue

Average Construction Fees Per Home:	\$ 8,182.00	\$ 482,738.00
Average Impact Fees Per Home:	\$ 8,917.00	\$ 526,103.00
Total		\$ 1,008,841.00

One Time Costs

Average City Construction Costs Per Home:	\$8,182.00	\$ 482,738.00
Sub Total		\$ 526,103.00

On-Going Revenue

Estimated Property Tax Revenue Per Home:	\$ 1,208.25	\$ 71,286.75
Estimated Sales Tax Per Home:	\$ 365.00	\$ 21,535.00
Estimated Motor Vehicle Tax Per Home:	\$ 41.00	\$ 2,419.00
Estimated Property Tax Revenue Per Home:	\$ 233.00	\$ 13,747.00
Total		\$ 108,987.75

On-Going Costs

Sewer Revenue Loss Per Home (Monthly Stream)	\$ (30.00)	\$ (21,240.00)
Operational Costs (Streets, Parks, Cemetary)	\$ (429.00)	\$ (25,311.00)
General Govt Costs (the rest)	\$ (1,000.00)	\$ (59,000.00)
Total		\$ (105,551.00)
Sub Total		\$ 3,436.75 (+/-)

EMAIL FROM FIRE CHIEF – BRAD FREEMAN

To alpine city council and alpine planning commission concerning box elder south sub-division.

I consider this sub division to be very safe for fire issues due to the fact the developers followed all my recommendations....I'm completely satisfied with the development of this parcel as long as they implement the required issues at hand.

Signed fire chief brad Freeman....LPPD

EMAIL FROM CITY ATTORNEY – DAVID CHURCH

With regard to the issue of liability. I am never sure what people mean when they use this term in conjunction with a proposed city decision like an annexation. It can mean the potential to be required to pay money damages for someone injured or the word could be used to mean the responsibility to pay for some future service or problem. I will discuss both uses of the term.

A decision to annex should not create any new damage claims against the City. The decisions made by the county about the approval and the design of the subdivision and flood control measures will not be imputed to the City because we annex. They are still the county's decisions and if those decisions harm others the county will be the one potentially liable. If we do annex then how we regulate, govern, serve, protect etc. could potentially create claims in the future, but these risks are no different than those already existing for a city like Alpine that provides full public services for its residents and land owners. We manage these risks through good practices and the purchase of insurance. Decisions of others made prior to annexation will not become our decisions simply because we annex.

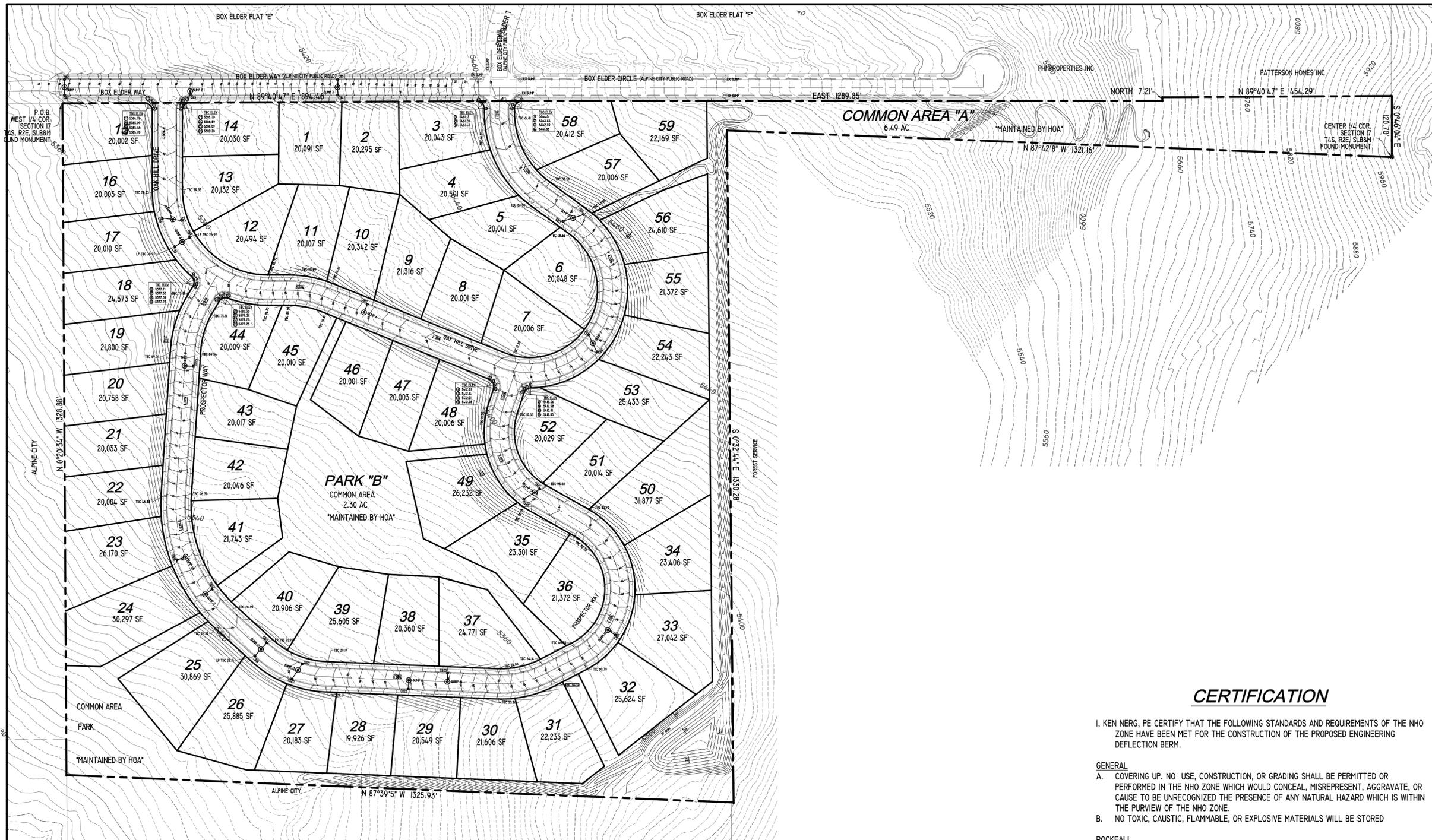
Liability can also be used to mean responsibility. In other words if we annex we would then become the local government entity responsible to provide services, maintain the infrastructure and respond to emergencies. To me this is the real issue in the annexation. The question is will the cost of this new responsibility be offset by the taxes generated by the new residents and property. If not, then are there intangibles that will justify having existing city residents subsidize the newly annexed. Intangibles might include an increase sense of community or the value of being the governing (zoning etc.) authority over the property. I believe Jason and the staff have given the Planning Commission a best guess about the financial impact of the proposed annexations. My only caution in this respect is that you should ignore one time money like building permits and impact fees and focus on ongoing revenue and ongoing expenses in your analysis.

The question may be concerning liability arising from a future large event like a fire or flood. This question may be expressed in both uses of the word liability—liability for claims and

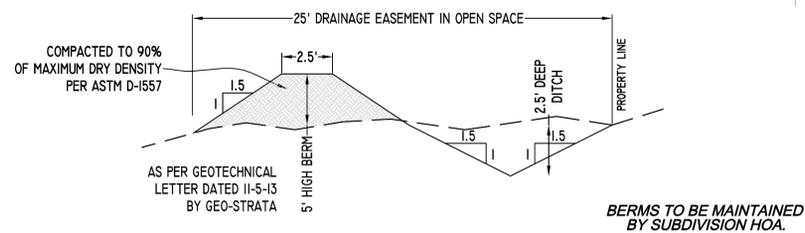
financial responsibility. When a disaster occurs people look to government to help solve the problem. Local government is the first in line to incur these costs. Annexation will obviously increase our opportunity to provide services to those affected by a disaster (natural or otherwise) these services will cost money. This is money that is usually not covered by insurance. Fortunately disasters are rare.

Large events like fires or floods should not be considered a liability issue in the sense of the City being liable for damage claims unless we caused the fire or flood. The most common claim arising from large events is that the government failed in a duty to protect (as opposed to a claim that the government caused the harm). Failure to protect claims are very low risk to government but they will have to be responded to and defended which entails some cost. Fortunately these types of claims are all now insured against and we have very favorable law on the side of the government.

I hope this helps in your understanding of the “liability” issues.



BERM DETAIL



CERTIFICATION

I, KEN NERG, PE CERTIFY THAT THE FOLLOWING STANDARDS AND REQUIREMENTS OF THE NHO ZONE HAVE BEEN MET FOR THE CONSTRUCTION OF THE PROPOSED ENGINEERING DEFLECTION BERM.

GENERAL

- A. COVERING UP, NO USE, CONSTRUCTION, OR GRADING SHALL BE PERMITTED OR PERFORMED IN THE NHO ZONE WHICH WOULD CONCEAL, MISREPRESENT, AGGRAVATE, OR CAUSE TO BE UNRECOGNIZED THE PRESENCE OF ANY NATURAL HAZARD WHICH IS WITHIN THE PURVIEW OF THE NHO ZONE.
- B. NO TOXIC, CAUSTIC, FLAMMABLE, OR EXPLOSIVE MATERIALS WILL BE STORED

ROCKFALL

- A. THE PROPOSED BERM IS ACTING AS AN ENGINEERED DEFLECTION OR CATCHMENT BERMS SUFFICIENT TO STOP ENTRY BY FALLING ROCK.

DEBRIS FLOW

- A. THE PROPOSED BERM IS ACTING AS AN ENGINEERED DEFLECTION BERM WHICH DOES NOT DISCHARGE ONTO A NEIGHBORING LOT AND WHICH IS ENGINEERED TO PREVENT THE ENTRY OF A FLOW BASED UPON THE GEOTECHNICAL ENGINEERING STUDY BY EARTHTEC DATED 9-29-08.

LANDSLIDE

- A. NO LANDSLIDE HAZARDS EXIST FOR THE BERM

SURFACE FAULT RUPTURE

- A. NO FAULT RUPTURE REQUIREMENTS FOR THE BERM.

KEN R. BERG, PE (#343602)

BOX ELDER SOUTH

DEVELOPER

PATTERSON HOMES
www.phutah.com

11038 N. Highland Blvd Suite 100
Highland, UT 84003
(801) 642-0119

SCALE: 1" = 100'

BERG
CIVIL ENGINEERING

11038 N. Highland Blvd Suite 400
Highland, UT, 84003
office (801) 492-1277
cell (801) 616-1677

REVISIONS			SEAL
NO.	DATE	DESCRIPTION	
1	9/16/13	PRELIM SUBMITTAL	
2	11/11/13	ENTRY ADJUSTMENT	
3			
4			
5			
6			
7			

ACTION	DATE
PRELIMINARY PLAN	11/11/13

PROJECT

BOX ELDER SOUTH
PRELIMINARY PLAN

DESCRIPTION

GRADING & DRAINAGE PLAN

SHEET NAME	SHEET NUMBER
BERM	C1

November 5, 2013

Mr. Stephen Sowby, P.E.
Patterson Construction
11038 Highland Blvd. Suite 100
Highland, Utah, 84003

GeoStrata Project No. 503-022

**RE: Debris Flow Mitigation Analysis
Box Elder South Development, Alpine, Utah.**

Mr. Sowby:

As requested, GeoStrata visited the site of the proposed Box Elder South development located in unincorporated Utah County, Utah and approximately 1¾ miles northeast of Alpine City. A geologic hazards assessment was previously completed for the property by Earthtec Testing and Engineering, P.C., (Earthtec) the results of which may be found in a report dated September 27, 2007. In that report, it was noted that the potential for debris flow flooding is considered high for the property, and that remediation is recommended to mitigate this hazard. We understand that it was decided to construct a 2.5-foot tall berm and excavate an adjacent 2.5-foot deep trench along the southern and portions of the eastern sides of the proposed development in order to divert any potential debris flow events. The purpose of our visit was to provide our opinion regarding the adequacy of the Earthtec remediations and to provide additional recommendations if necessary.

GeoStrata visited the site on November 5, 2013. At that time, it was observed that relatively recent debris flow events had occurred on the alluvial fan at the mouth of Wadsworth Canyon as well as within the drainage of a smaller, unnamed canyon located to the east of the subject property. The debris flow sourced by Wadsworth Canyon contained material in excess of 3 feet in diameter, and had a run-out length approximately 1,500 feet from the mouth of the canyon. Fresh debris was observed across large portions of the fan. The debris flow sourced by the unnamed canyon extended approximately 500 feet from the mouth of the canyon.

Based on our observations as well as on our geologic review of the property, the potential exists for a debris flow emanating from Wadsworth Canyon to impact the subject property. Compounding this hazard is the potential for the debris flow to collide perpendicularly with the diversionary berm. Under these conditions, it is likely that the debris flow event would fill the trench and overtop the berm rather than changing direction and flowing along the trench. This geometry, as well as the relatively large amount of sediment transported during the recent Wadsworth debris flow event, the large diameter of the mobilized clasts, and the relatively long run-out distance, it is considered unlikely that the 2.5 foot tall diversionary berm and the 2.5 foot deep trench will be adequate to deflect a large debris flow event, such as the one observed to have occurred recently. As such, GeoStrata recommends that the berm height be increased to 5 feet while still retaining the 2.5 foot deep ditch. As an alternative, a reinforced chain-link fence could be constructed along the top of the diversionary berm. This fence would serve to increase the height of the berm, although it should be understood that the potential remains for a mud slurry to pass through the fence and impact the proposed development. If the fencing is chosen,

we recommend that it be a minimum of 4 feet in height, and constructed of heavy chain-link material. The poles for the fencing should be reinforced to accommodate the potential loading associated with a debris flow by increasing the depth of embedment to a minimum of 5 feet. Finally, it is recommended that no structures should be constructed within 20 feet of the diversionary structure

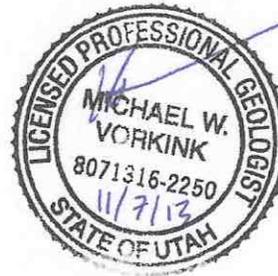
No laboratory testing or subsurface investigations were performed as a part of this investigation. If you would like to discuss any of the issues contained in this letter in more detail or have additional questions please contact us at your convenience (801) 501-0583.

We appreciate the opportunity to provide these services. Please contact us if you have questions regarding the information provided in this letter.

Respectfully,
GeoStrata



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



Mike W. Vorkink, P.G.
Senior Geologist



Mark I. Christensen
Senior Geotechnical Engineer



September 3, 2013
Job No. 1309-004-13

Berg Engineering
11038 Highland Boulevard
Highland, Utah 84003

Attention: Mr. Ken Berg, P.E.

Gentlemen:

Re: Letter
Box Elder South Mitigation Berms
1600 East Box Elder Circle
Alpine, Utah

As requested by Mr. Ken Berg of Berg Engineering, Mr. Bill Turner of GSH Geotechnical, Inc. (GSH) visited the above-referenced site on the afternoon of August 29, 2013. The purpose of the site visit was to observe existing conditions and proposed improvements for the proposed Box Elder South Development located in Alpine, Utah. A geologic hazards assessment report was completed for this site by Earthtec Testing & Engineering, P.C. dated September 27, 2007¹, along with subsequent addendum letters.

At the time of this site visit, Mr. Turner observed the existing grades versus the proposed grades and berm locations, as well as the recent debris flow area emanating from the burn scar on the mountainside east of the site. The referenced report and addendums have addressed using berms along the south side and the south half of the east side of the development to deflect water and debris flows that may emanate from Wadsworth Canyon and adjacent hillsides immediately east of the development. The current plans indicate a 2.5-foot high berm will be constructed at the locations recommended in the referenced report. Thus, it is our opinion that the measures contained in the Box Elder South plans will mitigate these potential hazards at the site and, thereby, adequately address the current requirements of Section 5-12 of the Utah County Land Use Ordinance.

¹ "Geologic Hazards Assessment, Box Elder South Development, Alpine, Utah" ETE Job No. 072247.

Berg Engineering
Job No. 1309-004-13
Box Elder South Mitigation Berms
September 3, 2013

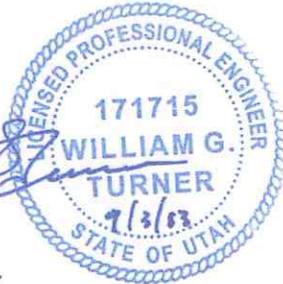


If you have any questions or would like to discuss these items further, please feel free to contact us at (801) 685-9190.

Respectfully submitted,

GSH Geotechnical, Inc.

A handwritten signature in blue ink, appearing to read "William G. Turner".



William G. Turner, P.E.
State of Utah No. 171715
Senior Geotechnical Engineer

WGT:jlb

Addressee (email)

December 6, 2013

Mr. Stephen Sowby, P.E.
Patterson Construction
11038 Highland Blvd. Suite 100
Highland, Utah, 84003

GeoStrata Project No. 503-022

**RE: Aerial Field Review of
Box Elder South Development, Alpine, Utah.**

Mr. Sowby:

On Tuesday November 26th Mr. William Turner P.E. (GSH Geotechnical), Mr. Mark Larsen, P.G. (Earthtec), and Mr. Mike Vorkink P.G. (GeoStrata) participated in a field review of the proposed Box Elder South development in Alpine, Utah. The intent of this field review was for the aforementioned individuals to fly over the subject site and surrounding terrain in a helicopter. The helicopter field review lasted approximately 30 minutes during which time we were able to direct the helicopter pilot as we saw fit.

The aerial review of the subject site began along the southern boundary of the property near the mouth of Wadsworth Canyon, one of the canyons identified in the Earthtec 2009 report as being a potential debris flow source. As we flew up Wadsworth Canyon we noticed grasses had started to grow but in general there was very little vegetation. We also saw the recently deposited debris flow at the mouth of Wadsworth Canyon. After our aerial field review of the southern portion of the subject site we maintain our previous recommendations of a berm 5 ft high along the southern portion of the site.

We noted that the lower tailings pile on the mine road between Wadsworth and Box Elder Canyon had been washed out in the recent flooding event. This tailings pile had not been washed out in storm events since the mine was excavated more than 50 years ago. This indicates that the conditions experienced during the flooding events were extraordinary.

We also noticed the recent debris flow deposit in the small drainage roughly half way between Wadsworth and Box Elder Canyons. As we traversed above this drainage there was no evidence that significant quantities of debris had been transported across the area above the mountain front drainage. This indicates that all the debris flow material was sourced on the face of the drainage in a talus cone. We suspect that this talus cone had probably taken decades to accumulate and hadn't been removed by erosion for quite some time. A subsequent review of aerial photographs confirms that the non-eroded talus cone was at least 50 years old.

In our aerial review of Box Elder Canyon we could see that this drainage is entrenched nearly to the western boundary of the proposed Box Elder South Development. We interpret this to mean that the likelihood that future flood deposits will abandon the current channel and flood onto the proposed Box Elder South development is low. After our aerial field review of the eastern portion of the subject site, we maintain that our previous recommendation of a 2.5 ft high berm

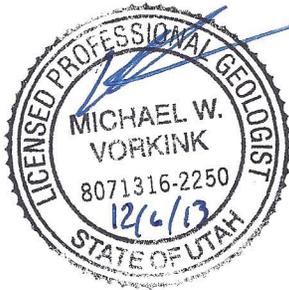
along the south half of the eastern side of the site is adequate.

In conclusion, we maintain that the proposed berms will adequately mitigate potential debris flows east of the site and will thus adequately address the current requirements of Section 5-12 of the Utah County Land Use Ordinance.

No laboratory testing or subsurface investigations were performed as a part of this aerial field review. If you would like to discuss any of the issues contained in this letter in more detail or have additional questions please contact us at your convenience (801) 501-0583.

We appreciate the opportunity to provide these services. Please contact us if you have questions regarding the information provided in this letter.

Respectfully,
GeoStrata



Mike W. Vorkink, P.G.
Senior Geologist

Reviewed By:



Mark Larsen, P.G.
Senior Geologist
Earthtec Engineering, Inc.



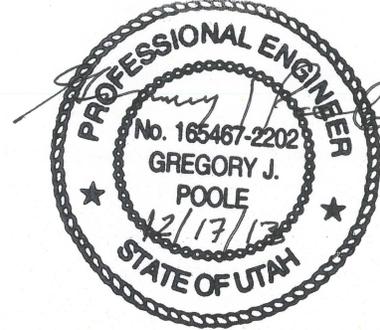
William G. Turner P.E.
Senior Geotechnical Engineer
GSH Geotechnical, Inc.

DATE: December 17, 2013
TO: Stephen E. Sowby, P.E.
Patterson Construction
11038 N. Highland Blvd. #100
Highland, UT 84003

FROM: Gregory J. Poole, P.E.
Hansen, Allen & Luce, Inc. (HAL)
6771 South 900 East
Midvale, UT 84047

SUBJECT: Box Elder South Offsite Hydrologic Analysis

PROJECT NO.: 344.92.100



INTRODUCTION

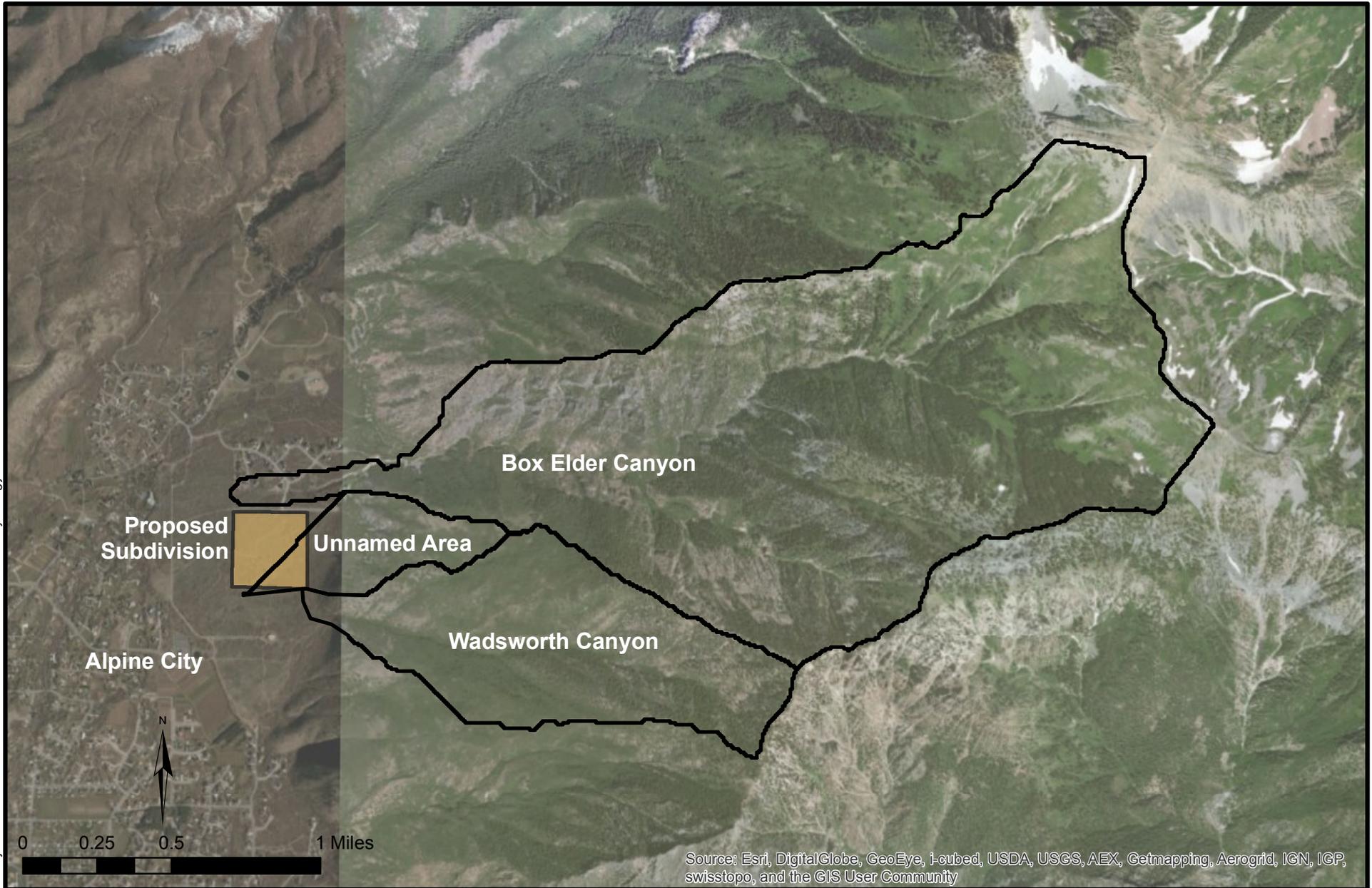
As requested, HAL has reviewed available hydrology and has developed storm runoff predictions for three watersheds adjacent to the proposed Box Elder South Subdivision. See Figure 1. Box Elder Canyon, Wadsworth Canyon, and an unnamed canyon were damaged by a forest fire in July 2012, raising concerns about future flooding on the proposed subdivision site.

OTHER STUDIES

The Natural Resources Conservation Service (NRCS) predicted post-fire 100-yr peak flows of 903 cfs and 556 cfs for Box Elder and Wadsworth Canyons, respectively (Quail Fire DSR report, July 2012).

On Sept. 7, 2013, a major storm occurred in the study area. We contracted a professional meteorologist (Dan Risch, Certified Consulting Meteorologist, Meteorological Solutions Inc.) to investigate the storm.

Weather radar data for the storm is not complete, and was interrupted at about 4:10 p.m. The white line on Figure 2 is shown to help visualize the approximate direction (from the southwest towards the northeast) in which the radar was showing the heavy showers moving towards the region just prior to losing that data at 4:10 PM on the afternoon of September 7, 2013. The code name of the adjacent rainfall gage sites along with the total amount of rain that fell during this storm episode is shown at each point on Figure 2.



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**PATTERSON CONSTRUCTION
BOX ELDER SOUTH SUBDIVISION HYDROLOGY**

STUDY AREA

**FIGURE
1**

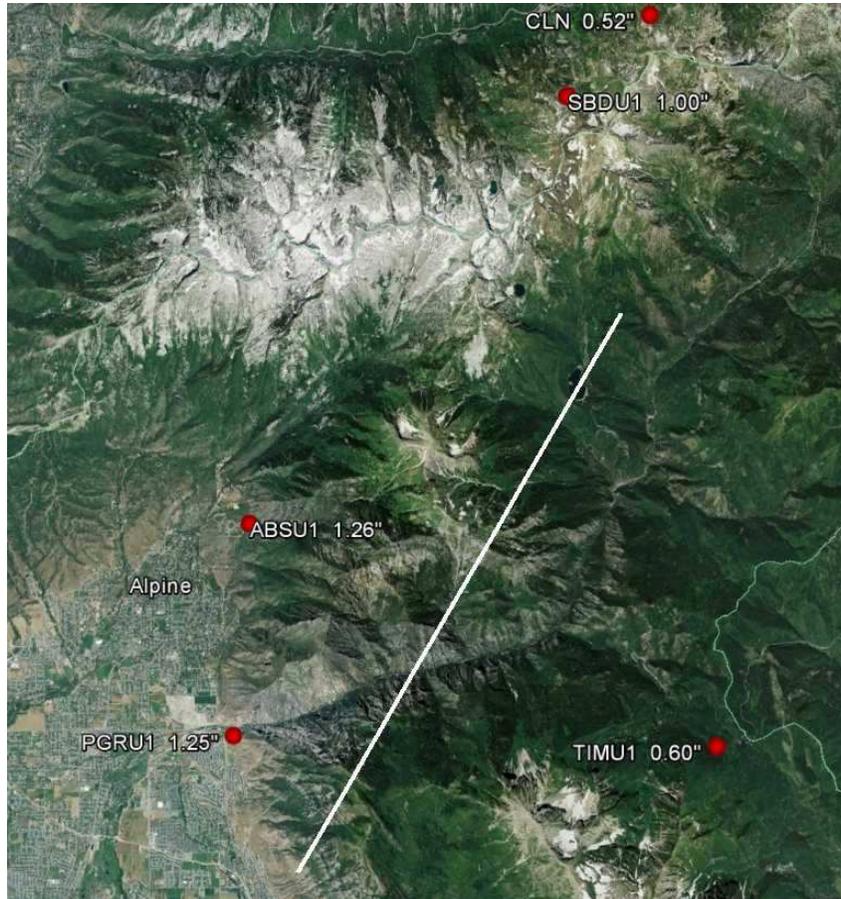


FIGURE 2. Adjacent Rainfall Gages & Storm Totals for The September 7, 2013 Storm

The ¹return periods for the 5, 10, 15 and 30 minute maximum rainfall totals that occurred at the meteorological station ABSU1 located near Alpine, Utah are shown on Table 1. This particular station is part of the federally operated HADS (Hydrometeorological Automated Data System) network, and it reported information every five minutes during the storm period of interest. Precipitation fell at the ABSU1 station on this day between 4:35 PM and 6:50 PM.

TABLE 1. September 7, 2013 Storm Gage ABSU1 Rainfall Depths for Various Durations

Duration Interval minutes	Maximum Rain inches	RETURN PERIOD YEARS
5	0.33	21
10	0.5	21
15	0.66	17
30	0.79	24

¹ Return Period is the inverse of the probability of the event being equaled or exceeded in any given year. For example, a storm with a 1% probability of being equaled or exceeded in any given year has a return period of 100 years (100=1/0.01).

HYDROLOGIC MODELING

We have developed a storm runoff model using the U.S. Army Corps of Engineers Hydrologic Modeling System 3.5 (HEC-HMS 3.5) to simulate runoff conditions. Watershed characteristics were developed for pre-fire conditions using two data sources: 1) data from the U.S. Geological Survey's StreamStats data service, and 2) watershed characteristics from studies of similar watersheds.

Post-fire conditions were modeled assuming a complete burn of all three watersheds resulting in bare soil conditions.

The model was used to define the expected range in storm runoff for the pre-fire and post-fire conditions for a 10-year storm event (the event with a 10% chance of being equaled or exceeded in any given year), 50-year storm event, and 100-year storm event. Results for the 10-year, 50-year, and 100-year analyses are presented in Tables 2, 3, and 4; respectively.

Table 2. 10-year Peak Flow Predictions

Watershed	Pre-fire (cfs)	Post-fire (cfs)
Box Elder Canyon	13-90	309
Unnamed Canyon	6-17	22
Wadsworth Canyon	16-18	80

Table 3. 50-year Peak Flow Predictions

Watershed	Pre-fire (cfs)	Post-fire (cfs)
Box Elder Canyon	40-190	546
Unnamed Canyon	4-12	43
Wadsworth Canyon	31-43	144

Table 4. 100-year Peak Flow Predictions

Watershed	Pre-fire (cfs)	Post-fire (cfs)
Box Elder Canyon	91–300	670
Unnamed Canyon	6–17	64
Wadsworth Canyon	31–61	200

CONCLUSIONS

While higher runoff will result from burned conditions, the 100-yr peak flows predicted here can be mitigated with properly engineered improvements. Having reviewed other predictions and independently developing our own, it is our opinion that the proposed subdivision can be feasibly and adequately protected from flooding in such events.

