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CUSTOMER NAME AND ADDRESS

UTAH COUNTY AUDITOR,  
MICKLENA FRAMPTON  
100 E CENTER ST STE 3600

PROVO UT 84606

ACCOUNT NUMBER

9001334912

DATE

1/24/2018

ACCOUNT NAME

UTAH COUNTY AUDITOR,

TELEPHONE

8018518238

ORDER # / INVOICE NUMBER

0001192260 /

PUBLICATION SCHEDULE

START 01/24/2018 END 01/24/2018

CUSTOMER REFERENCE NUMBER

Ordinance 2018-2

CAPTION

PUBLIC NOTICE ORDINANCE NO. 2018-2 WAS ADOPTED BY THE BOARD OF COUN

SIZE

34 LINES 1 COLUMN(S)

TIMES

2

TOTAL COST

40.70

PUBLIC NOTICE

ORDINANCE NO. 2018-2 WAS ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF UTAH COUNTY, UTAH, ON JANUARY 9, 2018, AMENDING SECTION 5-12 OF THE UTAH COUNTY LAND USE ORDINANCE, RELATIVE TO THE APPLICABILITY OF THE REQUIREMENTS OF THE NATURAL HAZARDS OVERLAY ZONE, AS WELL AS AN AMENDMENT TO THE DEFINITION OF CRITICAL FACILITIES FOUND IN SUBSECTION 2-2-A OF THE UTAH COUNTY LAND USE ORDINANCE.

A COMPLETE COPY OF THE ORDINANCE IS AVAILABLE AT THE UTAH COUNTY CLERK/AUDITOR'S OFFICE, COMMISSIONER NATHAN IVIE AND COMMISSIONER WILLIAM C. LEE VOTED IN FAVOR OF THE ORDINANCE, COMMISSIONER GREG GRAVES WAS ABSENT.  
1192260 UPAXLP

AFFIDAVIT OF PUBLICATION

AS NEWSPAPER AGENCY COMPANY, LLC dba UTAH MEDIA GROUP LEGAL BOOKER, I CERTIFY THAT THE ATTACHED ADVERTISEMENT OF PUBLIC NOTICE ORDINANCE NO. 2018-2 WAS ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF UTAH COUNTY, UTAH, ON JANUARY 9, 2018, AMENDING SECTION 5-12 OF THE UTAH FOR UTAH COUNTY AUDITOR, WAS PUBLISHED BY THE NEWSPAPER AGENCY COMPANY, LLC dba UTAH MEDIA GROUP, AGENT FOR DESERET NEWS AND THE SALT LAKE TRIBUNE, DAILY NEWSPAPERS PRINTED IN THE ENGLISH LANGUAGE WITH GENERAL CIRCULATION IN UTAH, AND PUBLISHED IN SALT LAKE CITY, SALT LAKE COUNTY IN THE STATE OF UTAH. NOTICE IS ALSO POSTED ON UTAHLEGALS.COM ON THE SAME DAY AS THE FIRST NEWSPAPER PUBLICATION DATE AND REMAINS ON UTAHLEGALS.COM INDEFINATELY. COMPLIES WITH UTAH DIGITAL SIGNATURE ACT UTAH CODE 46-2-101; 46-3-104.

PUBLISHED ON Start 01/24/2018 End 01/24/2018

DATE 1/24/2018

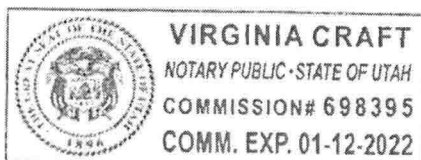
SIGNATURE *Lori Gudmundson*

STATE OF UTAH )

COUNTY OF SALT LAKE )

SUBSCRIBED AND SWORN TO BEFORE ME ON THIS 24TH DAY OF JANUARY IN THE YEAR 2018

BY LORI GUDMUNDSON.



*Virginia Craft*  
NOTARY PUBLIC SIGNATURE



ENT 6586:2018 PG 1 of 10  
JEFFERY SMITH  
UTAH COUNTY RECORDER  
2018 Jan 22 11:48 am FEE 0.00 BY BA  
RECORDED FOR UTAH COUNTY COMMISSIONERS

ORDINANCE NO. 2018- 2

**AN ORDINANCE AMENDING SECTION 5-12 OF THE UTAH COUNTY LAND USE ORDINANCE, RELATIVE TO THE APPLICABILITY OF THE REQUIREMENTS OF THE NATURAL HAZARDS OVERLAY ZONE, AS WELL AS AN AMENDMENT TO THE DEFINITION OF CRITICAL FACILITIES FOUND IN SUBSECTION 2-2-A OF THE UTAH COUNTY LAND USE ORDINANCE**

**WHEREAS**, the Board of County Commissioners initiated a review of the Utah County Land Use Ordinance (UCLUO), dealing with amending Section 5-12, relative to the applicability of the requirements of the Natural Hazards Overlay Zone; and

**WHEREAS**, the Board of County Commissioners referred the proposed amendments of the Utah County Land Use Ordinance to the Planning Commission during the regularly scheduled meeting of the Board of County Commissioners, on June 13, 2017; and

**WHEREAS**, the Planning Commission addressed the proposed amendments to the Utah County Land Use Ordinance during the regularly scheduled meeting of the Planning Commission, on December 19, 2017, and made a recommendation to the Board of County Commissioners regarding the proposed amendments; and

**WHEREAS**, a public hearing regarding the proposed amendments was scheduled and held during the regularly scheduled meeting of the Planning Commission, on December 19, 2017; and

**WHEREAS**, the Board of County Commissioners has received and carefully reviewed the recommendation from the Planning Commission regarding the proposed amendments, the minutes of the December 19, 2017 Utah County Planning Commission meeting, and the public hearing regarding the proposed amendments to the Utah County Land Use Ordinance; and

**WHEREAS**, the Board of County Commissioners has received and carefully reviewed the input, documents, and testimony from the public regarding the proposed amendments to the Utah County Land Use Ordinance; and

**WHEREAS**, the Board of County Commissioners finds the proposed amendments to the Utah County Land Use Ordinance conform to the Utah County General Plan, 2014, and are consistent with the other provisions of the Utah County Land Use Ordinance; and

**WHEREAS**, the Board of County Commissioners finds that the proposed amendments to the Utah County Land Use Ordinance are in the best interest of the health, safety, and welfare of the citizens of Utah County, considering all factors.

NOW, THEREFORE, THE COUNTY LEGISLATIVE BODY OF UTAH COUNTY ORDAINS AS FOLLOWS:

**Part I:**

Subsection 2-2-A-34 of the Utah County Land Use Ordinance is hereby amended to read as follows:

2-2: DEFINITIONS

A.

34. **Critical Facilities:** Communication, utility and transportation lines (including their appurtenant structures which are essential to make the system function, such as switching stations, transformers and monitoring gauge houses); emergency facilities such as fire stations, police stations, ambulance facilities, emergency and government utility vehicle shelters and garages, and hospitals; unique or large structures or land uses (including appurtenant structures and facilities) whose failure might be catastrophic, such as reservoirs, canals, dams holding over ten (10) acre feet of water, water tanks, petroleum refineries, and buildings where hazardous materials, as per the currently adopted building and fire codes, are manufactured, stored or handled; high occupancy buildings which are designed to accommodate 50 or more people, such as schools, hotels and offices; government communication centers and other facilities required for emergency response.

**Part II:**

Section 5-12 of the Utah County Land Use Ordinance is hereby amended to read as follows:

5-12: NHO NATURAL HAZARDS OVERLAY ZONE

A. DECLARATION AND LEGISLATIVE INTENT

The NHO Natural Hazards Overlay Zone (NHO Zone) includes the territory of the unincorporated area of Utah County which was identified in a joint program of the Utah Geologic and Mineral Survey and the US Geological Survey as having a susceptibility for rockfall, debris flow, landslides, or surface fault rupture. In addition to the territory identified in the joint program, the NHO Zone includes other areas that have been identified by the County Commission as having a significant hazard. The zone shall not be construed to be all-inclusive of such hazards.

It is hereby declared that the specific purposes and intent of the County Commission in establishing the NHO Natural Hazards Overlay Zone are:

1. To take advantage of the powers and more fully implement the basic purposes for planning and zoning set forth in Utah Code Annotated 1953, as amended.
2. To identify areas subject to geologic hazards and to reduce the risk therefrom.
3. To protect human life and health.
4. To reduce damage to public and private property and to public utilities and structures.
5. To assure that those who occupy the areas susceptible to geologic hazards assume responsibility for their actions regarding land use, construction, and grading.

6. To provide notification of areas of special hazard for rockfall, debris flow, landslide, or surface fault rupture to the public.

In order to accomplish the stated purposes and intent, the following provisions shall apply:

## B. SCOPE

### 1. Purview

The natural hazards which are the purview of the NHO Zone are limited to: rockfall, debris flow, landslide, and surface fault rupture.

### 2. Extent

The provisions of this section shall apply to all areas having a susceptibility to the above-named hazards within the unincorporated area of Utah County, which are depicted on the Official Zone Map of Utah County, Utah, as lying within the NHO Zone. Such provisions shall not abrogate but shall be in addition to the requirements of the underlying zoning districts within the NHO Zone, pertaining to the property within the NHO Zone. Where the provisions of this section conflict with any other requirement, the more stringent restriction shall apply.

### 3. Interpretation

To determine which properties lie within the NHO Zone, the Zoning Administrator shall determine the boundaries of the zone by scaling the distances from the Utah County Zone Map. The Zoning Administrator may be aided by the Natural Hazards Overlay Map Series, or successor map series, Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series, or successor maps, and other data from the U.S. Geological Survey (USGS) and the Utah Geological Survey. Any adversely affected party contesting the location of the zone boundary shall comply with the procedures set forth under Title 17, Chapter 27a, of the Utah Code Annotated 1953, as amended. Such adversely affected party shall make a request to contest the location of the zone boundary within twenty (20) days of the date of the decision being contested.

### 4. Compliance

No structure or land use shall hereinafter be constructed, located, extended, converted, altered or otherwise developed without full compliance with this section.

## C. PERMITTED USES

### 1. Uses

All structures and uses of land which are listed as permitted uses and permitted conditional uses in the underlying zoning districts shall also be permitted or approved as a conditional use in the territory covered by the NHO Zone if they meet the standards of both this section and the underlying zone.

### 2. Clearance

Before any permit is issued within the NHO Zone, the Zoning Administrator must first find that the land use, grading, construction, or other such development to be permitted therein complies with both the requirements of the NHO Zone and the underlying zone and issue a written clearance attesting to such finding. No land use, grading, construction or other development shall be commenced or altered within the territory of the NHO Zone until the clearance and the permit based on

such clearance are granted.

3. Large Scale Developments

No large scale development lying within the NHO Zone shall be approved without full compliance with the requirements of this Section.

Exception: The portion of a large scale development lying within the NHO Zone is exempt from the requirements of this Section when all the following requirements are met:

- a. The portion of a development lying within the NHO Zone is located and identified on the plat as being susceptible to natural hazards (the specific natural hazard[s], which is under the purview of the NHO Zone, only, shall be identified);
- b. The portion of the development to be exempted from the requirements of the NHO Zone is clearly located and identified on the plat;
- c. The plat includes the following note: "No occupied structure and habitable space, as defined in the currently adopted building codes, or critical facility (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures) shall be constructed on the land in this plat identified hereon as susceptible to natural hazards and exempt from the requirements of the NHO Zone"; and
- d. The applicant provides a signed, dated, and stamped statement of support, which includes findings, for the Exception from a geologist or engineer licensed by the State of Utah, who has at least four (4) years of experience in a responsible position in the field of engineering geology. Such statement shall be reviewed and approved by the County Engineer.

