FEE $	10.00
TCP $	1039.00
SIF $	400.00

PLANNING CLEARANCE

(Single Family Residential and Accessory Structures)

Community Development Department

BLDG PERMIT NO.

Building Address 2061 Sidewinder Ct

Parcel No. 2697-354-15-006

Subdivision Independence Ranch

Filing 12 Block 2 Lot 6

No. of Existing Bldgs 0 No. Proposed 1

Sq. Ft. of Existing Bldgs 0 Sq. Ft. Proposed Approx 5100

Sq. Ft. of Lot / Parcel 14,720

Sq. Ft. Coverage of Lot by Structures & Impervious Surface (Total Existing & Proposed) Approx 3,100

Height of Proposed Structure 25'

OWNER INFORMATION:

Name Haws/ Fisher

Address 413 Smallwood Lane

City / State / Zip Clifton, Co 81520

APPLICANT INFORMATION:

Name Fisher Const

Address 413 Small Wood

City / State / Zip Clifton, Co 81520

Telephone 216-7857

DESCRIPTION OF WORK & INTENDED USE:

- [X] New Single Family Home (*check type below)
- [ ] Interior Remodel [ ] Addition
- [ ] Other (please specify):

*TYPE OF HOME PROPOSED:

- [X] Site Built [ ] Manufactured Home (UBC)
- [ ] Manufactured Home (HUD)
- [ ] Other (please specify):

NOTES:

REQUIRED: One plot plan, on 8 1/2" x 11" paper, showing all existing & proposed structure location(s), parking, setbacks to all property lines, ingress/egress to the property, driveway location & width & all easements & rights-of-way which abut the parcel.

THIS SECTION TO BE COMPLETED BY COMMUNITY DEVELOPMENT DEPARTMENT STAFF

ZONE PD

Maximum coverage of lot by structures 35%

SETBACKS: Front 25' from property line (PL)

Permanent Foundation Required: YES X NO

Side 15' from PL Rear 25' from PL

Parking Requirement 2

Maximum Height of Structure(s) 32'

Special Conditions See Attached notes

Voting District A

Driveway Location Approval TKA (Engineer's Initials)

* MUST FOLLOW GEOTECH RECOMMENDATIONS

10/6/04 & 7/21/06

Modifications to this Planning Clearance must be approved, in writing, by the Community Development Department. The structure authorized by this application cannot be occupied until a final inspection has been completed and a Certificate of Occupancy has been issued, if applicable, by the Building Department (Section 305, Uniform Building Code).

I hereby acknowledge that I have read this application and the information is correct; I agree to comply with any and all codes, ordinances, laws, regulations or restrictions which apply to the project. I understand that failure to comply shall result in legal action, which may include but not necessarily be limited to non-use of the building(s).