Box Elder Canyon

Latitude: 40.4784
 Longitude: -111.7167
 Elevation: 8236 ft*

NOAA Atlas 14
 Point Precipitation Frequency Estimates
 Alpine, UT



Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.143 (0.126-0.167)	0.182 (0.160-0.212)	0.249 (0.217-0.289)	0.309 (0.266-0.359)	0.403 (0.339-0.474)	0.491 (0.401-0.582)	0.594 (0.470-0.712)	0.714 (0.543-0.871)	0.909 (0.655-1.14)	1.09 (0.749-1.40)
10-min	0.218 (0.191-0.254)	0.277 (0.243-0.322)	0.378 (0.330-0.440)	0.47 (0.405-0.547)	0.614 (0.516-0.721)	0.748 (0.611-0.886)	0.903 (0.715-1.08)	1.09 (0.826-1.33)	1.38 (0.997-1.73)	1.66 (1.14-2.13)
15-min	0.271 (0.237-0.315)	0.344 (0.302-0.399)	0.469 (0.409-0.545)	0.582 (0.502-0.678)	0.76 (0.639-0.894)	0.927 (0.757-1.10)	1.12 (0.886-1.34)	1.35 (1.02-1.64)	1.72 (1.24-2.15)	2.06 (1.41-2.64)
30-min	0.364 (0.320-0.424)	0.463 (0.406-0.538)	0.631 (0.550-0.733)	0.784 (0.676-0.913)	1.02 (0.861-1.20)	1.25 (1.02-1.48)	1.51 (1.19-1.81)	1.81 (1.38-2.21)	2.31 (1.66-2.89)	2.77 (1.90-3.55)
60-min	0.451 (0.395-0.525)	0.573 (0.503-0.666)	0.781 (0.681-0.908)	0.97 (0.836-1.13)	1.27 (1.06-1.49)	1.54 (1.26-1.83)	1.87 (1.48-2.24)	2.24 (1.71-2.74)	2.86 (2.06-3.58)	3.42 (2.36-4.39)
2-hr	0.576 (0.519-0.652)	0.718 (0.645-0.812)	0.935 (0.835-1.06)	1.14 (1.00-1.29)	1.46 (1.26-1.67)	1.76 (1.48-2.03)	2.11 (1.71-2.47)	2.52 (1.97-3.02)	3.19 (2.36-3.93)	3.81 (2.69-4.81)
3-hr	0.686 (0.625-0.766)	0.85 (0.773-0.943)	1.07 (0.964-1.19)	1.27 (1.14-1.42)	1.59 (1.39-1.78)	1.87 (1.60-2.12)	2.22 (1.85-2.55)	2.62 (2.12-3.06)	3.29 (2.54-3.96)	3.91 (2.89-4.84)
6-hr	0.961 (0.888-1.05)	1.18 (1.09-1.29)	1.43 (1.31-1.56)	1.65 (1.51-1.81)	1.98 (1.78-2.18)	2.25 (1.99-2.50)	2.56 (2.23-2.88)	2.92 (2.48-3.33)	3.57 (2.94-4.17)	4.15 (3.33-4.95)
12-hr	1.29 (1.18-1.41)	1.57 (1.45-1.73)	1.89 (1.74-2.08)	2.18 (1.98-2.40)	2.59 (2.33-2.87)	2.92 (2.59-3.27)	3.28 (2.86-3.71)	3.68 (3.15-4.22)	4.27 (3.56-5.02)	4.76 (3.87-5.70)
24-hr	1.63 (1.51-1.75)	1.99 (1.85-2.16)	2.39 (2.22-2.59)	2.73 (2.52-2.95)	3.18 (2.93-3.45)	3.54 (3.25-3.83)	3.9 (3.57-4.22)	4.27 (3.88-4.63)	4.78 (4.30-5.20)	5.17 (4.62-5.75)
2-day	2.01 (1.86-2.17)	2.47 (2.29-2.68)	2.98 (2.76-3.23)	3.4 (3.14-3.69)	3.98 (3.66-4.31)	4.43 (4.06-4.80)	4.9 (4.46-5.32)	5.38 (4.86-5.86)	6.03 (5.39-6.59)	6.53 (5.79-7.17)
3-day	2.26 (2.08-2.46)	2.78 (2.56-3.03)	3.37 (3.10-3.67)	3.85 (3.54-4.20)	4.53 (4.14-4.94)	5.07 (4.61-5.52)	5.62 (5.09-6.14)	6.19 (5.57-6.78)	6.97 (6.20-7.67)	7.59 (6.69-8.39)
4-day	2.51 (2.30-2.74)	3.09 (2.84-3.38)	3.75 (3.44-4.10)	4.31 (3.94-4.71)	5.09 (4.63-5.56)	5.7 (5.16-6.25)	6.34 (5.72-6.97)	7.01 (6.27-7.71)	7.92 (7.01-8.76)	8.64 (7.58-9.61)
7-day	3.11 (2.84-3.43)	3.84 (3.51-4.23)	4.65 (4.24-5.13)	5.33 (4.85-5.88)	6.27 (5.67-6.92)	7.01 (6.31-7.74)	7.78 (6.97-8.60)	8.56 (7.62-9.49)	9.65 (8.49-10.7)	10.5 (9.16-11.7)
10-day	3.59 (3.29-3.93)	4.43 (4.05-4.85)	5.33 (4.87-5.84)	6.06 (5.52-6.63)	7.04 (6.38-7.71)	7.78 (7.04-8.53)	8.54 (7.69-9.36)	9.3 (8.33-10.2)	10.3 (9.15-11.4)	11.1 (9.77-12.3)
20-day	4.86 (4.46-5.30)	5.99 (5.49-6.52)	7.14 (6.54-7.78)	8.04 (7.36-8.76)	9.2 (8.39-10.0)	10.1 (9.15-11.0)	10.9 (9.88-11.9)	11.7 (10.6-12.8)	12.8 (11.5-14.0)	13.5 (12.1-14.9)
30-day	5.93 (5.46-6.43)	7.29 (6.71-7.91)	8.65 (7.95-9.40)	9.72 (8.92-10.6)	11.1 (10.2-12.1)	12.1 (11.1-13.2)	13.2 (12.0-14.3)	14.1 (12.8-15.4)	15.4 (13.9-16.9)	16.3 (14.6-18.0)
45-day	7.48 (6.91-8.12)	9.18 (8.47-9.97)	10.9 (10.0-11.8)	12.2 (11.2-13.3)	13.9 (12.8-15.2)	15.2 (13.9-16.6)	16.5 (15.0-18.0)	17.7 (16.1-19.4)	19.4 (17.4-21.3)	20.6 (18.4-22.7)
60-day	8.93 (8.20-9.68)	11 (10.1-11.9)	12.9 (11.9-14.1)	14.5 (13.3-15.7)	16.4 (15.0-17.9)	17.9 (16.3-19.5)	19.3 (17.5-21.0)	20.6 (18.7-22.6)	22.3 (20.1-24.5)	23.6 (21.2-26.0)

Unnamed Canyon

Latitude: 40.4711
 Longitude: -111.7431
 Elevation: 6255 ft*

NOAA Atlas 14
 Point Precipitation Frequency Estimates
 Alpine, UT



Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.138 (0.121-0.161)	0.175 (0.154-0.204)	0.239 (0.209-0.279)	0.298 (0.257-0.348)	0.39 (0.328-0.460)	0.476 (0.389-0.565)	0.577 (0.456-0.692)	0.694 (0.528-0.848)	0.884 (0.637-1.11)	1.06 (0.729-1.36)
10-min	0.21 (0.184-0.245)	0.267 (0.234-0.311)	0.365 (0.318-0.425)	0.454 (0.391-0.530)	0.594 (0.499-0.700)	0.726 (0.592-0.861)	0.878 (0.694-1.05)	1.06 (0.803-1.29)	1.35 (0.969-1.69)	1.61 (1.11-2.07)
15-min	0.26 (0.228-0.304)	0.331 (0.290-0.385)	0.452 (0.394-0.526)	0.563 (0.485-0.656)	0.737 (0.619-0.867)	0.899 (0.734-1.07)	1.09 (0.860-1.31)	1.31 (0.996-1.60)	1.67 (1.20-2.09)	2 (1.38-2.56)
30-min	0.35 (0.307-0.409)	0.445 (0.390-0.519)	0.609 (0.531-0.709)	0.758 (0.652-0.884)	0.992 (0.833-1.17)	1.21 (0.988-1.44)	1.47 (1.16-1.76)	1.76 (1.34-2.15)	2.25 (1.62-2.81)	2.69 (1.85-3.45)
60-min	0.434 (0.380-0.506)	0.551 (0.483-0.642)	0.754 (0.657-0.877)	0.938 (0.808-1.09)	1.23 (1.03-1.45)	1.5 (1.22-1.78)	1.81 (1.43-2.18)	2.18 (1.66-2.67)	2.78 (2.00-3.48)	3.33 (2.29-4.27)
2-hr	0.554 (0.499-0.628)	0.692 (0.620-0.783)	0.901 (0.803-1.02)	1.09 (0.967-1.25)	1.41 (1.21-1.61)	1.7 (1.42-1.96)	2.04 (1.66-2.39)	2.44 (1.91-2.92)	3.09 (2.29-3.81)	3.69 (2.61-4.65)
3-hr	0.652 (0.593-0.728)	0.807 (0.734-0.897)	1.02 (0.918-1.13)	1.21 (1.08-1.35)	1.52 (1.33-1.71)	1.79 (1.53-2.03)	2.12 (1.77-2.44)	2.51 (2.02-2.93)	3.16 (2.43-3.84)	3.75 (2.77-4.70)
6-hr	0.896 (0.827-0.981)	1.1 (1.01-1.21)	1.33 (1.22-1.46)	1.54 (1.41-1.70)	1.85 (1.67-2.04)	2.11 (1.87-2.35)	2.4 (2.09-2.71)	2.74 (2.33-3.14)	3.37 (2.77-3.94)	3.92 (3.15-4.74)
12-hr	1.18 (1.08-1.29)	1.44 (1.33-1.58)	1.74 (1.60-1.91)	2 (1.82-2.20)	2.38 (2.14-2.63)	2.68 (2.38-3.00)	3.01 (2.63-3.41)	3.38 (2.89-3.87)	3.93 (3.27-4.61)	4.38 (3.57-5.24)
24-hr	1.4 (1.30-1.51)	1.72 (1.59-1.86)	2.06 (1.91-2.22)	2.34 (2.17-2.52)	2.72 (2.52-2.94)	3.02 (2.78-3.26)	3.33 (3.05-3.59)	3.64 (3.32-3.95)	4.06 (3.67-4.66)	4.44 (3.93-5.29)
2-day	1.74 (1.62-1.88)	2.14 (1.99-2.31)	2.57 (2.38-2.77)	2.92 (2.71-3.15)	3.41 (3.15-3.68)	3.79 (3.49-4.08)	4.17 (3.82-4.51)	4.57 (4.16-4.95)	5.1 (4.59-5.54)	5.51 (4.92-6.02)
3-day	1.94 (1.79-2.10)	2.38 (2.20-2.58)	2.87 (2.65-3.11)	3.28 (3.02-3.55)	3.84 (3.53-4.16)	4.28 (3.91-4.64)	4.73 (4.31-5.15)	5.2 (4.70-5.67)	5.83 (5.22-6.39)	6.33 (5.62-6.97)
4-day	2.13 (1.96-2.32)	2.62 (2.41-2.86)	3.17 (2.91-3.45)	3.63 (3.33-3.95)	4.27 (3.90-4.65)	4.77 (4.34-5.21)	5.29 (4.79-5.79)	5.83 (5.24-6.39)	6.57 (5.84-7.23)	7.15 (6.31-7.91)
7-day	2.61 (2.39-2.86)	3.21 (2.94-3.52)	3.87 (3.55-4.25)	4.42 (4.04-4.85)	5.18 (4.72-5.69)	5.77 (5.24-6.34)	6.39 (5.76-7.02)	7.01 (6.29-7.73)	7.87 (6.98-8.71)	8.53 (7.51-9.49)
10-day	2.99 (2.74-3.26)	3.68 (3.38-4.01)	4.41 (4.04-4.80)	5 (4.57-5.44)	5.78 (5.27-6.30)	6.38 (5.80-6.95)	6.97 (6.32-7.61)	7.58 (6.83-8.29)	8.36 (7.47-9.19)	8.96 (7.96-9.87)
20-day	4.01 (3.69-4.36)	4.94 (4.53-5.36)	5.87 (5.39-6.37)	6.59 (6.05-7.16)	7.52 (6.89-8.18)	8.2 (7.50-8.93)	8.87 (8.09-9.65)	9.51 (8.65-10.4)	10.3 (9.35-11.3)	10.9 (9.84-12.0)
30-day	4.88 (4.50-5.28)	5.99 (5.52-6.49)	7.09 (6.53-7.68)	7.95 (7.31-8.61)	9.06 (8.31-9.81)	9.88 (9.04-10.7)	10.7 (9.74-11.6)	11.5 (10.4-12.5)	12.4 (11.2-13.6)	13.2 (11.8-14.4)
45-day	6.13 (5.67-6.64)	7.51 (6.96-8.14)	8.86 (8.20-9.61)	9.92 (9.17-10.8)	11.3 (10.4-12.3)	12.3 (11.3-13.4)	13.3 (12.2-14.5)	14.3 (13.0-15.6)	15.5 (14.1-17.0)	16.5 (14.8-18.1)
60-day	7.3 (6.72-7.90)	8.96 (8.25-9.70)	10.6 (9.71-11.4)	11.8 (10.8-12.7)	13.4 (12.2-14.5)	14.5 (13.3-15.7)	15.6 (14.2-16.9)	16.7 (15.2-18.1)	18 (16.3-19.6)	19 (17.1-20.8)

Wadsworth Canyon

Latitude: 40.4654
 Longitude: -111.7318
 Elevation: 7024 ft*

NOAA Atlas 14
 Point Precipitation Frequency Estimates
 Alpine, UT



Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.139 (0.122-0.162)	0.177 (0.155-0.206)	0.241 (0.210-0.281)	0.3 (0.259-0.350)	0.393 (0.330-0.463)	0.48 (0.392-0.569)	0.58 (0.459-0.696)	0.698 (0.531-0.853)	0.889 (0.641-1.11)	1.06 (0.734-1.37)
10-min	0.212 (0.185-0.247)	0.269 (0.236-0.313)	0.368 (0.320-0.428)	0.457 (0.394-0.534)	0.599 (0.503-0.704)	0.731 (0.596-0.866)	0.884 (0.698-1.06)	1.06 (0.808-1.30)	1.35 (0.975-1.70)	1.62 (1.12-2.08)
15-min	0.262 (0.230-0.306)	0.334 (0.292-0.388)	0.456 (0.397-0.530)	0.567 (0.489-0.662)	0.742 (0.623-0.873)	0.905 (0.739-1.07)	1.09 (0.866-1.31)	1.32 (1.00-1.61)	1.68 (1.21-2.10)	2.01 (1.38-2.58)
30-min	0.353 (0.310-0.412)	0.449 (0.394-0.523)	0.614 (0.535-0.714)	0.764 (0.658-0.891)	1 (0.840-1.18)	1.22 (0.995-1.45)	1.48 (1.17-1.77)	1.77 (1.35-2.17)	2.26 (1.63-2.83)	2.71 (1.86-3.47)
60-min	0.437 (0.383-0.510)	0.556 (0.488-0.647)	0.76 (0.662-0.884)	0.945 (0.814-1.10)	1.24 (1.04-1.46)	1.51 (1.23-1.79)	1.82 (1.44-2.19)	2.2 (1.67-2.68)	2.8 (2.02-3.50)	3.35 (2.31-4.30)
2-hr	0.559 (0.504-0.634)	0.698 (0.626-0.791)	0.909 (0.811-1.03)	1.1 (0.976-1.26)	1.42 (1.23-1.63)	1.71 (1.44-1.98)	2.06 (1.67-2.41)	2.46 (1.92-2.94)	3.12 (2.31-3.83)	3.72 (2.63-4.69)
3-hr	0.66 (0.600-0.737)	0.817 (0.743-0.908)	1.03 (0.929-1.15)	1.22 (1.10-1.37)	1.54 (1.35-1.72)	1.81 (1.55-2.05)	2.14 (1.79-2.46)	2.53 (2.05-2.96)	3.19 (2.46-3.87)	3.79 (2.80-4.74)
6-hr	0.912 (0.842-0.998)	1.12 (1.03-1.23)	1.36 (1.24-1.49)	1.57 (1.43-1.72)	1.88 (1.69-2.08)	2.14 (1.90-2.38)	2.44 (2.12-2.75)	2.79 (2.37-3.18)	3.42 (2.82-3.99)	3.98 (3.19-4.76)
12-hr	1.21 (1.11-1.32)	1.47 (1.36-1.62)	1.78 (1.63-1.95)	2.04 (1.86-2.25)	2.43 (2.18-2.69)	2.74 (2.43-3.07)	3.08 (2.69-3.48)	3.45 (2.96-3.96)	4.01 (3.34-4.71)	4.47 (3.64-5.35)
24-hr	1.46 (1.36-1.57)	1.79 (1.66-1.94)	2.15 (1.99-2.32)	2.44 (2.26-2.64)	2.84 (2.63-3.08)	3.16 (2.90-3.41)	3.48 (3.19-3.76)	3.81 (3.47-4.12)	4.25 (3.84-4.74)	4.6 (4.12-5.41)
2-day	1.81 (1.68-1.95)	2.22 (2.06-2.40)	2.67 (2.47-2.88)	3.04 (2.81-3.28)	3.54 (3.27-3.83)	3.94 (3.62-4.25)	4.34 (3.97-4.70)	4.76 (4.32-5.17)	5.31 (4.78-5.79)	5.75 (5.13-6.29)
3-day	2.02 (1.86-2.19)	2.48 (2.29-2.69)	2.99 (2.76-3.24)	3.41 (3.14-3.71)	4 (3.67-4.35)	4.46 (4.08-4.85)	4.94 (4.49-5.39)	5.43 (4.90-5.93)	6.1 (5.45-6.69)	6.62 (5.86-7.30)
4-day	2.22 (2.04-2.42)	2.73 (2.51-2.98)	3.31 (3.04-3.61)	3.79 (3.47-4.13)	4.46 (4.07-4.87)	4.99 (4.53-5.46)	5.54 (5.01-6.07)	6.11 (5.48-6.70)	6.88 (6.11-7.59)	7.5 (6.60-8.31)
7-day	2.73 (2.49-3.00)	3.36 (3.08-3.69)	4.06 (3.71-4.46)	4.64 (4.23-5.10)	5.44 (4.94-5.99)	6.07 (5.48-6.67)	6.72 (6.04-7.40)	7.38 (6.59-8.15)	8.28 (7.33-9.20)	8.99 (7.88-10.0)
10-day	3.13 (2.87-3.42)	3.86 (3.54-4.21)	4.63 (4.24-5.05)	5.25 (4.79-5.73)	6.08 (5.53-6.64)	6.71 (6.08-7.33)	7.34 (6.64-8.03)	7.98 (7.18-8.74)	8.82 (7.86-9.70)	9.45 (8.37-10.4)
20-day	4.21 (3.87-4.58)	5.18 (4.75-5.64)	6.17 (5.66-6.71)	6.93 (6.35-7.54)	7.91 (7.23-8.62)	8.63 (7.88-9.41)	9.34 (8.50-10.2)	10 (9.10-10.9)	10.9 (9.83-11.9)	11.5 (10.4-12.7)
30-day	5.12 (4.72-5.55)	6.29 (5.79-6.82)	7.46 (6.86-8.09)	8.36 (7.68-9.07)	9.54 (8.73-10.3)	10.4 (9.50-11.3)	11.3 (10.2-12.2)	12.1 (10.9-13.2)	13.1 (11.8-14.4)	13.9 (12.5-15.2)
45-day	6.44 (5.96-6.99)	7.9 (7.30-8.57)	9.32 (8.61-10.1)	10.4 (9.63-11.3)	11.9 (11.0-12.9)	13 (11.9-14.1)	14 (12.8-15.3)	15.1 (13.7-16.5)	16.4 (14.8-18.0)	17.4 (15.6-19.1)
60-day	7.67 (7.06-8.31)	9.42 (8.66-10.2)	11.1 (10.2-12.0)	12.4 (11.4-13.4)	14.1 (12.9-15.2)	15.3 (14.0-16.6)	16.4 (15.0-17.9)	17.6 (15.9-19.1)	19 (17.1-20.7)	20 (18.0-21.9)

Box Elder South Subdivision

Hydrologic Analysis—Basin Characteristics

12/13/2013 RBS

Assume CN=64 based on other studies of similar watersheds

Parameter	Box Elder	Unnamed	Wadsworth
Mean basin elevation (ft)	8520	5960	7230
Area (mi ²)	2.53	0.17	0.66
Area covered by herbaceous upland (%)	2.15	0.16	0.15
Area covered by forest (%)	80.6	81.9	95.3
Mean annual precipitation (in.)	36.3	28.1	25.9
Average basin slope (%)	62.3	41.0	56.5
Slopes > 30% (%)	92.9	63.7	93.4
Watercourse length	19,100	5,250	9,400
Watercourse slope (%)	0.300	0.297	0.408
Watershed width (ft)	3,693	903	1,957
Hydrologic soil group	B	B	B
CN	64.0	64.0	64.0
S_{nat} (in.)	5.63	5.63	5.63
t_{lag} (min)*	82.8	35.9	54.2

* Lag time calculations follow Simas and Hawkins, "Lag time characteristics for small watersheds in the U.S.," Water Resources Engineering '98 (Reston, VA: ASCE, 1998)

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044199.pdf

S_{nat} (in.) = 1000/CN - 10

width = area/length

t_{lag} (min) = 0.0051 × width^{0.594} × slope^{-0.150} × S_{nat} ^{0.313} × 60

** See calibration sheet.

Notes

StreamStats

StreamStats & measured

StreamStats

StreamStats

StreamStats

StreamStats

StreamStats

Measured

Measured

Calculated

NRCS

Calibrated**

Calibrated**

Calibrated**

Box Elder South Subdivision Hydrologic Analysis—Basin Characteristics



12/13/2013 RBS

Characteristics from Stream Stats.

Parameter	Box Elder	Unnamed	Wadsworth	Notes
Mean basin elevation (ft)	8520	5960	7230	StreamStats
Area (mi ²)	2.53	0.17	0.66	StreamStats & measured
Area covered by herbaceous upland (%)	2.15	0.16	0.15	StreamStats
Area covered by forest (%)	80.6	81.9	95.3	StreamStats
Mean annual precipitation (in.)	36.3	28.1	25.9	StreamStats
Average basin slope (%)	62.3	41.0	56.5	StreamStats
Slopes > 30% (%)	92.9	63.7	93.4	StreamStats
Watercourse length	19,100	5,250	9,400	Measured
Watercourse slope (%)	0.300	0.297	0.408	Measured
Watershed width (ft)	3,693	903	1,957	Calculated
Hydrologic soil group	B	B	B	NRCS
CN	49.5	61.0	55.0	Calibrated**
S _{nat} (in.)	10.20	6.39	8.18	Calibrated**
t _{lag} (min)*	99.7	37.4	61.0	Calibrated**

* Lag time calculations follow Simas and Hawkins, "Lag time characteristics for small watersheds in the U.S.," Water Resources Engineering '98 (Reston, VA: ASCE, 1998)

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044199.pdf

S_{nat} (in.) = 1000/CN - 10

width = area/length

t_{lag} (min) = 0.0051 × width^{0.594} × slope^{-0.150} × S_{nat}^{0.313} × 60

** See calibration sheet.

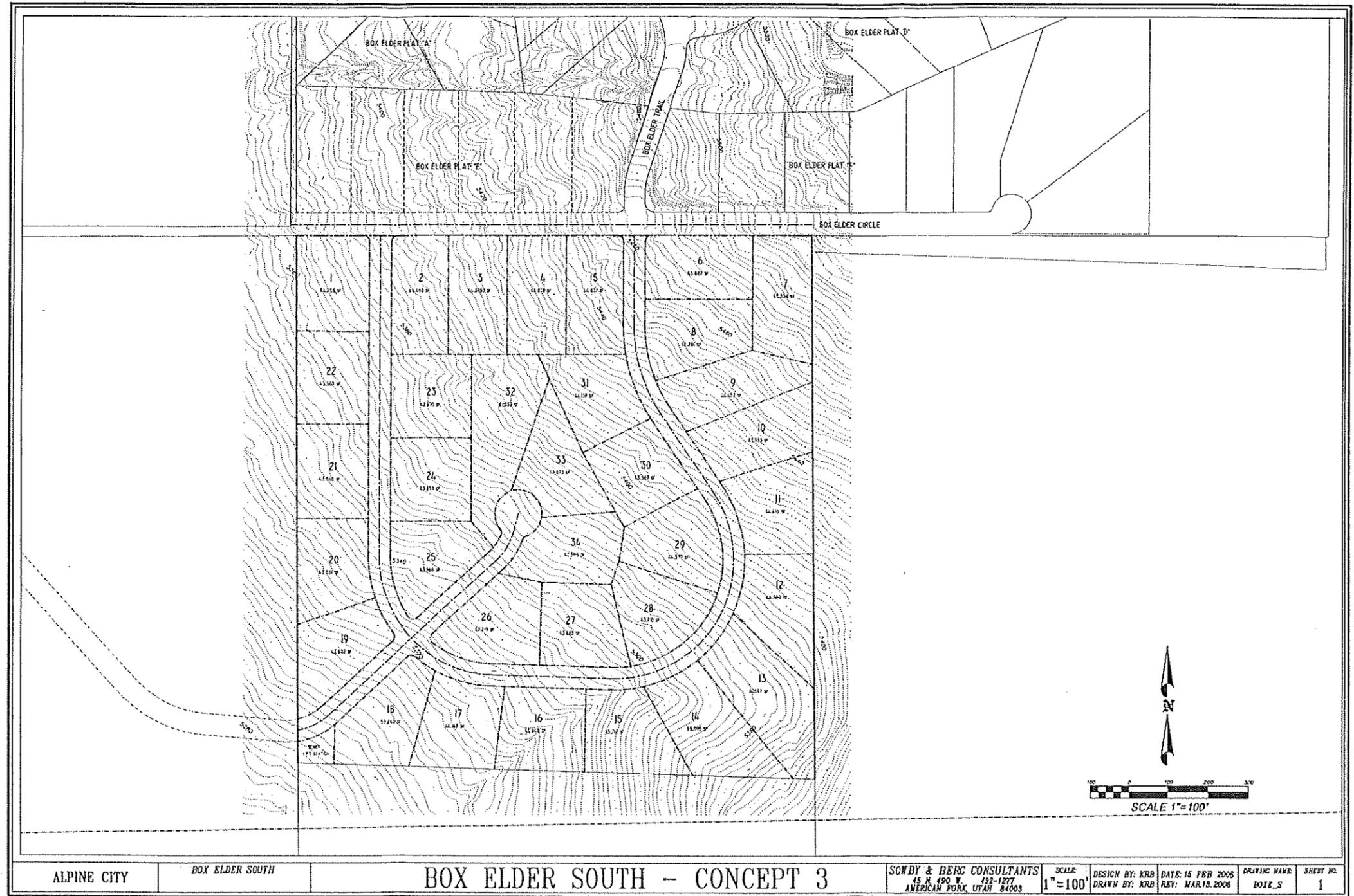


FIGURE NO.: 3
TOPOGRAPHIC SITE PLAN

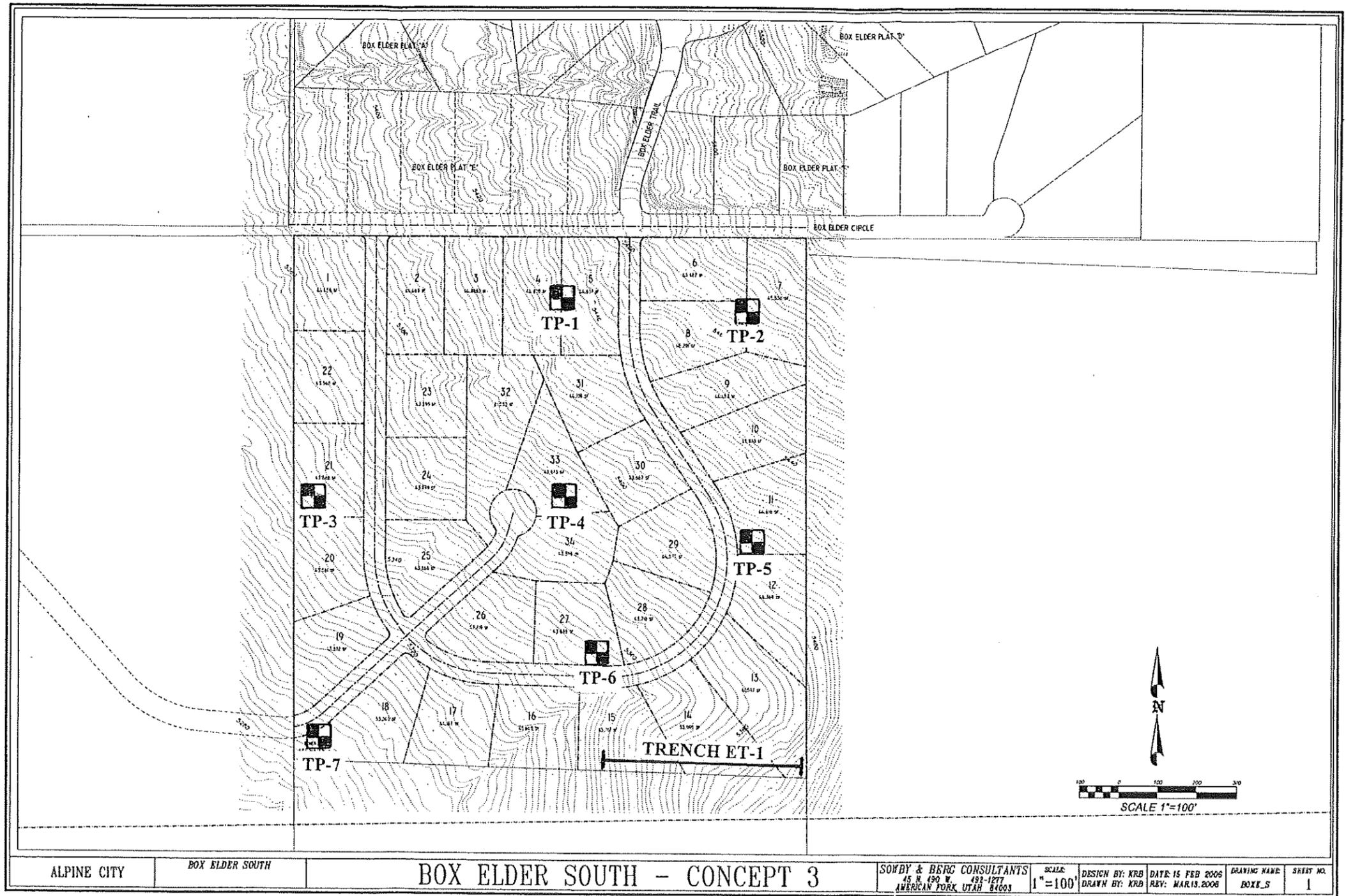
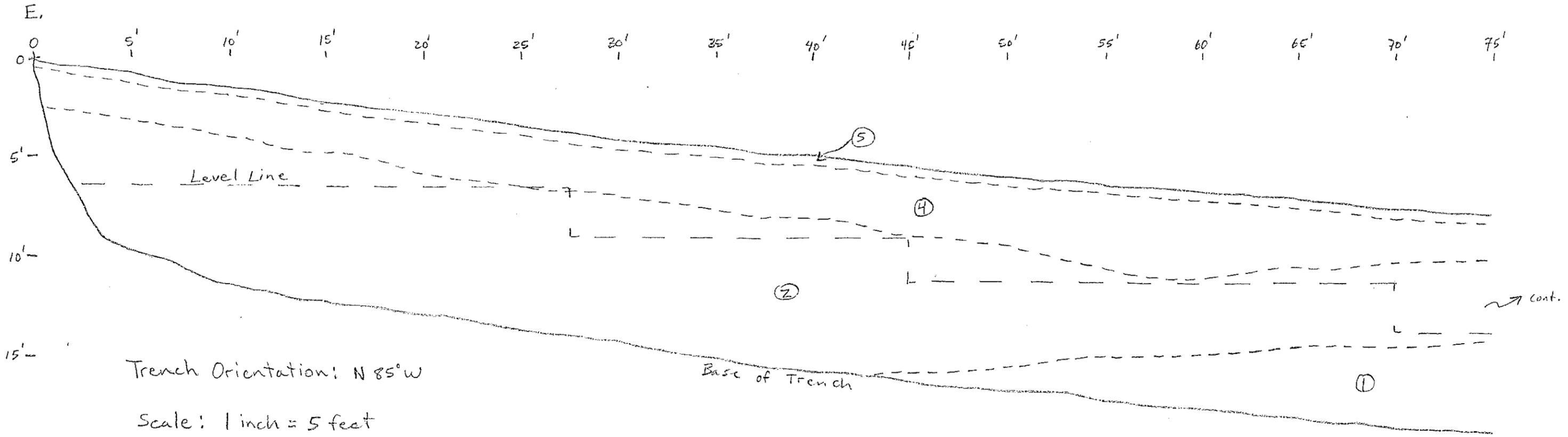


FIGURE NO.: 5
LOCATIONS OF EXPLORATIONS

Exploration Trench Log, Trench ET-1, Box Elder South, Utah County, UT

Logged By: Mark Larsen, P.G. Earthtec Engineering, 8/20 to 8/29, 2007



Trench Orientation: N 85° W

Scale: 1 inch = 5 feet

South Trench Wall Logged

Soil Units

- 1) Fan Alluvium - (Debris Flow Deposit) - (GC) Clayey gravel with silt and sand, pebble to boulder sized clasts, dense, weakly cemented in places, mostly matrix supported, moderate pinhole structure, angular to subangular clasts, massive. May contain more than one debris flow event - undifferentiated. Gray to gray-tan. Holocene.
- 2) Fan Alluvium - (Debris Flow Deposit) - (GC) Clayey gravel with sand, pebble to boulder sized clasts, dense, weakly cemented in places, mostly matrix supported, moderate pinhole structure, dry, angular to subangular clasts, massive, gray-tan. Holocene.
- 3) Fan Alluvium - (Debris Flow Deposit) - (GC) Clayey gravel with silt, pebble to cobble sized clasts, dense, matrix supported, major pinhole structure, dry, massive, light brown. Holocene.
- 4) Fan Alluvium - (Debris Flow Deposit) - (GC) Clayey gravel with silt, pebble to small boulder sized clasts, dense, mostly matrix supported, moderate pinhole structure, angular to subangular clasts, dry, massive, gray-brown. Holocene.
- 5) Modern Soil A Horizon - (GC) Clayey gravel with silt, organics, brown. Formed on Unit 4.

Notes

- 1) A thin, weakly-formed paleosol was visible in several places on the top of Unit 1.
- 2) No groundwater was encountered.
- 3) No evidence of surface fault rupture or related deformation was observed.