This Exception can be used to completely exempt a development from the requirements of this Section, provided all portions of a development lying within the NHO Zone qualify for the Exception.

4. Natural Hazards Assessment

- a. A Natural Hazards Assessment that complies with the standards of this Section shall be required for every application for occupied structures and habitable spaces, as defined in the currently adopted building codes, critical facilities (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures), and large scale developments in the NHO Zone.

Exception: In consultation with the Utah County Zoning Administrator, the Utah County Engineer may determine that a permit application for the renovation, remodel, or repair of an existing occupied structure, habitable space, critical facility, or amendment of a large development plat, is exempt from the Natural Hazards Assessment requirements, if the proposed application does not expand the footprint or scale of the existing occupied structure, habitable space, critical facility, or large scale development.

- b. Natural Hazards Assessments shall meet the following requirements:
  - i. The assessment shall be prepared by a geologist or engineer licensed by the State of Utah who has at least four (4) years of experience in a responsible position in the field of engineering geology. The assessment

- shall be signed, dated and stamped by the preparer and include the qualifications of the preparer.
- ii. The assessment shall be a site-specific engineering geology study and shall identify all known or suspected potential geologic hazards, originating on-site or off-site, whether previously mapped or unmapped, which may affect the proposed structure or use of land.
  - iii. The assessment shall identify the degree to which the hazards affect the proposed structure or use of land and recommend mitigation measures to adequately protect persons and property, including occupants and property improvements related to the proposed structures and uses, and to meet the standards of this ordinance.
  - iv. The assessment shall contain a detailed site map of the subject area showing any site-specific mapping performed as part of the geologic investigation, and including boundaries and features related to any natural or geological hazards, topography, and drainage. The site map must show the location and boundaries of the hazard(s), delineation of any recommended setback distances from hazard(s), and recommended location(s) for structures. Recommended buildable and non-buildable areas shall be clearly identified.
  - v. The assessment shall contain trench logs and test pit logs, boring logs, aerial photographs, references with citations, and other supporting information, as applicable.
  - vi. The County Engineer shall determine whether the Natural Hazards Assessment meets the standards of this Section. The County Engineer may reject the assessment if the County Engineer finds that the professional geologist or engineer has insufficient training or experience, or if the County Engineer finds that the assessment is insufficient in depth, scope, or detail. The County Engineer may require that a supplemental or revised assessment be submitted.
  - vii. All recommended mitigation measures identified in the Natural Hazards Assessment shall be incorporated into the design of the proposed structure or use of land. In the event that the Natural Hazards Assessment provides alternative mitigation measures, the applicant shall elect which mitigation measures to implement, and the applicant shall submit a supplemental Natural Hazards Assessment confirming that the elected mitigation measures are sufficient to adequately protect persons and property and to meet the standards of this ordinance. The applicant shall submit engineered plans for the proposed mitigation measures, which plans will demonstrate how the mitigation measures will be incorporated into the design of the applicable structure or use of land. These plans shall be prepared by a professional engineer who is licensed to practice in the State of Utah and is qualified to develop such plans. The County Engineer may reject the plans if the County Engineer finds that the professional engineer has insufficient training or experience, or if the County Engineer finds that the plans insufficiently describe the

proposed mitigation measures or do not meet the other requirements of this Section. The County Engineer may require that supplemental or revised plans be submitted.

viii. The County Engineer shall determine if the submitted plans sufficiently describe the proposed mitigation measures.

- c. Upon the determination by the County Engineer that the Natural Hazards Assessment meets the standards of this section, the Zoning Administrator shall issue a clearance which incorporates the uses, structures, and mitigation measures approved by the County Engineer.

#### D. STANDARDS

##### 1. General Standard

The mitigation measures, which have been identified in the Natural Hazards Assessment, shall be implemented. The mitigation measures shall be sufficient to provide adequate protection to persons and property, including occupants and property improvements related to the proposed structures and uses, and to meet the standards of this ordinance.

##### 2. Site Investigation, Hazard Identification, and Mitigation Implementation

Occupied structures and habitable spaces, as defined in the currently adopted building codes, critical facilities (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures), and large scale developments, shall not be placed in, an area subject to rockfall, debris flow, landslides, or surface fault rupture, unless the site for such structure or use of land is investigated in a site-specific Natural Hazards Assessment that meets the requirements of this Section and the mitigation measures identified in the Natural Hazards Assessment are all incorporated into the design of the structure or use of land and implemented, unless an exception is provided in this Section for such structure or use of land. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required. In the case of debris flow hazards, if mitigation measures include discharge onto neighboring land, written permission is required from the owner of the neighboring land.

##### 3. No Covering Up

No use, construction, or grading shall be permitted or performed in the NHO Zone which would conceal, misrepresent, or cause to be unrecognized the presence of any natural hazard which is within the purview of the NHO Zone.

#### E. VARIANCES

##### 1. Ability to Grant

The Board of Adjustment, when deciding appeals for variances of distance or area within the NHO Zone shall follow both the standards of chapter 7 of this land use ordinance and the standards stated below.

##### 2. Items to Consider

In deciding whether to grant a variance and what conditions to attach to its approval, the Board of Adjustment shall consider each of the following:

- a. The likelihood during a significant seismic or other geologic event that materials may be moved onto adjacent land areas, or that other impacts may

disturb or destabilize adjacent land areas, causing property damage or injury to others.

- b. The degree of susceptibility to damage by seismic or other geologic activity for the building design or use proposed.
  - c. The importance of the services of the proposed facility to the community and the need for the facility to be functional following a significant event of geologic activity.
  - d. The necessity of the facility to be in the proposed location or proposed design, considering alternate locations and designs available.
  - e. The ability of the community to provide emergency services to the facility in the event of a catastrophe.
  - f. The degree of benefit received from the variance relative to the hazards posed to the facility's neighbors, visitors, and owners.
3. Presumption Relative to Approval
- a. Generally, the standards of this section shall not be varied unless an equally safe method of use and construction can be approved.
  - b. The amount of variance approved shall be only the minimum amount required to provide relief.
  - c. A variance shall be granted only if it will not result in a threat to public safety, cause extraordinary public expense, or create a nuisance.
  - d. In a continuum beginning with hay barns and agricultural structures and progressing to high rise apartment buildings and auditoriums, the difficulty in obtaining a variance shall be greater for structures having a higher percentage of time when the structure has human utilization, and greater for structures which are occupied by a larger number of people.

#### F. SPECIAL REQUIREMENTS

##### 1. Certification by Engineer - Plans

When this Section requires the preparation and submittal of engineered plans, such plans shall be prepared by a professional engineer licensed to practice in the State of Utah and who is qualified to prepare such plans through experience and training. The required engineered plans shall bear on it a certification by the engineer that the plans implement all of the recommended mitigation measures identified in the required Natural Hazards Assessment, and meet the standards and requirements of the NHO Zone. Prior to the Zoning Administrator issuing any clearance to commence construction, the County Engineer shall determine if the requirements of this section have been met.

##### 2. Certification by Geologist or Engineer - Natural Hazards Assessments

When a Natural Hazards Assessment is required by this Section for a structure or use of land, the Natural Hazards Assessment shall bear the signed certification of the Utah State licensed geologist or engineer, who has at least four (4) years of experience in a responsible position in the field of engineering geology, that the recommended mitigation measures, which measures have been identified in the Natural Hazards Assessment, are sufficient to provide adequate protection to persons and property, including occupants and property improvements related to the proposed structures and uses, and are sufficient to meet the standards of this

ordinance. Prior to the Zoning Administrator issuing any clearance to commence construction, the County Engineer shall determine if the requirements of this section have been met.

3. Records

The Zoning Administrator shall retain the Natural Hazards Assessments and engineered plans submitted with applications for permits issued under authority of this section.

4. Maps Adopted by Reference

The map series "Utah County Natural Hazards Overlay," dated April 1, 1990, and Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series are hereby adopted by reference in book form. One copy of "Utah County Natural Hazards Overlay," dated April 1, 1990, and Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series, are hereby ordered to be placed in the office of the Utah County Clerk. They may be used in the administration of the NHO Zone as required therein, along with other data from the U.S. Geological Survey (USGS) and the Utah Geological Survey.

G. DISCLOSURE

1. Whenever a Natural Hazards Assessment is required under this Section, the owner of the parcel shall record a signed notice running with the land, in a form satisfactory to the County, prior to the approval of any use of land or structure. The required notice shall include the following:
  - a. Notice that the parcel is located within an area susceptible to natural hazards, which hazards are the purview of the Natural Hazards Overlay (NHO) Zone, as shown on the Official Zone Map of Utah County, Utah; and
  - b. Notice that a Natural Hazards Assessment was prepared and is available for public inspection in the Utah County Community Development office.
2. When the land, or portion thereof, of a development plat lies in an area susceptible to natural hazards, which hazards are the purview of the Natural Hazards Overlay (NHO) Zone, as shown on the Official Zone Map of Utah County, Utah, such plat shall contain notification of 1) the hazards area, 2) any natural hazards assessments prepared in connection with development approval, and 3) the mitigation measures incorporated into the development plan.

H. WARNING AND DISCLAIMER

The degree of protection from geologic hazards intended to be provided by this Section is considered reasonable for regulatory purposes. The original language of the NHO Zone was based on accepted geologic and scientific methods of study. Amendments have been made to this Section since its inception. The major amendments of this Section have been generally reviewed by experts in the field of engineering geology. This section is intended to reduce the danger, cost, and impact from geologic hazards. Therefore, known or unknown geologic conditions, or natural or man-made changes in conditions, may contribute to future damages even though a structure or use of land has been properly permitted within the NHO Zone. Furthermore, the provisions of this Section shall not imply that areas within or outside the NHO Zone will be free from the impact of geologic hazards. This

Section shall not create a liability on the part of or be a cause of action against the County or any officer or employee thereof for any personal or property damage that may result from reliance on the regulations of the NHO Zone, or from damages occurring in areas which for any reason have not been designated in the NHO Zone.

**Part III:**

A copy of the Utah County Land Use Ordinance, as amended herein, is hereby ordered to be filed in the office of the Utah County Clerk/Auditor.

**Part IV:**

If any of the sections, sentences, clauses or provisions of this ordinance shall for any reason be adjudged inapplicable or invalid by a court of competent jurisdiction, such shall not affect or invalidate the remaining portion contained herein.

**Part V:**

This ordinance shall become effective fifteen (15) days after it is passed and upon at least one (1) publication in a newspaper published in and having general circulation in Utah County.

PASSED and ordered published this 9th day of January 2018.

