Staff Report for Administrative Subdivision Approval

Weber County Planning Division

Synopsis

Application Information

Application Request:	Consideration and action on an administrative application for approval of the Emerson Hills Phase 3 Amended.
Type of Decision	Administrative
Agenda Date:	Wednesday, January 11, 2017
Applicant:	Kevin Parkinson
File Number:	UVL 111816

Property Information

Approximate Address:	6523 N North Fork RD, Eden
Project Area:	5.44 Acres
Zoning:	Forest (F-5) Zone
Existing Land Use:	Single Family Dwelling
Proposed Land Use:	Residential
Parcel ID:	16-287-0001
Township, Range, Section:	Township 7N, Range 1W, Section 1

Adjacent Land Use

North:	Forest/Residential	**South:**	Forest/Residential
East:	Residential	**West:**	Forest

Staff Information

Report Presenter:	Felix Lleverino flleverino@co.weber.ut.us 801-399-8767
Report Reviewer:	RK

Applicable Ordinances

- Title 104 (Zones) Chapter 9 (F-5 Zone)
- Title 104 (Zones) Chapter 27 (Natural Hazards Overlay District)
- Title 106 (Subdivisions)
- Title 108 (Standards) Chapter 22 (Natural Hazard Areas)
- Title 101 (General Provisions) Section 7 (Definitions)

Background and Summary

The applicant, Kevin Parkinson, is requesting final approval of this amendment to an already approved subdivision that was granted final approval on March 25, 2008. This amendment will expand the buildable area within lot 12 of the original plat. As part of the County Surveyor's comments it required that the lot be renumbered to lot 13.

The specific buildable area has been designated due to topography and ground water. The site specific geologic report was conducted by Gordon Geotechnical Engineering, Inc. and reviewed by Gregory C. Schlenker, Ph.D., P.G. from GCS Geoscience. The following quote is taken from page 5 of the Geologic Reconnaissance Study that has been included in this report as Exhibit D. "The proposed homesite development within the identified existing and proposed-expanded buildable areas located in the 5.44-acre property will not be excessively exposed to the geological hazards specified by the Weber County Natural Hazard Overlay District Code."

The width and area of lot 13 exceed the minimum requirements for the Forest (F-5) Zone. This lot also conforms to the subdivision requirements including adequate frontage and access along a dedicated public road as required in the Uniform Land Use Code of Weber County (LUC). The following is an analysis of the subdivision amendment proposal.

Analysis

General Plan: This buildable area expansion within Emerson Hills Phase 3 Amended is in harmony with the Ogden Valley General Plan by implementing developments that preserve natural, agricultural and open spaces within the valley.

Zoning: The property is located in the F-5 Zone. The purpose of this zone is stated below, and can be found in LUC §104-6-1

> *"The intent of the forest zones is to protect and preserve the natural environment of those areas of the county that are characterized by mountainous, forest or naturalistic land, and to permit development compatible to the preservation of these areas."*
>
> *Lot Area, Frontage Width and Yard Regulations*: The area and width of lot 13 exceeds the minimum requirements for a lot within the F-5 Zone. LUC 108-9-1
>
> The Yard Regulations for the F-5 zone are as follows:
>
> Front: 30 feet
>
> Side: 20 feet
>
> Rear: 30 feet
>
> The Minimum width and area for the F-5 Zone are as follows:
>
> 300 feet in width
>
> 5 acres in area
>
> *Natural Hazards Overlay Districts*: A site specific geologic report was conducted by Gordon Geotechnical Engineering, Inc. The report, dated January 11, 2017 with the project #406-01A-16, gave an analysis on the following potential geologic hazards affiliated with the site:
>
> 1. *Landsliding*
> 2. *Aluvial fan debris flow process*
> 3. *Surface fault rupture hazards, strong earthquake ground motion, and liquefaction*
> 4. *Rockfall and Avalanche hazards*
> 5. *Flooding*
> 6. *Sloping Surfaces*
> 7. *Expansive Soil and Rock and Collapsible Soils*
> 8. *Radon Exposure*
>
> The conclusion of this report found on page 5 stated that the, "Property will not be excessively exposed to the geological hazards specified by the Weber County Natural Hazards Overlay District code."
>
> A condition of approval that a "Natural Hazards Disclosure" document will be required to provide adequate notice of any geotechnical and geological recommendations for future property owners.

Small Subdivision: The LUC §101-1-7 defines "small subdivision" as "A subdivision consisting of five (5) or fewer lots and for which no streets will be created or realigned." This subdivision consists of one lot and no new streets are being created or realigned. Stated in the LUC § 106-1-5(b),(1) "The land use authority who, for the purposes of this section, shall be the planning commission, for their review and decision in compliance with applicable ordinances." Based on these requirements, this subdivision qualifies for administrative approval as a small subdivision.

Culinary Water; Durfee Creek Homeowners Association has provided culinary water services to lot 13 of the Emerson Hills Phase 3 Amended.

Sanitary System: Lot 13 of Emerson Hills Phase 3 Amended will be serviced by a private septic system.

Review Agencies: The proposed subdivision has been reviewed by Surveying, Planning and Engineering. The Planning Division anticipates that the items in each review can be sufficiently addressed by the applicant.

Tax Clearance: There is no record of past delinquent tax history and no outstanding tax bills on these parcels.

Public Notice: Noticing requirements, according to LUC § 106-1-6(c), have been met by mailing notices out to all property owners of record within 500 feet of the subject property.

Staff Recommendations

Staff recommends final plat approval of the Emerson Hills Phase 3 Amended, consisting of one lot. This recommendation for approval is subject to all applicable review agency requirements and is based on the following conditions:

1. A "Natural Hazards Disclosure" document will be required to provide adequate notice of any geotechnical and geological recommendations for future property owners.

This recommendation is based on the following findings:

1. The proposed subdivision conforms to the Ogden Valley General Plan.
2. The proposed subdivision complies with the applicable County ordinances.

Administrative Approval

Administrative final approval of Emerson Hills Phase 3 Amended is hereby granted based upon its compliance with the Weber County Land Use Code. This approval is subject to the requirements of applicable review agencies and the conditions of approval listed in this staff report.

Date of Administrative Approval: January 11, 2016

Rick Grover
Weber County Planning Director

Exhibits

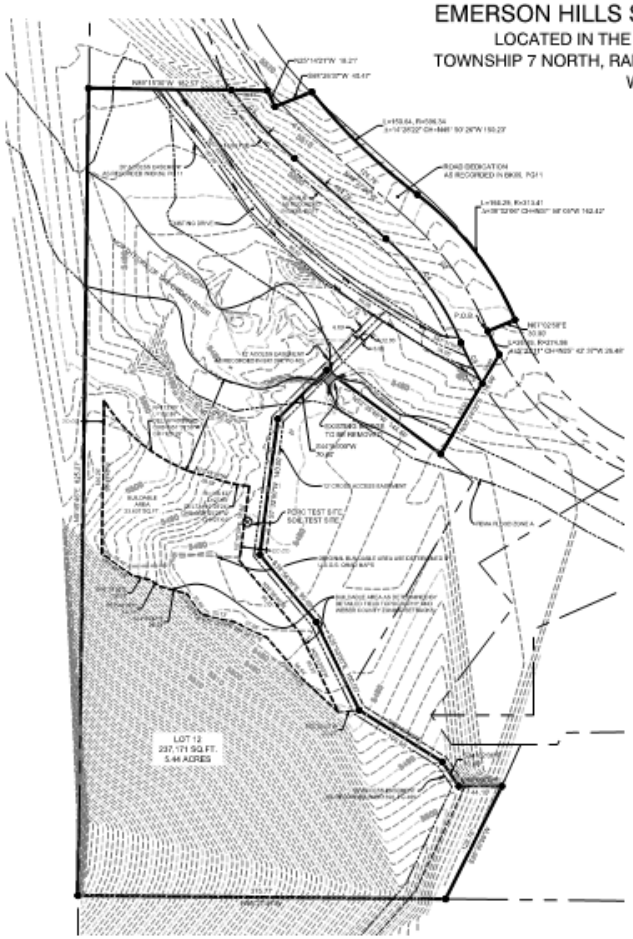
A. Emerson Hills Phase 3 Amended
B. Original Emerson Hills Phase 3 Plat
C. Recorders Plat
D. Geologic Report

Area Map


Subject property
WASATCH-CACHE NATIONAL FOREST
158
Eden
WEBER
Pineview Reservoir
39
Huntsvil