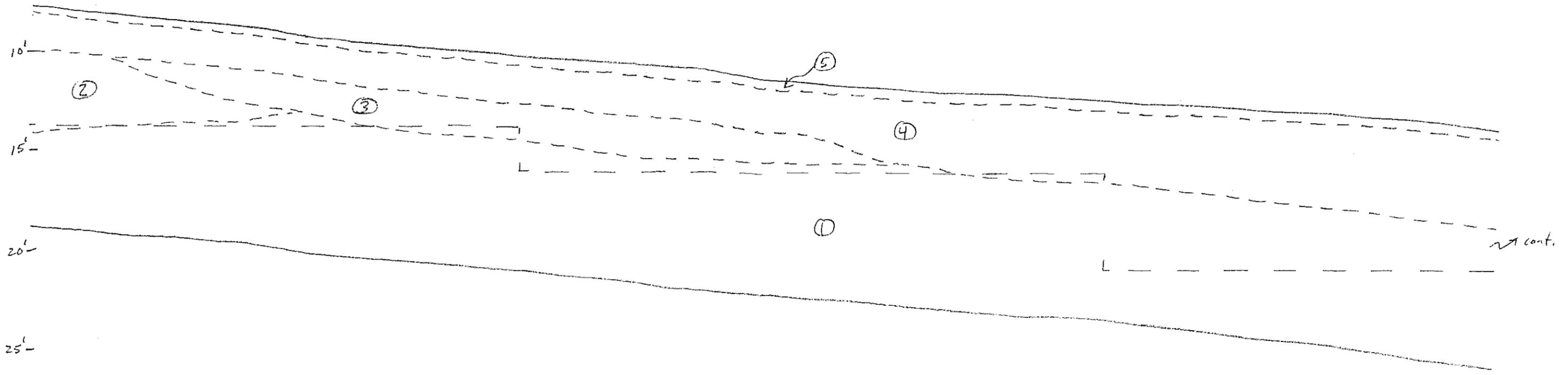
Symbols

- - Sharp contact
- - - - - - Gradational contact

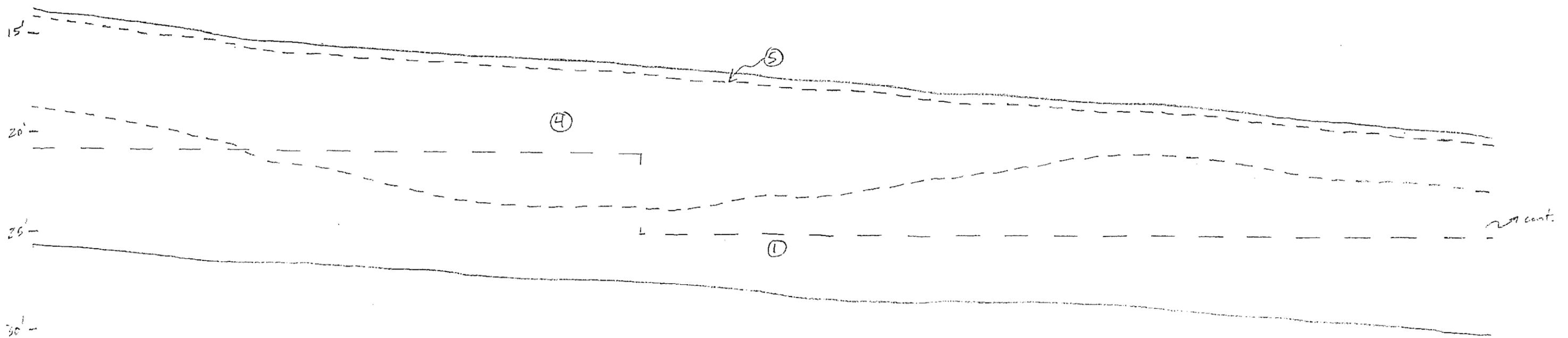


ET-1

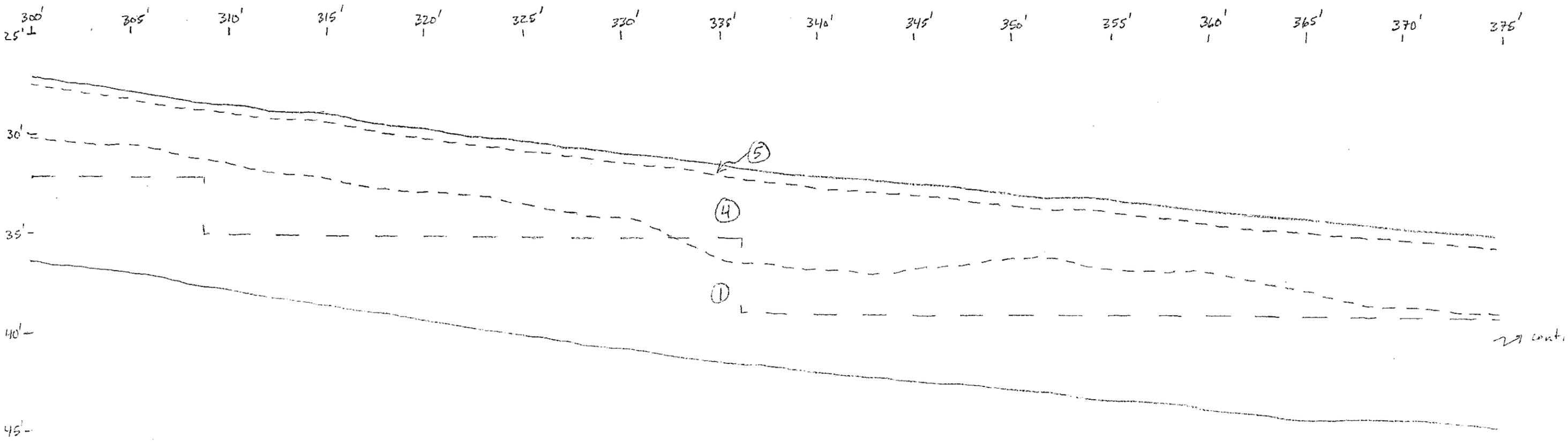
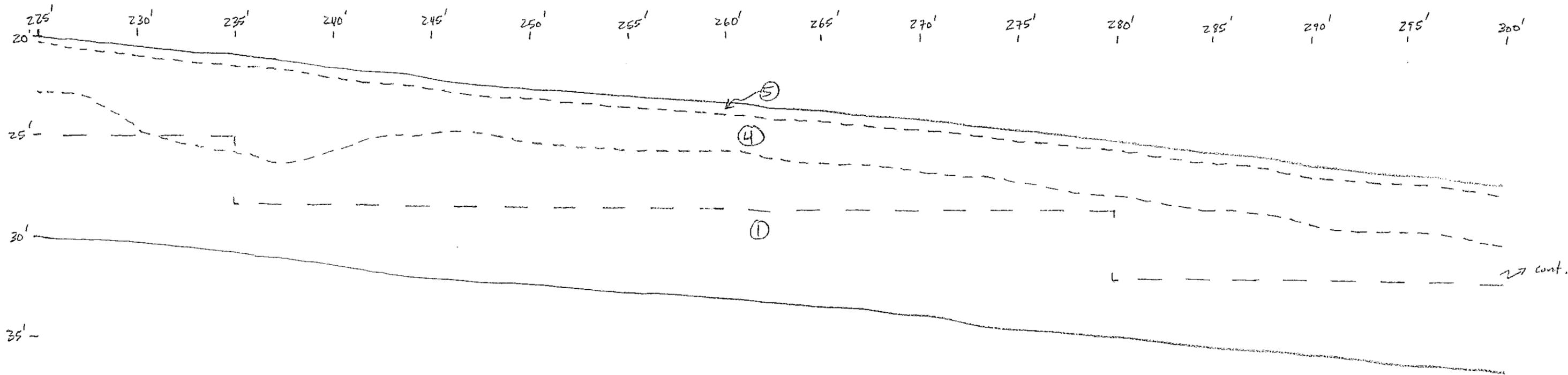
75' 80' 85' 90' 95' 100' 105' 110' 115' 120' 125' 130' 135' 140' 145' 150'



156' 155' 160' 165' 170' 175' 180' 185' 190' 195' 200' 205' 210' 215' 220' 225'

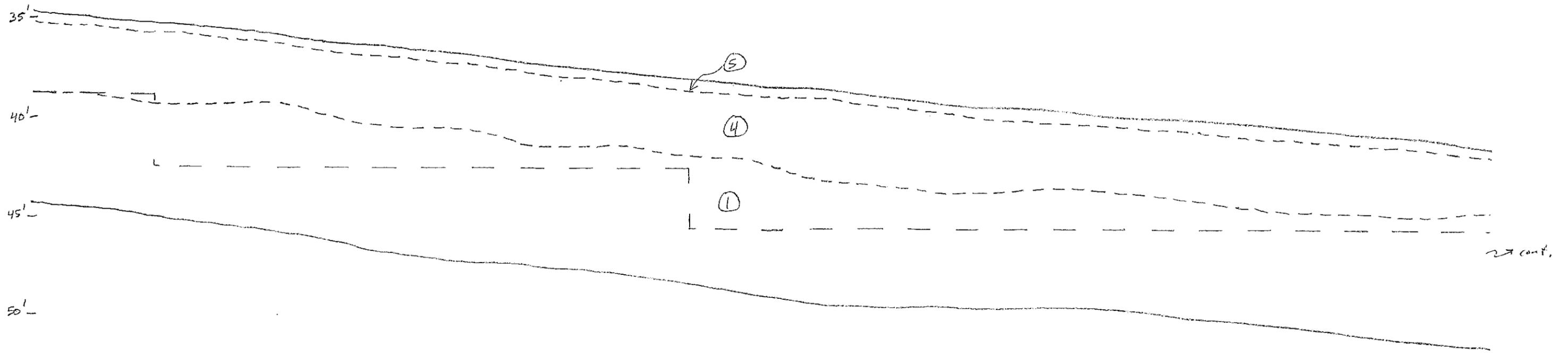


ET-1

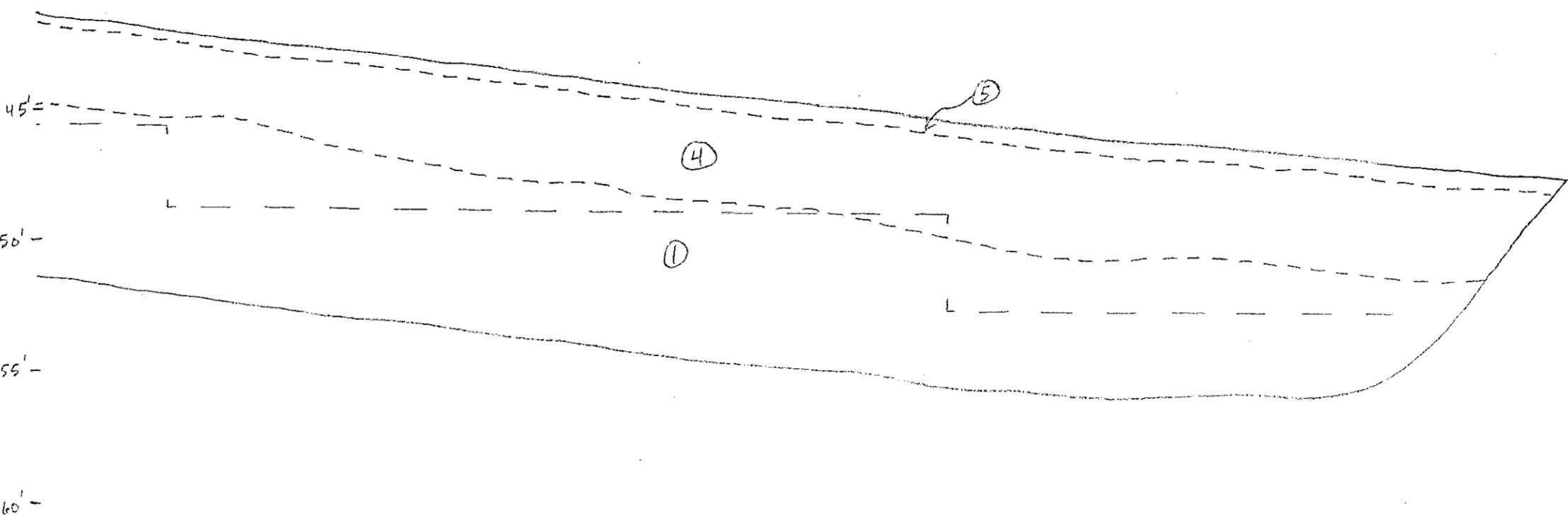


ET-1

375' 380' 385' 390' 395' 400' 405' 410' 415' 420' 425' 430' 435' 440' 445' 450'



450' 455' 460' 465' 470' 475' 480' 485' 490' 495' 500' 505' W. 510' 515' 520'



Appendix "D"

Geotechnical Reports prepared by Earthtec (072247)

Geologic Hazard Assessment – Sept 27, 2007

Addendum - Sept 29, 2008

Addendum – May 6, 2010



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

GEOLOGIC HAZARDS ASSESSMENT

BOX ELDER SOUTH DEVELOPMENT

UTAH COUNTY, UTAH

Prepared By:



133 North 1330 West
Orem, Utah 84057

(801) 225-5711

Job No. 072247

Prepared For:

Patterson Construction
11038 North Highland Blvd.
Highland, UT 84003

September 27, 2007

Earthtec

TABLE OF CONTENTS

1.0	INTRODUCTION	Page 1
2.0	PURPOSE	Page 1
3.0	SCOPE	Page 1
4.0	SITE DESCRIPTION	Page 2
5.0	GEOLOGIC AND TECTONIC SETTING	Page 2
6.0	OTHER MAP AND AERIAL PHOTOGRAPH REVIEW	Page 4
7.0	SITE RECONNAISSANCE	Page 5
8.0	GEOLOGIC HAZARDS	Page 7
9.0	CONCLUSIONS	Page 14
10.0	PERCOLATION TESTING	Page 16
11.0	GENERAL INFORMATION	Page 17

TABLE NO. 1 PERCOLATION TEST RESULTS

APPENDIX A

FIGURE No. 1	VICINITY MAP
FIGURE No. 2	AERIAL PHOTOGRAPH
FIGURE No. 3	TOPOGRAPHIC SITE PLAN
FIGURE No. 4	GEOLOGIC MAP
FIGURE No. 5	LOCATIONS OF EXPLORATIONS
FIGURE No. 6	EXPLORATION TRENCH LOG

1.0 INTRODUCTION

Earthtec Testing & Engineering, P.C., has completed a geologic hazards assessment for the proposed Box Elder South Development located in unincorporated Utah County to the east of the City of Alpine. The proposed development is approximately 41 acres in size. The approximate location of the subject property is shown on Figure No. 1, *Vicinity Map*, Appendix A.

2.0 PURPOSE

The purpose of this assessment was to: 1) Identify potential geologic hazards that may be present on and in the vicinity of the subject property. 2) Provide a relative (High, Moderate, Low) assessment of the potential for these hazards to impact the site. 3) Determine if there are areas of the proposed development that should not be developed because of a high relative hazard potential. 4) Determine if additional, more detailed, hazard-specific studies are warranted. 5) Provide general recommendations, where possible, for mitigating geologic hazards identified at the site. 6) Provide preliminary soil drainage characteristics for the site by conducting several percolation tests throughout the development. It is our understanding that the planned development at the site consists of constructing a multi-lot residential subdivision for single-family houses.

3.0 SCOPE

This geologic hazards assessment included the following work:

1. A review of published geologic maps of the area (Machette, 1992) (Harty, 1992) (Biek, 2005).
2. A review of available aerial photographs of the site. (USGS, 1997 & Digital Globe/ Navteq, 2007).
3. A review of the Utah County Natural Hazards Overlay Map (Utah County Public Works Department, 2001).
4. A geologic reconnaissance of the subject property and pertinent adjacent sites to observe and identify the general surficial geology, pertinent geologic features, and potential geologic hazards.

5. The excavation of an exploration trench on the site to observe the subsurface geology for evidence of surface fault rupture, other tectonic or coseismic ground deformation, and other potential geologic hazards.
6. The preparation of this report which includes text, figures, and maps.

4.0 SITE DESCRIPTION

The subject property is located in the northeast corner of Utah Valley, to the east of the City of Alpine. The site is located at the base of the Wasatch Mountain Range between the mouths of Box Elder and Wadsworth Canyons. The site is located on westward-sloping alluvial fans that extend west from the mouths of the canyons. The existing ground surface at the site has an average slope of approximately 12% down to the southwest. The ground surface at the site has been incised by several shallow gullies formed by runoff erosion on the alluvial fans. The site is currently undeveloped and is vegetated with patches of scrub oak, sage brush, and grasses and weeds. No surface water, including springs and seeps, were observed on the property. Several trails cross the site in various directions.

The subject property is bordered on the north by Box Elder Circle and Plats "E" and "F" of the Box Elder Subdivision which are partially developed with single family homes. The site is bordered on the east by undeveloped foothills and mountain slopes that are currently federally designated wilderness area. Undeveloped foothills and alluvial fans border the site on the south and undeveloped land borders the site on the west.

A recent aerial photograph of the subject property and surrounding area showing the approximate site boundaries is included as Figure No. 2, *Aerial Photograph*, Appendix A. Figure No. 3, *Topographic Site Plan*, shows the general topography of the site with a proposed lot and road configuration for the site.

5.0 GEOLOGIC AND TECTONIC SETTING

The site is located at the base of the Wasatch Mountain Range in a relatively complex geologic and tectonic setting. The site is dominated by geologically active alluvial fans that have been formed

by sediments eroded from the Wasatch Range and deposited at the mouths of Wadsworth and Box Elder Canyons. The lowest point at the southwest corner of the subject property at approximately 5,300 feet above sea level is over 100 feet higher in elevation than the high-stand elevation of Lake Bonneville. Lake Bonneville was an ancient, fresh water lake that covered Utah Valley, and much of western Utah, during Pleistocene time. The lake deposited thousands of feet of sediment in the valley basin. However, based on the elevation of the site, the lake did not cover this particular area and no lacustrine sediments related to the Bonneville Lake Cycle underlie the site.

The surficial geology at the site has been mapped by both Machette (1992) and Biek (2005). Machette shows the site to be covered by alluvial fan deposits mapped as Unit af1, upper Holocene Fan Alluvium, on the northern portion of the site, and Unit afy, Holocene to uppermost Pleistocene Younger Fan Alluvium, on the southern half of the site. The more recent geologic map completed by Biek shows the majority of the site to be covered by Unit Qaf2, Holocene to upper Pleistocene Level 2 Alluvial Fan Deposits. The northwest corner of the site is mapped by Biek to be covered by Unit Qaf1, Holocene Modern Alluvial Fan Deposits. The southeast corner is mapped to be covered with Unit Qafy, Holocene to Upper Pleistocene Younger Undifferentiated Alluvial Fan Deposits. Both Machette (1992) and Biek (2005) map a young (Holocene) debris flow deposit emanating from Wadsworth Canyon and projecting south, away from the subject site.

The subject site is located partially within the Wasatch Fault Zone and specifically adjacent to the northern end of the Provo Segment of the fault zone. The Wasatch Fault Zone is considered to be an "active" fault zone. An active fault zone is defined as one that has shown evidence of displacement during Holocene time (past 10,000 years). The Wasatch Fault Zone runs in a southerly direction from near the Utah-Idaho border to central Utah. The fault zone is comprised of six to ten separate segments. A number of studies have been completed on the Wasatch Fault, including studies by Swan and others (1980), Schwartz and Coppersmith (1984), Lund and others (1991), Machette and others (1991, 1992), McCalpin and others (1994), and Black and others (1995). Evidence of multiple surface rupture events on the five central segments of the fault zone during the late Pleistocene and Holocene has been documented. Recurrence intervals for these events during the past 5,600 years are on the order of 350 years for the entire fault zone and 1,275 to 2,800 years

for individual segments. The most recent surface rupture events on the five central segments of the fault zone appear to have occurred between 620 ± 30 and $2,120 \pm 100$ years ago. These surface rupture events have been estimated to be associated with paleo-earthquakes of surface wave magnitude (M_s) 6.5 to 7.5 (Machette, 1992; McCalpin and Nishenko, 1996).

Machette (1992) mapped a primary surface rupture trace of the fault zone approximately 200 feet east of the southeast corner of the site, at the base of the mountain slope. This west-dipping fault trace is shown to strike slightly east of north and is paralleled by a relatively short, east-dipping antithetic fault that is mapped crossing the extreme southeast corner of the subject site. This east-dipping fault is mapped as the west boundary of an apparent graben structure that is bounded by the mapped fault segments. Biek (2005) does not map this graben structure and the west-bounding antithetic fault. He does map a single, north-northeast striking, west-dipping fault trace just over 200 feet east of the southeast corner of the subject site. Biek shows the fault trace to be concealed at the surface by fan alluvium along its entire course east of the site. Based on our observations and findings during this assessment, as well as the respective scales of the two referenced geologic maps, we conclude that the mapping completed by Biek (2005) is the more accurate of the two maps. A portion of this map showing the subject site and surrounding area is included as Figure No. 4, *Geologic Map*, Appendix A.

6.0 OTHER MAP AND AERIAL PHOTOGRAPH REVIEW

Neither Machette (1992) or Biek (2005) mapped any landslide deposits or features on the site or on adjacent sites, including the mountain slope directly east. A landslide map of the Provo 30' x 60' Quadrangle by Harty (1992) was also reviewed. This map shows no landslide deposits or features on or in the vicinity of the subject property, including the slopes directly east of the site.

The Utah County Natural Hazards Overlay Map (2001) shows that the subject site has been mapped as a potential debris flow hazard area. The southeast quarter of the site is also shown to be a potential surface fault rupture hazard area primarily based on the previously discussed mapping by Machette (1992).

Aerial photographs (USGS, 1997 & Digital Globe/ Navteq, 2007) of the site and surrounding area show the subject site and adjacent surrounding properties to be located in an apparent alluvial fan depositional environment consistent with the referenced maps. A stereoscopic analysis of the USGS (1997) photographs (stereo pairs) of the site was completed. There is no photographic evidence of recent debris flow deposits or other landslide activity on the site. No lineaments or other surficial features that could indicate surface fault rupture scarps were observed crossing the site. The previously discussed faulting and associated graben structure interpreted and mapped by Machette (1992) crossing the southeast corner of the site was not observed during our photograph review.

7.0 SITE RECONNAISSANCE

A geologic reconnaissance of the site was conducted on August 14, 2007. The reconnaissance consisted of a traverse of the subject property and surrounding properties by the undersigned geologist to observe the existing surficial conditions for evidence of potential geologic hazards.

As previously discussed, the site is covered with alluvial fan deposits consisting of poorly sorted gravel ranging in size from pebbles to small boulders situated in a fine-grained matrix of clay to fine sand. The gravel clasts were all observed to be subangular to angular in shape consistent with alluvial fan deposits. Based on the topography of the site and surrounding area, it was readily apparent that the primary sources of the sediment at the site are Box Elder Canyon to the northeast and Wadsworth Canyon to the southeast.

The alluvial fan surfaces at the site were observed to be incised in several places by shallow gullies that appear to have been formed by past runoff erosion on the surface. All of the gullies were observed to flow in a general southwest direction. None of the shallow gullies showed evidence of recent runoff or erosion and were largely overgrown with vegetation. No debris levees were observed paralleling the gullies on the site. No surface water, including streams, ponds, springs, or seeps were observed on the site.

No scarps or other breaks in slope that could indicate past surface fault rupture were apparent on the subject site, including the area of the mapped (Machette, 1992) antithetic fault and graben on the

southeast portion of the site. No older or fresh scarping was observed to the east of the site in the area of the primary, west-dipping fault trace mapped by both Machette (1992) and Biek (2005). There is a north-northeast trending break in slope at the base of the mountain slope to the east where the slope contacts the alluvial fans. We believe that the mapped primary, west-dipping fault trace generally follows this break in slope to the east of the site based on the referenced geologic mapping, our aerial photograph analysis, and our site observations.

In addition to the site and the area directly east between the site and the mountain slope, the apex areas of the alluvial fans at the mouths of Box Elder and Wadsworth Canyons were observed during the site reconnaissance. Significant development in the form of single family homes and roads has occurred on the apex of the alluvial fan at the mouth of Box Elder Canyon. The main feeder channel emanating from the canyon has incised a deep (40 to 50 feet) gully into the alluvial fan for approximately 1,200 feet from the mouth of the canyon. At approximately 1,200 feet from the canyon mouth, a 60 inch diameter concrete culvert pipe has been placed in the channel and the gully has been filled in down-slope to the west to Box Elder Trail. The concrete pipe travels under the road and ends on the west side of the road where the natural channel, shallower at this point (5 to 10 feet deep), continues down-slope to the west. The feeder channel was dry at the time of the reconnaissance and the channel up-slope from the concrete pipe did not appear to contain any significant debris from recent debris flows or other sedimentation. The concrete pipe appeared to be clear of any significant debris or other blockage. The fan at the mouth of Wadsworth Canyon has not been developed and the apex portion of the fan is densely vegetated with scrub oak and sage brush. The main feeder channel emanating from the canyon has only incised a shallow, 1 to 2 feet deep, gully into the fan. Older debris levees were observed near the canyon mouth along the edges of the channel. The levees were observed to be 3 to 4 feet in height, extended no more than 150 feet down slope from the mouth of the canyon, and were overgrown with vegetation and moderately eroded. The channel was dry at the time of the reconnaissance and did not show evidence of recent debris flows or significant sedimentation. The topography of the fan at the mouth of Wadsworth

Canyon slopes down to the northeast, toward the subject site, as well as to the west and southwest.

8.0 GEOLOGIC HAZARDS

8.1 Debris Flows and Flooding

Based on our site reconnaissance and the previously cited geologic mapping, debris flow and alluvial fan flooding hazards appear to be the most significant potential geologic hazards at the location of the subject site. As discussed, the site is located on alluvial fans that have been formed by sediment deposited by ephemeral stream flow and debris flow events emanating from Box Elder and Wadsworth Canyons. Alluvial fan flooding and debris flows can pose a significant threat to development on the alluvial fan. Alluvial fan flooding and debris flows can inundate basements, push homes off of foundations, and damage or destroy structures and landscaping. Both hazards are generally triggered by rapid snow melt and/or intense, localized precipitation events in the drainage area of the mountainous area that accumulate water and/or debris in the drainage channel. The water and debris then flow down the channel, scour additional debris and sediment from the channel, and flow onto the alluvial fan at the mouth of the drainage. Flooding events generally involve primarily dilute stream flow with lesser amounts of sediment and the sediment load has no effect on flow behavior or yield strength. Hyperconcentrated flows consist of water with a higher sediment load that leads to a measurable yield strength. Debris flows (sometimes called mudflows or debris torrents) consist mostly of a slurry of sediment and debris that can include large boulders, trees, and mud. Debris flows are characterized by a substantial yield strength and plastic behavior but generally retain some partial liquid properties (Pierson and Costa, 1987). Deposits from stream flow and hyperconcentrated flows are generally clast supported and somewhat sorted due to individual particles and clasts falling out of suspension as the flow moves along. Larger, denser particles generally fall out and deposit first, with finer, less-dense particles moving downstream and being deposited last. Debris flows generally move as a single phase water-sediment mixture and deposit as a heterogeneous, poorly sorted, matrix supported unit. The alluvial fan deposits exposed in our subsurface explorations and observed at the surface on the site appear to be comprised predominantly of debris flow deposits.

It is our conclusion that the frequency of such events at the site is relatively small. This conclusion is based upon the absence of evidence of recent or significant historical debris flow or flooding events at the site and areas up-slope to the drainage mouths, and the relatively dry climatic conditions that generally and currently persist in the area. This conclusion does not preclude the potential for future debris flows and flooding from impacting the site, however, we estimate the recurrence interval for such events to be relatively long. Recurrence intervals are loosely estimated to be greater than 100 years at the site, however, more detailed studies would be required to support this estimate. It should be noted, however, that the longer the time period between debris flow events in a drainage, more sediment and debris can accumulate in the main feeder channel and any tributary channels. This additional sediment and debris becomes available for bulking in the channel and deposition on the alluvial fan and, in general, would result in larger volume and potentially more destructive debris flow events as more time passes between such events. Wildfires in the drainage can also significantly increase the frequency and size of both flooding and debris flow events following the fire and until burned vegetation can be reestablished.

Based on the site reconnaissance and cited previous geologic and topographic mapping of the site and surrounding area, the entire area of subject site has been impacted by debris flow events in the past. Due to the erratic and largely unpredictable nature of debris flow run-out paths once the material reaches the alluvial fan, the entire area of the site has the potential to be impacted by future debris flows and fan flooding. Debris flow run-out paths, flow velocities, flow energies, and flow volumes are difficult to estimate and require detailed studies to predict. Such studies are beyond the scope of this assessment and would require the expertise of an experienced hydrologist or engineer. However, we anticipate that the areas of the site that would be at greatest risk from these hazards would be the proposed lots on the southeast and southern portion of the site (Lots 11, 13, 14, 15, 16, 17, and 18), and the lots on the northwest portion of the site (Lots 1, 2, 3, and 4). These proposed lots are shown on Figure No 3. The listed lots on the southeast and southern portion of the site are at greatest risk from debris flows and floods emanating from Wadsworth Canyon. There are

currently no hazard mitigation features in this drainage or on the alluvial fan at the mouth of the drainage. As previously discussed (Section 7.0), the main feeder channel from Box Elder Canyon has deeply incised the alluvial fan for a distance of approximately 1,200 feet downslope from the mouth of the canyon to a point where a 60 inch diameter concrete culvert has been placed in the channel bottom. The channel and culvert are buried downslope to Box Elder Trail where the culvert crosses beneath the road and empties on the west side of the road into the preexisting natural channel that continues on downslope in a westward direction. These improvements appear to have been designed to adequately control normal seasonal and flood-type runoff from Box Elder Canyon. However, should a large debris flow event occur in the drainage, and the flow reach the culvert, the culvert could, and would likely, become clogged and obstructed with larger pieces of debris (boulders, trees, etc.), causing the debris flow, and additional water runoff, to backup in the channel (where there is significant storage capacity) and possibly breach the channel banks. This type of event poses the greatest threat to the listed lots on the northwest portion of the site. However, in such an event, we anticipate that the debris flow would lose considerable energy and velocity prior to breaching the channel and that most larger debris would likely remain in the channel. Down-slope flow of the breached material would likely consist of relatively shallow, fine-grained, low energy, and low velocity mud slurries and water flow.

Although some methods for mitigation of debris flows and fan flooding hazards generally require more detailed study by an experienced hydrologist or engineer to determine or estimate appropriate design parameters, some general possible options for mitigation of debris flow and flooding hazards at the site are presented below.

1. Do nothing and accept the risk posed by potential flooding and debris flow hazards. If this option is chosen, all future property owners, occupants, or residents on the subject site should be informed of, and understand, the risks associated with potential

flooding and debris flows on the alluvial fan areas. Although this a potential option, we do not recommend a “do nothing” approach to hazard mitigation.

2. Design and build the proposed homes at the site to be resistant to flooding and debris flow damage. This measure alone does not totally eliminate the risk of property damage and could be implemented in conjunction with other forms of mitigation. Measures could include the following:
 - a. As required by Section 5-12-D-3 of the Utah County Land Use Ordinance, any occupied structures, including single family residences, located on an alluvial fan subject to debris flows and not protected by other forms of mitigation (catchment basins or berms) should be engineered to resist fluid entry at any point up to an equivalent fluid pressure load of $19,640 \text{ N/m}^3$ (125 lb/ft^3). It is recommended that all proposed houses at the site be designed according to this standard unless other forms of mitigation (See options 3 and 4 below) are implemented up-slope of the house locations.
 - b. In conjunction with option “a” above, avoid placing sub-grade window wells and doors on the east, north, and south sides of the homes where the potential for inundation from water and debris flowing down-slope is greatest.
3. Design and construct a berm/channel system to intercept water and debris emanating from Wadsworth Canyon along at least the southern half of the east site boundary and the entire length of the south site boundary. A similar type system could be constructed along the western half of the north site boundary to intercept potential water and debris that might breach the Box Elder Canyon Channel. If implemented, these mitigation features should be designed and constructed to intercept a design

debris flow and/or flooding event, and direct the debris and water to an acceptable location that does not threaten existing or future development.

4. Design and construct some form of off-site mitigation system, such as a catchment basin or diversion structure, in the drainages or at the mouths of the drainages up-slope of the site. Such off-site mitigation systems would likely require the acquisition of additional property for the locations of the systems and could be expensive to construct. Therefore, such systems may not be economically realistic or feasible with regards to the planned development, and existing off-site property to the east includes federally designated wilderness area which would not likely allow such mitigation. These types of systems also often require agreements between the developer and local municipality regarding required periodic maintenance of the system.

Options 3 and 4 discussed above would require additional, more detailed, studies by experienced hydrologists or engineers to determine or estimate appropriate design parameters.

8.2 Surface Fault Rupture

As discussed above, the southeastern quarter of the site is located in a surface fault rupture special study zone as mapped by Utah County (2001) and interpreted surface fault rupture traces have been mapped crossing the southeast corner of the site and to the east by Machette (1992) and Biek (2005). To address this potential hazard, and to identify and map any surface fault rupture traces crossing the site, an exploration trench (Trench ET-1) was excavated adjacent to the south property line of the site and extending west from the southeast site corner to the edge of the fault rupture special study area. Trench ET-1 was excavated by a track-mounted backhoe from August 20 to 29, 2007. The south wall of the trench was cleaned and logged by an experienced geologist using standard tools and techniques. The trench reached a maximum depth of approximately 12 feet below the existing

ground surface and was approximately 509 feet in length. The trench was located to cross the mapped location of the antithetic fault trace mapped by Machette (1992), to be as close as possible to the west-dipping primary fault trace to the east mapped by both Machette (1992) and Biek (2005), and to limit the area of disturbance to the area along the south property boundary where future house locations would not be impacted by the disturbance of the soils. The approximate location of the exploration trench, along with the locations of test pits excavated to conduct percolation testing throughout the site, are shown on Figure No. 5, *Locations of Explorations*, Appendix A.