UTAH COUNTY COMMISSION

VOTE

[Signature]  
NATHAN IVIE, CHAIR

aye

[Signature]  
WILLIAM C. LEE, VICE-CHAIR

aye

absent  
GREG GRAVES, COMMISSIONER

o

ATTEST:  
BRYAN E. THOMPSON  
County Clerk/Auditor

By: [Signature]  
Deputy



APPROVED AS TO FORM:  
JEFFREY R. BUHMAN  
County Attorney

Approved

Disapproved

By: [Signature]  
Deputy

Date of Publication: Once only, as soon as possible

December 19, 2017

## UTAH COUNTY PLANNING COMMISSION STAFF REPORT

- I. APPLICATION:** (Public Hearing)
- A. APPLICANT** - Utah County Commission
  - B. REQUEST** - Proposed amendment of Section 5-12 of the Utah County Land Use Ordinance, relative to the applicability of the requirements of the Natural Hazards Overlay Zone
  - C. LOCATION** - Unincorporated Utah County

### II. EXECUTIVE SUMMARY:

Staff recommends that the Utah County Planning Commission recommend *approval* of the proposed amendment of Section 5-12 of the Utah County Land Use Ordinance (UCLUO), relative to the applicability of the requirements of the NHO Zone. This proposal also includes an amendment to Subsection 2-2-A-34 of the UCLUO, the definition of Critical Facilities. This is a fairly major amendment that has been generally reviewed by RB&G Engineering, Inc. This proposal appears to (1) conform to the land use element and other provisions of the general plan, (2) be in the best interest of the health, safety, and welfare of the public, and (3) more fully carry out the general purposes and intent of the Utah County Land Use Ordinance.

### III. STAFF ANALYSIS:

The requirements and provisions for the NHO Zone are contained within Section 5-12 of the UCLUO. On June 13, 2017, after receiving a proposal from Community Development staff for an amendment to Section 5-12, regarding the applicability of the NHO Zone requirements, the Utah County Commission acted to refer said proposal to the Utah County Planning Commission for their consideration. In forwarding the proposal to the County Commission, Community Development staff was explicit in its intent to refine the proposal after it was originally given to the County Commission.

The proposal forward to the County Commission was a seemingly simplistic approach to applying the NHO Zone to all know hazard areas in unincorporated Utah County. This proposal included establishing a definition for "Know Natural Hazards Areas" and amending Section 5-12 to have the NHO Zone apply to all "Know Natural Hazards Areas." Staff abandoned this approach. Administration of such an approach could have been difficult with the limited resources that Community Development possesses.

Staff has drafted an amendment to Section 5-12 (as well as Subsection 2-2-A-34) after conducting a careful process in which they obtained the feedback of the Engineering Division of

the Public Works Department, the County Attorney's Office, and RB&G Engineering, Inc., a private engineering firm with geotechnical expertise.

The proposed amendment to Section 5-12 would not change the basic structure of requirements for the NHO Zone. It would still require and/or operate as follows:

- The Utah County Zoning Map establishes which parcels lie in the NHO Zone
- The Zoning Administrator determines whether a certain property is in the NHO zone, after reviewing the Utah County Zoning Map and other resources permitted by the UCLUO
- For properties in the NHO Zone, applications for permits for certain uses, including structures occupied by humans, must include a natural hazards assessment (prepared by a geologist or engineer with the applicable experience)
- If the assessment recommends mitigation measures, the applicant must submit engineered plans for the mitigation measures and those plans must show the mitigation measures incorporated in the use of land

The major purposes of this proposal are as follows:

- Clean-up the language and make it more consistent throughout the section
- Expand the data which can be used to administer the NHO Zone, including the adoption of Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series
- Require applications for proposed large scale developments (i.e., subdivisions) to have a natural hazards assessment
- To a limited extent, expand the list of those proposed uses that must have a natural hazards assessment submitted with the application for the permit for such use
- Establish exceptions to the requirement for submittal of a natural hazards assessment
- Expand the definition of Critical Facilities

Each of these purposes is explained below in greater detail.

#### **Clean-up**

Staff is proposing to clean-up the language in the subject section. A good example of this effort is the proposed elimination of the following sentence from Subsection 5-12-A, which reads as follows: "The standards of the NHO Zone are the product of a joint program of the Utah Geologic and Mineral Survey and the US Geological Survey. . . ." This sentence is proposed to be stricken from the UCLUO because the statement is no longer completely true because of the amendments that have been made to this section since it was first adopted. Another example of this effort was the consolidation of Subsections 5-12-D-3 through 6. Much of the language of these subsections is repetitious and it seemed to make sense to consolidate them.

#### **Data Used for Administration of the NHO Zone**

The UCLUO establishes the Zoning Administrator as the person who is charged with "[determining] the boundaries of the zone by scaling the distances from the Utah County Zone Map." The Ordinance identifies certain sources of information the Zoning Administrator may consult or be aided by to make this determination. Those sources include: the "Natural Hazards Overlay Map Series, including updated data from the U.S. Geological Survey (USGS) and the Utah Geological Survey." This proposal would specifically identify Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle

map series, or successor maps, as well as *other* data (instead of updated data) from the U.S. Geological Survey (USGS) and the Utah Geological Survey. The addition of the Plates gives the Zoning Administrator a more recent data source for identifying lands in unincorporated Utah County that may be prone to at least some of the hazards considered in the NHO Zone. Additionally, amending this section to allow usage of other (instead of updated) data from the U.S. Geological Survey (USGS) and the Utah Geological Survey broadens the pool of information for the Zoning Administrator to use. There may be historical data from the U.S. Geological Survey (USGS) and the Utah Geological Survey that might aid the Zoning Administrator in his or her responsibility to "determine the boundaries of the zone."

There is a proposed rezone application running concurrently with this application. This application proposes that certain lands near the Thistle area of Utah County be included in the NHO Zone. Approval of the rezone application appears to be contingent upon the adoption of maps that show the proposed rezone area in an area that is susceptible to at least one or more of the hazards considered in the NHO Zone; Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series appear to provide the necessary mapping information.

### **Large Scale Developments**

Subsection 5-12-C-3-a, UCLUO, requires as follows:

"Every application to use land, grade, construct, or otherwise develop in the NHO Zone shall be accompanied by a plot plan and construction plans required by chapter 7 of this land use ordinance plus a Natural Hazards Assessment which complies with the standards of this Section, unless exempted by the terms of the following chart:"

The chart goes on to exempt most uses and structures; however, uses such as occupied structures, structures that house certain types of hazardous materials, water tanks, reservoirs, and canals are not exempt (water tanks, reservoirs, and canals in rockfall areas are exempt).

Applications for large scale developments have been required to meet the requirements of the NHO Zone, particularly those requirements related to natural hazard assessments, because of the potential residential nature of the proposed lots. But the current plain language of the Ordinance does not appear to require large scale developments to be subject to the natural hazard assessment requirements of Section 5-12.

Staff proposes the Ordinance be amended to specifically require large scale developments to be subject to the NHO requirements, particularly the natural hazard assessment requirements. Staff believes the potentially residential nature of the lots in a large scale development warrants the additional natural hazard requirements. However, this proposal does include provisions for large scale developments to be exempt from the requirements of the NHO Zone when certain requirements are met to qualify for the exemption, including, but not limited to, when the hazardous areas lying within a proposed development are identified on the plat and such areas are designated on the plat as unbuildable for occupied structures and most critical facilities.

### **Uses Required to Have a Natural Hazards Assessment**

Currently, the following uses are required by Section 5-12 to have a natural hazards assessment: occupied structures, structures that house certain types of hazardous materials,

water tanks, reservoirs, and canals (water tanks, reservoirs, and canals do not require an assessment in rockfall areas).

This application would require all proposed occupied structures and habitable spaces, as defined in the currently adopted building codes, critical facilities (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures), and large scale developments lying within the NHO Zone to obtain a natural hazards assessment. Occupied structures appurtenant to communication, utility, and transportation lines would require an assessment. Many critical facilities are also occupied structures; however, uses that are not occupied structures or facilities, such as reservoirs, canals, dams holding over ten (10) acre feet of water, water tanks, or other unoccupied unique and large structures and land uses (including appurtenant structures and facilities) whose failure might be catastrophic, which lie in the NHO Zone, would always require a natural hazards assessment under the subject proposal.

**Exception to the Natural Hazards Assessment Requirement for Certain Existing Uses**

This proposal provides for an exception to the natural hazards assessment requirement(s) for some existing uses under certain circumstances. According to this proposal, the County Engineer, in consultation with the Zoning Administrator, *"may determine that a permit application for the renovation, remodel, and repair of an existing occupied structure, habitable space, critical facility, or amendment of a large scale development plat, is exempt from the Natural Hazards Assessment requirements, if the proposed application does not expand the footprint and scale of the existing occupied structure, habitable space, critical facility, or large scale development."*

Staff's intent with this portion of the proposal is to give the County Engineer latitude in exempting permit applications, for the existing uses identified therein, from the natural hazard assessment requirements because (1) the permit application is for the renovation, etc., of an existing use and (2) the permit application does not propose the expansion of the use. Staff believes the County Engineer is the appropriate person to make decisions in these types of matters; however, staff recognizes this is a policy question that needs to be determined.

**Definition of Critical Facilities**

The definition of *Critical Facilities* is proposed to be amended, as part of this proposal, to add some additional structures or uses to be identified as a *critical facility*. Those additional structures or uses include:

- Emergency and government utility vehicle shelters and garages
- Government communication centers and other facilities required for emergency response
- Appurtenant structures and facilities for unique and/or large structures whose failure might be catastrophic
- Reservoirs
- Canals

As noted above and according to this proposal, all permit applications for critical facilities, except for communication, utility, and transportation lines and their non-occupied appurtenant structures, would be required to submit a natural hazard assessment as part of the application and meet all requirements of Section 5-12 related to natural hazard assessments, mitigation measures, engineered plans, etc.

As was noted above, this proposal was generally reviewed by RB&G Engineering, Inc (Consultant). Their feedback was considered and generally incorporated into the proposal. Staff did make some revisions during and after the Consultant's review, which were not reviewed by them. One notable change relates to the uses of land that would require a natural hazards assessment. Staff originally included grading, as well as communication, utility, and transportation lines as uses that would require a natural hazards assessment. These uses were removed after further consideration and consultation with the Engineering Division of the Utah County Public Works Department. It should be noted that the Consultant recommended removing "grading" as a use requiring a natural hazards assessment.

Many of the revisions made by staff *that* were not reviewed by the Consultant were generally for the sake of cleaning-up the language and making it more consistent throughout Section 5-12. After receiving the Consultant's review comments, staff generally incorporated their suggestions and went through the proposal an additional time attempting to refine it.

It should be briefly noted that the Consultant recommends the following: "Consider future additions to Natural Hazards Overlay Zones to include (1) liquefaction potential during seismic events, (2) steep slopes, and (3) flooding." Staff would note that the County has a Flood Plain Overlay (FPO) Zone.

The proposed amendment is included immediately below.

## PROPOSED AMENDMENTS -

Subsection 2-2-A and Section 5-12 of the Utah County Land Use Ordinance are proposed to be amended as follows (additions are in red, underlined font and deletions are in ~~red, crossed-out font~~):

### 2-2: DEFINITIONS

- A. For purposes of this land use ordinance, definitions are provided for the following terms. Not all of the terms are used in this land use ordinance. The inclusion of any term defining a land use does not imply that the term is a permitted or conditionally permitted use in any zone, unless specifically stated as such in the applicable zone. Any term which is defined, but not used in this land use ordinance, is included to differentiate the term from other terms which are used in this land use ordinance:
34. **Critical Facilities:** Communication, utility and transportation lines (including their appurtenant structures which are essential to make the system function, such as switching stations, transformers and monitoring gauge houses); emergency facilities such as fire stations, police stations, ambulance facilities, emergency and government utility vehicle shelters and garages, and hospitals; unique or large structures or land uses (including appurtenant structures and facilities) whose failure might be catastrophic, such as reservoirs, canals, dams holding over ten (10) acre feet of water, water tanks, petroleum refineries, and buildings where hazardous materials, as per the currently adopted building and fire codes, are manufactured, stored or handled; high occupancy buildings which are designed to accommodate 50 or more people, such as schools, hotels and offices; government communication centers and other facilities required for emergency response.

