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October 20, 2023

Mr. Craig Dossey
Vertex Consulting Services
455 E Pikes Peak Ave, Ste 101,
Colorado Springs, CO 80903

Subject: Geologic Hazard Study Exemption Request, Proposed Annexation to Mixed-Use Development, Union Printers Home, Parcels 6416300041 & 6416300042, 101 South Union Boulevard, Colorado Springs, Colorado.

Project No. 22-2-214.B

Dear Mr. Dossey,

The purpose of this letter is to present a geologic hazard study exemption request, as addressed by the "Geologic Hazard Study and Mitigation" ordinance of the City of Colorado Springs Zoning Code, for the subject property. Our assessment and interpretation of the referenced geologic maps and literature, and our observations of the site indicate the development qualifies to waive the requirement for the submittal of a geologic hazard study. We have conducted a geotechnical engineering study and subsurface investigation for the subject site under the Kumar & Associates, Inc. project numbers 22-2-214 & 22-2-214.A, dated January 30, 2023 and April 25, 2023.

Proposed Development: We understand that the site will be redeveloped, and will include the addition of new buildings of various sizes, up to about ten stories high in areas. Part or all of the existing buildings will remain in place, and will be renovated to accommodate the newly proposed use for this area. Grading plans have not been provided, but site grading is anticipated to include cuts and fills up to about 10 feet in depth. If the proposed development is determined to be significantly different than that described here, we should be notified.

Site Conditions: The project site is located at the historic Union Printer's Home at 101 South Union Boulevard. The lot is about 25 acres in area, and contains four buildings. The main building is a four-story structure with a garret and a basement. Three buildings are located behind the main building (to the east) and range from 3 to 5 stories tall. A formal paved entrance drive approaches the main building from the west, and a reflection pool is located in the center of the drive loop. A paved parking area is located at the northeast corner of the lot. The buildings are generally located at the top of a hill with mild downward slopes in all directions away from the main development. The grounds are covered with well irrigated grass lawns and many mature coniferous and deciduous trees, more concentrated along the property edges and in the yard directly north of the main building. The Memorial Park reservoir is located about ¼ mile southwest of the site, and is about 50 feet lower in elevation.

Site Geology: The surficial geology of the site is interpreted as eolian deposits based on our field reconnaissance and review of previous geologic mapping. Our interpretation of the reviewed geologic maps and reports indicate the Upper Cretaceous Pierre Shale to be located at varying

depths overlain by wind-deposited granular material. Claystone of the Pierre Shale was encountered at depths between 12 feet near the northwest corner of the site, and 62 feet on the east side of the site, and was overlain by granular material ranging from clayey sand to clayey-silty sand to silty sand, interpreted as eolian deposits, which generally correlates to the regional geologic setting and local topography.

Pre-existing Man-Placed Fill: Man-placed fill was mainly encountered in areas of previous development within the subject site. No obvious signs of surficial distress that can be attributed to movement of improperly compacted fill materials were observed. The planned demolition and reconstruction of the site, in addition to the recommendations in the geotechnical engineering reports should reduce the potential settlement of pre-existing man-place fill. Structures placed on uncontrolled or improperly compacted fill may experience increased settlement, both total and differential.

Mine Induced Subsidence: The Colorado Geological Survey does not indicate the presence of subsurface mining on or below the subject site, with the nearest historic mine in the area located approximately 2 miles north-northeast of the site. The subject site displayed no evidence of mine subsidence at the surface, and the risk of mine induced subsidence is considered minimal.

Slopes Greater than 33 Percent: The ground surface at the subject site is nearly level to undulating and no signs of slope instability were observed. The presence of two landscaped slopes that were greater than 33 percent were noted, both of which were less than two feet in height, and had no signs of slope instability. These slopes, one northwest of the main building, and one north of the access road near the west site entrance, are man-created for landscaping purposes, and should not impact site stability. Based on our review of the current site conditions and the information provided, slopes greater than 33 percent were not observed, other than the two minor landscaped slopes, and should not have any impact on the subject site. Although a final grading plan has not been provided, slopes greater than 33 percent are not anticipated within the proposed development.

Conclusions: Section 7.4.503 of the “Geologic Hazard Study and Mitigation” ordinance of the City of Colorado Springs zoning code states that the requirement for submittal of a geologic hazard study may be waived if the proposed development exhibits none of the listed characteristics. These criteria are presented below (in italics) followed by our conclusions regarding their applicability to the subject development.

- a. *Slopes (existing or proposed exceeding thirty three percent (33%) or which are otherwise unstable or potentially unstable.*

Based on our observations of the existing topography and understanding of the proposed development, it is our opinion the subject site does not contain and will not contain slopes that are unstable or potentially unstable. Grading is anticipated to maintain slopes of less than 33 percent.