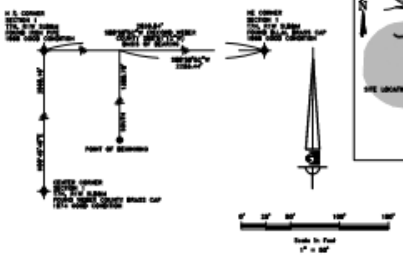
EMERSON HILLS SUBDIVISION PHASE 3 AMENDED

LOCATED IN THE NORTHEAST QUARTER OF SECTION 1,
TOWNSHIP 7 NORTH, RANGE 1 WEST, SALT LAKE BASE AND MERIDIAN,
WEBER COUNTY, UTAH
NOVEMBER 2016



VICINITY MAP

NOT TO SCALE



CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C2	55.10	450.00	17°49'29"	S43° 44' 29"E	54.99
C4	191.75	154.00	29°49'12"	S89° 47' 18"E	189.65
C5	47.10	354.00	5°53'56"	S37° 33' 51"E	47.10
C1	46.80	450.00	5°57'56"	N40° 31' 38"W	46.84
C3	143.64	354.00	23°15'13"	N39° 56' 44"W	142.68

LEGEND

- WEBER COUNTY MONUMENT AS NOTED
- FOUND 24" REBAR W/2" CAP MARKED GARDNER ENGINEERING
- SUBDIVISION BOUNDARY
- LOT LINE
- ADJACENT PARCEL
- SECTION LINE
- EXISTING FENCE
- PROPOSED BUILDABLE AREA
- EXISTING EASEMENT
- EXISTING FIRE HYDRANT
- EXISTING BUILDABLE AREA

NOTES

1. ZONE (T-5) CURRENT YARD SETBACKS: FRONT-30' // REAR - 25' // REAR - 50'
2. A PORTION OF THE SUBJECT PROPERTY FALLS WITHIN FEMA FLOOD ZONE "X" - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AND FLOOD ZONE "A" - AREAS WITH NO BASE FLOOD ELEVATION DETERMINED. PER FEMA MAP NO. 49057C0315F WITH A REVISED DATE OF JUNE 2, 2008. (AS SHOWN AND NOTED HEREON).
3. A DETAILED TOPOGRAPHY WAS CONDUCTED TO ACCURATELY DETERMINE THE TOPOGRAPHIC LOCATION OF THE TOE OF THE HILL AND OTHER RESTRICTIVE FEATURES.
4. VERTICAL DATUM IS NGVD 88.

NARRATIVE

THE PURPOSE OF THIS SURVEY WAS AMEND THE BUILDABLE AREA OF LOT 12, EMERSON HILLS SUBDIVISION PHASE 3, AS SHOWN AND NOTED HEREON. THE BUILDABLE AREA AS SHOWN HEREON WAS DETERMINED BY DETAILED FIELD TOPOGRAPHY AND BY WEBER COUNTY ZONING SETBACKS. THE SURVEY WAS ORDERED BY KEVIN PARKINSON. THE BASIS OF BEARINGS IS THE NORTH LINE OF THE NORTH EAST QUARTER OF SECTION 1, TOWNSHIP 7 NORTH, RANGE 1 WEST, OF THE SALT LAKE BASE AND MERIDIAN WHICH BEARS SOUTH 89°51'12" WEST WEBER COUNTY, UTAH NORTH, NAD 83 STATE PLANE GRID BEARING.

BOUNDARY DESCRIPTION

ALL OF LOT 12, EMERSON HILLS SUBDIVISION PHASE 3, LOCATED IN THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 7 NORTH, RANGE 1 WEST, OF THE SALT LAKE BASE AND MERIDIAN, ACCORDING TO THE OFFICIAL PLAT THEREOF, ON FILE WITH THE WEBER COUNTY RECORDER, AS ENTRY NUMBER 2309804, IN BOOK 69, PAGE 11.

SURVEYOR'S CERTIFICATE

I, KENT H. WHITNEY, DO HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH AND THAT I HOLD CERTIFICATE NO. 8227228 IN ACCORDANCE WITH TITLE 58, CHAPTER 22, OF THE PROFESSIONAL ENGINEERS AND LAND SURVEYORS ACT. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS I HAVE COMPLETED A SURVEY OF THE PROPERTY AS SHOWN AND DESCRIBED ON THIS PLAT, AND HAVE SUBDIVIDED SAID PROPERTY INTO LOTS AND STREETS, TOGETHER WITH EASEMENTS, HEREAFTER TO BE KNOWN AS EMERSON HILLS SUBDIVISION PHASE 3 AMENDED, IN ACCORDANCE WITH SECTION 17-23-17 AND HAVE VERIFIED ALL MEASUREMENTS THAT THE REFERENCE MONUMENTS SHOWN HEREON ARE LOCATED AS INDICATED AND ARE SUFFICIENT TO RETRACE OR REESTABLISH THIS SURVEY, AND THAT THE INFORMATION SHOWN HEREIN IS SUFFICIENT TO ACCURATELY ESTABLISH THE LATERAL BOUNDARIES OF THE HEREIN DESCRIBED TRACT OF REAL PROPERTY.

SIGNED THIS _____ DAY OF _____, 2016.

PROFESSIONAL LAND SURVEYOR — DATE — SECTION — Kent H. Whitney — STATE OF UTAH

KENT H. WHITNEY, PLS NO. 8227228

OWNER'S DEDICATION

I THE UNDERSIGNED OWNER OF THE HEREIN DESCRIBED TRACT OF LAND, HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS, PARCELS AND STREETS AS SHOWN ON THIS PLAT AND NAME SAID TRACT

EMERSON HILLS SUBDIVISION PHASE 3 AMENDED

AND HEREBY DEDICATE, GRANT AND CONVEY TO WEBER COUNTY, UTAH ALL THOSE PARTS OR PORTIONS OF SAID TRACT OF LAND DESIGNATED AS STREETS, THE SAME TO BE USED AS PUBLIC THOROUGHFARES FOREVER, AND ALSO GRANT AND DEDICATE A PERPETUAL EASEMENT OVER, UPON AND UNDER THE LANDS DESIGNATED ON THIS PLAT AS PUBLIC UTILITY, THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF PUBLIC UTILITY SERVICE LINES, STORM DRAINAGE FACILITIES OR FOR THE PERPETUAL PRESERVATION OF WATER DRAINAGE CHANNELS IN THEIR NATURAL STATE WHICHEVER IS APPLICABLE AS MAY BE AUTHORIZED BY WEBER COUNTY. UTAH, WITH NO BUILDINGS OR STRUCTURES BEING ERECTED WITHIN SUCH EASEMENTS.

SIGNED THIS ___ DAY OF _____, 2016.

BY: KEVIN R. PARKINSON, JOINT TENANT — BY: COLLETTE PARKINSON, JOINT TENANT

ACKNOWLEDGEMENT

STATE OF UTAH)
: S
COUNTY OF WEBER)

On this ___ day of _____, 2016, before me _____, A Notary Public, personally appeared KEVIN R. PARKINSON AND COLLETTE PARKINSON, HUSBAND AND WIFE, AS JOINT TENANTS, Proved on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to this instrument, and acknowledged (he/she/they) executed the same. Witness my hand and official seal.