5-12: NHO NATURAL HAZARDS OVERLAY ZONE

A. DECLARATION AND LEGISLATIVE INTENT

The NHO Natural Hazards Overlay Zone (NHO Zone) includes the territory of the unincorporated area of Utah County which was identified in a joint program of the Utah Geologic and Mineral Survey and the US Geological Survey as having a susceptibility for rockfall, debris flow, landslides, or surface fault rupture. ~~The standards of the NHO Zone are the product of a joint program of the Utah Geologic and Mineral Survey and the US Geological Survey, which program was conducted in the five counties of the Wasatch Front including Utah County.~~ In addition to the territory identified in the joint program, the NHO Zone includes other areas that have been identified by the County Commission as having a significant hazard. ~~However, not all areas susceptible to natural hazard were known or recognized at the time of adoption of the provisions of this zone, so t~~The zone shall not be construed to be all-inclusive of such hazards.

It is hereby declared that the specific purposes and intent of the County Commission in establishing the NHO Natural Hazards Overlay Zone are:

1. To take advantage of the powers and more fully implement the basic purposes for planning and zoning set forth in Utah Code Annotated 1953, as amended.
2. To identify areas subject to geologic hazards and to reduce the risk therefrom.
3. To protect human life and health.
4. To ~~minimize~~ reduce damage to public and private property and to public utilities and structures.
5. To assure that those who occupy the areas susceptible to geologic hazards assume responsibility for their actions regarding land use, construction, and grading.
6. To provide notification of areas of special hazard for rockfall, debris flow, landslide, or surface fault rupture to the public.

In order to accomplish the stated purposes and intent, the following provisions shall apply:

B. SCOPE

1. Purview

The natural hazards which are the purview of the NHO Zone are limited to: rockfall, debris flow, landslide, and surface fault rupture.

2. Extent

The provisions of this section shall apply to all areas having a susceptibility to the above-named hazards within the unincorporated area of Utah County, which are depicted on the Official Zone Map of Utah County, Utah, as lying within the NHO Zone. Such provisions shall not abrogate but shall be in addition to the requirements of the underlying zoning districts within the NHO Zone, pertaining to the property within the NHO Zone. Where the provisions of this section conflict with any other requirement, the more stringent restriction shall apply.

3. Interpretation

To determine which properties lie within the NHO Zone, the Zoning Administrator shall determine the boundaries of the zone by scaling the distances

from the Utah County Zone Map. ~~He~~ The Zoning Administrator may be aided by the Natural Hazards Overlay Map Series, or successor map series, including Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series, or successor maps, and updated other data from the U.S. Geological Survey (USGS) and the Utah Geological Survey. Any adversely affected party contesting the location of the zone boundary shall comply with the procedures set forth under Title 17, Chapter 27a, of the Utah Code Annotated 1953, as amended. Such adversely affected party shall make a request to contest the location of the zone boundary within twenty (20) days of the date of the decision being contested.

4. Compliance

No structure or land use shall hereinafter be constructed, located, extended, converted, altered or otherwise developed without full compliance with this section.

C. PERMITTED USES

1. Uses

All structures and uses of land which are listed as permitted uses and permitted conditional uses in the underlying zoning districts shall also be permitted or approved as a conditional use in the territory covered by the NHO Zone if they meet the standards of both this section and the underlying zone.

2. Clearance

Before any permit is issued within the NHO Zone, the Zoning Administrator must first find that the land use, grading, construction, or other such development to be permitted therein complies with both the requirements of the NHO Zone and the underlying zone and issue a written clearance attesting to such finding. No land use, grading, construction or other development shall be commenced or altered within the territory of the NHO Zone until the clearance and the permit based on such clearance are granted.

3. Large Scale Developments

No large scale development lying within the NHO Zone shall be approved without full compliance with the requirements of this Section.

Exception: The portion of a large scale development lying within the NHO Zone is exempt from the requirements of this Section when all the following requirements are met:

- a. The portion of a development lying within the NHO Zone is located and identified on the plat as being susceptible to natural hazards (the specific natural hazard[s], which is under the purview of the NHO Zone, only, shall be identified);
- b. The portion of the development to be exempted from the requirements of the NHO Zone is clearly located and identified on the plat;
- c. The plat includes the following note: "No occupied structure and habitable space, as defined in the currently adopted building codes, or critical facility (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures) shall be constructed on the land in this plat identified hereon as susceptible to natural hazards and exempt from the requirements of the NHO Zone"; and

d. The applicant provides a signed, dated, and stamped statement of support, which includes findings, for the Exception from a geologist or engineer licensed by the State of Utah, who has at least four (4) years of experience in a responsible position in the field of engineering geology. Such statement shall be reviewed and approved by the County Engineer.

This Exception can be used to completely exempt a development from the requirements of this Section, provided all portions of a development lying within the NHO Zone qualify for the Exception.

34. Natural Hazards Assessment

a. A Natural Hazards Assessment that complies with the standards of this Section shall be required for every application for occupied structures and habitable spaces, as defined in the currently adopted building codes, critical facilities (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures), and large scale developments to use land, grade, construct, or otherwise develop in the NHO Zone, shall be accompanied by a plot plan and construction plans required by chapter 7 of this land use ordinance plus a Natural Hazards Assessment which complies with the standards of this Section, unless exempted by the terms of the following chart:

CHART SHOWING WHEN A NATURAL HAZARDS ASSESSMENT IS NOT REQUIRED

<u>Hazard Type on Overlay Map</u>	<u>Items Exempt from Filing a Natural Hazards Assessment</u>
	ROCKFALL— All structures not occupied by humans (except for storage facilities for toxic, caustic, flammable, or explosive materials, which must have an assessment).
DEBRIS FLOW	All structures not occupied by humans (except for storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canals, which must have an assessment).
LANDSLIDE	All structures not occupied by humans (except for storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canals, which must have an assessment).
SURFACE FAULT RUPTURE	All structures not occupied by humans (except for storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canals, which must have an assessment).

In the column to the left in the above chart are the four categories of natural hazards which have been mapped in the Natural Hazard Overlay Map Series; at the right are various categories of buildings and land uses. An applicant that

~~proposes a use or structure listed as "exempt" shall not be required to submit a Natural Hazards Assessment in order to obtain a permit. Otherwise such assessment shall be required.~~

Exception: In consultation with the Utah County Zoning Administrator, the Utah County Engineer may determine that a permit application for the renovation, remodel, or repair of an existing occupied structure, habitable space, critical facility, or amendment of a large development plat, is exempt from the Natural Hazards Assessment requirements, if the proposed application does not expand the footprint or scale of the existing occupied structure, habitable space, critical facility, or large scale development.

- b. Natural Hazards Assessments shall meet the following requirements:
- i. The assessment shall be prepared by a geologist or engineer licensed by the State of Utah who has at least four (4) years of experience in a responsible position in the field of engineering geology. The assessment shall be signed, dated and stamped by the preparer and include the qualifications of the preparer.
  - ii. The assessment shall be a site-specific engineering geology study and shall identify all known or suspected potential geologic hazards, originating on-site or off-site, whether previously mapped or unmapped, which may affect the proposed structure or use of land.
  - iii. The assessment shall identify the degree to which the hazards affect the proposed structure or use of land and recommend mitigation measures to adequately protect persons and property, including occupants and property improvements related to the proposed structures and uses, and to meet the standards of this ordinance.
  - iv. The assessment shall contain a detailed site map of the subject area showing any site-specific mapping performed as part of the geologic investigation, and including boundaries and features related to any natural or geological hazards, topography, and drainage. The site map must show the location and boundaries of the hazard(s), delineation of any recommended setback distances from hazard(s), and recommended location(s) for structures. Recommended Buildable and non-buildable areas shall be clearly identified.
  - v. The assessment shall contain trench logs and test pit logs, boring logs, aerial photographs, references with citations, and other supporting information, as applicable.
  - vi. The County Engineer shall determine whether the Natural Hazards Assessment meets the standards of this Section. The County Engineer may reject the assessment if the County Engineer finds that the professional geologist or engineer has insufficient training or experience, or if the County Engineer finds that the assessment is insufficient in depth, scope, or detail. The County Engineer may require that a supplemental or revised assessment be submitted.
  - vii. All recommended mitigation measures identified in the Natural Hazards Assessment shall be incorporated into the design of the proposed structure or use of land. In the event that the Natural Hazards

Assessment ~~recommends~~ provides alternative mitigation measures, the applicant shall elect which alternative mitigation measures to implement, and the applicant shall submit a supplemental Natural Hazards Assessment confirming that the elected mitigation measures are sufficient to adequately protect persons and property and to meet the standards of this ordinance. The applicant shall submit engineered plans for the proposed mitigation measures, which plans will demonstrate how the mitigation measures will be incorporated into the design of the applicable structure or use of land. These plans shall be prepared by a professional engineer who is licensed to practice in the State of Utah and is qualified to develop such plans. The County Engineer may reject the plans if the County Engineer finds that the professional engineer has insufficient training or experience, or if the County Engineer finds that the plans ~~are insufficiently~~ describe the proposed mitigation measures or do not meet the other requirements of this Section. The County Engineer may require that supplemental or revised plans be submitted.

viii. The County Engineer shall determine if the submitted plans sufficiently describe the proposed mitigation measures.

- c. Upon the determination by the County Engineer that the Natural Hazards Assessment meets the standards of this section, the Zoning Administrator shall issue a clearance which incorporates the uses, structures, and mitigation measures approved by the County Engineer.

#### D. STANDARDS

1. General Standard

The mitigation measures, which have been identified in the Natural Hazards Assessment, shall be implemented. The mitigation measures shall be sufficient to provide adequate protection to persons and property, including occupants and property improvements related to the proposed structures and uses, and to meet the standards of this ordinance.

2. Site Investigation, Hazard Identification, and Mitigation Implementation

Occupied structures and habitable spaces, as defined in the currently adopted building codes, critical facilities (excluding communication, utility, and transportation lines and their non-occupied appurtenant structures), and large scale developments, shall not be placed in, an area subject to rockfall, debris flow, landslides, or surface fault rupture, unless the site for such structure or use of land is investigated in a site-specific Natural Hazards Assessment that meets the requirements of this Section and the mitigation measures identified in the Natural Hazards Assessment are all incorporated into the design of the structure or use of land and implemented, unless an exception is provided in this Section for such structure or use of land. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required. In the case of debris flow hazards, if mitigation measures include discharge onto neighboring land, written permission is required from the owner of the neighboring land.

23. No Covering Up

No use, construction, or grading shall be permitted or performed in the NHO Zone which would conceal, misrepresent, or cause to be unrecognized the presence of any natural hazard which is within the purview of the NHO Zone.