- b. *Underground mining or subsidence activity.*

Our review of underground mining maps, geologic maps, and literature did not indicate the subject site as underlain by underground mining or other geologic features that would cause potential mine-related subsidence activity. The nearest potential subsidence hazard associated with underground mines is located approximately 2.3 miles northeast of the subject site.

c. *A history of landfill or uncontrolled or undocumented fill activity.*

The subject site does not have a history of landfill activity. Pre-existing man-placed fill was encountered primarily in areas already development, and to a maximum depth of 7 feet, however, development activity in addition to the recommendations presented in the Kumar & Associates, Inc. geotechnical engineering report, project number 22-2-214, should mitigate the presence of undocumented fill within the proposed development.

In conclusion, it is our opinion the subject site meets the criteria to waive the requirement for the submittal of a geologic hazard study. A completed exemption request form is attached to this letter.

Please contact us if you have any questions or require additional information.

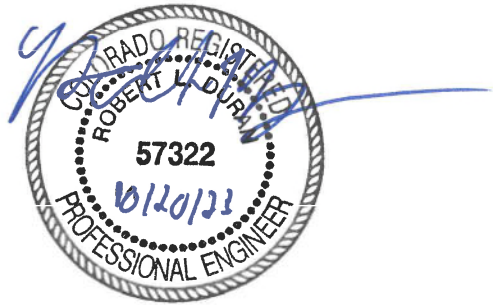
Sincerely,

Kumar & Associates, Inc.

By Rob Yeoman
Rob A. Yeoman, Staff Geologist

Reviewed by:
Robert L. Duran, P.E.

RAY:sw





APPLICATION FORM FOR GEOLOGIC HAZARD WAIVER

Applicant: Vertex Consulting Services Telephone 719-733-8606
Address: 455 E Pikes Peak Ave, Ste 101 Zip Code 80903 Email craig.dossey@vertexc.com
Colorado Springs, CO
Premises Involved: 101 South Union Boulevard, Union Printers Home, Mixed-Use Development
Tax Schedule Number: 3416300041 & 6416300042

In accordance with the Geologic Hazard Ordinance 7.4.501, City Planning, in consultation with written approval of the City Engineer, may waive the requirement for the submittal of a Geologic Hazard Study on a property that is not otherwise excluded or exempted from the provisions of this part for the following:

1. Master plans, development plans, or subdivision plats for which geologic hazard reports have been previously prepared and reviewed and which are still considered to be relevant.
2. Development proposals west of Interstate Highway 25 which exhibit none of the following characteristics:
 - a. Slopes (existing or proposed) exceeding thirty three percent (33%) or which are otherwise unstable or potentially unstable.
 - b. Underground mining or subsidence activity.
 - c. A history of a landfill or uncontrolled or undocumented fill activity.

A letter shall accompany this application that states that the project meets the above noted criteria, and is prepared by a professional geologist or professional geotechnical engineer, who is qualified in accord with section 7.4.504.

A completed waiver request will be reviewed within a 3 day time period.

Professional Geologist / Professional Geotechnical Engineer Acknowledgment:

I hereby formally request that the development at 101 South Union Boulevard be exempted from the requirement to submit a Geologic Hazard Study on the basis that review and on-site observation of the project has confirmed that all of the above referenced exemption criteria have been met. I hereby attest that I am a:

Professional Geologist / Professional Geotechnical Engineer as defined by section 7.4.504

Submitted for and on behalf of Vertex Consulting Services

Submitted by _____ Date _____

City Engineering: [Signature]

Date: 3-14-24



From: Dagnillo, Joel <Joel.Dagnillo@coloradosprings.gov>

Sent: Tuesday, September 19, 2023 9:54 AM

To: Dossey, Craig <Craig.Dossey@vertexcos.com>

Cc: Sevigny, Gabe G <Gabe.Sevigny@coloradosprings.gov>; Stuepfert, Phil <pstuepfert@hrgreen.com>; Morris, Patrick <Patrick.Morris@coloradosprings.gov>; Green, Justin <jgreen@hrgreen.com>; Mangino, Gina <gina.mangino@vertexcos.com>

Subject: RE: Union Printers Property - Anticipated Land Use Plan

Hi Craig,

Apologize for the delay in getting back with you. Engineering Development Review has determined a geological hazard waiver is sufficient for this lot. It must be submitted directly to EDRD through our electronic review system called ProjectDox. Below is a link to ProjectDox and a user manual.

<https://coloradosprings.gov/stormwater/planreview>.

Revised application forms are available on Public Works web-page.

Public Works/City Engineering Hub/New Development/Standards and References/ "References and Research Tools". <https://coloradosprings.gov/public-works/page/engineering-standards-and-references>

Let me know if you have any further questions. Thank you.

Joel Dagnillo, P.E.

Engineer III

Engineering Development Review

City of Colorado Springs

(719)385-5412

Joel.dagnillo@coloradosprings.gov