STAMP — NOTARY PUBLIC

WEBER COUNTY SURVEYOR	WEBER COUNTY ATTORNEY	WEBER COUNTY ENGINEER	WEBER COUNTY COMMISSION ACCEPTANCE	WEBER COUNTY PLANNING COMMISSION APPROVAL	WEBER - MORGAN HEALTH DEPARTMENT
I HEREBY CERTIFY THAT THE WEBER COUNTY SURVEYOR'S OFFICE HAS REVIEWED THIS PLAT FOR MATHEMATICAL CORRECTNESS, SECTION CORNER DATA, AND FOR HARMONY WITH LINES AND MONUMENTS ON RECORD IN COUNTY OFFICES. THIS APPROVAL OF THIS PLAT BY THE WEBER COUNTY SURVEYOR DOES NOT RELIEVE THE LICENSED LAND SURVEYOR WHO EXECUTED THIS PLAT FROM THE RESPONSIBILITIES AND/OR LIABILITIES ASSOCIATED THEREWITH.	I HAVE EXAMINED THE FINANCIAL GUARANTEE AND OTHER DOCUMENTS ASSOCIATED WITH THIS SUBDIVISION PLAT AND AS MY OPINION THEY CONFORM WITH THE COUNTY ORDINANCE APPLICABLE THERETO AND NOW IN FORCE AND EFFECT.	I HEREBY CERTIFY THAT THE REQUIRED PUBLIC IMPROVEMENTS' STANDARDS AND DRAWINGS FOR THIS SUBDIVISION CONFORM WITH COUNTY STANDARDS AND THE AMOUNT OF THE FINANCIAL GUARANTEE IS SUFFICIENT FOR THE INSTALLATION OF THESE IMPROVEMENTS.	THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAT, THE DEDICATION OF STREETS AND OTHER PUBLIC WAYS AND FINANCIAL GUARANTEE OF PUBLIC IMPROVEMENTS ASSOCIATED WITH THIS SUBDIVISION THEREON, ARE HEREBY APPROVED AND ACCEPTED BY THE COMMISSIONERS OF WEBER COUNTY, UTAH.	THIS IS TO CERTIFY THAT THIS SUBDIVISION WAS DULY APPROVED BY THE WEBER COUNTY PLANNING COMMISSION.	I do hereby certify that the soils, percolation rates, and site conditions for this subdivision have been investigated by this office and are approved for on-site wastewater disposal systems.
SIGNED THIS___DAY OF _____, 2016.	SIGNED THIS___DAY OF _____, 2016.	SIGNED THIS___DAY OF _____, 2016.	SIGNED THIS___DAY OF _____, 2016.	SIGNED THIS___DAY OF _____, 2016.	This ___ day of _____, 2016
_____ COUNTY SURVEYOR	_____ COUNTY ATTORNEY	_____ COUNTY ENGINEER	_____ ATTEST: _____ Chairman, Weber County Commission — Secretary	_____ CHAIRMAN, WEBER COUNTY PLANNING COMMISSION	_____ Director, Weber-Morgan Health Department

DEVELOPER:
KEVIN PARKINSON
6525 N NORTH FORK RD
EDEN, UT 84310

S1
1

GARDNER ENGINEERING
CIVIL · LAND PLANNING
MUNICIPAL · LAND SURVEYING
5150 SOUTH 375 EAST OGDEN, UT
OFFICE: 801.476.0202 FAX: 801.476.0066

COUNTY RECORDER

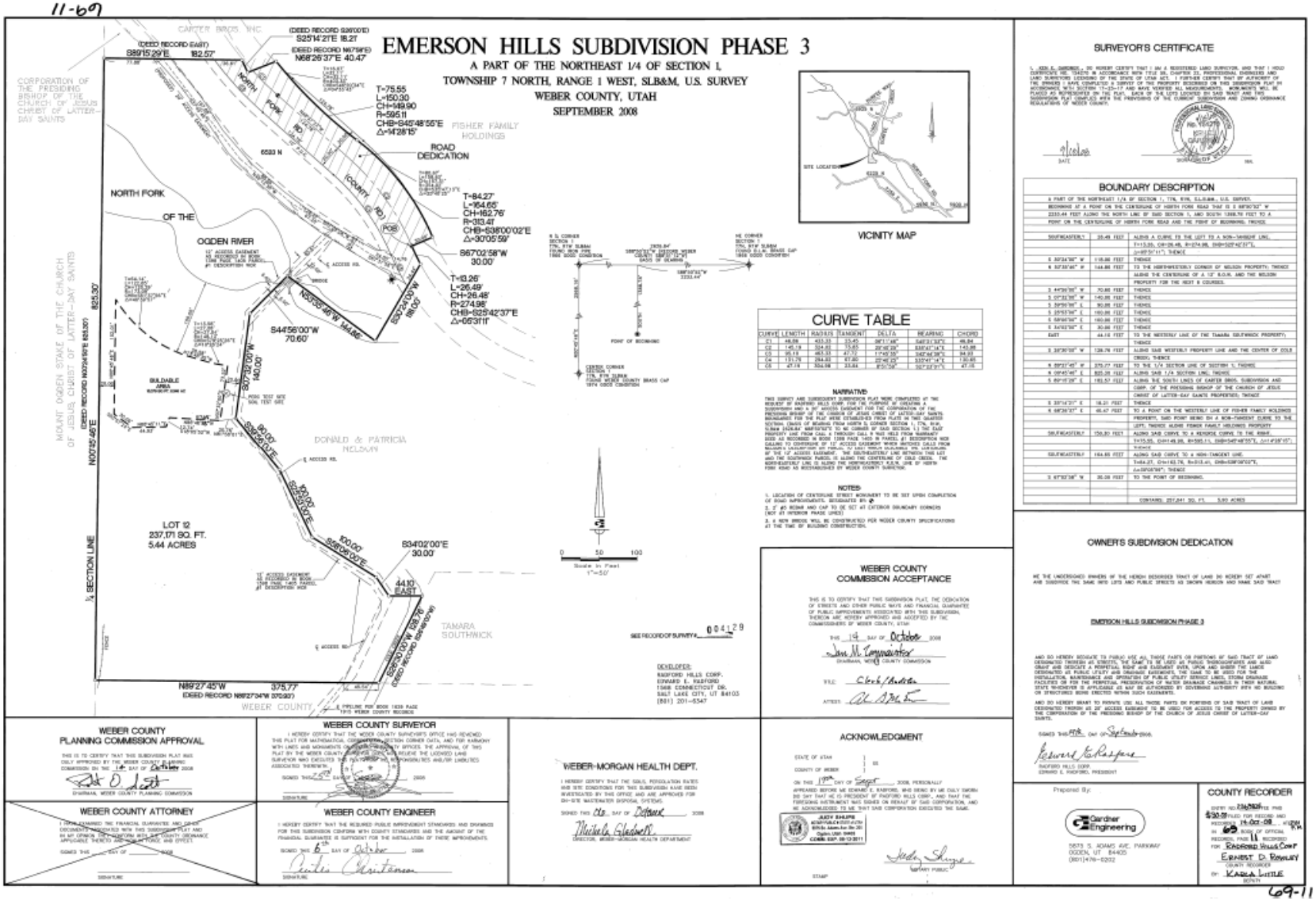
ENTRY NO. _____ FEE PAID _____
FILED FOR AND RECORDED _____
AT _____ IN BOOK _____ OF OFFICIAL RECORDS, PAGE _____ RECORDED
FOR _____
_____ COUNTY RECORDER
BY: _____

S:\1613 - PARKINSON, KEVIN\EMERSON HILLS\SURVEY\DWG\EMERSON HILLS PH3 AMENDED.DWG

11-69

EMERSON HILLS SUBDIVISION PHASE 3

A PART OF THE NORTHEAST 1/4 OF SECTION 1,
TOWNSHIP 7 NORTH, RANGE 1 WEST, SLB&M, U.S. SURVEY
WEBER COUNTY, UTAH
SEPTEMBER 2008



CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	DELTA	BEARING	CHORD
C1	46.99	433.33	23.45	06°11'49"	S48°31'30"E	46.94
C2	145.19	504.81	73.85	20°46'28"	S38°47'14"E	143.98
C3	95.19	461.33	47.72	11°49'35"	S42°46'28"E	94.99
C4	131.78	284.81	67.80	26°46'25"	S33°41'14"E	130.65
C5	47.16	304.98	23.64	8°51'39"	S52°23'21"E	47.16

NARRATIVE:

THIS SURVEY AND SUBSEQUENT SUBDIVISION PLAT WERE COMPLETED AT THE REQUEST OF RADFORD HILLS CORP. FOR THE PURPOSE OF CREATING A SUBDIVISION AND A 20' ACCESS EASEMENT FOR THE CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS. BOUNDARIES FOR THE PLAT WERE ESTABLISHED FROM PLATS IN THIS QUARTER SECTION. (BASIS OF BEARING FROM NORTH ¼ CORNER SECTION 1, T7N, R1W, SLB&M (N89°45'40"E 5281.52'") TO NE CORNER OF SAID SECTION 1.) THE EAST PROPERTY LINE FROM CALL 4 THROUGH CALL 8 WAS HELD FROM WARRANTY DEED AS RECORDED IN BOOK 1788 PAGE 1405 IN PARCEL #1 DESCRIPTION WERE CALLING TO CENTERLINE OF 12' ACCESS EASEMENT WHEN MATCHED CALLS FROM SURVEY RECORDED AS ENTRY #1966278. THE NORTHERLY LINE OF LOT 12 IS ALONG THE 12' ACCESS EASEMENT. THE SOUTHEASTERLY LINE BETWEEN THIS LOT AND THE SOUTHERN PARCEL IS ALONG THE CENTERLINE OF COLD CREEK. THE NORTHEASTERLY LINE IS ALONG THE NORTHEASTERLY R.O.W. LINE OF NORTH FORK ROAD AS MONUMENTED BY WEBER COUNTY SURVEYOR.