A representative log of the south wall of Trench ET-1 was prepared at a scale of 1 inch equals 5 feet. This log is included as Figure No. 6, *Exploration Trench Log*, Appendix A. Descriptions of the soil units exposed in trench are included on Figure No. 6 as well as a key to symbols used on the log.

No evidence of surface fault rupture or related ground deformation was observed in the exposed soils through the length of the trench. The antithetic fault trace and related graben structure mapped by Machette (1992) crossing the southeast corner of the site were not found in the trench. The soils exposed in the trench were interpreted to be alluvial fan sediments consisting of several debris flow deposits. Based on the observations and findings of our exploration trenching, site reconnaissance, and aerial photograph review, we rate the relative potential for surface fault rupture hazards at the site as low.

8.3 Tectonic and Coseismic Ground deformation

In addition to surface rupturing, other forms of tectonic and coseismic ground deformation can occur as the result of earthquake events and intense ground motion during a large magnitude earthquake. This type of ground deformation can include secondary faulting, cracking, ground tilting or uplift, subsidence, soil liquefaction, and slope failure. Our geologic reconnaissance of the site and observations of the exposed soils in Trench ET-1 did not reveal evidence of significant past ground deformation. However, the location of the site adjacent to the active Wasatch Fault Zone leads to

the conclusion that such deformation is possible at the site during a large magnitude earthquake event. Proposed houses and other structures at the site should be designed and constructed according to the current seismic design standards in the International Building Code. The Utah County Natural Hazards Overlay Map (2001) indicates that the site is located in a "low" liquefaction potential area. Based primarily on the location of the site adjacent to an active tectonic fault zone, we rate the relative potential hazard from tectonic and coseismic ground deformation at the site as moderate.

8.4 Landslides

As discussed in Section 6.0, no landslide features or deposits have been mapped on or adjacent to the subject property. No evidence of past landslide activity was observed on or adjacent to the site during our site reconnaissance. In addition, there are no significant slopes on the site steeper than 20% that would, based on slope alone, be at higher risk for landslide activity. Based on this evidence, the relative landslide hazard potential on the site is rated as low.

8.5 Rockfall

Rockfall can occur on slopes or cliffs where rock outcrops and/or loose boulders are present. Rocks can be dislodged from the outcrops or from the slope surface by natural weathering processes or by ground shaking during an earthquake event. Once dislodged, the rocks can roll or bounce down the slope and have the potential to cause damage to property and threaten life in the run-out zone at the base of the slope. Based on our observations during the geologic reconnaissance of the site, the subject lot is not located in a potential rockfall run-out zone. No rockfall clasts were observed on the property. The nearest potential rockfall source area is on the steeper mountains approximately 1,400 feet east of the site. In addition, the Utah County Natural Hazards Overlay Map (2001) does not show the site to be located in a rockfall hazard zone. Based on our observations, we rate the relative potential rockfall hazard at the site as low.

8.6 Radon

A radon hazard potential map of Utah prepared by Black (1993), indicates that the subject property is located in an area of "moderate to high" radon hazard potential. Radon is a radioactive gas that is a product of the natural radioactive decay of uranium, a trace element commonly found in soils and bedrock. Radon is believed to be a significant cause of lung cancer in humans. Radon can enter groundwater and the atmosphere as it moves upward after being produced naturally in the subsurface. The gas has the potential to enter buildings through cracks and other openings in footings and floor slabs and can affect buildings of any age or type. The radon hazard map reviewed for this report is only intended to be used as a general reference. Radon levels in buildings are influenced by both geological and non-geological factors and levels can vary from site to site. Radon testing would be necessary to determine actual indoor radon levels in any existing or future buildings at the site. Radon mitigation systems are relatively inexpensive and easy to install below floor slabs at the time of building construction. Such systems could be considered for future houses at the site as a preventative measure.

8.7 Other Geologic Hazards

Other geologic hazards that are not likely to affect the subject site due to the location of the site, the regional geologic setting, or the low probability of occurrence are seismic seiche and volcanic eruption. The probability of these hazards affecting the site is rated as low.

9.0 CONCLUSIONS

Based on our site reconnaissance, map and aerial photograph review, and exploration trenching, the subject property is located in a geologic and tectonic setting that is at high potential risk from debris flow and alluvial fan flooding hazards and relatively moderate to low risk from most other geologic hazards. Common geologic hazards and their relative potential threat (high, moderate, or low) to development on the subject property are listed below.

1. Debris Flows and Alluvial Fan Flooding
High relative threat for the entire site. More detailed studies by an experienced hydrologist or engineer may be required to fully address these hazards and provide design recommendations for mitigation. A discussion of these potential hazards and possible options for mitigation measures on the site are presented in Section 8.1 of this report.

2. Surface fault rupture
Low threat for the entire site.

3. Tectonic and Coseismic Ground Deformation
Moderate threat for the entire site.

4. Landslides
Low threat for the entire site.

5. Rockfall
Low threat for the entire site.

6. Radon
Moderate to high on the entire site, however, site specific indoor radon testing would be required to confirm this assessment and determine actual radon levels.

7. Seismic Seiche and Volcanic Eruption
Low threat for the entire site.

It is our conclusion that the subject property is located in a geologically sensitive location where several types of hazards are present and could pose a risk to development. However, we also conclude that with additional study these hazards (primarily debris flow and fan flooding) can be effectively mitigated and the proposed development can occur with an acceptable factor of safety. All current or future property owners and/or occupants on the subject property should fully understand the findings and conclusion of this assessment and the potential risks associated with owning property and/or living at the site. By choosing to live in a potentially geologically sensitive location, all property owners and/or occupants must accept the associated geologic hazard risks.

10.0 PERCOLATION TESTING

In conjunction with our geologic hazards assessment, percolation tests were conducted in test pits at seven locations throughout the site to assess the ability of the soils to transmit water. The purposes of these tests are to aid in the design of drainage sumps and to assess the feasibility of using on-site waste-water septic systems on the proposed lots. The locations of the test pits where percolation tests were conducted are shown on Figure No. 5. It should be noted that we intended to conduct an eighth test near the northwest corner of the site but the client's excavator did not excavate a test pit in this area prior to the testing. We do not believe that this eighth test would have resulted in a significantly different percolation rate than was found in the tests at the seven other locations throughout the site as the percolation rates were relatively consistent. The following table lists the results of the percolation testing.

Table No. 1 Percolation Test Results

Test Pit	Depth of Test Below Surface	Soil Type at Test Depth	Stabilized Percolation Rate (Minutes Per Inch)
TP-1	5 to 6 feet	Clayey Gravel (GC)	6.2
TP-2	4.5 to 5.5 feet	Silty Gravel (GM)	10.0
TP-3	6.5 to 7.5 feet	Silty Gravel (GM)	10.0
TP-4	4.5 to 5.5 feet	Clayey Gravel (GC)	6.7
TP-5	4 to 5 feet	Poorly Graded Gravel with Silty Sand (GP-GM)	5.7
TP-6	4.5 to 5.5 feet	Clayey Gravel (GM)	10.0
TP-7	6.5 to 7.5 feet	Silty Gravel (GM)	5.7

It should be noted that the percolation tests holes were not kept saturated for the typical 12 to 24 hour period prior to conducting the tests that is usually required for septic system design. Thus, percolation testing for septic system design will likely result in somewhat slower percolation rates. However, we believe, based on the soil conditions and our past experience, that percolation rates suitable for the design and implementation of on-site septic systems can be achieved at the site.

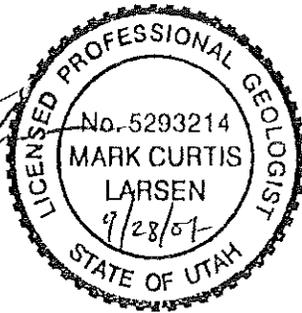
11.0 GENERAL INFORMATION

The observations, conclusions, and recommendations presented in this report were conducted and presented within the limits prescribed by our client and according to the generally accepted practices of the engineering geology profession. No other warranty or representation, either expressed or implied, is intended in our proposals, contracts, reports, and letters.

We appreciate the opportunity to be of service to you. If you have any questions, please call.

Respectively,
EARTHTEC TESTING & ENGINEERING, P.C.


Mark C. Larsen, P.G.
Project Geologist





William G. Turner, P.E.
Senior Geotechnical Engineer

REFERENCES CITED

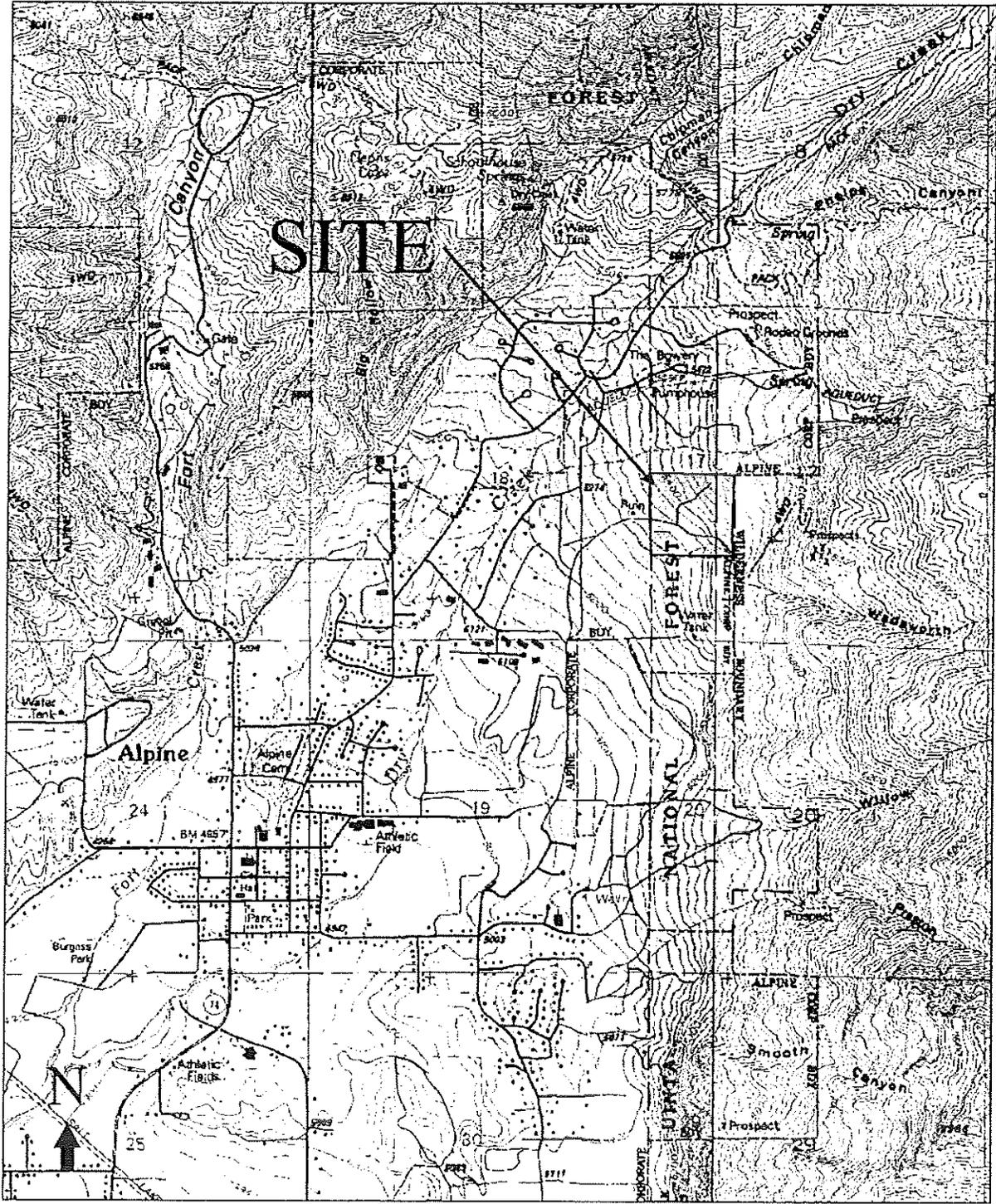
- Biek, R., F., 2005, *Geologic Map of the Lehi Quadrangle and Part of the Timpanogos Cave Quadrangle, Salt Lake and Utah Counties, Utah*; Utah Geological Survey Map 210, Scale 1:24,000.
- Black, B.D., Lund, W.R., and Mayes, B.H., 1995, *Summary of New Information From the South Fork Dry Creek Site, Salt Lake County, Utah: Environmental and Engineering Geology of the Wasatch Front Region*, edited by W.R. Lund, Utah Geological Association Pub. 24, p. 11-30.
- Black, B.D., 1993, *The Radon-Hazard-Potential Map of Utah*; Utah Geological Survey Map 149, scale 1:500,000.
- Christenson, G.E., Batatian, L.D., & Nelson, C.V., 2003, *Guidelines for Evaluating Surface-Fault-Rupture Hazards in Utah*; Utah Geological Survey Miscellaneous Publication 03-6.
- Harty, K., 1992, *Landslide Map of the Provo 30' x 60' Quadrangle, Utah*; Utah Geological Survey, Open File Report 256, Scale 1:100,000.
- Hecker, S., 1993, *Quaternary Tectonics of Utah With Emphasis on Earthquake-Hazard Characterization*; Utah Geological Survey Bulletin 127.
- Hungr, O., Morgan, G.C., and Kellerhals, R., 1984, *Quantitative Analysis of Debris Torrent Hazards for Design of Remedial Measures*; Canadian Geotechnical Journal, Vol. 21, 1984, p. 663-677.
- Lund, W.R., Schwartz, D.P., Mulvey, W.E., Budding, K.E., and Black, B.D., 1991, *Fault Behavior and Earthquake Recurrence on the Provo Segment of the Wasatch Fault Zone at Mapleton, Utah County, Utah: Paleoseismology of Utah, Vol. 1*, Utah Geological Survey Special Study 75, 41 pp.
- Machette, M.N., Personius, S.F., Nelson, A.R., Schwartz, D.P., and Lund, W.R., 1991, *Segmentation and History of Holocene Earthquakes, Wasatch Fault Zone, Utah: Journal of Structural Geology, Vol. 13*, p. 137-149.
- Machette, M. N., 1992, *Surficial Geologic map of the Wasatch Fault Zone, Eastern Part of Utah Valley, Utah County and Parts of Salt Lake and Juab Counties, Utah*; U.S. Geological Survey Miscellaneous Investigations Series, Map I-2095, Scale: 1:50,000.

- McCalpin, J.P., Forman, S.L., and Lowe, M., 1994, *Reevaluation of Holocene Faulting at the Kaysville Site, Weber Segment of the Wasatch Fault Zone, Utah*: Tectonics, Vol. 13, p. 1-16.
- McCalpin, J.P., and Nishenko, S.P., 1996, *Holocene Paleoseismicity, Temporal Clustering, and Probabilities of Future Large ($M > 7$) Earthquakes on the Wasatch Fault Zone, Utah*: Journal of Geophysical Research, Vol. 101, No. B3, p. 6233-6253.
- Pierson, T.C., and Costa, J.E., 1987, *A Rheologic Classification of Subaerial Sediment-Water Flows*, in Costa, J.E., and Wieczorek, G.F., eds., *Debris Flow/ Avalanches*: Geological Society of America Reviews in Engineering Geology, Vol. VII, p. 1-12.
- Schwartz, D.P., and Coppersmith, K.J., 1984, *Fault Behavior and Characteristics of Earthquakes-Examples from the Wasatch and San Andreas Fault Zones*: Journal of Geophysical Research, Vol. 89, No. B7, p. 5681-5698.
- Swan, F.H., III, Schwartz, D.P., and Cluff, L.S., 1980, *Recurrence of Moderate to Large Magnitude Earthquakes Produced by Surface Faulting on the Wasatch Fault Zone, Utah*: Bulletin Seismological Society of America, Vol. 70, p. 1431-1462.
- USGS Aerial Photograph, 1997. Photo obtained from www.terraser-ver-usa.com.
- Digital Globe/ Navteq Aerial Photograph, 2007. Photo obtained from www.earth.google.com.
- Utah County Natural Hazards Overlay Map, 2001, *Faults/ Liquefaction*, Utah County Public Works Department Mapping Division, Scale: 1:80,000.
- Utah County Land Use Ordinance, Utah County Planning Department.

APPENDIX A

VICINITY MAP

BOX ELDER SOUTH



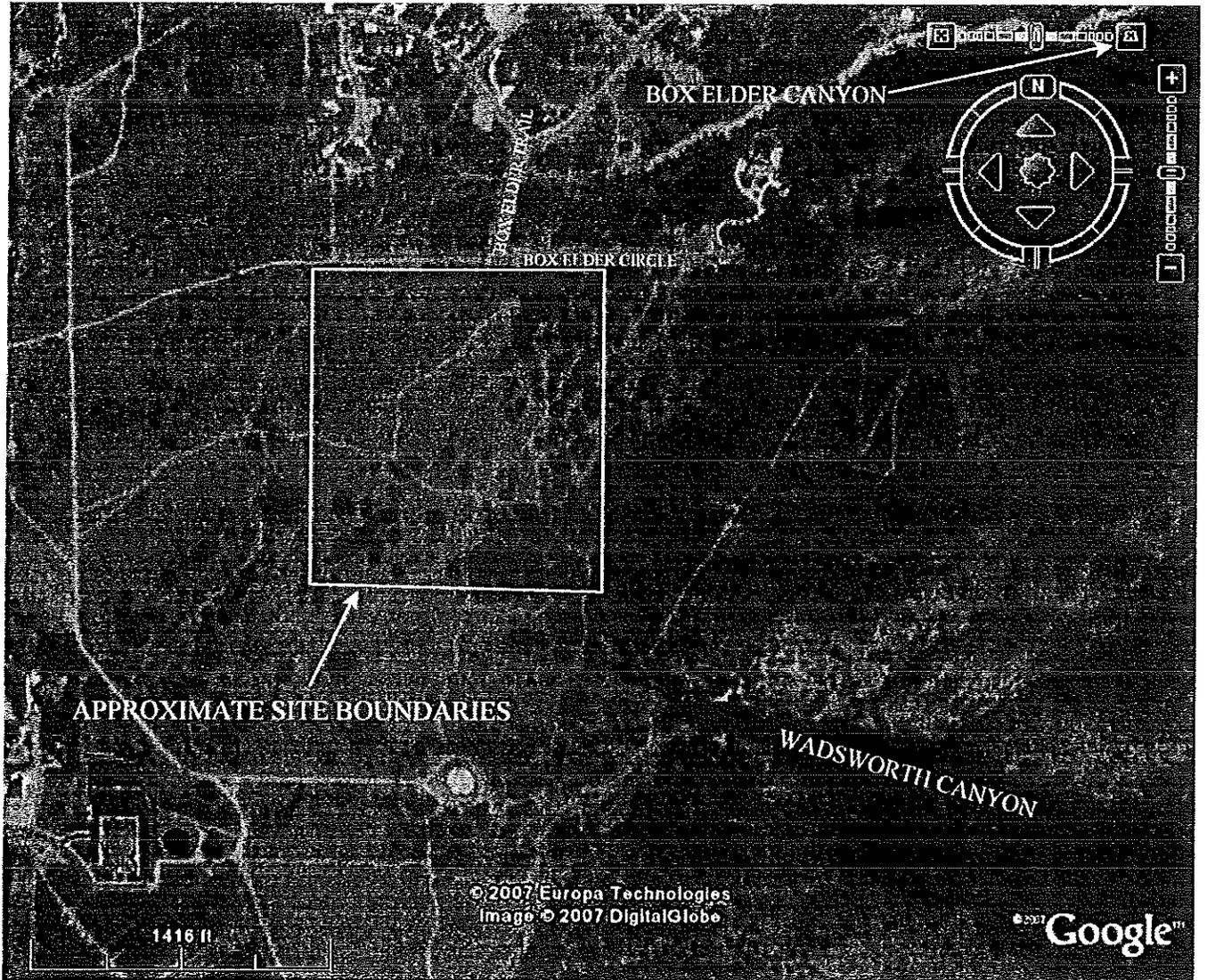
PROJECT NO.: 072247



FIGURE NO.: 1

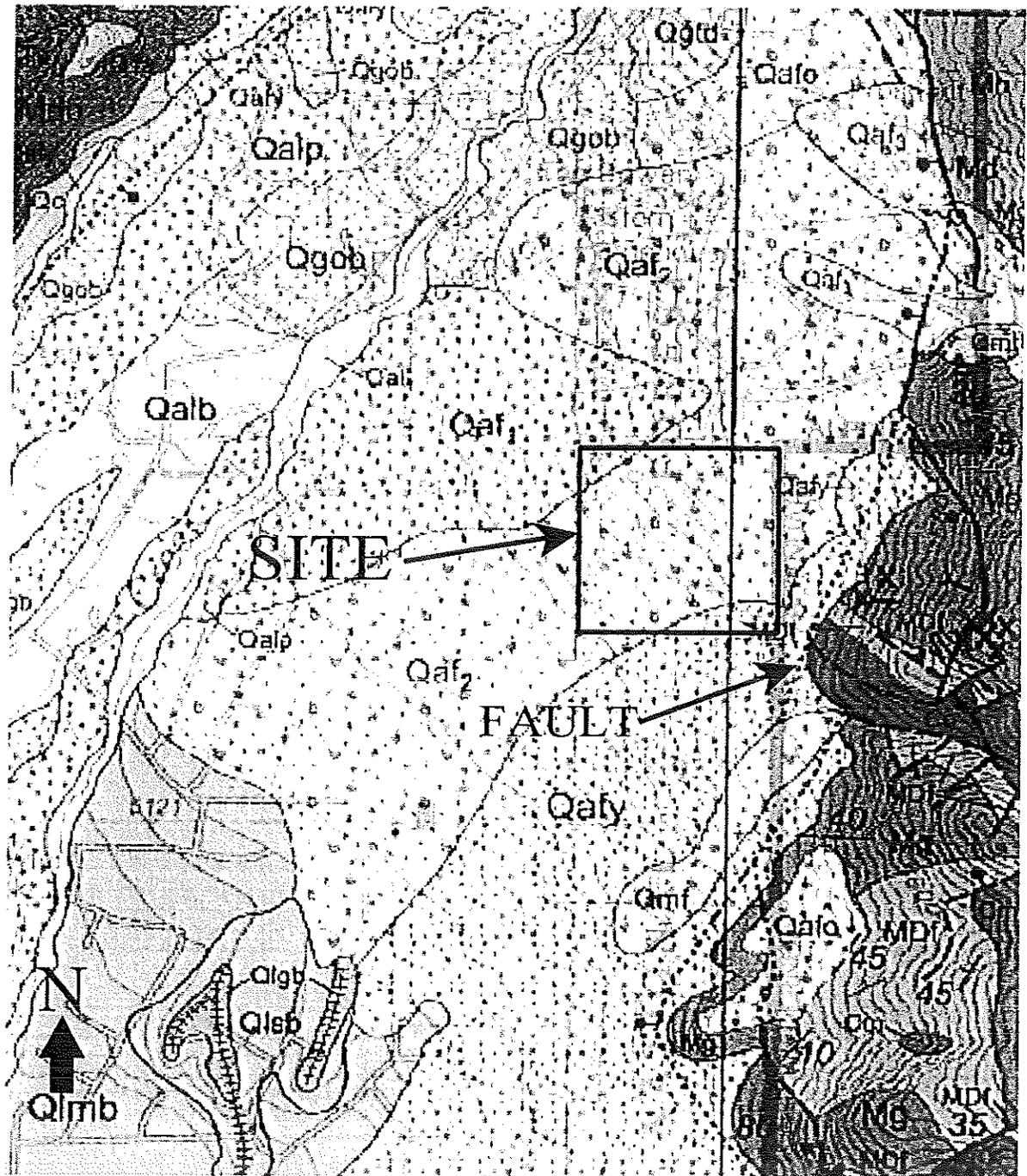
AERIAL PHOTOGRAPH

BOX ELDER SOUTH



GEOLOGIC MAP

BOX ELDER SOUTH



Map from Biek (2005)
Scale: 1 inch is approximately 1,150 feet

GEOLOGIC MAP LEGEND

BOX ELDER SOUTH

MAP UNIT DESCRIPTIONS

QUATERNARY

Alluvial deposits

- Qal₁** Stream deposits (Holocene) - Moderately to well-sorted sand, silt, clay, and pebbles to boulder gravel in river channels and flood plains; locally includes small alluvial-fan and colluvial deposits, and minor terraces up to 10 feet (3 m) above current base level; mapped principally along the larger streams in the quadrangle, including American Fork River and Dry Creek; generally 0 to 20 feet (0-6 m) thick
- Qal₂₋₃** Stream terrace deposits (Holocene to Upper Pleistocene) - Moderately to well-sorted sand, silt, clay, and pebbles to boulder gravel that forms level to gently sloping terraces incised by modern streams; subscript denotes height above modern stream channels; level 2 deposits are 10 to 30 feet (3-9 m), and level 3 deposits are 30 to 75 feet (10-20 m) above modern drainages, deposited in river channels and flood plains; generally 0 to 20 feet (0-6 m) thick
- Qaly** Young alluvial deposits (Holocene to Upper Pleistocene) - Moderately sorted sand, silt, clay, and pebbles to boulder gravel deposited in river channels and flood plains; incised by active stream channels, and locally include small alluvial-fan and colluvial deposits; equivalent to modern stream deposits (Qal₁) and older, post-Bonneville stream deposits that are undifferentiated because units are completely overlapping; probably less than 20 feet (6 m) thick
- Qalc** Older alluvial deposits (Upper Pleistocene) - Moderately sorted sand, silt, clay, and pebbles to boulder gravel incised by younger alluvial deposits in Fort Canyon; probably less than 30 feet (9 m) thick; small deposit overlying Dry Creek glacial outwash (Qgd) in Fort Canyon is well-cemented, subangular to subrounded pebbles conglomerate composed of Pennsylvanian or Permian calcareous sandstone clasts and is about 3 feet (1 m) thick
- Qalp** Alluvial deposits related to the Provo phase of the Bonneville lake cycle (Upper Pleistocene) - Moderately to well-sorted sand, silt, and pebble gravel deposited principally in river channels; coarsens upgradient and includes boulder-size clasts in the upper reaches of Dry Creek; locally includes veneer of fine-grained eolian sand and silt, and may include loess veneer; large deposits in south-central part of quadrangle are mostly alluvial deposit beds that grade into Provo-level deltas; deposits (Qalp) derived from American Fork and Dry Creek Canyons; generally 5 to 20 feet (2-6 m) thick
- Qalpo** Older alluvial deposits related to the Provo phase of the Bonneville lake cycle (Upper Pleistocene) - Moderately to well-sorted sand, silt, and pebbles to boulder gravel deposited in ancestral Dry Creek channel; forms terrace remnant north of Alpine that is about 30 feet (9 m) above adjacent Qalp deposits; may include loess veneer; exposed thickness about 30 feet (9 m)
- Qalb** Alluvial deposits related to the Bonneville phase of the Bonneville lake cycle (Upper Pleistocene) - Moderately sorted sand, silt, and pebbles to boulder gravel deposits of ancestral Dry Creek that are graded to the Bonneville shoreline; about 20 feet (6 m) thick
- Qalf** Modern alluvial-fan deposits (Holocene) - Poorly to moderately sorted, non-stratified, clay- to boulder-size sediment deposited principally by debris flows at the mouths of active drainages; upper parts typically characterized by abundant boulders and debris-flow levees that tabulate away from the apex of the fan; equivalent to the younger part of Qaly, but differentiated because they form smaller, isolated fans; generally less than 30 feet (9 m) thick
- Qaf₂** Level 2 alluvial-fan deposits (Holocene to Upper Pleistocene) - Poorly to moderately sorted, clay- to boulder-size sediment deposited principally by debris flows; large deposits at American Fork likely also deposited by perennial and intermittent streams of the American Fork River distributary system, incised by modern alluvial-fan and alluvial deposits; forms moderately dissected surfaces equivalent to the lower part of Qaly; probably less than 30 feet (9 m) thick
- Qaf₃** Level 3 alluvial-fan deposits (Upper Pleistocene) - Poorly to moderately sorted, clay- to boulder-size sediment deposited principally by debris flows; locally conceals the Bonneville shoreline and is incised by younger undifferentiated alluvial deposits; forms deeply dissected surface north of Alpine; probably less than 40 feet (12 m) thick
- Qaf_y** Younger undifferentiated alluvial-fan deposits (Holocene to Upper Pleistocene) - Equivalent to modern, level-2, and the upper part of level-3 alluvial-fan deposits, but undifferentiated because units are completely overlapping or too small to show separately; upper parts of fans are locally deeply incised; thickness unknown, but likely up to several tens of feet
- Qanf** Alluvial-fan deposits related to the Provo phase of the Bonneville lake cycle (Upper Pleistocene) - Poorly to moderately sorted, clay- to cobble-size sediment deposited principally by debris flows; larger deposits at Utah and American Fork are mostly reworked deltaic and fan-delta deposits; incised by younger alluvial and alluvial fan deposits; deposited by streams associated with the Provo (regressive) phase of Lake Bonneville; thickness unknown, but likely up to several tens of feet