Applicant Signature Brian Fisher Date 6-8-06

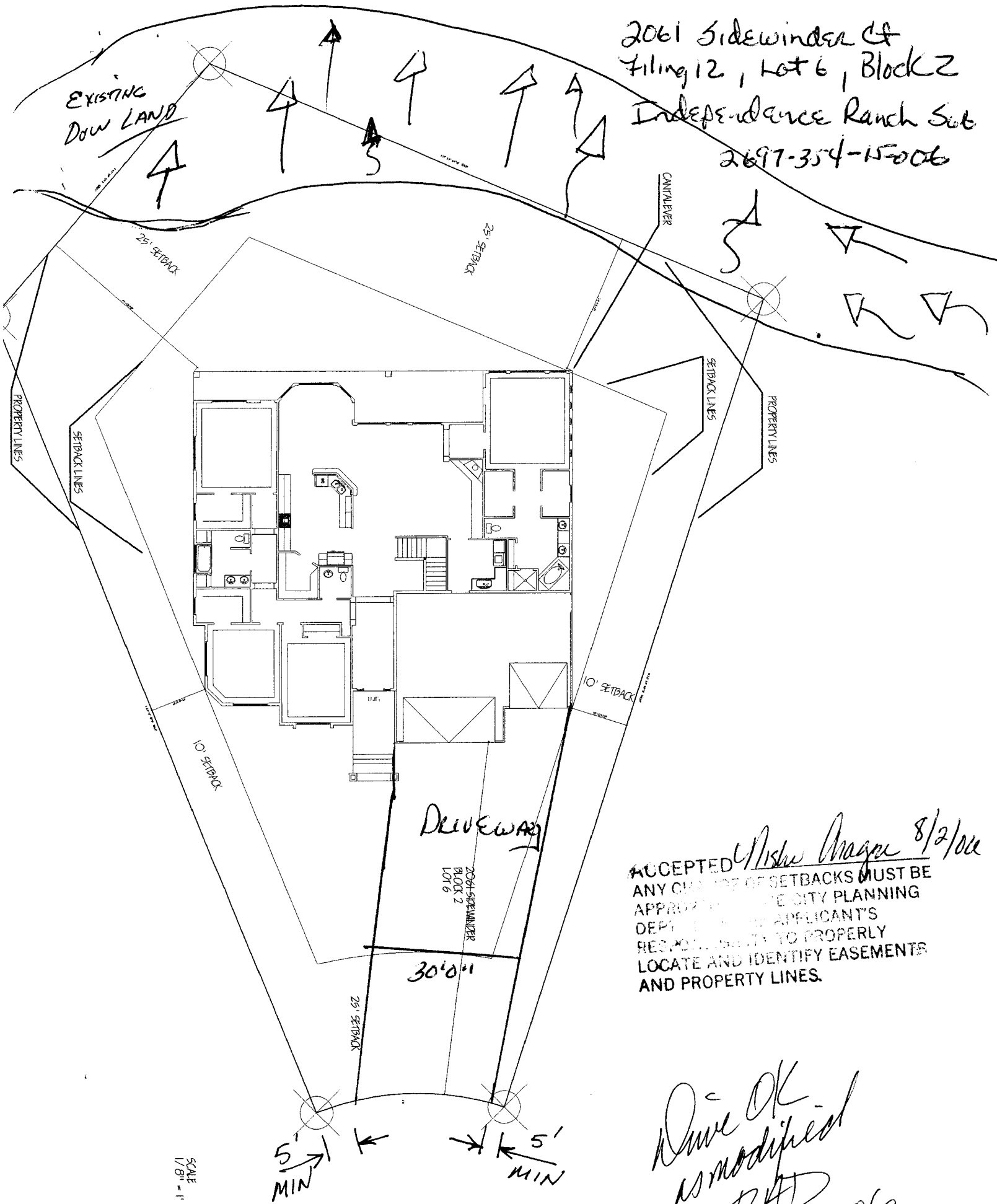
Department Approval NM Date 8/2/06

Additional water and/or sewer tap fee(s) are required:	YES /	NO	W/O No. 19353
Utility Accounting		Date 8/2/06	

VALID FOR SIX MONTHS FROM DATE OF ISSUANCE (Section 2.2.C.1 Grand Junction Zoning & Development Code)

(White: Planning) ***(Yellow: Customer)*** ***(Pink: Building Department)*** ***(Goldenrod: Utility Accounting)***

2061 Sidewinder Ct
Filing 12, Lot 6, Block 2
Independence Ranch Sub
2697-354-15-006



ACCEPTED Nisha Magee 8/2/06
ANY CU[illegible] OF SETBACKS MUST BE
APPRO[illegible] CITY PLANNING
DEPT[illegible] APPLICANT'S
RES[illegible] TO PROPERLY
LOCATE AND IDENTIFY EASEMENTS
AND PROPERTY LINES.

Drive OK - as modified
RAD
6-15-06

GRAND JUNCTION
LINCOLN - DeVORE, Inc.
GEOTECHNICAL ENGINEERS - GEOLOGISTS

1441 Motor St.
Grand Junction, CO 81505

TEL: (970) 242-8968
FAX: (970) 242-1561

July 21, 2006

Fisher Construction
413 Smallwood Lane
Clifton, CO 81520

Re: Building/Slope Setback, Job #92550-GJ
2061 Sidewinder Court, Grand Junction, CO

Gentlemen:

The site plan has been presented to Grand Junction Lincoln DeVore to determine if the building setback from the slope/bluff overlooking the Colorado River has been met. This setback is for geotechnical concerns and is different than the normal building setbacks established by the City of Grand Junction's Development Code. The site in question is Lot 6, Block 2, Independence Ranch Subdivision, Filing 12. This site has a physical address of 2061 Sidewinder Court.

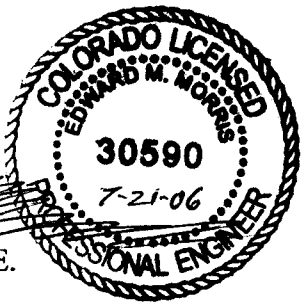
Our analysis indicates that the residential structure, with back setbacks of 24 feet and 3 feet from the back property lines is beyond the geotechnical setback as determined by our slope stability modeling and computations contained within the Slope Stability Study and Final Subsurface Soils Exploration Report for Independence Ranch Subdivision, Filings 12 & 13, Job #89191-GJ, dated October 6, 2004. The two back building setbacks are approximately 4 feet greater than and 2 feet greater, respectively, than the minimum required geotechnical setbacks. No site-specific lot improvements are required with respect to grading and drainage, which are in excess of those given in the above-referenced report. It must be noted that the amount of fill placed behind this structure on the downhill side is limited to1 foot.

The computational section for the building lot immediately north of 2061 Sidewinder is provided with this letter. Also included are the drainage and gradient recommendations contained in our report. It is strongly recommended that a perimeter drain be placed around this basement structure and this drain outlet should be extended to the property line.

We hope this letter has provided you with the information required. If questions arise, or if further information is needed, please feel free to contact Grand Junction Lincoln DeVore at any time.