3. Rockfall

~~Structures to be occupied by humans and storage facilities for toxic, caustic, flammable, or explosive materials, shall not be placed in a site subject to rockfall unless the site is investigated in a site-specific Natural Hazards Assessment which meets the requirements of this section and the mitigation measures, which have been identified in the Natural Hazards Assessment, are all incorporated into the design and implemented. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required.~~

4. Debris Flow

~~Structures to be occupied by humans, storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canal facilities, shall not be placed in an area subject to debris flows unless the site is investigated in a site-specific Natural Hazards Assessment which meets the requirements of this section and the mitigation measures, which have been identified in the Natural Hazards Assessment, are all incorporated into the design and implemented. If mitigation measures include discharge onto neighboring land, written permission is required from the owner of the neighboring land. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required.~~

5. Landslide

~~Structures to be occupied by humans, storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canal facilities, shall not be placed in an area subject to landslides unless the site is investigated in a site-specific Natural Hazards Assessment which meets the requirements of this section and the mitigation measures, which have been identified in the Natural Hazards Assessment, are all incorporated into the design and implemented. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required.~~

6. Surface Fault Rupture

~~Structures to be occupied by humans, storage facilities for toxic, caustic, flammable, or explosive materials, water tanks, reservoirs, and canal facilities, shall not be placed in an area subject to surface fault rupture unless the site is investigated in a site-specific Natural Hazards Assessment which meets the requirements of this section and the mitigation measures, which have been identified in the Natural Hazards Assessment, are all incorporated into the design and implemented. If the Natural Hazards Assessment finds that no mitigating measures are needed, then no mitigating measures are required.~~

E. **VARIANCES**

1. Ability to Grant

The Board of Adjustment, when deciding appeals for variances of distance or area within the NHO Zone shall follow both the standards of chapter 7 of this land use ordinance and the standards stated below.

2. Items to Consider

In deciding whether to grant a variance and what conditions to attach to its approval, the Board of Adjustment shall consider each of the following:

- a. The likelihood during a significant seismic or other geologic event that materials may be moved onto adjacent land areas, or that other impacts may disturb or destabilize adjacent land areas, causing property damage or injury to others.
  - b. The degree of susceptibility to damage by seismic or other geologic activity for the building design or use proposed.
  - c. The importance of the services of the proposed facility to the community and the need for the facility to be functional following a significant event of geologic activity.
  - d. The necessity of the facility to be in the proposed location or proposed design, considering alternate locations and designs available.
  - e. The ability of the community to provide emergency services to the facility in the event of a catastrophe.
  - f. The degree of benefit received from the variance relative to the hazards posed to the facility's neighbors, visitors, and owners.
3. Presumption Relative to Approval
- a. Generally, the standards of this section shall not be varied unless an equally safe method of use and construction can be approved.
  - b. The amount of variance approved shall be only the minimum amount required to provide relief.
  - c. A variance shall be granted only if it will not result in a threat to public safety, cause extraordinary public expense, or create a nuisance.
  - d. In a continuum beginning with hay barns and agricultural structures and going progressing to high rise apartment buildings and auditoriums, the difficulty in obtaining a variance shall be greater for structures having a higher percentage of time when the structure has human utilization, and greater for structures which are occupied by a larger number of people.

#### F. SPECIAL REQUIREMENTS

##### 1. Certification by Engineer - Plans

~~Where Chart 1 of part C of this section~~ When this Section requires the preparation and submittal of engineered plans, such plans shall be prepared by a structure or other use of land to be designed by an engineer, such engineer shall be a professional engineer who is licensed to practice in the State of Utah and who is qualified to make such design ~~prepare such plans~~ through experience and training. The required engineered plans for a structure or other use of land shall bear on the plans ~~it~~ a certification by the engineer that the plans implement all of the recommended mitigation measures, ~~which measures have been identified in the required~~ Natural Hazards Assessment, and meet the standards and requirements of the NHO Zone. Prior to the Zoning Administrator issuing any clearance to commence construction, the County Engineer shall determine if the requirements of this section have been met.

##### 2. Certification by Geologist or Engineer - Natural Hazards Assessments

~~Where Chart 1 of part C of this section requires~~ When a Natural Hazards Assessment is required by this Section for a structure or use of land of the site of

~~the structure or other use of land,~~ the Natural Hazards Assessment shall bear the signed certification of the Utah State licensed geologist or engineer, who has at least four (4) years of experience in a responsible position in the field of engineering geology, that the recommended mitigation measures, which measures have been identified in the Natural Hazards Assessment, are sufficient to provide adequate protection to persons and property, including occupants and property improvements related to the proposed structures and uses, and are sufficient to meet the standards of this ordinance. Prior to the Zoning Administrator issuing any clearance to commence construction, the County Engineer shall determine if the requirements of this section have been met.

3. Records

The Zoning Administrator shall retain the Natural Hazards Assessments and ~~engineered plans of engineered facilities~~ submitted with applications for permits issued under authority of this section.

4. Maps Adopted by Reference

The map series "Utah County Natural Hazards Overlay," dated April 1, 1990, ~~and Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series~~ is are hereby adopted by reference in book form. One copy of the "Utah County Natural Hazards Overlay," dated April 1, 1990, and Plates 14 and 19 of Elliott and Harty's 2010 Landslide Maps of Utah, 30' x 60' Quadrangle map series, complete map series is are hereby ordered to be placed in the office of the Utah County Clerk. This map series They may be used in the administration of the NHO Zone as required therein, which may include along with other updated data from the U.S. Geological Survey (USGS) and the Utah Geological Survey.

G. DISCLOSURE

1. Whenever a Natural Hazards Assessment is required under this ~~s~~Section, the owner of the parcel shall record a signed notice running with the land, in a form satisfactory to the County, prior to the approval of any use of land or structure. ~~Disclosure will include signing a Disclosure and Acknowledgment Form provided by the County, which will~~ The required notice shall include the following:
  - a. Notice that the parcel is located within an area susceptible to natural hazards, which hazards are the purview of the Natural Hazards Overlay (NHO) Zone, as shown on the Official Zone Map of Utah County, Utah; and
  - b. Notice that a Natural Hazards Assessment was prepared and is available for public inspection in the Utah County Community Development office.
2. When the land, or portion thereof, of a development plat lies in an area susceptible to natural hazards, which hazards are the purview of the Natural Hazards Overlay (NHO) Zone, as shown on the Official Zone Map of Utah County, Utah, such plat shall contain notification of 1) the hazards area, 2) any natural hazards assessments prepared in connection with development approval, and 3) the mitigation measures incorporated into the development plan.

H. WARNING AND DISCLAIMER

The degree of protection from geologic hazards intended to be provided by this ~~s~~Section is considered reasonable for regulatory purposes. The original language of the NHO Zone was and is based on accepted geologic and scientific methods of

study. Amendments have been made to this Section since its inception. The major amendments of this Section have been generally reviewed by experts in the field of engineering geology. This section is intended to ~~minimize~~ reduce the danger, cost, and impact from geologic hazards. Therefore, known or unknown geologic conditions, or natural or man-made changes in conditions, may contribute to future damages even though a structure or use of land has been properly permitted within the NHO Zone. Furthermore, the provisions of this ~~s~~Section shall not imply that areas within or outside the NHO Zone will be free from the impact of geologic hazards. This ~~s~~Section shall not create a liability on the part of or be a cause of action against the ~~e~~County or any officer or employee thereof for any personal or property damage that may result from reliance on the regulations of the NHO Zone, or from damages occurring in areas which for any reason have not been designated in the NHO Zone.

#### Applicable Ordinances and Statutes

1. **Subsection 1-2** of the Utah County Land Use Ordinance identifies the intent and purposes of the Ordinance.
2. **Subsection 2-2-A-34** of the Utah County Land Use Ordinance establishes the definition of Critical Facilities.
2. **Section 5-12** of the Utah County Land Use Ordinance contains the requirements for the Natural Hazards Overlay (NHO) Zone.
3. **Subsection 7-23-C and Section 7-25** of the Utah County Land Use Ordinance establish the criteria for Planning Commission recommendation of approval to the County Commission for any land use ordinance or zone map amendment.

#### **IV. STAFF FINDINGS:**

1. This text amendment application appears to meet the requirements of Section 7-23-C-1 of the Utah County Land Use Ordinance, which requires the amendment to conform to the land use element and other provisions of the general plan, including:

- A portion of the Natural Hazards section of Chapter 4 (Environmental Element) of the General Plan advises as follows:

“Utah County should maintain maps which identify those areas in unincorporated Utah County with a susceptibility for surface fault rupture, landslide, rockfall and debris flow. No development which includes human-occupied structures and critical facilities such as storage facilities for toxic, caustic, flammable or explosive materials, should occur in those areas identified as having a susceptibility to these hazards unless a geological study(s) is conducted by a qualified professional to identify the

degree to which the hazard(s) affects the proposed development and which recommends measures to mitigate the hazard(s). These recommended mitigation measures should be incorporated into the design of the development to adequately protect persons and property.”

This proposal appears to be in harmony with the above statement, including the provision for additional mapping data and the explicit requirement for proposed large scale development applications to include a natural hazards assessment. The exceptions in the proposal adds flexibility to the permitting process for large scale developments and permit projects for renovations, remodels, etc.

2. The application appears to meet the requirements of Section 7-23-C-2, which requires the amendment to be in the best interest of the health, safety, and welfare of the public.

-This proposal helps to facilitate careful planning and development in areas established as susceptible to natural hazards; yet, it adds some flexibility to aid the permitting process under certain conditions. This proposal does not prohibit development in areas susceptible to natural hazards, but promotes wise development that includes measures to help mitigate the hazards.

3. The application appears to meet the requirements of Section 7-23-C-3, which requires the amendment to more fully carry out the general purposes and intent of the Ordinance, including:

-Subsection 1-2-H of the Utah County Land Use Ordinance establishes the following as an intent of said Ordinance: “To lessen the hazards to persons and property from fires, floods, traffic hazards, and other dangers.”

This proposal would appear to help lessen hazards to people and property in the NHO Zone from the hazards identified in Section 5-12. It would, among other things, expand the mapping and other resources available for use in administering the NHO Zone. Further, it establishes that large scale developments in the NHO Zone must have a natural hazards assessment, unless an exception is qualified for.

**V. STAFF RECOMMENDATION**

That the Utah County Planning Commission recommend to the Utah County Commission approval of the proposed amendment of Section 5-12 of the Utah County Land Use Ordinance, as well as the amendment to Subsection 2-2-A-34, definition of Critical Facilities, based on the following findings:

1. That the proposed amendment of the Utah County Land Use Ordinance does conform to the land use element and other provisions of the general plan.
2. That the proposed amendment of the Utah County Land Use Ordinance is in the best interest of the health, safety, and welfare of the public.
3. That the proposed amendment of the Utah County Land Use Ordinance would more fully carry out the general purposes and intent of said Ordinance.

## UTAH COUNTY LAND USE ORDINANCE

### 1-2: INTENT AND PURPOSE

It is the intent and purpose of the Board of County Commissioners of the County of Utah, State of Utah, to avail itself of the powers granted under Title 17, Chapter 27a, of the Utah Code Annotated 1953, as amended, in a manner that will promote the health, safety, morals, convenience, order, prosperity, and general welfare of the present and future inhabitants of Utah County, and to this end:

- A. To encourage and facilitate orderly growth and development in the county.
- B. To secure economy in governmental expenditures in the process of development.
- C. To promote efficient and economical utilization, conservation, and production of land, water, and other resources and facilities.
- D. To foster the county's agricultural and other industries.
- E. To facilitate adequate provisions for transportation, water, sewage, schools, parks, and other public requirements.
- F. To reduce the waste of physical, financial, and human resources resulting from excessive scattering of population.
- G. To lessen congestion in the streets, prevent the overcrowding of land, and provide adequate light and air.
- H. To lessen the hazards to persons and property from fires, floods, traffic hazards, and other dangers.
- I. To promote a more attractive and wholesome environment.
- J. To create conditions favorable to prosperity, civic activities, and recreational, educational, and cultural opportunities.
- K. To protect both urban and non-urban development.
- L. To enforce the provisions of this ordinance and to minimize the exceptions or variances hereto.