MAP SYMBOLS

- Contour interval of 100 feet (30 m) and 200 feet (60 m) where indicated
- Natural fault, dashed where approximately located, and 100-foot (30-m) interval and 100-foot (30-m) interval, 100-foot (30-m) interval, 200-foot (60-m) interval, 300-foot (90-m) interval, 400-foot (120-m) interval, 500-foot (150-m) interval, 600-foot (180-m) interval, 700-foot (210-m) interval, 800-foot (240-m) interval, 900-foot (270-m) interval, 1000-foot (300-m) interval, 1100-foot (330-m) interval, 1200-foot (360-m) interval, 1300-foot (390-m) interval, 1400-foot (420-m) interval, 1500-foot (450-m) interval, 1600-foot (480-m) interval, 1700-foot (510-m) interval, 1800-foot (540-m) interval, 1900-foot (570-m) interval, 2000-foot (600-m) interval, 2100-foot (630-m) interval, 2200-foot (660-m) interval, 2300-foot (690-m) interval, 2400-foot (720-m) interval, 2500-foot (750-m) interval, 2600-foot (780-m) interval, 2700-foot (810-m) interval, 2800-foot (840-m) interval, 2900-foot (870-m) interval, 3000-foot (900-m) interval, 3100-foot (930-m) interval, 3200-foot (960-m) interval, 3300-foot (990-m) interval, 3400-foot (1020-m) interval, 3500-foot (1050-m) interval, 3600-foot (1080-m) interval, 3700-foot (1110-m) interval, 3800-foot (1140-m) interval, 3900-foot (1170-m) interval, 4000-foot (1200-m) interval, 4100-foot (1230-m) interval, 4200-foot (1260-m) interval, 4300-foot (1290-m) interval, 4400-foot (1320-m) interval, 4500-foot (1350-m) interval, 4600-foot (1380-m) interval, 4700-foot (1410-m) interval, 4800-foot (1440-m) interval, 4900-foot (1470-m) interval, 5000-foot (1500-m) interval, 5100-foot (1530-m) interval, 5200-foot (1560-m) interval, 5300-foot (1590-m) interval, 5400-foot (1620-m) interval, 5500-foot (1650-m) interval, 5600-foot (1680-m) interval, 5700-foot (1710-m) interval, 5800-foot (1740-m) interval, 5900-foot (1770-m) interval, 6000-foot (1800-m) interval, 6100-foot (1830-m) interval, 6200-foot (1860-m) interval, 6300-foot (1890-m) interval, 6400-foot (1920-m) interval, 6500-foot (1950-m) interval, 6600-foot (1980-m) interval, 6700-foot (2010-m) interval, 6800-foot (2040-m) interval, 6900-foot (2070-m) interval, 7000-foot (2100-m) interval, 7100-foot (2130-m) interval, 7200-foot (2160-m) interval, 7300-foot (2190-m) interval, 7400-foot (2220-m) interval, 7500-foot (2250-m) interval, 7600-foot (2280-m) interval, 7700-foot (2310-m) interval, 7800-foot (2340-m) interval, 7900-foot (2370-m) interval, 8000-foot (2400-m) interval, 8100-foot (2430-m) interval, 8200-foot (2460-m) interval, 8300-foot (2490-m) interval, 8400-foot (2520-m) interval, 8500-foot (2550-m) interval, 8600-foot (2580-m) interval, 8700-foot (2610-m) interval, 8800-foot (2640-m) interval, 8900-foot (2670-m) interval, 9000-foot (2700-m) interval, 9100-foot (2730-m) interval, 9200-foot (2760-m) interval, 9300-foot (2790-m) interval, 9400-foot (2820-m) interval, 9500-foot (2850-m) interval, 9600-foot (2880-m) interval, 9700-foot (2910-m) interval, 9800-foot (2940-m) interval, 9900-foot (2970-m) interval, 10000-foot (3000-m) interval, 10100-foot (3030-m) interval, 10200-foot (3060-m) interval, 10300-foot (3090-m) interval, 10400-foot (3120-m) interval, 10500-foot (3150-m) interval, 10600-foot (3180-m) interval, 10700-foot (3210-m) interval, 10800-foot (3240-m) interval, 10900-foot (3270-m) interval, 11000-foot (3300-m) interval, 11100-foot (3330-m) interval, 11200-foot (3360-m) interval, 11300-foot (3390-m) interval, 11400-foot (3420-m) interval, 11500-foot (3450-m) interval, 11600-foot (3480-m) interval, 11700-foot (3510-m) interval, 11800-foot (3540-m) interval, 11900-foot (3570-m) interval, 12000-foot (3600-m) interval, 12100-foot (3630-m) interval, 12200-foot (3660-m) interval, 12300-foot (3690-m) interval, 12400-foot (3720-m) interval, 12500-foot (3750-m) interval, 12600-foot (3780-m) interval, 12700-foot (3810-m) interval, 12800-foot (3840-m) interval, 12900-foot (3870-m) interval, 13000-foot (3900-m) interval, 13100-foot (3930-m) interval, 13200-foot (3960-m) interval, 13300-foot (3990-m) interval, 13400-foot (4020-m) interval, 13500-foot (4050-m) interval, 13600-foot (4080-m) interval, 13700-foot (4110-m) interval, 13800-foot (4140-m) interval, 13900-foot (4170-m) interval, 14000-foot (4200-m) interval, 14100-foot (4230-m) interval, 14200-foot (4260-m) interval, 14300-foot (4290-m) interval, 14400-foot (4320-m) interval, 14500-foot (4350-m) interval, 14600-foot (4380-m) interval, 14700-foot (4410-m) interval, 14800-foot (4440-m) interval, 14900-foot (4470-m) interval, 15000-foot (4500-m) interval, 15100-foot (4530-m) interval, 15200-foot (4560-m) interval, 15300-foot (4590-m) interval, 15400-foot (4620-m) interval, 15500-foot (4650-m) interval, 15600-foot (4680-m) interval, 15700-foot (4710-m) interval, 15800-foot (4740-m) interval, 15900-foot (4770-m) interval, 16000-foot (4800-m) interval, 16100-foot (4830-m) interval, 16200-foot (4860-m) interval, 16300-foot (4890-m) interval, 16400-foot (4920-m) interval, 16500-foot (4950-m) interval, 16600-foot (4980-m) interval, 16700-foot (5010-m) interval, 16800-foot (5040-m) interval, 16900-foot (5070-m) interval, 17000-foot (5100-m) interval, 17100-foot (5130-m) interval, 17200-foot (5160-m) interval, 17300-foot (5190-m) interval, 17400-foot (5220-m) interval, 17500-foot (5250-m) interval, 17600-foot (5280-m) interval, 17700-foot (5310-m) interval, 17800-foot (5340-m) interval, 17900-foot (5370-m) interval, 18000-foot (5400-m) interval, 18100-foot (5430-m) interval, 18200-foot (5460-m) interval, 18300-foot (5490-m) interval, 18400-foot (5520-m) interval, 18500-foot (5550-m) interval, 18600-foot (5580-m) interval, 18700-foot (5610-m) interval, 18800-foot (5640-m) interval, 18900-foot (5670-m) interval, 19000-foot (5700-m) interval, 19100-foot (5730-m) interval, 19200-foot (5760-m) interval, 19300-foot (5790-m) interval, 19400-foot (5820-m) interval, 19500-foot (5850-m) interval, 19600-foot (5880-m) interval, 19700-foot (5910-m) interval, 19800-foot (5940-m) interval, 19900-foot (5970-m) interval, 20000-foot (6000-m) interval, 20100-foot (6030-m) interval, 20200-foot (6060-m) interval, 20300-foot (6090-m) interval, 20400-foot (6120-m) interval, 20500-foot (6150-m) interval, 20600-foot (6180-m) interval, 20700-foot (6210-m) interval, 20800-foot (6240-m) interval, 20900-foot (6270-m) interval, 21000-foot (6300-m) interval, 21100-foot (6330-m) interval, 21200-foot (6360-m) interval, 21300-foot (6390-m) interval, 21400-foot (6420-m) interval, 21500-foot (6450-m) interval, 21600-foot (6480-m) interval, 21700-foot (6510-m) interval, 21800-foot (6540-m) interval, 21900-foot (6570-m) interval, 22000-foot (6600-m) interval, 22100-foot (6630-m) interval, 22200-foot (6660-m) interval, 22300-foot (6690-m) interval, 22400-foot (6720-m) interval, 22500-foot (6750-m) interval, 22600-foot (6780-m) interval, 22700-foot (6810-m) interval, 22800-foot (6840-m) interval, 22900-foot (6870-m) interval, 23000-foot (6900-m) interval, 23100-foot (6930-m) interval, 23200-foot (6960-m) interval, 23300-foot (6990-m) interval, 23400-foot (7020-m) interval, 23500-foot (7050-m) interval, 23600-foot (7080-m) interval, 23700-foot (7110-m) interval, 23800-foot (7140-m) interval, 23900-foot (7170-m) interval, 24000-foot (7200-m) interval, 24100-foot (7230-m) interval, 24200-foot (7260-m) interval, 24300-foot (7290-m) interval, 24400-foot (7320-m) interval, 24500-foot (7350-m) interval, 24600-foot (7380-m) interval, 24700-foot (7410-m) interval, 24800-foot (7440-m) interval, 24900-foot (7470-m) interval, 25000-foot (7500-m) interval, 25100-foot (7530-m) interval, 25200-foot (7560-m) interval, 25300-foot (7590-m) interval, 25400-foot (7620-m) interval, 25500-foot (7650-m) interval, 25600-foot (7680-m) interval, 25700-foot (7710-m) interval, 25800-foot (7740-m) interval, 25900-foot (7770-m) interval, 26000-foot (7800-m) interval, 26100-foot (7830-m) interval, 26200-foot (7860-m) interval, 26300-foot (7890-m) interval, 26400-foot (7920-m) interval, 26500-foot (7950-m) interval, 26600-foot (7980-m) interval, 26700-foot (8010-m) interval, 26800-foot (8040-m) interval, 26900-foot (8070-m) interval, 27000-foot (8100-m) interval, 27100-foot (8130-m) interval, 27200-foot (8160-m) interval, 27300-foot (8190-m) interval, 27400-foot (8220-m) interval, 27500-foot (8250-m) interval, 27600-foot (8280-m) interval, 27700-foot (8310-m) interval, 27800-foot (8340-m) interval, 27900-foot (8370-m) interval, 28000-foot (8400-m) interval, 28100-foot (8430-m) interval, 28200-foot (8460-m) interval, 28300-foot (8490-m) interval, 28400-foot (8520-m) interval, 28500-foot (8550-m) interval, 28600-foot (8580-m) interval, 28700-foot (8610-m) interval, 28800-foot (8640-m) interval, 28900-foot (8670-m) interval, 29000-foot (8700-m) interval, 29100-foot (8730-m) interval, 29200-foot (8760-m) interval, 29300-foot (8790-m) interval, 29400-foot (8820-m) interval, 29500-foot (8850-m) interval, 29600-foot (8880-m) interval, 29700-foot (8910-m) interval, 29800-foot (8940-m) interval, 29900-foot (8970-m) interval, 30000-foot (9000-m) interval, 30100-foot (9030-m) interval, 30200-foot (9060-m) interval, 30300-foot (9090-m) interval, 30400-foot (9120-m) interval, 30500-foot (9150-m) interval, 30600-foot (9180-m) interval, 30700-foot (9210-m) interval, 30800-foot (9240-m) interval, 30900-foot (9270-m) interval, 31000-foot (9300-m) interval, 31100-foot (9330-m) interval, 31200-foot (9360-m) interval, 31300-foot (9390-m) interval, 31400-foot (9420-m) interval, 31500-foot (9450-m) interval, 31600-foot (9480-m) interval, 31700-foot (9510-m) interval, 31800-foot (9540-m) interval, 31900-foot (9570-m) interval, 32000-foot (9600-m) interval, 32100-foot (9630-m) interval, 32200-foot (9660-m) interval, 32300-foot (9690-m) interval, 32400-foot (9720-m) interval, 32500-foot (9750-m) interval, 32600-foot (9780-m) interval, 32700-foot (9810-m) interval, 32800-foot (9840-m) interval, 32900-foot (9870-m) interval, 33000-foot (9900-m) interval, 33100-foot (9930-m) interval, 33200-foot (9960-m) interval, 33300-foot (9990-m) interval, 33400-foot (10020-m) interval, 33500-foot (10050-m) interval, 33600-foot (10080-m) interval, 33700-foot (10110-m) interval, 33800-foot (10140-m) interval, 33900-foot (10170-m) interval, 34000-foot (10200-m) interval, 34100-foot (10230-m) interval, 34200-foot (10260-m) interval, 34300-foot (10290-m) interval, 34400-foot (10320-m) interval, 34500-foot (10350-m) interval, 34600-foot (10380-m) interval, 34700-foot (10410-m) interval, 34800-foot (10440-m) interval, 34900-foot (10470-m) interval, 35000-foot (10500-m) interval, 35100-foot (10530-m) interval, 35200-foot (10560-m) interval, 35300-foot (10590-m) interval, 35400-foot (10620-m) interval, 35500-foot (10650-m) interval, 35600-foot (10680-m) interval, 35700-foot (10710-m) interval, 35800-foot (10740-m) interval, 35900-foot (10770-m) interval, 36000-foot (10800-m) interval, 36100-foot (10830-m) interval, 36200-foot (10860-m) interval, 36300-foot (10890-m) interval, 36400-foot (10920-m) interval, 36500-foot (10950-m) interval, 36600-foot (10980-m) interval, 36700-foot (11010-m) interval, 36800-foot (11040-m) interval, 36900-foot (11070-m) interval, 37000-foot (11100-m) interval, 37100-foot (11130-m) interval, 37200-foot (11160-m) interval, 37300-foot (11190-m) interval, 37400-foot (11220-m) interval, 37500-foot (11250-m) interval, 37600-foot (11280-m) interval, 37700-foot (11310-m) interval, 37800-foot (11340-m) interval, 37900-foot (11370-m) interval, 38000-foot (11400-m) interval, 38100-foot (11430-m) interval, 38200-foot (11460-m) interval, 38300-foot (11490-m) interval, 38400-foot (11520-m) interval, 38500-foot (11550-m) interval, 38600-foot (11580-m) interval, 38700-foot (11610-m) interval, 38800-foot (11640-m) interval, 38900-foot (11670-m) interval, 39000-foot (11700-m) interval, 39100-foot (11730-m) interval, 39200-foot (11760-m) interval, 39300-foot (11790-m) interval, 39400-foot (11820-m) interval, 39500-foot (11850-m) interval, 39600-foot (11880-m) interval, 39700-foot (11910-m) interval, 39800-foot (11940-m) interval, 39900-foot (11970-m) interval, 40000-foot (12000-m) interval, 40100-foot (12030-m) interval, 40200-foot (12060-m) interval, 40300-foot (12090-m) interval, 40400-foot (12120-m) interval, 40500-foot (12150-m) interval, 40600-foot (12180-m) interval, 40700-foot (12210-m) interval, 40800-foot (12240-m) interval, 40900-foot (12270-m) interval, 41000-foot (12300-m) interval, 41100-foot (12330-m) interval, 41200-foot (12360-m) interval, 41300-foot (12390-m) interval, 41400-foot (12420-m) interval, 41500-foot (12450-m) interval, 41600-foot (12480-m) interval, 41700-foot (12510-m) interval, 41800-foot (12540-m) interval, 41900-foot (12570-m) interval, 42000-foot (12600-m) interval, 42100-foot (12630-m) interval, 42200-foot (12660-m) interval, 42300-foot (12690-m) interval, 42400-foot (12720-m) interval, 42500-foot (12750-m) interval, 42600-foot (12780-m) interval, 42700-foot (12810-m) interval, 42800-foot (12840-m) interval, 42900-foot (12870-m) interval, 43000-foot (12900-m) interval, 43100-foot (12930-m) interval, 43200-foot (12960-m) interval, 43300-foot (12990-m) interval, 43400-foot (13020-m) interval, 43500-foot (13050-m) interval, 43600-foot (13080-m) interval, 43700-foot (13110-m) interval, 43800-foot (13140-m) interval, 43900-foot (13170-m) interval, 44000-foot (13200-m) interval, 44100-foot (13230-m) interval, 44200-foot (13260-m) interval, 44300-foot (13290-m) interval, 44400-foot (13320-m) interval, 44500-foot (13350-m) interval, 44600-foot (13380-m) interval, 44700-foot (13410-m) interval, 44800-foot (13440-m) interval, 44900-foot (13470-m) interval, 45000-foot (13500-m) interval, 45100-foot (13530-m) interval, 45200-foot (13560-m) interval, 45300-foot (13590-m) interval, 45400-foot (13620-m) interval, 45500-foot (13650-m) interval, 45600-foot (13680-m) interval, 45700-foot (13710-m) interval, 45800-foot (13740-m) interval, 45900-foot (13770-m) interval, 46000-foot (13800-m) interval, 46100-foot (13830-m) interval, 46200-foot (13860-m) interval, 46300-foot (13890-m) interval, 46400-foot (13920-m) interval, 46500-foot (13950-m) interval, 46600-foot (13980-m) interval, 46700-foot (14010-m) interval, 46800-foot (14040-m) interval, 46900-foot (14070-m) interval, 47000-foot (14100-m) interval, 47100-foot (14130-m) interval, 47200-foot (14160-m) interval, 47300-foot (14190-m) interval, 47400-foot (14220-m) interval, 47500-foot (14250-m) interval, 47600-foot (14280-m) interval, 47700-foot (14310-m) interval, 47800-foot (14340-m) interval, 47900-foot (14370-m) interval, 48000-foot (14400-m) interval, 48100-foot (14430-m) interval, 48200-foot (14460-m) interval, 48300-foot (14490-m) interval, 48400-foot (14520-m) interval, 48500-foot (14550-m) interval, 48600-foot (14580-m) interval, 48700-foot (14610-m) interval, 48800-foot (14640-m) interval, 48900-foot (14670-m) interval, 49000-foot (14700-m) interval, 49100-foot (14730-m) interval, 49200-foot (14760-m) interval, 49300-foot (14790-m) interval, 49400-foot (14820-m) interval, 49500-foot (14850-m) interval, 49600-foot (14880-m) interval, 49700-foot (14910-m) interval, 49800-foot (14940-m) interval, 49900-foot (14970-m) interval, 50000-foot (15000-m) interval, 50100-foot (15030-m) interval, 50200-foot (15060-m) interval, 50300-foot (15090-m) interval, 50400-foot (15120-m) interval, 50500-foot (15150-m) interval, 50600-foot (15180-m) interval, 50700-foot (15210-m) interval, 50800-foot (15240-m) interval, 50900-foot (15270-m) interval, 51000-foot (15300-m) interval, 51100-foot (15330-m) interval, 51200-foot (15360-m) interval, 51300-foot (15390-m) interval, 51400-foot (15420-m) interval, 51500-foot (15450-m) interval, 51600-foot (15480-m) interval, 51700-foot (15510-m) interval, 51800-foot (15540-m) interval, 51900-foot (15570-m) interval, 52000-foot (15600-m) interval, 52100-foot (15630-m) interval, 52200-foot (15660-m) interval, 52300-foot (15690-m) interval, 52400-foot (15720-m) interval, 52500-foot (15750-m) interval, 52600-foot (15780-m) interval, 52700-foot (15810-m) interval, 52800-foot (15840-m) interval, 52900-foot (15870-m) interval, 53000-foot (15900-m) interval, 53100-foot (15930-m) interval, 53200-foot (15960-m) interval, 53300-foot (15990-m) interval, 53400-foot (16020-m) interval, 53500-foot (16050-m) interval, 53600-foot (16080-m) interval, 53700-foot (16110-m) interval, 53800-foot (16140-m) interval, 53900-foot (16170-m) interval, 54000-foot (16200-m) interval, 54100-foot (16230-m) interval, 54200-foot (16260-m) interval, 54300-foot (16290-m) interval, 54400-foot (16320-m) interval, 54500-foot (16350-m) interval, 54600-foot (16380-m) interval, 54700-foot (16410-m) interval, 54800-foot (16440-m) interval, 54900-foot (16470-m) interval, 55000-foot (16500-m) interval, 55100-foot (16530-m) interval, 55200-foot (16560-m) interval, 55300-foot (16590-m) interval, 55400-foot (16620-m) interval, 55500-foot (16650-m) interval, 55600-foot (16680-m) interval, 55700-foot (16710-m) interval, 55800-foot (16740-m) interval, 55900-foot (16770-m) interval, 56000-foot (16800-m) interval, 56100-foot (16830-m) interval, 56200-foot (16860-m) interval, 56300-foot (16890-m) interval, 56400-foot (16920-m) interval, 56500-foot (16950-m) interval, 56600-foot (16980-m) interval, 56700-foot (17010-m) interval, 56800-foot (17040-m) interval, 56900-foot (17070-m) interval, 57000-foot (17100-m) interval, 57100-foot (17130-m) interval, 57200-foot (17160-m) interval, 57300-foot (17190-m) interval, 57400-foot (17220-m) interval, 57500-foot (17250-m) interval, 57600-foot (17280-m) interval, 57700-foot (17310-m) interval, 57800-foot (17340-m) interval, 57900-foot (17370-m) interval, 58000-foot (17400-m) interval, 58100-foot (17430-m) interval, 58200-foot (17460-m) interval, 58300-foot (17490-m) interval, 58400-foot (17520-m) interval, 58500-foot (17550-m) interval, 58600-foot (17580-m) interval, 58700-foot (17610-m) interval, 58800-foot (17640-m) interval, 58900-foot (17670-m) interval, 59000-foot (17700-m) interval, 59100-foot (17730-m) interval, 59200-foot (17760-m) interval, 59300-foot (17790-m) interval, 59400-foot (17820-m) interval, 59500-foot (17850-m) interval, 59600-foot (17880-m) interval, 59700-foot (17910-m) interval, 59800-foot (17940-m) interval, 59900-foot (17970-m) interval, 60000-foot (18000-m) interval, 60100-foot (18030-m) interval, 60200-foot (18060-m) interval, 60300-foot (18090-m) interval, 60400-foot (18120-m) interval, 60500-foot (18150-m) interval, 60600-foot (18180-m) interval, 60700-foot (18210-m) interval, 60800-foot (18240-m) interval, 60900-foot (18270-m) interval, 61000-foot (18300-m) interval, 61100-foot (18330-m) interval, 61200-foot (18360-m) interval, 61300-foot (18390-m) interval, 61400-foot (18420-m) interval, 61500-foot (18450-m) interval, 61600-foot (18480-m) interval, 61700-foot (18510-m) interval, 61800-foot (18540-m) interval, 61900-foot (18570-m) interval, 62000-foot (18600-m) interval, 62100-foot (18630-m) interval, 62200-foot (18660-m) interval, 62300-foot (18690-m) interval, 62400-foot (18720-m) interval, 62500-foot (18750-m) interval, 62600-foot (18780-m) interval, 62700-foot (18810-m) interval, 62800-foot (18840-m) interval, 62900-foot (18870-m) interval, 63000-foot (18900-m) interval, 63100-foot (18930-m) interval, 63200-foot (18960-m) interval, 63300-foot (18990-m) interval, 63400-foot (19020-m) interval, 63500-foot (19050-m) interval, 63600-foot (19080-m) interval, 63700-foot (19110-m) interval, 63800-foot (19140-m) interval, 63900-foot (19170-m) interval, 64000-foot (19200-m) interval, 64100-foot (19230-m) interval, 64200-foot (19260-m) interval, 64300-foot (19290-m) interval, 64400-foot (19320-m) interval, 64500-foot (19350-m) interval, 64600-foot (19380-m) interval, 64700-foot (19410-m) interval, 64800-foot (19440-m) interval, 649



Earthtec Engineering, Inc.

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

September 29, 2008

Mr. Steve Sowby
Patterson Construction
11038 N. Highland Blvd.
Highland, UT 84003

Re: **Addendum**
Geologic Hazards Assessment
Box Elder South Development
Utah County, Utah
Job No. 072247

Mr. Sowby:

This letter is an addendum to a geologic hazards assessment¹ completed for the site of the proposed Box Elder South Development located in unincorporated Utah County east of the city of Alpine, Utah. The purpose of this addendum is to address debris flow and alluvial fan flooding hazard mitigation measures that are proposed for the development.

Previous Work

Our referenced geologic hazards assessment for the site identified a potential debris flow and alluvial fan flooding hazard that could impact future development if not mitigated. This potential hazard was identified based on the location of the proposed development on active alluvial fans near the mouths of two significant drainages, and the presence of surficial and subsurface alluvial fan (debris flow) deposits over most of the site. Our previous field work included the excavation of an exploration trench in a general east to west orientation adjacent to the southern property boundary on the southeast portion of the site. It was determined that the proposed lots along the eastern and southern boundaries of the site, as well as several lots adjacent to the northern boundary of the site on the northwest portion of the development, are at greatest risk from potential debris flow and flooding hazards. This determination is based on the locations of these lots on the edges of the development where they would most likely be the first locations to be impacted during a debris flow and/or flooding event. However, it should be noted that such events could impact any lot within the proposed development.

The referenced geologic hazards assessment provided some general possible hazard mitigation options for the development.

¹Earthtec Testing & Engineering, P.C., 2007, *Geologic Hazards Assessment, Box Elder South Development, Utah County, Utah*; Unpublished Consultant's Report, Job No. 072247, Sept. 27, 2007.

Earthtec

Proposed Mitigation

The developer has reconfigured the proposed layout and lot configuration of the development since the completion of our original geologic hazards assessment. An updated site plan showing the new subdivision configuration is attached at the end of this letter. The new site plan includes a 20 foot wide drainage easement along the east and south boundaries of the development. The developer has proposed to construct a ditch-berm system within this easement to catch potential debris and/or flood water and divert it to off-site locations away from the development. It is our understanding that this system will include a 2½ foot deep ditch on the up-slope side of the easement adjacent to a 2½ foot high berm on the down-slope side of the ditch. This will provide an effective barrier height of 5 feet along the east and south sides of the development. It appears from the site plan and our observations of the site that any debris and/or water intercepted by this system will be directed to the west and southwest onto undeveloped land currently owed by Alpine City.

The updated site plan also shows that much of Box Elder Way adjacent to the northern boundary of the site will be constructed on raised road bed fill that will be several feet higher than the natural ground surface on either side of the road. It is our understanding that this road fill will be 2 to 10 feet higher than the surrounding natural ground surface. This raised road will be located directly north of the lots on the northwest portion of the subdivision that were previously identified to be at higher risk from potential debris and water runoff from the northeast.

Based on our understanding of the location of the proposed development and the proposed mitigation measures described above, we provide the following opinions and comments:

1. The proposed ditch and berm system along the east and south sides of the development is expected to provide an adequate factor of safety against most debris flow and flood events that would likely emanate from Wadsworth Canyon to the southwest of the site. This opinion is based on the thickness of the most recent debris flow deposits observed in the exploration trench excavated on the site. These deposits likely occurred during climatic conditions most similar to current conditions. The average deposit thickness of the youngest debris flow deposit observed and measured in the exploration trench was nearly 3.3 feet. The effective height of the proposed ditch and berm system will be 5 feet which should be adequate against similar future debris flow events at the site. It is our opinion that the proposed effective berm-ditch height of 5 feet should be considered a minimum effective height and should be increased if possible, particularly closer to the southeast corner of the site.
2. Our original referenced hazards assessment for the site predicted that potential future events which could impact the lots on the northwest portion of the site would consist of relatively shallow, fine-grained, low energy and velocity mud slurries and water. It is our opinion that the proposed raised road bed for Box Elder Way, located between the northwest portion of the site and the potential debris/flood water source to the northeast, would provide an effective barrier against most debris and flood events flowing in a southwest direction. Most potential debris and water flowing

downslope from the northeast would likely be diverted in a westerly direction along the north side of Box Elder Way before reaching the subdivision. The factor of safety against debris flows and flooding associated with this barrier could be increased by raising the proposed planter strips along each side of Box Elder way. Incorporating a 1 to 2 foot high berm into the planter strips would increase the effective height of the road way barrier and would increase the factor of safety.

3. The developer has proposed to include a note on the development plat that would cite the potential debris flow and flooding hazard, and particularly note the lots at highest relative risk. We support this proposal and also recommend that the potential hazard be disclosed to all future potential property owners within the entire development. The lots at higher relative risk according to the current subdivision configuration (see attached site plan) are as follows:
 - a. Lots 8 through 21 along the east and south borders of the development.
 - b. Lots 1 through 5 on the northwestern portion of the development.

It is our opinion that if the proposed mitigation system is incorporated in the development the potential threat to critical public facilities at the site is low. It is also our opinion that the proposed development and mitigation system discussed herein will not increase the risk to surrounding areas.

Recommendations

The proposed berm and trench debris flow/flood mitigation system at the site should be constructed according to the following recommendations and parameters:

1. As previously discussed, the proposed effective berm and ditch height of 5 feet (berm 2½ feet high, ditch 2½ feet deep) should be considered a minimum effective height. If possible, the height of the berm and/or depth of ditch should be increased as much as possible within the bounds of the 20 foot wide drainage easement.
2. The sides of the berm should be no steeper than 1.5:1 (horizontal: vertical). The sides of the ditch should be no steeper than 2:1 (horizontal: vertical). The ditch should be widened as much as possible within the limits of the easement and the berm.
3. On-site native soils appear to be suitable for the construction of the proposed berm. The berm soils should be placed in minimum 8 to 10 inch thick lifts and compacted to 90% of the maximum dry density as determined by ASTM D-1557. The granular nature of the native soils may inhibit density testing of the berm lifts. It may be prudent to remove larger rocks (greater than 4 inches in effective diameter) from the berm soils prior to lift placement and compaction. It is the developer's/contractor's responsibility to ensure that the berm soils are adequately placed and compacted according to our recommendations.

4. A drainage opening should be made and maintained at the west end of the ditch-berm system to allow debris and water to flow out of the ditch down-slope to the west. The ditch-berm system will require periodic maintenance to ensure that the system functions properly during a debris flow or flood event. This maintenance will include periodic (at least yearly) cleaning of the ditch to remove any loose soil, rocks, or debris that could block flow in the ditch, and needed repairs to the berm due to erosion or other processes that could compromise its effectiveness. The system will also require immediate cleaning and repair during or directly following a debris flow or flooding event to remove debris and repair any damage to the structures. It should be determined prior to approval and construction of the ditch-berm system who will be responsible for conducting this periodic maintenance work.

Conclusions

It is our conclusion that the proposed debris flow and flood mitigation system for the subject development will provide a sufficient factor of safety against these potential hazards for the majority of such events at the site. It is our conclusion that an acceptable level of risk can be established at the site by properly constructing and maintaining the proposed hazard mitigation system discussed herein.

General Conditions

The observations, opinions, recommendations, and conclusions presented in this letter were conducted in accordance with presently accepted practices of the engineering geology profession and within the limits prescribed by our client. No other warranty or representation, either expressed or implied, is intended in our proposals, contracts, reports, and letters.

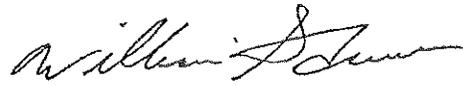
We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please contact us at (801) 225-5711.

Respectfully;

EARTHTEC ENGINEERING, INC.


Mark C. Larsen, P.G.
Project Geologist




William G. Turner, P.E.
Senior Geotechnical Engineer

Earthtec Engineering, Inc.

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

May 6, 2010

Mr. Scott Worthington, P.E.
Berg Engineering Resource Group
45 North 490 West
American Fork, Utah 84003

**Re: Addendum
Geologic Hazards Assessment
Box Elder South Development
Utah County, Utah
Job No. 072247**

Mr. Worthington:

At your request, we are providing this addendum letter in response to comments from the Utah County Attorney's Office regarding our previous Geologic Hazards Assessment^{1 2} for the subject site near Alpine, Utah County, Utah. In response to the comments from the County Attorney's Office, we provide the following comments and clarifications.

It is our opinion that our referenced, previous geologic hazards assessment for the subject site was sufficient to meet the standards of the Utah County Land Use Ordinance and accurately depicts the hazards to be encountered at the site.

Our previous work did not include an assessment of the location of the proposed water tank at the site. Additional, site specific geologic hazards assessment would be required to make any conclusions and mitigation recommendations regarding the water tank location.

Our referenced geologic hazards assessment stated that the potential risk from radon is moderate to high on the entire site. This relative risk assessment is based on mapping by the Utah Geological Survey which is largely based on site geologic conditions. Radon levels in buildings can vary from site to site and is usually influenced by a number of geological and structural factors. Thus, our report stated that indoor radon testing would be required to determine actual radon levels in future buildings at the site. It is our opinion, based on the potentially moderate to high radon risk at the site, that radon mitigation measures are warranted for any future habitable structures at the site. As stated in the referenced report, radon mitigation systems are typically relatively inexpensive and easy to install below floor slabs at the time of building construction.

¹ Earthtec Testing & Engineering, P.C., 2007, Geologic Hazards Assessment, Box Elder South Development, Utah County, Utah; Unpublished consultant's report, Job No. 072247, September 27, 2007.

² Earthtec Engineering, Inc., 2008, Addendum, Geologic Hazards Assessment, Box Elder South Development, Utah County, Utah; Unpublished consultant's report, Job No. 072247, September 29, 2008.

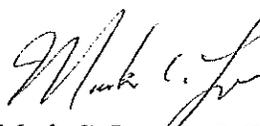
Addendum
Geologic Hazards Assessment
Box Elder South Development
Utah County, Utah
Job No. 072247

We have reviewed the most recent site plans showing our previously recommended hazard mitigation measures for the subject development. Based on our review and understanding of the plans, it is our opinion that the recommended mitigation features have been designed according to our recommendations. Based on the planned configuration of Box Elder Drive adjacent to the northern boundary of the site, and as discussed in our referenced report, we recommend that the areas in the planter strips adjacent to the road be raised to at least 2 feet above the road surface to provide an added factor of safety against shallow, sheet-flow type flooding.

This letter is an addendum to our referenced reports and subject to the same conditions and limitations presented therein.

We appreciate the opportunity of providing our services on this project. If we can answer questions or be of further service, please contact us at (801) 225-5711.

Respectfully;
EARTHTEC ENGINEERING, INC.


Mark C. Larsen, P.G.
Project Geologist



ALPINE CITY COUNCIL AGENDA

SUBJECT: National Forest Service/Patterson Construction Land Trade

FOR CONSIDERATION ON: July 28, 2015

PETITIONER: City Council

ACTION REQUESTED BY PETITIONER: For Council information

INFORMATION: Mayor Watkins received an email from the National Forest Service discussing a proposed land trade between the National Forest Service and Patterson Construction. A copy of the email to the Mayor and map of the proposed area to be traded is attached. The Mayor has invited Jon Stansfield, District Ranger, Uinta-Wasatch-Cache National Forest, Pleasant Grove Ranger District, to address the Council on the proposed trade.

RECOMMENDED ACTION: For Council information only.