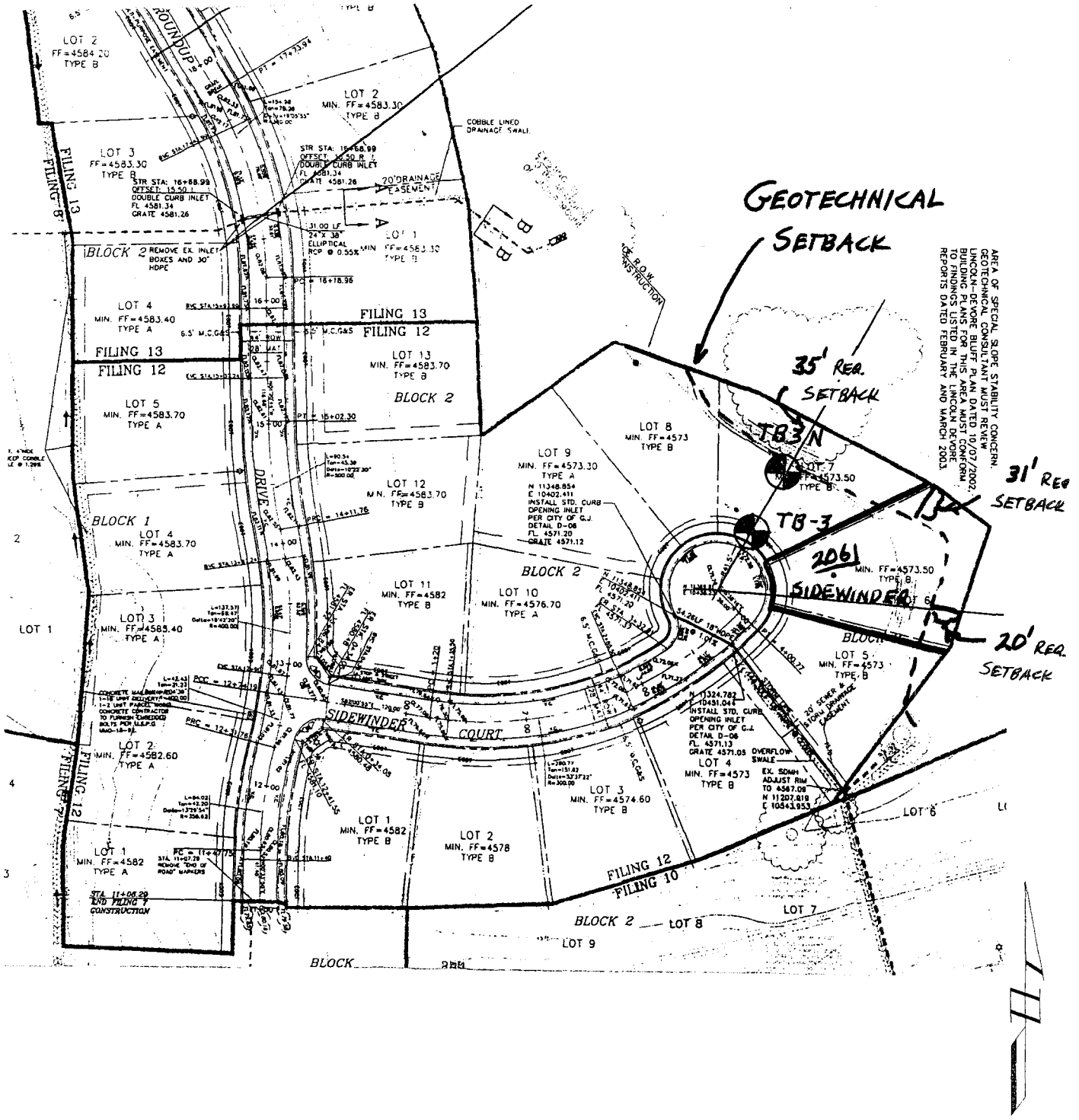
Respectfully submitted,

GRAND JUNCTION
LINCOLN DeVORE, INC.