NOTES:

1. LOCATION OF CENTERLINE STREET MONUMENT TO BE SET UPON COMPLETION OF ROAD IMPROVEMENTS. WITNESSED BY: ⊕
2. 2" Ø BRASS AND CAP TO BE SET AT EXTERIOR BOUNDARY CORNERS (NOT AT INTERIOR PHASE LINES)
3. A NEW BRIDGE WILL BE CONSTRUCTED PER WEBER COUNTY SPECIFICATIONS AT THE TIME OF BUILDING CONSTRUCTION.

SURVEYOR'S CERTIFICATE

I, KEN D. GARDNER, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HOLD CERTIFICATE NO. 172270 IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING OF THE STATE OF UTAH ACT. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS SUBDIVISION PLAT IN ACCORDANCE WITH SECTION 17-23-17 AND HAVE VERIFIED ALL MEASUREMENTS; BOUNDARIES WILL BE SET AS SHOWN ON THIS PLAT; AND THAT THIS PLAT OF EMERSON HILLS SUBDIVISION PHASE 3 IS THE SAME TRACT AS WAS SURVEYED AND THAT THIS SUBDIVISION PLAT COMPLIES WITH THE PROVISIONS OF THE CURRENT SUBDIVISION AND ZONING ORDINANCE REGULATIONS OF WEBER COUNTY.

9/16/08
DATE

SURVEYOR

BOUNDARY DESCRIPTION

A PART OF THE NORTHEAST 1/4 OF SECTION 1, T7N, R1W, S.L.B&M., U.S. SURVEY.

BEGINNING AT A POINT ON THE CENTERLINE OF NORTH FORK ROAD THAT IS S 89°30'52" W 2333.44 FEET ALONG THE NORTH LINE OF SAID SECTION 1, AND SOUTH 1328.17 FEET TO A POINT ON THE CENTERLINE OF NORTH FORK ROAD AND THE POINT OF BEGINNING, THENCE:

SOUTHEASTERLY	20.45 FEET	ALONG A CURVE TO THE LEFT TO A NON-TANGENT LINE, (r=13.26, CH=26.48, R=274.98, CHB=S25°42'37"E, Δ=05°31'11"), THENCE
S 52°24'09" W	118.88 FEET	THENCE
N 52°39'48" W	144.86 FEET	TO THE NORTHEASTERLY CORNER OF NELSON PROPERTY; THENCE ALONG THE CENTERLINE OF A 12' R.O.W. AND THE NELSON PROPERTY FOR THE NEXT 6 COURSES.
S 44°56'00" W	70.60 FEET	THENCE
S 07°35'00" W	140.00 FEET	THENCE
S 82°54'51" E	90.00 FEET	THENCE
S 82°54'51" E	100.00 FEET	THENCE
S 82°06'00" E	120.00 FEET	THENCE
S 83°02'00" E	30.00 FEET	THENCE
EAST	44.10 FEET	TO THE WESTERLY LINE OF THE TAMARA SOUTHWICK PROPERTY; THENCE
S 25°20'00" W	128.76 FEET	ALONG SAID WESTERLY PROPERTY LINE AND THE CENTER OF COLD CREEK; THENCE
N 89°27'45" W	375.77 FEET	TO THE 1/4 SECTION LINE OF SECTION 1; THENCE
N 00°45'40" E	825.30 FEET	ALONG SAID 1/4 SECTION LINE; THENCE
S 89°15'29" E	193.57 FEET	ALONG THE SOUTH LINES OF CARTER BROS. SUBDIVISION AND CORP. OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS PROPERTIES; THENCE
S 25°14'27" E	18.21 FEET	THENCE
N 68°26'37" E	40.47 FEET	TO A POINT ON THE WESTERLY LINE OF FISHER FAMILY HOLDINGS PROPERTY, SAID POINT BEING 60.4 RAD.-TANGENT CURVE TO THE LEFT; THENCE ALONG FISHER FAMILY HOLDINGS PROPERTY
SOUTHEASTERLY	150.30 FEET	ALONG SAID CURVE TO A REVERSE CURVE TO THE RIGHT, (r=75.55, CH=149.90, R=595.11, CHB=S45°48'55"E, Δ=14°28'15"); THENCE
SOUTHEASTERLY	164.65 FEET	ALONG SAID CURVE TO A NON-TANGENT LINE, (r=84.27, CH=162.76, R=313.47, CHB=S38°00'02"E, Δ=30°05'59"); THENCE
S 67°02'58" W	30.00 FEET	TO THE POINT OF BEGINNING.
		CONTAINS: 237,841 SQ. FT. 5.80 ACRES

OWNER'S SUBDIVISION DEDICATION

WE THE UNDERSIGNED OWNERS OF THE HEREIN DESCRIBED TRACT OF LAND DO HEREBY SET APART AND SUBDIVIDE THE SAME INTO LOTS AND PUBLIC STREETS AS SHOWN HEREON AND NAME SAID TRACT

EMERSON HILLS SUBDIVISION PHASE 3

AND DO HEREBY DEDICATE TO PUBLIC USE ALL THOSE PARTS OR PORTIONS OF SAID TRACT OF LAND DESIGNATED THEREIN AS STREETS, THE SAME TO BE USED AS PUBLIC THOROUGHFARES AND ALSO GRANT AND DEDICATE A PERPETUAL RIGHT AND EASEMENT OVER, UPON AND UNDER THE LANDS DESIGNATED AS PUBLIC UTILITY AND DRAINAGE EASEMENTS, THE SAME TO BE USED FOR THE INSTALLATION, MAINTENANCE AND OPERATION OF PUBLIC UTILITY SERVICE LINES, STORM DRAINAGE FACILITIES OR FOR THE PERPETUAL PRESERVATION OF WATER DRAINAGE CHANNELS IN THEIR NATURAL STATE WHICHEVER IS APPLICABLE AS MAY BE AUTHORIZED BY GOVERNING AUTHORITY WITH NO BUILDING OR STRUCTURES BEING ERECTED WITHIN SUCH EASEMENTS.

AND DO HEREBY GRANT TO PRIVATE USE ALL THOSE PARTS OR PORTIONS OF SAID TRACT OF LAND DESIGNATED THEREIN AS 20' ACCESS EASEMENT TO BE USED FOR ACCESS TO THE PROPERTY OWNED BY THE CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS.

SIGNED THIS 9TH DAY OF September 2008.

RADFORD HILLS CORP.
EDWARD E. RADFORD, PRESIDENT

WEBER COUNTY COMMISSION ACCEPTANCE

THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAT, THE DEDICATION OF STREETS AND OTHER PUBLIC WAYS AND FINANCIAL GUARANTEE OF PUBLIC IMPROVEMENTS ASSOCIATED WITH THIS SUBDIVISION, THEREON ARE HEREBY APPROVED AND ACCEPTED BY THE COMMISSIONERS OF WEBER COUNTY, UTAH

THIS 14 DAY OF October 2008

Jan M. Zogmaister
CHAIRMAN, WEBER COUNTY COMMISSION

ATTEST: Clerk/Auditor

WEBER COUNTY PLANNING COMMISSION APPROVAL

THIS IS TO CERTIFY THAT THIS SUBDIVISION PLAT WAS DULY APPROVED BY THE WEBER COUNTY PLANNING COMMISSION ON THE 14 DAY OF October 2008

CHAIRMAN, WEBER COUNTY PLANNING COMMISSION

WEBER COUNTY SURVEYOR

I HEREBY CERTIFY THAT THE WEBER COUNTY SURVEYOR'S OFFICE HAS REVIEWED THIS PLAT FOR MATHEMATICAL CORRECTNESS, SECTION CORNER DATA, AND FOR HARMONY WITH LINES AND MONUMENTS ON RECORD IN COUNTY OFFICES. THE APPROVAL OF THIS PLAT BY THE WEBER COUNTY SURVEYOR DOES NOT RELIEVE THE LICENSED LAND SURVEYOR WHO EXECUTES THIS PLAT FROM THE RESPONSIBILITIES AND/OR LIABILITIES ASSOCIATED THEREWITH.

SIGNED THIS 24 DAY OF Sept 2008

WEBER COUNTY ATTORNEY

I HAVE EXAMINED THE FINANCIAL GUARANTEE AND OTHER DOCUMENTS ASSOCIATED WITH THIS SUBDIVISION PLAT AND IN MY OPINION CONFORMS WITH THE COUNTY ORDINANCE APPLICABLE THERETO AND NOW IN FORCE AND EFFECT.