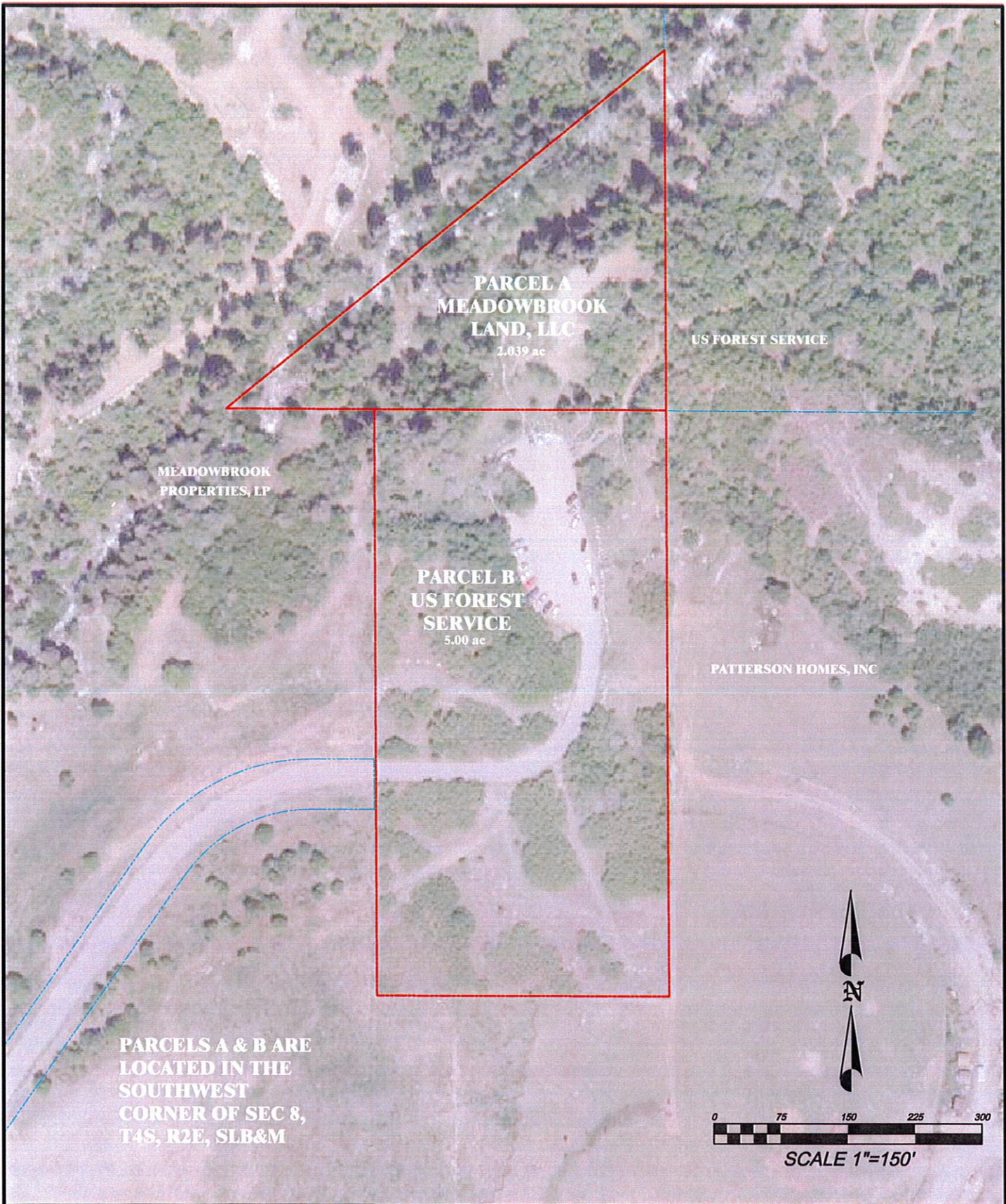


EXHIBIT 1
CURRENT EXISTING PARCELS

SHEET NUMBER

1

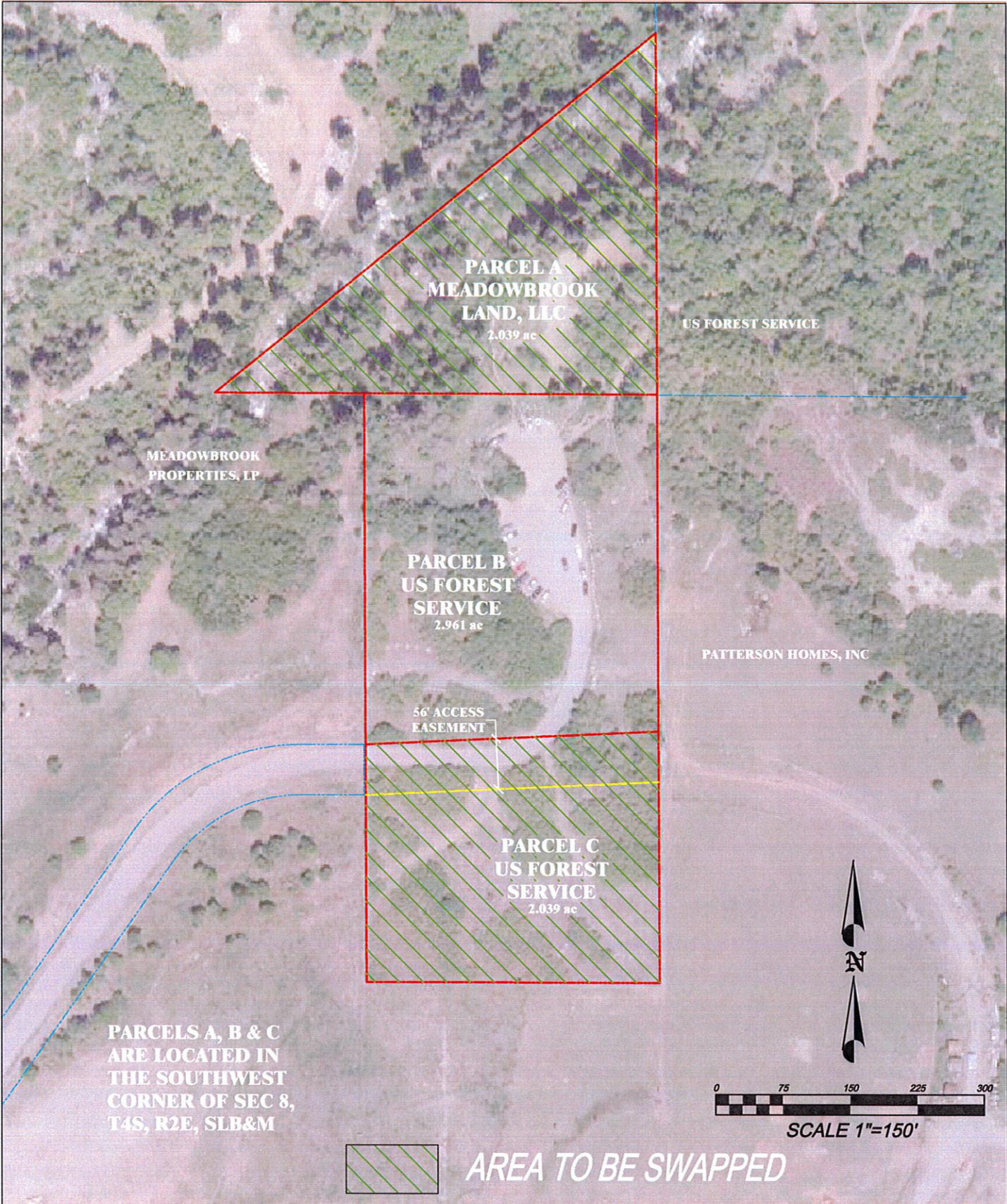


EXHIBIT 2
PROPOSED LAND SWAP

SHEET NUMBER

2

ALPINE CITY COUNCIL AGENDA

SUBJECT: Alpine City Council Rules of Procedure for the Public Meetings of the City Amendment.

FOR CONSIDERATION ON: July 28, 2015

PETITIONER: Council Members Will Jones and Roger Bennett

ACTION REQUESTED BY PETITIONER: That the Council amend RULE NO 9 by eliminating that rule and it replacing it with the language in the State code.

INFORMATION: Resolution No. R-2011-04 “A Resolution of the Governing Body of Alpine City Adopting Rules of Procedure for the Public Meetings of the City” was approved on February 8, 2011. It was drafted by David Church and sponsored by Council Member Kent Hastings. It is attached.

RECOMMENDED ACTION: That the Council decide if they want to replace Rule No. 9 or keep it the same or change it.

RESOLUTION NO. R-2011-04

A RESOLUTION OF THE GOVERNING BODY OF ALPINE CITY ADOPTING
RULES OF PROCEDURE FOR THE PUBLIC MEETINGS OF THE CITY

WHEREAS, Utah Code Section 10-3-606 allows each city to adopt rules of procedure for its meetings; and

WHEREAS, Utah Code Section 10-3-607 allows a city to adopt rules of conduct for the members of the City council; and

WHEREAS, it is generally felt that rules of procedure and conduct will aid the city council of Alpine city to perform its functions in an efficient and public friendly manner.

NOW THEREFORE BE RESOLVED by the Governing Body of Alpine City as follows:

1. The Attached Exhibit entitled Alpine City Council Procedures is hereby adopted as the rules of procedure for conducting of all meetings of the Alpine City Council
2. This resolution shall take effect immediately upon passing.

Passed and dated this 8th day of February, 2011.

Attest:

Recorder

Mayor



ALPINE CITY COUNCIL Meeting Procedures

Recognizing that the City Council, as a legislative body, needs a systematic way of conducting its business, these rules of procedure are to provide for the orderly conduct of City business by the City Council, with the objective of providing for full, open, and comprehensive debate of issues brought before the City Council for action in a forum open to the public, and which encourages citizens' awareness of City Council activities.

These procedures do not increase or diminish the existing powers or authority of the Mayor or City Council members, as set forth in state law or local ordinance.

CITY COUNCIL MEETING AGENDA

All meetings of the Alpine City Council will have a notice and agenda that complies with the Utah Open Meetings Act

The agenda shall contain the following items and be in substantially the following form:

- I. CALL TO ORDER
 - A. ROLL CALL
 - B. PRAYER
 - C. PLEDGE OF ALLEGIANCE:
- II. PUBLIC COMMENT
- III. CONSENT CALENDAR, APPROVE MINUTES OF PREVIOUS MEETING
- IV. PUBLIC HEARING (AS NEEDED)
- V. ACTION ON PUBLIC HEARING
- VI. INVITED PRESENTATIONS
- VII. ACTION/DISCUSSION ITEMS
- VIII. STAFF REPORTS
- IX. COUNCIL COMMUNICATION
- X. EXECUTIVE SESSION (AS NEEDED)
- XI. ADJOURN

An Item may be placed on the agenda by the Mayor or at the request of any two council members.

Agenda Items must be submitted to the City Recorder at least 1day before the date of the meeting. Any item that is submitted to the City Recorder after1 day will be put on the next following meeting agenda. Requestor should notify the Mayor of the added agenda item.

ROLE OF THE MAYOR AS COUNCIL CHAIR AND OTHER COUNCIL MEMBERS:

- The Mayor shall preside at meetings of the City Council.
- Participate in discussion of all matters.
- Shall vote as a member thereof only in case of a tie or where otherwise specifically authorized to do so by state law, and shall have no power to veto.

In addition, the Mayor, as the Chair, has the primary responsibility for ensuring that the Council's rules of procedure are followed and:

- For maintaining the dignity of Council meetings.
- Calls the meeting to order and confines the discussion to the agenda.
- Recognizes Council members for motions and statements and may allow audience and staff participation at appropriate times.
- Requires knowledge of the Alpine City adopted rules of parliamentary procedure and how to apply it.
- Ensures that the Utah Open and Public Meetings Act is complied with.
- Knows how to courteously discourage Council members who talk too much or too often.
- Knows how to courteously ensure those who have the floor are not interrupted and to rule out of order those not following meeting procedures.
- Recognizes the Council member offering the motion, restates the motion, presents it to the Council for consideration, calls for the vote, announces the vote, and then announces the next order of business.

CODE OF CONDUCT FOR CITY COUNCIL AND MAYOR INCLUDES:

- Council members' remarks should always be directed to the Mayor.
- Remarks should apply to the question under debate.
- Shall avoid references to personalities, and refrain from questioning motives of other members or staff personnel.
- Demonstrate courtesy and shall not disrupt proceedings.
- Shall not use their positions to secure privileges or personal gains and shall avoid situations which could cause anyone to believe that they may have brought bias or partiality to a question before the City Council.
- Shall be dedicated to the principles of representative democracy by recognizing that the chief function of local government is to serve the best interests of the public at large while respecting individual rights.

- Shall be dedicated to the effective use of the City’s available resources.
- Shall refrain from any activity that would hinder their ability to be objective and impartial.
- City business shall be discussed in open, well-publicized meetings, except in rare situations in which Executive Sessions are authorized.

PARLIAMENTARY RULES:

The following may be referred to as the Alpine City’s Rules of Order and shall be the parliamentary rules for conducting the business of the City Council. The City Attorney will serve as the Parliamentarian, and will recommend rulings, upon request by the presiding officer, to all points of order raised during the proceedings. Each Rule is followed by a recommended Procedure and Purpose to explain the Rule and guide the Mayor and council members in its intended application.

RULE NO. 1: The meeting is governed by the agenda and the agenda constitutes the City Council's agreed-upon roadmap for the meeting.

PROCEDURE. Each agenda item can be handled by the Mayor in the following basic format:

First, the Mayor should clearly announce the agenda item number and should clearly state what the agenda item subject is.

Second, following that agenda format, the Mayor should invite the appropriate person or persons to report on the item, including any recommendation that they might have. The appropriate person or persons may be the Mayor, a member of the City Council, a staff person, or an invited person charged with providing input on the agenda item.

Third, the Mayor should ask members of the City Council if they have any technical questions of clarification. At this point, members of the City Council may ask clarifying questions to the person or persons who reported on the item, and that person or persons should be given time to respond.

Fourth, the Mayor should invite public comments if at a formal public hearing and should open the public hearing for public input. If numerous members of the public indicate a desire to speak to the subject, the Mayor may limit the time of public speakers. At the conclusion of the public comments, the Mayor should announce that the public hearing is closed. For a regularly scheduled agenda item, the Mayor may invite public comment. *Fifth*, the Mayor should invite a motion. The Mayor should announce the name of the member of the City Council who makes the motion.

Sixth, the Mayor should determine if any member of the City Council wishes to second the motion. The Mayor should announce the name of the member of the City Council who seconds the motion. If there is no second then the item will be deemed concluded without decision

Seventh, if the motion is made and seconded, the Mayor should make sure everyone understands the motion. This is done in one of three ways: (1) The Mayor can ask the maker of the motion to repeat it. (2) The Mayor can repeat the motion. (3) The Mayor can ask the City Recorder to repeat the motion.

Eighth, the Mayor should now invite discussion of the motion by the City Council. If there is no desired discussion, or after the discussion has ended, the Mayor should announce that the City Council will vote on the motion. If there has been no discussion or very brief discussion, then the vote on the motion should proceed immediately and there is no need to repeat the motion. If there has been substantial discussion, then it is normally best to make sure everyone understands the motion by repeating it.

Ninth, the Mayor takes a vote. All votes for purposes of the meeting minutes shall be by roll call of the council.

Tenth, the Mayor should announce the result of the vote and should announce what action (if any) the City Council has taken.

PURPOSE OF THE RULE: All meetings must comply with the Utah Open and Public Meetings Act which requires that a notice and an agenda for a public meeting be prepared in advance of the meeting and that no final action be taken on any item that is not on the agenda. In addition the Act requires that the minutes of the meeting contain certain minimum information including the name of any member of the council speaking on an issue, the substance of what the member says, an accurate description of any action taken by the council and the voting record of each individual member of the council.

RULE NO 2: Any matter that requires a City Council decision shall be brought before the Council by motion.

PROCEDURE. The procedure for any motion shall be as follows: First, the Mayor should recognize the member of the City Council. Second, the member of the City Council makes a motion by preceding the member's desired approach with the words: "I move"

So, a typical motion might be: "I move that we give the City Attorney a raise in pay."

The Mayor usually initiates the motion by either (1) Inviting the members of the City Council to make a motion. "A motion at this time would be in order." (2) Suggesting a motion to the members of the City Council. "A motion would be in order that we give the City Attorney a raise in pay." (3) Making the motion. As noted, the Mayor has every right as a member of the City Council to make a motion, but should normally do so only if the Mayor wishes to make a motion on an item but is convinced that no other member of the City Council is willing to step forward to do so at a particular time. (4) Reading a motion suggested by the City Staff.

PURPOSE OF THE RULE. The purpose of this rule is to limit items under discussion to those and only those that the council members want to discuss; give clarity as to what is being decided; and to make sure everyone, including the person

taking the minutes actually knows and can remember what the ultimate outcome of any discussion and debate is.

RULE NO 3: One question at a time and one speaker at a time.

PROCEDURE: Only one question will be discussed at a time. The question may have several motions.

There will only be one speaker at a time. Anyone who wishes to speak must raise their hand first after the current speaker finishes. The Mayor will call upon the person by name. Once a member has been recognized, he has been granted “the floor” and may begin speaking. The speaker may not be interrupted except as allowed by these rules.

If a councilmember wishes to ask a question during their time and retain the floor to speak after the question has been answered they may indicate so before posing the question by saying something similar to “I have additional comments and wish to retain the floor after this question has been answered.”

PURPOSE OF THE RULE. The purpose is to focus on only one question and to allow council members the ability to express their points of consideration without losing their train of thought and to completely finish without fear of interruption.

RULE NO 4: The Mayor may use General Consent (also known as Unanimous Consent) with all motions except those motions where the votes are used for purposes of the meeting minutes and require a roll call of the council.

PROCEDURE: When the Mayor feels the council is all in agreement, the Mayor asks if there are any objections to the motion to amend, withdraw, or any motions in Rule No. 7. The Mayor pauses and if there are no objections states that the motion is approved. If there is any objection then the motion is put to a regular vote. A council member may object simply because he or she feels it is important to have a formal vote.

Example: The Mayor states, “If there is no objection, we will recess for 10 minutes, [pause to see if any member objects]. There being no objection, we will recess for 10 minutes.

If a member objects by stating, “I object” the matter is then put to a vote.

The Mayor states, “An objection being made, the question is shall we recess for 10 minutes? As many as are in favor, say Aye. Those opposed, say No. The Ayes have it and we will recess for 10 minutes.”

PURPOSE OF THE RULE. General consent is helpful in expediting general routine business or when the Mayor senses the council is in agreement. General consent allows flexibility of the rules while protecting the right of the majority to decide and the minority to be heard.

RULE NO 5: There are only three basic forms of motions allowed: Initial Motions, Motions to Amend, and Substitute Motions.

PROCEDURE: The initial motion. The initial motion is the one that puts forward an item for the City Council's consideration. An initial motion might be: "I move that we give the City Attorney a pat on the back."

The motion to amend. If a member wants to change the initial motion that is before the City Council, they would move to amend it. A motion to amend might be: "I move that we amend the motion to give the attorney a kick in the butt." A motion to amend takes the initial motion which is before the City Council and seeks to change it in some way. The motion to amend must be germane to the initial motion. The motion to amend must not be the same as a negative vote on the initial motion.

The substitute motion. If a member wants to completely do away with the initial motion that is before the City Council, and put a new motion before the City Council, they would move a substitute motion. A substitute motion might be: "I move a substitute motion that we get a new City Attorney."

PURPOSE OF THE RULE. "Motions to amend" and "substitute motions" are often confused. But they are quite different, and their effect (if passed) is quite different. A motion to amend seeks to retain the basic motion on the floor, but modify it in some way. A substitute motion seeks to throw out the basic motion on the floor, and substitute a new and different motion for it. The decision as to whether a motion is really a "motion to amend" or a "substitute motion" is left to the Mayor. So that if a member makes what that member calls a "motion to amend", but the Mayor determines that it is really a "substitute motion", then the Mayor's designation governs.

RULE NO 6. There can be up to three motions on the floor at the same time and no more than three. The Mayor can reject a fourth motion until the Mayor has dealt with the three that are on the floor and has resolved them.

PROCEDURE: When there are two or three motions on the floor (after motions and seconds) at the same time, the vote should proceed first on the last motion that is made. So, for example, assume the first motion is a basic "motion to give the City Attorney a pat on the back." During the discussion of this motion, a member might make a second motion to "amend the main motion to give the City Attorney a kick in the butt." And perhaps, during that discussion, a member makes yet a third motion as a "substitute motion that we just get rid of the City Attorney." The proper procedure would be as follows:

First, the Mayor would deal with the third (the last) motion on the floor, the substitute motion. After discussion and debate, a vote would be taken first on the third motion. If the substitute motion passed, it would be a substitute for the basic motion and would eliminate it. The first motion would be moot, as would the second motion (which sought to amend the first motion), and the action on the agenda item would be completed on the passage by the City Council of the third motion (the

substitute motion). No vote would be taken on the first or second motions. On the other hand, if the substitute motion (the third motion) failed then the Mayor would proceed to consideration of the second (now, the last) motion on the floor, the motion to amend.

Second, if the substitute motion failed, the Mayor would now deal with the second (now, the last) motion on the floor, the motion to amend. The discussion and debate would focus strictly on the amendment (should the City Attorney be kicked in the butt). If the motion to amend passed the Mayor would now move to consider the main motion (the first motion) as amended. If the motion to amend failed the Mayor would now move to consider the main motion (the first motion) in its original format, not amended.

Third, the Mayor would now deal with the first motion that was placed on the floor. The original motion would either be in its original format (pat on the back), or, if amended, would be in its amended format (kick in the butt). And the question on the floor for discussion and decision would be what part of the City Attorney's anatomy would be subject to assault.

PURPOSE OF THE RULE: Too many motions on the same subject can cause confusion as to what the end result is and in the official record. Limiting the number of motions to no more than three at a time, allows for enough debate and parliamentary maneuvering to satisfy those who want to be clever while allowing the slow to still keep up.

RULE NO 7: The debate can continue as long as members of the City Council wish to discuss an item, subject to the Mayor determining it is time to move on and take action by using General Consent to limit debate or by a proper motion by a council member to limit the debate. The following motions are not debatable—a motion to adjourn; a motion to recess; a motion to fix a time to adjourn; a motion to table; and a motion to limit debate.

PROCEDURE. There are exceptions to the general rule of free and open debate on motions. The exceptions all apply when there is a desire of the City Council to move on. The following motions are not debatable (that is, when the following motions are made and seconded, the Mayor must immediately call for a vote of the City Council without debate on the motion):

A motion to adjourn. This motion, if passed, requires the City Council to immediately adjourn to its next regularly scheduled meeting. It requires a simple majority vote.

A motion to recess. This motion, if passed, requires the City Council to immediately take a recess. The length should be set in the motion which may be a few minutes or an hour. It requires a simple majority vote.

A motion to fix the time to adjourn. This motion, if passed, requires the City Council to adjourn the meeting at the specific time set in the motion. For example, the motion might be: "I move we adjourn this meeting at midnight." It requires a simple majority vote.

A motion to table. This motion, if passed, requires discussion of the agenda item to be halted and the agenda item to be placed on "hold". The motion can contain a specific time in which the item can come back to the City Council: "I move we table this item until our regular meeting in October." Or the motion can contain no specific time for the return of the item, in which case the matter will not be placed back on an agenda for a future city council meeting except at the order of the Mayor or the request of any two council members. A motion to table an item requires a simple majority vote.

A motion to limit debate. The most common form of this motion is to say: "I move the previous question" or "I move the question" or "I call the question." When a member of the City Council makes such a motion, the member is really saying: "I've had enough debate. Let's get on with the vote". When such a motion is made, the Mayor should ask for a second, stop debate, and vote on the motion to limit debate. The motion to limit debate requires a simple majority vote of the City Council.

PURPOSE OF THE RULE. Debate and discussion are important until they are not. When a matter is chewed on enough it should be swallowed. This rule allows the Mayor by General Consent or the majority of the council to end the debate, after a reasonable time. It also keeps those in a minority position on an issue from filibustering until they get their way.

RULE NO 8: Three yes votes are required to pass any item before the council with limited exceptions. A motion to go into close session (executive session) requires a 2/3 vote of the members present. The mayor is entitled to vote in cases of a tie and where specifically allowed by state law.

PROCEDURE. If the mayor and all five members of the council are present, a vote of 3-2 passes the motion. A vote of 2-2 with one abstention means the motion fails. If one member is absent and the vote is 2-2, the mayor is entitled to vote.

PURPOSE OF THE RULE. Utah statutes set out both the number of the quorum and the minimum vote required on any issue. This rule is meant to clarify that when the entire council is present and voting then it is not a tie when one member abstains. If however the member is absent from the meeting for any reason and the vote is 2-2 then it may be a tie and the mayor may vote as allowed by state statute.

RULE NO 9: A motion to reconsider any item requires a majority vote to pass, but there are special rules that apply only to the motion to reconsider. First, is timing. A motion to reconsider must be made at the meeting where the item was first voted upon or at the very next meeting of the City Council if the item is properly on the agenda. In addition, a motion to reconsider cannot be made at a special meeting of the Council unless the number of members of the council present at the special meeting equals or exceeds the number present at the meeting when the action was approved. Second, a motion to reconsider can only be made by a member who voted in the majority on the original motion.

PROCEDURE. If such a member has a change of heart, he or she can make the motion to reconsider (any other member of the City Council may second the motion).

If a member who voted in the minority seeks to make the motion to reconsider, it must be ruled out of order.

PURPOSE OF THE RULE. The purpose of this rule is finality. If a member of the minority could make a motion to reconsider, then the item could be brought back to the City Council again and again. That would defeat the purpose of finality.

If the motion to reconsider passes, then the original matter is back before the City Council, and a new initial motion is then in order. The matter can be discussed and debated as if it were on the floor for the first time.

RULE NO 10: The Mayor and council members shall adhere to the code of conduct.

PROCEDURE. The Mayor, as chair of the meeting, is primarily responsible to see that debate and discussion of an agenda item focuses on the agenda item and the policy in question, not the personalities of the members of the City Council. There are, however, exceptions that are intended to assist the Mayor in keeping order to the meeting. A speaker may be interrupted by a council member only for the following reasons and in the form set forth below:

Privilege. The proper interruption would be: "point of privilege." The Mayor would then ask the interrupter to "state your point." Appropriate points of privilege relate to anything that would interfere with the normal comfort or safety of the meeting or when the reputation of the council or any individual is at stake. For example, the room may be too hot or too cold, a blowing fan might interfere with a person's ability to hear, or the speaker may be misrepresenting an individual's remarks

Order. The proper interruption would be: "point of order." Again, the Mayor would ask the interrupter to "state your point." Appropriate points of order relate to anything that would not be considered appropriate conduct of the meeting. For example, if the Mayor moved on to a vote on a motion that permits debate without allowing that discussion or debate.

Appeal. If the Mayor makes a ruling that a member of the City Council disagrees with, that member may appeal the ruling of the Mayor. If the motion is seconded, and after debate, if it passes by a simple majority vote, then the ruling of the Mayor is deemed reversed.

Call for orders of the day. This is simply another way of saying, "Let's return to the agenda." If a member believes that the City Council has drifted from the agreed-upon agenda, such a call may be made. It does not require a vote, and when the Mayor discovers that the agenda has not been followed, the Mayor simply reminds the City Council to return to the agenda item properly before them. If the Mayor fails to do so, the Mayor's determination may be appealed.

Withdraw a motion. To withdraw a motion, the maker of the motion on the floor states, "I request that my motion be withdrawn." The motion to withdraw a motion requires a simple majority vote.

PURPOSE OF THE RULE. Debate and discussion should be focused, but free and open. In the interest of time, the Mayor may, however, limit the time allotted to speakers, including members of the City Council. A council member may continue speaking on a majority vote of the Council. The rules of order are meant to create an atmosphere where the members of the City Council and the members of the public can attend to business efficiently, fairly and with full participation. At the same time, it is up to the Mayor and the members of the City Council to maintain common courtesy and decorum. Only one person at a time will have the floor and every speaker must be recognized by the Mayor before proceeding to speak.

RESIDENTS' RIGHT TO BE HEARD:

It is the Council's goal that residents of the City resolve their complaints for service or regarding employees' performance at the staff level. However, it is recognized that residents may from time to time believe it is necessary to speak to City Council on matters of concern. Accordingly, the City Council expects any person presenting to the city council to speak in a civil manner, with due respect for the decorum of the meeting, and with due respect for all persons attending.

- No member of the public shall be heard until recognized by the Mayor.
- Public comments will only be heard during the Public Comment portion of the meeting unless the issue is a Public Hearing or a member of the public is asked to speak on a matter by the mayor.
- Speakers must state their name and address for the record.
- Any resident requesting to speak shall limit him or herself to matters of fact regarding the issue of concern.
- Comments should be limited to three (3) minutes unless prior approval by the Mayor.
- If a representative is elected to speak for a group, the Mayor may approve an increased time allotment.
- Personal attacks made publicly toward any person or city employee are not allowed. Speakers are encouraged to bring their complaints regarding employee performance through the supervisory chain of command in accordance with the City's Personnel Policies.
- Any member of the public interrupting City Council proceedings, approaching the dais without permission, otherwise creating a disturbance, or failing to abide by these rules of procedure in addressing City Council, shall be deemed to have disrupted a public meeting and, at the direction of the Mayor, shall be removed from Council chambers by Police Department personnel or other agent designated by City Council or City Manager.

ALPINE CITY COUNCIL
Meeting Procedures

Recognizing that the City Council, as a legislative body, needs a systematic way of conducting its business, these rules of procedure are to provide for the orderly conduct of City business by the City Council, with the objective of providing for full, open, and comprehensive debate of issues brought before the City Council for action in a forum open to the public, and which encourages citizens' awareness of City Council activities.

These procedures do not increase or diminish the existing powers or authority of the Mayor or City Council members, as set forth in state law or local ordinance.

CITY COUNCIL MEETING AGENDA

All meetings of the Alpine City Council will have a notice and agenda that complies with the Utah Open Meetings Act

The agenda shall contain the following items and be in substantially the following form:

- I. CALL TO ORDER
 - A. ROLL CALL
 - B. PRAYER
 - C. PLEDGE OF ALLEGIANCE:
- II. PUBLIC COMMENT
- III. CONSENT CALENDAR, APPROVE MINUTES OF PREVIOUS MEETING
- IV. PUBLIC HEARING (AS NEEDED)
- V. ACTION ON PUBLIC HEARING
- VI. INVITED PRESENTATIONS
- VII. ACTION/DISCUSSION ITEMS
- VIII. STAFF REPORTS
- IX. COUNCIL COMMUNICATION
- X. EXECUTIVE SESSION (AS NEEDED)
- XI. ADJOURN

An Item may be placed on the agenda by the Mayor or at the request of any two council members.

Agenda Items must be submitted to the City Recorder at least 1 day before the date of the meeting. Any item that is submitted to the City Recorder after 1 day will be put on the next following meeting agenda. Requestor should notify the Mayor of the added agenda item.

ROLE OF THE MAYOR AS COUNCIL CHAIR AND OTHER COUNCIL MEMBERS:

- The Mayor shall preside at meetings of the City Council.
- Participate in discussion of all matters.
- Shall vote as a member thereof only in case of a tie or where otherwise specifically authorized to do so by state law, and shall have no power to veto.

In addition, the Mayor, as the Chair, has the primary responsibility for ensuring that the Council's rules of procedure are followed and:

- For maintaining the dignity of Council meetings.
- Calls the meeting to order and confines the discussion to the agenda.
- Recognizes Council members for motions and statements and may allow audience and staff participation at appropriate times.
- Requires knowledge of the Alpine City adopted rules of parliamentary procedure and how to apply it.
- Ensures that the Utah Open and Public Meetings Act is complied with.
- Knows how to courteously discourage Council members who talk too much or too often.
- Knows how to courteously ensure those who have the floor are not interrupted and to rule out of order those not following meeting procedures.
- Recognizes the Council member offering the motion, restates the motion, presents it to the Council for consideration, calls for the vote, announces the vote, and then announces the next order of business.

CODE OF CONDUCT FOR CITY COUNCIL AND MAYOR INCLUDES:

- Council members' remarks should always be directed to the Mayor.
- Remarks should apply to the question under debate.
- Shall avoid references to personalities, and refrain from questioning motives of other members or staff personnel.
- Demonstrate courtesy and shall not disrupt proceedings.
- Shall not use their positions to secure privileges or personal gains and shall avoid situations which could cause anyone to believe that they may have brought bias or partiality to a question before the City Council.
- Shall be dedicated to the principles of representative democracy by recognizing that the chief function of local government is to serve the best interests of the public at large while respecting individual rights.

- Shall be dedicated to the effective use of the City’s available resources.
- Shall refrain from any activity that would hinder their ability to be objective and impartial.
- City business shall be discussed in open, well-publicized meetings, except in rare situations in which Executive Sessions are authorized.

PARLIAMENTARY RULES:

The following may be referred to as the Alpine City’s Rules of Order and shall be the parliamentary rules for conducting the business of the City Council. The City Attorney will serve as the Parliamentarian, and will recommend rulings, upon request by the presiding officer, to all points of order raised during the proceedings. Each Rule is followed by a recommended Procedure and Purpose to explain the Rule and guide the Mayor and council members in its intended application.

RULE NO. 1: The meeting is governed by the agenda and the agenda constitutes the City Council's agreed-upon roadmap for the meeting.

PROCEDURE. Each agenda item can be handled by the Mayor in the following basic format:

First, the Mayor should clearly announce the agenda item number and should clearly state what the agenda item subject is.

Second, following that agenda format, the Mayor should invite the appropriate person or persons to report on the item, including any recommendation that they might have. The appropriate person or persons may be the Mayor, a member of the City Council, a staff person, or an invited person charged with providing input on the agenda item.

Third, the Mayor should ask members of the City Council if they have any technical questions of clarification. At this point, members of the City Council may ask clarifying questions to the person or persons who reported on the item, and that person or persons should be given time to respond.

Fourth, the Mayor should invite public comments if at a formal public hearing and should open the public hearing for public input. If numerous members of the public indicate a desire to speak to the subject, the Mayor may limit the time of public speakers. At the conclusion of the public comments, the Mayor should announce that the public hearing is closed. For a regularly scheduled agenda item, the Mayor may invite public comment. *Fifth*, the Mayor should invite a motion. The Mayor should announce the name of the member of the City Council who makes the motion.

Sixth, the Mayor should determine if any member of the City Council wishes to second the motion. The Mayor should announce the name of the member of the City Council who seconds the motion. If there is no second then the item will be deemed concluded without decision

Seventh, if the motion is made and seconded, the Mayor should make sure everyone understands the motion. This is done in one of three ways: (1) The Mayor can ask the maker of the motion to repeat it. (2) The Mayor can repeat the motion. (3) The Mayor can ask the City Recorder to repeat the motion.

Eighth, the Mayor should now invite discussion of the motion by the City Council. If there is no desired discussion, or after the discussion has ended, the Mayor should announce that the City Council will vote on the motion. If there has been no discussion or very brief discussion, then the vote on the motion should proceed immediately and there is no need to repeat the motion. If there has been substantial discussion, then it is normally best to make sure everyone understands the motion by repeating it.

Ninth, the Mayor takes a vote. All votes for purposes of the meeting minutes shall be by roll call of the council.

Tenth, the Mayor should announce the result of the vote and should announce what action (if any) the City Council has taken.

PURPOSE OF THE RULE: All meetings must comply with the Utah Open and Public Meetings Act which requires that a notice and an agenda for a public meeting be prepared in advance of the meeting and that no final action be taken on any item that is not on the agenda. In addition the Act requires that the minutes of the meeting contain certain minimum information including the name of any member of the council speaking on an issue, the substance of what the member says, an accurate description of any action taken by the council and the voting record of each individual member of the council.

RULE NO 2: Any matter that requires a City Council decision shall be brought before the Council by motion.