by: Edward M. Morris, P.E.
Principal Engineer

GJLD Job #92550-GJ



PLAN Adapted From THOMPSON-LANGFORD Drawing

BORING LOCATION DIAGRAM

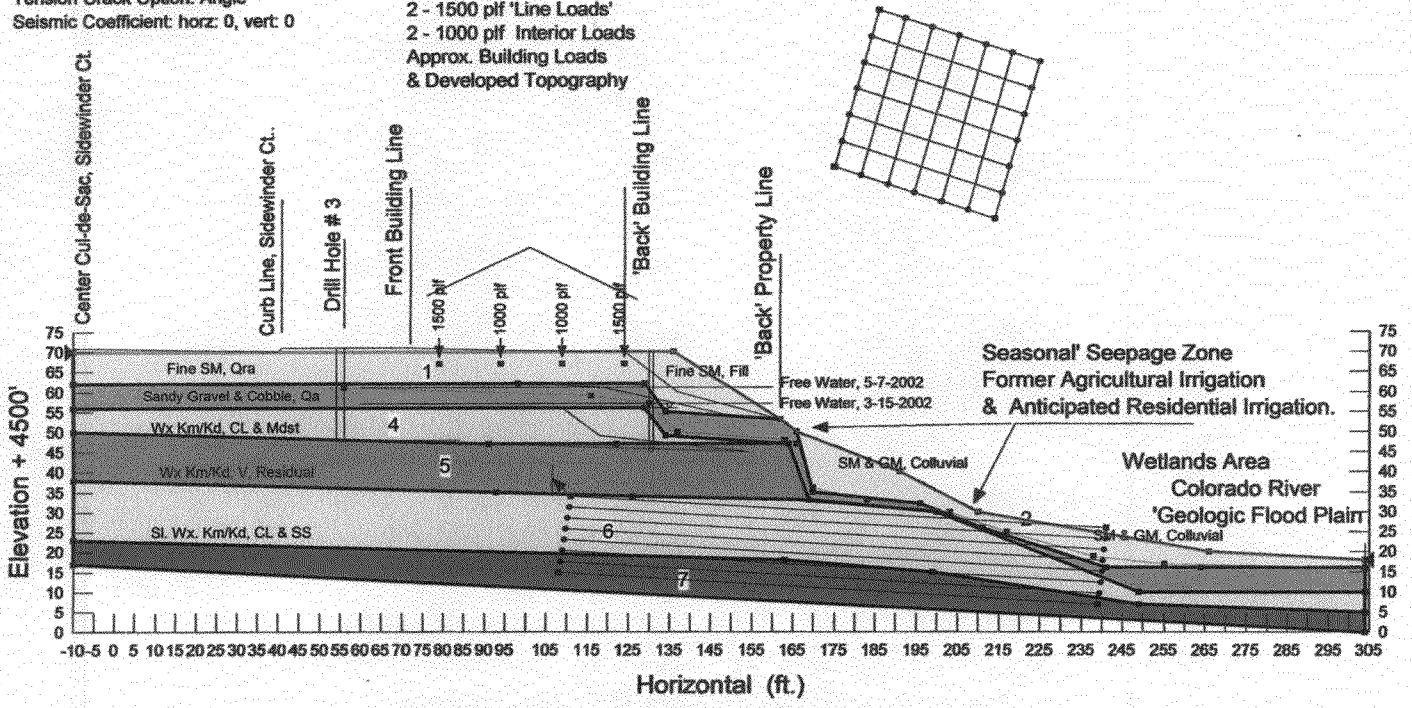
GRAND JUNCTION
LINCOLN - DeVORE, Inc.
Geotechnical Consultants
Grand Junction, Colorado

SLOPE STUDY - Filings 12 & 13		
INDEPENDENCE RANCH, Sub, Fil. G.J.		
LAUGHING WATERS, LLC		Date
Grand Junction, Colorado		**9-28-2004**
Job No.	Drawn	
89191-GJ	**EMM**	

Laughing Waters,LLC
Independence Ranch, Slope Study
File Name: 89191ultSidewindera.gsz
Last Saved Date: 3/1/2005
Analysis Method: Morgenstern-Price
Slip Surface Option: GridAndRadius
P.W.P. Option: PiezometricLine
Tension Crack Option: Angle
Seismic Coefficient: horz: 0, vert: 0

DEVELOPED SLOPE CONDITION.
BUILDING LOADS APPLIED.
RAISED FREE WATER TABLE.
Max. SAND STRENGTH.

2 - 1500 plf 'Line Loads'
2 - 1000 plf Interior Loads
Approx. Building Loads
& Developed Topography



This Study is A Section on Lot 7, Block 2, Filing 12, Overlooking the Ancient Colorado River Floodplain
This is the Critical Section, taken at the gully encroachment adjacent to the Building Area.

This bank appears to have experienced significant seepage within the alluvial soils during previous agricultural activities. The shale encountered in the borings was very hard.

The Modeled Site has been Developed, The Site Grading has added up to 1 Foot of Alluvial Sands.
The Structure has been modeled for a Crawl Space ('Walkout Basement is possible) and the Landscaping is irrigated.
The Water Table is at the elevated High Seasonal Irrigation, 5-7-2002, confirmed during site grading Fall, 2004.
Building Loads are Modeled at 1000 plf. For the Interior and 1500 plf for the Exterior. If a Basement is constructed, the building loads will increase and the excavated soil will remove more weight, resulting in less weight on the slope.
Thin Fill may be Placed at the Building Area and No Fill is Allowed Toward the Slope Edge..
The Building Setback to the slope toe is Significantly Steeper than the 3:1 (hor : vert) Limit of the IBC, Chapter 18.