SIGNED THIS _____ DAY OF _____ 2008

WEBER COUNTY ENGINEER

I HEREBY CERTIFY THAT THE REQUIRED PUBLIC IMPROVEMENT STANDARDS AND DRAWINGS FOR THIS SUBDIVISION CONFORM WITH COUNTY STANDARDS AND THE AMOUNT OF THE FINANCIAL GUARANTEE IS SUFFICIENT FOR THE INSTALLATION OF THESE IMPROVEMENTS.

SIGNED THIS 6th DAY OF October 2008

WEBER-MORGAN HEALTH DEPT.

I HEREBY CERTIFY THAT THE SOILS, PERCOLATION RATES AND SITE CONDITIONS FOR THIS SUBDIVISION HAVE BEEN INVESTIGATED BY THIS OFFICE AND ARE APPROVED FOR ON-SITE WASTEWATER DISPOSAL SYSTEMS.

SIGNED THIS 8th DAY OF October 2008

DIRECTOR, WEBER-MORGAN HEALTH DEPARTMENT

ACKNOWLEDGMENT

STATE OF UTAH)
: ss
COUNTY OF WEBER)

ON THIS 9TH DAY OF Sept 2008, PERSONALLY APPEARED BEFORE ME EDWARD E. RADFORD, WHO BEING BY ME DULY SWORN DID SAY THAT HE IS PRESIDENT OF RADFORD HILLS CORP., AND THAT THE FOREGOING INSTRUMENT WAS SIGNED ON BEHALF OF SAID CORPORATION, AND HE ACKNOWLEDGED TO ME THAT SAID CORPORATION EXECUTED THE SAME.

JUDY SHUPE
NOTARY PUBLIC • STATE of UTAH
5176 So. Adams Ave. Ste. 201
Ogden, Utah 84405
COMM. EXP. 08-13-2011

NOTARY PUBLIC

STAMP

Prepared By:

Gardner Engineering
5675 S. ADAMS AVE. PARKWAY
OGDEN, UT 84405
(801)476-0202

COUNTY RECORDER

ENTRY NO. 2267609 FEE PAID $30.00 FILED FOR RECORD AND RECORDED 14-Oct-08 AT 09:04 AM IN BOOK 65 OF OFFICIAL RECORDS, PAGE 11 RECORDED FOR RADFORD HILLS CORP
ERNEST D. ROWLEY
COUNTY RECORDER
BY: KARLA LITTLE
DEPUTY

69-11

287

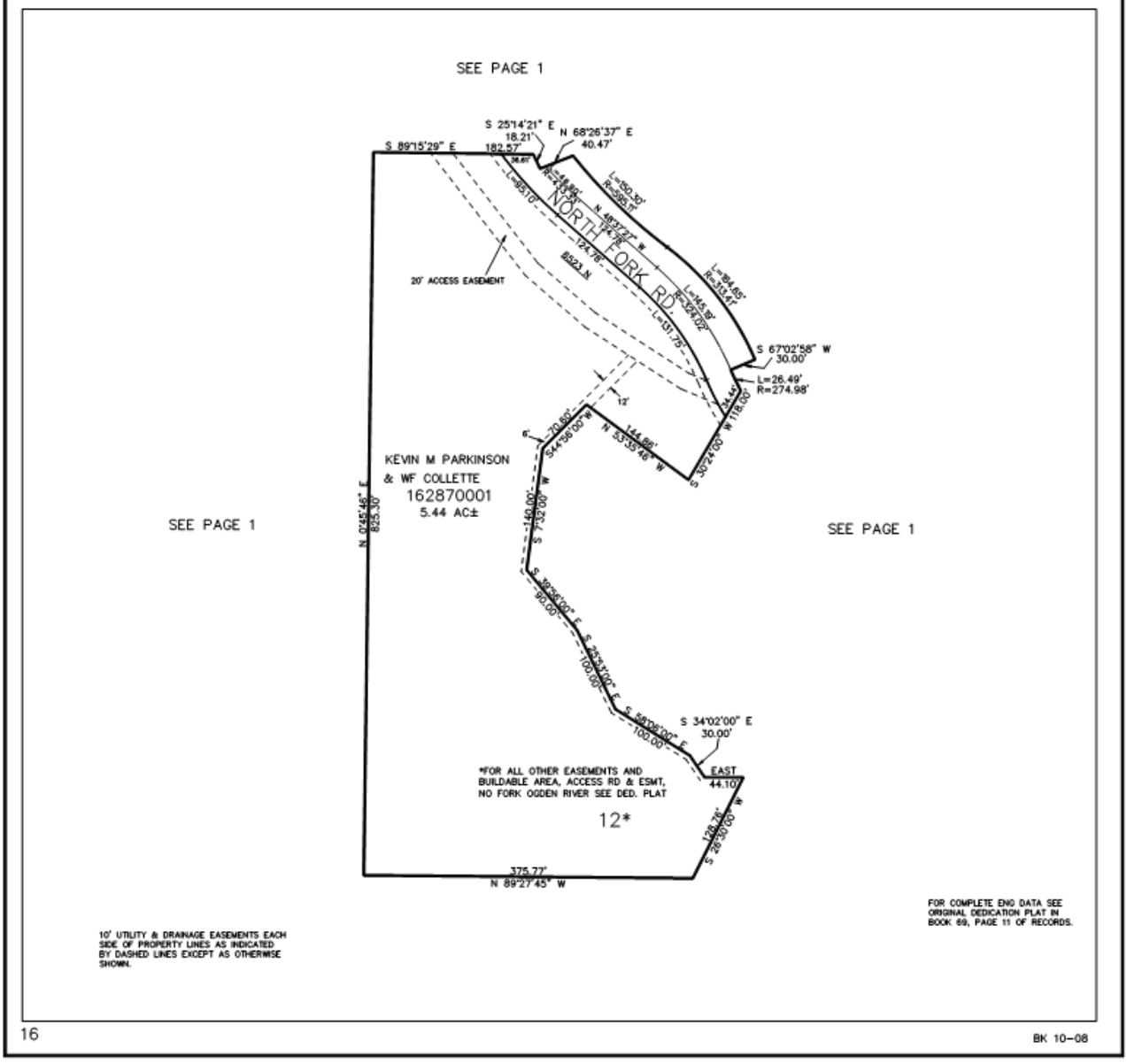
PART OF THE NE.1/4, OF SECTION 1, T.7N., R.1W., S.L.B. & M.

EMERSON HILLS SUBDIVISION PHASE 3

IN WEBER COUNTY

TAXING UNIT: 410

SCALE 1" = 80'



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BK 10-08

GORDON GEOTECHNICAL ENGINEERING, INC.

January 11, 2017
Job No. 406-01A-16

Distinct Homes, LLC
2490 Wall Avenue
Ogden, Utah 84401

Attention: Mr. Kevin Parkinson

Re: Professional Geologist Review and Supplemental Addendum

for:

Geologic Reconnaissance Study
Buildable Area Expansion
Emerson Hills Subdivision Lot #12
Liberty, Utah
September 23, 2016

INTRODUCTION

This letter has be prepared as a review and a supplemental information addendum in support of our previous September 23, 2016 Geological Reconnaissance Study referenced above.

In our previous study we addressed Slope Stability and Landslide Hazards, Rockfall Hazard, Flood zone hazards, Shallow Groundwater, Expansive Soil and Rock, and Indoor Radon-Hazards issues. For this review supporting and concurrent information is provided to support September 23, 2016 Report.

The purpose of the review is to address the hazards that are included in the Weber County Code, Chapter 27, Natural Hazards Overlay District criteria. These hazards include, but are not limited to: Surface-Fault Rupture, Landslide,
Tectonic Subsidence, Rock Fall, Debris Flows, Liquefaction Areas, Flood, or other Hazardous Areas (Weber County Code, 2016).

Resources supporting this review included; our previous September 23 2016, report (Gordon Geotechnical Engineering, Inc., 2016a); previous reports within the site vicinity (AGRA Earth & Environmental, 1997; GCS Geoscience, 2016), and a GIS data integration effort that included previous mapping and literature pertaining to site geology including Coogan and King (2016),

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Crittenden and Sorensen (1985); an analysis of vertical and stereoscopic aerial photography for the site including a 1946 1:20,000 stereoscopic sequence, a 2014 1.0 meter color digital NAIP coverage, and a 2012 5.0 inch digital color HRO coverage of the site; and a GIS analysis using the QGIS® GIS platform to geoprocess and analyze 2011 1.0 meter LiDAR digital elevation data made available for the site by the Utah Automated Geographic Reference Center (AGRC).