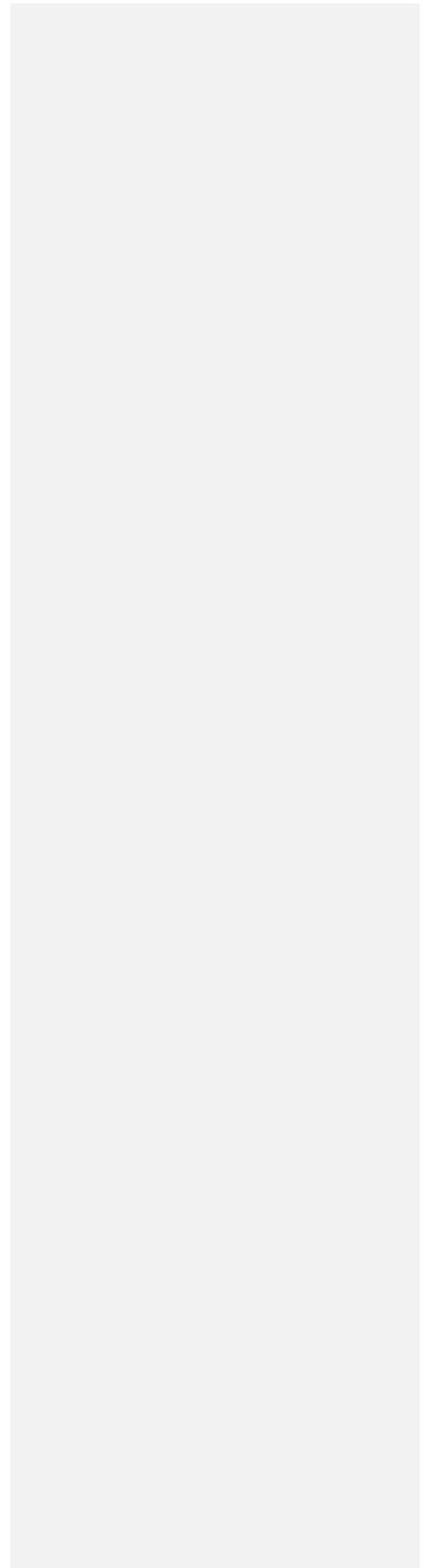
PROCEDURE. The procedure for any motion shall be as follows: First, the Mayor should recognize the member of the City Council. Second, the member of the City Council makes a motion by preceding the member's desired approach with the words: "I move"

So, a typical motion might be: "I move that we give the City Attorney a raise in pay."

The Mayor usually initiates the motion by either (1) Inviting the members of the City Council to make a motion. "A motion at this time would be in order." (2) Suggesting a motion to the members of the City Council. "A motion would be in order that we give the City Attorney a raise in pay." (3) Making the motion. As noted, the Mayor has every right as a member of the City Council to make a motion, but should normally do so only if the Mayor wishes to make a motion on an item but is convinced that no other member of the City Council is willing to step forward to do so at a particular time. (4) Reading a motion suggested by the City Staff.

PURPOSE OF THE RULE. The purpose of this rule is to limit items under discussion to those and only those that the council members want to discuss; give clarity as to what is being decided; and to make sure everyone, including the person

taking the minutes actually knows and can remember what the ultimate outcome of any discussion and debate is.



RULE NO 3: One question at a time and one speaker at a time.

PROCEDURE: Only one question will be discussed at a time. The question may have several motions.

There will only be one speaker at a time. Anyone who wishes to speak must raise their hand first after the current speaker finishes. The Mayor will call upon the person by name. Once a member has been recognized, he has been granted “the floor” and may begin speaking. The speaker may not be interrupted except as allowed by these rules.

If a councilmember wishes to ask a question during their time and retain the floor to speak after the question has been answered they may indicate so before posing the question by saying something similar to “I have additional comments and wish to retain the floor after this question has been answered.”

PURPOSE OF THE RULE. The purpose is to focus on only one question and to allow council members the ability to express their points of consideration without losing their train of thought and to completely finish without fear of interruption.

RULE NO 4: The Mayor may use General Consent (also known as Unanimous Consent) with all motions except those motions where the votes are used for purposes of the meeting minutes and require a roll call of the council.

PROCEDURE: When the Mayor feels the council is all in agreement, the Mayor asks if there are any objections to the motion to amend, withdraw, or any motions in Rule No. 7. The Mayor pauses and if there are no objections states that the motion is approved. If there is any objection then the motion is put to a regular vote. A council member may object simply because he or she feels it is important to have a formal vote.

Example: The Mayor states, “If there is no objection, we will recess for 10 minutes, [pause to see if any member objects]. There being no objection, we will recess for 10 minutes.

If a member objects by stating, “I object” the matter is then put to a vote.

The Mayor states, “An objection being made, the question is shall we recess for 10 minutes? As many as are in favor, say Aye. Those opposed, say No. The Ayes have it and we will recess for 10 minutes.”

PURPOSE OF THE RULE. General consent is helpful in expediting general routine business or when the Mayor senses the council is in agreement. General consent allows flexibility of the rules while protecting the right of the majority to decide and the minority to be heard.

RULE NO 5: There are only three basic forms of motions allowed: Initial Motions, Motions to Amend, and Substitute Motions.

PROCEDURE: The initial motion. The initial motion is the one that puts forward an item for the City Council's consideration. An initial motion might be: "I move that we give the City Attorney a pat on the back."

The motion to amend. If a member wants to change the initial motion that is before the City Council, they would move to amend it. A motion to amend might be: "I move that we amend the motion to give the attorney a kick in the butt." A motion to amend takes the initial motion which is before the City Council and seeks to change it in some way. The motion to amend must be germane to the initial motion. The motion to amend must not be the same as a negative vote on the initial motion.

The substitute motion. If a member wants to completely do away with the initial motion that is before the City Council, and put a new motion before the City Council, they would move a substitute motion. A substitute motion might be: "I move a substitute motion that we get a new City Attorney."

PURPOSE OF THE RULE. "Motions to amend" and "substitute motions" are often confused. But they are quite different, and their effect (if passed) is quite different. A motion to amend seeks to retain the basic motion on the floor, but modify it in some way. A substitute motion seeks to throw out the basic motion on the floor, and substitute a new and different motion for it. The decision as to whether a motion is really a "motion to amend" or a "substitute motion" is left to the Mayor. So that if a member makes what that member calls a "motion to amend", but the Mayor determines that it is really a "substitute motion", then the Mayor's designation governs.

RULE NO 6. There can be up to three motions on the floor at the same time and no more than three. The Mayor can reject a fourth motion until the Mayor has dealt with the three that are on the floor and has resolved them.

PROCEDURE: When there are two or three motions on the floor (after motions and seconds) at the same time, the vote should proceed first on the last motion that is made. So, for example, assume the first motion is a basic "motion to give the City Attorney a pat on the back." During the discussion of this motion, a member might make a second motion to "amend the main motion to give the City Attorney a kick in the butt." And perhaps, during that discussion, a member makes yet a third motion as a "substitute motion that we just get rid of the City Attorney." The proper procedure would be as follows:

First, the Mayor would deal with the third (the last) motion on the floor, the substitute motion. After discussion and debate, a vote would be taken first on the third motion. If the substitute motion passed, it would be a substitute for the basic motion and would eliminate it. The first motion would be moot, as would the second motion (which sought to amend the first motion), and the action on the agenda item would be completed on the passage by the City Council of the third motion (the

substitute motion). No vote would be taken on the first or second motions. On the other hand, if the substitute motion (the third motion) failed then the Mayor would proceed to consideration of the second (now, the last) motion on the floor, the motion to amend.

Second, if the substitute motion failed, the Mayor would now deal with the second (now, the last) motion on the floor, the motion to amend. The discussion and debate would focus strictly on the amendment (should the City Attorney be kicked in the butt). If the motion to amend passed the Mayor would now move to consider the main motion (the first motion) as amended. If the motion to amend failed the Mayor would now move to consider the main motion (the first motion) in its original format, not amended.

Third, the Mayor would now deal with the first motion that was placed on the floor. The original motion would either be in its original format (pat on the back), or, if amended, would be in its amended format (kick in the butt). And the question on the floor for discussion and decision would be what part of the City Attorney's anatomy would be subject to assault.

PURPOSE OF THE RULE: Too many motions on the same subject can cause confusion as to what the end result is and in the official record. Limiting the number of motions to no more than three at a time, allows for enough debate and parliamentary maneuvering to satisfy those who want to be clever while allowing the slow to still keep up.

RULE NO 7: The debate can continue as long as members of the City Council wish to discuss an item, subject to the Mayor determining it is time to move on and take action by using General Consent to limit debate or by a proper motion by a council member to limit the debate. The following motions are not debatable—a motion to adjourn; a motion to recess; a motion to fix a time to adjourn; a motion to table; and a motion to limit debate.

PROCEDURE. There are exceptions to the general rule of free and open debate on motions. The exceptions all apply when there is a desire of the City Council to move on. The following motions are not debatable (that is, when the following motions are made and seconded, the Mayor must immediately call for a vote of the City Council without debate on the motion):

A motion to adjourn. This motion, if passed, requires the City Council to immediately adjourn to its next regularly scheduled meeting. It requires a simple majority vote.

A motion to recess. This motion, if passed, requires the City Council to immediately take a recess. The length should be set in the motion which may be a few minutes or an hour. It requires a simple majority vote.

A motion to fix the time to adjourn. This motion, if passed, requires the City Council to adjourn the meeting at the specific time set in the motion. For example, the motion might be: "I move we adjourn this meeting at midnight." It requires a simple majority vote.

A motion to table. This motion, if passed, requires discussion of the agenda item to be halted and the agenda item to be placed on "hold". The motion can contain a specific time in which the item can come back to the City Council: "I move we table this item until our regular meeting in October." Or the motion can contain no specific time for the return of the item, in which case the matter will not be placed back on an agenda for a future city council meeting except at the order of the Mayor or the request of any two council members. A motion to table an item requires a simple majority vote.

A motion to limit debate. The most common form of this motion is to say: "I move the previous question" or "I move the question" or "I call the question." When a member of the City Council makes such a motion, the member is really saying: "I've had enough debate. Let's get on with the vote". When such a motion is made, the Mayor should ask for a second, stop debate, and vote on the motion to limit debate. The motion to limit debate requires a simple majority vote of the City Council.

PURPOSE OF THE RULE. Debate and discussion are important until they are not. When a matter is chewed on enough it should be swallowed. This rule allows the Mayor by General Consent or the majority of the council to end the debate, after a reasonable time. It also keeps those in a minority position on an issue from filibustering until they get their way.

RULE NO 8: Three yes votes are required to pass any item before the council with limited exceptions. A motion to go into close session (executive session) requires a 2/3 vote of the members present. The mayor is entitled to vote in cases of a tie and where specifically allowed by state law.

PROCEDURE. If the mayor and all five members of the council are present, a vote of 3-2 passes the motion. A vote of 2-2 with one abstention means the motion fails. If one member is absent and the vote is 2-2, the mayor is entitled to vote.

PURPOSE OF THE RULE. Utah statutes set out both the number of the quorum and the minimum vote required on any issue. This rule is meant to clarify that when the entire council is present and voting then it is not a tie when one member abstains. If however the member is absent from the meeting for any reason and the vote is 2-2 then it may be a tie and the mayor may vote as allowed by state statute.

~~RULE NO 9: A motion to reconsider any item requires a majority vote to pass, but there are special rules that apply only to the motion to reconsider. First, is timing. A motion to reconsider must be made at the meeting where the item was first voted upon or at the very next meeting of the City Council if the item is properly on the agenda. In addition, First an A A motion to reconsider cannot be made at a special meeting of the Council unless the number of members of the council present at the special meeting equals or exceeds the number present at the meeting when the action was approved. Second, a motion to reconsider can only be made by a member who voted in the majority on the original motion.~~

PROCEDURE. ~~If such a member has a change of heart, he or she can make the motion to reconsider (any other member of the City Council may second the~~

- Formatted: Font color: Black
- Formatted: Font color: Custom Color(RGB(0,0,204))
- Formatted: Underline
- Formatted: Underline, Font color: Violet
- Formatted: Font color: Violet
- Formatted: Font color: Custom Color(RGB(0,0,204)), Strikethrough
- Formatted: Font color: Custom Color(RGB(0,0,153))
- Formatted: Font: Bold, Font color: Custom Color(RGB(0,0,204)), Strikethrough

~~motion). If a member who voted in the minority seeks to make the motion to reconsider, it must be ruled out of order. A motion to reconsider can only be made if the number of members of the council present at the meeting equals or exceeds the number present at the meeting when the action was approved.~~

Formatted: Font: Bold

If the number of members present when the proposed reconsideration is brought before the council is less than the number present when the action was approved then the action must be ruled out of order.

PURPOSE OF THE RULE. The purpose of this rule ~~is finality. If a member of the minority could make a motion to reconsider, then the item could be brought back to the City Council again and again. That would defeat the purpose of finality, is to stop the Council from reconsidering an action unless the same number of council members are present when the action was approved. If the action was approved on a 3 yes to 2 no vote, the motion cannot be brought up if only 4 members of the council are present. This would defeat the purpose of the majority vote.~~

Formatted: Font color: Custom
Color(0,0,153)

Formatted: Font: Bold, Font color: Custom
Color(0,0,153), Strikethrough

Formatted: Font: Bold

If the motion to reconsider passes, then the original matter is back before the City Council, and a new initial motion is then in order. The matter can be discussed and debated as if it were on the floor for the first time.

RULE NO 10: The Mayor and council members shall adhere to the code of conduct.

PROCEDURE. The Mayor, as chair of the meeting, is primarily responsible to see that debate and discussion of an agenda item focuses on the agenda item and the policy in question, not the personalities of the members of the City Council. There are, however, exceptions that are intended to assist the Mayor in keeping order to the meeting. A speaker may be interrupted by a council member only for the following reasons and in the form set forth below:

Privilege. The proper interruption would be: "point of privilege." The Mayor would then ask the interrupter to "state your point." Appropriate points of privilege relate to anything that would interfere with the normal comfort or safety of the meeting or when the reputation of the council or any individual is at stake. For example, the room may be too hot or too cold, a blowing fan might interfere with a person's ability to hear, or the speaker may be misrepresenting an individual's remarks

Order. The proper interruption would be: "point of order." Again, the Mayor would ask the interrupter to "state your point." Appropriate points of order relate to anything that would not be considered appropriate conduct of the meeting. For example, if the Mayor moved on to a vote on a motion that permits debate without allowing that discussion or debate.

Appeal. If the Mayor makes a ruling that a member of the City Council disagrees with, that member may appeal the ruling of the Mayor. If the motion is seconded, and after debate, if it passes by a simple majority vote, then the ruling of the Mayor is deemed reversed.

Call for orders of the day. This is simply another way of saying, "Let's return to the agenda." If a member believes that the City Council has drifted from the agreed-upon agenda, such a call may be made. It does not require a vote, and when the Mayor discovers that the agenda has not been followed, the Mayor simply reminds the City Council to return to the agenda item properly before them. If the Mayor fails to do so, the Mayor's determination may be appealed.

Withdraw a motion. To withdraw a motion, the maker of the motion on the floor states, "I request that my motion be withdrawn." The motion to withdraw a motion requires a simple majority vote.

PURPOSE OF THE RULE. Debate and discussion should be focused, but free and open. In the interest of time, the Mayor may, however, limit the time allotted to speakers, including members of the City Council. A council member may continue speaking on a majority vote of the Council. The rules of order are meant to create an atmosphere where the members of the City Council and the members of the public can attend to business efficiently, fairly and with full participation. At the same time, it is up to the Mayor and the members of the City Council to maintain common courtesy and decorum. Only one person at a time will have the floor and every speaker must be recognized by the Mayor before proceeding to speak.

RESIDENTS' RIGHT TO BE HEARD:

It is the Council's goal that residents of the City resolve their complaints for service or regarding employees' performance at the staff level. However, it is recognized that residents may from time to time believe it is necessary to speak to City Council on matters of concern. Accordingly, the City Council expects any person presenting to the city council to speak in a civil manner, with due respect for the decorum of the meeting, and with due respect for all persons attending.

- No member of the public shall be heard until recognized by the Mayor.
- Public comments will only be heard during the Public Comment portion of the meeting unless the issue is a Public Hearing or a member of the public is asked to speak on a matter by the mayor.
- Speakers must state their name and address for the record.
- Any resident requesting to speak shall limit him or herself to matters of fact regarding the issue of concern.
- Comments should be limited to three (3) minutes unless prior approval by the Mayor.
- If a representative is elected to speak for a group, the Mayor may approve an increased time allotment.
- Personal attacks made publicly toward any person or city employee are not allowed. Speakers are encouraged to bring their complaints regarding employee performance through the supervisory chain of command in accordance with the City's Personnel Policies.

- Any member of the public interrupting City Council proceedings, approaching the dais without permission, otherwise creating a disturbance, or failing to abide by these rules of procedure in addressing City Council, shall be deemed to have disrupted a public meeting and, at the direction of the Mayor, shall be removed from Council chambers by Police Department personnel or other agent designated by City Council or City Manager.

RESOLUTION NO. R2015-09

A RESOLUTION BY THE GOVERNING BODY OF ALPINE CITY AMENDING THE RULES OF PRECEDURE FOR THE PUBLIC MEETINGS OF THE CITY

WHEREAS, Utah Code Section 10-3-606 allows each city to adopt rules of procedure for its meetings; and

WHEREAS, Utah Code Section 10-3-607 allows a city to adopt rules of conduct for the members of the city council; and

WHEREAS, it is generally felt that rules of procedure and conduct will aid the city council of Alpine City to perform its functions in an efficient and public friendly manner.

NOW THEREFORE BE RESOLVED by the Governing Body of Alpine City as follows:

1. The attached Exhibit entitled Alpine City Council Procedures is hereby amended as the rules of procedure for conducting all meetings of the Alpine City Council.
2. This Resolution shall take effect immediately upon passing.

Passed and dated this _____ day of _____, 2015.

Don Watkins, Mayor

Attest:

Charmayne G. Warnock, City Recorder

ALPINE CITY COUNCIL
Meeting Procedures

Recognizing that the City Council, as a legislative body, needs a systematic way of conducting its business, these rules of procedure are to provide for the orderly conduct of City business by the City Council, with the objective of providing for full, open, and comprehensive debate of issues brought before the City Council for action in a forum open to the public, and which encourages citizens' awareness of City Council activities.

These procedures do not increase or diminish the existing powers or authority of the Mayor or City Council members, as set forth in state law or local ordinance.

CITY COUNCIL MEETING AGENDA

All meetings of the Alpine City Council will have a notice and agenda that complies with the Utah Open Meetings Act

The agenda shall contain the following items and be in substantially the following form:

- I. CALL TO ORDER
- A. ROLL CALL
- B. PRAYER
- C. PLEDGE OF ALLEGIANCE:
- II. PUBLIC COMMENT
- III. CONSENT CALENDAR, APPROVE MINUTES OF PREVIOUS MEETING
- IV. PUBLIC HEARING (AS NEEDED)
- V. ACTION ON PUBLIC HEARING
- VI. INVITED PRESENTATIONS
- VII. ACTION/DISCUSSION ITEMS
- VIII. STAFF REPORTS
- IX. COUNCIL COMMUNICATION
- X. EXECUTIVE SESSION (AS NEEDED)
- XI. ADJOURN

An Item may be placed on the agenda by the Mayor or at the request of any two council members.

Agenda Items must be submitted to the City Recorder at least 1 day before the date of the meeting. Any item that is submitted to the City Recorder after 1 day will be put on the next following meeting agenda. Requestor should notify the Mayor of the added agenda item.

ROLE OF THE MAYOR AS COUNCIL CHAIR AND OTHER COUNCIL MEMBERS:

- The Mayor shall preside at meetings of the City Council.
- Participate in discussion of all matters.
- Shall vote as a member thereof only in case of a tie or where otherwise specifically authorized to do so by state law, and shall have no power to veto.

In addition, the Mayor, as the Chair, has the primary responsibility for ensuring that the Council's rules of procedure are followed and:

- For maintaining the dignity of Council meetings.
- Calls the meeting to order and confines the discussion to the agenda.
- Recognizes Council members for motions and statements and may allow audience and staff participation at appropriate times.
- Requires knowledge of the Alpine City adopted rules of parliamentary procedure and how to apply it.
- Ensures that the Utah Open and Public Meetings Act is complied with.
- Knows how to courteously discourage Council members who talk too much or too often.
- Knows how to courteously ensure those who have the floor are not interrupted and to rule out of order those not following meeting procedures.
- Recognizes the Council member offering the motion, restates the motion, presents it to the Council for consideration, calls for the vote, announces the vote, and then announces the next order of business.

CODE OF CONDUCT FOR CITY COUNCIL AND MAYOR INCLUDES:

- Council members' remarks should always be directed to the Mayor.
- Remarks should apply to the question under debate.
- Shall avoid references to personalities, and refrain from questioning motives of other members or staff personnel.
- Demonstrate courtesy and shall not disrupt proceedings.
- Shall not use their positions to secure privileges or personal gains and shall avoid situations which could cause anyone to believe that they may have brought bias or partiality to a question before the City Council.
- Shall be dedicated to the principles of representative democracy by recognizing that the chief function of local government is to serve the best interests of the public at large while respecting individual rights.
- Shall be dedicated to the effective use of the City's available resources.
- Shall refrain from any activity that would hinder their ability to be objective and impartial.
- City business shall be discussed in open, well-publicized meetings, except in rare situations in which Executive Sessions are authorized.

PARLIAMENTARY RULES:

The following may be referred to as the Alpine City's Rules of Order and shall be the parliamentary rules for conducting the business of the City Council. The City Attorney will serve as the Parliamentarian, and will recommend rulings, upon request by the presiding officer, to all points of order raised during the proceedings. Each Rule is followed by a recommended Procedure and Purpose to explain the Rule and guide the Mayor and council members in its intended application.

RULE NO. 1: The meeting is governed by the agenda and the agenda constitutes the City Council's agreed-upon roadmap for the meeting.

PROCEDURE. Each agenda item can be handled by the Mayor in the following basic format:

First, the Mayor should clearly announce the agenda item number and should clearly state what the agenda item subject is.

Second, following that agenda format, the Mayor should invite the appropriate person or persons to report on the item, including any recommendation that they might have. The appropriate person or persons may be the Mayor, a member of the City Council, a staff person, or an invited person charged with providing input on the agenda item.

Third, the Mayor should ask members of the City Council if they have any technical questions of clarification. At this point, members of the City Council may ask clarifying questions to the person or persons who reported on the item, and that person or persons should be given time to respond.

Fourth, the Mayor should invite public comments if at a formal public hearing and should open the public hearing for public input. If numerous members of the public indicate a desire to speak to the subject, the Mayor may limit the time of public speakers. At the conclusion of the public comments, the Mayor should announce that the public hearing is closed. For a regularly scheduled agenda item, the Mayor may invite public comment.

Fifth, the Mayor should invite a motion. The Mayor should announce the name of the member of the City Council who makes the motion.

Sixth, the Mayor should determine if any member of the City Council wishes to second the motion. The Mayor should announce the name of the member of the City Council who seconds the motion. If there is no second then the item will be deemed concluded without decision

Seventh, if the motion is made and seconded, the Mayor should make sure everyone understands the motion. This is done in one of three ways: (1) The Mayor can ask the maker of the motion to repeat it. (2) The Mayor can repeat the motion. (3) The Mayor can ask the City Recorder to repeat the motion.

Eighth, the Mayor should now invite discussion of the motion by the City Council. If there is no desired discussion, or after the discussion has ended, the Mayor should announce that the City Council will vote on the motion. If there has been no discussion or very brief discussion, then the vote on the motion should proceed immediately and there is no need to repeat the motion. If there has been substantial discussion, then it is normally best to make sure everyone understands the motion by repeating it.

Ninth, the Mayor takes a vote. All votes for purposes of the meeting minutes shall be by roll call of the council.

Tenth, the Mayor should announce the result of the vote and should announce what action (if any) the City Council has taken.

PURPOSE OF THE RULE: All meetings must comply with the Utah Open and Public Meetings Act which requires that a notice and an agenda for a public meeting be prepared in advance of the meeting and that no final action be taken on any item that is not on the agenda. In addition the Act requires that the minutes of the meeting contain certain minimum information including the name of any member of the council speaking on an issue, the substance of what the member says, an accurate description of any action taken by the council and the voting record of each individual member of the council.

RULE NO 2: Any matter that requires a City Council decision shall be brought before the Council by motion.

PROCEDURE. The procedure for any motion shall be as follows: First, the Mayor should recognize the member of the City Council. Second, the member of the City Council makes a motion by preceding the member's desired approach with the words: "I move"

So, a typical motion might be: "I move that we give the City Attorney a raise in pay."

The Mayor usually initiates the motion by either (1) Inviting the members of the City Council to make a motion. "A motion at this time would be in order." (2) Suggesting a motion to the members of the City Council. "A motion would be in order that we give the City Attorney a raise in pay." (3) Making the motion. As noted, the Mayor has every right as a member of the City Council to make a motion, but should normally do so only if the Mayor wishes to make a motion on an item but is convinced that no other member of the City Council is willing to step forward to do so at a particular time. (4) Reading a motion suggested by the City Staff.

PURPOSE OF THE RULE. The purpose of this rule is to limit items under discussion to those and only those that the council members want to discuss; give clarity as to what is being decided; and to make sure everyone, including the person taking the minutes actually knows and can remember what the ultimate outcome of any discussion and debate is.

RULE NO 3: One question at a time and one speaker at a time.

PROCEDURE: Only one question will be discussed at a time. The question may have several motions.

There will only be one speaker at a time. Anyone who wishes to speak must raise their hand first after the current speaker finishes. The Mayor will call upon the person by name. Once a member has been recognized, he has been granted "the floor" and may begin speaking. The speaker may not be interrupted except as allowed by these rules.

If a councilmember wishes to ask a question during their time and retain the floor to speak after the question has been answered they may indicate so before posing the question by saying something similar to "I have additional comments and wish to retain the floor after this question has been answered."

PURPOSE OF THE RULE. The purpose is to focus on only one question and to allow council members the ability to express their points of consideration without losing their train of thought and to completely finish without fear of interruption.

RULE NO 4: The Mayor may use General Consent (also known as Unanimous Consent) with all motions except those motions where the votes are used for purposes of the meeting minutes and require a roll call of the council.

PROCEDURE: When the Mayor feels the council is all in agreement, the Mayor asks if there are any objections to the motion to amend, withdraw, or any motions in Rule No. 7. The Mayor pauses and if there are no objections states that the motion is approved. If there is any objection then the motion is put to a regular vote. A council member may object simply because he or she feels it is important to have a formal vote.

Example: The Mayor states, "If there is no objection, we will recess for 10 minutes, [pause to see if any member objects]. There being no objection, we will recess for 10 minutes.

If a member objects by stating, "I object" the matter is then put to a vote.

The Mayor states, "An objection being made, the question is shall we recess for 10 minutes? As many as are in favor, say Aye. Those opposed, say No. The Ayes have it and we will recess for 10 minutes."

PURPOSE OF THE RULE. General consent is helpful in expediting general routine business or when the Mayor senses the council is in agreement. General consent allows flexibility of the rules while protecting the right of the majority to decide and the minority to be heard.

RULE NO 5: There are only three basic forms of motions allowed: Initial Motions, Motions to Amend, and Substitute Motions.

PROCEDURE: The initial motion. The initial motion is the one that puts forward an item for the City Council's consideration. An initial motion might be: "I move that we give the City Attorney a pat on the back."

The motion to amend. If a member wants to change the initial motion that is before the City Council, they would move to amend it. A motion to amend might be: "I move that we amend the motion to give the attorney a kick in the butt." A motion to amend takes the initial motion which is before the City Council and seeks to change it in some way. The motion to amend must be germane to the initial motion. The motion to amend must not be the same as a negative vote on the initial motion.

The substitute motion. If a member wants to completely do away with the initial motion that is before the City Council, and put a new motion before the City Council, they would move a substitute motion. A substitute motion might be: "I move a substitute motion that we get a new City Attorney."

PURPOSE OF THE RULE. "Motions to amend" and "substitute motions" are often confused. But they are quite different, and their effect (if passed) is quite different. A motion to amend seeks to retain the basic motion on the floor, but modify it in some way. A substitute motion seeks to throw out the basic motion on the floor, and substitute a new and different motion for it. The decision as to whether a motion is really a "motion to amend" or a "substitute motion" is left to the Mayor. So that if a member makes what that member calls a "motion to amend", but the Mayor determines that it is really a "substitute motion", then the Mayor's designation governs.

RULE NO 6. There can be up to three motions on the floor at the same time and no more than three. The Mayor can reject a fourth motion until the Mayor has dealt with the three that are on the floor and has resolved them.

PROCEDURE: When there are two or three motions on the floor (after motions and seconds) at the same time, the vote should proceed first on the last motion that is made. So, for example, assume the first motion is a basic "motion to give the City Attorney a pat on the back." During the discussion of this motion, a member might make a second motion to "amend the main motion to give the City Attorney a kick in the butt." And perhaps, during that discussion, a member makes yet a third motion as a "substitute motion that we just get rid of the City Attorney." The proper procedure would be as follows:

First, the Mayor would deal with the third (the last) motion on the floor, the substitute motion. After discussion and debate, a vote would be taken first on the third motion. If the substitute motion passed, it would be a substitute for the basic motion and would eliminate it. The first motion would be moot, as would the second motion (which sought to amend the first motion), and the action on the agenda item would be completed on the passage by the City Council of the third motion (the substitute motion). No vote would be taken on the first or second motions. On the other hand, if the substitute motion (the third motion) failed then the Mayor would proceed to consideration of the second (now, the last) motion on the floor, the motion to amend.

Second, if the substitute motion failed, the Mayor would now deal with the second (now, the last) motion on the floor, the motion to amend. The discussion and debate would focus strictly on the amendment (should the City Attorney be kicked in the butt). If the motion to amend passed the Mayor would now move to consider the main motion (the first motion) as amended. If the motion to amend failed the Mayor would now move to consider the main motion (the first motion) in its original format, not amended.

Third, the Mayor would now deal with the first motion that was placed on the floor. The original motion would either be in its original format (pat on the back), or, if amended, would be in its amended format (kick in the butt). And the question on the floor for discussion and decision would be what part of the City Attorney's anatomy would be subject to assault.

PURPOSE OF THE RULE: Too many motions on the same subject can cause confusion as to what the end result is and in the official record. Limiting the number of motions to no more than three at a time, allows for enough debate and parliamentary maneuvering to satisfy those who want to be clever while allowing the slow to still keep up.

RULE NO 7: The debate can continue as long as members of the City Council wish to discuss an item, subject to the Mayor determining it is time to move on and take action by using General Consent to limit debate or by a proper motion by a council member to limit the debate. The following motions are not debatable—a motion to adjourn; a motion to recess; a motion to fix a time to adjourn; a motion to table; and a motion to limit debate.

PROCEDURE. There are exceptions to the general rule of free and open debate on motions. The exceptions all apply when there is a desire of the City Council to move on. The following motions are not debatable (that is, when the following motions are made and seconded, the Mayor must immediately call for a vote of the City Council without debate on the motion):

A motion to adjourn. This motion, if passed, requires the City Council to immediately adjourn to its next regularly scheduled meeting. It requires a simple majority vote.

A motion to recess. This motion, if passed, requires the City Council to immediately take a recess. The length should be set in the motion which may be a few minutes or an hour. It requires a simple majority vote.

A motion to fix the time to adjourn. This motion, if passed, requires the City Council to adjourn the meeting at the specific time set in the motion. For example, the motion might be: "I move we adjourn this meeting at midnight." It requires a simple majority vote.

A motion to table. This motion, if passed, requires discussion of the agenda item to be halted and the agenda item to be placed on "hold". The motion can contain a specific time in which the item can come back to the City Council: "I move we table this item until our regular meeting in October." Or the motion can contain no specific time for the return of the item, in which case the matter will not be placed back on an agenda for a future city council meeting except at the order of the Mayor or the request of any two council members. A motion to table an item requires a simple majority vote.

A motion to limit debate. The most common form of this motion is to say: "I move the previous question" or "I move the question" or "I call the question." When a member of the City Council makes such a motion, the member is really saying: "I've had enough debate. Let's get on with the vote". When such a motion is made, the Mayor should ask for a second, stop debate, and vote on the motion to limit debate. The motion to limit debate requires a simple majority vote of the City Council.

PURPOSE OF THE RULE. Debate and discussion are important until they are not. When a matter is chewed on enough it should be swallowed. This rule allows the Mayor by General Consent or the majority of the council to end the debate, after a reasonable time. It also keeps those in a minority position on an issue from filibustering until they get their way.

RULE NO 8: Three yes votes are required to pass any item before the council with limited exceptions. A motion to go into close session (executive session) requires a 2/3 vote of the members present. The mayor is entitled to vote in cases of a tie and where specifically allowed by state law.

PROCEDURE. If the mayor and all five members of the council are present, a vote of 3-2 passes the motion. A vote of 2-2 with one abstention means the motion fails. If one member is absent and the vote is 2-2, the mayor is entitled to vote.

PURPOSE OF THE RULE. Utah statutes set out both the number of the quorum and the minimum vote required on any issue. This rule is meant to clarify that when the entire council is present and voting then it is not a tie when one member abstains. If however the member is absent from the meeting for any reason and the vote is 2-2 then it may be a tie and the mayor may vote as allowed by state statute.