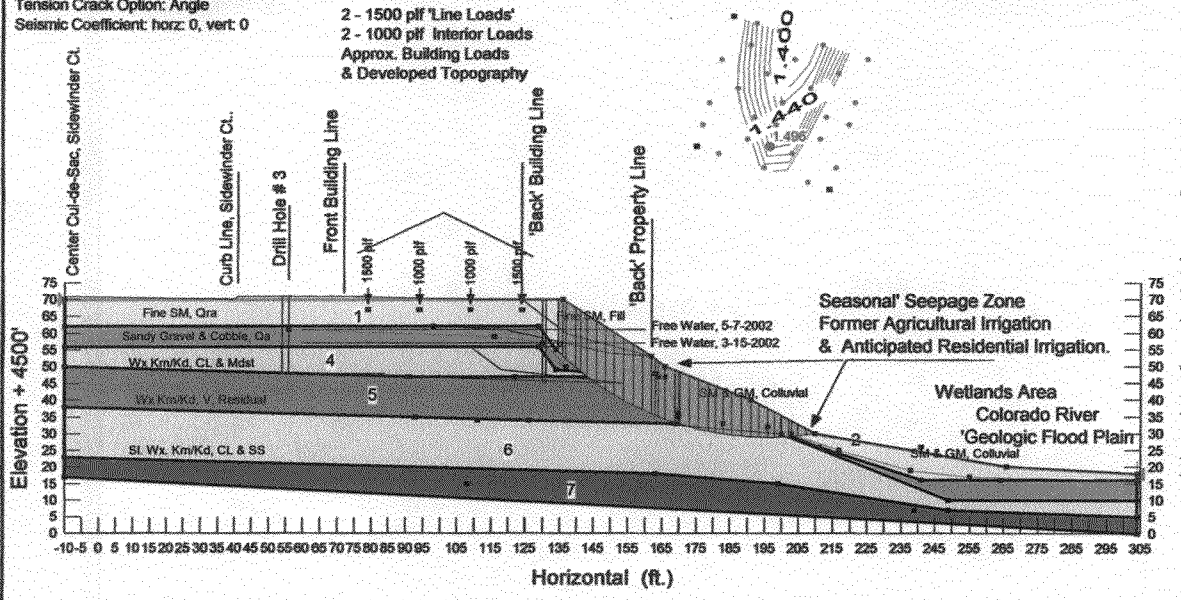
The Steep, erosional surface of the Very Weathered Mancos Shale (VWx) IV, Mancos Shale (Vwx) V and The Slightly Weathered Mancos Shale & Siltstone Strata were found to be critical for this modeling, forcing an elevated, stepped water table.

The analysis was performed using the PC software SLOPE/W, within GeoStudeo 2004, Version 6.11, Geo-Slope International LTD, Calgary, Alberta, Canada. The Limit Equilibrium Theory for the factor of safety, incorporating the Morgenstern-Price Method which uses both Moment and Force Equilibrium Theory, generally considered to be a relatively rigorous analysis.

Laughing Waters,LLC
Independence Ranch, Slope Study
File Name: 89191ultSidewindera.gsz
Last Saved Date: 3/1/2005
Analysis Method: Morgenstern-Price
Slip Surface Option: GridAndRadius
P.W.P. Option: PiezometricLine
Tension Crack Option: Angle
Seismic Coefficient: horz: 0, vert: 0

DEVELOPED SLOPE CONDITION.
BUILDING LOADS APPLIED.
RAISED FREE WATER TABLE.
Max. SAND STRENGTH.

2 - 1500 plf 'Line Loads'
2 - 1000 plf Interior Loads
Approx. Building Loads
& Developed Topography



The Landscaping is irrigated.

The Water Table is Elevated

Building Loads are Modeled at 1000 plf & 1500 plf.

About 1' of Fill is Placed at Building Area.

The Computed Failure Surface Is 15' From the Building/SetBack.