GEOLOGIC HAZARDS REVIEW

The summation of our review is presented on Figure 1, Geologic Hazards Review, which presents the site layout and limiting geoenvironmental conditions. Also shown on Figure 1, are property boundaries and "buildable area" zones that were projected from Gardner Engineering drawings titled "Topographic Site Plan For Kevin Parkinson, Lot 12, Emerson Hills Subdivision Phase 3," dated September 6, 2016, and assumed as reliable.

In addition to the review and location query we searched for nearby or proximal classifications or conditions that could possibly present hazardous conditions to the site. A summary of our findings is provided as follows:

1. Landsliding: The nearest landslide units as mapped by Cogan and King (2016) are located approximately 875 feet to the east of the property, and should not potentially impact the proposed buildable areas on the site.

2. Alluvial fan debris flow processes, including flash flooding and debris flow hazard: The nearest occurrence of alluvial fan debris flow deposits occurs at the mouth of Durfee Creek, where Durfee Creek joins the North Fork Ogden River. These deposits occur on the very northeastern margin of the property, on the north side of North Fork Ogden River. The proximity of these deposits to the buildable areas on the site indicate these hazards to be improbable to the homesite building areas.

3. Surface fault rupture hazards, strong earthquake ground motion, and liquefaction:

Active Earthquake Faults: The nearest active (Holocene) earthquake fault to the site is the Weber segment of the Wasatch fault zone (UT2351E) which is located 3.5 miles southwest of the site, thus fault rupture hazards are not considered present on the site (Black et al., 2004). The Ogden Valley North Fork fault (UT2376) is located much closer to the site, approximately 2500 feet to the west of the property, however the most recent movement along this fault is estimated to be pre-Holocene (greater than 15,000 years before present), and presently is not considered an active risk (Black, et al., 1999).

Strong earthquake ground motion originating from the Wasatch fault or other near-by seismic sources is capable of impacting the surrounding region including the site. The Wasatch fault zone is considered active and capable of generating earthquakes as large as

magnitude 7.3 (Arabasz et al., 1992). Based on probabilistic estimates (Peterson, et al., 2008) queried for the site, the expected peak horizontal ground acceleration on rock from a large earthquake with a ten-percent probability of exceedance in 50 years is as high as 0.19*g*, and for a two-percent probability of exceedance in 50 years is as high as 0.44*g* for the site.

The a 10-percent probability of exceedance in 50 years event has a return period of 475 years, and the 0.19*g* acceleration for this event corresponds "very strong" perceived shaking with "moderate" potential damage based on instrument intensity correlations (Wald et al., 1999).

The 2-percent probability of exceedance in 50 years event has a return period of 2475 years, and the 0.44*g* acceleration for this event corresponds "severe" perceived shaking with "moderate to heavy" potential damage based on instrument intensity correlations (Wald et al., 1999).

Future ground accelerations greater than these are possible but will have a lower probability of occurrence.

Liquefaction Potential Hazards: In conjunction with strong earthquake ground motion potential of large magnitude seismic events as discussed previously, certain soil units may also possess a potential for liquefaction during a large magnitude event. Liquefaction is a phenomenon whereby loose, saturated, granular soil units lose a significant portion of their shear strength due to excess pore water pressure buildup resulting from dynamic loading, such as that caused by an earthquake. Among other effects, liquefaction can result in densification of such deposits causing settlements of overlying layers after an earthquake as excess pore water pressures are dissipated. Horizontally continuous liquefied layers may also have a potential to spread laterally where sufficient slope or freeface conditions exist. The primary factors affecting liquefaction potential of a soil deposit are: (1) magnitude and duration of seismic ground motions; (2) soil type and consistency; and (3) occurrence and depth to groundwater.

Liquefaction potential hazards have not been studied or mapped for the Ogden Valley area, as has occurred in other parts of northern Utah (Anderson et al., 1994). Because this phenomena is known to occur in susceptible alluvial sediments in conjunction with shallow groundwater conditions, we consider areas mapped as alluvium such as those in the site vicinity along the North Fork Ogden River as potentially susceptible to liquefaction during a future earthquake event. In Weber County, where "High/Moderate" liquefaction potential conditions have been identified or mapped, liquefaction hazard studies are nevertheless not required for residential subdivisions, however the disclosure that "High/Moderate" liquefaction potential may be present is required, as specified by Chapter 27, Sec. 104-27-5 of the Weber County Code (Weber County Code, 2016).

5. Rockfall and Avalanche hazards: The site is over a mile from steep slope areas where such hazards may originate.

6. Flooding: Mapping by Federal Emergency Management Agency (FEMA, 2015) is shown on Figure 1. The Zone A shown on Figure 1, includes the 100-year flood hazard zone as delimited by recent FEMA studies conducted in the Ogden Valley area. On the basis of the FEMA determination ...*mandatory flood insurance purchase requirements and floodplain management standards apply*...for improvements made in the Zone A area shown on Figure 1. Shown on Figure 1, the Zone A FEMA mapping for the North Fork Ogden River does not appear to contact the "buildable area" parts of the site where the river crosses on the north side the site.

Also shown on Figure 1, is the UTABA Dam Failure Inundation mapping as prepared by Weber county to evaluate the area of inundation should dam failure occur at the UTABA Dam which is located approximately 1.3 miles up-stream from the site on the North Fork Ogden River (Bridges, 1977). The estimated inundation area from failure of the UTABA Dam is shown on Figure 1, and is presumed to be the worst-case scenario calculated by the County Engineers (Weber County Engineering, 1994), and probability of this occurrence is very low.

7. Sloping Surfaces: The surface of site slopes developed from our LiDAR analysis range from level to well over 50-percent as shown on Figure 1. For the overall 5.44-acre area of the site, slope gradients averaged 36.4 percent, with the slopes ranging from 0.0 to 100.0 percent. For the existing buildable area the slope gradient averaged 23.9 percent, and the proposed-expanded buildable area the slope gradient averaged 17.1 percent.

The steeper slope areas in excess of 25 percent are shown on Figure 1, with the steeper sloping surfaces on the site concentrated on a steep riser slope located immediately to the southwest of the existing and proposed-expanded buildable areas on the site. The threshold gradient for slope development considerations and hillside review according to the Weber County Section 108-14-3 (Weber County Code, 2016), includes slopes greater that 25-percent.

8. Expansive Soil and Rock and Collapsible Soils: A previous geotechnical evaluation for the buildable areas on the site was conducted by our office, and a report summarizing our findings was prepared on August 12, 2016 (Gordon Geotechnical Engineering, Inc., 2016b). No expansive soil and rock, or collapsible soils were encountered in the two test pits excavated for the geotechnical study, however geotechnical recommendations for site preparation and development were provided.

9. Radon Exposure: Radon is a naturally occurring radioactive gas that has no smell, taste, or color, and comes from the natural decay of uranium that is found in nearly all rock and soil. Radon and has been found occur in the Ogden Valley area, and can be a hazard in buildings because the gas collects in enclosed spaces. Indoor testing following construction to detect and determine radon hazard exposure should be conducted to determine if radon reduction measures are necessary for new construction. The radon-hazard potential mapping has been

prepared for most of Ogden Valley by the Utah Geological Survey (Solomon, 1996), and the site appears to be located in an area mapped as having a "Moderate" to "High" radon potential classification. For new structures radon-resistant construction techniques as provided by the EPA (EPA 2016) should be considered.

CONCLUSIONS

Based upon the findings of this review we believe that the proposed homesite development within the identified existing and proposed-expanded buildable areas located on the 5.44-acre property will not be excessively exposed to the geological hazards specified by the Weber County Natural Hazards Overlay District code (Weber County Code, Chapter 27) to preclude this development.

Although not addressed by the Weber County ordinances, we recommend that radon exposure be evaluated for all proposed dwellings to determine if radon reduction measures are necessary for the new residential construction. It is our understanding that new construction in Ogden Valley area often includes radon remedial measures as part of final design.

CLOSURE

If you have any questions or would like to discuss these items further, feel free to contact us at (801) 327-9600.

Respectfully submitted,

Gordon Geotechnical Engineering, Inc.