### 7-23: POWERS AND DUTIES OF THE PLANNING COMMISSION

- C. The Planning Commission may propose a land use ordinance and zone map for Utah County or may propose amendments of an existing land use ordinance or zone map to the County Commission, and may adopt procedures for the proposals to be initiated by its members, its staff, or members of the public at large. The Planning Commission shall also consider and give its recommendations on any amendment to the land use ordinance which is proposed by the County Commission and submitted to the Planning Commission for recommendation. Before the Planning Commission proposes any land use ordinance or zone map amendment, or makes a favorable recommendation of an amendment, it shall find that:

1. The amendment will conform to the land use element and other provisions of the general plan (or conform to a proposed amendment to the general plan which is considered concurrently with the zoning amendment).
2. The amendment is in the best interest of the health, safety, and welfare of the public.
3. The amendment will more fully carry out the general purposes and intent of this ordinance.
4. In considering a proposed amendment to the land use ordinance or zone map, the Planning Commission may submit a recommendation to the County Commission for or against the proposal, or it may recommend an alternate amendment.

7-25: AMENDMENTS TO ORDINANCE AND MAP

- A. Either the Planning Commission or the County Commission may propose amendments to this Land Use Ordinance or the zone map.
- B. Any other person or organization seeking an amendment of the Land Use Ordinance or zone map shall petition the Planning Commission, in writing, to initiate such amendment using the petition forms and procedures adopted by the Planning Commission. The petitioner shall designate fully and clearly on the forms the change desired and the reasons therefor.
- C. Upon receipt of the petition, the Planning Commission shall consider the amendment request and may: recommend approval, approval with change, disapproval, or hold the matter for future consideration.
- D. All recommended amendments shall conform to the general plan (or to proposed amendments to the general plan which are adopted concurrently with the land use amendment) and be consistent with the other provisions of this land use ordinance.
- E. Amendments to this ordinance may be adopted by the County Commission only after a public hearing by the Planning Commission at which parties of interest and other persons have an opportunity to be heard. Notice of the date, time and place of the first public hearing to consider the adoption or modification of the Land Use Ordinance shall be made as specified herein.

# Draft originally given to the County Commission

\*\*\*This is a draft and Community Development intends to refine it prior to Planning Commission review\*\*\*

Subsection 2-2-A of the Utah County Land Use Ordinance is proposed to be amended as follows (additions are underlined):

## 2-2: DEFINITIONS

- A. For purposes of this land use ordinance, definitions are provided for the following terms. Not all of the terms are used in this land use ordinance. The inclusion of any term defining a land use does not imply that the term is a permitted or conditionally permitted use in any zone, unless specifically stated as such in the applicable zone. Any term which is defined, but not used in this land use ordinance, is included to differentiate the term from other terms which are used in this land use ordinance:

75. **Known Natural Hazards Area:** An area known, through historical data, maps, or agency records of Utah County, the United States Geological Survey, or the Utah Geological Survey, to have a susceptibility to the naturally occurring geologic conditions or phenomenon considered in this ordinance, which may present a potential danger to life and property.

Subsections 5-12-A & B of the Utah County Land Use Ordinance are proposed to be amended as follows (additions are underlined):

## 5-12: NHO NATURAL HAZARDS OVERLAY ZONE

### A. DECLARATION AND LEGISLATIVE INTENT

The NHO Natural Hazards Overlay Zone (NHO Zone) includes the territory of the unincorporated area of Utah County which was identified as having a susceptibility for rockfall, debris flow, landslides, or surface fault rupture. The standards of the NHO Zone are the product of a joint program of the Utah Geologic and Mineral Survey and the US Geological Survey, which program was conducted in the five counties of the Wasatch Front including Utah County. In addition to the territory identified in the joint program, the NHO Zone includes other areas that have been identified by the County Commission as having a significant hazard, as well as those known natural hazards areas. However, not all areas susceptible to natural hazard were known or recognized at the time of adoption of the provisions of this zone, so the zone shall not be construed to be all-inclusive of such hazards.

It is hereby declared that the specific purposes and intent of the County Commission in establishing the NHO Natural Hazards Overlay Zone are:

1. To take advantage of the powers and more fully implement the basic purposes for planning and zoning set forth in Utah Code Annotated 1953, as amended.
2. To identify areas subject to geologic hazards and to reduce the risk therefrom.

3. To protect human life and health.
4. To minimize damage to public and private property and to public utilities and structures.
5. To assure that those who occupy the areas susceptible to geologic hazards assume responsibility for their actions regarding land use, construction, and grading.
6. To provide notification of areas of special hazard for rockfall, debris flow, landslide, or surface fault rupture to the public.

In order to accomplish the stated purposes and intent, the following provisions shall apply:

B. SCOPE

1. Purview

The natural hazards which are the purview of the NHO Zone are limited to: rockfall, debris flow, landslide, and surface fault rupture.

2. Extent

The provisions of this section shall apply to all areas having a susceptibility to the above-named hazards within the unincorporated area of Utah County which are depicted on the Official Zone Map of Utah County, Utah, as lying within the NHO Zone, or lying within a known natural hazard area. Such provisions shall not abrogate but shall be in addition to the requirements of the underlying zoning districts within the NHO Zone, pertaining to the property within the NHO Zone. Where the provisions of this section conflict with any other requirement, the more stringent restriction shall apply.

3. Interpretation

To determine which properties lie within the NHO Zone, the Zoning Administrator shall determine the boundaries of the zone by scaling the distances from the Utah County Zone Map. He may be aided by the Natural Hazards Overlay Map Series, including updated data from the U.S. Geological Survey (USGS) and the Utah Geological Survey. A known natural hazards area shall be established by historical data, maps, or agency records of Utah County, the United States Geological Survey, or the Utah Geological Survey. Any adversely affected party contesting the location of the zone boundary, or the identification of a known hazards area, shall comply with the procedures set forth under Title 17, Chapter 27a, of the Utah Code Annotated 1953, as amended. Such adversely affected party shall make a request to contest the location of the zone boundary, or identification of a known natural hazards area, within twenty (20) days of the date of the decision being contested.

4. Compliance

No structure or land use shall hereinafter be constructed, located, extended, converted, altered or otherwise developed without full compliance with this section.

December 7, 2017



Brandon Larsen, Planner  
Utah County Community Development  
51 South University Ave., Suite 117  
Provo, UT 84601

Re: Land Use Ordinance  
Natural Hazards Overlay Zone Amendment Review

Dear Mr. Larsen:

We have reviewed the proposed Land Use Ordinance Amendment to the Natural Hazards Overlay (NHO) Zone and are in general agreement with the proposed changes. The following modifications to the amendment are recommended for consideration.

1. Replace "is" with "are" in first sentence of amendment.
2. Section 2-2-A – Replace "33" with "31" for Critical Facilities paragraph in the amendment to comply with Land Use Ordinance.
3. Section 5-12-A-4. – Consider replacing "minimize" with "reduce".
4. Section 5-12-B-1. – Consider future additions to Natural Hazards Overlay Zones to include (1) liquefaction potential during seismic events, (2) steep slopes, and (3) flooding.
5. Section 5-12-C-2. – Delete "exempt" from the end of this paragraph.
6. Section 5-12-C-4-a. - Section C.3 allows an exception for the requirement for a Natural Hazards Assessment (NHA) if a portion of a large-scale development lies within the NHO Zone, provided no occupied structure or habitable space is constructed within the NHO Zone. It appears that site grading within the NHO Zone could be completed within a large development without completing an NHA; however, site grading within a smaller development within the NHO Zone could not be completed without an NHA. Are these requirements, which seem somewhat inconsistent, intentional? Recommend removing "grading" from this paragraph.
7. Section 5-12-E-2-a. – Recommend modifying this sentence to read: "The likelihood during a significant seismic or other geologic event that materials may be moved onto adjacent land areas, or that other impacts may disturb or destabilize adjacent land areas, causing property damage or injury to others.
8. Section 5-12-E-3-d. – Replace "going" with "progressing" in the first sentence.
9. Section 5-12-F-1. Since Chart 1 has been deleted, replace the first sentence with: "The engineer responsible for the design of a structure or other use of land within the NHO zone shall be a professional engineer who is licensed to practice in the State of Utah and who is qualified to make such design through experience and training."

10. Section 5-12-F-2. – Since Chart 1 has been deleted, replace the first portion of the first sentence with: “Where a Natural Hazards Assessment for the site of the structure or other use of land is required,....”
11. Section H – Consider replacing “minimize” with “reduce” in the second sentence.

We appreciate the opportunity of providing this service for you. If there are any questions relating to the information contained herein, please call.

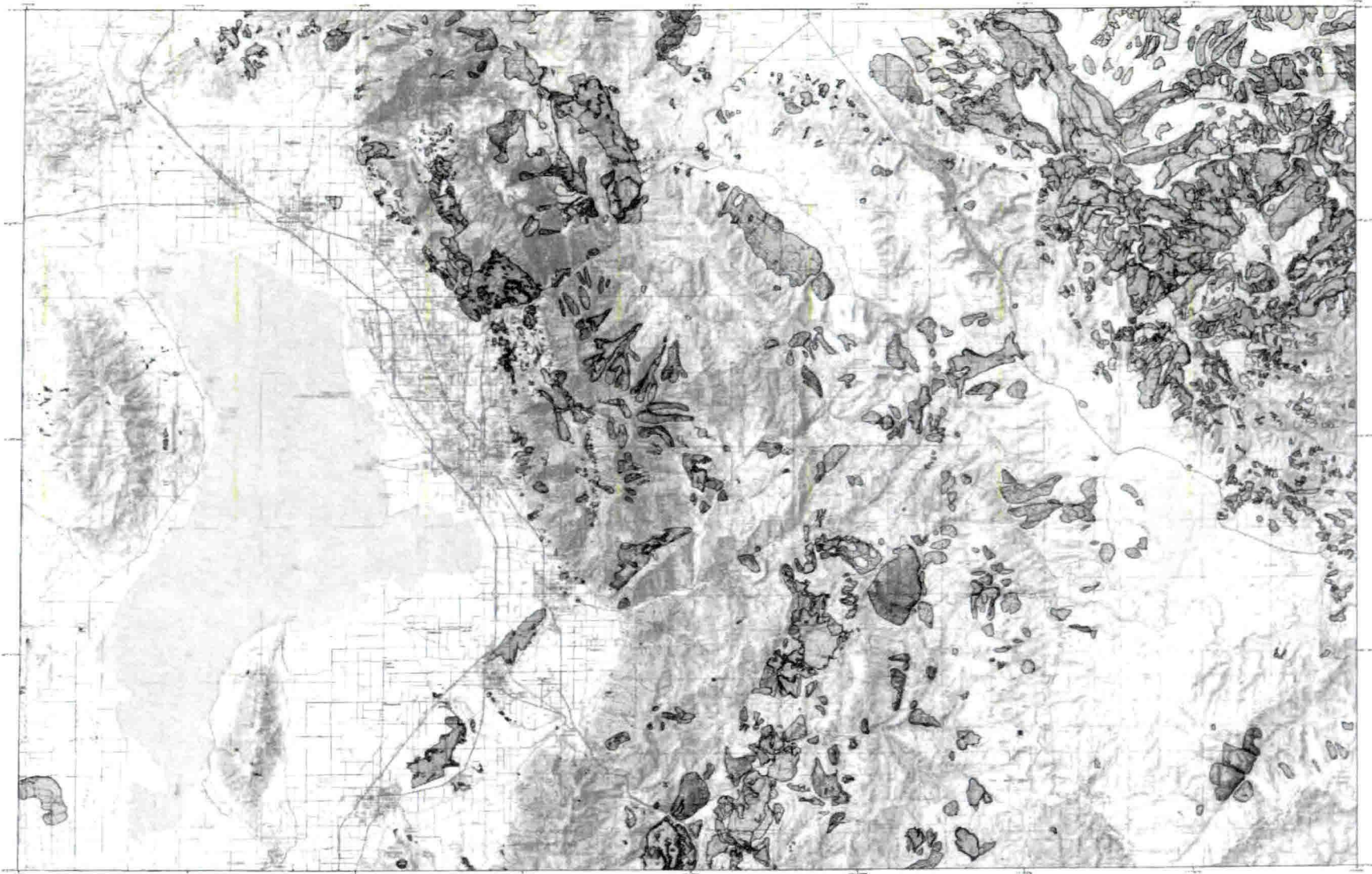
Sincerely,

RB&G ENGINEERING, INC.