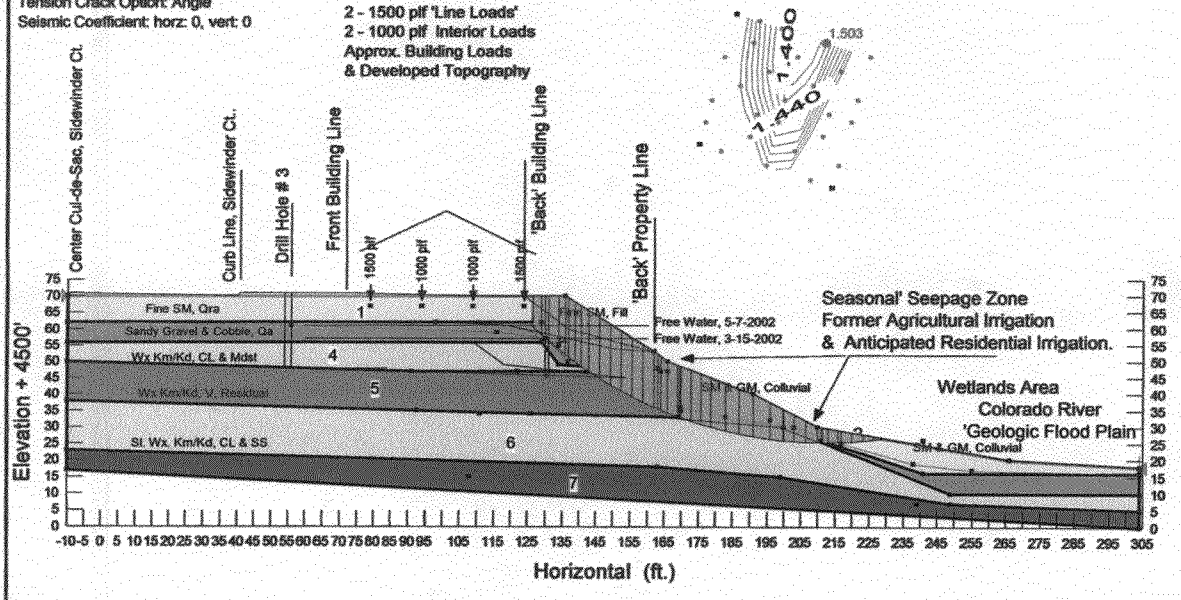
Computed S.F. =

1.496

Laughing Waters,LLC
Independence Ranch, Slope Study
File Name: 89191ultSidewindera.gsz
Last Saved Date: 3/1/2005
Analysis Method: Morgenstern-Price
Slip Surface Option: GridAndRadius
P.W.P. Option: PiezometricLine
Tension Crack Option: Angle
Seismic Coefficient: horz: 0, vert: 0

DEVELOPED SLOPE CONDITION.
BUILDING LOADS APPLIED.
RAISED FREE WATER TABLE.
Max. SAND STRENGTH.

2 - 1500 plf 'Line Loads'
2 - 1000 plf Interior Loads
Approx. Building Loads
& Developed Topography



The Landscaping is irrigated.

The Water Table is Elevated

Building Loads are Modeled at 1000 plf & 1500 plf.

About 1' of Fill is Placed at Building Area.

The Computed Failure Surface Is 3' From the Building/SetBack.

Computed S.F. = 1.503

GRAND JUNCTION
LINCOLN DeVORE, Inc.
GEOTECHNICAL ENGINEERS - GEOLOGISTS

Figure IXb

INDEPENDENCE RANCH Sub. Fil. # 10 & 11
GJLD # 89191-GJ, March 1, 2005

All Soils

Soil 1
Fine SM, Qra
Soil Model Shear/Normal Fn.
Unit Weight 120
Shear/Normal Fn. #1 - SM, Qra, Type I, 5W @ 9
Unit Wt. above WT 98
Phi B 0
Anisotropic Fn. 0
Piezometric Line # 1
Ru 0
Pore-Air Pressure 0

Soil 2
Sandy Gravel & Cobble, Qa
Soil Model Mohr-Coulomb
Unit Weight 145
Cohesion 10
Phi 30
Unit Wt. above WT 135
Phi B 0
Anisotropic Fn. 0
Piezometric Line # 1
Ru 0
Pore-Air Pressure 0

Soil 3
Wx Km/Kd, CL & Mdst
Soil Model Shear/Normal Fn.
Unit Weight 142
Shear/Normal Fn. #4 - CL, WxKm, Type IV, 7 @ 24
Unit Wt. above WT 132
Phi B 0
Anisotropic Fn. 0
Piezometric Line # 1
Ru 0
Pore-Air Pressure 0

Soil 4
Wx Km/Kd, V, Residual
Soil Model Mohr-Coulomb
Unit Weight 139
Cohesion 0
Phi 18.8
Unit Wt. above WT 132
Phi B 0
Anisotropic Fn. 0
Piezometric Line # 1
Ru 0
Pore-Air Pressure 0

Soil 5
Sl. Wx. Km/Kd, CL & SS
Soil Model Shear/Normal Fn.
Unit Weight 142
Shear/Normal Fn. #3 - CL, WxKm, Type V, Remold, Pana
Unit Wt. above WT 132
Phi B 0
Anisotropic Fn. 0
Piezometric Line # 0
Ru 0
Pore-Air Pressure 0

Soil 6
Bedrock
Soil Model Bedrock (Impenetrable)
Piezometric Line # 0
Ru 0
Pore-Air Pressure 0

GRAND JUNCTION
LINCOLN - DeVORE, Inc.
GEOTECHNICAL ENGINEERS - GEOLOGISTS

1441 Motor St.
Grand Junction, CO 81505

TEL: (970) 242-8968
FAX: (970) 242-1561

October 6, 2004

Laughing Waters, LLP
11439 E. Penstamin Dr.
Scottsdale, AZ 85255

Re: SLOPE STABILITY STUDY and

FINAL SUBSURFACE SOILS EXPLORATION

INDEPENDENCE RANCH SUBDIVISION, FILINGS 12 & 13

GRAND JUNCTION, CO

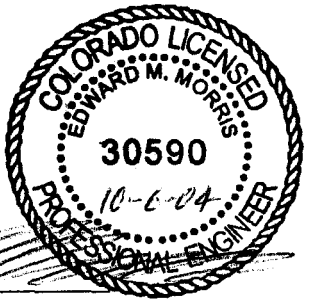
Dear Sir:

Transmitted herein are the results of a Slope Stability Study and Final Subsurface Soils Exploration for the proposed Independence Ranch Subdivision, Filing 12 & 13, Grand Junction, CO.