RULE NO 9: A motion to reconsider cannot be made at a special meeting of the Council unless the number of members of Council present at the special meeting equals or exceeds the number present at the meeting when the action was approved.

PROCEDURE: A motion to reconsider can only be made if the number of members of the council present at the meeting equals or exceeds the number present at the meeting when the action was approved. If the number of members present when the proposed reconsideration is brought before the council is less than the number present when the action was approved then the action must be ruled out of order.

PURPOSE OF THE RULE: The purpose of this rule is to stop the Council from reconsidering an action unless the same number of council members are present when the action was approved. If the action was approved on a 3 yes to 2 no vote, the motion then cannot be brought up if only 4 members of the council are present. This would defeat the purpose of the majority vote. If the motion to reconsider passes, then the original matter is back before the City Council, and a new initial motion is then in order. The matter can be discussed and debated as if it were on the floor for the first time.

RULE NO 10: The Mayor and council members shall adhere to the code of conduct.

PROCEDURE. The Mayor, as chair of the meeting, is primarily responsible to see that debate and discussion of an agenda item focuses on the agenda item and the policy in question, not the personalities of the members of the City Council. There are, however, exceptions that are intended to assist the Mayor in keeping order to the meeting. A speaker may be interrupted by a council member only for the following reasons and in the form set forth below:

Privilege. The proper interruption would be: "point of privilege." The Mayor would then ask the interrupter to "state your point." Appropriate points of privilege relate to anything that would interfere with the normal comfort or safety of the meeting or when the reputation of the council or any individual is at stake. For example, the room may be too hot or too cold, a blowing fan might interfere with a person's ability to hear, or the speaker may be misrepresenting an individual's remarks

Order. The proper interruption would be: "point of order." Again, the Mayor would ask the interrupter to "state your point." Appropriate points of order relate to anything that would not be considered appropriate conduct of the meeting. For example, if the Mayor moved on to a vote on a motion that permits debate without allowing that discussion or debate.

Appeal. If the Mayor makes a ruling that a member of the City Council disagrees with, that member may appeal the ruling of the Mayor. If the motion is seconded, and after debate, if it passes by a simple majority vote, then the ruling of the Mayor is deemed reversed.

Call for orders of the day. This is simply another way of saying, "Let's return to the agenda." If a member believes that the City Council has drifted from the agreed-upon agenda, such a call may be made. It does not require a vote, and when the Mayor discovers that the agenda has not been followed, the Mayor simply reminds the City Council to

return to the agenda item properly before them. If the Mayor fails to do so, the Mayor's determination may be appealed.

Withdraw a motion. To withdraw a motion, the maker of the motion on the floor states, "I request that my motion be withdrawn." The motion to withdraw a motion requires a simple majority vote.

PURPOSE OF THE RULE. Debate and discussion should be focused, but free and open. In the interest of time, the Mayor may, however, limit the time allotted to speakers, including members of the City Council. A council member may continue speaking on a majority vote of the Council. The rules of order are meant to create an atmosphere where the members of the City Council and the members of the public can attend to business efficiently, fairly and with full participation. At the same time, it is up to the Mayor and the members of the City Council to maintain common courtesy and decorum. Only one person at a time will have the floor and every speaker must be recognized by the Mayor before proceeding to speak.

RESIDENTS' RIGHT TO BE HEARD:

It is the Council's goal that residents of the City resolve their complaints for service or regarding employees' performance at the staff level. However, it is recognized that residents may from time to time believe it is necessary to speak to City Council on matters of concern. Accordingly, the City Council expects any person presenting to the city council to speak in a civil manner, with due respect for the decorum of the meeting, and with due respect for all persons attending.

- No member of the public shall be heard until recognized by the Mayor.
- Public comments will only be heard during the Public Comment portion of the meeting unless the issue is a Public Hearing or a member of the public is asked to speak on a matter by the mayor.
- Speakers must state their name and address for the record.
- Any resident requesting to speak shall limit him or herself to matters of fact regarding the issue of concern.
- Comments should be limited to three (3) minutes unless prior approval by the Mayor.
- If a representative is elected to speak for a group, the Mayor may approve an increased time allotment.
- Personal attacks made publicly toward any person or city employee are not allowed. Speakers are encouraged to bring their complaints regarding employee performance through the supervisory chain of command in accordance with the City's Personnel Policies.
- Any member of the public interrupting City Council proceedings, approaching the dais without permission, otherwise creating a disturbance, or failing to abide by these rules of procedure in addressing City Council, shall be deemed to have disrupted a public meeting and, at the direction of the Mayor, shall be removed from Council chambers by Police Department personnel or other agent designated by City Council or City Manager.

ALPINE CITY COUNCIL AGENDA

SUBJECT: Condominium Conversion Ordinance

FOR CONSIDERATION ON: 28 July 2015

PETITIONER: Larry Hilton

ACTION REQUESTED BY PETITIONER: Adopt Ordinance 2015-10

APPLICABLE STATUTE OR ORDINANCE: Sections 6.4 (2) and 6.4 (3)

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

BACKGROUND INFORMATION:

Larry Hilton has requested that the city amend the Condominium Conversion Ordinance No. 85-07 and strike Section 6.4 (2) and part of 6.4. (3) which relates to fire wall separation requirements in condominiums. Mr. Hilton said it is his understanding that the standards imposed by the ordinance are significantly more stringent than those required by other municipalities in the area, and are more costly that would be required by the International Building Code.

Attached is the request by Larry Hilton, an email from Roger Evans of Sunrise Engineering and a letter from the Fire Marshall, Ben Bailey.

PLANNING COMMISSION MOTION:

Bryce Higbee moved to recommend that section 6.4.2 and 6.4.3 be amended as proposed which would eliminate 6.4.2 (2-hour fire separation requirement) and eliminate the fire separation language in 6.4.3.

Steve Swanson seconded the motion. The motion passed with 6 Ayes 0 Nays.
Bryce Higbee, Jason Thelin, David Fotheringham, Steve Cospers, Jane Griener and Steve Swanson all voted Aye

CHAPTER 6

CONDOMINIUM CONVERSION POLICY (ORDINANCE 85-07, Amended by Ord. 2009-17, 10/27/09)

6.1 Intent

The intent of this section is to establish guidelines and minimum requirements relating to the conversion of existing commercial structures to condominium ownership and the maintenance and operation of such projects. These provisions shall be supplemental and in addition to the general requirements for major subdivisions contained under existing City ordinances, and also the requirements of Title 57 Chapter 8 of the Utah Code Annotated, 1953, as amended.

6.2 Permitted Uses

Uses permitted within a condominium project shall be limited to those uses specifically permitted within the zone which underlies the area of the project and shall be subject to all conditions and restrictions required within the zone for the use.

6.3 Layout and Improvement

1. Commercial Conversion Projects. Each project shall conform to the minimum City standards with regard to locations, parking, landscaping, access and similar issues which existed at the time the structure was established.

6.4 Structural Quality - Fire Separation - Variance

1. All structures proposed for conversion shall conform to all applicable provisions of the International Building Code in effect at the time of application.

~~2. Regardless of any other provision to the contrary, each separate unit within a multi-unit structure shall be separate from each adjacent unit by walls and/or ceilings having a fire rating of two (2) hours or more.~~

3. Variances to the building code ~~or fire separation standards~~, as required above, may be granted by the City Council as a condition of approval of the conversion project, following the prior recommendation of the Planning Commission and upon the finding that said requirements are impractical because of unique circumstances associated with the structure, and that the gravity of said variance will not result in the creation or perpetuation a health or safety problem or a reduction in structural quality which is significantly less than would be achieved by full compliance with said requirements. In making its recommendation to the City Council on any such request for variance, the Planning Commission shall give due consideration to the recommendations of the Building Inspector, City Engineer, Fire Department or other affected agency.

6.5 Utility and Facility Requirements

1. All units shall be separately metered for water, gas, electricity, and sewer, unless the covenants, conditions and restrictions provide for the Association to pay the costs of services.
2. Each unit shall be provided with readily accessible individual shut-off valves.
3. All storage and solid waste receptacles outside of units must be housed in a closed structure compatible with the design of the development.

6.6 Approval Procedure

The procedure to be followed shall be the same as set forth in City ordinances dealing with major subdivisions.

6.7 Required Documents

The following documents shall be prepared and submitted by the developer for each condominium conversion project:

1. Articles of Incorporation
2. Corporation By-Laws
3. Declaration of Covenants, Conditions, Restrictions and Management Policies/Declaration of Condominium
4. Management Agreement
5. Open Space Easement
6. Sales Brochure
7. Record of Survey or Final Subdivision Plat
8. Property Report

Where, in the opinion of the City Council, a particular document required under this Section is inapplicable for the particular project proposed, the City may waive the requirement for submitting said document.

6.8 Special Provisions

1. Property Report (as required under Section 6.7 above). The developer shall submit two (2) copies of a property report describing the condition, useful life, and capacity of the roof, foundations, mechanical, electrical, heating, plumbing, and structural elements of all existing buildings and structures or uses; and identifying existing or latent deficiencies, proposed repairs and/or renovations. Said report shall be prepared by a structural engineer or qualified licensed contractor(s) acceptable to the City. The report shall also contain a statement of disclosure identifying those aspects of the building and site area which do not meet the requirements of the building code or zoning ordinance as they currently exist.
2. Notification of Tenants. Developers of a condominium conversion project shall, at the time of submission for final approval, submit to the City the following:
 - (1) Certification that the present tenants of the project have been notified of the proposed conversion. All tenants who occupy the property after an application for conversion has been filed with the City shall be notified by the developer prior to occupancy by such tenant.
 - (2) The present tenant or tenants of any unit to be converted shall be given a nontransferable right of first refusal to purchase the unit occupied upon at least the same terms and conditions offered to the general public or other individuals. The right shall extend for at least sixty (60) days after beginning sales, provided that the tenant may cancel the purchase agreement if the unit is not conveyed to the tenant within six (6) months or unless the tenant gives prior written notice of his/her intention not to exercise such right.
3. Unlawful to Record Unapproved Documents. It shall be unlawful to record any record of survey map or declaration of a condominium project in the office of the County Recorder, unless the same shall bear thereon final approval of the Planning Commission and City Council as required by the terms of this Code, and any record of survey map or declaration

so recorded without such approval shall be null and void. Any owner, or agent of any owner, of land or units located within a purported condominium conversion project, who transfers or sells any land, structure, or condominium unit in such purported project, before obtaining the final approval by the Planning Commission and City Council on the record of survey map and declaration and recording the same in the office of the County Recorder, shall be guilty of a misdemeanor for each lot, parcel of land, structure or condominium unit so transferred or sold.

From: Larry Hilton [ldhilton@gmail.com]
Sent: Friday, June 05, 2015 4:01 PM
To: Jason Bond
Subject: Request for Amendment to City Ordinance

Jason:

I am writing to follow up on our conversations regarding Alpine's condominium conversion policy. We respectfully request that section 6.4(2) in its entirety, as well as the phrase "or fire separation standards" in section 6.4(3) be stricken from ordinance 85-07. We understand that these standards are significantly more stringent than those required by any other municipality in the area, and that they would entail much greater cost beyond that required by the International Building Code.

Please do not hesitate to contact me should you have any questions regarding our concerns. Thank you for your consideration.

--

Best regards,
Larry Hilton
(801) 367-0067



Lone Peak Fire District
5582 Parkway West
Highland, UT 84003
801-420-2529

Benjamin D. Bailey, BS, EMTP
Fire Marshal / Battalion Chief

July 8, 2015

Jason Bond
City Planner
Alpine City

RE: Proposed Condo Ordinance Amendment

Mr. Bond,

I have reviewed the following proposed changes to the condo ordinance and I'm in agreement with it.

6.4 Structural Quality - Fire Separation - Variance

1. All structures proposed for conversion shall conform to all applicable provisions of the International Building Code in effect at the time of application.

~~2. Regardless of any other provision to the contrary, each separate unit within a multi-unit structure shall be separate from each adjacent unit by walls and/or ceilings having a fire rating of two (2) hours or more.~~

3. Variances to the building code ~~or fire separation standards~~, as required above, may be granted by the City Council as a condition of approval of the conversion project, following the prior recommendation of the Planning Commission and upon the finding that said requirements are impractical because of unique circumstances associated with the structure, and that the gravity of said variance will not result in the creation or perpetuation a health or safety problem or a reduction in structural quality which is significantly less than would be achieved by full compliance with said requirements. In making its recommendation the Council on any such request for variance, the Planning Commission shall give due consideration to the recommendations of the Building Inspector, City Engineer, Fire Department or other affected agency.

Please contact me with any questions you have.

Regards,

Benjamin Bailey, BS, EMTP
Fire Marshal / Battalion Chief
Lone Peak Public Safety District

Charmayne Warnock

From: Roger Evans [revans@sunrise-eng.com]
Sent: Thursday, July 02, 2015 11:47 AM
To: Charmayne Warnock
Subject: RE: Condo - firewal requirement

After reviewing the proposed ordinance change, I agree with Larry Hilton that paragraph two (2) should be deleted in Section 6.4 of the Alpine ordinance. The current adopted codes require only a one (1) hour separation between condo units.

From: Charmayne Warnock [cwarnock@alpinecity.org]
Sent: Thursday, July 02, 2015 10:59 AM
To: Roger Evans
Subject: Condo - firewal requirement

Roger,

Attached is Alpine City's current ordinance on condominium conversion. The part the applicant wants taken out is in red. I'm also attaching a copy of his email requesting it.

Charmayne G. Warnock

Alpine City Recorder/Building Dept.

Office # 801-756-6241

Fax # 801-756-1189

cwarnock@alpinecity.org



ORDINANCE NO. 2015-10

AN ORDINANCE ADOPTING AMENDMENTS TO SECTION 6.4 OF THE ALPINE CITY DEVELOPMENT CODE RELATING TO FIRE SEPERATION FOR CONDOMINIUM UNITS.

WHEREAS, The City Council of Alpine, Utah has deemed it in the best interest of Alpine City to amend the ordinance to address the fire separation standards for condominium units; and

WHEREAS, the Alpine City Planning Commission has reviewed the proposed Amendments to the Development Code, held a public hearing, and has forwarded a recommendation to the City Council; and

WHEREAS, the Alpine City Council has reviewed the proposed Amendments to the Development Code:

NOW, THEREFORE, BE IT ORDAINED BY THE ALPINE CITY COUNCIL THAT:

The amendments to Section 6.4 contained in the attached document will supersede Section 6.4 as previously adopted.

This Ordinance shall take effect upon posting.

Passed and dated this 28th day of July 2015.

Don Watkins, Mayor

ATTEST:

Charmayne G. Warnock, Recorder

CHAPTER 6

CONDOMINIUM CONVERSION POLICY (ORDINANCE 85-07, Amended by Ord. 2009-17, 10/27/09)

6.1 Intent

The intent of this section is to establish guidelines and minimum requirements relating to the conversion of existing commercial structures to condominium ownership and the maintenance and operation of such projects. These provisions shall be supplemental and in addition to the general requirements for major subdivisions contained under existing City ordinances, and also the requirements of Title 57 Chapter 8 of the Utah Code Annotated, 1953, as amended.

6.2 Permitted Uses

Uses permitted within a condominium project shall be limited to those uses specifically permitted within the zone which underlies the area of the project and shall be subject to all conditions and restrictions required within the zone for the use.

6.3 Layout and Improvement

1. Commercial Conversion Projects. Each project shall conform to the minimum City standards with regard to locations, parking, landscaping, access and similar issues which existed at the time the structure was established.

6.4 Structural Quality - Fire Separation - Variance

1. All structures proposed for conversion shall conform to all applicable provisions of the International Building Code in effect at the time of application.
2. Variances to the building code, as required above, may be granted by the City Council as a condition of approval of the conversion project, following the prior recommendation of the Planning Commission and upon the finding that said requirements are impractical because of unique circumstances associated with the structure, and that the gravity of said variance will not result in the creation or perpetuation a health or safety problem or a reduction in structural quality which is significantly less than would be achieved by full compliance with said requirements. In making its recommendation the Council on any such request for variance, the Planning Commission shall give due consideration to the recommendations of the Building Inspector, City Engineer, Fire Department or other affected agency.

6.5 Utility and Facility Requirements

1. All units shall be separately metered for water, gas, electricity, and sewer, unless the covenants, conditions and restrictions provide for the Association to pay the costs of services.
2. Each unit shall be provided with readily accessible individual shut-off valves.
3. All storage and solid waste receptacles outside of units must be housed in a closed structure compatible with the design of the development.

6.6 Approval Procedure

The procedure to be followed shall be the same as set forth in City ordinances dealing with major subdivisions.

6.7 Required Documents

The following documents shall be prepared and submitted by the developer for each condominium conversion project:

1. Articles of Incorporation
2. Corporation By-Laws
3. Declaration of Covenants, Conditions, Restrictions and Management Policies/Declaration of Condominium
4. Management Agreement
5. Open Space Easement
6. Sales Brochure
7. Record of Survey or Final Subdivision Plat
8. Property Report

Where, in the opinion of the City Council, a particular document required under this Section is inapplicable for the particular project proposed, the City may waive the requirement for submitting said document.

6.8 Special Provisions

1. Property Report (as required under Section 6.7 above). The developer shall submit two (2) copies of a property report describing the condition, useful life, and capacity of the roof, foundations, mechanical, electrical, heating, plumbing, and structural elements of all existing buildings and structures or uses; and identifying existing or latent deficiencies, proposed repairs and/or renovations. Said report shall be prepared by a structural engineer or qualified licensed contractor(s) acceptable to the City. The report shall also contain a statement of disclosure identifying those aspects of the building and site area which do not meet the requirements of the building code or zoning ordinance as they currently exist.
2. Notification of Tenants. Developers of a condominium conversion project shall, at the time of submission for final approval, submit to the City the following:
 - (1) Certification that the present tenants of the project have been notified of the proposed conversion. All tenants who occupy the property after an application for conversion has been filed with the City shall be notified by the developer prior to occupancy by such tenant.
 - (2) The present tenant or tenants of any unit to be converted shall be given a nontransferable right of first refusal to purchase the unit occupied upon at least the same terms and conditions offered to the general public or other individuals. The right shall extend for at least sixty (60) days after beginning sales, provided that the tenant may cancel the purchase agreement if the unit is not conveyed to the tenant within six (6) months or unless the tenant gives prior written notice of his/her intention not to exercise such right.
3. Unlawful to Record Unapproved Documents. It shall be unlawful to record any record of survey map or declaration of a condominium project in the office of the County Recorder, unless the same shall bear thereon final approval of the Planning Commission and City Council as required by the terms of this Code, and any record of survey map or declaration so recorded without such approval shall be null and void. Any owner, or agent of any owner, of land or units located within a purported condominium conversion project, who transfers or sells any land, structure, or condominium unit in such purported project, before obtaining the final approval by the Planning Commission and City Council on the record of survey map and declaration and recording the same in the office of the County Recorder, shall be guilty of a misdemeanor for each lot, parcel of land, structure or condominium unit so transferred or sold.

ALPINE CITY COUNCIL AGENDA

SUBJECT: PRD Amendment (Retaining Wall Approval Process)

FOR CONSIDERATION ON: 28 July 2015

PETITIONER: Staff

**ACTION REQUESTED BY PETITIONER: Make a Recommendation to the
City Council**

APPLICABLE STATUTE OR ORDINANCE: Section 3.9.7 (PRD Design Criteria)

PETITION IN COMPLIANCE WITH ORDINANCE: Yes

BACKGROUND INFORMATION:

The Retaining Wall Ordinance (Article 3.32) was recently adopted by the City Council. Section 3.9.7 of the PRD ordinance talks about an approval process for the use of retaining walls. This proposed amendment will simply clean up some language and refer people to the new retaining wall ordinance.

PLANNING COMMISSION MOTION:

Steve Swanson moved to recommend approval to the City Council for the new wording of the 3.9.7 design criteria of the PRD Amendment (Retaining Wall Approval Process).

Jane Griener seconded the motion. The motion passed with 4 Ayes 0 Nays. Steve Cosper, Jane Griener, Steve Swanson and Judi Pickell all voted Aye.

3.9.7 DESIGN CRITERIA

1. The design of the project shall incorporate the open space and all other criteria applicable to PRD projects.
2. All existing public streets and all streets proposed to be dedicated to the public shall be improved in accordance with City standards for public streets.
3. To the maximum extent possible, the design of the road system shall provide for continuous circulation throughout the project. Cul-de-sacs (dead end roads) shall be allowed only where unusual conditions exist which make other designs undesirable. Cul-de-sac streets shall be not longer than 450 feet and shall be terminated by a turn-around or loop road of not less than 120 feet in diameter.
4. No street shall be constructed in a location or in a manner which results in the creation of a cut or fill slope face exceeding the cut and fill standards of the City or the critical angle of repose for the soils in the disturbed area or a disturbed cross-section area exceeding the cut and fill slope standards for streets in the City. Use of retaining walls [shall conform to the provisions of Section 3.32 of the Alpine City Development Code](#). ~~is prohibited unless approval is recommended by the City Engineer and the Planning Commission, and approved by the City Council~~. Any driveway providing access to a buildable area shall conform to the provisions of Section 3.1.11.5 of the Alpine City Development Code. (Ord. 96-13, 10/9/96; Amended by Ord. No. 2007-04, 4/10/07)
5. All disturbed cut and fill slopes created in the course of constructing streets, utility systems or other improvements shall be stabilized and revegetated. The materials submitted in support of a request for approval of any PRD project shall include a detailed slope stabilization and revegetation plan showing the intended measures to be employed in stabilizing and revegetating the cut and fill slope areas to be created as part of the project. The performance guarantee amounts shall include the estimated cost of stabilization and revegetation. (Ord. 96-13, 10/9/96)
6. Each lot within the Project Area shall abut upon and have direct access to an adjacent public street. The width of each lot shall be not less than 90 feet (as measured along a straight line connecting each side lot line at a point 30 feet back from the front lot line), and the length of the front lot line abutting the City street shall be not less than 60 feet (Amended Ord. 95-18, 7/11/95).

ORDINANCE NO. 2015-11

AN ORDINANCE ADOPTING AMENDMENTS TO SECTION 3.9.7 OF THE ALPINE CITY DEVELOPMENT CODE RELATING TO THE PROCESS TO USE RETAINING WALLS IN A PRD DEVELOPMENT.

WHEREAS, The City Council of Alpine, Utah has deemed it in the best interest of Alpine City to amend the ordinance to direct developers to the retaining wall ordinance (Article 3.32); and

WHEREAS, the Alpine City Planning Commission has reviewed the proposed Amendments to the Development Code, held a public hearing, and has forwarded a recommendation to the City Council; and

WHEREAS, the Alpine City Council has reviewed the proposed Amendments to the Development Code:

NOW, THEREFORE, BE IT ORDAINED BY THE ALPINE CITY COUNCIL THAT:

The amendments to Section 3.9.7 contained in the attached document will supersede Section 3.9.7 as previously adopted.

This Ordinance shall take effect upon posting.

Passed and dated this 28th day of July 2015.

Don Watkins, Mayor

ATTEST:

Charmayne G. Warnock, Recorder

3.9.7 DESIGN CRITERIA

1. The design of the project shall incorporate the open space and all other criteria applicable to PRD projects.
2. All existing public streets and all streets proposed to be dedicated to the public shall be improved in accordance with City standards for public streets.
3. To the maximum extent possible, the design of the road system shall provide for continuous circulation throughout the project. Cul-de-sacs (dead end roads) shall be allowed only where unusual conditions exist which make other designs undesirable. Cul-de-sac streets shall be not longer than 450 feet and shall be terminated by a turn-around or loop road of not less than 120 feet in diameter.
4. No street shall be constructed in a location or in a manner which results in the creation of a cut or fill slope face exceeding the cut and fill standards of the City or the critical angle of repose for the soils in the disturbed area or a disturbed cross-section area exceeding the cut and fill slope standards for streets in the City. Use of retaining walls shall conform to the provisions of Section 3.32 of the Alpine City Development Code. Any driveway providing access to a buildable area shall conform to the provisions of Section 3.1.11.5 of the Alpine City Development Code. (Ord. 96-13, 10/9/96; Amended by Ord. No. 2007-04, 4/10/07)
5. All disturbed cut and fill slopes created in the course of constructing streets, utility systems or other improvements shall be stabilized and revegetated. The materials submitted in support of a request for approval of any PRD project shall include a detailed slope stabilization and revegetation plan showing the intended measures to be employed in stabilizing and revegetating the cut and fill slope areas to be created as part of the project. The performance guarantee amounts shall include the estimated cost of stabilization and revegetation. (Ord. 96-13, 10/9/96)
6. Each lot within the Project Area shall abut upon and have direct access to an adjacent public street. The width of each lot shall be not less than 90 feet (as measured along a straight line connecting each side lot line at a point 30 feet back from the front lot line), and the length of the front lot line abutting the City street shall be not less than 60 feet (Amended Ord. 95-18, 7/11/95).

ALPINE CITY COUNCIL AGENDA

SUBJECT: Art Exhibit Agreement

FOR CONSIDERATION ON: July 28, 2015

PETITIONER: Staff

ACTION REQUESTED BY PETITIONER: That the Council consider approving the art exhibit agreement with Mary Ann Judd Johnson.

INFORMATION: Mary Ann Judd Johnson, a local artist, has 40 paintings of historical sites in Alpine City including historic homes, city hall, old churches and businesses and the old red schoolhouse. Many of these historic buildings no longer exist. Mrs. Johnson has offered the paintings to the city to hang in City Hall. She has done this in other communities including American Fork, Lehi, Pleasant Grove and Cedar Fort where donors have purchased the painting in behalf of the city (rather than being purchased by individuals) so they may be enjoyed by all, now and for future generations.

Due to liability concerns, David Church drafted an art exhibit agreement which would release the city from any liability if the paintings should be lost or damaged. The artist has read and agreed to sign the agreement. If other artists wish to display their work in City Hall under the same conditions, they could enter into the same agreement.

RECOMMENDED ACTION: That the Council decide if they want to enter into an agreement to display art work in City Hall. .

EXHIBITION AGREEMENT

This Agreement between Alpine City, a Utah municipal corporation ("*City*"), and _____ ("*Artist*"), a creator or owner of visual art described under this Agreement (each individually, a "*Party*," and collectively, the "*Parties*"), takes effect on the last date signed below ("*Effective Date*").

BACKGROUND

- Alpine City owns a City Hall wherein it conducts the public's business and holds public meetings.
- Artist has created paintings that depict scenes of, or about, the City described in more detail in Exhibit 1 (attached and incorporated into this Agreement) ("*Artwork*").
- The City has wall space available to display the Artwork of the Artist.
- City desires to display the Artwork for the benefit of the public, the City and the Artist.
- City has the full authority to enter into this Agreement as the owner of the facilities wherein Artist's artwork will be exhibited.
- The Parties desire City to have custody and possession of the Artwork in its City Hall for the purposes of public display and enjoyment.
- The Parties intend this Agreement to set forth the Parties' respective interests in the Artwork, and procedures and understandings governing the Artwork's use, custody, protection and public enjoyment.

AGREEMENT

The Parties agree as follows:

I. Conveyance.

- A. Under Loan. Artist grants to City a loan of the Artwork, subject to this Agreement's requirements. Artist retains ownership or other controlling interest in Artwork not specifically delegated to City under the Agreement.
- B. No Exhibiting Obligation Created. Signing this Agreement does not obligate City to borrow and exhibit Lender's work. If City, after signing this Agreement and before physically borrowing or exhibiting Artist's work, at its sole determination decides that the exhibition is not feasible or that the Artwork will not be included in the Exhibition, then City:
 - 1. promptly must notify Artist of City's decision to not borrow or exhibit Artist's work, and must return the work; and
 - 2. is under no further obligation to borrow or exhibit the Artwork.

II. Term and Termination.

- A. Duration. The City's right physically to take possession of and display the Artwork or any part of it for the Exhibition begins and will end at the discretion of the Artist and the City.
- B. Termination. Either Party has a right to terminate this Agreement for some or all of the Artwork at their convenience by giving the other Party 10 days' written notice.
- C. Post-Termination Rights. Upon this Agreement's termination, the Artist has the right to the return of the Artwork. If the City gives the Artist notice that some or all of the Artwork is to be removed from the City Hall the Artist is responsible to see that the Artwork is picked up and taken. If City, after making all reasonable efforts to get the Artist to retrieve the Artwork, then City has an absolute right to:
 - 1. place the Artwork in storage;
 - 2. charge regular storage fees and any related insurance cost.

III. Delivery of Artwork. Artist must pay any cost for delivering or retrieving the Artwork to or from the City.

IV. Care, Installation and Return of Artwork by City.

- A. Nonalteration. City must maintain the Artwork in any condition in which City has received the Artwork. City must not unframe, unglaze or remove Artwork from any mat, mount or base, or clean or repair or transport Artwork in any damaged condition except:
 - 1. with Artist's express written permission; or
 - 2. when imperative with respect to the Artwork's safety.
- B. Hanging and Display. City staff shall be solely responsible for the physical work of hanging the Artwork. Artist may have input into the position and display of the Artwork, but the final decision of where to hang any particular piece shall be the City's.
- C. Security. The Artist understands and agrees that the City Hall is a building open to the public, with limited security. The City does not warrant or guarantee the Artwork against theft or damage.
- D. Display Only. City must use Artwork solely for display at the City Hall.
- E. Nonalteration. Except in an emergency to preserve Artwork, City must obtain Artist's written consent before:
 - 1. touching up, reframing, repairing or restoring Artwork;
 - 2. cleaning, repairing, or removing Artwork from its frame, or
 - 3. otherwise changing, altering, or disturbing the Artwork's physical condition.
- F. Return. Upon termination of this Agreement, City must return Artwork to Artist in as good condition as when City took possession of the Artwork, ordinary wear, tear, degradation and inherent vice excepted.

- V. Identification of Artwork.** The Artist, with the agreement of the City, may affix or post any label, plate, or other marking to identify the Artwork as a loan to the City and information about the Artwork and the Artist.
- VI. Insurance.** Artist understands and agrees that the City may or may not cover the Artwork with its insurance policies. Artist is solely responsible to obtain insurance coverage for the Artwork. The City does not insure or guarantee the Artwork against theft or damage while in its possession.
- VII. Title and Copyright.** Artist warrants that Artist has full legal title and copyrights to the Artwork or that Artist is a duly authorized agent of each owner of the Artwork. Artist will indemnify and defend City against, and to hold City harmless from, any liability (including attorney's fees and the costs of defending any actions) arising out of any claim by any individual, institution or other person claiming full or partial title or copyright to the Artwork.
- VIII. Miscellaneous.**
- A. No Personal Liability. No officer, agent, governing board member or employee of City is personally subject to any liability under this Agreement.
- B. Binding Effect. This Agreement is for the Parties' benefit only and inures to the benefit of and binds the Parties and their respective heirs, legal representatives, successors and assigns.
- C. Venue; Governing Law. A Party has a right to institute any legal proceeding between the Parties only in a County of Utah, State of Utah court and each Party must submit to that court's jurisdiction. The laws of the State of Utah govern this Agreement as an agreement to be performed within the State of Utah.
- D. No Joint Venture. Nothing contained in this Agreement is considered to create a joint venture, partnership, or agency relationship between the Parties.
- E. Severability. If a court of competent jurisdiction determines any Agreement provision to any extent to be invalid or unenforceable, the remainder of this Agreement is not affected, and each remaining Agreement provision is valid and be enforceable to the fullest extent permitted by law. If any Agreement provision is capable of more than one construction, one of which would render the provision void and any other of which would render the provision valid, the provision has the meaning that renders it valid.
- F. Waiver. No provision or breach of that provision is considered waived, except by written consent of a Party against whom the waiver is claimed, and any waiver of the breach of any provision is not considered to be a waiver of any other Agreement provision. A Party's acceptance of another Party's performance after the time that performance becomes due does not constitute the accepting Party's waiver of the breach or default of an applicable Agreement provision unless the accepting Party expressly indicates in writing otherwise.
- H. Notices.
1. *Required Procedure.* A Party's notice under this Agreement is valid only if in writing and delivered in person or by public or private courier service (including U.S. Postal Service Express Mail) or certified mail with return receipt requested or by facsimile. A Party must address each Agreement notice to the other Party at

each following address corresponding to that other Party or at any other address that the other Party from time to time directs in writing:

- a. If to the City:
Alpine City
 atten: City Recorder
 20 N. Main Street
 Alpine City, UT 84004

- b. If to the Artist:

- 2. *Delivery Date.* Actual in-person notice, however and from whomever received, is always effective. Any other notice is considered to have been given on the earlier of:
 - a. actual delivery or refusal to accept delivery;
 - b. the date of mailing by certified mail; or
 - c. the day facsimile delivery is verified.

IX. Entire Agreement. This Agreement, including any attachments, constitutes the entire understanding between Artist and City and supersedes each prior or contemporaneous agreement - whether written or oral - between parties. Any oral representation not contained in the Agreement is binding on the parties only if the parties have acknowledged it in writing. The Parties have not entered any warranty, representation, or other agreement in connection with the Agreement's subject matter unless specifically set forth in the Agreement. Any supplement, amendment, alteration, modification, waiver or termination of this Agreement is binding only if the Parties have entered it in writing.

ALPINE CITY:

ARTIST:

By: _____
Mayor Don Watkins
Title: _____
Date: _____

Mary Ann Judd Johnson
Date: _____

ATTEST:

City Recorder, Charmayne G. Warnock

Exhibit 1

Description of Artwork