Bradford E. Price, P.E., President

bep/jal



This map was prepared by the Utah Geological Survey, Salt Lake City, Utah, under contract to the U.S. Geological Survey, Reston, Virginia. The map is based on data from the Utah Geological Survey, Salt Lake City, Utah, and the U.S. Geological Survey, Reston, Virginia. The map is not a warranty, guarantee, or endorsement, and does not constitute an offer of insurance or any other financial product. The map is for informational purposes only and should not be used for any other purpose. The map is not a warranty, guarantee, or endorsement, and does not constitute an offer of insurance or any other financial product. The map is for informational purposes only and should not be used for any other purpose.

UTAH

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**LANDSLIDE MAPS OF UTAH  
 PROVO 30' X 60' QUADRANGLE**  
 by  
 Ashley H. Elliott and Kimm M. Harry  
 2016

This map is a derivative work of the Provo 30' X 60' Quadrangle, Utah Geological Survey, Salt Lake City, Utah, and the U.S. Geological Survey, Reston, Virginia. The map is not a warranty, guarantee, or endorsement, and does not constitute an offer of insurance or any other financial product. The map is for informational purposes only and should not be used for any other purpose.

- Explanation**
- Deep or unconsolidated fill (generally less than 100 years old) that has been subjected to erosion. May include areas of high erosion susceptibility, but is not subject to erosion. (See also the legend for the term 'erosion susceptibility').
  - Shallow landslide (generally less than 10 feet thick and less than 100,000 cubic feet). Includes debris flows, debris slides, and debris avalanches. May include areas of high erosion susceptibility.
  - Limited spread under flow failure (includes debris flows, debris slides, and debris avalanches). Includes areas of high erosion susceptibility.
  - Landslide (includes debris flows, debris slides, and debris avalanches). Includes areas of high erosion susceptibility.
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75. Known Natural Hazards Area. An area known, through historical data, maps, or agency records of Utah County, the United States Geological Survey, or the Utah Geological Survey, to have a susceptibility to the naturally occurring geologic conditions or phenomenon considered in this ordinance, which may present a potential danger to life and property.

Subsections 5-12-A & B of the Utah County Land Use Ordinance are proposed to be amended as follows (additions are underlined):

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It is hereby declared that the specific purposes and intent of the County Commission in establishing the NHO Natural Hazards Overlay Zone are:

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2. To identify areas subject to geologic hazards and to reduce the risk therefrom.

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5. To assure that those who occupy the areas susceptible to geologic hazards assume responsibility for their actions regarding land use, construction, and grading.
6. To provide notification of areas of special hazard for rockfall, debris flow, landslide, or surface fault rupture to the public.

In order to accomplish the stated purposes and intent, the following provisions shall apply:

B. **SCOPE**

1. Purview

The natural hazards which are the purview of the NHO Zone are limited to: rockfall, debris flow, landslide, and surface fault rupture.

2. Extent

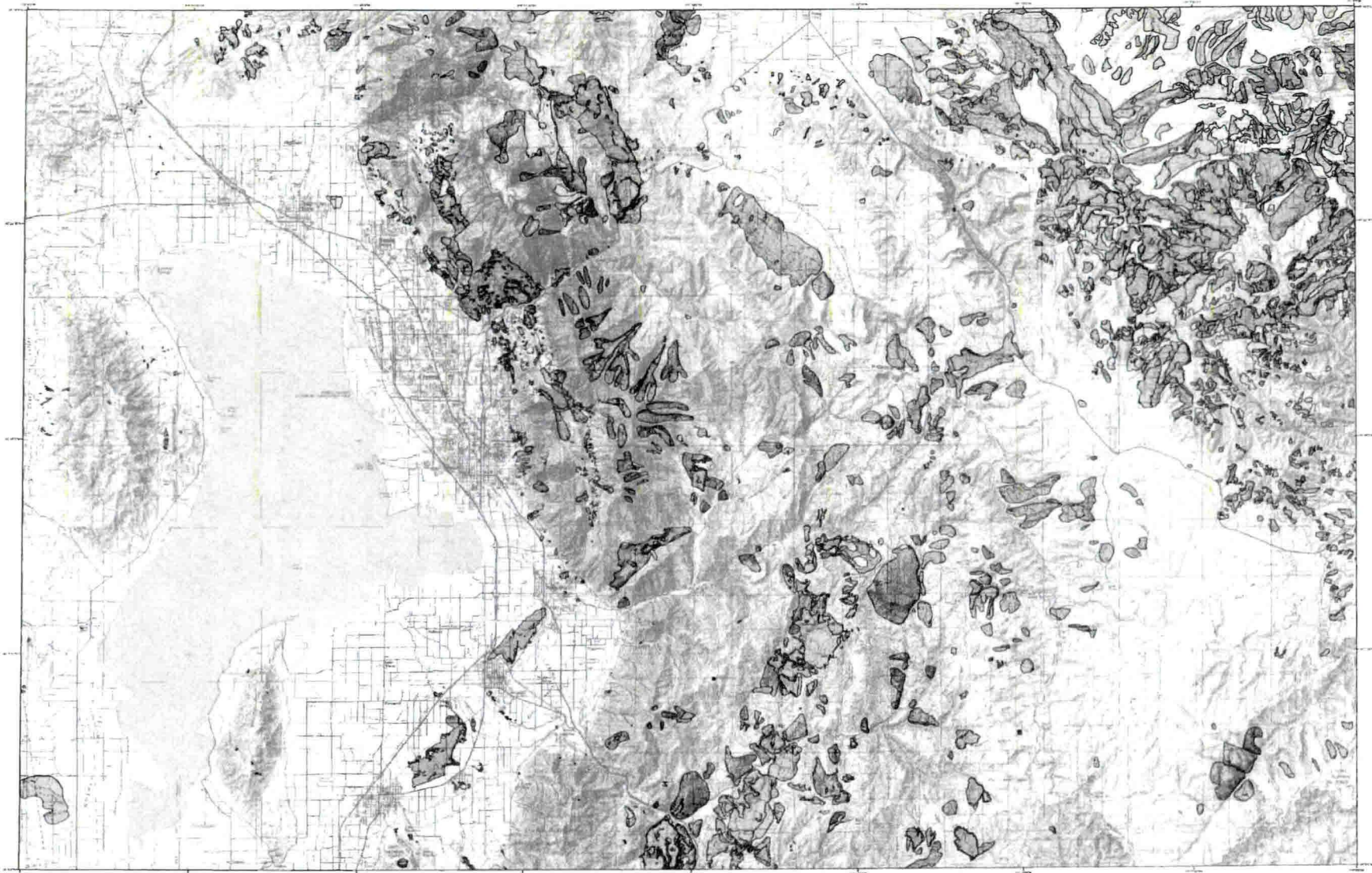
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To determine which properties lie within the NHO Zone, the Zoning Administrator shall determine the boundaries of the zone by scaling the distances from the Utah County Zone Map. He may be aided by the Natural Hazards Overlay Map Series, including updated data from the U.S. Geological Survey (USGS) and the Utah Geological Survey. A known natural hazards area shall be established by historical data, maps, or agency records of Utah County, the United States Geological Survey, or the Utah Geological Survey. Any adversely affected party contesting the location of the zone boundary, or the identification of a known hazards area, shall comply with the procedures set forth under Title 17, Chapter 27a, of the Utah Code Annotated 1953, as amended. Such adversely affected party shall make a request to contest the location of the zone boundary, or identification of a known natural hazards area, within twenty (20) days of the date of the decision being contested.

4. Compliance

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UTAH

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QUADRANTS LOCATIONS



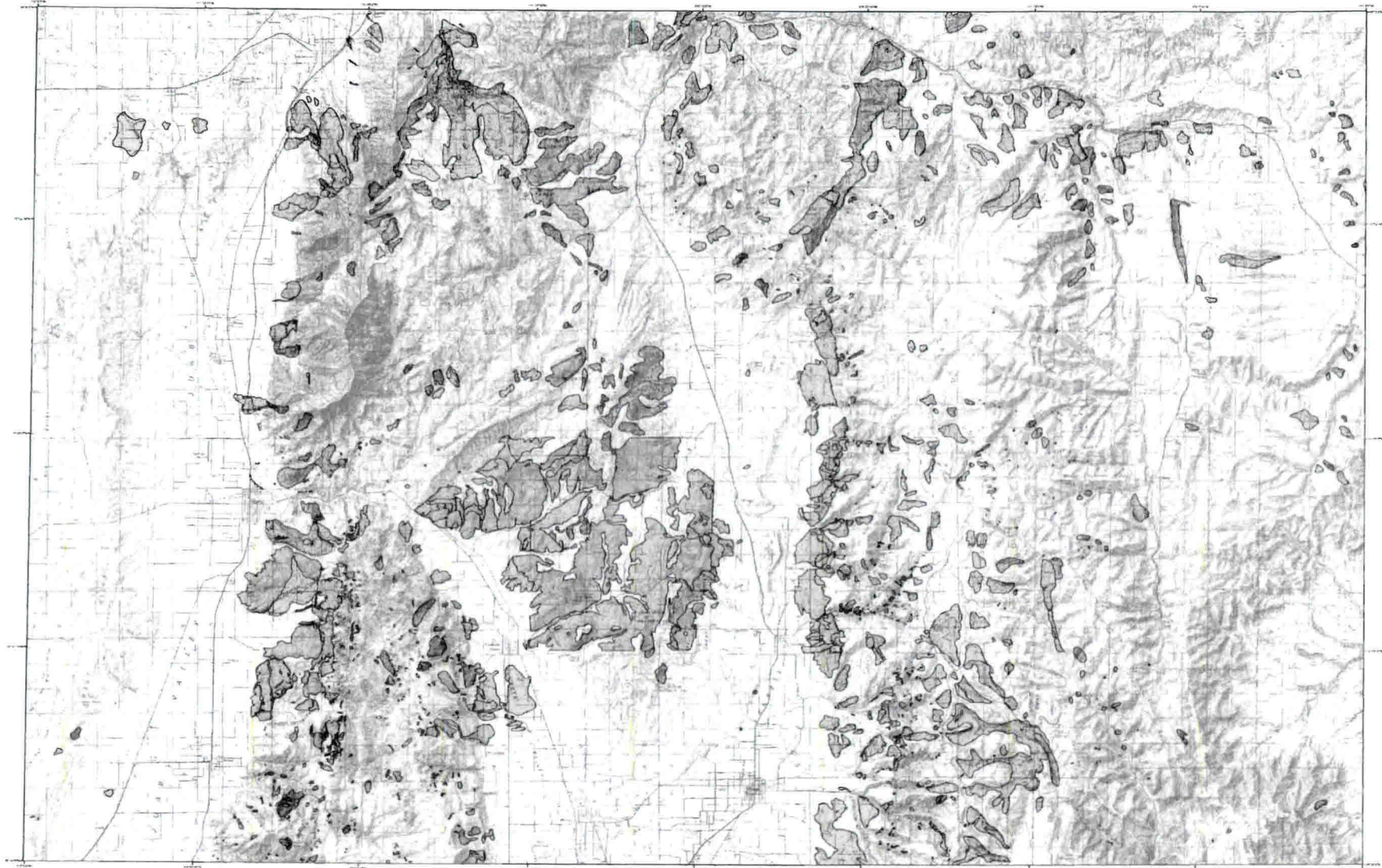
**LANDSLIDE MAPS OF UTAH**  
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 by  
 Ashley H. Elliott and Kimm M. Harry  
 2010