If you have any questions after reviewing this report, please feel free to contact this office at any time. This opportunity to provide Geotechnical Engineering services is sincerely appreciated.

Respectfully submitted,

GRAND JUNCTION
LINCOLN DeVORE, INC.



By:
Edward M. Morris, P.E.
Principal Engineer

GJLD Job No. 89191-GJ

EMM/bw

CONCLUSIONS AND RECOMMENDATIONS

GENERAL DISCUSSION

No geologic conditions were apparent during our reconnaissance which would preclude the site development, provided the recommendations contained herein are fully complied with. Some of the planned building envelopes adjacent to the Colorado River bank may require minor adjustment based upon the results of our Subsurface Soils Exploration and slope stability study. Based on our investigation to date and the knowledge of the proposed construction, the site condition which would have the greatest effect on the planned development is the unstable banks along the Colorado River, as evidenced by the existing slope failure mass. Of minor concern for the subdivision as a whole but, a more important concern for the majority of building sites, are the slightly to occasionally moderately collapsible silty sands of the Redlands Alluvium (Soil Type I), which will require soil conditioning in the building areas.

Since the exact magnitude and nature of the foundation loads are not precisely known at the present time, the following recommendations must be somewhat general in nature. Any special loads or unusual design conditions should be reported to Grand Junction Lincoln DeVore so that changes in these recommendations may be made, if necessary. However, based upon our analysis of the soil conditions and project characteristics previously outlined, the following recommendations are made.

OPEN FOUNDATION OBSERVATION

Since the recommendations in this report are based on information obtained through random borings, it is possible that the subsurface materials between the boring points could vary. Therefore, prior to placing forms or pouring concrete, an open excavation observation should be performed by representatives of Grand Junction Lincoln DeVore. The purpose of this observation is to determine if the subsurface soils directly below the proposed foundations are similar to those encountered in our exploration borings. If the materials below the proposed foundations differ from those encountered, are unstable, or in our opinion, are not capable of supporting the applied loads, additional recommendations could be provided at that time.

DRAINAGE AND GRADIENT

Adequate site drainage should be provided in all foundation areas both during and after construction to prevent the ponding of water and the wetting or saturation of the subsurface soils. We recommend that the ground surface around the structures be graded so that surface water will be carried quickly away from the building. The minimum gradient within 10 feet of the buildings will depend on surface landscaping. We recommend that paved areas maintain a minimum gradient of 2%, and that landscaped areas maintain a minimum gradient of 8%. It is further recommended that roof drain downspouts be carried at least 5 feet beyond all backfilled areas and discharged a minimum 10 feet away from the structure. **Proper discharge of roof drain downspouts may require the use of subsurface piping in some areas**. Under no circumstances should a 'dry well discharge'

be used on this site, unless specifically sited by a Geotechnical Engineer. Planters, if any, should be so constructed that moisture is not allowed to seep into foundation areas or beneath slabs or pavements.

The existing drainage on the site must either be maintained carefully or improved. We recommend that water be drained away from structures as rapidly as possible and not be allowed to stand or pond near the building. We recommend that water removed from one building not be directed onto the backfill areas of adjacent buildings. We recommend that a hydrologist or drainage engineer experienced in this area be retained to complete a drainage plan for this site.

Should an automatic lawn irrigation system be used on this site, we recommend that the sprinkler heads, irrigation piping and valves be installed no less than 5 feet from any building. In addition, these heads should be adjusted so that spray from the system does not fall onto the walls of the building and that such water does not excessively wet the backfill soils.

It is recommended that lawn and landscaping irrigation be reasonably limited, so as to prevent undesirable saturation of subsurface soils or backfilled areas. Several methods of irrigation water control are possible and, due to the slope stability concerns on this site, must be implemented.

* Not provide a separate irrigation water system for the residences unless specifically controlled and metered for each individual site. Irrigation from the metered domestic water source is preferred.
* Sizing any irrigation distribution service piping to limit on-site water usage.
* Encourage efficient landscaping practices.
* Enforcing reasonable limits on the size of high water usage landscaping for each lot and any park areas.
* Incorporating 'xeriscaping' landscaping and irrigation techniques.

A plastic membrane placed on any Crawlspace ground surfaces may retain/trap excessive amounts of water beneath the membrane. If future moisture problems develop or are anticipated, the Foundation Design Engineer or the Geotechnical Engineer may require that the membrane be partially or completely removed from the crawlspace area.