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Reviewed by:

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GCS/PRE:sn

Encl. Figure 1, Geologic Hazards Review

Addressee (email only)

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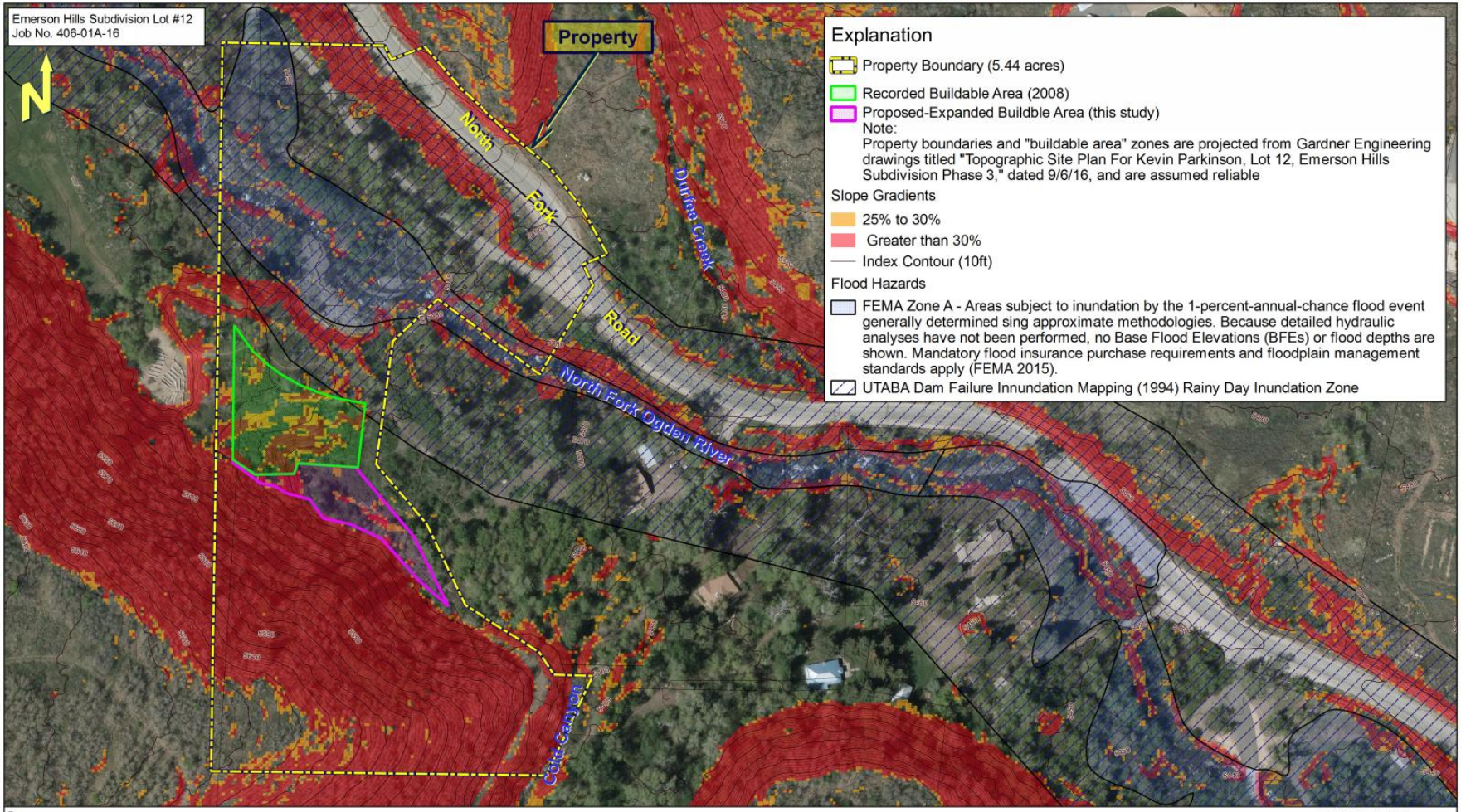

FIGURE 1
GEOLOGIC HAZARDS REVIEW

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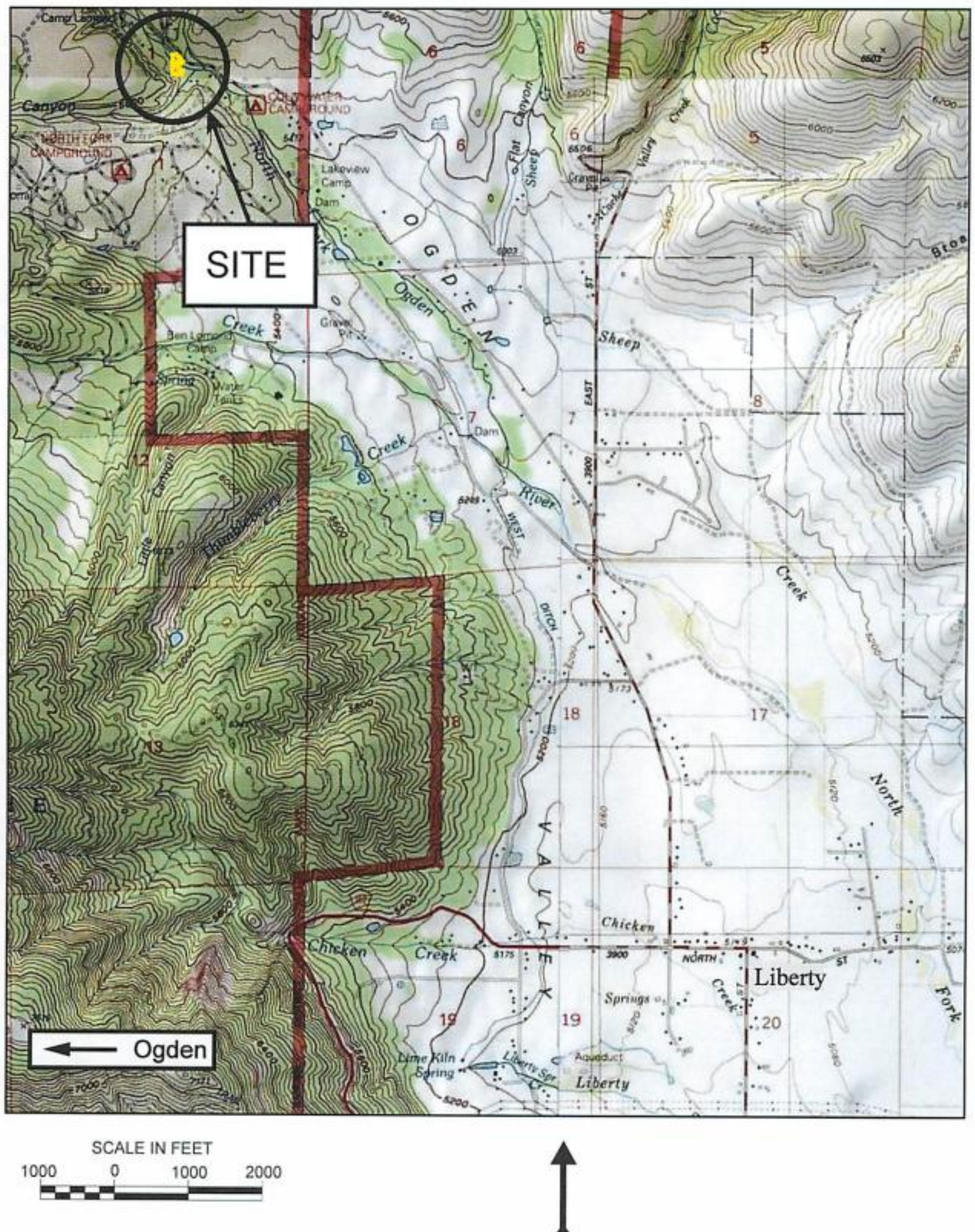
DISTINCT HOMES, LLC
JOB NO. 406-01A-16

GORDON GEOTECHNICAL ENGINEERING, INC.