U.S. Geological Survey, Reston, Virginia  
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**Explanation**

- Deep or unconsolidated landslides - Generally 10 feet (3 m) thick or more and show characteristic horizontal or slightly curved slip surfaces. May include areas of collapse or multiple landslides in a single landslide area. May be caused by erosion, subsidence, or other processes. May include areas of multiple landslides.
- Shallow landslides - Generally less than 10 feet (3 m) thick and show characteristic curved slip surfaces. Includes areas of slope failure and debris flow. May include some complex landslides.
- Lateral spread and/or flow failure - Landslide-induced landslides usually associated with earth failure. Generally occur on very gentle slopes, or flat land.
- Landslide unconsolidated flow, talus, and/or colluvial deposits - May include flow on debris landslides, debris, and talus under colluvial deposits.
- Landslide and/or landslides under/overlain by flow, talus, and/or colluvial deposits - May include areas of multiple landslides, debris flow, talus, and/or colluvial deposits. Generally associated with complex landslides.
- Not classified - Includes areas not mapped in the original data considered for the map, or areas not mapped areas with no landform recognition.
- Landslide flow - Landslide flow based on the head. May include flow areas where landslides occurred but no flow path was mapped. May include flow areas where landslides occurred but no flow path was mapped.
- Disturbed road path - Includes the path of a road. See (Landslide Landslides)

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Although the maps are prepared by the United States Geological Survey, the State Department of Natural Resources, Utah, is the primary agency for the collection and distribution of the maps. The maps are prepared by the Utah Geological Survey, Salt Lake City, Utah. The maps are prepared by the Utah Geological Survey, Salt Lake City, Utah. The maps are prepared by the Utah Geological Survey, Salt Lake City, Utah.

UTAH

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UTAH STATE GRID



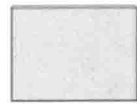
**LANDSLIDE MAPS OF UTAH  
NEPHTHYS 30' X 60' QUADRANGLE**

by  
**Ashley H. Elliott and Kinon M. Harty**  
2010

UTAH STATE GEOLOGICAL SURVEY  
SALT LAKE CITY, UTAH

- Explanation**
- Deep or unclassified landslide. Generally 10 feet or more and shows characteristic landslide morphology. May include areas of secondary or tertiary landsliding or be landslide debris from other landslides. May include areas of secondary or tertiary landsliding or be landslide debris from other landslides.
  - Shallow landslide. Generally less than 10 feet (3 m) and shows characteristic landslide morphology. Includes many debris slides and debris flows. May include areas of secondary or tertiary landsliding.
  - Limited spread surface flow failure. Unconfined-saturated landslides typically associated with earth or stone (generally) and/or very sandy soils or fat lands.
  - Landslide in differentiated basins and/or colluvial deposits. May include debris or debris flow and may be associated with debris slides and debris flows.
  - Landslide in non-differentiated basins and/or colluvial deposits. May include debris or debris flow and may be associated with debris slides and debris flows.
  - Not classified. Includes areas not recognized as landslides on this map, as well as mapped areas in the standard quadrangle.
  - Landslide scarp. Landslide scarp found near the trail, identified as the area where landslides are most likely to occur and where the mapped ground, therefore, are from the scarp.
  - Debris flow scarp path. Identifies the path of a debris flow failure landslide.

## Explanation



**Deep or unclassified landslide** - Generally 10 feet (3 m) thick or more and shows characteristic landslide morphology. May include areas of complex or composite landsliding where landslide density is too great to show individual landslides separately. Also includes unclassified landslides (original source was not specific about landslide type).



**Shallow landslide** - Generally less than 10 feet (3 m) thick and shows characteristic landslide morphology. Includes mainly debris slides and debris flows. May include some composite landslides.



**Lateral spread and/or flow failure** - Liquefaction-induced landslides typically associated with earthquakes; generally occur on very gentle slopes or flat terrain.



**Landslide undifferentiated from talus and/or colluvial deposits** - May include deep or shallow landslides mapped with talus and/or colluvial deposits.



**Landslide and/or landslide undifferentiated from talus, colluvial, rock-fall, glacial, and soil-creep deposits** - May include deep or shallow landslides mapped with talus, colluvial, rock-fall, glacial, and/or soil-creep deposits; primarily mapped and compiled by Roger B. Colton, U.S. Geological Survey.



**Not classified** - Includes areas not mapped in the original studies compiled for this map, as well as mapped areas with no identified landsliding.



**Landslide scarp** - Landslide feature found near the head. Identified as the area where landslide material has moved downslope and away from the undisturbed ground. Hachures on down-dropped side.



**Debris-flow travel path** - Identifies the path of a debris flow (shallow landslide).

**UTAH COUNTY PLANNING COMMISSION**

**Minutes  
December 19, 2017**

Present: Thomas Liddle, Chair  
Karen McCandless  
Vern Keeslar  
Robert McMullin  
Blaine Thatcher  
Judi Pickell

Excused: Nathan Allred

Bryce Armstrong, Associate Director, Community Development  
Robert Moore, Deputy County Attorney  
Joshua Ivie, Secretary

**OTHERS PRESENT:** Peggy Kelsey, Brandon Larsen, Utah County Community Development; Glen Tanner, Public Works Engineering Division; Mike Moore, Aaron Troyer, Alan Landes.

The meeting was called to order at 5:30 PM by Vern Keeslar, Chair of the Utah County Planning Commission at 100 E Center St, Room 1400, of the Utah County Administration Building, located in Provo, Utah. Judi Pickell led the assembled body in the Pledge of Allegiance.

Motion: Karen McCandless                      Second: Robert McMullin

Motion to **open** the Public Hearing portion of the meeting.

The motion passed by the following vote: "Aye", Thomas Liddle, Karen McCandless, Vern Keeslar, Robert McMullin, Judi Pickell; "Nay", none. Blaine Thatcher had not yet arrived at the meeting.

**LAND USE ORDINANCE TEXT AMENDMENT**

**Utah County Commission - Proposed Utah County Land Use Ordinance text amendment to Section 5-12 relative to the applicability of the requirements of the Natural Hazards Overlay Zone (continued from July 18, 2017, October 17, 2017, and November 21, 2017 Planning Commission meetings) [Public Hearing]**

Brandon Larsen introduced the application and explained the process that Staff had gone through in order to bring the application to the Planning Commission. Larsen explained that the application's purpose was to establish a definition of "Known Hazard Areas" in addition to an amendment to section 5-12 of the Utah County Land Use Ordinance (UCLUO) that would stipulate that all areas in a Known Hazard Area would be subject the Natural Hazards Overlay (NHO) Zone. Larsen added that a consultant had reviewed the proposed ordinance. Larsen then explained that Staff had "cleaned-up" that section of the ordinance and incorporated new mapping data from the Utah Geological Survey. Larsen then explained why Staff is proposing to adopt the map plates that they are. Larsen then added that the proposed text amendment would require Large Scale Developments to have a natural hazards assessment in place.

Larsen further explained that Staff had added proposed an allowance for the County Engineer to allow for an exception relative to permits for the renovation of cabins and plat amendments located in the NHO Zone when it does not appear that the scope of the building or development is being expanded.

Larsen further clarified an exception relative to large scale developments and how that could be applied. Larsen also commented that Staff had expanded the definition of "Critical Facilities," and added that any application for one of these facilities (located in the NHO Zone) would require a Natural Hazards Assessment.

Larsen then commented that Staff would recommend approval of the proposed amendment based on Staff Findings.

Thomas Liddle asked if there were any members of the public that would like to address the Planning Commission on the matter. There were none.

Vern Keeslar asked why the application had been continued so many times. Larsen clarified that Staff didn't feel ready to move forward with the application at the time and was waiting for the completion of a review from an engineering consultant. Keeslar then commented that he thought the proposed "clean-up" of the ordinance was well put-together and thought the ordinance became clearer.

Motion: Vern Keeslar

Second: Karen McCandless

That the Utah County Planning Commission recommend to the Utah County Commission approval of the proposed amendment of Section 5-12 of the Utah County Land Use Ordinance, as well as the amendment to Subsection 2-2-A-34, definition of Critical Facilities, based on the following findings:

- I. This text amendment application appears to meet the requirements of Section 7-23-C-1 of the Utah County Land Use Ordinance, which requires the amendment to conform to the land use element and other provisions of the general plan, including:

- A portion of the Natural Hazards section of Chapter 4 (Environmental Element) of the General Plan advises as follows:

"Utah County should maintain maps which identify those areas in unincorporated Utah County with a susceptibility for surface fault rupture, landslide, rockfall and debris flow. No development which includes human-occupied structures and critical facilities such as storage facilities for toxic, caustic, flammable or explosive materials, should occur in those areas identified as having a susceptibility to these hazards unless a geological study(s) is conducted by a qualified professional to identify the degree to which the hazard(s) affects the proposed development and which recommends measures to mitigate the hazard(s). These recommended mitigation measures should be incorporated into the design of the development to adequately protect persons and property."

This proposal appears to be in harmony with the above statement, including the provision for additional mapping data and the explicit requirement for proposed large scale development applications to include a natural hazards assessment. The exceptions

in the proposal adds flexibility to the permitting process for large scale developments and permit projects for renovations, remodels, etc.

2. The application appears to meet the requirements of Section 7-23-C-2, which requires the amendment to be in the best interest of the health, safety, and welfare of the public.

-This proposal helps to facilitate careful planning and development in areas established as susceptible to natural hazards; yet, it adds some flexibility to aid the permitting process under certain conditions. This proposal does not prohibit development in areas susceptible to natural hazards, but promotes wise development that includes measures to help mitigate the hazards.

3. The application appears to meet the requirements of Section 7-23-C-3, which requires the amendment to more fully carry out the general purposes and intent of the Ordinance, including:

-Subsection 1-2-H of the Utah County Land Use Ordinance establishes the following as an intent of said Ordinance: "To lessen the hazards to persons and property from fires, floods, traffic hazards, and other dangers."

This proposal would appear to help lessen hazards to people and property in the NHO Zone from the hazards identified in Section 5-12. It would, among other things, expand the mapping and other resources available for use in administering the NHO Zone. Further, it establishes that large scale developments in the NHO Zone must have a natural hazards assessment, unless an exception is qualified for.

And with Staff Findings as summarized:

1. That the proposed amendment of the Utah County Land Use Ordinance does conform to the land use element and other provisions of the general plan.
2. That the proposed amendment of the Utah County Land Use Ordinance is in the best interest of the health, safety, and welfare of the public.
3. That the proposed amendment of the Utah County Land Use Ordinance would more fully carry out the general purposes and intent of said Ordinance.

The motion passed by the following vote: "Aye", Thomas Liddle, Karen McCandless, Vern Keeslar, Robert McMullin, Blaine Thatcher, Judi Pickell; "Nay", none.