Provided all recommendations found herein pertaining to site surface drainage, grading and soil compaction are closely followed, a perimeter foundation drain would not be required. For fully finished basements, however, the use of a perimeter foundation drain would significantly reduce potential moisture related problems which can arise from subsequent area development.

BORING NO. 3 DRILL: GJLD CME-45B

BORING ELEVATION: 4572' (TLC) AUGER/TOOLS: 4" od, SOLID

DEPTH (FT.)	SOIL LOG	DESCRIPTION		BLOW COUNT /inch	SOIL DENSITY pcf	WATER %
		THIN MAN-MADE FILL (CONTROLLED)				
	SM	SILTY SAND AEOLIAN (Windblown) REWORKED SOIL				
	I	COLLAPSIBLE REDLANDS ALLUVIUM DRY				
	SM	SILTY SAND w/GRAVELS ALLUVIAL/DEBRIS FAN DEPOSITS	ST		77.9	1.3%
5	II	COLLAPSIBLE STRATA of COARSE GRAVELS	5			
		TRACE of ORGANIC MATTER				
	SM	SILTY SAND				
	I	COLLAPSIBLE STRATIFED				
		DRY	SPT	15/6		2.9%
10	GM	SANDY GRAVEL (4560') COBBLES, up to 12" ??	10	19/6		
	IV	COLORADO RIVER TERRACE DEPOSIT		26/6		
		FREE WATER (4561 - 5-7-2002') — - STRATIFED				
		COARSE SAND & GRAVEL FRAGMENTS of OCHER SANDSTONE				
		V. HARD to DRILL LOW-MEDIUM DENSITY				
15		SANDS ARE 'FLOWING' INTO HOLE	15			
		FREE WATER (4557')				
		Wx MANCOS/DAKOTA FORMATION (4556')				
	CL	MUDSTONE & CLAYSTONE GRAY-GREEN FISSLE				
	V	EXPANSIVE THIN SILTSTONE & MUDSTONE STRATA				
20		HARD to DRILL	20			
		THIN SILTSTONE & MUDSTONE STRATA	ST			
	CL	LEAN CLAY SANDY HARD FRACTURED	SPT	50/6		9.5%
25	V	EXPANSIVE MUDSTONE & CLAYSTONE MOIST	25	51/2		13.9%
30		TD @ 24' (4548')	30			
35			35			
		Blow Counts are counted for each				
		6 inches of sampler penetration.				
40		**Free Water @** 15'	40			
		During Drilling 3-15-2002				

LOG OF SUBSURFACE EXPLORATION

GRAND JUNCTION
LINCOLN - DeVORE, Inc.
Geotechnical Consultants
Grand Junction, Colorado

SLOPE STUDY
INDEPENDENCE RANCH, Sub, Fil. G.J.
LAUGHING WATERS, LLC
Grand Junction, Colorado

Date **3-12-2002**

Job No. **89191-GJ**

Drawn **EMM**

BORING NO. 3N DRILL: GJLD CME-45B

BORING ELEVATION: 4584' AUGER/TOOLS: 4" od, SOLID

DEPTH (FT.)	SOIL LOG	DESCRIPTION		BLOW COUNT /inch	SOIL DENSITY pcf	WATER %
		MAN-MADE FILL to 5'				
		SM SILTY SAND				
		I COLLAPSIBLE				
5		SANDY GRAVEL FILL	5			
		SM SILTY SAND				
		I COLLAPSIBLE				
10		GM SANDY GRAVEL w/COBBLE	10			
		IV COLORADO RIVER TERRACE DEPOSIT				
		MODELED, ELEVATED FREE WATER (4572')				
		FREE WATER (4570') ▽				
15		GM SANDY GRAVEL w/COBBLE	15			
		IV FIRM to DRILL				
		Wx MANCOS/DAKOTA Frm (4567')				
		SOFT at CONTACT				
20		CL MUDSTONE & CLAYSTONE	20			
		V EXPANSIVE THIN SILTSTONE & MUDSTONE STRATA				
		V. Hard MANCOS/DAKOTA Frm (4563')				
		CL MUDSTONE & CLAYSTONE				
		V EXPANSIVE THIN SILTSTONE & MUDSTONE STRATA	SPT			
25		HARD to DRILL	25	19/6		
				45/6		
				41/6		
30			30			
		TD @ 26' (4558')				
35			35			
		Blow Counts are counted for each 6 inches of sampler penetration.				
40		**Free Water @ 14'**	40			
		During Drilling 3-1-2005				

LOG OF SUBSURFACE EXPLORATION

GRAND JUNCTION
LINCOLN - DeVORE, Inc.
Geotechnical Consultants
Grand Junction, Colorado

SLOPE STUDY
INDEPENDENCE RANCH, Sub, Fil. G.J.
LAUGHING WATERS, LLC
Grand Junction, Colorado

Date **3-1-2005**

Job No. **89191-GJ**

Drawn **EMM**