REFERENCE:
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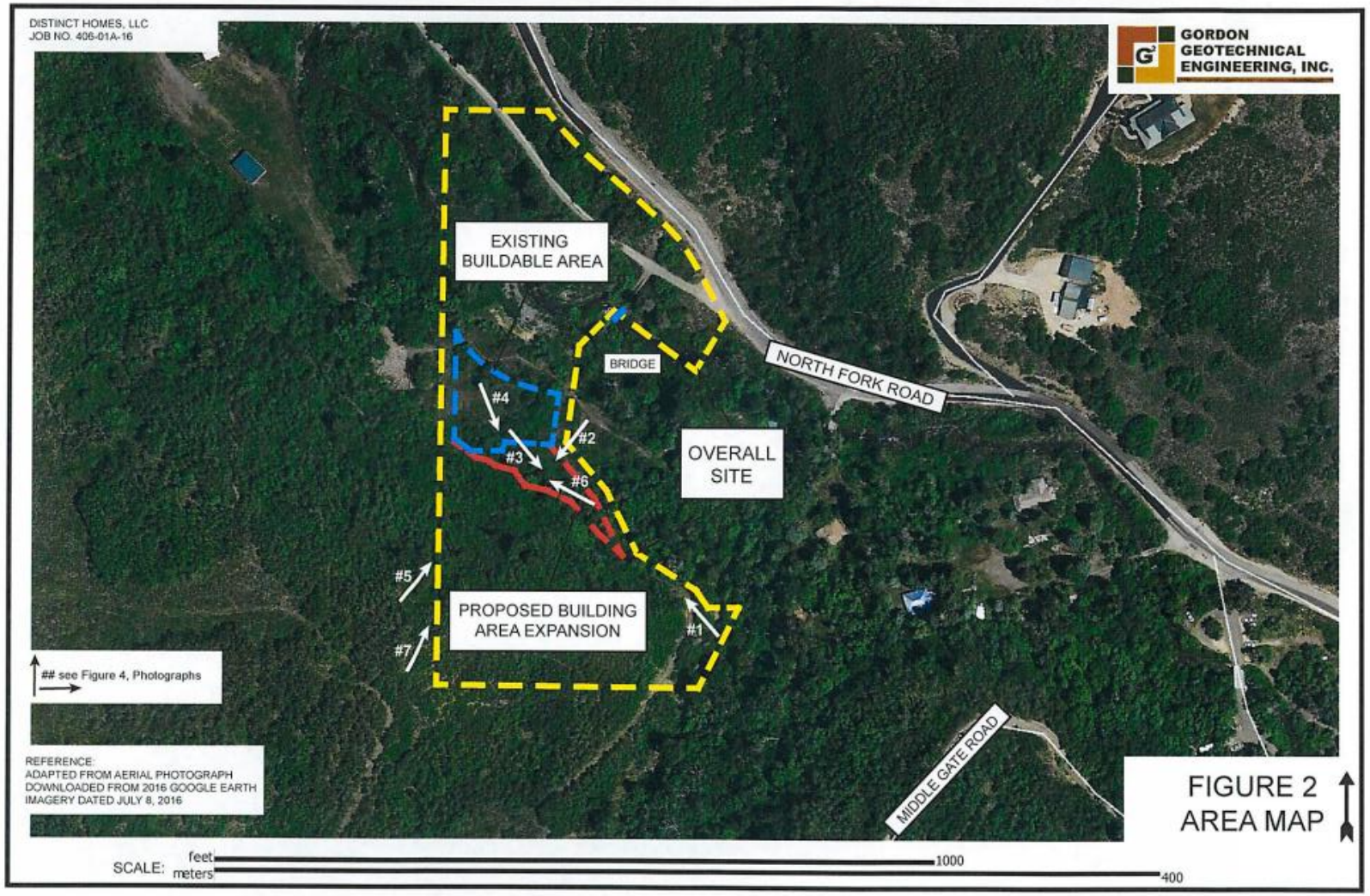
FIGURE 1
VICINITY MAP


DISTINCT HOMES, LLC
JOB NO. 406-01A-16
GORDON GEOTECHNICAL ENGINEERING, INC.
EXISTING BUILDABLE AREA
BRIDGE
NORTH FORK ROAD
#4
#2
#3
#6
OVERALL SITE
#5
PROPOSED BUILDING AREA EXPANSION
#1
#7
see Figure 4, Photographs
REFERENCE:
ADAPTED FROM AERIAL PHOTOGRAPH
DOWNLOADED FROM 2016 GOOGLE EARTH
IMAGERY DATED JULY 8, 2016
MIDDLE GATE ROAD
FIGURE 2
AREA MAP
SCALE: feet 1000
meters 400

DISTINCT HOMES, LLC
JOB NO. 406-01A-16

GORDON GEOTECHNICAL ENGINEERING, INC.

#1 View of roadcut exposed geologic materials comprising the slopes at the site.

#2 Facing southwest from the buildable area expansion toward the heavily vegetated slope.

#3 Facing southeast across the proposed building area expansion.

#4 Facing southeast, overall buildable area.

Locations and direction, see Figure 2, Area Map

FIGURE 4
PHOTOGRAPHS

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#5 Facing northeast from the top of the 130+ foot slope.

#6 Facing northwest, buildable area.

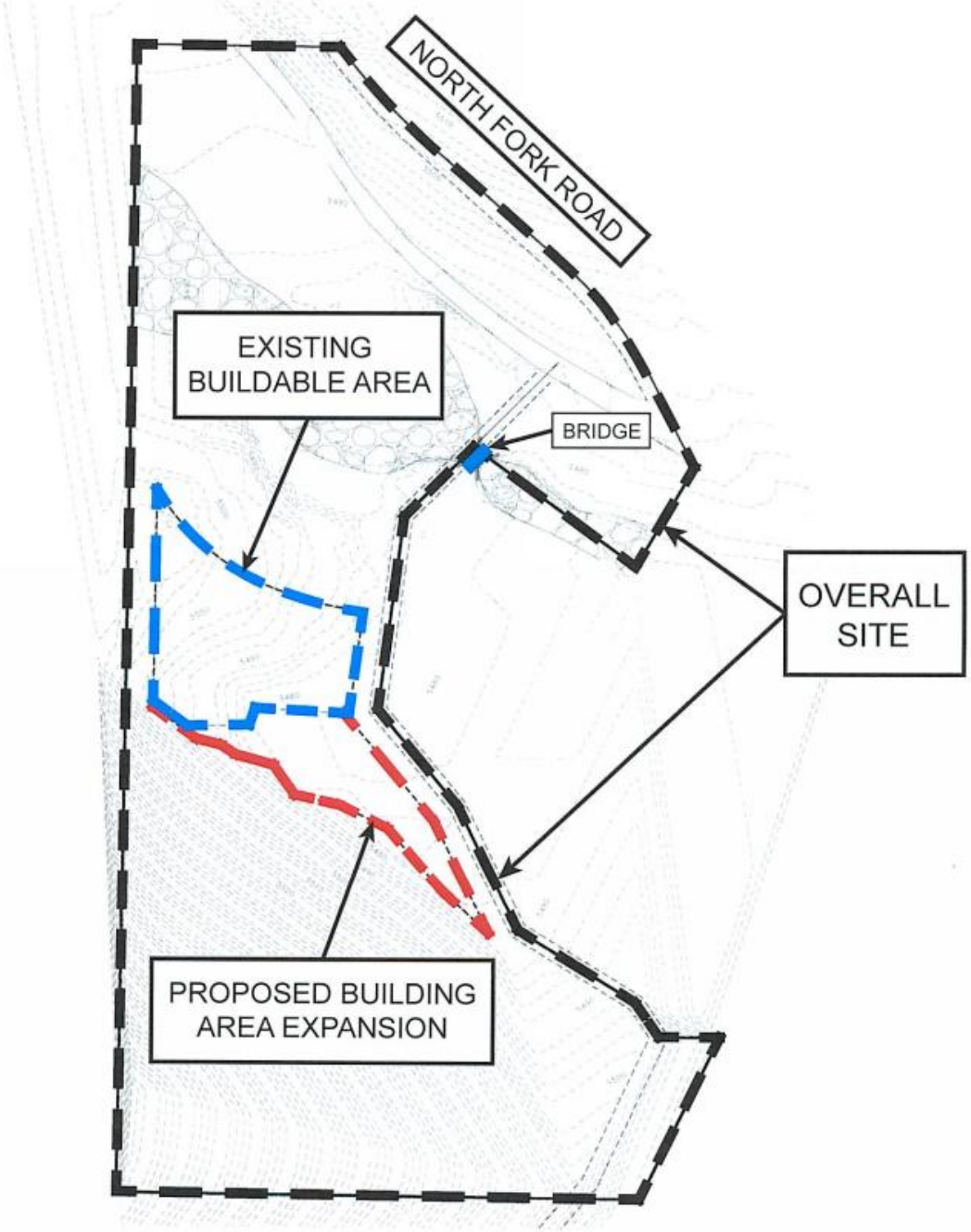
#7 Facing northeast from the top of the large slope across the rest of the subdivision.

FIGURE 4
PHOTOGRAPHS (CONT.)

Locations and direction, see Figure 2, Area Map

DISTINCT HOMES, LLC
JOB NO. 406-01A-16

GORDON GEOTECHNICAL ENGINEERING, INC.



REFERENCE:
ADAPTED FROM DRAWING ENTITLED
"TOPOGRAPHIC SITE PLAN FOR KEVIN PARKINSON"
BY GARDNER ENGINEERING, NOT DATED

NOT TO SCALE

FIGURE 3
SITE PLAN